As filed with the Securities and Exchange Commission on March 13, 2025

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

or

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2024

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

or

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report……………………………….

Commission file number 1-15242

Deutsche Bank Aktiengesellschaft

(Exact name of Registrant as specified in its charter)

Deutsche Bank Corporation

(Translation of Registrant's name into English)

Federal Republic of Germany

(Jurisdiction of incorporation or organization)

Taunusanlage 12, 60325 Frankfurt am Main, Germany

(Address of principal executive offices)

Andrea Schriber, +49-69-910-40493, andrea.schriber@db.com, Taunusanlage 12, 60325 Frankfurt am Main, Germany

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act
See following page

Securities registered or to be registered pursuant to Section 12(g) of the Act.

NONE

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

NONE

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

Ordinary Shares, no par value	1,945,125,755

(as of December 31, 2024)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer”, “accelerated filer”, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☒ Accelerated filer ☐

Non-accelerated filer ☐ Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards* provided pursuant to Section 13(a) of the Exchange Act. ☐

*The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes ☐ No ☐

Securities registered or to be registered pursuant to Section 12(b) of the Act (as of February 28, 2025)

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary shares, no par value	DB	The New York Stock Exchange
4.50 % Fixed Rate Subordinated Tier 2 Notes Due 2025	DB 25	The New York Stock Exchange
DB Gold Double Long Exchange Traded Notes due February 15, 2038	DGP	NYSE Arca, Inc.
DB Gold Double Short Exchange Traded Notes due February 15, 2038	DZZ	NYSE Arca, Inc.
DB Gold Short Exchange Traded Notes due February 15, 2038	DGZ	NYSE Arca, Inc.

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Deutsche Bank Aktiengesellschaft, also called Deutsche Bank AG, is a stock corporation organized under the laws of the Federal Republic of Germany. Unless otherwise specified or required by the context, in this document, references to “Deutsche Bank”, “the bank” or “the Group” are to Deutsche Bank Aktiengesellschaft and its consolidated subsidiaries.

Due to rounding, numbers presented throughout this document may not add up precisely to the totals presented and percentages may not precisely reflect the absolute figures.

The bank’s registered address is Taunusanlage 12, 60325 Frankfurt am Main, Germany, and its telephone number is +49-69-910-00.

Inclusion of its Annual Report

Deutsche Bank has included as an integral part of this Annual Report on Form 20-F its Annual Report 2024, to which the bank refers to in response to certain items included in Form 20-F. Certain portions of the Annual Report 2024 have been omitted, as indicated therein. The included Annual Report 2024 contains the consolidated financial statements, which the bank refers to in response to Items 8 and 18.

The Annual Report 2024 and consolidated financial statements included herein differ from those Deutsche Bank publishes for other purposes (the “non-SEC” versions thereof) in that the financial information presented in the Annual Report 2024 and consolidated financial statements included herein has been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The financial information presented in the non-SEC Annual Report 2024 and consolidated financial statements included therein, by contrast, has been prepared in accordance with IFRS as issued by the IASB and endorsed by the European Union (EU), including, effective as of January 1, 2020, the application of fair value hedge accounting for portfolio hedges of interest rate risk (fair value macro hedges) in accordance with the EU carve-out version of International Accounting Standard (IAS) 39. For further information, see Note 1, “Material accounting policies and critical accounting estimates – Basis of accounting – EU carve-out” to the consolidated financial statements.

Such consolidated financial statements differ from those contained in the Annual Report 2024 used for other purposes (the “non-SEC financial statements”) in that (i) Notes 42, 43 and 44 of the non-SEC financial statements, which address non-U.S. requirements, have been deleted, and (ii) Note 42, which addresses U.S. requirements, has been added to the included financial statements.

The consolidated financial statements have been audited by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, as described in their “Report of Independent Registered Public Accounting Firm” included in the Annual Report 2024. Such report is included only in the version of the Annual Report 2024 included in this Annual Report on Form 20-F.

Cautionary Statement Regarding Forward-Looking Statements

Deutsche Bank makes certain forward-looking statements in this document with respect to its financial condition and results of operations. In this document, forward-looking statements include, among others, statements relating to:

- The potential development and impact on the bank of economic and business conditions, along with the legal and regulatory environment to which the bank is subject, including the challenging macroeconomic environment in Europe, in particular in Germany, potential re-emergence of inflationary pressures impacting interest rates, the potential for widespread trade tariffs; along with elevated geopolitical risks
- Deutsche Bank's ability to grow revenues or sustain its cost base by means of strategic initiatives, the bank's responses to economic and business conditions and the legal and regulatory environment
- The development of aspects of Deutsche Bank's results of operations
- The bank's expectations of the impact of risks that affect the bank's business, including the risks of losses in its trading businesses and credit exposures
- Other statements relating to the bank's future business development and economic performance

In addition, the Group may from time to time make forward-looking statements in the periodic reports to the United States Securities and Exchange Commission on Form 6-K, annual and interim reports, invitations to Annual General Meetings and other information sent to shareholders, offering circulars and prospectuses, press releases and other written materials. Deutsche Bank's Management Board, Supervisory Board, officers and employees may also make oral forward-looking statements to third parties, including financial analysts.

Forward-looking statements are statements that are not historical facts, including statements about the bank's beliefs and expectations. Deutsche Bank uses words such as “believe”, “anticipate”, “expect”, “intend”, “seek”, “estimate”, “project”, “should”, “potential”, “reasonably possible”, “plan”, “aim” and similar expressions to identify forward-looking statements.

By their very nature, forward-looking statements involve risks and uncertainties, both general and specific. Deutsche Bank bases these statements on its current plans, estimates, projections and expectations. The reader of this document should therefore not place too much reliance on them. The bank's forward-looking statements speak only as of the date the bank makes them, and Deutsche Bank undertakes no obligation to update any of them in light of new information or future events.

Deutsche Bank cautions the reader that a number of important factors could cause its actual results to differ materially from those the bank describes in any forward-looking statement. These factors include those listed above and, among others, the following:

- Other changes in general economic and business conditions
- Changes and volatility in currency exchange rates, interest rates and asset prices
- Changes in governmental policy and regulation, including measures taken in response to economic, business, political and social conditions
- The potential development and impact on the bank of legal and regulatory proceedings to which the bank is or may become subject
- Changes in the bank's competitive environment
- The success of acquisitions, divestitures, mergers and strategic investments and alliances
- Other factors, including those the bank refers to in “Item 3: Key Information – Risk Factors” and elsewhere in this document and others to which the bank does not refer

Use of Non-GAAP financial measures

This document and other documents Deutsche Bank has published or may publish contain Non-GAAP financial measures. Non-GAAP financial measures are measures of the bank's historical or future performance, financial position or cash flows that contain adjustments that exclude or include amounts that are included or excluded, as the case may be, from the most directly comparable measure calculated and presented in accordance with IFRS in the financial statements. Examples of Deutsche Bank's Non-GAAP financial measures, and the most directly comparable IFRS financial measures, are as follows:

Non-GAAP financial measure	Most Directly Comparable IFRS financial measure
Profit (loss) attributable to Deutsche Bank shareholders for the segments, Profit (loss) attributable to Deutsche Bank shareholders and additional equity components for the segments	Profit (loss)
Revenues excluding specific items, Revenues on a currency-adjusted basis	Net revenues
Net interest income in the key banking book segments	Net interest income
Adjusted costs, Costs on a currency-adjusted basis, Nonoperating costs	Noninterest expenses
Net assets (adjusted)	Total assets
Tangible shareholders' equity, Average tangible shareholders' equity, Tangible book value, Average tangible book value	Total shareholders' equity (book value)
Post-tax return on average shareholders' equity (based on Profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon), Post-tax return on average tangible shareholders' equity (based on Profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon)	Post-tax return on total shareholders' equity
Book value per basic share outstanding, Tangible book value per basic share outstanding	Book value per share outstanding

For descriptions of these Non-GAAP financial measures and the adjustments made to the most directly comparable financial measures under IFRS, please refer to "Supplementary Information (Unaudited): Non-GAAP financial measures", which is included herein.

When used with respect to future periods, Non-GAAP financial measures used by Deutsche Bank are also forward-looking statements. The bank cannot predict or quantify the levels of the most directly comparable financial measures under IFRS that would correspond to these measures for future periods. This is because neither the magnitude of such IFRS financial measures, nor the magnitude of the adjustments to be used to calculate the related Non-GAAP financial measures from such IFRS financial measures, can be predicted. Such adjustments, if any, will relate to specific, currently unknown, events and in most cases can be positive or negative, so that it is not possible to predict whether, for a future period, the Non-GAAP financial measure will be greater than or less than the related IFRS financial measure.

Use of Internet Addresses

This document contains inactive textual addresses of Internet websites operated by the bank and third parties. Reference to such websites is made for informational purposes only, and information found at such websites is not incorporated by reference into this document.

PART I

Item 1: Identity of Directors, Senior Management and Advisers

Not required because this document is filed as an Annual Report.

Item 2: Offer Statistics and Expected Timetable

Not required because this document is filed as an Annual Report.

Item 3: Key Information

Dividends

The following table shows the dividend per share in euro and in U.S. dollars for the years ended December 31, 2024, 2023, 2022, 2021 and 2020. Deutsche Bank declares dividends at its Annual General Meeting following each year. For 2024, the Management Board intends to propose to the Annual General Meeting to pay a dividend of € 0.68 per share. Deutsche Bank's dividends are based on the non-consolidated results of Deutsche Bank AG as prepared in accordance with German accounting principles. Because the Group declares dividends in euro, the amount an investor actually receives in any other currency depends on the exchange rate between euro and that currency at the time the euros are converted into that currency.

In general, the German withholding tax applicable to dividends is 26.375 % (consisting of a 25 % withholding tax and an effective 1.375 % surcharge). Under the German Investment Tax Act, dividends received by an investment fund within the meaning of the German Investment Tax Act are subject to 15 % German withholding tax equal to the treaty tax rate. For individual German tax residents, the withholding tax paid represents for private dividends, generally, the full and final income tax applicable to the dividends. Dividend recipients who are tax residents of countries that have entered into a convention for avoiding double taxation may be eligible to receive a refund from the German tax authorities for a portion of the amount withheld and in addition may be entitled to receive a tax credit for the German withholding tax not refunded in accordance with their local tax law.

Generally, U.S. residents will be entitled to receive a refund equal to 11.375 % of the dividends paid. For U.S. federal income tax purposes, the dividends the Group pays are not eligible for the dividends received deduction generally allowed for dividends received by U.S. corporations from other U.S. corporations.

Dividends in the table below are presented before German withholding tax.

See "Item 10: Additional Information – Taxation" for more information on the tax treatment of the bank's dividends.

			Payout ratio[2,3]	
	Dividends per share[1]	Dividends per share	Basic earnings per share	Diluted earnings per share
2024 (proposed)	$ 0.70	€ 0.68	36%	37%
2023	$ 0.50	€ 0.45	16%	16%
2022	$ 0.32	€ 0.30	13%	13%
2021	$ 0.23	€ 0.20	20%	21%
2020	$ 0.00	€ 0.00	N/M	N/M

N/M – Not meaningful

[1] For convenience, the Group presents dividends in U.S. dollars for each year by translating the euro amounts at the period end rate for the last business day of each year

[2] Payout ratio defined as dividends per share the Group paid in respect of each financial year as a percentage of basic and diluted earnings per share for that year

[3] For the financial year 2020, no dividend was paid

Capitalization and Indebtedness

Consolidated capitalization in accordance with IFRS as issued by the IASB as of December 31, 2024

	in € m.
Debt:[1]	
Long-term debt	114,899
Trust preferred securities	287
Long-term debt at fair value through profit or loss	22,203
Total debt	137,389
Shareholders' equity:	
Common shares (no par value)	5,106
Additional paid-in capital	39,744
Retained earnings	25,872
Common shares in treasury, at cost	(713)
Accumulated other comprehensive income, net of tax	
Unrealized net gains (losses) on financial assets at fair value through other comprehensive income, net of tax and other	(1,196)
Unrealized net gains (losses) on derivatives hedging variability of cash flows, net of tax	23
Unrealized net gains (losses) on assets classified as held for sale, net of tax	0
Unrealized net gains (losses) attributable to change in own credit risk of financial liabilities designated at fair value through profit and loss, net of tax	(108)
Foreign currency translation, net of tax	(12)
Unrealized net gains (losses) from equity method investments	(8)
Total shareholders' equity	68,709
Equity component of financial instruments	11,550
Noncontrolling interests	1,606
Total equity	81,865
Total capitalization	219,254

[1] € 41,174 million (30 %) of Deutsche Bank's debt was secured as of December 31, 2024.

Reasons for the Offer and Use of Proceeds

Not required because this document is filed as an Annual Report.

Risk Factors

An investment in Deutsche Bank's securities involves a number of risks. Potential investors should carefully consider the following information about the risks Deutsche Bank faces, together with other information in this document, when they make investment decisions involving Deutsche Bank's securities. If one or more of these risks were to materialize, it could have a material adverse effect on Deutsche Bank's financial condition, results of operations, cash flows or prices of its securities.

Summary of Risk Factors

Risks Relating to the Macroeconomic, Geopolitical and Market Environment. Deutsche Bank is materially affected by global macroeconomic and financial market conditions. Significant challenges may arise from market volatility, persistent inflation, impacts of a higher interest rate environment and potential for widespread trade tariffs. A number of geopolitical and political risks could negatively affect the business environment, leading to weaker economic activity and a broader correction in the financial markets. In particular, policies of the new U.S. administration around international trade, tensions in the Middle East, military support for Ukraine and other conflicts or economic sanctions, including other trade and investment restrictions, could negatively impact global markets and the macroeconomic environment. Materialization of these risks could negatively affect Deutsche Bank's results of operations in some of the bank's businesses and its financial condition as well as its strategic plans.

Risks Relating to Deutsche Bank's Strategy and Business. If Deutsche Bank is unable to meet its 2025 financial targets due to a significant deterioration in the global macroeconomic environment, an adverse change in market confidence in the banking sector and/or client behavior, the bank may incur unexpected losses or incur unforeseen costs, experience lower than planned profitability or an erosion of the bank's capital or liquidity base and broader financial condition, leading to a material adverse effect on Deutsche Bank's results of operations and share price. This may also impact Deutsche Bank's ability to make desired cash distributions and share buybacks.

Deutsche Bank's liquidity, business activities and profitability may be adversely affected by an inability to access the debt capital markets or to sell assets during periods of market-wide or firm-specific liquidity constraints which could significantly impact aspects of the bank's business model.

Risks Relating to Regulation and Supervision. Prudential reforms and increased regulatory scrutiny affecting the financial sector continue to have a significant impact on Deutsche Bank, which may adversely affect its business and, in cases of non-compliance, could lead to regulatory sanctions against the bank, including prohibitions against the bank from making dividend payments, share repurchases or payments on its regulatory capital instruments, or increasing regulatory capital and liquidity requirements. Competent regulators may prohibit the bank from making dividend payments, share repurchases or payments on its regulatory capital instruments or take other actions if the Group fails to comply with regulatory requirements. Regulatory changes may impact how key entities are funded which could affect how businesses operate and negatively impact results. Regulatory actions may also require Deutsche Bank to change its business model or result in some business activities becoming unviable. Regulatory and legislative changes require Deutsche Bank to maintain increased capital and debt that can be bailed in in a resolution scenario and abide by tightened liquidity requirements. Any perceptions in the market that the bank may be unable to meet its capital or liquidity requirements could intensify the effect of these factors on the bank's business and results.

Risks Relating to Deutsche Bank's Internal Control Environment. Deutsche Bank is focused on the need to strengthen its internal control environment and infrastructure and has embarked on initiatives to accomplish this. The German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, BaFin) has ordered the bank to improve its control and compliance infrastructure relating to anti-money laundering and know-your-client processes. If Deutsche Bank is unable to improve its infrastructure and control environment on the timelines set or expected by regulators, the bank's reputation, regulatory position and financial condition may be materially adversely affected.

Risks Relating to Technology, Data and Innovation. Digital Innovation may offer market entry opportunities for new competitors such as cross-industry entrants, global tech companies and financial technology companies. Therefore, the bank expects its businesses to have an increased need for investments in digital products and process resources to remain competitive and protect the bank from security threats. If not, there is a risk Deutsche Bank could lose market share, which could have a material adverse effect on Deutsche Bank's financial position, results of operations, cash flows or prices of its securities.

Risks Relating to Litigation, Regulatory Enforcement Matters, Investigations and Tax Examinations. The bank operates in a highly regulated and litigious environment, potentially exposing the bank to liabilities and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm. Should any legal proceedings be resolved against the bank or any investigations result in a finding that the bank failed to comply with an applicable law, Deutsche Bank could be exposed to material damages, fines, limitations on business, remedial undertakings, criminal prosecution or other material adverse effects on its financial condition as well as risk to the bank's reputation and potential loss of business as a result of extensive media attention. Guilty pleas by or convictions of the bank or its affiliates in criminal proceedings, or regulatory or enforcement orders, settlements or agreements to which the bank or its affiliates become subject, may have consequences that have adverse effects on certain of the bank's businesses.

Climate Change and Other Risks Relating to Environmental, Social and Governance (ESG)-Related Matters. The impacts of rising global temperatures and the associated policy, technology and behavioral changes required to limit global warming have led to emerging sources of financial and non-financial risks. These include the physical risk impacts from extreme weather events and the risk that financial institutions face from increased scrutiny from governments, regulators, shareholders, and other bodies. The emergence of significantly diverging (and sometimes conflicting) ESG regulatory and/or disclosure standards across jurisdictions could lead to higher costs, including compliance costs, and increased risks of failing to meet the respective regulatory requirements in each jurisdiction.

Other Risks - Deutsche Bank is also subject to other risks, including the following:

- Deutsche Bank's risk management policies, procedures and methods may leave the bank exposed to unidentified or unanticipated risks, which could lead to material losses
- Deutsche Bank utilizes a variety of third parties in support of its business and operations. Services provided by third parties pose risks to the bank comparable to if Deutsche Bank performed the services internally. If such a third party does not conduct business in accordance with applicable standards or the bank's expectations, the bank could be exposed to material losses, regulatory action, litigation or reputational damage or fail to achieve the benefits sought from the third-party relationship
- Operational risks, which may arise from errors in the performance of the bank's processes, the conduct of its employees, shortfalls in access management, instability, malfunction or outage of IT systems and infrastructure, or loss of business continuity, or comparable issues with respect to its third-party service providers, may disrupt the bank's businesses and lead to material losses
- The inability to have equivalence arrangements with Central Clearing Counterparties in countries outside the EU may have adverse effects on Deutsche Bank's business results or operations; more generally, the bank's large clearing and settlement business poses risks if it fails to operate properly for even short periods
- Impairments of goodwill and other intangible assets and reductions in deferred tax assets have had and may in the future have material adverse effects on Deutsche Bank's profitability, equity and financial condition
- In addition to the bank's traditional banking businesses of deposit-taking and lending, the bank may also engage in nontraditional credit businesses in which credit is extended via transactions that materially increase the bank's exposure to credit risk
- A substantial proportion of the bank's assets and liabilities comprise financial instruments that the bank carries at fair value, with changes in fair value recognized in the income statement. Deutsche Bank has incurred losses, and may incur further losses, from such fair value changes
- Deutsche Bank is exposed to pension risks which can materially impact the measurement of its pension obligations, including interest rate, inflation, longevity and liquidity risks that can materially impact the bank's earnings
- The emerging crypto assets sector may pose risks to the bank, whether the bank participates in it or refrains from doing so
- Deutsche Bank is subject to laws and other requirements relating to financial and trade sanctions and embargoes. If the bank breaches such laws and requirements, it can be subject, and in the past has been subject, to material regulatory enforcement actions and penalties
- Transactions with persons targeted by U.S. economic sanctions or counterparties in countries designated by the U.S. State Department as state sponsors of terrorism may lead potential customers and investors to avoid doing business with the bank or investing in Deutsche Bank's securities, harm the bank's reputation or result in regulatory or enforcement action, which could have a material and adverse effect on the bank's business

Risks Relating to the Macroeconomic, Geopolitical and Market Environment

Deutsche Bank is materially affected by global macroeconomic and market conditions. Significant challenges may arise from persistent inflation, higher interest rates for longer, potential for widespread trade tariffs, market volatility, and a deteriorating macroeconomic environment. These risks could negatively affect the business environment, leading to weaker economic activity and a broader correction in the financial markets. Materialization of these risks could negatively affect Deutsche Bank's results of operations and financial condition as well as the bank's ability to meet its financial targets. Deutsche Bank takes step to manage these risks through its risk management and hedging activities but remains exposed to these macroeconomic and market risks.

Global economic activity expanded at a robust pace in 2024, primarily driven by the U.S. economy which has outperformed expectations. By contrast, economic performance in most of Europe remained challenging, especially in Germany. In 2025, the U.S. economy expects to head for slightly slower but solid growth driven by hopes of tax cuts and deregulation under the new U.S. administration. Growth in the eurozone area is set to pick up moderately, but Germany is expected to lag behind with selected sectors such as automotives seeing weak demand growth and elevated structural risks over the medium-term. Political uncertainty in the eurozone remains elevated with German elections held in February 2025 with coalition talks in progress, potentially leading to disappointment on structural reforms. Additionally, the new minority government in France has yet to develop a credible fiscal consolidation strategy to stabilize the elevated public debt ratio against strong political resistance. In addition, European economies face external downside risks from potential U.S. trade tariffs and from China where domestic activity lacks momentum and the highly indebted real estate sector is yet to show signs of a turnaround.

With headline and core inflation approaching central bank targets, the ECB and Federal Reserve lowered their key policy rates by 100 basis points each in the second half of 2024. However, inflationary pressure remains elevated especially in the U.S. against the backdrop of a firm labor market. Moreover, if the new U.S. administration cuts taxes, imposes higher tariffs and lowers migration, this would likely increase the risk of inflation and higher interest rates. Additionally, global supply chain pressures from ongoing geopolitical tensions could also fuel inflation. The outlook for interest rates has become more uncertain and markets price fewer rate cuts in the U.S. compared to a few months ago. Should inflation exceed current expectations, the Federal Reserve and other central banks could be forced to resume policy tightening and increase the risk of a cyclical economic recession including higher unemployment and defaults.

Inflationary pressures and the possibility of rising interest rates could dampen consumer spending and private client investments. This may consequently result in a reduction in new business for the bank's consumer finance and/or private mortgage lending businesses. Additionally rising inflation could lead to payment difficulties for private clients due to reduced inflation-adjusted income and could lead to increasing delinquent exposure with corresponding impact on provisions for credit losses.

Higher interest rates may lead to refinancing risks and potential credit rating downgrades for corporates, small and medium-sized enterprises, commercial clients and private clients. In addition, inflation, interest rates and market volatility could lead to an asset price reduction of collaterals with risks related to recovery values in case of liquidation and therefore respective higher impacts on provisions for credit losses. Asset price reduction of collaterals could also lead to a potentially higher refinancing risk.

A persistently higher than expected interest rate environment would also increase the risk of corrections in highly valued segments of risk asset markets, e.g. the technology segment of U.S. equity markets. A prolonged, more severe bout of volatility could adversely impact global monetary and credit conditions and Deutsche Bank's business environment.

Commercial real estate (CRE) markets remain under stress from the impact of higher interest rates, borrowing costs and tight lending conditions leading to ongoing pressure on collateral values, particularly in the office sector, and may result in higher-than-expected provisions for credit losses. Recent evidence suggests that CRE property prices and broader market conditions are stabilizing. The turn in the monetary cycle may help to support market sentiment and ease refinancing conditions from the second half of 2025 although refinancing risk remains elevated in the near term. The adjustment process in the office sector is expected to persist for the next several years.

Private capital markets, which include certain activities from non-bank financial institutions and private credit more broadly, may also be negatively impacted by higher-than-expected interest rates and weaker investor sentiment. The non-bank financial institutions sector is extremely broad with diverse risk profiles and vulnerabilities. A failure of one or multiple larger non-bank financial institutions has the potential to drive direct losses for banks including Deutsche Bank and other creditors or capital providers. Broader market instability with rising rates, risk aversion, market illiquidity and economic slowdown all increase the likelihood of failures occurring as returns drop and investors reallocate capital. Internal risk management approaches are commensurate to the risk profile of underlying counterparty and concentration risk exposures and although Deutsche Bank has not experienced any significant losses in the past, the bank may do so in the future.

Overall, either in isolation or in combination with other risk factors such as the potential escalation of geopolitical risks (see below), the aforementioned risks could lead to a deterioration in Deutsche Bank's portfolio quality and higher than expected credit losses as well as increased capital and liquidity demands as clients draw down on funding lines. Higher volatility in financial markets could lead to increased margin calls, higher market risk risk-weighted assets (RWA) and elevated valuation reserves. Negative impacts on investor appetite may also impact the Group's ability to distribute and de-risk capital market commitments, which could potentially result in losses as well as making pricing and hedging more challenging and costly. It also increases the risk of idiosyncratic counterparty events both directly and indirectly, for example shortfalls under Lombard or securities financing transactions. In addition, market volatility triggered by unexpected policy decisions or policy mistakes, could also lead to increased inherent risks in several non-financial risks including transaction processing, internal and external fraud; along with conduct risks including attempts to conceal losses and increased risk of litigation from clients.

A substantial proportion of the assets and liabilities on the Group's balance sheet comprise of financial instruments that are carried at fair value, with changes in fair value recognized in the income statement. As a result of such changes, the Group has incurred losses in the past, and may incur further losses in the future. The Group is exposed to risks related to movements from foreign exchange rates, most notably related to USD and GBP. The bank also accounts for assets and liabilities at amortized costs. The fair value of these assets may be lower than their carrying value and could result in realized losses if the asset is sold prior to maturity.

If multiple downside risks simultaneously materialize and/or occur in combination with a more pronounced economic slowdown, the negative impact on Deutsche Bank's business environment could be more severe than currently expected and impact the bank's ability to meet its 2025 financial targets.

A number of geopolitical and political risks and events could negatively affect Deutsche Bank's business environment, including weaker economic activity, financial market corrections, compliance risks or a lower interest rate environment which could reduce the bank's ability to achieve its 2025 financial targets.

There is particular focus on the future policies of the new U.S. administration around international trade and energy. There is a risk that some of these policies could result in higher inflation and interest rates and uncertainty around the outlook for key geopolitical risks. For instance, the U.S. administration has announced additional tariffs on imported goods especially those from key trading partners such as Canada, Mexico and China, which if implemented could negatively impact growth and fuel inflation in the U.S. This in turn, could lead to increased provisions for credit losses. Besides, the U.S. administration has proposed to reduce funding and subsidies for clean energy initiatives which may impact companies who are active in renewables.

The ongoing war in Ukraine and the risk that U.S. military support may potentially be reduced, continue to increase European concerns and may lead to heightened uncertainty and business disruption. Meanwhile, the risk of a Middle East conflict remains elevated, despite the fragile temporary ceasefire agreed between Israel and Hamas, and the fact that Iran and its terrorist proxies have been weakened by Israel's military strikes and the collapse of the Assad regime in Syria. While the market reaction remains contained thus far, a further escalation could lead to negative impacts including higher oil prices, volatility in the markets and supply chain disruption which may in turn impact Deutsche Bank's risk profile.

Further sanctions against Russia, as well as countermeasures by the Russian government, continue to increase complexity of operations and create conflict of law situations. Against the challenging sanctions backdrop, banks have been implicated in economic disputes of and with counterparties which could result in costs or losses which would not occur in the normal course of business. While an immediate adverse impact to assets in Russia was averted, the recent Russian court orders against various western banks pose downside risk.

Also, tensions between the U.S. and China remain elevated across a wide range of areas, including trade and technology-related issues, financial and investment flows, Hong Kong, Taiwan, human rights, tariffs and cybersecurity. Amidst the inauguration of Taiwan's newly elected president last year, China conducted large-scale military exercises around Taiwan, thereby continuing to apply pressure on the island while also aggressively staking out its territorial claims in the South China Sea. While the bank does not consider a China/Taiwan military conflict as its base case in the near-term, potential downside impacts from an escalation are significant and could substantially and adversely affect Deutsche Bank's results of operations and financial targets. Geopolitical tensions could drive further economic polarization and fragmentation of global trade with the possible emergence of distinct China vs. U.S.-led supporters. Overall, potential downside impacts could adversely affect Deutsche Bank's planned results of operations and financial targets.

In many democratic countries, domestic political challenges have arisen from growing political polarization, rising social discontent and higher inflation. These challenges, including recent German elections, may impede political decision-making processes, forestall necessary structural reforms and lead to negative economic outcomes which could directly or indirectly impact the bank's risk profile and financial results.

Risks Relating to Deutsche Bank's Strategy and Business

If Deutsche Bank is unable to meet its 2025 financial targets or incurs future losses or low profitability, Deutsche Bank's financial condition, results of operations and share price may be materially and adversely affected, and the bank may be unable to make contemplated distributions or share buybacks.

Deutsche Bank's *Global Hausbank* strategy includes financial targets and objectives for the Group until the end of 2025. While the Group continuously plans for and adapts to changing situations, the bank runs the risk that a significant deterioration in the global macroeconomic environment, an adverse change in market confidence in the banking sector and/or client behavior, as well as higher competition, inflation or unforeseen costs could lead to the bank missing its 2025 financial targets and capital objectives. As such, Deutsche Bank may incur unexpected losses including further impairments and provisions, incur unforeseen costs, experience lower than planned profitability or an erosion of the bank's capital or liquidity base and broader financial condition, leading to a material adverse effect on Deutsche Bank's results of operations and share price. This also includes the risk that Deutsche Bank will not be able to make desired cash distributions and share buybacks, all of which are subject to regulatory approval, shareholder authorization and German corporate law requirements. Where such targets reflect commitments to or requirements of regulators, missing them may also trigger action from such regulators or rating agencies. In these situations, the Group would need to take actions to ensure it meets its minimum capital or liquidity objectives. These actions or measures may result in adverse effects on Deutsche Bank's business, results of operations, strategic plans or meeting its 2025 financial targets and capital objectives.

In 2024, employee turnover rates exceeded prior year's level, mainly driven by the regions Asia Pacific, Middle East & Africa and by the Americas. In general, the development of turnover rates could impact the bank's operations and cost structures. Inflation and growing full-time equivalent employee costs are additional risks over and above employee turnover rates.

Deutsche Bank has the objective to preserve a CET 1 ratio of no less than 200 basis points above the bank's maximum distributable amount (MDA) threshold with some variability possible in 2025. The Group's capital ratio development reflects among other things: the operating performance of the bank's operating businesses; the extent of its restructuring costs and the delivery of associated benefits from change initiatives including for example front-to-back optimization programs; costs related to potential litigation and regulatory enforcement actions; growth in the balance sheet usage of the operating businesses; changes in the bank's tax and pensions accounts; impacts on other comprehensive income; and changes in regulation and regulatory technical standards.

The Group enters into contracts and letters of intent in connection with its ongoing evolution as well as in the ordinary course of business. When these are preliminary in nature or conditional, the Group is exposed to the risk that they do not result in execution of the final agreement or consummation of the proposed arrangement, putting associated benefits with such agreements at risk.

The financial results of the bank could be adversely impacted if anticipated benefits from mergers and acquisitions, joint ventures, strategic partnerships, planned cost savings and other investments do not materialize. Potential business disposals could also result in additional costs to be incurred by the bank. At the same time, any integration process or business disposal will require significant time and resources, and the bank may not be able to manage the process successfully.

All of the above could have a material impact on the Group's CET 1 ratio as well as other target ratios. It is therefore possible that the bank will fall below e.g., the CET 1 ratio objective of no less than 200 basis points above the bank's MDA threshold, not meet the cost/income ratio target, or the Post-tax Return on Average Tangible Equity target, as highlighted in the section "Item 4: Business Strategy" in this report.

In addition to other risks described in the Risk Factors, the following could negatively impact the bank's strategic goals and ability to achieve its financial targets and capital objectives for 2025:

- The base case scenario for Deutsche Bank's financial and capital plan includes revenue growth estimates which are dependent on macroeconomic developments. Stagnation or a downturn in the macroeconomic environment could significantly impact the bank's ability to generate the revenue growth necessary to achieve these strategic financial and capital targets. This base case scenario also includes assumptions regarding the bank's ability to reduce costs in future periods
- In addition, the bank's base case scenario is based on current market implied forward interest rate curves. If interest rates do not evolve as expected, the bank's revenues may not develop as the bank anticipates
- Deutsche Bank's objectives are also based on assumptions regarding inflation levels. If inflation does not develop as the bank expects, the bank's businesses may be adversely impacted, and the bank may not meet its cost target
- Fluctuations in foreign exchange rates could adversely impact the bank's financial results, ratios and the bank's ability to achieve its strategic targets or capital objectives
- Reputational risk or negative market perceptions of Deutsche Bank could impact client levels, deposits or asset outflows and adversely affect the bank's results and ability to meet its 2025 financial targets

Adverse market conditions, asset price deteriorations, volatility and cautious investor sentiment have affected and may in the future materially and adversely affect Deutsche Bank's revenues and profits, particularly in investment banking, brokerage and other commission- and fee-based businesses.

Deutsche Bank has significant exposure to the financial markets and is more at risk from adverse developments in the financial markets than institutions predominantly engaged in traditional banking activities. Sustained market declines have in the past caused and can in the future cause the bank's revenues to decline, and, if the bank is unable to reduce its expenses at the same pace, can cause the bank's profitability to erode or result in material losses. Market volatility can also adversely affect Deutsche Bank by causing the value of financial assets it holds to decline or hedging costs to rise.

Specifically, revenues in the Investment Bank, in the form of financial advisory and underwriting fees, directly relate to the number and size of the transactions in which the bank participates and are susceptible to adverse effects from sustained market downturns. These fees and other income are generally linked to the value of the underlying transactions and therefore can decline with asset values. In addition, periods of market decline and uncertainty tend to dampen client appetite for market and credit risk, a critical driver of transaction volumes and investment banking revenues, especially transactions with higher margins. In the past, decreased client appetite for risk has led to lower levels of activity and lower levels of profitability within Origination & Advisory. Deutsche Bank's revenues and profitability could sustain material adverse effects from a significant reduction in the number or size of debt and equity offerings and merger and acquisition transactions. There is also a risk if the Investment Bank is unable to attain its expected market share, the bank may be unable to meet its financial targets.

Market downturns have also led and may in the future lead to declines in the volume of transactions that the bank executes for its clients and result in a decline in noninterest income. In addition, because the fees that the bank charges for managing clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of clients' portfolios, or increases withdrawals, reduces the revenues the bank receives from Asset Management and Private Bank businesses. Even in the absence of a market downturn, below market or negative performance by Asset Management's investment funds may result in increased withdrawals and reduced inflows, which would impact Deutsche Bank's revenues. While clients would be responsible for losses incurred in taking positions on their accounts, the bank may be exposed to additional credit risk and need to cover the losses if the bank does not hold adequate collateral or cannot realize the expected value of the collateral. Deutsche Bank's businesses may also suffer if clients lose money and lose confidence in Deutsche Bank's products and services.

In addition, the revenues and profits Deutsche Bank earns from trading and investment positions and transactions in connection with them can be directly and negatively impacted by market prices. When Deutsche Bank owns assets, market price declines can expose the bank to losses. Many of the Investment Bank's more sophisticated transactions are influenced by price movements and differences among prices. If prices move in a way not anticipated, the bank may experience losses. In addition, Deutsche Bank has committed capital and takes market risk to facilitate certain capital markets transactions; doing so can result in losses as well as income volatility. Such losses may especially occur on assets the bank holds which do not trade in very liquid markets. Assets that are not traded on stock exchanges or other public trading markets, such as derivatives contracts between banks without publicly quoted prices, may have values that the bank calculates using models. Monitoring the deterioration of prices of assets like these is difficult and could lead to losses the bank does not anticipate. Deutsche Bank can also be adversely affected if general perceptions of risk cause uncertain investors to remain on the sidelines of the market, curtailing clients' activity and in turn reducing the levels of activity in those businesses' dependent on transaction flow.

Deutsche Bank's liquidity, business activities and profitability may be adversely affected by an inability to access the debt capital markets or to sell assets during periods of market-wide or firm-specific liquidity constraints.

Deutsche Bank has a continuous demand for liquidity to fund its business activities and the bank's liquidity may be impaired if the bank is unable to access secured and/or unsecured debt markets, access funds from subsidiaries, allocate liquidity optimally across businesses, sell assets, or experiences unforeseen outflows of cash or deposits. These situations may arise due to disruptions in the financial markets, including limited liquidity, defaults by counterparties, non-performance or other adverse developments that affect financial institutions. Such adverse developments may include the reluctance of counterparties or the market to finance Deutsche Bank's operations due to perceptions about potential outflows (including deposit outflows) resulting from litigation, regulatory or similar matters. These items may be actual or perceived weaknesses in the bank's businesses, business model or strategy, as well as in Deutsche Bank's resilience to counter negative economic and market conditions. If such situations occur, internal estimates of the bank's available liquidity over the duration of a stressed scenario could be negatively impacted.

In addition, these perceptions could affect the prices at which Deutsche Bank could access the capital markets to obtain the necessary funding to support its business activities. Another impact could be the expectation among some market participants that callable securities, typically Tier 2 and Additional Tier 1, but also senior debt, will be called at the first available call date. In the event the bank decides not to exercise the call, there may be a negative impact on Deutsche Bank's funding curve due to a combination of investor dissatisfaction and potential signaling of financial difficulties. The magnitude of the impact on funding spreads is dependent on a series of factors including, amongst others, the reset spread and coupon of the security as compared to current market conditions. Such events could result in an inability to refinance assets on balance sheet, business activities in their respective currencies, or maintain appropriate levels of capital. As a result, the bank may be forced to liquidate assets it holds at depressed prices or on unfavorable terms, and to curtail businesses, such as lending activities. This could have an adverse effect on Deutsche Bank's business, financial condition and results of operations.

Liquidity risk could also arise from lower value and marketability of Deutsche Bank's High Quality Liquid Assets (HQLA), impacting the amount of proceeds available for covering cash outflows during a stress event. Additional haircuts may be incurred on top of already impaired asset values. Moreover, securities might lose their eligibility as collateral necessary for accessing central bank facilities, as well as their value in the repo/wholesale funding market.

Additional liquidity risks, due to negative developments in the wider financial sector, may also occur from withdrawal of deposits not insured by deposit guarantee schemes or result in deposits moving into other investment products. In times of economic uncertainty or market stress, digital banking allows depositors to swiftly move funds digitally to other market participants, leading to a faster and larger scale of deposit outflows. This risk may be exacerbated by the rollout of the Instant Payments Regulation which could lead to accelerated outflows outside of normal business hours in addition to increased needs for intraday liquidity. In addition, higher interest rates could foster price competition among banks for retail deposits increasing Deutsche Bank's funding costs, as well as putting further pressure on the volume of Deutsche Bank's retail deposits, which are one of the main funding sources for the bank.

Uncertain macroeconomic developments could negatively affect Deutsche Bank's ability to transact foreign exchange (FX) trades due to volatility in the FX markets or if counterparties are concerned about the bank's ability to fulfil agreed transaction terms and therefore seek to limit their exposure. Additionally, increased FX mismatches on the bank's balance sheet may lead to increased collateral outflows if the euro (Deutsche Bank's local currency) materially depreciates against other major currencies and may lead to difficulties to support liquidity needs in different currencies.

As part of emerging risks, digital payments and blockchain are assessed as areas which could impact the depth and volatility of market liquidity and funding and may temporarily impact cost of funding and thereby adversely affect profitability.

Any future credit rating downgrade to below investment grade could adversely affect funding costs and the willingness of counterparties to do business with Deutsche Bank and could impact aspects of the bank's business model.

Rating agencies regularly review the bank's credit ratings, and such reviews could be negatively affected by a number of factors that can change over time, including the credit rating agency's assessment of the bank's strategy and management's capability; financial condition including in respect of profitability, asset quality, capital, funding and liquidity; the level of political support for the industries in which the bank operates; the implementation of structural reform; the legal and regulatory frameworks applicable to the bank's legal structure; business activities and the rights of the bank's creditors; changes in rating methodologies; changes in the relative size of the loss-absorbing buffers protecting bondholders and depositors; the competitive environment, political and economic conditions in the bank's key markets; and market uncertainty. In addition, credit ratings agencies are increasingly considering environmental, social and governance factors, including climate risk, as part of the credit ratings analysis, as are investors in their investment decisions.

A reduction in Deutsche Bank's credit rating below investment grade, or a deterioration in the capital markets' perception of its financial resilience could affect the bank's access to money markets, reduce the size of the bank's deposit base or trigger additional collateral or other requirements in derivatives contracts and other secured funding arrangements or the need to amend such arrangements, which could adversely affect the cost of funding and access to capital markets and could limit the range of counterparties willing to enter into transactions with the bank. This could in turn adversely impact Deutsche Bank's competitive position and threaten its prospects in the short to medium-term.

Deutsche Bank may have difficulties selling businesses or assets at favorable prices or at all and may experience material losses from these assets and other investments irrespective of market developments.

Deutsche Bank seeks to sell or otherwise reduce its exposure to assets as part of its strategy and to meet or exceed capital and leverage requirements, as well as to help the bank meet its return on tangible equity targets. Where the bank sells businesses, it may remain exposed to certain losses or risks under the terms of the sale contracts, and the process of separating and selling such companies or businesses may give rise to operating risks or other losses. Unfavorable business or market conditions may make it difficult for the bank to sell companies, businesses or assets at favorable prices, or may preclude a sale altogether.

Deutsche Bank may have difficulty in identifying, integrating, and executing business combinations or other types of investments which could impact the bank's financial performance. In addition, avoiding business combinations could also materially harm the bank's results of operations and share price.

Deutsche Bank considers business combinations and other types of investments from time to time. If the bank were to announce or complete a significant business combination, its share price or the share price of the combined entity could decline significantly if investors viewed the transaction as too costly, dilutive to existing shareholders or unlikely to improve the bank's competitive position. Also, the need to revalue certain classes of assets at fair value in a business combination may make transactions infeasible. If Deutsche Bank decided to acquire an entity or other types of investments (e.g., equity method investments), it is generally not feasible to complete all aspects of a review for any business prior to completion of the business combination. As a result, the business combination, or other types of investments, may not perform as well as expected or the bank may fail to integrate the combined entity's operations successfully. Failure to complete announced business combinations or failure to achieve the expected benefits of any such combination or investments could materially and adversely affect profitability. Such failures could also affect investors' perception of the business prospects and management of the bank, and cause the share price to fall. It could also lead to departures of key employees or lead to increased costs and reduced profitability if the bank offered key employees financial incentives to remain.

If Deutsche Bank avoids or is unable to enter into business combinations or if announced or expected transactions fail to materialize, market participants may perceive the bank negatively. The bank may also be unable to expand its businesses, especially into new business areas, as quickly or successfully as competitors if the bank does so through organic growth alone. These perceptions and limitations could cost the bank business and harm its reputation, which could have material adverse effects on the financial condition, results of operations and liquidity.

Intense competition, in Deutsche Bank's home market of Germany as well as in international markets, has impacted and could continue to materially adversely impact revenues and profitability.

Deutsche Bank operates in highly competitive markets in all business divisions. If the bank is unable to respond to the competitive environment with attractive product and service offerings that are profitable, the bank may lose market share or incur losses. In addition, downturns in the economies of these markets could add to the competitive pressure, for example, through increased price pressure and lower business volumes. Also, the bank's competitiveness may be impaired if it is not able to deploy capital and fund investments to grow revenues. The Group continuously monitors and responds to competitive developments to protect its market position and realize growth opportunities. Competitors in that context include large, international banks, smaller domestic banks as well as emerging and non-banking competitors. If significant competitors were to merge or be acquired, this could have an adverse impact on Deutsche Bank's business model and opportunities to grow non-organically in the future.

Risks Relating to Regulation and Supervision

Prudential reforms and heightened regulatory scrutiny affecting the financial sector continue to have a significant impact on Deutsche Bank, which may adversely affect its business and, in cases of non-compliance, could lead to regulatory sanctions against the bank, including prohibitions against the bank making dividend payments, share repurchases or payments on its regulatory capital instruments, or increasing regulatory capital and liquidity requirements.

Governments and regulatory authorities continue to work to enhance the resilience of the financial services industry against future crises through changes to the regulatory framework, in particular through the final implementation of the regulatory reform agenda outlined by the Basel Committee on Banking Supervision (Basel Committee) and, more recently, the envisaged transition towards sustainable economies.

As a core element of the reform of the regulatory framework, the Basel Committee developed and continues to refine a comprehensive set of rules regarding minimum capital adequacy and liquidity standards as well as other rules (known as “Basel III”) which apply to Deutsche Bank (as described further in “Item 4: Regulation and Supervision” of this report under “Highlights”). In June 2024, the EU prudential rules (Capital Requirements Regulation and Directive – CRR3 and CRD 6) were published in the EU Official Journal. The reform implements the Basel Committee’s Final Basel III reforms. These reforms change how EU banks will calculate their risk weighted assets. The biggest part of the reforms apply as of January 2025, with the exception of the rules on market risk (implementing the fundamental review of the trading book – FRTB), which has been delayed by the European Commission, via a Delegated Act, until January 2026. The output floor, which limits the internal-model RWA to ultimately 72.5% of the standardized approach RWA, will apply fully in January 2030. Final Basel III will increase the bank’s RWA and associated capital requirements. The reform is also being implemented, with different timelines, in all major jurisdictions. At the start of 2024, the European Banking Authority (EBA) consulted on amendments to its regulatory technical standards (RTS) on prudent valuation. This standard sets out the requirements that institutions operating in the EU should apply for the valuation of their fair-valued assets and liabilities for prudential purposes. The EBA is working through the comments received, and depending on their final view, this may lead to an increase in Deutsche Bank’s CET 1 requirements. The EBA also consulted on change to their RTS on off-balance sheet items. This approach is also looking into the treatment of chargeback payments. Similar to the prudent valuation RTS, the EBA is working through the comments, and the bank expects a final RTS to be published in third quarter 2025. This will provide further steer on the prudential treatment of chargeback risk.

Furthermore, Deutsche Bank’s prudential regulators, including the European Central Bank (the “ECB”) under the EU’s Single Supervisory Mechanism (the “SSM”), conduct stress tests and regular reviews of asset quality and risk management processes in accordance with the supervisory review and evaluation process (the “SREP”). Prudential regulators have discretion to impose capital surcharges on financial institutions for risks which they deem to not be sufficiently covered by the general capital rules (Pillar 1) or impose other measures, such as restrictions on or changes to the business. In this context, the ECB has imposed, individual capital requirements on Deutsche Bank resulting from the SREP (referred to as “Pillar 2 requirements”) which it must meet with at least 75% of Tier 1 capital and at least 56.25% of CET 1 capital. Pillar 2 requirements must be fulfilled in addition to the statutory minimum capital and buffer requirements and any non-compliance may have immediate legal consequences such as restrictions on dividend payments.

Following the 2024 SREP, Deutsche Bank has been informed by the ECB of its decision regarding prudential capital requirements to be maintained from January 1, 2025 onwards, that Deutsche Bank’s Pillar 2 requirement will be 2.9% of RWA, of which at least 1.63% must be covered by CET 1 capital and 2.18% by Tier 1 capital. Further, the decision includes conclusions the ECB draws from regulatory stress tests conducted by the EBA or the ECB. The results of the EBA EU wide stress test launched on January 20, 2025 will be published at the beginning of August 2025. The ECB evaluates each bank’s performance from a qualitative angle to inform the decision on the level of Pillar 2 Requirement and a quantitative outcome which is one aspect when assessing the level of Pillar 2 Guidance. The ECB has already used these powers in its SREP decisions in the past and it may continue to do so to address findings from onsite inspections. In extreme cases, the ECB can even suspend certain activities or permission to operate within their jurisdictions and impose monetary fines for failures to comply with rules applicable to the guidelines.

Regulatory authorities have substantial discretion in how to regulate banks, and this discretion and the powers available to them have been steadily increasing over the years. Also, new regulation may be imposed on an ad-hoc basis by governments and regulators in response to ongoing or future crises (such as global pandemics or climate change), which may especially affect financial institutions such as Deutsche Bank that are deemed to be systemically important.

The ECB conducted its first-ever cyber resilience stress test in 2024 which, according to the ECB, revealed certain areas where banks in the European Union needed to make improvements, including business continuity frameworks, incident response planning, back-up security and management of third-party providers. Deficiencies in operational resilience frameworks as regards IT security and cyber risks have thus become part of the ECB’s 2025-2027 supervisory priorities.

If Deutsche Bank fails to comply with regulatory requirements, in particular with statutory minimum capital requirements or Pillar 2 requirements, or if there are shortcomings in Deutsche Bank's governance and risk management processes, competent regulators may prohibit the bank from making dividend payments to shareholders or distributions to holders of other regulatory capital instruments or require the Bank to take action which may impact its strategy, profitability, capital and liquidity profile. This could occur, for example, if the bank fails to make sufficient profits due to declining revenues, or as a result of substantial outflows due to litigation, regulatory and similar matters. Failure to comply with the quantitative and qualitative regulatory requirements could result in other forms of regulatory enforcement action being brought against Deutsche Bank, which may result in sanctions including fines. Such enforcement action could have a material adverse effect on Deutsche Bank's current and future business, financial condition and results of operations, including Deutsche Bank's ability to pay out dividends to shareholders or distributions on other regulatory capital instruments.

Both the regulatory and legislative environment are expected to be dynamic and can impact Deutsche Bank's revenue and costs (e.g., the cost to ensure ongoing and future compliance). Additionally, the prospect of regulatory conditions easing in certain non-European regions could present a competitive disadvantage to the bank.

Please refer to "Item 4: Regulation and Supervision" of this report for further details on current regulation and supervision requirements applicable to Deutsche Bank.

Deutsche Bank is required to maintain increased capital and bail-inable debt (debt that can be bailed-in in resolution) and abide by tightened liquidity requirements. These requirements may significantly affect the bank's business model, financial condition and results of operations, as well as the competitive environment generally. Any perceptions in the market that the bank may be unable to meet its capital or liquidity requirements with an adequate buffer, or that the bank should maintain capital or liquidity in excess of these requirements, or any other failure to meet these requirements, could intensify the effect of these factors on the business model and results of the bank.

As described above and as described further in "Item 4: Regulation and Supervision" of this report under "Capital Adequacy Requirements" and "Liquidity Requirements", Deutsche Bank is, among other things, subject to increased capital and tightened liquidity requirements under applicable law, including additional capital buffer requirements. Further revisions that came into effect in recent years, such as stricter rules on the measurement of risks, increased risk-weighted assets, and the corresponding capital demand for banks, as well as tightened liquidity requirements and the introduction of a binding leverage ratio (including the leverage ratio buffer) could affect the business model, financial conditions and results of operations of the bank. Furthermore, if Deutsche Bank fails to meet regulatory capital or liquidity requirements, the bank may become subject to enforcement actions. In addition, any requirement to maintain or increase liquidity could lead the bank to reduce activities that pursue revenue generation and profit growth.

In addition to such regulatory capital and liquidity requirements, Deutsche Bank is also required to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers' money. These rules are referred to as "TLAC" (Total Loss Absorbing Capacity) and "MREL" (minimum requirement for own funds and eligible liabilities) requirements, as more fully described in "Item 4: Regulation and Supervision" of this report under "MREL Requirements". The need to comply with these requirements may affect Deutsche Bank's business, financial condition and results of operation and in particular may increase its financing costs.

Deutsche Bank may not have or may not be able to issue sufficient capital or other loss-absorbing liabilities to meet these increasing regulatory requirements. This could occur due to regulatory changes and other factors, such as the bank's inability to issue new securities which are recognized as regulatory capital or loss-absorbing liabilities under the applicable standards, due to an increase of risk-weighted assets based on more stringent rules for the measurement of risks or as a result of a future decline in the value of the euro as compared to other currencies, due to stricter requirements for the compliance with the non-risk based leverage ratio, due to any substantial losses the bank may incur, which would reduce retained earnings, a component of CET 1 capital, or due to a combination of these or other factors.

If the bank is unable to maintain sufficient capital to meet the applicable minimum capital ratios, the buffer requirements, any specific Pillar 2 capital requirements, leverage ratio requirements, or TLAC or MREL requirements, the bank may become subject to enforcement actions and/or restrictions on the pay-out of dividends, share buybacks, payments on other regulatory capital instruments, and discretionary compensation payments. In addition, any requirement to increase risk-based capital ratios or the leverage ratio could lead the bank to adopt a strategy focusing on capital preservation and creation over revenue generation and profit growth, including the reduction of higher margin risk-weighted assets. If the bank is unable to increase its capital ratios to the regulatory minimum in such a case or by raising new capital through the capital markets, through the reduction of risk-weighted assets or through other means, the bank may be required to activate its group recovery plan. If these actions or other private or supervisory actions do not restore capital ratios to the required levels, and the bank is deemed to be failing or likely to fail, competent authorities may apply resolution powers under the Single Resolution Mechanism (SRM) and applicable rules and regulations, which could lead to a significant dilution of shareholders' or even the total loss of the bank's shareholders' or creditors' investment.

In some cases, the bank is required to hold and calculate capital and to comply with rules on liquidity and risk management separately for its local operations in different jurisdictions, in particular in the United States.

Deutsche Bank is required to hold and calculate capital and to comply with rules on liquidity and risk management separately for its local operations in different jurisdictions. Federal Reserve Board rules set forth how the U.S. operations of certain foreign banking organizations (FBOs), such as Deutsche Bank, are required to be structured, as well as the enhanced prudential standards that apply to their U.S. operations. Under these rules, a large FBO with U.S.$ 50 billion or more in U.S. non-branch assets, such as Deutsche Bank, is required to establish or designate a separately capitalized top-tier U.S. intermediate holding company (an "IHC") that would hold substantially all of the FBO's ownership interests in its U.S. subsidiaries. With the Federal Reserve Board's prior approval, Deutsche Bank designated two IHCs: DB USA Corporation and DWS USA Corporation. DWS USA Corporation is a subsidiary of DWS Group GmbH & Co. KGaA, which is approximately 80% owned by Deutsche Bank and holds the bank's Asset Management division and subsidiaries. Each IHC is subject, on a consolidated basis, to the risk-based and leverage capital requirements under the U.S. Basel III capital framework, capital planning and stress testing requirements, U.S. liquidity buffer requirements and other enhanced prudential standards comparable to those applicable to large U.S. banking organizations. The two IHCs are also subject to supplementary leverage ratio requirements, as well as requirements on the maintenance of TLAC and long-term debt. They, and Deutsche Bank's principal U.S. bank subsidiary, Deutsche Bank Trust Company Americas, are also subject to liquidity coverage ratio and net stable funding ratio requirements. The Federal Reserve Board has the authority to examine an IHC, such as DB USA Corporation and DWS USA Corporation, and its subsidiaries, as well as U.S. branches and agencies of FBOs, such as Deutsche Bank's New York branch.

Deutsche Bank AG is required under the Dodd-Frank Act to prepare and submit to the Federal Reserve Board and the Federal Deposit Insurance Corporation a resolution plan (the "U.S. Resolution Plan") on a timeline prescribed by such agencies, alternating between filing a full plan and a targeted plan. The U.S. Resolution Plan must demonstrate that Deutsche Bank AG has the ability to execute a strategy for the orderly resolution of its designated U.S. material entities and operations. Deutsche Bank's U.S. Resolution Plan describes the single point of entry strategy for Deutsche Bank's U.S. material entities and operations and prescribes that DB USA Corporation would provide liquidity and capital support to its U.S. material entity subsidiaries and ensure their solvent wind-down outside of applicable resolution proceedings.

Deutsche Bank's next full resolution plan submission is due on October 1, 2025. If the agencies were to jointly deem Deutsche Bank's U.S. Resolution Plan not credible and Deutsche Bank failed to remediate any deficiencies in the required timeframe, these agencies could impose restrictions on Deutsche Bank or require the restructuring or reorganization of businesses, legal entities, operational systems and/or intra-company transactions which could negatively impact the bank's operations and/or strategy. Additionally, the agencies could also subject Deutsche Bank to more stringent capital, leverage or liquidity requirements, or require Deutsche Bank to divest certain assets or operations.

DB USA Corporation and DWS USA Corporation are each subject, on an annual basis, to the Federal Reserve Board's supervisory stress testing and capital plan requirements. DB USA Corporation and DWS USA Corporation are also subject to the Federal Reserve's Comprehensive Capital Analysis and Review (CCAR), which is an annual supervisory exercise that assesses the capital positions and planning practices of large bank holding companies and IHCs. Following amendments in 2020, the CCAR process combines the CCAR quantitative assessment and the buffer requirements in the Federal Reserve Board's capital rules to create an integrated capital buffer requirement. The amendments eliminated the quantitative and qualitative 'pass/fail' assessments from the CCAR and modified the static capital conservation buffer to incorporate an institution-specific stress capital buffer ("SCB"). The SCBs for DB USA Corporation and DWS USA Corporation based on the 2024 supervisory stress test results are 13.9% and 5.6%, respectively. These SCBs became effective October 1, 2024 and will remain in effect until September 30, 2025, at which point the size of the SCB for each of Deutsche Bank's IHCs will be recalibrated based on the results of the 2025 stress tests, which are expected to be released in June 2025. Increases in the SCB may require the bank to increase capital or restructure businesses in ways that may negatively impact the bank's operations and strategy.

U.S. rules and interpretations, including those described above, could cause the bank to reduce assets held in the United States, or to inject capital and/or liquidity into or otherwise change the structure of the bank's U.S. operations, and could also restrict the ability of the U.S. subsidiaries to pay dividends or the amount of such dividends. To the extent that the bank is required to reduce operations in the United States or deploy capital or liquidity in the United States that could be deployed more profitably elsewhere, these requirements could have an adverse effect on the bank's business, financial condition and results of operations.

It is unclear whether the U.S. capital and other requirements described above, as well as similar developments in other jurisdictions, could lead to a fragmentation of supervision of global banks that could adversely affect the bank's reliance on regulatory waivers allowing the bank to meet capital adequacy requirements, large exposure limits and certain organizational requirements on a consolidated basis only rather than on both a consolidated and non-consolidated basis. Should the bank no longer be entitled to rely on these waivers, the bank would have to adapt and take the steps necessary in order to meet regulatory capital requirements and other requirements on a consolidated as well as a non-consolidated basis, which could result also in significantly higher costs and potential adverse effects on the bank's profitability and dividend paying ability.

Deutsche Bank's regulatory capital and liquidity ratios and funds available for distributions on its shares or regulatory capital instruments will be affected by business decisions and, in making such decisions, the bank's interests and those of the holders of such instruments may not be aligned, and the bank may make decisions in accordance with applicable law and the terms of the relevant instruments that result in no or lower payments being made on Deutsche Bank shares or regulatory capital instruments.

Deutsche Bank's regulatory capital and liquidity ratios are affected by a number of factors, including decisions the bank makes relating to its business and operations as well as the management of its capital position, risk-weighted assets and balance sheet, and external factors, such as regulations regarding the risk weightings of the bank's assets, commercial and market risks or the costs of its legal or regulatory proceedings. While the bank's management is required to take into account a broad range of considerations in managerial decisions, including the interests of the bank as a regulated institution and those of its shareholders and creditors, particularly in times of weak earnings and increasing capital requirements, the regulatory requirements to build capital and liquidity may become paramount. Accordingly, in making decisions in respect of capital and liquidity management, the bank is not required to adhere to the interests of the holders of instruments issued that qualify for inclusion in regulatory capital, such as Deutsche Bank's shares or Additional Tier 1 capital instruments. The bank may decide to refrain from taking certain actions, including increasing capital at a time when it is feasible to do so (through securities issuances or otherwise), even if failure to take such actions would result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of any of the bank's regulatory capital instruments. Deutsche Bank's decisions could cause the holders of such regulatory capital instruments to lose all or part of the value of their investments in these instruments due to the effect on the bank's regulatory capital ratios, and such holders will not have any claim against Deutsche Bank AG relating to such decisions, even if they result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of such instruments it holds.

In addition, the annual profit and distributable reserves, which form an important part of the funds available to pay dividends on shares and make payments on other regulatory capital instruments, as determined in the case of each such instrument by its terms or by operation of law, are calculated on an unconsolidated basis generally in accordance with German accounting rules set forth in the Commercial Code (*Handelsgesetzbuch*). Any adverse change in Deutsche Bank's financial prospects, financial position or profitability, or Deutsche Bank AG's distributable reserves, each as calculated on an unconsolidated basis, may have a material adverse effect on the bank's ability to make dividend or other payments on these instruments. In addition, as part of the implementation of Deutsche Bank's strategy, it may record impairments that reduce the carrying value of subsidiaries on Deutsche Bank AG's unconsolidated balance sheet and reduce profits and distributable reserves. Future impairments or other events that reduce profit or distributable reserves on an unconsolidated basis could lead the bank to be unable to make such payments in respect of future years in part or at all. In particular, the direct costs of Deutsche Bank's potential settlements of litigation, enforcement and similar matters, especially to the extent in excess of provisions Deutsche Bank has established for them, and their related business impacts, if they occur, could impact such distributable amounts.

In addition, German law places limits on the extent to which annual profits and otherwise-distributable reserves, as calculated on an unconsolidated basis, may be distributed to shareholders or the holders of other regulatory capital instruments, such as Additional Tier 1 capital instruments. The bank's management also has, subject to applicable law, broad discretion under the applicable accounting principles to influence amounts relevant for calculating funds available for distribution. Such decisions may impact the ability to make dividend or other payments under the terms of the bank's regulatory capital instruments.

If resolvability or resolution measures were imposed on Deutsche Bank in accordance with European and German legislation, Deutsche Bank's business operations could be significantly affected. Any such measures could lead to losses for shareholders and creditors of the bank.

Germany participates in the SRM, which centralizes at a European level the key competences and resources for managing the failure of any bank in member states of the European Union participating in the banking union. The SRM Regulation and the German Recovery and Resolution Act (*Sanierungs- und Abwicklungsgesetz*), which implemented the EU Bank Recovery and Resolution Directive in Germany, require the preparation of recovery and resolution plans for banks and grant broad powers to public authorities to intervene in a bank which is failing or likely to fail. Resolution measures that could be imposed upon a bank in resolution may include the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank's outstanding debt instruments, for example by way of a deferral of payments or a reduction of the applicable interest rate. Furthermore, certain eligible unsecured liabilities, in particular certain senior "non-preferred" debt instruments specified by the German Banking Act, may be written down, including to zero, or converted into equity (commonly referred to as "bail-in") if the bank becomes subject to resolution.

Resolution laws are also intended to eliminate, or reduce, the need for public support of troubled banks. Therefore, financial public support for such banks, if any, would be used only as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution powers, including a bail-in. The taking of measures by the competent authority to remove impediments to resolvability could materially affect the bank's business operations. Resolution actions could furthermore lead to a significant dilution of shareholders or even the total loss of shareholders' or creditors' investment.

Other regulatory reforms that have been adopted or proposed – for example, extensive new regulations governing derivatives activities, compensation, bank levies, deposit protection and data protection – may materially increase Deutsche Bank's operating costs and negatively impact its business model.

Beyond capital requirements and the other requirements discussed above, Deutsche Bank is affected, or expects to be affected, by various additional regulatory reforms, including, among other things, regulations governing its derivatives activities, compensation, bank levies, deposit protection and data protection.

Under the EU Regulation on over-the-counter (OTC) derivatives, central counterparties and trade repositories, referred to as European Market Infrastructure Regulation (EMIR) banks and other covered institutions must abide by certain requirements, including clearing obligations for certain classes of OTC derivatives and various reporting and disclosure obligations. Following a targeted review of EMIR which concluded in January 2023, certain changes to such EMIR requirements were adopted in November 2024 and the revised EMIR ("EMIR 3.0") published in the Official Journal in December 2024, including the introduction of requirements for counterparties subject to clearing obligations to maintain active accounts at EU central counterparties and clear a representative portion of certain systemic derivative contracts within the EU. The implementation of EMIR 3.0 requirements may negatively impact Deutsche Bank's profit margins.

Deutsche Bank is subject to restrictions on compensation including caps on bonuses that may be awarded to "material risk takers" and other employees as defined therein and in the German Banking Act and other applicable rules and regulations such as the Remuneration Regulation for Institutions (*Institutsvergütungsverordnung*). Such restrictions on compensation, whether by law or pursuant to any guidelines issued by the EBA to further implement them, could put the bank at a disadvantage to its competitors in attracting and retaining talented employees, especially compared to those outside the European Union that are not subject to these caps and other constraints.

Bank levies are provided for in the EU member states participating in the SRM, including, among others, Germany, and also other countries, such as the United Kingdom. Deutsche Bank paid € 172 million for bank levies in 2024, € 528 million for bank levies in 2023 and € 762 million in 2022, reflecting ex-ante contributions to the Single Resolution Funds ("SRF"). The target level of the SRF of 1% of insured deposits of all banks in member states participating in the SRM was reached at the end of 2023 and no contributions to the SRF were required in 2024. Similarly, the bank does not anticipate making contributions to the Single Resolution Fund in 2025. However, the bank acknowledges the inherent risk of this assumption and will closely monitor developments that may impact its financial obligations to the SRF. In addition, German banks must make contributions to the statutory deposit guarantee and investor compensation schemes under the recast European Union directive on deposit guarantee schemes (DGS Directive) and the European Union directive on investor compensation schemes.

The DGS Directive defines a 0.8% target level of prefunding by July 3, 2024 (similar to resolution funds), which has significantly increased the costs of the statutory deposit protection scheme. Deutsche Bank also participates in the voluntary deposit protection provided by the private banks in Germany through the Deposit Protection Fund (Einlagensicherungsfonds) which is funded through contributions by its members. While the total impact of future levies cannot currently be quantified, there could also be certain market conditions or events that give rise to higher-than-expected contributions required by members, which could have a material adverse effect on the bank's business, financial condition and results of operations in future periods. Failure of banks, resolution measures and a decline of the value of the assets held by the SRM by the relevant DGS can cause an increase of contributions in order to replenish the shortfall.

In addition, Deutsche Bank may be impacted by future decisions made by the Court of Justice of the EU in regard to the terms and conditions related to irrevocable payment commitments to the Single Resolution Fund. If a ruling by the court is deemed to have a negative impact on the current accounting treatment of such irrevocable payment commitments, this could result in an accounting loss and have a material adverse effect on the bank's results of operations. For additional details see Note 28 – "Credit-related commitments and contingent liabilities" in the consolidated financial statements.

Deutsche Bank is subject to the General Data Protection Regulation (GDPR) which has increased its regulatory obligations in connection with the processing of personal data, including requiring compliance with the GDPR's data protection principles, the increased number of data subject rights and strict data breach notification requirements. The GDPR grants broad enforcement powers to supervisory authorities, including the potential to levy significant fines for non-compliance and provides for a private right of action for individuals who are affected by a violation of the GDPR. Compliance with the GDPR requires investment in appropriate technical and organizational measures and the bank may be required to devote significant resources to data protection on an ongoing basis. In the event that the bank is found to have not met the standards required by the GDPR, the bank may incur damage to its reputation and the imposition by data protection supervisory authorities of significant fines or restrictions on its ability to process personal data, and the bank may be required to defend claims for compensation brought by affected individuals, all of which could have a material adverse effect on the bank.

More generally, there continues to be scrutiny from both EU and non-EU authorities over financial services firms' compliance with anti-money laundering (AML) and counter-terrorism financing rules, which has led to a number of regulatory proceedings, criminal prosecutions and other enforcement action against firms in various jurisdictions.

Risks Relating to the Bank's Internal Control Environment

A robust and effective internal control environment and adequate infrastructure (comprising people, policies and procedures, controls testing and IT systems) are necessary to enable Deutsche Bank to conduct its business in compliance with the laws, regulations and associated supervisory expectations applicable to the bank. The bank has identified the need to strengthen its internal control environment and infrastructure and has been required to do so in certain areas by its regulators. The bank has undertaken initiatives to accomplish this. If these initiatives are not successful or proceed too slowly, Deutsche Bank's reputation, regulatory position and financial condition may be materially adversely affected, and its ability to achieve the bank's strategic ambitions may be impaired.

Deutsche Bank's businesses are highly dependent on its ability to maintain a robust and effective internal control environment. This is needed for the bank to process and monitor, on a daily basis, a wide variety of transactions, many of which are highly complex and occur at high speeds, volumes and frequencies, and across numerous and diverse markets and currencies. Such a robust and effective control environment is in turn dependent on the sufficiency of the bank's infrastructure to support that environment. This infrastructure consists broadly of internal policies and procedures, testing protocols, and the IT systems and employees needed to enforce and enable them. An effective control environment is dependent on infrastructure systems and procedures that cover the processing and settling of transactions; the valuation of assets; the identification, monitoring, aggregation, measurement and reporting of risks and positions against various metrics; the evaluation of counterparties and customers for legal, regulatory and compliance purposes; the escalation of reviews; and the taking of mitigating and remedial actions where necessary. They are also critical for regulatory reporting and other data processing and compliance activities.

Both the internal control environment and the infrastructure that underlies it fall short in a number of areas of Deutsche Bank's standards for completeness and comprehensiveness and are not well integrated across the bank. The bank's IT infrastructure, in particular, is fragmented, with numerous distinct platforms, many of which need significant upgrades, in operation across the bank. The bank's business processes and the related control systems often require manual procedures and actions that increase the risks of human error and other operational problems that can lead to delays in reporting information to management and to the need for more adjustments and revisions than would be the case with more seamlessly integrated and automated systems and processes. As a result, it is often difficult and labor-intensive for the bank to obtain or provide information of a consistently high quality and on a timely basis to comply with regulatory reporting and other compliance requirements or to meet regulatory expectations on a consistent basis and, in certain cases, to manage the bank's risk comprehensively. Furthermore, it often takes intensive efforts to identify, when possible, inappropriate behavior by staff and attempts by third parties to misuse the bank's services as a conduit for prohibited activities, including those relating to anti-financial crime laws and regulation.

In addition, Deutsche Bank may not always have the personnel with the appropriate experience, seniority and skill levels to compensate for shortcomings in its processes and infrastructure, or to identify, manage or control risks, and it often has been difficult to attract and retain the requisite talent. This has impacted the bank's ability to remediate existing weaknesses and manage the risks inherent in its activities. Additionally, attrition in positions key to improving the bank's control environment remains a risk. Furthermore, engagement of third-party service providers may not be sufficient to address the bank's staffing issues in these areas or the underlying shortcomings themselves.

Against this backdrop, regulators, the Management Board and the Group Audit function have increasingly and more intensively focused on internal controls and infrastructure through numerous formal reviews and audits of the bank's operations. These reviews and audits have identified various areas for improvement relating to a number of elements of the bank's control environment and infrastructure. These include the infrastructure relating to transaction capturing and recognition, classification of assets, asset valuation frameworks, models, data and process consistency, information technology, security and governance, software license management, payment services, risk identification, measurement and management and other processes required by laws, regulations, and supervisory expectations. They also include regulatory reporting, AML, transaction monitoring, "know-your-customer" (KYC), sanctions and embargoes, market conduct and other internal processes that are aimed at preventing use of the bank's products and services for the purpose of committing or concealing financial crime.

The bank's principal regulators, including the BaFin, the ECB, the UK Prudential Regulation Authority and the Federal Reserve Board, have also conducted numerous reviews focused on the bank's internal controls and the related infrastructure. These regulators have required the bank formally commit to remediate its AML and other weaknesses, including the fragmented and manual nature of its infrastructure. In addition, local regulators in other countries in which the bank does business also review the adequacy of the bank's control environment and infrastructure with respect to their jurisdictions. While the overall goals of the various prudential regulators having authority over the bank in the many places in which it does business are broadly consistent, and the general themes of deficiencies in internal controls and the supporting infrastructure are similar, the regulatory frameworks applicable to the bank in the area of internal controls are generally applicable at a national or EU-wide level and are not always consistent across the jurisdictions in which the bank operates around the world. This adds complexity and cost to its efforts to reduce fragmentation and put in place automated systems that communicate seamlessly and quickly with one another.

In order to improve in the areas discussed above, the bank has been undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen its controls and infrastructure, manage non-financial risks and enhance the skill set of personnel. Deutsche Bank believes that these initiatives will better enable it to avoid the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which the bank has been subject; and will improve its ability to comply with laws and regulations and meet supervisory expectations. In particular, the bank has been making efforts to reduce the complexity of the bank's business and to integrate and automate processes and business and second-line controls. The bank has also exited certain businesses and high-risk countries, selectively off-boarded a number of clients and worked to strengthen its compliance culture and control functions. However, the bank may be unable to complete these initiatives as quickly as it intends or regulators demand, and its efforts may be insufficient to remediate existing deficiencies and prevent future deficiencies or to result in fewer litigations or regulatory and enforcement investigations, proceedings and criticism in the future. The bank may also, when faced with the considerable expense of these initiatives, fail to provide sufficient resources for them quickly enough or at all or underestimate the extent of resource requirements. Additionally, during the course of implementing these initiatives, alongside other initiatives aimed at business growth, there will be heightened transformation risk that could lead to further downsides if it is not managed and governed effectively.

The bank's remediation efforts and progress on achieving significant and durable improvements in the areas discussed above may result in regulatory action if regulators deem progress to be insufficient or too slow. If the bank is unable to improve its infrastructure and control environment in a timely manner, the bank may be subject to fines or penalties, as well as to regulatory intervention in aspects of its businesses. For example, the bank might feel pressure or be required by regulators to reduce its exposure to or terminate certain kinds of products or businesses, counterparties or regions, which could, depending on the extent of such requirement, significantly challenge its ability to operate profitably under the current business model.

Regulators can also impose capital surcharges, requiring capital buffers in addition to those directly required under the regulatory capital rules applicable to the bank, to reflect the additional risks posed by deficiencies in its control environment. In extreme cases, regulators can suspend the bank's permission to operate in the businesses and regions within their jurisdictions or require extensive and costly remedial actions. Furthermore, implementation of enhanced infrastructure and controls may result in higher-than-expected costs of regulatory compliance that could offset or exceed efficiency gains or significantly affect the bank's profitability. Any of these factors could affect the bank's ability to implement its strategy in a timely manner or at all.

The BaFin has ordered the bank to improve its control and compliance infrastructure relating to anti-money laundering and know-your-client processes. Deutsche Bank's results of operations, financial condition and reputation could be materially and adversely affected if the bank is unable to significantly improve its infrastructure and control environment by the set deadlines.

In September 2018, BaFin ordered Deutsche Bank to implement internal safeguards and comply with general due diligence obligations to prevent money laundering and terrorist financing. In February 2019, BaFin extended the order with regards to the review of its group-wide risk management processes in correspondent banking and adjust them as necessary. In April 2021, BaFin further expanded its order, requiring additional internal safeguards and sustainable compliance with due diligence obligations, including those for correspondent relationships. The April 2021 order was subsequently extended to include enhancements to the Bank's transaction monitoring systems.

In 2023, the BaFin issued an additional order instructing Deutsche Bank to implement specific improvements to data processing systems for transaction monitoring and warned of potential financial penalties in case of non-fulfillment.

To monitor the implementation of the ordered measures, BaFin appointed a Special Representative in 2018, whose mandate was prolonged following each order extension to ensure continued monitoring and progress assessment. This mandate concluded on October 30, 2024. The bank continues to fully cooperate with the BaFin and remains committed to investing the necessary resources to implement the remaining measures within the deadlines.

The bank's AML and KYC processes and controls aimed at preventing misuse of its products and services to commit financial crime, continue to be subject of regulatory reviews, investigations, and enforcement actions in several jurisdictions. The bank continually seeks to enhance the efficacy of its internal control environment and improve its infrastructure to revised regulatory requirements and to close gaps identified by the bank and/or by regulators and monitors.

If Deutsche Bank is unable to significantly improve its infrastructure and control environment by the set deadlines, the bank's results of operations, financial condition and reputation could be materially and adversely affected. Regulators can impose fines or require the bank to reduce its exposure to or terminate certain kinds of products or businesses or relationships with counterparties or regions. The bank may also face additional legal proceedings, investigations or regulatory actions in the future, including in other jurisdictions with material impact on the bank´s business and profitability. These could, depending on the extent of any resulting requirements, significantly challenge the bank's reputation and its ability to operate profitably under its current business model.

Risks Relating to Technology, Data and Innovation

Digital Innovation may offer market entry opportunities for new competitors such as cross-industry entrants, global tech companies and financial technology companies. Therefore, the bank expects its businesses to have an increased need for investments in digital products and process resources to remain competitive and protect the bank from security threats. If the above investments are not made, there is a risk Deutsche Bank could lose market share, which could have a material adverse effect on its financial results.

Through Deutsche Bank's strategic partnership with Google, the Bank is migrating applications to the Public Cloud with the goal of improving IT flexibility and resiliency. Technology transformation requires robust governance, planning and funding and remains an area of significant regulatory interest. Additionally, the bank must ensure to adopt applicable standards of data privacy and security to protect client and bank information. Failure to do so can compromise client trust, lead to financial losses and result in regulatory penalties, litigation and compensation obligations.

The bank continually assesses and monitors emerging threats relating to the bank’s operations and information. This comprises identification of and response to incidents along the bank’s supply chain, including third- and fourth-party vendors. Security breaches impacting the bank’s supply chain may not only affect the bank but also may have severe cross-industry consequences. Additionally, Deutsche Bank actively tracks threats which have the potential to exploit security vulnerabilities, and activities by nation-state actors along with trends and developments, such as cyber risks related to artificial intelligence technologies and potential threats that quantum computing poses to encryption. The bank also continues to closely observe common attack scenarios, including ransomware, denial of service, and supply chain attacks. For further details and more information, please refer to the Information Security chapter within the Risk Report.

Deutsche Bank is continuously improving its data management strategy focusing on core processes and data sets like transactional, client, and reference data. This includes developing and implementing enterprise architecture principles across its core technology infrastructure. This is central to Deutsche Bank’s wider technology and data strategy, which aims to enable business growth and efficiencies, while also enhancing the control environment. Regulators are actively involved in monitoring the bank's progress in this area.

Major technology transformations in the bank’s business and infrastructure areas are executed via dedicated initiatives. These initiatives aim to reduce IT and business costs, improve controls, and drive revenue growth by offering new client features or targeting client growth. However, there are risks in executing these programs, such as, talent and financial constraints, dependencies on other programs and key deliverables, extended implementation timelines or adverse change related impacts activity on the control environment and functionality issues within upgraded applications or their underlying technologies.

Deutsche Bank maintains insurance for cyber events. There can be no assurance that such coverage will be adequate to cover all losses or liabilities arising from a cyber event.

Risks relating to artificial intelligence could potentially impact or amplify existing risks Deutsche Bank’s faces in its operations.

Artificial intelligence (AI) has the potential to amplify existing risk factors across various domains, including technical, security, societal, economic, ethical, regulatory, environmental, and privacy-related risks. These AI related risks could significantly impact the bank’s stakeholders and society at large. If not properly addressed and mitigated, they may lead to a deterioration of Deutsche Bank’s business results through potential legal liabilities, reputational damage, and loss of customer trust.

The failure to leverage AI or adopting an overly conservative approach, coupled with stringent or inconsistent regulations across jurisdictions, poses risks of missed opportunities. Additionally, AI technologies are highly reliant on the collection and analysis of large amounts of data and complex algorithms, which may be overbroad, insufficient, or contain biased information. These technologies may also lack transparency of the sources of data used to train or develop them or how inputs are converted to outputs, and the bank cannot fully validate this process and its accuracy. There is also the risk of implementing an AI model that leads to incorrect results. These risks could hinder the bank’s ability to innovate, compete, and grow in an increasingly AI driven market. Consequently, this may result in a weakened market position, reduced operational efficiency, the inability to meet evolving customer expectations and negatively impact Deutsche Bank’s cost base and financial results.

Risks Relating to Litigation, Regulatory Enforcement Matters, Investigations and Tax Examinations

Deutsche Bank operates in a highly and increasingly regulated and litigious environment, potentially exposing the bank to liability and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm.

The financial services industry is among the most highly regulated industries. The bank’s operations throughout the world are regulated and supervised by the central banks and regulatory authorities in the jurisdictions in which it operates. In recent years, regulation and supervision in a number of areas has increased, and regulators, law enforcement authorities, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations or enforcement actions which are often followed by civil litigation. There has been a steep escalation in the severity of the terms which regulatory and law enforcement authorities have required to settle legal and regulatory proceedings against financial institutions, with settlements in recent years including unprecedented monetary penalties as well as criminal sanctions. As a result, it may continue to be subject to increasing levels of liability and regulatory sanctions and may be required to make greater expenditures and devote additional resources to addressing these liabilities and sanctions. Regulatory sanctions may include status changes to local licenses or orders to discontinue certain business practices.

The bank and its subsidiaries are involved in various litigation proceedings, including civil class action lawsuits, arbitration proceedings and other disputes with third parties, as well as regulatory proceedings and investigations by both civil and criminal authorities in jurisdictions around the world. While Deutsche Bank has made significant progress resolving litigation and regulatory enforcement matters, remaining unresolved or new litigation, enforcement or similar matters pending against the bank could result in significant costs against the bank in the near to medium term and could adversely affect its business, financial condition and results of operations, if these matters develop in an adverse manner. Litigation and regulatory matters are subject to many uncertainties, and the outcome of individual matters is not predictable with assurance. The bank may settle litigation or regulatory proceedings prior to a final judgment or determination of liability. The bank may do so for a number of reasons, including to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when the bank believes it has valid defenses to liability. The bank may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, it may, for similar reasons, reimburse counterparties for their losses even in situations where the bank does not believe it is compelled to do so. The financial impact of legal risks might be considerable but may be difficult or impossible to estimate and to quantify, so that amounts eventually paid may exceed the amount of provisions made or contingent liabilities assessed for such risks.

Guilty pleas by or convictions of the bank or its affiliates in criminal proceedings, or regulatory or enforcement orders, settlements or agreements to which the bank or its affiliates become subject, may have consequences that have adverse effects on certain of its businesses. Moreover, if these matters are resolved on terms that are more adverse to the bank than expected, in terms of the costs or necessary changes to the bank’s businesses, or if related negative perceptions concerning its business and prospects and related business impacts increase, Deutsche Bank may not be able to achieve its strategic objectives or may be required to change them.

Actions currently pending against Deutsche Bank or its current or former employees may not only result in judgments, settlements, fines or penalties, but may also cause substantial reputational harm to the bank. The risk of damage to the bank’s reputation arising from such proceedings is also difficult or impossible to quantify.

Regulators have increasingly sought admissions of wrongdoing in connection with settlement of matters brought by them. This could lead to increased exposure in subsequent civil litigation or in consequences under so-called "bad actor" laws, in which persons or entities determined to have committed offenses under some laws can be subject to limitations on business activities under other laws, as well as adverse reputational consequences. In addition, the U.S. Department of Justice (DOJ) conditions the granting of cooperation credit in civil and criminal investigations of corporate wrongdoing on the company involved having provided to investigators all relevant facts relating to the individuals responsible for the alleged misconduct. This policy may result in increased fines and penalties if the DOJ determines that that bank has not provided sufficient information about applicable individuals in connection with an investigation. Other governmental authorities could adopt similar policies.

In addition, the financial impact of legal risks arising out of matters similar to some of those the bank faces have been very large for a number of participants in the financial services industry, with fines and settlement payments greatly exceeding what market participants may have expected and, as noted above, escalating steeply in recent years to unprecedented levels. The experience of others, including settlement terms, in similar cases is among the factors the bank takes into consideration in determining the level of provisions the bank maintains in respect of these legal risks. Developments in cases involving other financial institutions in recent years have led to greater uncertainty as to the predictability of outcomes and could lead the bank to add provisions. Moreover, if these matters are resolved on terms that are more adverse to the bank than expected, in terms of the costs or necessary changes to the bank’s businesses, or if related negative perceptions concerning its business and prospects and related business impacts increase, Deutsche Bank may not be able to achieve its strategic objectives or may be required to change them. In addition, the costs of the bank’s investigations and defenses relating to these matters are themselves substantial. Further uncertainty may arise as a result of a lack of coordination among regulators from different jurisdictions or among regulators with varying competencies in a single jurisdiction, which may make it difficult for the bank to reach concurrent settlements with each regulator. Should the bank be subject to financial impacts arising out of litigation and regulatory matters to which the bank is subject in excess of those it has calculated in accordance with its expectations and the relevant accounting rules, provisions in respect of such risks may prove to be materially insufficient to cover these impacts. This could have a material adverse effect on the bank’s results of operations, financial condition or reputation as well as on the bank’s ability to maintain capital, leverage and liquidity ratios at levels expected by market participants and regulators. In such an event, the bank could find it necessary to reduce its risk-weighted assets (including on terms disadvantageous to the bank) or substantially cut costs to improve these ratios, in an amount corresponding to the adverse effects of the provisioning shortfall.

Deutsche Bank is currently involved in civil proceedings in connection with its voluntary takeover offer for the acquisition of all shares of Postbank. The extent of the bank's financial exposure to this matter could be material, and the bank's reputation may be harmed.

In 2010, Deutsche Bank announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG ("Postbank"). Deutsche Bank offered Postbank shareholders a consideration of € 25 for each Postbank share. This offer was accepted for a total of approximately 48.2 million Postbank shares.

A significant number of former shareholders of Postbank who had accepted the takeover offer brought claims against Deutsche Bank alleging that Deutsche Bank had been obliged to make a mandatory takeover offer at the latest, in 2009. The plaintiffs allege that the consideration offered for the shares in Postbank needed to be raised to € 57.25 or even € 64.25 per share.

Deutsche Bank recognized a provision of € 1.3 billion in the second quarter of 2024 to provide for the amount of all pending claims and cumulative interest.

On October 23, 2024, the Higher Regional Court of Cologne handed down its judgment in the remaining lead case and fully granted the plaintiffs' claims. The court did not grant a further leave to appeal to the Federal Court of Justice (BGH). On November 19, 2024, Deutsche Bank filed a complaint against the denial of leave to appeal with the BGH.

The legal question of whether Deutsche Bank had been obliged to make a mandatory takeover offer for all Postbank shares prior to its 2010 voluntary takeover may impact two pending appraisal proceedings *(Spruchverfahren)*. These proceedings were initiated by former Postbank shareholders with the aim to increase the cash compensation of € 35.05 paid in connection with the squeeze-out of Postbank shareholders in 2015 and the cash compensation of € 25.18 offered and annual compensation of € 1.66 paid in connection with the execution of a domination and profit and loss transfer agreement *(Beherrschungs- und Gewinnabführungsvertrag)* between DB Finanz-Holding AG (now DB Beteiligungs-Holding GmbH) and Postbank in 2012. The compensation of € 25.18 in connection with the domination and profit and loss transfer agreement was accepted for approximately 0.5 million Postbank shares. The compensation of € 35.05 paid in connection with the squeeze-out in 2015 was relevant for approximately 7 million Postbank shares.

The applicants in the appraisal proceedings claim that a potential obligation of Deutsche Bank to make a mandatory takeover offer for Postbank at an offer price of € 57.25 should be decisive when determining the adequate cash compensation in the appraisal proceedings. The Regional Court Cologne had originally followed this legal view of the applicants in two resolutions. In a decision dated June 2019, the Regional Court Cologne expressly gave up this legal view in the appraisal proceedings in connection with the execution of a domination and profit and loss transfer agreement and concluded that whether Deutsche Bank was obliged to make a mandatory offer for all Postbank shares prior to its voluntary takeover offer in 2010 shall not be relevant for determining the appropriate cash compensation. It is likely that the Regional Court Cologne will take the same legal position in the appraisal proceedings in connection with the squeeze-out.

In October 2020, the Regional Court Cologne handed down a decision in the appraisal proceeding concerning the domination and profit and loss transfer agreement according to which the annual compensation pursuant to Sec. 304 German Stock Corporation Act shall be increased by € 0.12 to € 1.78 per Postbank share and the compensation pursuant to Sec. 305 of the German Stock Corporation Act shall be increased from € 25.18 to € 29.74 per Postbank share. The increase of the settlement amount is of relevance for approximately 0.5 million former Postbank shares whereas the increase of the annual compensation is of relevance for approximately 7 million former Postbank shares. Deutsche Bank as well as the applicants have lodged an appeal against this decision which remains outstanding.

The extent of the bank's financial exposure to these matters, including beyond provisions the bank has taken, could be material and the bank's reputation may be harmed.

Deutsche Bank is currently the subject of industry-wide inquiries and investigations by regulatory and law enforcement authorities relating to transactions of clients in German shares around the dividend record dates for the purpose of obtaining German tax credits or refunds in relation to withholding tax levied on dividend payments (so-called cum-ex transactions). In addition, the bank is exposed to potential tax liabilities and to the assertion of potential civil law claims by third parties, e.g., former counterparties, custodian banks, investors and other market participants, including as a consequence of criminal judgements in criminal proceedings in which the bank is not directly involved. The eventual outcome of these matters is unpredictable and may materially and adversely affect the bank's results of operations, financial condition and reputation.

Deutsche Bank Group is subject to ongoing criminal investigations by the Public Prosecutor in Cologne (*Staatsanwaltschaft Köln*, “CPP”) and civil law claims in relation to cum-ex. In addition, current and former Deutsche Bank employees and seven former Management Board members are under criminal investigation by the CPP, as are unnamed personnel of former Deutsche Postbank AG. Ongoing media attention surrounding the cum-ex topic as well as any future criminal judgement that is unfavorable to the bank or its former employees and Management Board members could create reputational risks. The imposition of fines and the disgorgement of profits or criminal confiscations could have a material adverse effect on the bank's financial condition, results of operations and reputation.

The bank is further exposed to the assertion of potential tax and civil law recourse and compensation claims by German tax authorities and third parties.

The risks arising from the cum-ex topic are difficult to quantify and the likelihood of these risks materializing is hard to predict. In the event that Deutsche Bank is eventually liable under the civil law claims already asserted or under claims that will potentially be asserted by third parties in the future, this may materially and adversely affect the bank's financial condition or results of operations. For additional details on the specific cases, see Note 27 – “Provisions” in the consolidated financial statements.

Deutsche Bank is under continuous examination by tax authorities in the jurisdictions in which it operates. Tax laws are increasingly complex and are evolving. The cost to the bank arising from the resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes may increase and may adversely affect the bank's business, financial condition and results of operation.

Deutsche Bank is under continuous examination by tax authorities in the jurisdictions in which it operates. Tax laws are becoming increasingly more complex. In the current political and regulatory environment, tax administrations' and courts' interpretation of tax laws and regulations and their application are evolving, and scrutiny by tax authorities has intensified. Wide ranging and continuous changes in the principles of international taxation emanating from the OECD's Base Erosion and Profit Shifting agenda are generating significant uncertainties for the bank and its subsidiaries and may result in an increase in instances of tax disputes or instances of double taxation, as member states may take different approaches in transposing these requirements into national law or may choose to implement unilateral measures. This includes, for example, the OECD global minimum taxation rules which are effective starting with tax year 2024. Tax administrations, including Germany, have also been focusing on the eligibility of taxpayers for reduced withholding taxes on dividends in connection with certain cross-border lending or derivative transactions. In addition, while administrative guidance has been issued, uncertainties remain in the application of the Base Erosion Anti-Abuse Tax provisions introduced by the U.S. tax reform in 2017 and of the corporate alternative minimum tax enacted by the U.S. Inflation Reduction Act of 2022. These developments have led to an increase in the number of tax periods that remain open and therefore subject to potential adjustment. As a result, the cost to the bank arising from the resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes, as well as from rapidly changing and increasingly more complex and uncertain tax laws and principles, may increase and may adversely affect the bank's business, financial condition and results of operation.

Deutsche Bank has received requests for information from regulatory and law enforcement authorities concerning its anti-financial crime controls, including in the United States. In the event that violations of law or regulation are found to have occurred, legal and regulatory sanctions in respect thereof may materially and adversely affect the bank's results of operations, financial condition and reputation.

The bank has received requests for information from regulatory and law enforcement authorities concerning its anti-financial crime controls over the past several years, both generally and in connection with specific clients, counterparties or incidents, including in the United States. Among the areas within the scope of these inquiries are client onboarding and KYC processes, transaction monitoring systems and procedures, processes concerning the decision to file or not to file a suspicious activity report, escalation procedures, and other related processes and procedures. In the event that violations of law or regulation are found to have occurred, legal and regulatory sanctions in respect thereof may materially and adversely affect the bank's results of operations, financial condition and reputation.

In July 2023, Deutsche Bank, Deutsche Bank AG New York Branch, DB USA Corporation, Deutsche Bank Trust Company Americas and DWS USA Corporation entered into a consent order and written agreement with the Federal Reserve concerning adherence to prior orders and settlements related to sanctions and embargoes and AML compliance, and remedial agreements and obligations related to risk management issues. The 2023 consent order alleges insufficient and tardy implementation of the post-settlement sanctions and embargoes and AML control enhancement undertakings required by prior consent orders the bank entered into with the Federal Reserve in 2015 and 2017. The 2023 consent order further provides that the material failure to remediate the unsafe and unsound practices or violations described therein may require additional and escalated formal actions by the Federal Reserve against Deutsche Bank, including additional penalties or additional affirmative corrective actions. In the event the bank is unable to timely complete the sanctions and embargoes and AML control enhancement undertakings required by the Federal Reserve, the damages could be substantial and the impact on the bank's results of operations, financial condition and reputation would be material.

Deutsche Bank's subsidiary, Deutsche Bank Polska S.A., is subject to numerous demands for reimbursement in respect of mortgage loans agreements in foreign currency, based on allegations that they are unfair and invalid.

Starting in 2016, certain clients of Deutsche Bank Polska S.A. have reached out to Deutsche Bank Polska S.A. alleging that their mortgage loan agreements in foreign currency include unfair clauses and are invalid. These clients have demanded reimbursement of the alleged overpayments under such agreements totaling over € 864 million with over 6,645 civil claims having been commenced in Polish courts as of December 31, 2024. These cases are an industry wide issue in Poland and other banks are facing similar claims. The bank's total portfolio provision for this matter, which includes both Swiss Franc and EUR mortgage cases, is € 895 million as of December 31, 2024. The outcome of this matter is uncertain and future changes to assumptions included in the model or resolutions of claims could result in a significant increase in the provision beyond the amount established.

Guilty pleas by or convictions of the bank or its affiliates in criminal proceedings, or regulatory or enforcement orders, settlements or agreements to which the bank or its affiliates become subject, may have consequences that have adverse effects on certain of the bank's businesses.

Deutsche Bank and its affiliates have been and are subjects of criminal and regulatory enforcement proceedings. Guilty pleas or convictions against the bank or its affiliates, or regulatory or enforcement orders, settlements or agreements to which the bank or its affiliates become subject, could lead to the bank's ineligibility to conduct certain business activities. In particular, such guilty pleas or convictions could cause its asset management affiliates to no longer qualify as "qualified professional asset managers" (QPAMs) under the QPAM Prohibited Transaction Exemption under the U.S. Employee Retirement Income Security Act of 1974 (ERISA), which exemption is relied on to provide asset management services to certain pension plans in connection with certain asset management strategies. While there are a number of statutory exemptions and numerous other administrative exemptions that the bank's asset management affiliates may use to trade on behalf of ERISA plans, and in many instances they may do so in lieu of relying on the QPAM exemption, loss of QPAM status could cause customers who rely on such status (whether because they are legally required to do so or because the bank has agreed contractually with them to maintain such status) to cease to do business or refrain from doing business with the bank and could negatively impact its reputation more generally. For example, clients may mistakenly see the loss as a signal that the bank's asset management affiliates are somehow no longer approved as asset managers generally by the U.S. Department of Labor (DOL), the agency responsible for ERISA, and cease to do business or refrain from doing business with the bank for that reason. This could have a material adverse effect on the bank's results of operations, particularly those of its asset management business in the United States. The DOL has granted an individual exemption permitting certain of the bank's affiliates to retain their QPAM status despite both the conviction of DB Group Services (UK) Limited and the conviction of Deutsche Securities Korea Co. (the latter conviction has been subsequently overturned). This exemption has been extended by the DOL until April 17, 2027, which is the end of the disqualification period. The extension would terminate if, among other things, Deutsche Bank or its affiliates were to be convicted of crimes in other matters.

Climate Change and Other Risks Relating to Environmental, Social and Governance (ESG)-Related Matters

The impacts of rising global temperatures and the associated policy, technology and behavioral changes required to limit global warming to no greater than 1.5°c above pre-industrial levels have led to emerging sources of financial and non-financial risks. These include the physical risk impacts from extreme weather events, and transition risks as carbon-intensive sectors are faced with higher costs, potentially reduced demand and restricted access to financing. More rapid than currently expected emergence of transition and / or physical climate risks and other environmental risks may lead to increased credit and market losses as well as operational disruptions due to impacts on vendors and the bank's own operations.

Instances of extreme weather events have increased in frequency and severity. Recent cases of severe flash flooding in Spain, hurricanes in North America and wildfires in California highlight the increasing trend of damaging climate events. Although impacts were contained, future extreme weather events could lead to higher credit loss provisions, property loss, rising insurance costs and operational resilience risks. Extreme weather events can also impact Deutsche Bank's revenue generating capabilities and costs, while market declines and volatility could negatively impact the value of financial instruments, drive volatility in the bank's valuation and timing differences and result in impairments of non-financial assets.

Financial institutions are facing increased scrutiny on climate and ESG-related issues from governments, regulators, shareholders and other bodies (including non-governmental organizations). Banks must navigate an increasingly complex and heterogeneous policy environment with U.S. led challenges to their collaborative efforts to reduce greenhouse gas emissions leading to accusations of unlawful practice and anti-trust violations with potential for restrictions on access to certain clients and potential litigation. In key focus is the Net Zero Banking Alliance which has seen the departure of U.S. peers in response to these concerns. In contrast, many organizations and individuals expect banks to support the transition to a lower carbon economy, to limit nature-related risks such as biodiversity and habitat loss, and to protect human rights. This increased scrutiny includes more extensive and prescriptive ESG disclosure requirements such as the Corporate Sustainability Reporting Directive (CSRD). The emergence of significantly diverging (and sometimes conflicting) ESG regulatory and / or disclosure standards across jurisdictions could lead to higher costs of compliance and risks of failing to meet requirements. Of note is the interconnectedness between transition, other environmental, and social risks where supporting the transition could lead to increased demand for transition minerals which are obtained via mining.

In the United States, state legislators and regulators are issuing potentially conflicting laws and certification requirements regarding ESG matters, reflecting a polarized political context within the U.S. California, for example, issued ESG disclosure laws, whereas Florida requires the bank to certify that it does not discriminate based on business activities of borrowers. This may result in the risk of loss of business or licenses if the bank cannot certify, while also requiring DB to analyze and balance positions.

Deutsche Bank is rated by a number of ESG rating providers, with the ratings increasingly utilized as criteria to determine eligibility for sustainable investments and to assess management of ESG risks and opportunities. The methodologies and scores used by the different providers can lead to significant divergence in results and may not provide an accurate and consistent reflection of the risks facing the bank. Should the bank's ratings lag peers, or materially deteriorate, this could lead to negative reputational impacts and reduced investor demand for equity or debt.

Data, methodologies and industry standards for measuring and assessing climate and other environmental risks are still evolving or, in certain cases, are not yet available. This, combined with a lack of comprehensive and consistent climate and other environmental risk disclosures by its clients, means that the bank, in line with the wider industry, is heavily reliant on proxy estimates and/or proprietary approaches for risk assessment and modelling and for the bank's climate and environmental risk management disclosures. The high degree of uncertainty that this creates increases the risk that third parties may assert that the bank's sustainability-related disclosures constitute greenwashing. In addition to the reputational risks associated with such allegations, competent supervisory authorities and law enforcement agencies may commence investigations based on such allegations.

Deutsche Bank is committed to managing its business activities and operations in a sustainable manner, including aligning portfolios with net zero emissions by 2050. The bank continues to develop and implement its approach to environmental risk assessments and management in order to promote the integration of environmental-related factors across its business activities. This includes the ability to identify, monitor and manage risks and to conduct regular scenario analysis and stress testing. Rapidly changing regulatory as well as stakeholder demands, combined with significant focus by stakeholders, may adversely affect its businesses if it fails to adopt such demands or appropriately implement its plans.

While Deutsche Bank remains committed to the targets outlined in its Sustainability Deep Dive, the bank may face headwinds in achieving its aim for € 500 billion in cumulative sustainable financing and investment volumes through the end of 2025. If ambitions or targets are missed, this could impact, among other things, revenues and the reputation of the bank. In addition, scarcity of green and social assets may reduce Deutsche Bank's ability to issue compliant funding. In addition, competition for the financing of green and social assets may reduce Deutsche Bank's ability to issue funding that qualifies for inclusion. Additionally, an economy transitioning at a slower pace may result in significant deviations from the bank's net zero-aligned emissions pathways toward its targets. This would come to reduce transition risk in the short to medium term but increase it significantly over the longer term. The bank continues to consider its net zero targets as one of the key climate risk management tools and recently extended its net zero target framework to include the Commercial Aviation sector.

Certain jurisdictions have begun to develop anti-ESG measures including requiring financial institutions that wish to do business with them to certify their non-adherence to aspects of the transition agenda. Failing to comply with these requirements may result in the termination of existing business and the inability to conduct new business with those jurisdictions, while complying may lead to reputational risks and potential lawsuits.

Other Risks

The bank's risk management policies, procedures and methods leave the bank exposed to unidentified or unanticipated risks, which could lead to material losses.

Deutsche Bank has devoted significant resources to develop its risk management policies, procedures and methods, including with respect to market, credit, liquidity, operational as well as reputational and model risk. However, the bank may not be fully effective in mitigating its risk exposures in all economic or market environments or against all types of risk, including risks that the bank fails to identify or anticipate. Where the Group uses models to calculate risk-weighted assets for regulatory purposes, potential deficiencies may also lead regulators to impose a recalibration of input parameters or a complete review of the model.

Nonetheless, the risk management techniques and strategies have not been and may in the future not be fully effective in mitigating the bank's risk exposure in all economic market environments or against all types of risk, including risks that it fails to identify or anticipate. Some of the bank's quantitative tools and metrics for managing risk are based upon its use of observed historical market behavior. The bank applies statistical and other tools to these observations to arrive at quantifications of its risk exposures. In a financial crisis, the financial markets may experience extreme levels of volatility (rapid changes in price direction) and the breakdown of historically observed correlations (the extent to which prices move in tandem) across asset classes, compounded by extremely limited liquidity. In such a volatile market environment, the bank's risk management tools and metrics may fail to predict important risk exposures. In addition, Deutsche Bank's quantitative modeling does not take all risks into account and makes numerous assumptions regarding the overall environment, which may not be borne out by events. As a result, risk exposures have arisen and could continue to arise from factors the bank did not anticipate or correctly evaluate in its models. This has limited and could continue to limit the bank's ability to manage its risks especially in light of geopolitical developments, many of the outcomes of which are currently unforeseeable. The bank's losses thus have been and may in the future be significantly greater than the historical measures indicate.

In addition, the bank's more qualitative approach to managing those risks not taken into account by the quantitative methods could also prove insufficient, exposing the bank to material unanticipated losses. Also, if existing or potential customers or counterparties believe its risk management is inadequate, they could take their business elsewhere or seek to limit their transactions with the bank. This could harm the bank's reputation as well as its revenues and profits. See "Combined Management Report: Risk Report" in the Annual Report 2024 for a more detailed discussion of the policies, procedures and methods the bank uses to identify, monitor and manage its risks.

Deutsche Bank utilizes a variety of third parties in support of its business and operations. Services provided by third parties pose risks to the bank comparable to those it bears if Deutsche Bank performed the services itself, and the bank remains ultimately responsible for the services its third parties provide. Furthermore, if a third party does not conduct business in accordance with applicable standards or Deutsche Bank's expectations, the bank could be exposed to material losses, regulatory action, litigation, reputational damage, or fail to achieve the benefits it sought from the relationship.

Financial institutions rely on third-party service providers for a range of services, some of which support their critical operations. These dependencies have grown in recent years as part of the increasing trend in digitalization of the financial services sector which can bring multiple benefits including flexibility, innovation and improved operational resilience. However, if not properly managed, disruption to critical services or service providers could pose risks to financial institutions, and in some cases, financial stability.

The regulatory framework for managing third party risk continues to evolve and becomes increasingly complex as regulators seek to address various objectives. There are two main areas of focus including how financial institutions manage their third-party risks and how to address the systemic risks caused by concentration of services provided by critical third parties.

Deutsche Bank has a well-established approach to third party risk management; from a clear policy and procedure through to centralized risk process for businesses to use when engaging with third parties. To respond to the increasing regulatory demand, Deutsche Bank is continuously enhancing the bank's control environment. In 2024, the bank concluded a key transformational project which has delivered improved efficiency, a more proportionate approach, real time monitoring and better culture of awareness to protect the bank from third party risk.

When using third-party service providers, the bank remains fully responsible and accountable for complying with all the regulatory obligations, including the ability to oversee the outsourcing of critical or important functions. The bank may face risks of material losses or reputational damage if third parties fail to provide services as agreed with the bank and/or in line with regulatory requirements.

Similar to cybersecurity threats to Deutsche Bank, a successful cyberattack on a third party vendor could have a significant negative impact on the bank that may result in the disclosure or misuse of client as well as proprietary information, damage or inability to access information technology systems, financial losses, additional costs, personal data breach notification obligations, reputational damage, client dissatisfaction and potential regulatory penalties or litigation exposure

In situations where Deutsche Bank is the third party service provider, the bank may be exposed to financial risks, such as lost revenues, costs and expenses associated with the cancellation of the service agreement, if Deutsche Bank were no longer able to benefit from the relationship.

Operational risks, which may arise from errors in the performance of the bank's processes, the conduct of its employees, shortfalls in access management, instability, malfunction or outage of its IT system and infrastructure, or loss of business continuity, or comparable issues with respect to the bank's vendors, may disrupt its businesses and lead to material losses.

Deutsche Bank faces operational risk arising from errors, inadvertent or intentional, made in the execution, confirmation or settlement of transactions or from transactions not being properly recorded, evaluated or accounted for. An example of this risk concerns derivative contracts, which are not always confirmed with the counterparties on a timely basis. For so long as the transaction remains unconfirmed, the bank is subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce the contract.

In addition, Deutsche Bank's businesses are highly dependent on its ability to process manually or through its systems a large number of transactions on a daily basis, across numerous and diverse markets in many currencies. Some of the transactions have become increasingly complex. Moreover, management relies heavily on its financial, accounting and other data processing systems that include manual processing components. If any of these processes or systems do not operate properly, or are disabled, or subject to intentional or inadvertent human error, the bank could suffer financial loss, a disruption of its businesses, liability to clients, regulatory intervention or reputational damage.

The bank is also dependent on its employees to conduct its business in accordance with applicable laws, regulations and generally accepted business standards. If the bank's employees do not conduct its business in this manner, the bank may be exposed to material losses. Furthermore, if an employee's misconduct reflects fraudulent intent, the bank could also be exposed to reputational damage. The bank categorizes these risks as conduct risk, a term used to describe the risks associated with behavior by employees and agents, including third parties, that could harm clients, customers or the integrity of the markets, such as selling products that are not suitable for a particular customer, fraud, unauthorized trading and failure to comply with applicable regulations, laws and internal policies. U.S. regulators in particular have been increasingly focused on conduct risk, and such heightened regulatory scrutiny and expectations could lead to investigations and other inquiries, as well as remediation requirements, more regulatory or other enforcement proceedings, civil litigation and higher compliance and other risks and costs.

The bank is required to monitor, evaluate, and observe laws and other requirements relating to financial and trade sanctions and embargoes set by the EU, the Deutsche Bundesbank, Germany's Federal Office for Economic Affairs and Export Control, and other authorities, such as the U.S. Treasury Department's Office of Foreign Assets Control (OFAC) and the UK Treasury Department's Office of Financial Sanctions Implementation (OFSI). Sanctions are subject to rapid change, and it is also possible that new direct or indirect secondary sanctions could be imposed by the United States or other jurisdictions without warning, as a result of geopolitical developments. Should the bank fail to comply timely and in all respects with these sanctions, the bank could be exposed to legal penalties and its reputation could suffer.

The bank in particular faces the risk of loss events due to the instability, malfunction or outage of its IT system and IT infrastructure, as well as breaches in IT system and infrastructure (including cyber-attacks). Such losses could materially affect the bank's ability to perform business processes and may, for example, arise from the erroneous or delayed execution of processes as a result of system outages, degraded services in systems and IT applications or the inaccessibility of its IT systems. A delay in processing a transaction, for example, could result in an operational loss if market conditions worsen during the period after the error. IT-related errors may also result in the mishandling of confidential information, damage to the bank's computer systems, financial losses, additional costs for repairing systems, reputational damage, customer dissatisfaction or potential regulatory or litigation exposure (including under data protection laws such as the GDPR). Additionally, there is a heightened emphasis and growing expectations of data management and the risks posed by poor data management standards and data quality, and the potential impact to key control, decision-making and reporting processes.

The continuing move across global industries to conduct business from home and away from primary office locations is driving a more accelerated evolution of business practices compared to historic trends. The demand on the bank's technology infrastructure and the risk of cyber-attacks could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services, as well as increase the likelihood of conduct breaches.

Business continuity risk is the risk of incurring losses resulting from the interruption of normal business activities. The bank operates in many geographic locations and is frequently subject to the occurrence of events outside of its control. Despite the contingency plans the bank has in place, its ability to conduct business in any of these locations may be adversely impacted by a disruption to the infrastructure that supports the bank's business, whether as a result of, for example, events that affect the bank's third-party vendors or the community or public infrastructure in which the bank operates. Any number of events could cause such a disruption including deliberate acts such as acts of war or other military action, sabotage, terrorist activities, bomb threats, strikes, riots and assaults on the bank's staff; natural calamities such as hurricanes, snowstorms, floods, disease pandemics (such as the COVID-19 pandemic) and earthquakes; or other unforeseen incidents such as accidents, fires, explosions, utility outages and political unrest. Any such disruption could have a material adverse effect on the bank's business and financial position.

As a global bank, Deutsche Bank is often the subject of news reports. Deutsche Bank conducts its media dialogue through official teams. However, members of the media sometimes approach Deutsche Bank staff outside of these channels and Deutsche Bank-internal information, including confidential matters, have been subject to external news media coverage, which may result in publication of confidential information. Leaks to the media can have severe consequences for Deutsche Bank, particularly when they involve inaccurate statements, rumors, speculation or unsanctioned opinions. This can result in financial consequences such as the loss of confidence or business with clients and may impact the bank's share price or capital instruments by undermining investor confidence. The bank's ability to protect itself against these risks is limited.

The inability to have equivalence arrangements with Central Clearing Counterparties (CCPs) in countries outside the European Union may have adverse effects on Deutsche Bank's business, results of operations or financial targets; or more generally, the bank's large clearing and settlement business poses risks if it fails to operate properly for even short periods.

For Indian CCPs, the BaFin published a statement in February 2023 allowing German credit institutions, including Deutsche Bank, the possibility to remain members of the six India CCPs until October 31, 2024. The BaFin, as well as the French AMF and ACPR granted indefinite extension of this deadline, allowing time for European banks together with the relevant European and Indian authorities to continue work on finding a solution. This allows European banks, including Deutsche Bank, to make any changes needed so that the clients can continue to be served even after the deadline. If a solution cannot be reached and Deutsche Bank no longer had equivalence arrangements with India, this would have an adverse impact on the bank's business results.

Negotiations between the UK and EU have continued with regards to financial services not extensively covered by the existing post-Brexit deal. The extension to the temporary equivalence arrangements for UK CCPs until June 2025 has temporarily removed the risk that access to UK clearing would be withheld from EU firms. On January 31, 2025, European Commission published the decision to extend equivalence for UK CCP's until June 30, 2028.

The bank has large clearing and settlement businesses and an increasingly complex and interconnected IT landscape. These give rise to the risk that the bank's customers or other third parties could lose substantial sums if the systems fail to operate properly for even short periods. This will be the case even where the reason for the interruption is external to the bank. In such a case, the bank might suffer harm to its reputation even if no material loss of money occurs. This could cause customers to take their business elsewhere, which could materially harm the bank's revenues and profits.

The bank must test goodwill and other intangible assets at least annually for impairment or each reporting period if indicators of impairment exist. In the event the test determines that impairment exists, the bank must write down the value of the asset.

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition. Goodwill on the acquisition of subsidiaries is capitalized and reviewed for impairment annually or more frequently if there are indications that impairment may have occurred. Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. These assets are tested for impairment and useful life reaffirmed at least annually. The determination of the recoverable amount in the impairment assessment of non-financial assets requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques, or a combination thereof, necessitating management to make subjective judgments and assumptions. These estimates and assumptions could result in significant differences to the amounts reported if underlying circumstances were to change. Impairments of goodwill and other intangible assets have had and may have a material adverse effect on the bank's profitability and results of operations.

In addition to the bank's traditional banking businesses of deposit-taking and lending, the bank may also engage in nontraditional credit businesses in which credit is extended via transactions (e.g., holding of securities of third parties or engaging in complex derivative transactions) that may materially increase the bank's exposure to credit risk.

As a bank and provider of financial services, the bank is exposed to the risk that third parties who owe claims to the bank will not perform on their obligations. Many of the bank's businesses in beyond the traditional banking businesses of deposit-taking and lending also expose the bank to credit risk.

In particular, much of the business the bank conducts through the Investment Bank entails credit transactions, frequently ancillary to other transactions. Nontraditional sources of credit risk can arise, for example, from holding securities of third parties; entering into swap or other derivative contracts under which counterparties have obligations to make payments to the bank; executing securities, futures, currency or commodity trades that fail to settle at the required time due to non-delivery by the counterparty or systems failure by clearing agents, exchanges, clearing houses or other financial intermediaries; and extending credit through other arrangements. Parties to these transactions, such as trading counterparties, may default on their obligations to Deutsche Bank due to bankruptcy, political and economic events, lack of liquidity, operational failure or other reasons.

Many of the bank's derivative transactions are individually negotiated and non-standardized, which can make exiting, transferring or settling the position difficult. Certain credit derivatives require that the bank delivers to the counterparty the underlying security, loan, or other obligation to receive payment. In several cases, the bank does not hold, and may not be able to obtain, the underlying security, loan or other obligation. This could cause the bank to forfeit the payments otherwise due to it or result in settlement delays, which could damage the bank's reputation and ability to transact future business, as well as impose increased costs on the bank. Legislation in the European Union (EMIR) and the United States (the Dodd-Frank Act) requires standardization, margining, central clearing and transaction reporting of certain over-the-counter derivatives. While such requirements aim at reducing the risk posed to counterparties and the financial system by such derivatives, they may reduce the volume and profitability of the transactions in which the bank engages, and compliance with such provisions may impose substantial costs on the bank.

In the past, exceptionally difficult market conditions severely adversely affected certain areas in which the bank does business that entail nontraditional credit risks, including leveraged finance and structured credit markets. If similar market conditions occur in the future, the bank may experience adverse effects.

A substantial proportion of the bank's assets and liabilities comprise financial instruments carried at fair value, with changes in fair value recognized in the income statement. As a result of such changes, the bank has incurred losses in the past, and may incur further losses in the future. Fair value is defined as the price at which an asset or liability could be exchanged in an arm's length transaction between knowledgeable, willing parties, other than in a forced or liquidation sale. If the value of an asset carried at fair value declines (or the value of a liability carried at fair value increases) a corresponding unfavorable change in fair value is recognized in the income statement. These changes have been and could in the future be significant.

Observable prices or inputs are not available for certain classes of financial instruments. Fair value is determined in these cases using valuation techniques the bank believes to be appropriate for the particular instrument. The application of valuation techniques to determine fair value involves estimation and management judgment, the extent of which will vary with the degree of complexity of the instrument and liquidity in the market. Management judgment is required in the selection and application of the appropriate parameters, assumptions and modeling techniques. If any of the assumptions change due to negative market conditions or for other reasons, subsequent valuations may result in significant changes in the fair values of the bank's financial instruments, requiring the bank to record losses.

Deutsche Bank's exposure and related changes in fair value are reported net of any fair value gains that may be recorded in connection with hedging transactions related to the underlying assets. However, the bank may never realize these gains, and the fair value of the hedges may change in future periods for a number of reasons, including as a result of deterioration in the credit of its hedging counterparties. Such declines may be independent of the fair values of the underlying hedged assets or liabilities and may result in future losses.

Deutsche Bank must review its deferred tax assets at the end of each reporting period. To the extent that it is no longer probable that sufficient taxable income will be available to allow all or a portion of the bank's deferred tax assets to be utilized, the bank must reduce the carrying amounts. These reductions have had and may in the future have material adverse effects on Deutsche Bank's profitability, equity, and financial condition.

The bank recognizes deferred tax assets for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. To the extent that it is no longer probable that sufficient taxable profits will be available to allow all or a portion of the deferred tax assets to be utilized, the bank must reduce the carrying amounts. Each quarter, the bank re-evaluates its estimate related to deferred tax assets, which can change from period to period and requires significant management judgment. Furthermore, deferred tax assets are measured based on tax rates that are expected to apply in the period that the asset is realized, based on the tax rates and tax laws that have been enacted or substantially enacted at the balance sheet date. If for example, the U.S. were to enact a reduction in the corporate income tax rate, which going forward would positively impact the bank's effective tax rate, the bank's deferred tax assets in the U.S. would have to be remeasured at the lower tax rate. Reductions in the amount of deferred tax assets from a change in estimate or a change in tax law have had and may in the future have material adverse effects on its profitability, equity and financial condition.

Deutsche Bank is exposed to pension risks which can materially impact the measurement of its pension obligations, including interest rate, inflation, longevity and liquidity risks that can materially impact the bank's earnings.

Deutsche Bank sponsors a number of post-employment benefit plans on behalf of its employees, including defined benefit plans. For further details on Deutsche Bank's employee benefit plans see Note 33 – "Employee Benefits" in the consolidated financial statements.

The bank develops and maintain guidelines for governance and risk management, including funding, asset allocation and actuarial assumption setting. In this regard, risk management means the management and control of risks for the bank related to market developments (e.g., interest rate, credit spread, price inflation), asset investment, regulatory or legislative requirements, as well as monitoring demographic changes (e.g., longevity). To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk. In its key pension countries, the bank's largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation, longevity risk and liquidity risk, although these have been partially mitigated through the investment strategy adopted. Overall, the bank seeks to minimize the impact of pensions on its financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements.

The bank's investment objective in funding the plans and its obligations in respect of them is to protect the bank from adverse impacts of its defined benefit pension plans on key financial metrics. The bank seeks to allocate plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation and, thereby, plan assets broadly reflect the underlying risk profile and currency of the pension obligations.

To the extent that the factors that drive the bank's pension liabilities move in a manner adverse to the bank, or that its assumptions regarding key variables prove incorrect, or that funding of the pension liabilities does not sufficiently hedge those liabilities, the bank could be required to make additional contributions or be exposed to actuarial or accounting losses in respect of its pension plans.

In Germany, the Group is a member of the *BVV Versicherungsverein des Bankgewerbes a.G.* (BVV), a multi-employer defined benefit plan, together with other financial institutions. In line with industry practice, the Group accounts for it as a defined contribution plan since insufficient information is available to identify assets and liabilities relating to the Group's current and former employees, primarily because the BVV does not fully allocate plan assets to beneficiaries nor to member companies. The Group may be exposed to significant financial risk should the residual risks related to this multi-employer defined benefit plan materialize.

The emerging crypto assets sector may pose risks to the bank, whether the bank participates in it or refrains from doing so..

Crypto assets carry extreme price volatility risk, unclear price transparency, can have underdeveloped liquidity and may be susceptible to market manipulation or fraud. Deutsche Bank's crypto related activities and direct risk exposures are extremely limited and the risk of broader contagion to financial markets is still considered to be limited. Despite the risks currently posed by crypto assets, the bank is cognizant of the innovation that is occurring in this space. Deutsche Bank reviews opportunities to leverage the benefits of the underlying technology to address customer needs within the bank's regulatory and risk appetite frameworks. By maintaining a cautious and highly selective approach, the bank aims to leverage new technology in a way that safely benefits clients, but this approach could also lead to missed opportunities. In addition, the ability for banks to engage in digital asset activities will vary depending on the regulatory stances taken within each jurisdiction and this may limit Deutsche Bank's ability to engage in these activities.

Deutsche Bank is subject to laws and other requirements relating to financial and trade sanctions and embargoes. If the bank breaches such laws and requirements, it can be subject, and in the past has been subject, to material regulatory enforcement actions and penalties.

The bank is required to monitor, evaluate, and observe laws and other requirements relating to financial and trade sanctions and embargoes set by the EU, the Deutsche Bundesbank, Germany's Federal Office for Economic Affairs and Export Control, and other authorities, such as the U.S. Treasury Department's Office of Foreign Assets Control (OFAC) and the UK Treasury Department's Office of Financial Sanctions Implementation (OFSI). Sanctions are subject to rapid change, and it is also possible that new direct or indirect secondary sanctions (including as a result of newly expanded U.S. secondary sanctions risks for financial institutions that engage in certain dealings with the Russian economy) could be imposed by the United States or other jurisdictions without warning as a result of geopolitical developments. New and far-reaching sanctions against Russian entities and individuals have been, and may continue to be, imposed by the United States, the EU, the United Kingdom and other individual countries very rapidly following the commencement by Russia of the war in Ukraine, and many of these sanctions require very rapid implementation. Should the bank fail to comply timely and in all respects with these new sanctions, the bank could be exposed to legal penalties and its reputation could suffer. New sanctions may also be imposed on other entities and individuals beyond the war in Ukraine at any time. If Deutsche Bank breaches any such new or preexisting laws and requirements, it can be subject, and has in the past been subject, to material regulatory enforcement actions and penalties.

Transactions with persons targeted by U.S. economic sanctions or counterparties in countries designated by the U.S. State Department as state sponsors of terrorism may lead potential customers and investors to avoid doing business with the bank or investing in the bank's securities, harm its reputation or result in regulatory or enforcement action which could materially and adversely affect its business.

The bank engages or has engaged in a limited amount of business with counterparties, including government-owned or -controlled counterparties, in certain countries or territories that are subject to comprehensive U.S. sanctions (referred to as "Sanctioned Territories"), or with persons targeted by U.S. economic sanctions (referred to as "Sanctioned Persons"). U.S. law generally prohibits U.S. persons or any other persons acting within U.S. jurisdiction (which includes business with a U.S. nexus) from dealings with or relating to Sanctioned Territories or Sanctioned Persons. Additionally, U.S. indirect or "secondary" sanctions threaten the imposition of sanctions against non-U.S. persons entirely outside of U.S. jurisdiction for engaging in certain activities, most recently targeting foreign financial institutions that knowingly or unknowingly facilitate transactions or provide services relating to Russia's military-industrial base. The bank's U.S. subsidiaries, branch offices, and employees are, and, in some cases, its non-U.S. subsidiaries, branch offices, and employees are or may become, subject to such prohibitions and other regulations.

Deutsche Bank is a German bank and its activities with respect to Sanctioned Territories and Sanctioned Persons have been subject to policies and procedures designed to exclude the involvement of U.S. jurisdiction, including U.S. persons acting in any managerial or operational role and to ensure compliance with United Nations, European Union and German sanctions and embargoes; in reflection of legal developments in recent years, the bank has further developed its policies and procedures with the aim of promoting – to the extent legally permitted – compliance with regulatory requirements extending to other geographic areas regardless of jurisdiction. However, the regulatory requirements themselves may change rapidly, and should its policies prove to be, or have been, ineffective, the bank may be subject to regulatory or enforcement action that could materially and adversely affect its reputation, financial condition, or business.

Further, in response to the war in Ukraine, the United States, as well as other nations and the EU, have continued to expand sanctions on Russia, Russian entities and third-country entities supporting sanctions avoidance; such sanctions could have a material impact on the bank's business activities. In response, the bank took a range of preparatory and responsive actions to implement the high number of, and in part newly developed, sanctions by inter alia filter and control updates, additional due diligence steps in transaction and client reviews with a nexus to Russia and by restricting its policy significantly and adjusting processes. Even though Deutsche Bank believes that it reacted quickly and thoroughly to these challenges, the sheer amount and complexity of changes and the broad discretion that U.S. authorities may exercise in interpreting and enforcing U.S. sanctions have increased the operational risk relating to regulatory compliance (e.g. under the June 2024 expanded authority to impose blocking sanctions or other restrictions against foreign financial institutions that are knowingly or unknowingly engaged in certain targeted activities relating to the Russian military-industrial base, including dealings with sanctioned parties, given the strict liability applied in areas of this regulatory environment, such operational risk may translate into regulatory risks for the bank leading to consequential losses. There can be no assurances that U.S. authorities will not bring enforcement actions against the bank or impose secondary sanctions. Any such actions could have a material impact on the bank's business and harm its reputation.

Item 4: Information on the company

History and development of the company

The legal and commercial name of the company is Deutsche Bank Aktiengesellschaft. It is a stock corporation organized under the laws of Germany.

Deutsche Bank Aktiengesellschaft originated from the reunification of Norddeutsche Bank Aktiengesellschaft, Hamburg, Rheinisch-Westfälische Bank Aktiengesellschaft, Düsseldorf, and Süddeutsche Bank Aktiengesellschaft, Munich. Pursuant to the Law on the Regional Scope of Credit Institutions, these were disincorporated in 1952 from Deutsche Bank, which had been founded in 1870. The merger and the name were entered in the Commercial Register of the District Court Frankfurt am Main on May 2, 1957.

Deutsche Bank is registered under registration number HRB 30 000. Deutsche Bank's registered address is Taunusanlage 12, 60325 Frankfurt am Main, Germany, and its telephone number is +49-69-910-00. The bank's agent in the United States is: DB USA Corporation, c/o Office of the Secretary, 1 Columbus Circle, Mail Stop NYC01-1950, New York, New York 10019-8735.

For information on significant capital expenditures and divestitures, please see "Combined Management Report: Operating and Financial Review: Deutsche Bank Group: Significant capital expenditures and divestitures" in the Annual Report 2024.

The Securities and Exchange Commission ("SEC") maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, such as Deutsche Bank Aktiengesellschaft, with the address http://www.sec.gov. Deutsche Bank's filings are available on the SEC's Internet site under File Number 001-15242 and Internet address is http://www.db.com.

Business Overview

Deutsche Bank's organization

Please see "Combined Management Report: Operating and financial review: Deutsche Bank Group: Deutsche Bank's organization" in the Annual Report 2024. For information on net revenues by geographic area and by corporate division please see Note 4 "Business Segments and related information: Entity-wide disclosures" to the consolidated financial statements and "Combined Management Report: Operating and financial review: Results of operations: Segment results of operations" in the Annual Report 2024.

Management structure

Please see "Combined Management Report: Operating and financial review: Deutsche Bank Group: Management structure" in the Annual Report 2024.

Business Strategy

Global Hausbank

Deutsche Bank's strategic and financial roadmap through 2025 aims to position Deutsche Bank as a *Global Hausbank*, dedicated to its clients' lasting success and financial security at home and abroad, and to achieve the bank's 2025 financial targets and capital objectives. The *Global Hausbank* strategy is underpinned by three key themes: risk management, sustainability and technology, all of which have become even more important considering the ongoing geopolitical and macroeconomic challenges.

Deutsche Bank’s key performance indicators 2025

Financial targets and capital objectives for 2025

Financial targets:
- Post-tax Return on Average Tangible Equity of above 10% for the Group
- Compound annual growth rate of revenues between 2021 and 2025 of 5.5% to 6.5%
- Cost/income ratio of below 65% (reset from below 62.5%)

Capital objectives:
- Common Equity Tier 1 capital ratio of approximately 13%
- 50% Total payout ratio from 2025

Deutsche Bank reaffirms its financial targets, including the cost/income ratio target which has been reset from below 62.5% to below 65% at the beginning of 2025, as well as its capital objectives for 2025. All forward-looking projections below are based on January 31, 2025, foreign exchange rates.

Post-tax Return on Average Tangible Equity and adjusted costs are non-GAAP financial measures. Please refer to “Supplementary financial information (Unaudited): Non-GAAP financial measures” of this report for the definitions of such measures and reconciliations to the IFRS numbers on which they are based.

Deutsche Bank’s financial and regulatory targets are based on the financial results prepared in accordance with IFRS as issued by the IASB and endorsed by the EU. For further details, please refer to “Note 01 – Material Accounting Policies and Critical Accounting Estimates – EU carve-out” to the consolidated financial statements.

Progress on strategy implementation

In 2024, Deutsche Bank made progress across all dimensions of its accelerated *Global Hausbank* strategy through disciplined execution, driving revenue growth as well as operational and capital efficiency. The bank maintained tight discipline on adjusted costs while continuing to invest in the bank’s platform. Moreover, the bank put specific legacy litigation costs and exceptional other items behind it.

On revenue growth, net revenues grew to € 31.5 billion in 2024, up from € 31.2 billion, or 1%, versus 2023, in line with the bank’s guidance of around € 30 billion for 2024. Compound annual revenue growth since 2021 was 7.2% through the end of 2024, compared to 10.5% in 2023, in line with the bank’s target range of 5.5% to 6.5%. In 2025, the bank expects continued franchise momentum and growth potential across all its businesses to drive revenue growth supported by investments under the bank’s efficiency programs. This growth is expected to result from both net interest income and non-interest income, reflecting the bank's diversified business mix which allows around 75% of the expected revenues to come from more predictable revenue streams. Deutsche Bank confirms its revenue goal of around € 32 billion at Group level in 2025, which translates to around € 32.7 billion at January 2025 foreign exchange rates.

Noninterest expenses in 2024 were € 23.0 billion, up from € 21.7 billion, or 6%, versus the prior year, and included € 2.6 billion in nonoperating costs relating to litigation as well as restructuring and severance charges. Adjusted costs were € 20.4 billion in 2024, down from € 20.6 billion, or 1% compared to the prior year. Deutsche Bank made further progress on its € 2.5 billion operational efficiency program during 2024. Measures included the optimization of the bank’s platform in Germany, workforce reductions, notably in non-client-facing roles, IT and infrastructure optimization along with a continued automation of front-to-back processes. The bank expects the large majority of these measures to positively impact the adjusted cost run-rate in 2025. Nonoperating costs in 2025 are expected to decrease as litigation as well as restructuring and severance charges are expected to normalize. As a result, the bank now targets a cost/income ratio of below 65% in 2025, marginally higher than the original target, to support further growth and business momentum in and beyond 2025.

On capital efficiency, Deutsche Bank’s capital efficiency program has delivered cumulative RWA-equivalent reductions of € 24 billion, close to its target range of € 25 to € 30 billion by the end of 2025. The bank aims to reach the higher end of its target range by year end 2025. Capital efficiencies contributed to the bank’s year end 2024 CET1 ratio of 13.8%, which includes the € 750 million share repurchases authorized for 2025. The bank plans to continue progressing on capital efficiencies in 2025.

Deutsche Bank announced plans for € 2.1 billion in further capital distributions to shareholders in 2025. The bank has received supervisory authorization for further share repurchases of € 750 million and plans to propose 2024 dividends of € 1.3 billion, or € 0.68 per share, at its Annual General Meeting in May 2025, up 50% from € 0.45 per share for 2023. These measures would increase cumulative capital distributions to shareholders to € 5.4 billion since 2022, in excess of the € 5 billion goal in the bank's transformation program launched in 2019. The bank reaffirms its ambition to exceed its capital distribution goal of € 8 billion in respect of the financial years 2021-2025, to be paid in 2022-2026. Deutsche Bank will continue to target a payout ratio of 50% after 2025 through share buybacks and cash dividends, with cash dividends growing more moderately compared to increases seen in recent years.

Driving the next phase of Deutsche Bank's evolution

Looking beyond 2025, Deutsche Bank already started to work on its next phase of evolution and implement measures to bring the bank to the next level of performance, aiming for an even more balanced earnings profile and for a more technology-driven business with the bank's customers with a leaner infrastructure.

Deutsche Bank aims to further increase shareholder value by sharpening its focus on capital allocation and the optimization of RWA at both the business and client level. The bank sees potential for further revenue growth in the continued improvement of resource productivity across the portfolio through pricing and reallocating capital to high-return franchises. In addition, the bank strives to improve profitability of lower-return businesses through front-to-back efficiency improvements and capital efficiency measures. A reduction in allocated capital and potential selected exits may be considered for areas where return improvements cannot be achieved. Deutsche Bank also plans to re-engineer its target operating model, enabling the bank to run its platform on a lower headcount and simplifying the organizational structure. These measures coupled with further front-to-back streamlining of processes, are expected to drive operational efficiency.

Deutsche Bank's next phase also includes a management agenda which emphasizes strengthening risk management and accountability and evolving its culture through a purpose-led framework called "*This is Deutsche Bank*". With investments, the bank believes that it is well-positioned to grow the *Global Hausbank* model, make it more efficient and generate more capital for deployment to the businesses and shareholder distributions.

Deutsche Bank plans to provide more details on its strategic aspiration and actions beyond 2025 in due course.

Sustainability

Sustainability has been a fundamental aspect of Deutsche Bank's strategy since 2019. In 2024, the bank continued to focus on the four pillars of its sustainability strategy: Sustainable Finance, Policies & Commitments, People & Own Operations, and Thought Leadership & Stakeholder Engagement.

Deutsche Bank set ambitious targets to maximize its contribution to achieving the Paris Climate Agreement's targets and the United Nations (UN) Sustainable Development Goals. The key targets related to sustainability matters are as follows:

– The bank aims to achieve cumulative sustainable financing and investment volumes of € 500 billion from January 2020 to the end of 2025 (excluding DWS)
– Deutsche Bank is committed to achieving net zero emissions by 2050. To this end, the bank has set net-zero targets for eight carbon-intensive sectors in its corporate loan book, with interim goals by end of 2030 and final targets by end of 2050
– The bank plans to source 100% of its electricity from renewable sources by 2025
– Following the requirements of the German Stock Corporation Act (AktG) to set targets for the representation of women on the two management levels below the MB, Deutsche Bank aims to have women representing at least 35% of Managing Director, Director and Vice President roles by 2025

Deutsche Bank has published its revised Sustainable Finance Framework, effective as of January 1, 2024. This framework includes updated criteria used for classifying financings as sustainable. With the updated Sustainable Instruments Framework now encompassing both green and social assets, Deutsche Bank is positioned to issue social bonds, following which the bank issued its inaugural social bond of € 500 million with an orderbook size of over € 6.6 billion in July 2024.

Deutsche Bank Business segments

Corporate Bank

Corporate banking is an integral part of Deutsche Bank's business. Corporate Bank's capabilities in Cash Management, Trade Finance and Lending in close collaboration with Foreign Exchange in the Investment Bank enable the business segment to serve the core needs of its clients. As a leading bank serving multinational and German corporates domestically and abroad (source: EUROMONEY), the Corporate Bank helps clients in optimizing their working capital and liquidity, securing global supply chains and distribution channels and managing their risks. Furthermore, Corporate Bank acts as a specialized provider of services to financial institutions, offering Correspondent Banking, Trust and Agency Services as well as Securities Services. Finally, the business segment provides Business Banking services to small corporate and entrepreneur clients in Germany through a standardized product suite.

Corporate Bank has defined a number of specific initiatives to capitalize on its core competencies across these different areas to grow revenues to achieve its targets. In particular, the business segment's investments in new initiatives and experience in managing complex situations for clients, such as uncertainties associated with increasing geopolitical tensions, lower economic growth in some of the major operating countries as well as uncertainty around central bank policies, allow Corporate Bank to provide its advisory and solution services.

In 2024, Corporate Bank continued to make progress on the business segment's strategic objectives, notably growing commissions and fee income across all regions. Net interest income in deposit businesses remained resilient as ongoing deposit margin normalization was partly offset by higher deposit volumes and interest hedging. Corporate Bank has been awarded "World's Best Bank for Corporates" in the Euromoney's Awards for Excellence 2024 and also named "Best Bank for Corporates in Germany". Additionally, Corporate Bank Germany was recognized by the 2024 FINANCE magazine survey as the best bank in corporate banking, number one Hausbank, number one in Cash Management/Payment Transactions and in Trade and Export Finance. The segment believes that these awards are a recognition of Corporate Bank's deep client relationships and client centric solution offering.

Looking ahead, Corporate Bank is expected to continue to act as an integral part of the *Global Hausbank* strategy and contribute to Deutsche Bank's 2025 objectives. The segment sees growth opportunities across all core client groups – Corporate, Institutional and Business Banking – both from existing Corporate Bank strengths and from new products. Corporate Bank aims to offer a full range of advisory and financing solutions for corporate treasurers and seeks to remain the trusted partner for the German economy, building on its standing as the leading Corporate Bank in its home market. The segment is also committed to connect financial institutions worldwide, a business where it is one of the market leaders (source: SWIFT Euro peer benchmarking). The segment's global network across 140 countries combined with profound local knowledge, a comprehensive product suite and tailored client offering, is expected to continue to offer competitive advantages versus the business segment's peers.

As a transition partner, Corporate Bank seeks to help its clients across sector value chains to achieve their strategic goals by offering a broad suite of sustainable finance solutions and sector-aligned sustainability industry expertise. Also, Corporate Bank aims to enable the accelerated renewables and infrastructure build-out through its asset and project finance capabilities for emerging energy transformation sectors such as hydrogen, carbon capture, and battery and storage solutions, and the build-out of financing capabilities, driving energy efficiency transformation.

Corporate Bank's initiatives will target revenue growth with corporate clients across Cash Management and Trade Finance and Lending, including growing its fee-based business with institutional clients and expanding Securities and Trust and Agency Services business.

As the segment seeks to grow its business with clients globally, Corporate Bank commits to apply sound risk management principles to maintain its high-quality loan portfolio and strict lending standards. Equally, the segment commits to continued cost discipline supported by technology and front-to-back process optimization as well as automation and location strategy and further investments to support business growth in 2025 and beyond.

Investment Bank

The Investment Bank is a key pillar of Deutsche Bank's business. Across Fixed Income & Currencies (FIC) and Origination & Advisory (O&A), corporate and institutional clients are offered a comprehensive range of services encompassing financing, market making/liquidity provision, risk management solutions, advisory, and debt & equity issuance. The business segment regionally encompasses Europe, Americas, and APAC/MEA.

In 2024, the Investment Bank delivered robust performance, with a revenue increase of 15% compared to 2023, while materially growing return on equity for the business segment. This performance reflects the execution of strategic priorities, enhancing the service offering for clients and building on the franchise development over the recent years.

O&A market fee pools materially improved in 2024, with year-on-year growth of approximately 25%. This, combined with the benefits of significant investments into the platform throughout 2023, drove market share gains across the core businesses within O&A (source: Dealogic). The strategic senior hires into existing businesses are now reaching full productivity, hence further revenue share growth is expected in 2025 and beyond. This will be supported by the Client Strategy and Analytics team, which has strengthened client relationships via a re-tiering exercise across the entire client-base, ensuring the capacity to closely monitor performance at the most granular level, as the market develops into 2025.

A continued focus on developing the depth of client relationships, while investing across the platform particularly in the U.S., has led to a continuation of the FIC franchise development. The longer-term trend of revenue and market share growth has been extended. A mature and diversified platform is in place to meet the requirements of the client base. This is exemplified by multiple instances of developments across the business, e.g., the launch of HausFX, bringing the FIC suite of workflow solutions together and providing clients with the ability to simplify operational activity associated with FX execution. Investment in technology enables both the provision of enhancements to the client offering and the development of more efficient internal processes, ensuring optimized marginal cost of delivery as revenues grow.

In 2025, the strategy of the Investment Bank is focused on its vision of being the leading non-U.S. global investment bank. The segment believes continued benefits from prior investments, along with further areas of targeted investment, will enable an enhanced offering to clients, further deepening relationships. The result will be a more diversified business – which emphasizes capital efficiency and cost discipline, driving shareholder returns.

As the O&A franchise evolves, the segment anticipates that a diversification of revenues will see the proportion of strategic advisory revenues as a percentage of total revenues increase. This will be driven in particular by the development of the M&A franchise. The segment expects this, combined with the well-established Debt origination offering, and the expected improvement in Equity Origination to drive further revenue growth. Within FIC, the existing strategy continues – advancing existing and adjacent businesses, the Americas, the depth and breadth of client relationships, and a leading Financing franchise. As with O&A, this is expected to underpin the growth ambition of the business and, combined with a focus upon the efficiency of the operating model, is expected to drive operating leverage. Resources are expected to continue to be allocated to the areas of highest return where a competitive advantage has been identified. Across the Investment Bank, a dedicated client centricity program has been established to optimize resource allocation, with a view to identifying further areas of collaboration with other business segments, ensuring clients are delivered the full suite of Deutsche Bank's product offering.

Finally, sustainability remains a priority across the Investment Bank, as the business segment continues supporting its clients globally. During 2024, Deutsche Bank acted as Joint Lead Manager on KfW's € 3 billion five-year green bond, the proceeds of which will be used to finance new eligible Green Projects. Additionally, the bank served as joint bookrunner on the Republic of Colombia's U.S.$ 1.3 billion re-opening of Social U.S.$ Notes due in 2035 and 2053 under its Green, Social and Sustainable Bond Framework. Colombia became the second Latin America sovereign issuer to access the international capital markets with an ESG-labeled bond in 2024.

Private Bank

In 2024, Private Bank reshaped its business along two core client sectors, Personal Banking and Wealth Management & Private Banking, reinforcing its long-term dedication to a customer-centric strategy. This setup enables more targeted client service, sharpening the business model around personal and private clients, wealthy individuals, entrepreneurs, family offices and commercial customers in international markets. Deeply committed to over 20 million clients across more than 60 markets globally, Private Bank is a strong pillar of the overall Deutsche Bank Group.

The Personal Banking business is positioned as the market-leading franchise in Germany through its two major brands, Deutsche Bank and Postbank. Postbank offers German retail clients daily banking solutions with its “mobile-first” value proposition, while the Deutsche Bank brand focuses on investment advisory delivered via digital, remote and physical channels.

In 2024, the upgraded Postbank mobile app significantly accelerated the momentum of digital client engagement in Germany, contributing to the success of new deposit campaigns and to growing commercial activity on online platforms. Continued efforts to optimize the branch network were complemented by the successful evolution of the in-branch client experience, highlighted by the opening of the new Postbank advisory branches and the deployment of digital coaches to guide clients in the digital transition. Internationally, Personal Banking focused on expanding the affluent client sector, while further innovating the customer value proposition through broader digital services and a leaner branch footprint, strengthened by the launch of new landmark flagship branches.

Private Bank decided to refocus its brand presence in the German mortgage and consumer finance business by discontinuing the DSL Bank brand over the course of 2025. This will allow to further reduce complexity and costs. DSL Bank mortgages have so far been distributed primarily via partner platforms. The move is in line with the Private Bank’s ambition to optimize its franchise portfolio towards capital-light businesses in order to improve profitability and capital efficiency of the segment.

The Wealth Management & Private Banking business maintained a well-diversified revenue mix across regions, focusing on ultra-high-net-worth (UHNW) family entrepreneurs in the home market and internationally, as well as on private clients in Europe. Aspiring to be the *Global Hausbank* and partner of choice for family entrepreneurs, it is committed to creating lasting value and ensuring wealth preservation across generations.

In 2024, the business segment continued its expansive focus on attracting and serving ultra-high-net-worth clients, resulting in strong asset gathering in all regions and in a significant growth of net new asset inflows. In Germany, the business segment established a dedicated ultra-high-net-worth coverage team in early 2024, while focusing on remote advisory pilots and new Deutsche Bank Private Banking Centers to enhance the engagement with Private Banking clients. The franchise accelerated the ‘One-Bank’ collaboration between Private and Corporate Bank, with successful client referrals generating new asset inflows. In international markets, UHNW clients and Family Offices remained a priority, with targeted product launches innovating the investment solution offering, especially in alternative investments. In Italy, Spain and Belgium, the business achieved increased penetration in core discretionary portfolio management solutions and further strengthened the ‘Bank for Entrepreneurs’ collaboration between Wealth Management and Business Banking.

The continued evolution of the Wealth Management & Private Banking proposition was recognized also within the industry, with Private Bank winning 15 Euromoney ‘Best Private Bank’ 2024 awards, including in the categories ‘Best for Entrepreneurs’, ‘Best for UHNW’ and ‘Best for Transformation’, alongside regional and market-specific accolades.

In 2025, Private Bank will continue its transformation of the Personal Banking business, further building out digital and remote channels, while optimizing the physical footprint by closing traditional branches or converting them into flagship locations. Growth will be driven by the upgrade of the offering with new digital account models and Discretionary Portfolio Mandate (DPM) solutions, and by continued focus on deposit gathering. In Wealth Management & Private Banking scaling the business in core markets will remain a key priority, supported by product innovation and further emphasis on DPM solutions, building on the core sustainability offering.

In sustainability, Private Bank advanced its announced strategy with successful product launches, award recognitions and in-house sustainability awareness initiatives, including trainings and business-wide information sessions. Private Bank enhanced its sustainability product portfolio, fostered strategic thematic collaborations, and focused on strengthening the overall sustainability value proposition to support clients in their sustainable transition journeys.

Asset Management

Asset Management consists of DWS Group GmbH & Co. KGaA, a global asset manager with diverse investment capabilities that spans traditional active and passive strategies, as well as alternative solutions.

DWS strategy is composed of four strategic elements; Growth, Value, Build and Reduce, which are aligned to its capabilities and market growth prospects. The aim is to maintain market leading position in Germany, building on expertise and established customer relationships, in addition to expanding existing partnerships and developing new distribution channels, to gain additional market share. DWS sees additional market potential especially in Alternatives investments and Passive funds, represented by the Xtrackers brand.

The Growth strategy is built on the potential in Passive and Alternatives businesses. DWS' Passive segment, represented by the Xtrackers brand, sees sustained and profitable growth potential. Building on the franchise and European business, DWS has decided to invest in a U.S. growth plan including sustainable, thematic, and actively managed ETFs. Further, DWS sees a strong demand for mandates in Asia Pacific, and therefore plans to expand its customized mandates business. In 2024, DWS successfully expanded the Xtrackers offering in the European UCITS segment, launched further Passive ETFs in the United States and established a portfolio management team in Hong Kong. Scale is becoming increasingly important for asset managers and the DWS franchise. In 2024, DWS reached a key milestone by surpassing € 1 trillion of assets under management (AuM) for the first time. DWS will continue to actively review organic and inorganic growth initiatives.

In Alternatives, DWS expects growth to be driven by higher demand from both institutional and retail investors. DWS' competitive edge across lending markets from its distribution partnerships for retail clients is expected to see allocations to alternatives. DWS focuses on expanding offerings across Real Estate and Infrastructure, while building out the debt platform. During 2024, DWS capitalized on the expanding private credit market, strengthened the U.S. Real Estate credit business and established a European Alternatives credit platform, while the Infrastructure business remains well positioned to capture growing allocations.

The Value strategy aims to maintain leadership in mature markets for Active, specifically Equity and Fixed Income, and to scale Multi Asset solutions. In Equity, DWS intends to selectively expand the platform. Given changing market environment and higher interest rates, DWS continues to focus on Fixed Income and institutional investors. In Multi-Asset, the aim is to strengthen solutions capabilities and enhance the modular investment platform to achieve economies of scale. With increasing importance of pension solutions, investment advisory and outsourced CIO services, DWS is looking to expand its current offerings in this segment.

The Build strategy's emphasis on digitalization trends aims to focus on asset management as-a-service and digital assets. Asset management-as-a-service is based on the belief that investment funds will be distributed by digital means, and therefore DWS intends to improve the integration of its services into offerings of distribution partners. In an increasingly tokenized economy, DWS' Digital Assets strategy aims to utilize new blockchain infrastructure, build innovative products and reach additional clients. In 2024, DWS has established a joint venture with the aim of issuing a regulated, euro-dominated stablecoin and launched its first cryptocurrency Exchange-Traded Certificate (ETC) products to provide European investors with reliable Bitcoin and Ethereum exposure.

The Reduce strategy intends to reallocate financial resources to fund Build and Growth areas. DWS continuously analyzes measures to increase efficiency. In 2024, DWS optimized its product portfolio by merging or closing several funds.

DWS's sustainability strategy aims to enable clients to navigate the sustainable transformation of the real economy by providing investment expertise and solutions. Climate change remains the key theme of the sustainability strategy as it poses a significant risks to the planet, humanity, and the global economy. The DWS sustainability strategy is built around three priorities: focus on climate related investing, strengthen engagement with investees and other relevant stakeholders, and advance DWS' own corporate transformation to achieve commitment to net zero. Across all its activities, DWS acknowledges differences in client preferences and regulatory frameworks also across regions, and therefore seeks to take those into account in its product offering, engagement and proxy voting activities.

The competitive environment

Geopolitical situations, particularly the ongoing war in Ukraine and further escalation in the Middle East, continued to influence the economic environment and risk perception in 2024.

The global economy experienced robust growth of 3.2% in 2024. However, growth momentum varied across regions: while the European economy lagged, the U.S. economy expanded strongly. Asia and India experienced dynamic growth. Global aggregate inflation eased to 6.4% and many central banks started lowering interest rates.

Economic momentum in developed market economies varied regionally in 2024, resulting in overall GDP growth of 1.5%. While the U.S. experienced noticeable expansion, momentum in Europe was comparatively weak and even weaker in Japan. Central banks in Europe and the U.S. began easing monetary policy, while the central bank in Japan implemented a slight tightening. Overall inflation moderated to 2.7%.

Emerging markets grew robustly at 4.3%, led by a strong performance in Asia. However, European emerging markets growth was subdued, reflecting the ongoing impact of geopolitical spillovers and weakness in some key industrialized trading partners. Contrary to the general trend, Argentina's strong inflation in 2024 pushed the aggregate inflation rate for emerging markets to 8.8%, somewhat higher than the previous year. However, in many other regions, inflation normalized, giving central banks scope to reduce key interest rates.

Euro area GDP growth of 0.7% in 2024 was largely export-led. Despite easing inflation and rising wages, real income driven consumption remained sluggish. The decline in inflation to 2.4% enabled the ECB to commence an interest rate cut cycle.

The German economy contracted slightly in 2024 for the second consecutive year, reflecting persistent weakness in both domestic and external economic drivers. Despite easing inflation to 2.2% and strong wage growth, private consumption stagnated. The manufacturing sector and foreign trade were burdened by declining competitiveness. The labor market also showed signs of cooling.

The U.S. economy registered strong growth of 2.8% in 2024, notwithstanding the prevailing restrictive monetary policy stance. Inflation moderated to 3.0% and the labor market became more balanced, providing the Federal Reserve with the opportunity to commence a gradual reduction in key interest rates during the latter half of the year.

The Japanese economy contracted by 0.2%, primarily due to weak export demand. Domestic economic momentum was unable to counter this headwind. In response to persistently elevated inflation at 2.7%, the Bank of Japan initiated a tightening of monetary policy by raising key interest rates.

The Asian economy expanded by 5.2% in 2024, reflecting the positive contributions of both China and India, as well as favorable economic performance in other regional economies. The moderation of inflation to 1.8% provided support to private household consumption.

Despite headwinds from a weak property market, China's economy grew by 5.0% in 2024, aided by stronger fiscal support in the second half of the year. Subdued growth among trading partners constrained foreign trade momentum. With inflation at 0.2%, the People's Bank of China implemented easing monetary policy measures.

2025 Outlook

Statements in this section are based on the Group’s expectations regarding future economic and industry developments in 2025.

The global economy is expected to expand at 3.2%, a similar pace to last year. However, increasing trade barriers and risk of widespread trade tariffs are likely to hinder stronger momentum and limit the decline in inflation, which is expected to remain at 4.0%.

The growth momentum of developed countries is likely to be driven by the continued recovery of various key regions. However, higher tariffs could limit GDP growth to 1.8%. Inflation in developed countries is expected to continue to normalize initially and stay at 2.5%.

Growth in emerging markets could also be negatively impacted by higher trade barriers. Export demand from developed countries is likely to weaken, at least in the second half of the year. GDP is expected to expand by 4.1%. Inflation is likely to continue to normalize to 4.9%.

Strong growth drivers are likely absent in the Eurozone, as key member states adopt a more restrictive fiscal policy and Germany continues to be hampered by weaker competitiveness. GDP is expected to expand by only 0.8%. Higher U.S. tariffs threaten to further dampen momentum, while the weakening of inflation to 2.0% is likely to allow the ECB to make further interest rate cuts.

The German economy is likely to expand by just 0.5%, driven solely by private and government consumption spending. The cooling of the labor market could dampen the recovery of private consumption. Structural competitive disadvantages and growing trade barriers are also likely to limit growth. With likely noticeably declining interest rates, construction could gain momentum. Inflation is likely to stay at 2.2%.

Underlying growth momentum in the U.S. economy is expected to remain solid, with the labor market and private consumption holding up robustly. Tax cuts are likely to provide tailwinds, leading to GDP growth of 2.6%. However, the expected increases in import tariffs could ultimately be inflationary. The inflation rate is expected to be 2.8% in 2025. As a result, the Federal Reserve is unlikely to cut key interest rates further, which could limit growth.

The Japanese economy is expected to recover, driven by domestic demand. GDP growth is projected at 1.3%. Not least because of wage growth, inflation is expected to stay elevated at 2.9%. The Bank of Japan is expected to maintain its cautious approach to raising key interest rates.

Slightly lower growth rates in major economies are likely to result in somewhat less momentum in Asia overall. While domestic demand in the countries concerned is recovering, external economic impulses are likely to weaken.

The Chinese economy is expected to expand robustly at 4.8%, driven by domestic demand supported by further fiscal policy measures. This should also further stabilize the real estate sector. As a result of tariff increases, particularly by the US, Chinese exports are likely to weaken, thus limiting growth momentum. Inflation is expected to accelerate to 0.7%.

There are a number of risks to the bank’s global economic outlook. Geopolitical risks remain elevated in Ukraine and in the Middle East. A major multidimensional source of economic policy uncertainty is the possibility of additional tariffs and which countries introduce them. This concerns both the absolute level, the timing of implementation, and the scope of goods affected.

Competitor landscape

Against this backdrop, Deutsche Bank competes in the financial services sector with a wide variety of competitors including other universal banks, commercial banks, savings banks and other public sector banks, broker dealers, investment banking firms, asset management firms, private banks, investment advisors, payments services providers, financial technology firms and insurance companies. Some of the competitors are global like Deutsche Bank, while others have a regional, product or niche client footprint. Deutsche Bank competes on a number of factors, including the quality of client relationships, transaction execution, products and services, innovation, reputation and price.

In 2024, the European banking industry continued to benefit from an elevated interest rate environment. Even though net interest income increased from its strong prior-year level, growth momentum slowed considerably compared to 2023. At the same time, administrative expenses expanded at a similar pace. Asset quality overall remained strong, with a deterioration in Germany while largely robust in Southern Europe, leading to moderately higher credit risk provisions at still low levels. Post-tax profits climbed to another all-time high. As in 2023, loan volumes with the private sector in the euro area continued to be broadly flat; however, did not contract. Both banks' tightening credit standards and the weakening of credit demand have largely come to an end, and demand for residential mortgages picked up significantly towards the end of the year due to declining interest rates. The corporate finance business recovered from the sluggish previous two years, led by debt capital markets. Trading activities in equities significantly increased globally year on year and developed positively in fixed income.

The global banking industry is expected to operate in a favorable environment in 2025. With stable global economic growth and a further moderate decline in interest rates, loan growth could pick up from low levels, while interest margins could come under some pressure. Nevertheless, revenues overall could maintain positive momentum. The favorable situation in capital markets is expected to continue which should benefit investment banking and trading activities. Asset quality of banks is expected to remain largely robust and profitability should therefore remain high. Coupled with strong capitalization, banks' capital returns to shareholders both in form of dividends and share buybacks should therefore remain substantial.

After more than a decade of increasing regulation, political focus is now gradually shifting towards enhancing competitiveness, which could lead to initiatives to ease rules or to tax cuts in some jurisdictions. Strong earnings and higher stock market valuations could support sector consolidation to accelerate growth, especially domestically. Main risks for the banking sector include elevated geopolitical risks, uncertainty about future policies of the new U.S. administration around international trade and energy, the potential for a correction of elevated stock market valuations and the risk of meaningful deterioration in credit quality if interest rates do not decline as much as expected or private-sector defaults require a sudden increase of loan loss provisions.

Banks in Europe are expected to face stronger headwinds than their U.S. peers from declining interest rates and margins. Subdued economic activity in major economies are expected to limit business volume growth. However, fee and commission income could partially offset lower interest income as capital market activity may increase. In addition, political initiatives to promote the *Savings and Investments Union, formerly known as Capital Markets Union* appear to be gaining more traction than in previous years and could lead to significant progress in some areas such as securitization. Nominal net income is expected to remain close to its all-time high.

U.S. banks could substantially benefit from the new U.S. administration's impetus for deregulation both of the real economy and also the financial system, although its extent is uncertain and any changes, if they materialize, may take time to feed through into results. A reduction in capital requirements compared to those envisaged so far in the implementation of final Basel III and less stringent capital market supervision, including of crypto assets, could support both banking sector and financial market growth. More immediately, a lower burden from unrealized losses on securities portfolios, either through bond sales or due to declining interest rates, would probably strengthen investor confidence in banks' balance sheets further. Banks in China may continue to suffer from the economic slowdown, and particularly the crisis in the real estate sector, as well as from additional interest rate cuts, and the potential ramifications of a trade war with the U.S. However, mitigating action adopted by the government such as fiscal stimulus and more expansionary monetary policy should strengthen the economy and also banks' performance. Japanese banks are likely to benefit from slowly rising rates, on top of a rebound in economic growth.

In Deutsche Bank's home market Germany, the retail banking market remains fragmented, and the competitive environment is influenced by the three-pillar system of private banks, public banks and cooperative banks. In recent years, competitive intensity remained elevated following some consolidation activity, particularly among public regional banks (*Landesbanken*) and private banks, and increased activity levels from foreign players.

Looking at the wider banking ecosystem, the evolution of financial technology firms remains as much an opportunity as a challenge for banks. While the bank sees the risk of banking disruption primarily through big technology companies and in select product areas, particularly the unregulated segments, many banks have also taken the opportunity to partner with financial technology firms and leverage their solutions, including in the field of artificial intelligence, to become more efficient and/or develop differentiated delivery channels for end clients. In addition, private credit firms are increasingly becoming active as competitors for banks, especially in the U.S. market.

Regulatory environment

Various new legislative and regulatory proposals were issued in recent years, covering topics such as regulatory capital, liquidity, resolution planning, central bank digital currencies and digital assets and the banking turmoil of spring 2023 in the U.S.

Capital, liquidity and leverage requirements – During 2024, the EU co-legislators finalized, adopted and published the comprehensive package of reforms with respect to European Union banking rules which implement the Final Basel III set of global reforms, changing how banks calculate their Risk Weighted Assets. The package amends the EU Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD).

CRR3 and CRD 6 include, among other things, a gradually introduced output floor establishing minimum risk-weighted assets that will ultimately be set at 72.5 % of the risk-weighted assets calculated under the standardized approach, changes to standardized and internal ratings-based approaches for determining credit risk, changes to the credit valuation adjustment, a revision of the approaches for operational risks and reforms to the market risk framework as set out in the FRTB, adjustments to the Pillar 2 requirements (P2R) and the Systematic Risk Buffer (SyRB) and a “fit-and-proper” set of rules for the senior staff managing banks. Other proposed measures are aimed at addressing sustainability risks by requiring banks to identify, disclose and manage environmental, social and governance risks as part of their risk management framework and include regular climate stress testing by the banks’ supervisors. The implementation of the changes to CRR and CRD has the potential to increase Deutsche Bank’s risk-weighted assets and will likely affect its business by raising its regulatory capital and liquidity requirements and by leading to increased costs.

In connection with the Final Basel III package, the European Commission adopted a Delegated Regulation postponing the application of certain elements of the CRR3 related to the market risk framework (FRTB) by one year to January 2026. This was in order to ensure a level playing field for these rules, given that other major jurisdictions would apply them later or were not clear about their implementation timeline.

On the back of the CRR3 and CRD 6 finalization and as empowered therein, the European Banking Authority (EBA) started working on technical elements through regulatory standards and guidance (regulatory products), by issuing consultations and, in some instances, final regulatory products. These regulatory products have the potential to increase Deutsche Bank’s risk-weighted assets and will likely affect its business by raising its regulatory capital and liquidity requirements, increasing costs or impacting other parts of the business.

In parallel, the UK Prudential Regulation Authority (PRA) finalized and published its package implementing the Final Basel III reforms, known as Basel 3.1. On January 17, 2025, the PRA announced that it would delay the formal implementation date until January 2027.

In July 2023, the U.S. federal banking agencies issued a Notice of Proposed Rulemaking (NPR) for the implementation of the Final Basel III reforms in the U.S. The NPR would implement the most wide-ranging and significant changes to the U.S. capital rules since 2013, requiring Category I-IV banking organizations, including DB USA Corporation, and their depository institution subsidiaries to calculate risk-weighted assets under both the current standardized approach that also incorporates a new approach for market risk and a new, more risk sensitive, approach referred to as the “Expanded Risk-Based Approach”. Total risk-weighted assets under the Expanded Risk-Based Approach would include standardized approaches for credit risk, operational risk and credit valuation adjustment risk, as well as a new approach for market risk that would be based on internal models and standardized supervisory models. Under the proposal, DB USA Corporation and its depository institution subsidiaries would be subject to the lower of the two resulting capital ratios from the current standardized approach and the Expanded Risk-Based Approach. However, change in leadership at the U.S. federal banking agencies following the 2024 U.S. presidential election has made it uncertain if and when a final rule will be adopted, and if so, whether and to what extent it will differ from the NPR. As a result, the timing and content of any final rule, and the potential effects of any final rule on DB USA Corporation and its depository institution subsidiaries, remain uncertain.

The Basel Committee on Banking Supervision made several announcements and consulted on several topics, including banks’ management of Counterparty Credit Risk (CCR). The final rules, if implemented by the bank’s supervisors, have the potential to change the procedures around Deutsche Bank’s CCR management.

Central Clearing Counterparties (CCPs) – Political negotiations on the European Commission’s proposal for a legislative package with respect to clearing services (the “Clearing Package”) were finalized in early February 2024 and following the adoption of the final text of the European Market Infrastructure Regulation (EMIR) by the Council on November 19, 2024, the amendments have become effective at the end of 2024 with phase-ins for certain requirements. The European Securities and Markets Authority (ESMA) has started consulting on more detailed Level 2 requirements, including on the requirement on financial and non-financial counterparties to open an active account at an EU CCP for certain derivative instruments and to clear a set number of representative trades which will become applicable six months after entry into force of EMIR 3.0.

In terms of equivalence and recognition determinations for third country CCPs, there have not been major developments. For Indian CCPs, no Memorandum of Understanding (MoU) was signed between Indian and EU authorities and the Indian CCPs remain derecognized. BaFin continues to allow German credit institutions including Deutsche Bank the possibility to remain members of six Indian CCPs for an indefinite period of time.

Savings and Investments Union – During 2024, a number of additional proposals on the *Savings and Investments Union, formerly known as Capital Markets Union* were finalized and work on more detailed Level 2 requirements were conducted by ESMA, including on the European Long-Term Investment Fund Regulation, the European Single Access Point, the EU Listing Act and the Review of the Markets in Financial Instruments Regulation and Directive which entered into force in May 2024.

Benchmarks – Negotiations on the European Commission’s legislative proposal to reform the scope of the EU Benchmarks Regulation from October 2023 continue, with the goal to significantly reduce the number of EU and non-EU benchmarks in scope. The EU co-legislators have found their respective negotiating positions and trilogues started at the end of November 2024 and were already finalized in December 2024. The final legal text is expected to be published in the first quarter of 2025, with formal entry into force by January 2026.

Digital Transformation – Several jurisdictions progressed initiatives in 2024 to both address risks and capitalize on the benefits associated with the digitalization of financial services and address the growing dependence on so-called critical third parties. Work in this area is expected to continue with a focus on data protection, open data access, payment innovation, e-privacy, cybersecurity, fraud prevention, operational resilience and capital treatment of crypto assets.

In 2024, the European Commission finalized its work in the context of its 2020 Digital Finance Strategy which defined regulatory priorities and policy actions for the outgoing European Commission. The strategy included two key legislative proposals to strengthen and harmonize financial sector operational resilience requirements (proposal for a Digital Operational Resilience Act (DORA) and a complementing amending directive) and to establish a regulatory framework for crypto assets (proposals for regulations on markets in crypto assets (Markets in Crypto-Assets Regulation - MiCA Regulation) and on a pilot regime for market infrastructures based on distributed ledger technology (DLT Pilot Regulation)). DORA and the complementing directive were finalized in 2022. The European Commission and the European Supervisory Authorities progressed with the definition of subsequent technical standards and supervisory guidelines to facilitate the efficient implementation of DORA by the financial industry. DORA requirements started to apply from January 17, 2025, and introduce a comprehensive framework setting out rules on the digital operational resilience for all regulated financial institutions throughout the European Union.

Since June 2024, the MiCA Regulation partially started to become applicable, and as from December 2024 became fully applicable. Throughout 2024, the European Commission, the ESMA and the EBA continued to complete the work on this new digital finance framework by publishing a number of Delegated Acts, Regulatory Technical Standards and Implementing Technical Standards. In July 2024, the EBA also produced guidelines on the application of the so-called “travel rule” to certain crypto-asset transfers, which requires certain crypto-asset transfers to be accompanied by specified information for anti-money laundering and anti-terrorist financing purposes. The guidelines came into force in December 2024 along with the MiCA Regulation.

The Data Act as a horizontal set of rules on data access and use that respects the protection of fundamental rights was published in December 2023 and will become applicable in September 2025, complementing the Data Governance Act as part of the European data strategy. It aims to deliver wide-ranging benefits for the European economy and society by encouraging data-driven innovation. It lays the foundation for so-called sectoral data spaces and data-sharing agreements and introduces rules for switching of cloud service providers.

Specific to the financial sector, the European Commission published a proposal for Financial Data Access legislation (FiDA) in June 2023. Building on lessons learned from the EU's Second Payment Services Directive, FiDA seeks to introduce mandatory data-sharing obligations among financial institutions across a broad range of financial products and accounts, including investments, savings, loans and insurance. The proposed scope is not limited to account and transaction data, but also covers customer onboarding information with the aim of facilitating comparability, competition and switching of providers. The Council reached an agreement on the European Commission's proposal in December 2024. Subject to agreement with the European Parliament and formal adoption of the FiDA legislation. However, given the remaining complexity of the proposal itself, FiDA is on the preliminary list of the European Commission to be retracted. If this happens, all discussions between member states and the European Parliament will be stopped. In the U.S., the Consumer Financial Protection Bureau published a final rule in October 2024 on data access and data-sharing obligations, under which a consumer would be able to grant third parties' access to the consumer's information associated with credit card, checking, prepaid and digital wallet accounts under certain conditions. The final rule is effective as of January 2025. Compliance dates range from April 2026 to April 2030.

The European AI Act was published in June 2024 and initial provisions for prohibited AI use cases became applicable on February 2, 2025, and the remainder of the requirements will become applicable on August 2, 2026. Following a self-regulation approach for the longest time, the U.S. White House issued an Executive Order on AI in 2023. The Executive Order required the Secretary of the Treasury to submit a public report on best practices for financial institutions to manage AI-specific cybersecurity risks, which was released in March 2024. In June 2024, the U.S. Treasury issued a request for information seeking input on the use of AI in the financial services sector. In December 2024, the U.S. treasury issued a second report and recommendations on the use of AI in the financial services sector following a request for information seeking input on such topic. As a result of the new U.S. administration, a revised approach to AI is expected, however, the specific actions to be taken are unclear.

In April 2024, the final Instant Payments Regulation was published to make instant payments in euro available to all citizens and businesses. This regulation will become applicable in a staggered approach, starting with the initial obligation for banks and payment service providers to be able to receive instant payments which became applicable in January 2025, and by October 2025 banks and payment service providers are required to be able to send instant payments and comply with the mandatory "verification of payee" obligation. Further changes to the EU's payment services legislative framework proposed as part of the third EU Payment Services Directive and a new Payment Services Regulation continue to be subject to negotiations between EU Member States with a key focus on the prevention of and liability for fraud. The final political negotiations between EU co-legislators are not expected to be finalized before the second half of 2025.

In addition, the European political and regulatory landscape continues to be driven by a desire to increase "digital sovereignty". This goal translates into active support for European initiatives in the field of digital identities and cloud services, while at the same time it leads to greater scrutiny of non-European technologies and respective providers, including calls for onshoring of data and services.

Aligned with the majority of central banks globally, the European Central Bank is in the middle of its preparation phase of the digital euro project for the potential launch of a digital euro as a new form of digital central bank money (CBDC) to the wider public. This two-year phase including the establishment of a rulebook for the digital euro will run until October 2025. In parallel, the EU co-legislators continue to negotiate the proposed legal framework for the digital euro as a legal tender together with a proposed legal framework clarifying the role of euro banknotes and coins as a legal tender and their interplay with the digital euro. Political negotiations on this legislative proposal are expected to continue throughout the on-going project phase of the ECB. The Bank of England and the new UK government include central bank digital currencies as a potential component for their national payment vision together with other new forms of money and payments. The U.S. has seen a shift in policy regarding CBDCs, as the new U.S. administration issued an executive order on digital assets that supports the research and development of dollar-backed stablecoins as opposed to CBDCs. Specifically, the executive order prohibits the establishment, issuance, circulation and use of a CBDC within the jurisdiction of the U.S. In addition, U.S. agencies are prohibited from promoting the viability of CBDCs abroad.

Work by UK and U.S. authorities focused on cloud services and the role of critical third-party service providers that are not regulated financial entities, but whose service provision is critical to the functioning of the financial market. In November 2024, the UK Financial Conduct Authority (FCA) and the Bank of England (BoE) published a final oversight framework for critical third parties which took effect from January 2025 with an initial step to assign the designation status of critical third parties. The U.S. Treasury at the same time assessed the current regulatory framework and need for action on cloud regulation in the U.S. The Federal Reserve Board, FDIC and OCC continue to monitor the effectiveness of their joint guidance published in June 2023 on banking organizations' management of risks associated with third-party relationships.

On October 28, 2024, the U.S. Treasury department issued a final rule implementing President Biden’s Executive Order 14105 by prohibiting or requiring notification of certain outbound U.S. investments to China (including Hong Kong and Macau) in semiconductors, quantum computing technology, and AI. The final rule came into effect on January 2, 2025. The Final Rule contains the following key elements (1) prohibitions on certain investments made by U.S. persons and their controlled foreign entities in the Chinese semiconductor, microelectronic, quantum information technology, and artificial intelligence sectors; and (2) requirements for U.S. persons to notify U.S. Treasury of certain other investments in these sectors.

In terms of crypto assets, stable coins and decentralized finance, the new UK government is expected to further progress to provide legal clarity on the basis of the announcements by the previous government in October 2023 with some changes to the regulatory approach of stablecoins compared to the plans.

U.S. authorities maintained scrutiny of crypto-asset activities during 2024. The Federal Reserve Board, FDIC, OCC and the New York State Department of Financial Services (DFS) have continued to require regulated banks to provide written notice to or obtain approval from them prior to engaging in any crypto-asset-related activity. The federal banking agencies and the DFS have further signaled through guidance, public statements, and other actions that all crypto-asset-related activities will be heavily scrutinized. However, the new U.S. administration is expected to take a more accommodating approach to the asset class.

Anti-Money Laundering and Other Financial Crime – The political negotiations on the European Commission’s anti-money laundering (AML) and countering the financing of terrorism (CFT) legislative package (referred to as the AML/CFT Package) were concluded and the final package was published and implemented in 2024. The AML/CFT Package contains proposals for a regulation on AML/CFT containing directly applicable rules (AML Regulation), a sixth directive on AML/CFT, a regulation establishing the EU AML/CFT Authority (AMLA), and a Regulation on information accompanying transfers of funds and certain crypto assets (FTR Recast). One key element of the AML/CFT Package is the establishment of an integrated European AML supervisory system closely involving national supervisors and the newly to be established AMLA as well as the creation of a unified AML/CFT regulatory framework which includes directly applicable AML/CFT rules and requirements throughout the EU (single EU rulebook). The single rulebook expands the list of obliged entities and includes harmonized, more detailed and granular rules, among other things, in the area of customer due diligence, beneficial ownership, and AML/CFT risk management.

Climate change, environmental and social issues

2024 saw a continuation in the global development of sustainability-related regulation. Key themes over the course of the year included supply chain due diligence legislation, anti-greenwashing guidelines through naming and marketing rules as well as regulation of ESG ratings providers.

Environmental Taxonomy – Building onto EU Taxonomy developments over the course of 2023, 2024 saw significant developments outside the EU. On December 20, 2024, the Association of Southeast Asian Nations (ASEAN) Taxonomy for Sustainable Finance V3 was published. It is designed as a reference point for classifying projects and activities as sustainable, so issuers and investors have better understanding of environmental objectives. The ASEAN Taxonomy includes a Foundation framework for countries that are establishing a principles-based taxonomy, and a Plus Standard, which is threshold-based. In May 2024, the Hong Kong Monetary Authority (HKMA) also published the Hong Kong Taxonomy for Sustainable Finance, to enable informed decision making on green and sustainable finance and facilitate relevant finance flows. Encompassing twelve economic activities from four sectors: Power Generation, Transportation, Construction and Water Management, HKMA references other frameworks, such as the Common Ground Taxonomy, China’s Green Bond Endorsed Projects Catalogue and the EU’s Taxonomy for Sustainable Activities. Other global taxonomy developments include Costa Rica publishing their first green Taxonomy in August 2024, designed to be compatible to the EU’s Taxonomy Regulation as well as those from Mexico and Colombia, facilitating better comparisons for investors across the different regions.

Building upon the release of taxonomies to align financial flows with low-carbon activities, 2024 also saw the further development of transition plan frameworks and transition finance frameworks. In November 2024, the International Organization of Securities Commissions (IOSCO) published a report detailing considerations for transition plans around consistency and transparency, legal and regulatory clarity as well as building capacity. The UK has seen a number of publications including the finalization of the Transition Plan Taskforce (TPT)’s final report on transition plans. The TPT was launched in 2022 to develop a standard for private sector climate transition plans. Final sectoral guidance, Just Transition and final implementation guidance was also released by TPT in April 2024, with the IFRS Foundation announcing in June 2024 that it will assume responsibility for the disclosure specific materials developed by TPT. TPT also contributed into the Transition Finance Market Review (TFMR), an independent market-led review exploring barriers to scale a transition finance market in the UK and globally. Transition Finance frameworks are crucial to avoid carbon lock-ins and increase credibility of investments. After a call for evidence in March 2024, the final report was published in October 2024 with a set of recommendations and a framework.

ESG ratings proposals and reporting requirements – The EU ESG Ratings Regulation (the Regulation on the Transparency and Integrity of Environmental, Social and Governance Rating Activities) was published in the Official Journal of the European Union in December 2024 and will apply from July 2, 2026. In the UK, following a mandate by the Financial Conduct Authority (FCA) in December 2023, the International Capital Market Association (ICMA) released a voluntary code of conduct which may be applied in global jurisdictions where there is no regulation currently in place. This provides a globally consistent, voluntary Code of Conduct for ESG ratings and data providers, aligning with IOSCO recommendations. In APAC, ESG rating providers currently have a requirement to apply to the Securities and Exchange Board of India (SEBI) for a certificate to continue operations. In July 2023, the SEBI established a regulatory framework for ESG rating providers (ERPs) in the securities market by introducing a new chapter to its Credit Rating Agencies Regulations (Regulation) and issuing the Master Circular for ESG Rating Providers (Circular). The Regulation and Circular introduce measures to mitigate ERPs' conflicts of interest and to enhance transparency in ESG ratings. ERPs are also required to consider India-specific parameters in their ESG ratings.

ESG Reporting Requirements – 2024 saw firms implementing the Corporate Sustainability Reporting Directive (CSRD) and its associated European Sustainability Reporting Standards (ESRS), which extended reporting requirements for corporates and banks. Provided that the CSRD is transposed into the respective national laws, companies previously subject to the Non-Financial Reporting Directive (NFRD), are required to report for the first time under ESRS for the financial year 2024, with a first Sustainability Statement to be published in 2025. In November 2024, the Global Reporting Initiative (GRI) and the CDP (formerly the Carbon Disclosure Project) also announced a new cooperation agreement which will see the organizations more closely collaborate and align their reporting standards and platform, to improve and streamline environmental reporting for companies and improve access to data on corporate environmental impacts. In late 2024, the German government asked the European Commission to delay the CSRD implementation date by 2 years, with the French government making a similar request in early 2025. Whether this will be accepted will depend on agreement with the Commission and the co-legislators. In November 2024, the President of the European Commission Ursula von der Leyden announced the intention for an 'Omnibus Directive' to reduce regulatory burdens on businesses by at least 25% – especially via Taxonomy Regulation, CSRD and Corporate Sustainability Due Diligence Directive ('CSDDD'). The package was announced for February 26, 2025. Although the CSRD was not transposed into German law as of December 31, 2024, the bank voluntary applied ESRS as reporting framework for the Sustainability Statement 2024 as allowed by Section 315c (3) HGB in conjunction with Section 289d HGB.

Environmental legislation – The EU Deforestation Regulation issued in June 2023 requires companies trading in cattle, cocoa, coffee, oil palm, rubber, soya and wood - and products derived from these commodities (i.e. meat products, leather, chocolate, glycerol, soybeans, wood products i.e., books) to conduct extensive due diligence on the value chain. The due diligence is to be conducted by any operator or trader who places these commodities in the EU market or exports from it and must be able to prove goods do not originate from recent (post December 31, 2020) deforestation, forest degradation or breaches of local environmental or social laws. This rule repeals the EU Timber Regulation. On October 2, 2024, the European Commission proposed a 12-month delay in implementation of the Deforestation regulation, which was scheduled to apply from December 30, 2024. On October 16, 2024, the European Council agreed with the European Commission's position on the targeted amendment of the EU deforestation regulation, with now the European Parliament to finalize the amendments. The regulation is set to be formally adopted by both co-legislators and published in the Official Journal of the EU so that it can enter into force by the end of 2025.

Anti-greenwashing legislation – On August 21, 2024, ESMA published the translation in all official EU languages of its Guidelines on funds' names using ESG or sustainability-related terms. The Guidelines aim at protecting investors against unsubstantiated or exaggerated sustainability claims in fund names, with an application date of November 21, 2024. The transitional period for funds existing before the application date is until May 2025. Any new funds created after the application date apply the Guidelines immediately.

In the UK, the FCA released their final Sustainability Disclosure Requirements (SDR) via a Policy Statement (PS23/16), incorporating anti-Greenwashing rules (finalized later via a Guideline document FG24/3), a financial product labelling regime and naming and marketing rules for funds using sustainable terms but without a label. SDR applies to UK firms and their UK domiciled products, with a view to expand to overseas products sold into the UK. The labelling rules became available to use from July 31, 2024, and include four labels: Sustainability Focus, Sustainability Improvers, Sustainability Impact and Sustainability Mixed Goals. Entities need to comply with specific and general qualifying criteria at a minimum of 70% of a fund's assets, to apply any label. Rules come with associated consumer-facing, pre-contractual and periodic reporting disclosure requirements. Specific criteria apply if using sustainability terms in a fund name (without using a label), which was set to apply from December 2, 2024, but on September 9, 2024, the FCA introduced temporary measures to give firms more time to comply. For funds that submitted their extension requests, they have until April 2, 2025, to comply with the "naming and marketing" element of SDR. All other relevant rules must be complied with. Rules come with associated consumer-facing and pre-contractual disclosure requirements, and also a statement on why no label is being used. SDR is also under consultation to be extended to Portfolio Management (CP24/8). Entity-level reporting becomes necessary based on size of the firm from December 2, 2025, onwards. Distributors have a responsibility to make labels and any consumer-facing disclosures available to consumers.

In the U.S., the Securities and Exchange Commission (SEC) adopted final rules on climate related disclosures in March 2024, however on April 4, 2024, they issued a voluntary stay order on these adopted disclosure rules pending ongoing legal challenges to the rules. These rules require certain registrants to disclose information about their material direct greenhouse gas (GHG) emissions (Scope 1), and material indirect emissions from purchased electricity or other forms of energy (Scope 2), as well as detailed disclosures regarding, among other things, climate-related risks, risk management and governance, climate-related targets and goals, and certain climate-related financial statement footnote disclosures. California Bill AB 1305, which became effective on January 1, 2024, requires companies that operate within California and make certain claims within California regarding carbon neutrality, net zero or reduction of greenhouse gas emissions, and companies purchasing or using carbon offsets in addition to making such claims, to disclose information on the accuracy of the claim, interim progress measures, third-party verification and, if applicable, information on the carbon offsets purchased and emissions data by January 1, 2025. AB 1305 also requires certain factual disclosures from companies that market or sell carbon offsets within California.

Sustainability Due-Diligence – At an EU level, the CSDDD was provisionally agreed by the Member States and the European Parliament in December 2023 and finalized in July 2024. The CSDDD outlines obligations for corporations to identify, mitigate, minimize and prevent adverse impacts on the environment and human rights for their business chain of activities. Member States are currently in the process of issuing national transpositions of this law, which must occur by July 2026. CSDDD will begin applying to certain companies in July 2027, with other categories of companies subject to CSDDD requirements beginning in July 2028 and July 2029. In Germany, the Supply Chain Due Diligence Act (SCDDA or Lieferkettensorgfaltspflichtengesetz/LkSG) has been in place since January 1, 2023, with first reporting for 2023 originally due by April 30, 2024, but extended until December 31, 2025, to align with CSRD-ESRS requirements. After CSDDD was published in the EU Official Journal, amendments to SCDDA were proposed by the Bundestag, but the proposal is currently on hold and will be reviewed following German elections. On October 25, 2024, the German Federal Office for Economic Affairs and Export Control announced that it will not be reviewing the submission and publication of reports under SCDDA until January 1, 2026. Whilst the failure to submit the reports will not be penalized, other due diligence obligations under SCDDA remain in place and will be penalized if violations occur. In early 2025, the French government asked the European Commission to indefinitely delay implementation of the CSDDD. It is unclear what, if anything, the European Commission will do in response to this request.

Regulation and Supervision

Deutsche Bank's operations throughout the world are regulated and supervised by the relevant authorities in each of the jurisdictions where the bank conducts business. Such regulation relates to licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. It affects the type and scope of the business the bank conducts in a country and how it structures its operations.

Highlights

On October 27, 2021, the European Commission published a proposal for a comprehensive package of reforms with respect to European Union banking rules ("Banking Package 2021") to ensure that banks become more resilient to potential future economic shocks while contributing to the European Union's recovery from the COVID-19 pandemic and its transition to climate neutrality. The proposals have aimed to amend the Capital Requirements Regulation ("CRR"), the Capital Requirements Directive ("CRD") and the Bank Recovery and Resolution Directive ("BRRD"). The amendment of the CRR and CRD (commonly referred to as "CRR3" and "CRD 6") finalize, in particular, the implementation of the Basel III framework in the European Union and also fully implement the market risk capital changes in the Fundamental Review of the Trading Book ("FRTB"). Another separate proposal entailed combined amendments to the CRR and the BRRD with respect to the resolution regime.

After adoption by the European Parliament and the Council, CRR3 and CRD 6 were published in the EU Official Journal on 19 June, 2024 and entered into force 20 days later on 9 July, 2024. CRR3 applies from January 1, 2025, with certain elements of the regulation being phased in over subsequent years. With some exceptions regarding transposition and application dates, the European Member States shall, in principle, adopt and publish, by 10 January 2026, the laws, regulations and administrative provisions necessary to comply with CRD 6 and apply those measures from 11 January 2026. CRR3 and CRD 6 include, among other things, a gradually introduced output floor establishing minimum risk-weighted assets that will ultimately be set at 72.5% of the risk weighted assets calculated under the standardized approach, changes to standardized and internal ratings-based approaches for determining credit risk, changes to the credit valuation adjustment, a revision of the approaches for operational risks and reforms to the market risk framework as set out in the FRTB, adjustments to the Pillar 2 requirements and the systemic risk buffer ("SyRB"), a "fit-and-proper" set of rules for the senior staff managing banks, minimum requirements for the prudential supervision of third-country branches, and a provision for future dedicated legislation on the prudential treatment of crypto asset exposures and interim own-funds requirements for certain crypto-asset exposures. Other measures address sustainability risks by requiring banks to identify, disclose and manage environmental, social and governance risks as part of their risk management framework and include regular climate stress testing by the banks' supervisors. CRR3 and CRD 6 do not entail any adjustments to the capital requirements for green or brown assets. Rather, climate-related risks are captured by the existing EU risk-based prudential framework.

Certain proposals laid out in the Banking Package 2021 included clarifications to the total loss absorbing capacity ("TLAC") as well as the minimum requirement for own funds and eligible liabilities ("MREL") regimes. In October 2022, a regulation regarding the prudential treatment of global systemically important institutions ("G-SIIs") with a multiple-point-of-entry resolution strategy and the indirect subscription of instruments eligible for meeting MREL (the so-called "Daisy Chain Regulation") was published in the EU Official Journal, making targeted changes to CRR and BRRD in respect of MREL and TLAC. The changes included the introduction of a deduction regime requiring intermediate parents to deduct from their own internal MREL capacity the amount of their holdings of internal MREL eligible instruments, including own funds, issued by their subsidiaries belonging to the same resolution group, which became effective on January 1, 2024.

According to an assessment conducted by the EBA, the full implementation of the Basel III framework in the European Union could lead to an increase in the minimum capital requirements of all European banks of 9% and 16% for G-SIIs.

The implementation of CRR3 and CRD 6 has the potential to increase Deutsche Bank's risk-weighted assets and will likely affect its business by raising its regulatory capital and liquidity requirements and by leading to increased costs.

Deutsche Bank AG is authorized and regulated by the European Central Bank ("ECB") and the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* or "BaFin"). Following the departure of the United Kingdom (UK) from the European Union as a result of Brexit, and European Union law ceasing to be applicable in the UK as from end of 2020, Deutsche Bank AG received a new UK authorization (Part 4A) from the Prudential Regulatory Authority (PRA), on December 19, 2022. With respect to its regulated activities in the UK, and the continued operation of its London Branch, Deutsche Bank AG is authorized by the PRA and subject to regulation by the Financial Conduct Authority (FCA) and limited regulation by the PRA.

Pursuant to that authorization, Deutsche Bank AG continues to provide banking and other financial services in the UK both from its London Branch and also on a cross-border basis. Divergence between UK and European Union law will potentially, and increasingly, pose challenges for both Deutsche Bank AG and the financial services industry generally.

The following sections present a description of the regulation and supervision of Deutsche Bank's business in its home market Germany under the European Union framework of regulation and in the United States.

Regulation in Germany under the Regulatory Framework of the European Union

Deutsche Bank is subject to comprehensive regulation under German law and regulations promulgated by the European Union which are directly applicable law in Germany.

The German Banking Act (*Kreditwesengesetz*) and the CRR are important sources of regulation for German banks with respect to prudential regulation, licensing requirements, and the business activities of financial institutions. In particular, the German Banking Act requires that an enterprise which engages in one or more of the activities categorized in the German Banking Act as "banking business" or "financial services" in Germany must be licensed as a credit institution (*Kreditinstitut*) or financial services institution (*Finanzdienstleistungsinstitut*), as the case may be. Deutsche Bank AG is licensed as a credit institution and is authorized to conduct banking business and to provide financial services.

Significant parts of the regulatory framework for banks in the European Union are governed by the CRR. The CRR includes requirements relating to regulatory capital, risk-based capital adequacy, monitoring and control of large exposures, consolidated supervision, leverage, liquidity and public disclosure, including Basel III standards.

Certain other requirements that apply to Deutsche Bank, including those with respect to capital buffers, organizational and risk management requirements, are set forth in the German Banking Act and other German laws, partly implementing European Union directives such as the CRD.

Deutsche Bank AG, headquartered in Frankfurt am Main, Germany, is the parent institution of Deutsche Bank Group. Under the CRR, Deutsche Bank AG, as credit institution and parent company, is responsible for regulatory consolidation of all subsidiary credit institutions, financial institutions, asset management companies and ancillary services undertakings. Generally, the bank regulatory requirements under the CRR and the German Banking Act apply both on a stand-alone and a consolidated basis. However, banks forming part of a consolidated group may receive a waiver with respect to the application of specific regulatory requirements on an unconsolidated basis if certain conditions are met. As of December 31, 2024, Deutsche Bank AG benefited from such a waiver, according to which Deutsche Bank AG needs to apply the requirements relating to own funds, large exposures, exposures to transferred credit risks, leverage and disclosure by institutions, as well as certain risk management requirements, only on a consolidated basis.

Capital Adequacy Requirements

Minimum Capital Adequacy Requirements (Pillar 1)

The minimum capital adequacy requirements for banks are primarily set forth in the CRR. The CRR requires German banks to maintain an adequate level of regulatory capital in relation to the total of their risk positions, referred to as total exposure amount. Risk positions include credit risk positions, market risk positions and operational risk positions (including, among other things, risks related to certain external factors, as well as to technical errors and errors of employees). The most important type of capital for compliance with the capital requirements under the CRR is Common Equity Tier 1 capital. Common Equity Tier 1 capital primarily consists of share capital, retained earnings and other reserves, subject to certain regulatory adjustments. Another component of regulatory capital is Additional Tier 1 capital, which includes, for example, certain unsecured subordinated perpetual capital instruments and related share premium accounts. An important feature of Additional Tier 1 capital is that the principal amount of the instruments will be written down, or converted into Common Equity Tier 1 capital, when the Common Equity Tier 1 capital ratio of the financial institution falls below a minimum of 5.125% (or such higher level as the issuing bank may determine). Common Equity Tier 1 capital and Additional Tier 1 capital together constitute Tier 1 capital. An additional type of regulatory capital is Tier 2 capital which generally consists of long-term subordinated debt instruments. Tier 1 capital and Tier 2 capital together constitute own funds.

Under the CRR, banks are required to maintain a minimum ratio of Tier 1 capital to total risk exposure amount of 6% and a minimum ratio of Common Equity Tier 1 capital to total risk exposure of 4.5%. The minimum total capital ratio of own funds to total risk exposure is 8%.

Capital Buffers

The German Banking Act also requires banks to build up a mandatory capital conservation buffer (Common Equity Tier 1 capital amounting to 2.5% of total risk exposure), and authorizes the BaFin to set a domestic countercyclical capital buffer (“CCyB”) for Germany (Common Equity Tier 1 capital of generally 0% to 2.5% of total risk exposure, or more in particular circumstances) during periods of high credit growth. The CCyB for Germany is currently set at 0.75%. In order to comply with the CCyB requirement, banks must calculate their institution-specific CCyB as the weighted average of the CCyBs that apply to them in the jurisdictions where their relevant credit exposures are located. Accordingly, the total CCyB requirement, if any, with which Deutsche Bank needs to comply also depends on the corresponding buffer requirements in other jurisdictions. In addition, BaFin may require banks to build up a SyRB (Common Equity Tier 1 capital of a minimum of 0.5% of the total risk exposure amount for all exposures to prevent and mitigate long term non-cyclical systemic or macro-prudential risks not otherwise covered by CRR/CRD). Any SyRB determined by BaFin in excess of 5% would require prior authorization of the European Commission. A SyRB with regard to residential real estate financing is currently set in Germany at 2%. Furthermore, since December 31, 2023, BaFin has imposed an additional SyRB of 4.5% to all risk exposure amounts in Norway. G-SIIs are subject to an additional capital buffer (Common Equity Tier 1 capital of between 1% and 3.5% of risk-weighted assets), which the BaFin determines for German banks based on a scoring system measuring the bank’s global systemic importance. Deutsche Bank’s current G-SII capital risk buffer is 1.5%. BaFin can also determine a capital buffer of Common Equity Tier 1 capital of up to 3% of risk-weighted assets for other systemically important banks (so-called O-SIIs) in Germany, based on criteria measuring, among others, the bank’s importance for the economy in Germany and the European Economic Area (EEA). Deutsche Bank is subject to treatment both as a G-SII, as well as an O-SII (on a consolidated basis). Any risk buffer for O-SIIs that exceeds the threshold of 3% requires prior authorization by the European Commission. Deutsche Bank’s current O-SII capital buffer is 2%. The buffers for G-SIIs and the buffer for O-SIIs are not cumulative; only the higher of these buffers applies. However, such higher buffer and the SyRB are cumulative. If the total buffer is higher than 5%, BaFin needs to seek approval by the European Commission. If a bank fails to build up the required capital buffers, it will be subject to restrictions on the pay-out of dividends, share buybacks and discretionary compensation payments. Also, within the single supervisory mechanism (“SSM”), the ECB may require banks to maintain higher capital buffers than those required by the BaFin.

Leverage Ratio

The CRR also provides for a Tier 1 capital-based binding minimum leverage ratio requirement of 3%. The minimum leverage ratio requirement is calculated on a non-risk basis and complements the other risk-based capital requirements. In addition to the minimum leverage ratio requirement, the CRR provides for a leverage ratio buffer requirement for G-SIIs (such as Deutsche Bank), which must be met with Tier 1 capital and is set at 50% of the G-SII's risk-weighted capital buffer rate. Certain aspects relating to the leverage ratio buffer requirement as contained in the CRD (such as, among others, restrictions on the pay out of dividends if the requirements are not met) must be implemented in the laws of the individual Member States.

Pillar 2 Capital Requirements and Guidance

Furthermore, the ECB may impose capital and leverage ratio requirements on individual significant credit institutions which are more stringent than the statutory minimum requirements set forth in the CRR, the German Banking Act or the related regulations. Upon completion of the supervisory review and evaluation process (“SREP”) discussed in greater detail below, the competent supervisory authority makes a SREP decision in relation to each relevant bank, which may include specific capital and liquidity requirements for each affected bank. Any such additional bank-specific capital requirements resulting from the SREP are referred to as Pillar 2 requirements for its solvency ratios in addition to the statutory minimum capital and buffer requirements. Institutions must meet their Pillar 2 requirements with at least 75% of Tier 1 capital and at least 56.25% of Common Equity Tier 1 capital. In its SREP cycle 2023, the ECB has introduced a Pillar 2 requirement for the leverage ratio to address risks of excessive leverage. The Pillar 2 requirement for the leverage ratio became effective on January 1, 2024.

In addition, the ECB may decide following the SREP to communicate to individual banks an expectation to hold a further Pillar 2 Common Equity Tier 1 capital add-on, the so-called Pillar 2 guidance. The ECB has stated that it generally expects banks to meet the Pillar 2 guidance, although it is not legally binding and failure to meet the Pillar 2 guidance does not automatically have legal consequences. The competent supervisory authority may take a range of other measures based on the SREP outcome to address shortcomings in a bank’s governance and risk management processes or its capital or liquidity position, such as prohibiting dividend payments to shareholders or distributions to holders of regulatory capital instruments.

For details of Deutsche Bank’s regulatory capital, see “Management Report: Risk Report: Risk and Capital Performance” in Deutsche Bank’s Annual Report 2024.

MREL Requirements

As discussed below under “Recovery and Resolution”, to ensure that European banks have a sufficient amount of liabilities with loss-absorbing capacity, they are required to meet MREL determined for each institution individually on a case-by-case basis. The European Union implemented the Financial Stability Board’s (“FSB”) TLAC standard for global systemically important banks (“G-SIBs”, such as Deutsche Bank) by introducing a Pillar 1 MREL requirement for G-SIIs (the European equivalent term for G-SIBs). This requirement is based on both risk-based and non-risk-based denominators and will be set at the higher of 18% of total risk exposure and 6.75% of the leverage ratio exposure measure. It can be met with Tier 1 or Tier 2 capital or debt that meets specific eligibility criteria. Deduction rules apply for holdings by G-SIIs of TLAC instruments of other G-SIIs. In addition, the competent authorities have the ability to impose on G-SIIs individual MREL requirements that exceed the statutory minimum requirements.

Limitations on Large Exposures

The CRR also contains the primary restrictions on large exposures, which limit a bank’s concentration of credit risks. The German Banking Act and the German Large Exposure Regulation (*Großkredit- und Millionenkreditverordnung*) supplement the CRR in this regard. Under the CRR, Deutsche Bank’s exposure to a customer and any customers affiliated with such customer is deemed to be a “large exposure” when the value of such exposure is equal to or exceeds 10% of its Tier 1 capital. All exposures to a single customer and any customers affiliated with such customer are aggregated for these purposes. In general, no large exposure may exceed 25% of Deutsche Bank’s Tier 1 capital, or, in case the customer is a bank designated as G-SII, 15% of its Tier 1 capital. For exposures in the trading book, the large exposure regime may give greater latitude, subject to an additional own funds requirement.

Liquidity Requirements

The CRR introduced a liquidity coverage requirement intended to ensure that banks have an adequate stock of unencumbered high quality liquid assets that can be easily and quickly converted into cash to meet their liquidity needs for a 30-calendar day liquidity stress scenario. The required liquidity coverage ratio (“LCR”) is calculated as the ratio of a bank’s liquidity buffer to its net liquidity outflows. Also, banks must regularly report the composition of the liquid assets in their liquidity buffer to their competent authorities.

In addition, the CRR provides for a net stable funding ratio (“NSFR”) to reduce medium- to long-term funding risks by requiring banks to fund their activities with sufficiently stable sources of funding over a one-year period. The NSFR is defined as the ratio of a bank’s available stable funding relative to the amount of required stable funding over a one-year period. Banks must maintain an NSFR of at least 100%. The NSFR applies to both the Group as a whole and to individual SSM regulated entities, including the parent entity Deutsche Bank AG.

The ECB may impose on individual banks liquidity requirements which are more stringent than the general statutory requirements if the bank’s continuous liquidity would otherwise not be ensured.

Separation of Proprietary Trading Activities by Universal Banks

The German Separation Act (*Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen*) provides that deposit-taking banks and their affiliates are prohibited from engaging in proprietary trading that does not constitute a service for others, high-frequency trading, and credit or guarantee transactions with hedge funds and comparable enterprises that are substantially leveraged, unless such activities are exempt or excluded, or in the case where no such exemption or exclusion is available, is transferred to a separate legal entity, referred to as a financial trading institution (*Finanzhandelsinstitut*). The separation requirement applies if certain thresholds are exceeded, which is the case for Deutsche Bank. In addition, the German Separation Act authorizes the BaFin to prohibit the deposit-taking bank and its affiliates, on a case-by-case basis, from engaging in market-making and other activities that are comparable to the activities prohibited by law, if these activities may put the solvency of the deposit-taking bank or any of its affiliates at risk. In the event that the BaFin orders such a prohibition, the respective activities must be discontinued or transferred to a separate financial trading institution. The financial trading institution may be established in the form of an investment firm or a bank and may be part of the same group as the deposit-taking bank. However, it must be economically and organizationally independent from the deposit-taking bank and its other affiliates, and it has to comply with enhanced risk management requirements. Deutsche Bank has established a compliance and control framework to ensure that no prohibited activities are conducted. As a result, Deutsche Bank has not established a financial trading institution.

Anti-Financial Crime, Money Laundering, Sanctions, Fraud, Bribery and Corruption

Financial sector participants are required to take steps to prevent the abuse of the financial system through money laundering and other financial crime. The European Union has continually sought to strengthen its framework for anti-money laundering and combating the financing of terrorism, in line with international standards set by the Financial Action Task Force. On July 20, 2021, the European Commission presented a new package of legislative proposals to strengthen the existing rules (the "AML/CFT Package"). Upon completion of the legislative process for the AML/CFT Package, the legal instruments forming the AML/CFT Package were published in the EU Official Journal with a July 2024 effective date. One key element of the AML/CFT Package is the establishment of an integrated European AML supervisory system closely involving national supervisors and the newly established EU Anti-Money Laundering Authority ("AMLA") as well as the creation of the single rulebook expanding the list of obliged entities and including harmonized, more detailed and granular rules on, among other things, customer due diligence, beneficial ownership, and AML/CFT risk management. The requirements of the Anti-Money Laundering Regulation and the Anti-Money Laundering Directive 6 will be applicable from 10 July 2027. Eventually, once the package has been implemented, AMLA will directly supervise certain cross-border financial sector entities in the highest risk category, which is expected to include Deutsche Bank, facilitate cooperation among financial intelligence units and coordinate national authorities. Generally, the requirements (such as know-your-customer requirements) currently set out in the German AML Act (*Geldwäschegesetz*) and the German Banking Act apply to all business lines and infrastructure units as well as all subsidiaries and affiliates that undertake AML-relevant business and in which Deutsche Bank AG has a dominating influence. A robust and effective internal control environment and adequate infrastructure (comprising people, policies and procedures, controls, testing, IT systems and data) are necessary to ensure that the bank conducts its business and performs its processes in general in compliance with the laws, regulations, and associated supervisory expectations. The bank continually enhances the effectiveness of its internal control environment and improves its infrastructure to revised regulatory requirements and to close gaps identified by the bank and/or by regulators and monitors.

Combatting financial crime and complying with applicable laws and regulations is vital to ensuring the stability of banks, such as Deutsche Bank, and the integrity of the international financial system.

Deutsche Bank is required to comply with economic sanctions laws and regulations in the jurisdictions in which it operates, including sanctions administered and enforced by the United Nations Security Council, the European Union, the United States, the United Kingdom, and other sanctions measures imposed by governments in jurisdictions where the bank acts, as applicable. Deutsche Bank therefore implements a risk-based compliance program reasonably designed to comply with applicable sanctions. As sanctions continue to increase in breadth and complexity, this necessitates continued updating of the bank's policies, procedures, processes, and controls.

Deutsche Bank, its management board and supervisory board members and its employees, as the case may be, are subject to fraud, bribery and corruption laws and regulations under the German Criminal Code (*Strafgesetzbuch*) and in the other countries in which it conducts business. The UK Bribery Act 2010 has extraterritorial impact and requires Deutsche Bank to design and develop appropriate measures to mitigate bribery and corruption risk and to administer controls and safeguards to mitigate such risks.

Data Protection and Cyber Risk

Deutsche Bank has to comply with all applicable data protection laws in the countries in which it operates. In Germany and the other European Union Member States, the regulation on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, also referred to as the General Data Protection Regulation ("GDPR"), became applicable in the European Union on May 25, 2018. It relates to data protection and privacy rights of individuals within the European Union and addresses the export of personal data to other jurisdictions. The GDPR primarily aims at giving individuals control over their personal data and to unifying the regulatory environment for cross-border business. The GDPR contains provisions and requirements pertaining to the processing of personal data of individuals and applies to businesses inside the European Union that are processing personal data. The regulation furthermore applies to businesses outside of the European Union if goods or services are offered to data subjects in the European Union, or if the behavior of data subjects in the European Union is being monitored. The GDPR imposes compliance obligations and grants broad enforcement powers to supervisory authorities, including the potential to levy significant fines for non-compliance. For the U.S., Deutsche Bank maintains a cyber security and data privacy program that complies with the Gramm Leach Bliley Act as well as SEC and New York Department of Financial Services rules.

Under the German Banking Act (*Gesetz über das Kreditwesen*) and the BaFin's Minimum Requirements for Risk Management for Banks (*Mindestanforderungen an das Risikomanagement*) together with the BaFin's Supervisory Requirements for IT in Financial Institutions (*Bankaufsichtliche Anforderungen an die IT*), information security needs to be an integral part of a financial institution's IT strategy and risk management. The BaFin requires that financial institutions establish a comprehensive information and cyber security program, define standards, implement controls and adhere to their resulting security policies and standards in accordance with evolving business requirements, regulatory guidance, and an emerging threat landscape. Information security risk management is part of vendor risk management for any procurement if information technology or outsourcing activity include the use of new technologies like cloud services. Information security risk (also referred to as cyber risk) is a component of operational risk assessed in the context of the SREP under Guidelines on Information and Communication Technology Risk Assessment issued by the EBA, which expects financial institutions to protect the confidentiality, integrity, and availability of customer data and information assets. Such guidelines are complemented by the EBA's Guidelines on ICT and Security Risk Management. Going forward, the recently adopted Digital Operational Resilience Act ("DORA"), which applies from January 17, 2025, and the pertinent technical standards, introduce a comprehensive framework setting out rules on the digital operational resilience for regulated financial institutions, including Deutsche Bank AG, in a harmonized form throughout the European Union. At the same time, BaFin's Supervisory Requirements for IT in Financial Institutions will no longer be applicable to financial institutions subject to DORA.

Remuneration Rules

Under the German Banking Act and the German Credit Institution Remuneration Regulation (*Institutsvergütungsverordnung*), as well as the directly applicable EBA Guidelines on sound remuneration policies under Directive 2013/36/EU, Deutsche Bank AG is subject to certain restrictions on the remuneration it pays to its management board members and employees. These remuneration rules implement requirements of the CRD and impose a cap on bonuses. Pursuant to this cap, the variable remuneration for management board members and employees must not exceed the fixed remuneration. The maximum variable remuneration may be increased to twice the management board member's or employee's fixed remuneration if expressly approved by the shareholders' meeting with the required majority. In addition, Deutsche Bank AG is obliged to identify individuals who have a material impact on the bank's risk profile ("material risk takers"). Such material risk takers are subject to additional rules, such as the requirement that at least 40% or, as the case may be, up to 60% of the variable remuneration granted to them must be on a deferred basis. The minimum deferral period is four years and may increase to five years depending on certain factors. For certain material risk takers the minimum deferral period is set to five years. Also, at least 50% of the variable remuneration for material risk takers must be paid in shares of the bank or instruments linked to shares of the bank. Variable compensation of material risk takers has to be subject to an ex-post risk adjustment mechanism and to a claw back provision in case of personal wrongdoing. These deferral and claw back provisions do not apply to a material risk taker whose variable remuneration does not exceed € 50,000 gross and 1/3 of the total annual remuneration. Finally, Deutsche Bank is required to comply with certain disclosure requirements relating to the remuneration it pays to, and its remuneration principles in respect of, its material risk takers and other affected employees.

In addition, as an issuer whose shares are listed on the New York Stock Exchange (NYSE), the bank has adopted compensation recovery mechanisms to recoup previously awarded compensation in the event of an accounting restatement. See below under "Regulation and Supervision in the United States".

For details of Deutsche Bank's remuneration system, see "3 - Compensation Report" in Deutsche Bank's Annual Report 2024.

Deposit Protection and Investor Compensation in Germany

The Deposit Protection Act and the Investor Compensation Act

The German Deposit Protection Act (*Einlagensicherungsgesetz*) and the German Investor Compensation Act (*Anlegerentschädigungsgesetz*) provide for a mandatory deposit protection and investor compensation system in Germany, based on a European Union directive on deposit guarantee schemes ("DGS Directive") and a European Union directive on investor compensation schemes.

The German Deposit Protection Act (which implements the DGS Directive into German law) requires that each German bank participates in one of the statutory government-controlled deposit protection schemes (*Entschädigungseinrichtungen*). Since October 2021, the Entschädigungseinrichtung deutscher Banken GmbH ("EdB"), which has been commissioned by the Ministry of Finance to operate the mandatory deposit protection scheme, is the sole German deposit protection scheme for all German banks. The EdB collects and administers the contributions of the member banks, and settles any compensation claims of depositors in accordance with the German Deposit Protection Act.

Under the German Deposit Protection Act, deposit protection schemes are generally liable for obligations resulting from deposits denominated in any currency in an amount of up to € 100,000 per depositor and bank. Certain depositors, such as banks, insurance companies, investment funds and governmental bodies, are excluded from coverage.

Deposit protection schemes are financed by annual contributions of the participating banks proportionate to their potential liabilities, depending on the amount of covered deposits and the degree of risk the bank is exposed to. A target level of 0.8% of the total covered deposits of the participating banks has been reached by July 3, 2024. Deposit protection schemes may also levy special contributions if required to settle compensation claims.

Deposit protection schemes will be required to contribute to bank resolution costs where resolution tools are used. The contribution made by the deposit protection scheme is limited to the compensation it would have to pay if the affected bank had become subject to insolvency proceedings. Furthermore, deposit protection schemes may provide funding to its participating banks to avoid their failure under certain circumstances.

Under the German Investor Compensation Act, in the event that the BaFin ascertains a compensation case, EdB as Deutsche Bank AG's deposit protection scheme is also required to compensate 90% of the aggregate claims of each covered creditor arising from securities transactions denominated in euro or in a currency of any other Member State up to an amount of the equivalent of € 20,000. Many financial sector participants such as banks, insurance companies, investment funds, governmental bodies or medium-sized and large corporations, however, do not benefit from this coverage.

Voluntary Deposit Protection System

Liabilities to creditors that are not covered by a statutory compensation scheme may be covered by the Deposit Protection Fund (*Einlagensicherungsfonds*) set up by the Association of German Banks (*Bundesverband deutscher Banken e.V.*) of which Deutsche Bank AG is a member. The Deposit Protection Fund protects deposits, i.e., generally credit balances credited to an account or resulting from interim positions which the bank is required to repay, up to certain maximum amounts and subject to certain exclusions, of private individuals, foundations and corporates. Deposits of banks, broker-dealers and other financial sector entities, such as insurance and re-insurance undertakings or investment funds as well as governmental agencies, are excluded.

The financial resources of the Deposit Protection Fund are funded by contributions of the participating banks. If the resources of the Fund are insufficient, banks may be required to make special contributions, in particular if the resources of the Deposit Protection Fund become stretched due to bank insolvencies or otherwise.

In 2021, the Association of German Banks launched a far-reaching reform project for its Deposit Protection Fund that has started phasing in from 2023 onwards. Deposits held with non-German branches of Deutsche Bank AG are no longer covered unless grandfathering rules apply. Also, absolute cover limit amounts will apply to all depositors. These amounts were € 5 million per depositor from January 1, 2023 onwards which have been reduced to € 3 million from January 1, 2025 and will be further reduced to € 1 million from January 1, 2030. For corporates the limits will be ten times higher but limited to deposits with a maturity of up to twelve months.

Market Conduct, Investor Protection and Infrastructure Regulation

Under the German Securities Trading Act (*Wertpapierhandelsgesetz*), the BaFin regulates and supervises securities trading, including the provision of investment services, in Germany. The German Securities Trading Act contains, among other things, disclosure and transparency rules for issuers of securities that are listed on a German exchange and organizational requirements as well as rules of conduct which apply to all businesses that provide investment services. Investment services include, in particular, the purchase and sale of securities or derivatives for others and the intermediation of transactions in securities or derivatives as well as investment advice. The BaFin has broad powers to investigate businesses providing investment services to monitor their compliance with the organizational requirements, rules of conduct and reporting requirements. In addition, the German Securities Trading Act requires an independent auditor to perform an annual audit of the investment services provider's compliance with its obligations under the German Securities Trading Act.

A related area is the Market Abuse Regulation ("MAR") which establishes a common European Union framework for, inter alia, insider dealing, the public disclosure of inside information, market manipulation, and managers' transactions. The German Securities Trading Act, which had contained rules on market abuse prior to the entering into force of the MAR, continues to supplement the MAR in this respect, for example by providing for sanctions in case of violations of the MAR.

In addition, the Markets in Financial Instruments Directive ("MiFID"), implemented primarily by the German Securities Trading Act, and the Markets in Financial Instruments Regulation ("MiFIR") provide for more far-reaching regulation and oversight of financial firms providing investment services or activities in the European Union by covering additional markets and instruments, the extension of pre- and post-trade transparency rules from equities to all financial instruments, greater restrictions on operating trading platforms, and greater sanctioning powers. The trading venues under supervision include organized trading facilities. In addition, MiFID/MiFIR, also provide for a trading obligation for over-the-counter ("OTC") derivatives subject to mandatory clearing and which are sufficiently standardized, and investor protection rules that significantly impact the way investment firms distribute products.

The Regulation on Key Information Documents or Packaged Retail and Insurance-based Investment Products ("PRIIPs") applies since January 1, 2018. It focuses on disclosure and transparency requirements when advising on or selling to clients classified as "retail" structured products and other complex and packaged investment products and aims at increasing investor protection.

Beyond the infrastructure-related provisions of MiFID, PRIIPs and MiFIR, market infrastructure has been the focus of other regulatory initiatives of the European Union that are relevant for Deutsche Bank. The Regulation on Transparency of Securities Financing Transaction aims at increasing transparency and reducing risks associated with such transactions. The regulation requires that repos, securities lending transactions and transactions with equivalent effect and margin lending transactions be reported to trade repositories and requires risk disclosures and consent before assets are reused or re-hypothecated. For the OTC derivatives markets, the European Regulation on OTC Derivatives, Central Counterparties ("CCPs") and Trade Repositories, also referred to as European Market Infrastructure Regulation ("EMIR"), pursues the goals of reducing system, counterparty and operational risk and increase transparency in the OTC derivatives markets. The regulation introduced requirements for standardized OTC derivatives, such as central clearing, margining, portfolio reconciliation or reporting to trade repositories.

In addition, the European Union's Regulation on Financial Benchmarks seeks to ensure the integrity and accuracy of indices used as benchmarks for financial instruments and contracts, and prevent their manipulation. European Union-regulated banks, investment firms, fund managers and certain other supervised entities are only permitted to use benchmarks provided in accordance with the regulation. Benchmark administrators in the European Union are required to obtain authorization or registration, and are subject to rules and oversight regarding their organization, governance and conduct. Benchmarks provided by non-EU administrators are permissible under certain conditions.

Legal Requirements relating to Financial Statements and Audits

As required by the German Commercial Code (*Handelsgesetzbuch*), Deutsche Bank AG prepares its non-consolidated financial statements in accordance with German GAAP. Deutsche Bank Group's consolidated financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as endorsed by the European Commission, and the bank's compliance with capital adequacy requirements and large exposure limits is determined solely based upon such consolidated financial statements.

Under German law, Deutsche Bank AG is required to be audited annually by a certified public accountant (*Wirtschaftsprüfer*). Deutsche Bank AG's auditor is appointed each year at the annual shareholders' meeting. However, the supervisory board mandates the auditor and supervises the audit. The BaFin and the Deutsche Bundesbank ("Bundesbank"), the German central bank, must be informed of the appointment and the BaFin may reject the auditor's appointment. The German Banking Act requires that a bank's auditor inform the BaFin and the Bundesbank of any facts that come to the auditor's attention which would lead it to refuse to certify or to limit its certification of the bank's annual financial statements or which would adversely affect the bank's financial position. The auditor is also required to notify the BaFin and the Bundesbank in the event of a material breach by management of the articles of association or of any other applicable law. The auditor is required to prepare a detailed and comprehensive annual audit report (*Prüfungsbericht*) for submission to the bank's supervisory board, the BaFin and the Bundesbank. The BaFin and the Bundesbank share their information with the ECB. In addition to the statutory audit directive and its amendment that has been implemented into national law, Deutsche Bank is also subject to the European Union's Regulation on Specific Requirements regarding Statutory Audit of Public-Interest Entities which includes requirements for mandatory audit firm rotation and restrictions on non-audit services.

Banking Supervision under the Single Supervisory Mechanism

Under the European Union's system of financial supervision referred to as SSM, the ECB is the primary supervisor of all systemically important or significant credit institutions (such as Deutsche Bank AG) and their banking affiliates in the relevant Member States. The competent national authorities supervise the remaining, less significant banks under the oversight of the ECB. As a result, Deutsche Bank AG is supervised by the ECB, the BaFin and the Bundesbank.

With respect to Deutsche Bank and other significant credit institutions, the ECB is the primary supervisor and is responsible for most tasks of prudential supervision, such as compliance with regulatory requirements concerning own funds, large exposure limits, leverage, liquidity, securitizations, corporate governance, business organization and risk management requirements. The ECB carries out its day-to-day supervisory functions through a joint supervisory team ("JST") established for Deutsche Bank Group. The JST is led by the ECB and comprises staff from the ECB and national supervisory authorities, including the BaFin and the Bundesbank. In addition, and regardless of whether an institution is significant or not, the ECB is responsible for issuing new licenses to credit institutions and for assessing the acquisition and increase of significant participations (also referred to as qualifying holdings) in credit institutions established in those Member States of the European Union that participate in the SSM and where notification of such changes must be filed.

The BaFin is Deutsche Bank's principal supervisor for regulatory matters with respect to which the bank is not supervised by the ECB. These include business conduct in the securities markets, in particular when providing investment services to clients, payment services and implementing measures against money laundering and terrorist financing, and they also include certain special areas of bank regulation, such as those related to the issuance of covered bonds (*Pfandbriefe*) and the supervision of German home loan banks (*Bausparkassen*) with regard to certain regulatory requirements specifically applicable to such home loan banks. Generally, the BaFin also supervises Deutsche Bank with respect to those requirements under the German Banking Act that are not based upon European law. The Bundesbank supports the BaFin and the ECB and closely cooperates with them. The cooperation includes the ongoing review and evaluation of reports submitted by Deutsche Bank and of its audit reports as well as assessments of the adequacy of the bank's capital base and risk management systems. The ECB, the BaFin and the Bundesbank receive comprehensive information from Deutsche Bank in order to monitor its compliance with applicable legal requirements and to obtain information on its financial condition.

Supervisory Review and Evaluation Process (SREP)

For significant institutions such as Deutsche Bank, the JST conducts the SREP for an ongoing assessment of risks, governance arrangements and the capital and liquidity situation. The SREP requires that the JSTs review the arrangements, strategies, processes and mechanisms of supervised banks on a regular basis, in order to evaluate risks to which these banks are or might be exposed, risks they could pose to the financial system, and risks revealed by stress testing.

The SREP framework consists of a business model analysis, an assessment of internal governance and institution-wide control arrangements, an assessment of risks to capital and adequacy of capital to cover these risks; and an assessment of risks to liquidity and adequacy of liquidity resources to cover these risks. The SREP can result in Pillar 2 capital and liquidity requirements or guidance for the relevant institution (see above "Pillar 2 Capital Requirements and Guidance").

Audits, Investigations and Enforcement

Investigations and Supervisory Audits

The ECB and the BaFin may conduct audits of banks on a discretionary basis, as well as for cause. In particular, the ECB may audit Deutsche Bank's compliance with requirements with respect to which it supervises Deutsche Bank, such as those set forth in the CRR/CRD. The BaFin may also decide to audit the bank's compliance with requirements with respect to which it supervises the bank, such as those relating to business conduct in the securities markets and the regulation of anti-money laundering, to counter terrorist financing and payment services, as well as certain special areas of bank regulation, such as those related to the issuance of covered bonds and the supervision of German home loan banks.

The ECB as well as the BaFin may require a bank to furnish information and documents in order to ensure that the bank is complying with applicable bank supervisory laws. The ECB and the BaFin may conduct investigations without having to state a reason therefor. Such investigations may also take place at a foreign entity that is part of a bank's group for regulatory purposes. Investigations of foreign entities are limited to the extent that the law of the jurisdiction where the entity is located restricts such investigations.

The ECB and the BaFin may attend meetings of a bank's supervisory board and shareholders meetings. They also have the authority to require that such meetings be convened.

Supervisory and Enforcement Powers

The ECB has a wide range of enforcement powers in the event it discovers any irregularities concerning adherence to requirements with respect to which it supervises Deutsche Bank.

It may, for example,

- Impose additional own funds or liquidity requirements in excess of statutory minimum requirements;
- Restrict or limit a bank's business;
- Require the cessation of activities to reduce risk;
- Require a bank to use net profits to strengthen its own funds;
- Restrict or prohibit dividend payments to shareholders or distributions to holders of Additional Tier 1 instruments; or
- Remove the members of the bank's management or supervisory board members from office.

To the extent necessary to carry out the tasks granted to it, the ECB may also require national supervisory authorities to make use of their powers under national law. If these measures are inadequate, the ECB may revoke the bank's license. Furthermore, the ECB has the power to impose administrative penalties in case of breaches of directly applicable European Union laws, such as the CRR, or of applicable ECB regulations and decisions. Penalties imposed by the ECB may amount to up to twice the amount of profits gained or losses avoided because of the violation, or up to 10% of the total annual turnover of the relevant entity in the preceding business year or such other amounts as may be provided for in relevant European Union law. In addition, where necessary to carry out the tasks granted to it, the ECB may also require that the BaFin initiate proceedings to ensure that appropriate penalties are imposed on the affected bank.

The BaFin also retains a wide range of enforcement powers. As discussed above, it may take action if instructed by the ECB in connection with supervisory tasks granted to the ECB. With respect to supervisory tasks remaining with the BaFin, the BaFin may take action upon its own initiative. In particular, if a bank is in danger of defaulting on its obligations to creditors, the BaFin may take emergency measures to avert default. These emergency measures may include:

- Issuing instructions relating to the management of the bank;
- Prohibiting the acceptance of deposits and the extension of credit;
- Prohibiting or restricting the bank's managers from carrying on their functions;
- Prohibiting payments and disposals of assets;
- Closing the bank's customer services; and
- Prohibiting the bank from accepting any payments other than payments of debts owed to the bank.

The BaFin may also impose administrative pecuniary penalties under the German Banking Act and other German laws. Penalties under the German Banking Act may amount to generally up to € 5 million or, in certain cases, € 20 million, depending on the type of offense. If the economic benefit derived from the offense is higher, the BaFin may impose penalties of up to 10% of the net turnover of the preceding business year or twice the amount of the economic benefit derived from the violation.

Finally, violations of the German Banking Act may result in criminal penalties against the members of the Management Board or senior management.

Recovery and Resolution

Germany participates in the European Union's single resolution mechanism ("SRM"), which centralizes at a European level the key competences and resources for managing the failure of banks in Member States of the European Union participating in the banking union. The SRM is based on the SRM Regulation and the BRRD, which in Germany are mainly implemented through the German Recovery and Resolution Act (*Sanierungs- und Abwicklungsgesetz*).

Under the SRM, broad resolution powers with respect to banks domiciled in the participating Member States are granted to the Single Resolution Board ("SRB") as the central European resolution authority and to the competent national resolution authorities. Resolution powers in particular include the power to reduce, including to zero, the nominal value of shares, or to cancel shares outright, and to write down certain eligible subordinated and unsubordinated unsecured liabilities, including to zero, or convert them into equity (commonly referred to as "bail-in").

For a bank directly supervised by the ECB, such as Deutsche Bank, the SRB draws up the resolution plan, assesses the bank's resolvability and may require legal and operational changes to the bank's structure to ensure its resolvability. In the event that a bank is failing or likely to fail and certain other conditions are met, in particular where there is no reasonable prospect that any alternative private sector measures would prevent the failure and resolution measures are necessary in the public interest, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (the BaFin in Germany).

Resolution measures that could be imposed on a failing bank may consist of a range of measures including the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders of a failing bank or the outright cancellation of shares, or the amendment, modification or variation of the terms of the bank's outstanding debt instruments, for example by way of deferral of payments or a reduction of the applicable interest rate. Furthermore, by way of a "bail-in", certain liabilities may be written down, including to zero, or converted into equity after the bank's regulatory capital has been exhausted.

To ensure that resolution measures can be taken effectively, contractual obligations governed by the laws of a non-EU country or that are subject to jurisdiction outside the European Union are required to include contractual provisions that ensure that the relevant obligation can be bailed in. In the case of financial contracts governed by the laws of a non-EU country or that are subject to jurisdiction outside the European Union, stay acceptance clauses need to be included.

To ensure sufficient availability of liabilities with loss-absorbing capacity that could be bailed in, the SRM Regulation and the German Recovery and Resolution Act introduced a requirement for banks to meet MREL. The required level of MREL is determined by the competent resolution authorities for each supervised bank individually on a case-by-case basis, depending on the preferred resolution strategy. In the case of Deutsche Bank AG, MREL is determined by the SRB.

In addition, G-SIIs are subject to a special Pillar 1 MREL requirement that implements the FSB's TLAC standard for G-SIBs (see "MREL Requirements" above).

G-SIIs will need to predominantly rely on capital instruments or eligible subordinated debt for this purpose. Effective January 1, 2017, the German Banking Act provided for a new class of statutorily subordinated debt securities that rank as senior non-preferred below the bank's other senior liabilities (but in priority to the bank's contractually subordinated liabilities, such as those qualifying as Tier 2 instruments). Following a harmonization effort by the European Union implemented in Germany effective July 21, 2018, banks are permitted to decide if a specific issuance of eligible senior debt will rank as senior non-preferred debt or as senior preferred debt.

The SRB is charged with administering the Single Resolution Fund ("SRF"), a pool of money which is financed by bank levies in the form of annual ex-ante contributions raised at national level, with the target level being 1% of insured deposits of all banks in Member States participating in the SRM. The target level was reached for the first time at the end of the initial build-up period which started in 2016 and ended on December 31, 2023. The SRB continues to verify on an annual basis whether the SRF's available financial means have diminished below the target level in the relevant contribution period. Based on the 2024 verification exercise, no ex-ante contributions to the SRF were collected from banks in the collection period 2024.

In early 2025, the SRB will verify, again, whether the available financial means in the Single Resolution Fund equal at least 1% of covered deposits held in the banking union. Should that not be the case, the SRB will decide whether ex ante contributions to the SRF will be calculated and restarted to be collected in the 2025 contribution period. The SRF will be used for resolving failing banks after other options, such as the bail-in tool, have been exhausted. In line with the German Recovery and Resolution Act, public financial support for a failing bank should only be used as a last resort, after having assessed and exploited, to the maximum extent possible, resolution measures set forth in the SRM Regulation and the German Recovery and Resolution Act, including the bail-in tool.

Regulation in the EEA and Brexit

The European Union pursues common standards of laws and regulations to create consistency across the internal market and reduce compliance and regulatory burdens for businesses operating on a cross-border basis. The EEA Agreement extends this objective to Iceland, Liechtenstein and Norway. Within the EEA, Deutsche Bank AG generally operates in a branch structure (and on a cross border basis from its headquarters in Frankfurt am Main) throughout the Member States under the "European Passport" legislative provisions enacted within the EU. Deutsche Bank AG is authorized and regulated by the ECB and the BaFin. To the extent that any Member State deems the regulated activities of Deutsche Bank AG to be carried out within its supervisory jurisdiction, the national competent authorities of that Member State supervise the conduct of such regulated activities. This includes, for example, rules on treating clients fairly and rules governing a bank's conduct in the securities market.

As a result of Brexit, the UK ceased to be a Member State of the European Union and European law ceased to be applicable within the UK as from December 31, 2020. This meant, therefore, for the purposes of Deutsche Bank AG's continuation of regulated activities in the UK, the European Passport provisions were no longer available and it was obliged to rely upon temporary regulatory permissions while it sought new regulatory (Part 4A) permissions from the UK national competent authority, namely the PRA. Deutsche Bank AG received its (Part 4A) authorization from the PRA on December 19, 2022. With respect to its regulated activities in the UK, and the continued operation of its London Branch, Deutsche Bank AG is currently authorized by the PRA and subject to regulation by the FCA and limited regulation by the PRA.

Deutsche Bank AG continues to provide banking and other financial services in the UK both from its London Branch and also on a cross-border basis. In June 2023, the UK enacted the Financial Services and Markets Act 2023, which provides for the eventual repeal of EU financial services laws that were retained and subsequently "assimilated" into UK law in the UK post-Brexit. Such laws have since been subject to consultation and varying degrees of amendment following Brexit, and upon repeal will be replaced by UK rules under a new regulatory framework. The growing divergence between the financial services laws and regulations in the UK and the EEA gives rise to new challenges for both Deutsche Bank AG and the financial services industry generally.

Since Brexit, the subsidiaries of the Deutsche Bank Group have also had to assess whether they conduct regulated activities in the UK (e.g., by providing UK regulated services to UK based clients), and where so, make plans to run off that activity within the UK's Financial Services Contracts Regime (FSCR) or otherwise ensure such activity can be conducted pursuant to a UK licensing exemption (i.e., the "overseas persons exclusion"). Deutsche Bank subsidiaries conducting contractual run-off operations within the FSCR include BHM (FFT), Norisbank (FFT), DB S.P.A. (Milan), DB SAEU (Madrid), DB Polska (Warsaw) and DB Luxembourg. The regulated activities being conducted by these subsidiaries in a run-off manner are all with respect to retail client activities (largely as a result of clients having moved to the UK since first availing of the services).

Regulation and Supervision in the United States

Deutsche Bank's operations are subject to extensive federal and state banking, securities and derivatives regulation and supervision in the United States. Deutsche Bank engages in U.S. banking activities directly through its New York branch. It also controls U.S. bank subsidiaries, such as Deutsche Bank Trust Company Americas ("DBTCA"), a U.S. broker-dealer, Deutsche Bank Securities Inc., U.S. non-depository trust companies and other subsidiaries. Deutsche Bank holds its U.S. subsidiaries through two intermediate holding companies, DB USA Corporation, through which Deutsche Bank's U.S. banking subsidiaries and the large majority of its other U.S. subsidiaries are held, and DWS USA Corporation, through which Deutsche Bank's U.S. asset management subsidiaries are held.

Deutsche Bank's operations are subject to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and its implementing regulations, including the Dodd-Frank Act provisions known as the "Volcker Rule," which limit the ability of banking entities and their affiliates to engage as principal in certain types of proprietary trading and to sponsor or invest in private equity or hedge funds or similar funds ("covered funds"), subject to certain exclusions and exemptions. In the case of non-U.S. banking entities such as Deutsche Bank AG, these exemptions permit certain activities conducted outside the United States, provided that certain criteria are satisfied. The Volcker Rule also limits the ability of banking entities and their affiliates to enter into certain transactions with covered funds with which they or their affiliates have certain relationships. The Volcker Rule also requires banking entities to establish comprehensive compliance programs designed to help ensure and monitor compliance with restrictions under the Volcker Rule.

The Dodd-Frank Act also mandates that regulators provide for greater capital, leverage and liquidity requirements and other prudential standards, particularly for financial institutions that pose significant systemic risk. U.S. regulators are also able to restrict the size and growth of systemically significant non-bank financial companies and large interconnected bank holding companies. U.S. regulators are also required to impose bright-line debt-to-equity ratio limits on financial companies that the Financial Stability Oversight Council determines pose a grave threat to financial stability if it determines that the imposition of such limits is necessary to minimize the risk.

Federal Reserve rules set forth how the U.S. operations of certain foreign banking organizations ("FBOs"), such as Deutsche Bank AG, are required to be structured, as well as impose enhanced prudential standards that apply to their U.S. operations. Under these rules, a large FBO with combined U.S. assets of U.S.$ 100 billion or more and U.S. non-branch assets of U.S.$ 50 billion or more, such as Deutsche Bank, is required to establish or designate a separately capitalized top-tier U.S. intermediate holding company (an "IHC") that holds substantially all of the FBO's ownership interests in its U.S. subsidiaries. The Federal Reserve Board may permit an FBO subject to the U.S. IHC requirement to establish or designate multiple IHCs upon written request. Deutsche Bank AG submitted such a request and received Federal Reserve Board approval to designate two IHCs: DB USA Corporation and DWS USA Corporation. DWS USA Corporation is a subsidiary of DWS Group GmbH & Co. KGaA, which is approximately 80% owned by Deutsche Bank AG and holds the bank's Asset Management division and subsidiaries. Each IHC is subject, on a consolidated basis, to the risk-based and leverage capital requirements under the U.S. Basel III capital framework, capital planning and stress testing requirements, U.S. liquidity buffer requirements and other enhanced prudential standards comparable to those applicable to large U.S. banking organizations. They are also subject to supplementary leverage ratio requirements, requirements on the maintenance of TLAC and long-term debt, liquidity coverage ratio and net stable funding ratio requirements.

Under the Federal Reserve Board's October 2019 final rules, U.S. operations of large FBOs are categorized based on size, complexity and risk for purposes of tailoring the application of the U.S. enhanced prudential standards (the "Tailoring Rules"). The Tailoring Rules did not significantly change the capital requirements that apply to DB USA Corporation or DWS USA Corporation, though the Tailoring Rules did provide modest relief for such companies with respect to applicable liquidity requirements so long as their combined weighted short term wholesale funding remains below U.S.$75 billion.

In July 2023, the U.S. federal banking agencies issued a Notice of Proposed Rulemaking ("NPR") for the implementation of the Final Basel III reforms in the United States. The NPR would implement the most wide-ranging and significant changes to the U.S. capital rules since 2013, requiring Category I-IV banking organizations, including DB USA Corporation, and their depository institution subsidiaries to calculate risk-weighted assets under both the current standardized approach and a new, more risk sensitive, approach referred to as the "Expanded Risk-Based Approach." Total risk-weighted assets under the Expanded Risk-Based Approach would include standardized approaches for credit risk, operational risk and credit valuation adjustment risk, as well as a new approach for market risk that would be based on internal models and standardized supervisory models. Under the proposal, DB USA Corporation and its depository institution subsidiaries would be subject to the lower of the two resulting capital ratios from the current standardized approach and the Expanded Risk-Based Approach. Recent public statements by U.S. banking officials indicate that the NPR is under reconsideration. In addition, change in leadership at the U.S. federal banking agencies following the 2024 U.S. presidential election has made it uncertain if and when a final rule will be adopted, and if so, whether and to what extent it will differ from the NPR. As a result, the timing and content of any final rule, and the potential effects of any final rule on DB USA Corporation and its depository institution subsidiaries, remain uncertain.

The Federal Reserve Board has the authority to supervise and examine an IHC, such as DB USA Corporation and DWS USA Corporation, and its subsidiaries, as well as U.S. branches and agencies of FBOs, such as Deutsche Bank's New York branch. An FBO's U.S. branches and agencies are not required to be held beneath an IHC; however, the U.S. branches and agencies of an FBO are subject to certain separate liquidity requirements, as well as other enhanced prudential standards applicable to the combined U.S. operations, such as risk management and oversight and, under certain circumstances, asset maintenance requirements. Additionally, the FBO itself is subject to certain requirements related to the adequacy and reporting of the FBO's home country capital and stress testing regime.

The Federal Reserve Board has adopted rules relating to single counterparty credit limits that apply to the combined U.S. operations and IHCs of certain large FBOs, including Deutsche Bank. Under these rules, Deutsche Bank's IHCs are prohibited from having net credit exposure to a single unaffiliated counterparty in excess of 25 percent of the respective IHC's Tier 1 capital. Deutsche Bank's combined U.S. operations (including its IHCs and New York branch) would have become separately subject to similar restrictions beginning July 1, 2021, unless Deutsche Bank AG certified compliance with a home country large exposure regime that is consistent with the Basel large exposure framework. Deutsche Bank AG has availed itself of substituted compliance through certification for its combined U.S. operations, as the European Union's framework became effective on June 28, 2021.

As a bank holding company with assets of U.S.$ 250 billion or more whose combined U.S. operations meet the criteria for a “triennial full filer”, Deutsche Bank AG is required under Title I of the Dodd-Frank Act to prepare and submit to the Federal Reserve Board and the FDIC a resolution plan (the “U.S. Resolution Plan”) on a timeline prescribed by such agencies, alternating between filing a full plan and a targeted plan. The U.S. Resolution Plan must demonstrate that Deutsche Bank AG has the ability to execute a strategy for the orderly resolution of its designated U.S. material entities and operations. For foreign-based companies subject to these resolution planning requirements such as Deutsche Bank AG, the U.S. Resolution Plan relates only to subsidiaries, branches, agencies and businesses that are domiciled in or whose activities are carried out in whole or in material part in the United States. Deutsche Bank’s U.S. Resolution Plan describes the single point of entry strategy for Deutsche Bank’s U.S. material entities and operations and prescribes that DB USA Corporation would provide liquidity and capital support to its U.S. material entity subsidiaries and ensure their solvent wind-down outside of applicable resolution proceedings. In December 2021, Deutsche Bank filed its first ‘targeted’ 2021 U.S. Resolution Plan, which described the core elements of Deutsche Bank’s U.S. resolution strategy — such as capital, liquidity, and recapitalization strategies — as well as how Deutsche Bank integrated lessons learned from its response to the COVID-19 pandemic into its resolution planning process. On December 16, 2022, the Federal Reserve Board and the FDIC announced the results of their review of Deutsche Bank’s 2021 U.S. Resolution Plan, as well as those of other banks and did not find any shortcomings or deficiencies in Deutsche Bank’s plan. In their feedback letter to Deutsche Bank, the agencies noted areas where further progress would help improve resolvability, which Deutsche Bank must address in its next full resolution plan submission, which is due by October 1, 2025. The deadline reflects an extension by the agencies from the original due date of July 1, 2024, to allow firms additional time to come into compliance with new guidance finalized on August 5, 2024 by the Federal Reserve Board and FDIC for the resolution plans of certain large foreign filers, including Deutsche Bank AG.

The Dodd-Frank Act also established a new regime for the orderly liquidation of failing financial companies through the appointment of the FDIC as receiver that is available only if the U.S. Secretary of the Treasury determines in consultation with the U.S. President that certain criteria are met, including that the failure of the company and its resolution under otherwise applicable federal or state law would have serious adverse effects on U.S. financial stability.

DB USA Corporation and DWS USA Corporation are each subject, on an annual basis, to the Federal Reserve Board’s supervisory stress testing and capital requirements. DB USA Corporation and DWS USA Corporation are also subject to the Federal Reserve’s Comprehensive Capital Analysis and Review (“CCAR”), which is an annual supervisory exercise that assesses the capital positions and planning practices of large bank holding companies and IHCs. On June 26, 2024, the Federal Reserve Board publicly released the results of its annual supervisory stress test, which showed that DB USA Corporation and DWS USA Corporation would continue to have capital levels above minimum requirements even under the stress test’s severely adverse scenario. DB USA Corporation and DWS USA Corporation submitted their annual capital plans in April 2024 and will make their next capital plan submissions to the Federal Reserve Board in April 2025. The CCAR process combines the CCAR quantitative assessment and the buffer requirements in the Federal Reserve Board’s capital rules to create an integrated capital buffer requirement. Amendments in 2020 eliminated the quantitative and qualitative ‘pass/fail’ assessments from CCAR and modified the static capital conservation buffer to incorporate an institution-specific stress capital buffer (“SCB”), which is floored at 2.5%. The SCB equals (i) a bank holding company's projected peak-to-trough decline in Common Equity Tier 1 capital under the annual CCAR supervisory severely adverse stress testing scenario prior to any planned capital actions, plus (ii) one year of planned common stock dividends. The SCB is reset each year. On August 28, 2024, the Federal Reserve Board announced an SCB for each CCAR firm based on 2024 supervisory stress testing results, which for DB USA Corporation was 13.9% and for DWS USA Corporation was 5.6%. This SCB became effective October 1, 2024, and will remain in effect until September 30, 2025, at which point the size of the SCB for each of Deutsche Bank’s IHCs will be recalibrated based on the results of the 2025 stress tests, which are expected to be released in June 2025.

In December 2024, a group of trade associations representing banking organizations in the United States sued the Federal Reserve for allegedly violating the Administrative Procedure Act by developing annual stress-testing hypothetical scenarios and models – which are used in the annual supervisory stress testing process to calculate an institution’s SCB – without publishing the hypothetical scenarios and models for public comment. In the same month, the Federal Reserve announced that it will soon seek public comment on significant changes to improve the transparency of its bank stress tests and to reduce the volatility of resulting SCB requirements. These changes may include: (i) disclosing and seeking public comment on the models that determine the hypothetical losses and revenue of banks under stress; (ii) averaging the stress test results over two years to reduce the year-over-year changes in the SCB; and (iii) ensuring that the public can comment on the hypothetical scenarios used annually for stress testing, before the scenarios are finalized.

Large U.S. bank holding companies and certain of their subsidiary depositary institutions are subject to LCR requirements that are generally consistent with the Basel Committee’s revised Basel III liquidity standards. These LCR requirements are applicable to DB USA Corporation, DWS USA Corporation and DBTCA. The current LCR requirements applicable to these entities provide for 85 percent coverage of net outflows over a projected 30-day period. These firms are required to publicly report LCR information on a quarterly basis.

On October 20, 2020, the Federal Reserve Board and other U.S. regulators finalized rules implementing the second element of the Basel III liquidity framework, the net stable funding ratio ("NSFR"). DB USA Corporation, DWS USA Corporation and DBTCA are subject a reduced NSFR requirement, reflecting 85 percent of the required stable funding amount, so long as the IHCs' combined weighted short term wholesale funding remains below $75 billion. These firms are required to calculate the NSFR on a daily basis and to publicly report NSFR information on a semi-annual basis.

The Federal Reserve Board's TLAC rules require, among other things, the U.S. IHCs of non-U.S. G-SIBs, including DB USA Corporation and DWS USA Corporation, to maintain a minimum TLAC amount, and separately require them to maintain a minimum amount of eligible long-term debt. The required TLAC amount and the ability or inability of the IHC to count long-term debt issued externally towards the requirements varies depending on the G-SIB's planned resolution strategy. DB USA Corporation and DWS USA Corporation are each considered a "non-resolution covered IHC", which means that they are intended, under the planned global resolution strategy of their G-SIB parent (Deutsche Bank AG), to continue to operate outside of resolution proceedings while the G-SIB parent is subject to a bail-in under the applicable European resolution regime. The TLAC rules require a "non-resolution covered IHC" to maintain (i) internal minimum TLAC of at least 16% of its risk-weighted assets, 6% of its Basel III leverage ratio denominator and 8% of its average total consolidated assets, and (ii) internal eligible long-term debt of at least 6% of its risk-weighted assets, 2.5% of its Basel III leverage ratio denominator and 3.5% of its average total consolidated assets. Eligible long-term debt instruments for non-resolution covered IHCs are required to meet certain criteria, including issuance to a foreign company that controls directly or indirectly the covered IHC or a foreign affiliate (a non-U.S. entity that is wholly owned, directly or indirectly, by the non-U.S. G-SIB) and the inclusion of a contractual trigger allowing for, in limited circumstances, the immediate conversion or exchange of some or all of the instrument into Common Equity Tier 1 instruments upon an order by the Federal Reserve Board. Internal TLAC requirements may be satisfied with a combination of eligible long-term debt instruments and Tier 1 capital. Each of DB USA Corporation and DWS USA Corporation would also face restrictions on its discretionary bonus payments and capital distributions if it fails to maintain a TLAC buffer consisting of Common Equity Tier 1 capital above the minimum TLAC requirement equal to 2.5% of risk-weighted assets. The TLAC rules also prohibit or limit the ability of DB USA Corporation and DWS USA Corporation to engage in certain types of financial transactions.

In August 2023, the FDIC, Federal Reserve Board, and Office of the Comptroller of the Currency issued a joint NPR on long-term debt ("LTD") requirements that would make limited amendments to the existing TLAC rules and would extend the LTD and clean-holding company portions of the Federal Reserve Board's existing TLAC rule for U.S. G-SIBs and U.S. IHCs of foreign G-SIBs to all large banking organizations with U.S.$ 100 billion or more in total assets, with virtually no tailoring and only a few other amendments to the existing TLAC rule.

Furthermore, the Dodd-Frank Act provides for an extensive framework for the regulation of OTC derivatives, including mandatory clearing, exchange trading and transaction reporting of certain OTC derivatives, as well as rules regarding registration, capital, margin, business conduct standards, recordkeeping and other requirements for swap dealers, security-based swap dealers, major swap participants and major security-based swap participants. The Commodity Futures Trading Commission ("CFTC") has adopted rules implementing the most significant provisions of the Dodd-Frank Act. Also pursuant to the Dodd-Frank Act, the CFTC has finalized regulations to impose position limits on certain commodities and economically equivalent swaps, futures and options. In addition, the CFTC has adopted final rules on the cross-border application of U.S. swap rules, building on the CFTC's cross-border guidance from 2013 and related no-action relief letters. The Securities and Exchange Commission ("SEC") has also finalized rules regarding registration, capital, margin, risk-mitigation techniques, trade reporting, business conduct standards, trade acknowledgement and verification requirements, recordkeeping and financial reporting, and cross-border requirements for security-based swap dealers. These rules generally came into effect in November 2021, the first compliance date for registration of security-based swap dealers and major security-based swap participants. Finally, the Federal Reserve Board, the FDIC, the Office of the Comptroller of the Currency, the Farm Credit Administration and the Federal Housing Finance Agency have adopted final rules establishing margin requirements for non-cleared swaps and security-based swaps that are applicable to swap dealers and security-based swap dealers that are subject to U.S. prudential regulations in lieu of the CFTC's and SEC's margin rules.

In December 2023, the CFTC published a notice of proposed rulemaking to require swap dealers, such as Deutsche Bank AG, to document, implement, and maintain an operational resilience framework reasonably designed to identify, monitor, manage, and assess risks relating to information and technology security, third-party relationships, and emergencies or other significant disruptions to normal business operations. The proposed rule, which was open for industry review and comment until April 1, 2024, may be amended prior to finalization. Deutsche Bank AG reviewed the rule proposal and will continue to consider its compliance framework in this respect.

In addition, the Dodd-Frank Act requires U.S. regulatory agencies to prescribe regulations with respect to incentive-based compensation at financial institutions in order to prevent inappropriate behavior that could lead to a material financial loss; such rules were proposed in 2011 and 2016, but were not finalized. Other provisions require issuers with securities listed on U.S. stock exchanges to establish a "claw back" policy to recoup previously awarded executive compensation in the event of an accounting restatement; in November 2022, the SEC adopted rules to implement these provisions that cover foreign private issuers such as Deutsche Bank. The New York Stock Exchange ("NYSE"), on which Deutsche Bank's ordinary shares are listed, has adopted listing standards to implement these rules, pursuant to which NYSE-listed issuers, including Deutsche Bank, were required to adopt a compensation recovery policy by December 1, 2023. The compensation recovery policies the bank has adopted are attached as Exhibits 97.1 and 97.2 hereto.

The Dodd-Frank Act also grants the SEC discretionary rule-making authority to impose a new fiduciary standard on brokers, dealers and investment advisers; pursuant to this authority, on June 5, 2019, the SEC adopted rules and interpretations applicable to the relationships between such entities and their retail customers, and full compliance was required on June 30, 2020. The Dodd-Frank Act also expands the extraterritorial jurisdiction of U.S. courts over actions brought by the SEC or the United States with respect to violations of the antifraud provisions of the Securities Act of 1933, the Securities Exchange Act of 1934 and the Investment Advisers Act of 1940.

Effective May 28, 2024, the SEC adopted its long-anticipated final rules requiring registrants to provide certain climate-related information in their registration statements and annual reports, including climate-related risks that have materially impacted, or are reasonably likely to have a material impact on, its business strategy, results of operations, or financial condition. The rules also require disclosures related to climate-related risks, Scope 1 and Scope 2 greenhouse gas (GHG) emissions and climate-related financial metrics. These rules are the result of years of significant debate and the topic of sharp political divide. Federal litigation is already underway challenging the rules, and it is unclear how the new U.S. administration will affect the future of these rules.

On June 28, 2024, the U.S. Supreme Court overruled longstanding judicial precedent regarding agency deference with its decision in *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024). Under *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), where U.S. laws, including banking laws, were ambiguous on an issue, an agency's reasonable interpretation of it received mandatory judicial deference. The Supreme Court overruled this keystone of administrative law and stated that courts no longer need to defer to the interpretations of laws by agencies, including Deutsche Bank's U.S. regulators. This decision has already and will continue to lead to significant scrutiny of regulatory actions as well as increased challenges of agency overreach. Deutsche Bank is reviewing the potential implications of this legal shift on its U.S. regulatory landscape.

Regulatory Authorities

Deutsche Bank AG as well as its wholly owned subsidiary DB USA Corporation are bank holding companies under the U.S. Bank Holding Company Act of 1956, as amended (the "Bank Holding Company Act"), by virtue of, among other things, their ownership of DBTCA. Deutsche Bank AG and DB USA Corporation have elected to be financial holding companies pursuant to the provisions of the Gramm-Leach-Bliley Act (the "GLB Act") and, accordingly, may affiliate with securities firms and engage in other activities that are financial in nature or incidental or complementary to activities that are financial in nature. As a bank holding company and financial holding company, Deutsche Bank's U.S. operations are subject to regulation, supervision and examination by the Federal Reserve Board as Deutsche Bank's U.S. "umbrella supervisor".

DBTCA is a New York state-chartered bank whose deposits are insured by the FDIC to the extent permitted by law. DBTCA is subject to regulation, supervision and examination by the Federal Reserve Board and the New York State Department of Financial Services and to applicable FDIC rules. In addition, DBTCA is also subject to regulation by the Consumer Financial Protection Bureau in relation to retail products and services offered to its customers. Deutsche Bank Trust Company Delaware is a Delaware state-chartered bank which is subject to regulation, supervision and examination by the FDIC and the Office of the State Bank Commissioner of Delaware. Deutsche Bank AG's New York branch is supervised by the Federal Reserve and the New York State Department of Financial Services. Deutsche Bank's federally chartered non-depository trust companies are subject to regulation, supervision and examination by the Office of the Comptroller of the Currency. Deutsche Bank and its subsidiaries are also subject to regulation, supervision and examination by state banking regulators of certain states in which they conduct banking operations.

Restrictions on Activities

As described below, federal and state banking laws, regulations and supervisory authorities restrict Deutsche Bank's ability to engage, directly or indirectly through subsidiaries, in activities in the United States. Among other requirements, Deutsche Bank and its subsidiaries are required to obtain the prior approval of the Federal Reserve Board before directly or indirectly acquiring the ownership or control of more than 5% of any class of voting shares of U.S. banks, certain other depository institutions, and bank or depository institution holding companies. Under applicable U.S. federal banking law, Deutsche Bank's U.S. banking operations are also restricted from engaging in certain "tying" arrangements involving products and services.

Deutsche Bank's two U.S. FDIC-insured bank subsidiaries, as well as its New York branch, are subject to requirements and restrictions under federal and state law, including requirements to maintain reserves against deposits, restrictions on the types and amounts of loans that may be made and the interest that may be charged thereon, and limitations on the types of investments that may be made and the types of services that may be offered.

In addition to the business of banking, and managing or controlling banks, so long as Deutsche Bank is a financial holding company under U.S. law, it and its subsidiaries may also engage in nonbanking activities in the United States that are financial in nature, or incidental or complementary to such financial activity, including certain securities, merchant banking, insurance and other financial activities, subject to certain limitations on the conduct of such activities and to notice or prior regulatory approval in some cases. As a non-U.S. bank, Deutsche Bank AG and its non-U.S. subsidiaries are generally authorized under U.S. law and regulations to acquire a non-U.S. company engaged in nonfinancial activities as long as that company's U.S. operations do not exceed certain thresholds and certain other conditions are met.

The Federal Reserve Board has implemented a supervisory rating system for bank holding companies with U.S.$ 100 billion or more in total consolidated assets and for IHCs with U.S.$ 50 billion or more in total consolidated assets, such as DB USA Corporation. The supervisory rating system also generally applies to DWS USA Corporation. Under the supervisory rating system, covered companies receive separate ratings from the Federal Reserve for (i) capital planning and positions, (ii) liquidity risk management and positions and (iii) governance and controls. Each of these component areas will receive one of the following four ratings: (i) Broadly Meets Expectations, (ii) Conditionally Meets Expectations, (iii) Deficient-1, and (iv) Deficient-2. A covered company must maintain a rating of Broadly Meets Expectations or Conditionally Meets Expectations for each of the three components to be considered "well managed."

A financial institution's status as a financial holding company, and resulting ability to engage in a broader range of nonbanking activities, are dependent on the institution and its subsidiary IHCs and insured U.S. depository institutions qualifying as "well capitalized" and "well managed" under applicable regulations and upon the insured U.S. depository institutions meeting certain requirements under the Community Reinvestment Act. The Federal Reserve Board's and other U.S. regulators' "well capitalized" standards are generally based on specified quantitative thresholds set at levels above the minimum requirements to be considered "adequately capitalized." For Deutsche Bank's two insured depository institution subsidiaries, DBTCA and Deutsche Bank Trust Company Delaware, the well-capitalized thresholds under the U.S. Basel III framework are a Common Equity Tier 1 capital ratio of 6.5%, a Tier 1 capital ratio of 8%, a Total capital ratio of 10%, and a U.S. leverage ratio of 5%. For bank holding companies, including Deutsche Bank AG and DB USA Corporation, the well-capitalized thresholds are a Tier 1 capital ratio of 6% and a Total capital ratio of 10%, both of which in the case of Deutsche Bank AG are calculated for Deutsche Bank AG under its home country standards.

State-chartered banks (such as DBTCA) and state-licensed branches and agencies of foreign banks (such as the New York branch) may not, with certain exceptions that require prior regulatory approval, engage as principal in any type of activity not permissible for their federally chartered or licensed counterparts. In addition, DBTCA and Deutsche Bank Trust Company Delaware are subject to their respective state banking laws pertaining to legal lending limits and permissible investments and activities. Likewise, the United States federal banking laws also subject state-licensed branches and agencies of foreign banking organizations to the single-borrower lending limits that apply to federally licensed branches or agencies, which are substantially similar to the lending limits applicable to national banks. The single-borrower lending limits applicable to branches and agencies are calculated based on the dollar equivalent of the capital of the foreign bank (i.e., Deutsche Bank AG in the case of the New York branch).

The Federal Reserve Board may terminate the activities of any U.S. office of a foreign bank if it determines that the foreign bank is not subject to comprehensive supervision on a consolidated basis in its home country or that there is reasonable cause to believe that such foreign bank or its affiliate has violated the law or engaged in an unsafe or unsound banking practice in the United States or, for a foreign bank that presents a risk to the stability of the United States financial system, the home country of the foreign bank has not adopted, or made demonstrable progress toward adopting, an appropriate system of financial regulation to mitigate such risk.

Also, under the so-called swaps "push-out" provisions of the Dodd-Frank Act, certain structured finance derivatives activities of FDIC-insured banks and U.S. branch offices of foreign banks (including Deutsche Bank's New York branch) are restricted.

There are various qualitative and quantitative restrictions on the extent to which Deutsche Bank and its nonbank subsidiaries can borrow or otherwise obtain credit from Deutsche Bank's U.S. banking subsidiaries or engage in certain other transactions involving those subsidiaries, including derivative transactions and securities borrowing or lending transactions. In general, these transactions must be on terms that would ordinarily be offered to unaffiliated entities, must be secured by designated amounts of specified collateral and are subject to volume limitations. These restrictions also apply to certain transactions of Deutsche Bank's New York branch with its U.S. broker-dealers and certain of its other U.S. affiliates.

A major focus of U.S. governmental policy relating to financial institutions is aimed at preventing money laundering and terrorist financing and compliance with economic sanctions in respect of designated countries or activities. Failure of an institution to have policies and procedures and controls in place to prevent, detect and report money laundering and terrorist financing could in some cases have serious legal, financial and reputational consequences for the institution.

New York Branch

The New York branch of Deutsche Bank AG is licensed by the Superintendent of the New York State Department of Financial Services to conduct a commercial banking business and is required to maintain and pledge eligible high-quality assets with banks in the State of New York. The Superintendent of Financial Services may also impose asset maintenance requirements on foreign banks with branch offices in New York. In addition, the Federal Reserve Board is authorized to impose institution-specific asset maintenance requirements under certain conditions, pursuant to the Tailoring Rules.

The New York State Banking Law authorizes the Superintendent of Financial Services to take possession of the business and property of a New York branch of a foreign bank under certain circumstances, generally involving violation of law, conduct of business in an unsafe manner, impairment of capital, suspension of payment of obligations, or initiation of liquidation proceedings against the foreign bank at its domicile or elsewhere. In liquidating or dealing with a branch's business after taking possession of a branch, only the claims of depositors and other creditors which arose out of transactions with a branch are to be accepted by the Superintendent of Financial Services for payment out of the business and property of the foreign bank in the State of New York or in the U.S. and reflected on the books of the New York branch, without prejudice to the rights of the holders of such claims to be satisfied out of other assets of the foreign bank. After such claims are paid, the Superintendent of Financial Services will turn over the remaining assets, if any, first to the liquidators of other offices of the foreign bank that are being liquidated in the United States and then, if any assets remain, to the foreign bank or its duly appointed liquidator or receiver.

The New York branch's deposits and other note obligations are not insured by the FDIC. In general, under the International Banking Act and FDIC regulations, the New York branch is not permitted to engage in domestic retail deposit activity (accepting an initial deposit of less than US$250,000). The New York branch may not engage as principal in any type of activity that is not permissible for a federally licensed branch of a foreign bank unless the Federal Reserve Board has determined that such activity is consistent with sound banking practice. The New York branch must also comply with the same single borrower (or issuer) lending and investment limits applicable to federally licensed branches, which are substantially similar to the lending limits applicable to national banks, as well as those imposed by the New York State Banking Law. The lending limits applicable to the New York branch take into account credit exposures from derivative transactions. These limits are based on the foreign banks worldwide capital. In addition, regulations that the U.S. Financial Stability Oversight Council or other regulators may adopt could affect the nature of the activities which the New York branch may conduct, and may impose restrictions and limitations on the conduct of such activities.

Deutsche Bank Trust Company Americas

The Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA") provides for extensive regulation of depository institutions (such as DBTCA and its direct and indirect parent companies), including requiring federal banking regulators to take "prompt corrective action" with respect to FDIC-insured banks that do not meet minimum capital requirements. As an insured bank's capital level declines and the bank falls into lower categories (or if it is placed in a lower category by the discretionary action of its supervisor), greater limits are placed on its activities and federal banking regulators are authorized (and, in many cases, required) to take increasingly more stringent supervisory actions, which could ultimately include the appointment of a conservator or receiver for the bank (even if it is solvent). In addition, FDICIA generally prohibits an FDIC-insured bank from making any capital distribution (including payment of a dividend) or payment of a management fee to its holding company if the bank would thereafter be undercapitalized. If an insured bank becomes "undercapitalized", it is required to submit to federal regulators a capital restoration plan guaranteed by the bank's holding company. Since the enactment of FDICIA, both of Deutsche Bank's U.S. insured bank subsidiaries have maintained capital above the "well capitalized" standards, the highest capital category under applicable regulations.

DBTCA, like other FDIC-insured banks, is required to pay assessments to the FDIC for deposit insurance under the FDIC's Deposit Insurance Fund (calculated using the FDIC's risk-based assessment system). The minimum reserve ratio for the Deposit Insurance Fund was increased under the Dodd-Frank Act from 1.15% to 1.35%. After having reached 1.35% as of September 30, 2018, the reserve ratio had declined below that amount following extraordinary growth in insured deposits across the banking industry in the first and second quarters of 2020. In response to this, the FDIC adopted a restoration plan to restore the Deposit Insurance Fund to 1.35% by September 28, 2028. The restoration plan, as amended, incorporates an increase in initial base deposit assessment rate schedules uniformly by two basis points beginning in the first quarterly assessment period of 2023. Such increase is applicable to insured depositary institutions generally, including to DBTCA.

In November 2023, the FDIC approved a final rule to implement a special assessment to recover the loss to the Deposit Insurance Fund associated with protecting uninsured depositors following the closures of Silicon Valley Bank and Signature Bank. The special assessment allows banking organizations to deduct U.S.$5 billion of uninsured deposits from their insured depository institutions' assessment bases. For banking organizations like DB USA Corporation that have multiple insured depository institutions, the deduction is distributed across the affiliated insured depository institutions. The FDIC has started collecting the special assessment at an annual rate of approximately 13.4 basis points, over an initial eight-quarter assessment period, beginning with the first quarter of 2024. The FDIC currently projects that it will collect for an additional two quarters beyond the initial eight-quarter period, at a lower rate.

In addition, the FDIC has set the designated reserve ratio at 2% as a long-term goal.

The FDIC's standard maximum deposit insurance amount per depositor at an insured depository institution is U.S.$ 250,000.

Other

In the United States, Deutsche Bank's U.S.-registered broker-dealer subsidiaries are regulated by the SEC. Broker-dealers are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices among broker-dealers, use and safekeeping of customers' funds and securities, capital structure, recordkeeping, the financing of customers' purchases and the conduct of directors, officers and employees.

Deutsche Bank's principal U.S. SEC-registered broker-dealer subsidiary, Deutsche Bank Securities Inc., is a member of the NYSE (and other securities exchanges) and is regulated by the Financial Industry Regulatory Authority, Inc. ("FINRA") and the individual state securities authorities in the states in which it operates. The U.S. government agencies and self-regulatory organizations, as well as state securities authorities in the United States having jurisdiction over Deutsche Bank's U.S. broker-dealer affiliates, are empowered to conduct administrative proceedings that can result in censure, fine, the issuance of cease-and-desist orders or the suspension or expulsion of a broker-dealer or its directors, officers or employees. Deutsche Bank Securities Inc. is also registered with and regulated by the SEC as an investment adviser, and by the CFTC and the National Futures Association as a futures commission merchant and commodity pool operator.

Under the Dodd-Frank Act, entities that are swap dealers or major swap participants are required to register with the CFTC and entities that are security-based swap dealers or major security-based swap participants are required to register with the SEC. Deutsche Bank AG is registered as a swap dealer with the CFTC and a security-based swap dealer with the SEC. As a registrant, Deutsche Bank AG is subject to certain requirements relating to capital, margin, business conduct standards and recordkeeping, among others.

Organizational Structure

In 2024, Deutsche Bank operated its business along the structure of four corporate divisions. Deutsche Bank AG is the direct or indirect holding company for its subsidiaries. The following table sets forth the significant subsidiaries the Group owns, directly or indirectly, as of December 31, 2024. Deutsche Bank used the three-part test set out in Section 1-02 (w) of Regulation S-X under the U.S. Securities Exchange Act of 1934 to determine significance. The bank does not have any other subsidiaries it believes are material based on other less quantifiable factors.

Deutsche Bank owns 100 % of the equity and voting interests in these subsidiaries except for DWS Group GmbH & Co. KGaA, of which it owns 79.49 % of equity and voting interests. These subsidiaries are included in the consolidated financial statements and prepare standalone financial statements as of December 31, 2024. The principal countries of operations are the same as the countries of incorporation.

Subsidiary	Place of Incorporation
DB USA Corporation[1]	Delaware, United States
Deutsche Bank Americas Holding Corporation[2]	Delaware, United States
DB U.S. Financial Markets Holding Corporation[3]	Delaware, United States
Deutsche Bank Securities Inc.[4]	Delaware, United States
Deutsche Bank Trust Corporation[5]	New York, United States
Deutsche Bank Trust Company Americas[6]	New York, United States
Deutsche Bank Luxembourg S.A.[7]	Luxembourg
DB Beteiligungs-Holding GmbH[8]	Frankfurt am Main, Germany
DWS Group GmbH & Co. KGaA[9]	Frankfurt am Main, Germany

[1] DB USA Corporation is the top-level holding company for its subsidiaries in the United States.
[2] Deutsche Bank Americas Holding Corporation is a second tier holding company for subsidiaries in the United States.
[3] DB U.S. Financial Markets Holding Corporation is a second tier holding company for subsidiaries in the United States.
[4] Deutsche Bank Securities Inc. is a U.S. company registered as a broker dealer and investment advisor with the Securities and Exchange Commission and as a futures commission merchant with the Commodities Futures Trading Commission.
[5] Deutsche Bank Trust Corporation is a bank holding company under Federal Reserve Board regulations.
[6] Deutsche Bank Trust Company Americas is a New York State-chartered bank and member of the Federal Reserve System. It originates loans and other forms of credit, accepts deposits, arranges financings and provides numerous other commercial banking and financial services.
[7] The company's primary business model comprises loan business with international clients (Corporate Bank & Investment Bank), where the bank acts globally as lending office and as risk transfer hub for the Strategic Corporate Lending of Deutsche Bank, as well as structured finance activities covering long-term infrastructure projects and high quality investment goods. Furthermore, the bank offers tailor-made solutions with a wide range of products and services to their ultra-high-net-worth (UHNW) clients.
[8] The company holds the majority stake in DWS Group GmbH & Co. KGaA.
[9] The company is a partnership limited by shares (Kommanditgesellschaft auf Aktien) with a German limited liability company (Gesellschaft mit beschränkter Haftung) as a general partner. The business purpose of the company is the holding of participations in as well as the management and support of a group of financial services providers. Following the public listing on March 23, 2018 on the Frankfurt Stock Exchange Deutsche Bank Group owns 79.49 % of equity and voting interests in the entity.

Property and Equipment

As of December 31, 2024, Deutsche Bank operated in 56 countries out of 1,307 branches around the world, of which 67 % were in Germany. The Group leases a majority of its offices and branches under long-term agreements.

Deutsche Bank continues to review its property requirements worldwide taking into account cost containment measures as well as growth initiatives in selected businesses. Please see Note 21 “Property and Equipment” to the consolidated financial statements for further information.

Information required by subpart 1400 of SEC Regulation S-K

Please see pages S-1 through S-11 of the Supplemental Financial Information (Unaudited), which pages are included herein, for information required by subpart 1400 of SEC Regulation S-K.

Item 4A: Unresolved Staff Comments

Deutsche Bank has not received written comments from the Securities and Exchange Commission regarding its periodic reports under the Exchange Act, as of any day 180 days or more before the end of the fiscal year to which this Annual Report relates, which remain unresolved.

Item 5: Operating and Financial Review and Prospects

Overview

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes to them included in "Item 18: Financial Statements" of this document, on which Deutsche Bank has based this discussion and analysis.

The Group has prepared its consolidated financial statements in accordance with IFRS as issued by the International Accounting Standards Board.

Material accounting policies and critical accounting estimates

The Group's material accounting policies are essential to understanding its reported results of operations and financial condition. Certain of these accounting policies require critical accounting estimates that involve complex and subjective judgments and the use of assumptions, some of which may be for matters that are inherently uncertain and susceptible to change. Such critical accounting estimates could change from period to period and have a material impact on the bank's financial condition, changes in financial condition or results of operations. Critical accounting estimates could also involve estimates where management could have reasonably used another estimate in the current accounting period. Actual results may differ from these estimates if conditions or underlying circumstances were to change. See Note 1 "Material accounting policies and critical accounting estimates" to the consolidated financial statements for a discussion on the Group's material accounting policies and critical accounting estimates.

Deutsche Bank has identified the following material accounting policies that involve critical accounting estimates:

- The impairment of loans and provisions for off-balance sheet positions
- The impairment of financial assets at fair value through other comprehensive income
- The determination of fair value
- The recognition of trade date profit
- The impairment of goodwill and other intangibles
- The recognition and measurement of deferred tax assets
- The accounting for legal and regulatory contingencies and uncertain tax positions

Recently adopted accounting pronouncements and new accounting pronouncements

See Note 2 "Recently adopted and new accounting pronouncements" to the consolidated financial statements for a discussion on the Group's recently adopted and new accounting pronouncements.

Operating results

The following discussion and analysis should be read in conjunction with the bank's consolidated financial statements.

Executive summary

Please see "Combined Management Report: Operating and financial review: Executive summary" in the Annual Report 2024.

Trends and uncertainties

For insight into the trends impacting the bank's performance please see the "Combined Management Report: Operating and financial review" section of the Annual Report 2024. Key risks and uncertainties for the bank are discussed in "Item 3: Key Information – Risk Factors".

The Group's aspirations are subject to various external and internal factors, some of which it cannot influence. Successful achievement of the bank's 2025 strategic targets may be adversely impacted by reduced revenue generating capacities of some of the bank's core businesses should downside risks crystallize. These risks include but are not limited to the challenging macroeconomic environment in Europe, in particular Germany, and the potential for a re-emergence of inflationary pressures impacting the interest rate outlook. A number of geopolitical trends may exacerbate these risks, including potential for widespread imposition of trade tariffs by the new U.S. administration. Other risk factors include cyber events, the ongoing headwinds posed by regulatory reforms and the effects on the bank's legal and regulatory proceedings. In 2024, focus remained on the impacts of higher interest rates on the bank's portfolios, including Commercial Real Estate where market conditions have stabilized but a meaningful recovery is not expected until the second half of 2025. The bank's German retail and corporate portfolios also faced increasing headwinds, but quality remains overall resilient. These trends could continue to drive high levels of uncertainty and impact the Group's operations, strategic plans and financial targets.

Opportunities may arise if macroeconomic conditions, the inflation and interest rate environment improve beyond currently forecasted levels which suggest slightly stronger, albeit still weak, GDP growth in Europe but a moderate slowdown in the U.S. and China in 2025 compared to last year. A better macroeconomic environment could lead to higher revenues and support the Group's ability to meet its 2025 financial targets. In addition, the credit environment could improve further on the back of stabilized European growth and solid growth still expected in the U.S.; as well as a continued easing of monetary policy by major central banks in 2025, which may result in a decrease in expected credit losses from currently forecasted levels. At the same time, potentially higher inflation and interest rate levels and market volatility could lead to increased revenues from trading flows and higher net interest income and lending margins. Through times of volatility or uncertainty, Deutsche Bank could also benefit from helping clients navigate such financial markets. Focusing on and investing in Deutsche Bank's areas of core strengths and the implementation of the bank's strategy may create further opportunities if implemented to a greater extent or under more favorable conditions than currently anticipated.

In addition to the risks outlined above, risks to the divisional outlook include second order effects on energy and supply chain disruptions from geopolitical uncertainty which may also have an adverse impact on client activity. Client activity and investors' confidence could also be impacted by market uncertainties including higher than expected volatility in equity and credit markets.

Results of operations

Please see “Combined Management Report: Operating and financial review: Results of operations” in the Annual Report 2024 and the Group’s discussion of Non-GAAP financial measures in the “Supplementary Information (Unaudited): Non-GAAP financial measures”.

Financial position

Please see “Combined Management Report: Operating and financial review: Financial position” in the Annual Report 2024.

Liquidity and capital resources

Deutsche Bank believes that its working capital is sufficient for the bank’s present requirements.

For a detailed discussion of the bank’s liquidity risk management, see “Combined Management Report: Risk Report: Liquidity risk” in the Annual Report 2024.

For a detailed discussion of the Group’s capital management, see “Combined Management Report: Risk Report: Capital management” in the Annual Report 2024.

Post-employment benefit plans

Please see “Combined Management Report: Employees: Post-employment benefit plans” in the Annual Report 2024.

Off-balance sheet arrangements

For information on the nature, purpose and extent of the Group’s off-balance sheet arrangements, please see Note 38 “Structured entities” to the consolidated financial statements. For further information on off-balance sheet arrangements, including allowances for off-balance sheet positions, please refer to “Combined Management Report: Risk Report: Asset quality: Allowance for credit losses” in the Annual Report 2024 and Note 19 “Allowance for credit losses” to the consolidated financial statements. For information on irrevocable lending commitments and contingent liabilities with respect to third parties, please see Note 28 “Credit related commitments and contingent liabilities” to the consolidated financial statements.

Tabular disclosure of contractual obligations

Please see “Combined Management Report: Operating and financial review: Tabular disclosure of contractual obligations” in the Annual Report 2024.

Research and development, patents and licenses

Not applicable.

Item 6: Directors, Senior Management and Employees

Directors and Senior Management

In accordance with the German Stock Corporation Act (Aktiengesetz), Deutsche Bank has a Management Board (Vorstand) and a Supervisory Board (Aufsichtsrat). The German Stock Corporation Act prohibits simultaneous membership on both the Management Board and the Supervisory Board. The members of the Management Board are the executive officers of the company. The Management Board is responsible for managing the company and representing the bank in dealings with third parties. The Supervisory Board oversees the Management Board, appoints and removes its members and determines their remuneration and other compensation components, including pension benefits. According to German law, the Supervisory Board represents Deutsche Bank in dealings with members of the Management Board. Therefore, no members of the Management Board may enter into any agreement for Deutsche Bank without the prior consent of the Supervisory Board.

Age limits for members of the Management Board are defined contractually. Accordingly, the appointment as member of the Management Board shall end in principle with the close of the ordinary general meeting in the year in which the Management Board Member reaches the retirement age according to the rules of the German statutory pension insurance scheme applicable in Germany for the long-time insured to claim an early retirement pension (“Renteneineintrittsalter zur vorzeitigen Inanspruchnahme der Altersrente für langjährig Versicherte”), which is currently 63 years of age. Age limits also exist for the members of the Supervisory Board according to the terms of reference (Geschäftsordnung) for the Supervisory Board. There is a maximum age limit of 70 years for members of the Supervisory Board. In exceptional cases, a Supervisory Board member can be elected or appointed for a period that extends no longer than until the end of the fourth ordinary general meeting that takes place after he/she has reached the age of 70.

The Supervisory Board may not make management decisions. However, German law and Deutsche Bank’s Articles of Association (Satzung) require the Management Board to obtain the approval of the Supervisory Board for certain actions. The most important of these actions are:

- Granting of general powers of attorney (Generalvollmachten). A general power of attorney authorizes its holder to represent the company in substantially all legal matters without limitation to the affairs of a specific office
- Acquisitions and disposals (including transactions carried out by a dependent company) of real estate in so far as the object involves more than € 500,000,000
- Granting of credits, including the acquisition of participations in other companies, where the German Banking Act (Kreditwesengesetz) requires approval by the Supervisory Board. In particular, pursuant to the German Banking Act, it requires of the Supervisory Board inter alia the approval if the bank grants a loan (to the extent legally permissible) to a member of the Management Board or the Supervisory Board or one of the bank’s employees who holds a procuration (Prokura) or general power of attorney, and
- Acquisitions and disposals (including transactions carried out by a dependent company) of other participations, insofar as the object involves more than € 1 billion. The Supervisory Board must be informed without delay of any acquisition or disposal of such participations involving more than € 500,000,000

The Management Board must submit regular reports or ad-hoc reports, as the case may be, to the Supervisory Board on its current operations and future business planning as well as on its risk situation. The Supervisory Board may also request special reports from the Management Board at any time.

With respect to voting powers, a member of the Supervisory Board or the Management Board may not vote on resolutions open to a vote at a board meeting if the proposed resolution concerns:

- A legal transaction between Deutsche Bank and the respective member, or
- Commencement, settlement or completion of legal proceedings between Deutsche Bank and the respective member

A member of the Supervisory Board or the Management Board may not directly or indirectly exercise voting rights on resolutions open to a vote at a shareholders’ meeting (Hauptversammlung, which the bank refers to as the General Meeting) if the proposed resolution concerns:

- Ratification of the member’s acts
- A discharge of liability of the member, or
- Enforcement of a claim against the member by the bank.

Supervisory Board and Management Board

In carrying out their duties, members of both the Management Board and the Supervisory Board must exercise the standard of care of a prudent and diligent businessperson, and they are liable to the bank for damages if they fail to do so.

The liability of the members of the Management Board or the Supervisory Board under the German Stock Corporation Act for breach of their fiduciary duties is to the company rather than individual shareholders. However, individual shareholders that hold at least 1 % or € 100,000 of the subscribed capital and are granted standing by the court may also invoke such liability to the company. The underlying concept is that all shareholders should benefit equally from amounts received under this liability by adding such amounts to the company's assets rather than disbursing them to plaintiff shareholders. Deutsche Bank may waive the right to claim damages or settle these claims if at least three years have passed since the alleged breach and if the shareholders approve the waiver or settlement at the General Meeting with a simple majority of the votes cast, and provided that opposing shareholders holding, in the aggregate, one tenth or more of its share capital do not have their opposition formally noted in the minutes.

Supervisory Board

The German Co-Determination Act of 1976 (Mitbestimmungsgesetz) requires the bank's Supervisory Board to have twenty members, which is also reflected in the Articles of Association. In the event that the number of members of the Supervisory Board falls below twenty, upon application to a competent court, the court must appoint replacement members to serve on the board until regular appointments are made by the General Meeting (with respect to shareholder representatives) or the employees and their representatives (with respect to employee representatives).

The German Co-Determination Act of 1976 (Mitbestimmungsgesetz) requires that the shareholders elect half of the members of the supervisory board of large German companies, such as Deutsche Bank, and that employees in Germany elect the other half. None of the current members of either of the bank's boards were selected pursuant to any arrangement or understandings with major shareholders, customers or others.

Each member of the Supervisory Board generally serves for a fixed term of approximately five years. For the election of shareholder representatives, the term of shareholder representatives is usually limited to approximately four years by the General Meeting since 2021. Pursuant to German law, the term expires at the latest at the end of the Annual General Meeting that approves and ratifies such member's actions in the fourth fiscal year after the year in which the Supervisory Board member was elected. Supervisory Board members may also be re-elected. The shareholders may, by a majority of the votes cast in a General Meeting, remove any member of the Supervisory Board the shareholders have elected in a General Meeting. The employees may remove any member they have elected by a vote of three-quarters of the employee votes cast.

The members of the Supervisory Board elect the chairperson and the deputy chairperson(s) of the Supervisory Board. Traditionally, the chairperson is a representative of the shareholders, and the first deputy chairperson is a representative of the employees. At least half of the members of the Supervisory Board must be present at a meeting or must have submitted their vote in writing to constitute a quorum. In general, approval by a simple majority of the members of the Supervisory Board present and voting is required to pass a resolution. In the case of a deadlock, the resolution is put to a second vote. In the case of a second deadlock, the chairperson has the deciding vote.

For additional information on Deutsche Bank's Supervisory Board, including a table providing the names of and biographical information for the current members, see “Corporate Governance Statement: Management Board and Supervisory Board: Supervisory Board” in the Annual Report 2024.

Committees of the Supervisory Board

For information on the committees of the bank's Supervisory Board, please see “Corporate Governance Statement: Management Board and Supervisory Board: Committees of the Supervisory Board” in the Annual Report 2024.

The business address of the members of the Supervisory Board is the same as Deutsche Bank's business address, Taunusanlage 12, 60325 Frankfurt am Main, Germany.

Management Board

Deutsche Bank's Articles of Association require the Management Board to have at least three members. The Management Board currently has ten members. The Supervisory Board has also appointed a Chairman (CEO) and a Deputy Chairman (President) of the Management Board.

The Supervisory Board appoints and oversees the members of the Management Board. The initial appointment is for a maximum of three years. Members may be re-appointed or have their terms extended for one or more terms of up to a maximum of five years each, although also re-appointments shall be for a maximum of three years. The Supervisory Board may remove a member of the Management Board prior to the expiration of his or her term for good reason.

Pursuant to Deutsche Bank's Articles of Association, two members of the Management Board, or one member of the Management Board together with a holder of procuration, may represent the bank for legal purposes. A holder of procuration is an attorney-in-fact who holds a legally defined power of attorney under German law, which cannot be restricted with respect to third parties. However, pursuant to German law, the Management Board as a whole must resolve on certain matters and may neither delegate the decision to one or more individual members. In particular, the Management Board may not delegate the determination of the bank's business and risk strategies, and the coordinating or controlling responsibilities. The Management Board is required to ensure that shareholders are treated on an equal basis and receive equal information. The Management Board is also responsible for ensuring proper business organization, which includes appropriate and effective risk management as well as compliance with legal requirements and internal guidelines, and for taking the necessary measures to ensure that adequate internal guidelines are developed and implemented.

Other selected responsibilities of the Management Board in accordance with the Terms of Reference for the Management Board and/or German law are:

- Appointing key personnel at the level directly below the Management Board, in particular, appointing the Global Key Function Holders employed by the bank
- Making decisions regarding significant credit exposures or other risks which have not been delegated to individual risk management units
- Acquisition and disposal of equity investments, including capital measures in all cases in which (i) the law or the Articles of Association require approval by the Supervisory Board, or (ii) the equivalent of € 100 million is exceeded
- Acquisition and disposal of real estate – directly or by separate legal entities, in all cases in which: (i) the law or the Articles of Association require approval by the Supervisory Board, or (ii) the real estate's equivalent exceeds € 100 million
- Individual vendor or intra Group-outsourcings (or material changes to those outsourcings) in all cases in which the equivalent of € 100 million is exceeded on an annual basis or include the delegation of core organizational duties of the Management Board
- Calling shareholders' meetings
- Filing petitions to set aside shareholders' resolutions
- Preparing and executing shareholders' resolutions and
- Reporting to the Supervisory Board

For additional information on Deutsche Bank's Management Board, including the names of and biographical information for the current members, see "Corporate Governance Statement: Management Board: Composition of the Management Board" in the Annual Report 2024. The Terms of Reference of the Management Board are published on the bank's website www.db.com/ir/en/documents.htm.

Board practices of the Management Board

The Terms of Reference for the Management Board are in accordance with the Supervisory Board resolution of January 31, 2024. These Terms of Reference provide that the members of the Management Board have the collective responsibility for managing Deutsche Bank. Notwithstanding this principle, the allocation of functional responsibilities to the individual members of the Management Board and member substitutions (in case of temporary absence) are set out in the Business Allocation Plan for the Management Board in accordance with the Supervisory Board resolution of September 10, 2024. The allocation of functional responsibilities does not exempt any member of the Management Board from collective responsibility for the management of the business. The members of the Management Board are responsible for the proper performance and/or delegation of its duties and the clear allocation of accountabilities and responsibilities within the area of its functional responsibility (so-called "*Ressort*") in accordance with the Business Allocation Plan.

Members of the Management Board are bound to the corporate interest of Deutsche Bank. No member of the Management Board may pursue personal interests in his or her decisions or use business opportunities intended for the company for himself/herself. To the extent permitted by German law, individual members of the Management Board may assume mandates outside of Deutsche Bank Group, honorary offices or special assignments. In order to effectively prevent any conflicts of interest, the members of the Management Board may accept such positions only upon the approval of the other members of the Management Board and the Chairman's Committee of the Supervisory Board. Management Board members generally do not accept the role of chair of supervisory boards of companies outside the Group.

Section 161 of the German Stock Corporation Act requires that the management board and supervisory board of any German stock exchange-listed company declare annually that the company complies with the recommendations of the German Corporate Governance Code or, if not, which recommendations the company does not comply with and why it does not comply with these recommendations (so-called "comply or explain"-principle). On some points, these recommendations go beyond the requirements of the German Stock Corporation Act. The Management Board and Supervisory Board issued a new Declaration of Conformity in accordance with Section 161 of the German Stock Corporation Act in October 2024, which is available on the bank's internet website at www.db.com/ir/en/documents.htm under the heading "Declaration of Conformity pursuant to Section 161 German Stock Corporation Act (AktG), Oct 2024".

For information on the Management Board's terms of office, please see "Corporate Governance Statement: Management Board: Composition of the Management Board" in the Annual Report 2024. For details of the Management Board's service contracts providing benefits upon termination, please see "Compensation Report: Benefits as of the end of the mandate" and "Compensation Report: Benefits upon Early Termination" in the Management Report of the Annual Report 2024.

The allocation of functional responsibilities to the individual members of the Management Board is described in the Business Allocation Plan for the Management Board, which sets the framework for the delegation of responsibilities to senior management below the Management Board. The Management Board endorses individual accountability of senior position holders as opposed to joint decision-taking in committees. At the same time, the Management Board recognizes the importance of having comprehensive and robust information across all businesses in order to take well informed decisions and established, in addition to Infrastructure Committees, Business Executive Committees and Regional Committees, the "Group Management Committee" which aims to improve the information flow across the Corporate Divisions and between the Corporate Divisions and the Management Board. The Group Management Committee as a senior platform, which is not required by the German Stock Corporation Act, is composed of all Management Board members as well as most senior business representatives to exchange information and discuss business, growth and profitability.

Compensation

For information on the compensation of the members of the bank's Management Board, see Compensation Report: Management Board Compensation Report" in the Annual Report 2024.

For information on the compensation of the members of the bank's employees, see Compensation Report: Employee Compensation Report" in the Annual Report 2024.

For information on the compensation of the members of the bank's Supervisory Board, see Compensation Report: Compensation System for Supervisory Board Members" in the Annual Report 2024.

Employees

Labor Relations

In Germany, labor unions and employers' associations generally negotiate collective bargaining agreements on salaries and benefits for employees below the management level. Many companies in Germany, including Deutsche Bank and its material German subsidiaries, are members of the employers' association and are bound by collective bargaining agreements.

Accordingly, the bank's employers' association, the "Arbeitgeberverband des privaten Bankgewerbes e.V.", regularly renegotiates the collective bargaining agreements that cover many of the Group's employees. The last agreement was reached in July 2024. As part of the final package, salaries were increased in three steps by in total 10.5%, the first step being 5.5% from August 2024, the second step being 3.0% from August 2025 and the third step being 2.0% from July 2026. This collective wage agreement will last until end of September 2026.

Deutsche Bank's employers' association negotiates with the following unions:

- ver.di (Vereinte Dienstleistungsgewerkschaft)
- Deutscher Bankangestellten Verband (DBV – Gewerkschaft der Finanzdienstleister)

Many employees of Deutsche Bank, who are former employees of the merged Postbank, are covered by in-house collective bargaining agreements that are agreed between Deutsche Bank and trade unions directly.

The last agreement was reached in May 2024. As part of the final package, salaries were increased in two steps by a total of 11.5%, the first step being 7.0% but at least € 270 from June 2024 and the second step being 4.5% from July 2025. This collective wage agreement will last until end of March 2026.

In the afore mentioned context Deutsche Bank negotiates with the following unions:

- ver.di (Vereinte Dienstleistungsgewerkschaft)
- Deutscher Bankangestellten Verband (DBV – Gewerkschaft der Finanzdienstleister)
- Kommunikationsgewerkschaft DPV (DPVKOM)
- komba gewerkschaft (komba)

As German law prohibits the bank from asking its employees whether they are members of labor unions, there is no record of how many of the bank's employees are union members.

On the basis of the agreement on cross-border information and consultation of Deutsche Bank employees in the EU concluded on September 10, 1996, all employees in the EU are represented by the European Works Council. This adds up to around 50% of the Group's total workforce.

Share Ownership

For the share ownership of the Group's Management Board, see "Management Report: Compensation Report: Management Board Share Ownership" in the Annual Report 2024.

For the share ownership of the members of the Supervisory Board, see "Corporate Governance Statement/Corporate Governance Report: Reporting and Transparency: Directors' Share Ownership" in the Annual Report 2024.

For a description of the Group's employee share programs, please see Note 33 "Employee Benefits" to the consolidated financial statements.

Item 7: Major Shareholders and Related Party Transactions

Major Shareholders

On December 31, 2024, Deutsche Bank's issued share capital amounted to € 5,106,436,078.08 divided into 1,994,701,593 no par value ordinary registered shares.

On January 3, 2025, Deutsche Bank cancelled 46,448,708 of no par value ordinary registered shares owned by Deutsche Bank, representing € 118,908,692.48. Following this cancellation, Deutsche Bank's issued share capital amounted to € 4,987,527,385.60 divided into 1,948,252,885 no par value ordinary registered shares.

On December 31, 2024, Deutsche Bank had 536,633 registered shareholders. 891,627,613 of the bank's shares were registered in the names of 526,686 shareholders resident in Germany, representing 45.77% of the share capital. 270,096,160 of Deutsche Bank's shares were registered in the names of 500 shareholders resident in the United States, representing 13.86% of the share capital.

The German Securities Trading Act (Wertpapierhandelsgesetz) requires investors in publicly-traded corporations whose investments reach or cross certain thresholds to notify both the corporation and the BaFin of such change within four trading days. The minimum disclosure threshold is 3% of the corporation's issued voting share capital.

BlackRock, Inc., Wilmington, DE, has notified Deutsche Bank that as of October 1, 2024 it held 6.005% of the bank's shares. Deutsche Bank has received no further notification by BlackRock, Inc., Wilmington, DE, through February 3, 2025.

The Capital Group Companies, Inc., Los Angeles, CA, has notified Deutsche Bank that as of January 7, 2025 it held 5.06% of the bank's shares. Deutsche Bank has received no further notification by The Capital Group Companies, Inc., Los Angeles, CA, through February 3, 2025.

Paramount Service Holding Ltd. S.ÀR.L., British Virgin Islands, has notified Deutsche Bank that as of January 25, 2023 it held 4.54% of the bank's shares. Deutsche Bank has received no further notification by Paramount Service Holding Ltd. S.ÀR.L., British Virgin Islands, through February 3, 2025.

Supreme Universal Holdings Ltd., Cayman Islands, has notified Deutsche Bank that as of August 20, 2015 it held 3.05% of the bank's shares. Deutsche Bank has received no further notification by Supreme Universal Holdings Ltd., Cayman Islands, through February 3, 2025.

Over the last three years, Deutsche Bank has been notified of the following changes with regards to the minimum disclosure threshold.

	Disclosure date	% of outstanding shares held at disclosure date
Amundi S.A.	February 1, 2023	2.97
	October 19, 2022	3.07
	October 3, 2022	2.90
	September 27, 2022	3.10
	July 28, 2022	2.78
	June 22, 2022	3.08
	June 21, 2022	2.89
	June 20, 2022	3.07
	May 5, 2022	2.69
	April 27, 2022	3.08
BlackRock, Inc.	October 1, 2024	6.01
	February 9, 2024	5.86
	February 8, 2024	5.78
	March 31, 2023	5.38
	March 30, 2023	5.01
	March 24, 2023	3.81
The Capital Group Companies, Inc.	January 7, 2025	5.06
	April 10, 2024	3.04
	April 12, 2022	0.01
Douglas L. Braunstein (Hudson Executive Capital LP)[1]	January 25, 2024	0.92
Paramount Service Holding Ltd. S.ÀR.L.[2]	January 25, 2023	4.54
Stephen A. Feinberg (Cerberus)[3]	January 10, 2022	1.99

[1] From previously 3.18 % of Deutsche Bank shares as of November 20, 2020
[2] From previously 3.05 % of Deutsche Bank shares as of August 20, 2015
[3] From previously 3.001 % of Deutsche Bank shares as of November 14, 2017

Deutsche Bank is neither directly nor indirectly owned nor controlled by any other corporation, by any government or by any other natural or legal person severally or jointly.

Pursuant to German law and our Articles of Association, to the extent that Deutsche Bank may have major shareholders at any time, Deutsche Bank may not give them voting rights different from those of any of its other shareholders. Even if the bank’s articles of association were amended to allow for the issuance of shares with multiple voting rights, the issuance of such shares would require the consent of all affected shareholders.

Deutsche Bank is aware of no arrangements which may at a subsequent date result in a change in control of the company.

Related Party Transactions

Deutsche Bank has business relationships with a number of the companies in which the bank owns significant equity interests. Deutsche Bank also has business relationships with a number of companies where members of the bank's Management Board also hold positions on boards of directors. Deutsche Bank's business relationships with these companies cover many of the financial services the bank provides to their clients generally. For more detailed information, refer to Note 36 "Related Party Transactions" to the consolidated financial statements.

Deutsche Bank conducts its business with these companies on terms equivalent to those that would prevail if the bank did not have equity holdings in them or management members in common, and the bank has conducted business with these companies on that basis in 2024 and prior years. None of these transactions is or was material to the bank.

Among Deutsche Bank's business with related party companies in 2024, there have been and currently are loans, guarantees and commitments, which totaled € 77 million (including loans amounting to € 73 million) as of December 31, 2024, compared to € 42 million (including loans amounting to € 41 million) as of December 31, 2023.

All these credit exposures

- Were made in the ordinary course of business
- Were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons, and
- Did not involve more than the normal risk of collectability or present other unfavorable features compared to loans to nonrelated parties at their initiation

Related Party Impaired Loans

The Group did not have any impaired loans to related parties in 2024 and 2023.

Interests of Experts and Counsel

Not required because this document is filed as an Annual Report.

Item 8: Financial Information

Consolidated statements and other financial information

Consolidated financial statements

The financial statements of this Annual Report on Form 20-F consist of the consolidated financial statements including Notes 1 to 42 thereto, which are set forth as Part 2 of the Annual Report 2024, and, as described in Note 1 "Material accounting policies and critical accounting estimates" thereto under "Basis of accounting", certain parts of the Combined Management Report set forth as Part 1 of the Annual Report 2024. Such consolidated financial statements have been audited by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, as described in their "Report of Independent Registered Public Accounting Firm" included in the Annual Report 2024.

Legal proceedings

Deutsche Bank and its subsidiaries operate in a legal and regulatory environment that exposes them to significant litigation risks. As a result, they are involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. Please refer to Note 27 "Provisions" to the consolidated financial statements for descriptions of material legal proceedings and certain other significant legal proceedings.

Dividend policy

Deutsche Bank plans to sustainably grow cash dividends and, over time, return to shareholders through share buybacks excess capital over and above the requirements to support profitable growth and upcoming regulatory changes.

For the financial year 2024, the Management Board intends to propose to the Annual General Meeting a dividend of € 0.68 per share, after having paid a dividend of € 0.45 per share for 2023 and € 0.30 per share for 2022.

For the financial year 2025 and subsequent years, the bank targets a payout ratio of 50% of net income attributable to Deutsche Bank shareholders, delivered through a combination of cash dividends and share buybacks. These distributions to shareholders are subject to shareholder authorization and German corporate law requirements, and in the case of share buybacks, regulatory approval. The bank has received supervisory approval for a share repurchase of € 750 million, which it aims to materially complete by the third quarter of 2025, having completed € 675 million in share repurchases in 2024 and € 450 million in 2023, and it plans to propose a dividend in respect of the 2024 financial year of € 0.68 per share, or approximately € 1.3 billion, up from € 0.45 per share for 2023, at the bank's Annual General Meeting in May 2025. For the financial year 2025, Deutsche Bank aims for cash dividends of € 1.00 per share, subject to a 50% payout ratio limitation relative to net income attributable to Deutsche Bank shareholders. Deutsche Bank will continue to target a payout ratio of 50% after 2025 through share buybacks and cash dividends, with cash dividends growing more moderately compared to increases seen in recent years. The bank has set a capital distribution goal of € 8 billion in respect of the financial years 2021-2025, to be paid in 2022-2026, and believes that it is positioned to exceed this objective if it achieves its financial targets.

However, Deutsche Bank cannot assure investors that it will pay dividends or conduct share buybacks as it did in previous years, nor at any other level, or at all, in any future period. If Deutsche Bank AG is not profitable enough, it may not pay dividends or conduct share buybacks at all. Furthermore, if Deutsche Bank AG fails to meet the regulatory capital adequacy requirements under CRR/CRD (including individually imposed capital requirements ("Pillar 2" requirements) and the combined buffer requirement), it may be prohibited from making, and the ECB or the BaFin may suspend or limit, the payment of dividends or execution of share buybacks. In particular, a credit institution, such as Deutsche Bank, will be considered as failing to meet the combined buffer requirement when it does not have sufficient own funds in an amount and of the quality needed to meet at the same time (i) its minimum capital requirements under the CRR, (ii) certain Pillar 2 capital requirements, and (iii) the sum of the capital buffers applicable to the relevant credit institution. In calculating the respective amounts that may be distributed ("Maximum Distributable Amount" or "MDA"), the bank will have to take into account certain Pillar 2 capital requirements. Since January 2022, the Group has also been subject to MDA restrictions, including a Pillar 2 capital requirement for the leverage ratio, in instances of non-compliance with its leverage ratio buffer introduced in the CRR. In addition, Deutsche Bank is subject to additional restrictions on distributions if it breaches the harmonized minimum TLAC requirement under the CRR or its institution-specific minimum requirement for own funds and eligible liabilities (MREL) set by the Single Resolution Board.

In addition, the ECB expects banks to meet Pillar 2 guidance. If Deutsche Bank AG operates or expects to operate below Pillar 2 guidance, the ECB will review the reasons why the bank's capital level has fallen or is expected to fall and may take appropriate and proportionate measures in connection with such shortfall. Any such measures might have an impact on Deutsche Bank AG's willingness or ability to pay dividends or conduct share buybacks. For further information on regulatory capital adequacy requirements and the powers of Deutsche Bank AG's regulators to suspend dividend payments or share buybacks, see "Item 4: Information on the Company – Regulation and Supervision – Capital Adequacy Requirements" and "— Investigative and Enforcement Powers."

In order to meet the German corporate law requirements, Deutsche Bank AG's dividends and capacity to conduct share buybacks are based on the unconsolidated results of Deutsche Bank AG as prepared in accordance with the German Commercial Code (HGB). Deutsche Bank AG's Management Board, which prepares the annual financial statements of Deutsche Bank AG on an unconsolidated basis, and its Supervisory Board, which reviews the financial statements, first allocate part of Deutsche Bank AG's annual surplus (if any) to Deutsche Bank AG's statutory reserves and to any losses carried forward, in accordance with applicable legal requirements. Deutsche Bank then allocates the remainder of any surplus to other revenue reserves (or retained earnings) and balance sheet profit. Deutsche Bank may allocate up to one-half of this remainder to other revenue reserves and must allocate at least one-half to balance sheet profit. A profit distribution from the balance sheet profit is only permitted to the extent that the balance sheet profit plus distributable earnings exceed potential dividend blocking items, which consist primarily of deferred tax assets, self-developed software and unrealized gains on plan assets, all net of respective deferred tax liabilities.

Deutsche Bank AG may then distribute as dividend a portion of or all the amount of the balance sheet profit not subject to dividend blocking of Deutsche Bank AG if the Annual General Meeting so resolves. The Annual General Meeting may resolve a non-cash distribution instead of, or in addition to, a cash dividend. However, Deutsche Bank AG is not legally required to distribute its balance sheet profit to its shareholders to the extent that it has issued participatory rights (*Genussrechte*) or granted a silent participation (*stille Beteiligung*) that accord their holders the right to a portion of Deutsche Bank AG's distributable profit.

Deutsche Bank AG declares dividends by resolution of the Annual General Meeting and pays them (if any) once a year. Dividends approved at a General Meeting are payable on the third business day after that meeting, unless a later date has been determined at that meeting or by the Articles of Association. In accordance with the German Stock Corporation Act, the record date for determining which holders of Deutsche Bank AG's ordinary shares are entitled to the payment of dividends, if any, or other distributions whether cash, stock or property, is the date of the General Meeting at which such dividends or other distributions are declared.

Deutsche Bank's financial and regulatory targets are based on the financial results prepared in accordance with IFRS as issued by the IASB and endorsed by the EU. For further details, please refer to "Note 01 – Material accounting policies and critical accounting estimates – EU carve-out" to the consolidated financial statements.

Significant changes

Except as otherwise stated in this document, there have been no significant changes subsequent to December 31, 2024.

Item 9: The Offer and Listing

Offer and Listing Details and Markets

Deutsche Bank's share capital consists of ordinary shares issued in registered form without par value. Under German law, shares without par value are deemed to have a "nominal" value equal to the total amount of share capital divided by the number of shares. Deutsche Bank's shares have a nominal value in this sense of € 2.56 per share.

The principal trading market for Deutsche Bank's shares is the Frankfurt Stock Exchange, where it trades under the symbol DBK. Deutsche Bank's shares are also traded on the six other German stock exchanges (Berlin, Duesseldorf, Hamburg, Hanover, Munich and Stuttgart, where on each exchange it also trades under the symbol DBK), on the Eurex and the New York Stock Exchange, where it trades under the symbol DB.

Deutsche Bank maintains a share register in Frankfurt am Main and, for the purposes of trading the bank's shares on the New York Stock Exchange, a share register in New York.

All shares on German stock exchanges trade in euros, and all shares on the New York Stock Exchange trade in U.S. dollars.

You should not rely on Deutsche Bank's past share performance as a guide to the bank's future share performance.

Plan of Distribution

Not required because this document is filed as an Annual Report.

Selling Shareholders

Not required because this document is filed as an Annual Report.

Dilution

Not required because this document is filed as an Annual Report.

Expenses of the Issue

Not required because this document is filed as an Annual Report.

Item 10: Additional Information

Share Capital

Not required because this document is filed as an Annual Report.

Memorandum and Articles of Association

The following is a summary of certain information relating to certain provisions of Deutsche Bank's Articles of Association, its share capital and German law. This summary is not complete and is qualified by reference to its Articles of Association and German law in effect at the date of this filing. Copies of the bank's Articles of Association are publicly available at the Commercial Register (*Handelsregister*) in Frankfurt am Main, and an English translation is filed as Exhibit 1.1 to this Annual Report.

Deutsche Bank's Business Objectives

Section 2 of the Articles of Association sets out the objectives of the Group's business:

- To transact all aspects of banking business
- To provide financial and other services and
- To promote international economic relations

The bank's Articles of Association permit it to pursue these objectives directly or through subsidiaries and affiliated companies.

The Articles of Association also provide that, to the extent permitted by law, the Group may transact all business and take all steps that appear likely to promote the bank's business objectives. In particular, the bank may:

- Acquire and dispose of real estate
- Establish branches in Germany and abroad
- Acquire, administer and dispose of participations in other enterprises and
- Conclude intercompany agreements (*Unternehmensverträge*)

Supervisory Board and Management Board

For more information on the Supervisory Board and Management Board, see "Item 6: Directors, Senior Management and Employees."

Voting Rights and Shareholders' Meetings

Each of the bank's shares entitles its registered holder to one vote at Deutsche Bank's General Meeting. The Annual General Meeting takes place within the first eight months of the fiscal year. Pursuant to the Articles of Association, Deutsche Bank may hold the meeting in Frankfurt am Main, Düsseldorf or any other German city with over 250,000 inhabitants. Unless a shorter period is permitted by law, the Group must give the notice convening the General Meeting at least 30 days before the last day on which shareholders can register their attendance of the General Meeting (which is the sixth day immediately preceding that General Meeting). Shorter periods apply if the General Meeting is called to adopt a resolution on a capital increase in the context of early intervention measures pursuant to the Act on the Recovery and Resolution of Institutions and Financial Groups (*Gesetz zur Sanierung und Abwicklung von Instituten und Finanzgruppen*).

The Management Board or the Supervisory Board may also call an extraordinary General Meeting. Shareholders holding in the aggregate at least 5% of the nominal value of Deutsche Bank's share capital may also request that such a meeting be called. The bank's Articles of Association authorize the Management Board to hold any General Meeting taking place on or before August 31, 2025 in virtual form without physical attendance of the shareholders or their authorized representatives.

According to the Articles of Association, Deutsche Bank's shares are issued in the form of registered shares. For purposes of registration in the share register, all shareholders are required to notify the bank of the number of shares they hold and, in the case of natural persons, of their surname, first name, address and date of birth and, in the case of legal persons, of their registered name, business address and registered domicile, and in both cases should add an electronic address. Both being registered in the bank's share register and the timely registration for attendance of the General Meeting constitute prerequisite conditions for any shareholder's attendance and exercise of voting rights at the General Meeting. Shareholders may register their attendance of a General Meeting with the Management Board (or as otherwise designated in the invitation) by written notice or electronically, no later than the sixth day immediately preceding the date of that General Meeting. Any shareholders who have failed to comply with certain notification requirements summarized under "Notification Requirements" below are precluded from exercising any rights attached to their shares, including voting rights.

Under German law, upon the bank's request a registered shareholder must inform the bank whether that shareholder owns the shares registered in its name or whether that shareholder holds the shares for any other person as a nominee shareholder. Both the nominee shareholder and the person for whom the shares are held have an obligation to provide the same personal data as required for registration in the share register with respect to the person for whom the shares are held.

Shareholders may appoint proxies to represent them at General Meetings. As a matter of German law, a proxy relating to voting rights granted by shares may be revoked at any time.

As a foreign private issuer, Deutsche Bank is not required to file a proxy statement under U.S. securities law. The proxy voting process for the bank's shareholders in the United States is substantially similar to the process for publicly held companies incorporated in the United States.

The Annual General Meeting normally adopts resolutions on the following matters:

- Appropriation of distributable balance sheet profits (*Bilanzgewinn*) from the preceding fiscal year;
- Formal ratification of the acts (*Entlastung*) of the members of the Management Board and the members of the Supervisory Board in the preceding fiscal year and
- Appointment of independent auditors for the current fiscal year

A simple majority of votes cast is generally sufficient to approve a measure, except in cases where a greater majority is otherwise required by the bank's Articles of Association or by law. Under the German Stock Corporation Act and the German Transformation Act (*Umwandlungsgesetz*), certain resolutions of fundamental importance require a majority of at least 75% of the share capital represented at the General Meeting adopting the resolution, in addition to a majority of the votes cast. Such resolutions include the following matters, among others:

- Amendments to the Articles of Association changing the Group's business objectives
- Capital increases that exclude preemptive rights
- Capital reductions
- Creation of authorized or conditional capital
- Deutsche Bank's dissolution
- "Transformations" under the German Transformation Act such as mergers, spin-offs and changes in the bank's legal form
- Transfer of all the bank's assets and
- Intercompany agreements (in particular, domination and profit-transfer agreements)

Under certain circumstances, such as when a resolution violates the Articles of Association or the German Stock Corporation Act, shareholders may file a shareholder action with the appropriate Regional Court (*Landgericht*) in Germany to set aside resolutions adopted at the General Meeting.

Under German law, the rights of shareholders as a group can be changed by amendment of the company's articles of association. Any amendment of the Articles of Association requires a resolution of the General Meeting. The authority to amend the Articles of Association, insofar as such amendments merely relate to the wording, such as changes of the share capital as a result of the issuance of shares from authorized capital, has been assigned to the Supervisory Board by the Articles of Association. Pursuant to the Articles of Association, the resolutions of the General Meeting are taken by a simple majority of votes and, insofar as a majority of capital stock is required, by a simple majority of capital stock, except where law or the Articles of Association determine otherwise. The rights of individual shareholders can only be changed with their consent. Amendments to the Articles of Association become effective upon their registration in the Commercial Register.

Share Register

Deutsche Bank maintains a share register with Link Market Services GmbH and its New York transfer agent, pursuant to an agency agreement between Deutsche Bank and Link Market Services GmbH and a sub-agency agreement between Link Market Services GmbH and the New York transfer agent.

Any shareholder may request information about the data concerning its person that have been entered in the share register. The share register generally contains each shareholder's surname, first name, date of birth, address, electronic address, if any, and the number or the quantity of the shares held. Shareholders may prevent their personal information from appearing in the share register by holding their securities through a bank or custodian. Although the shareholder would remain the beneficial owner of the securities, only the bank's or custodian's name would appear in the share register. In this case, the exercise of certain shareholder rights will depend on the cooperation of the bank or custodian.

Dividend Rights

For a summary of Deutsche Bank’s dividend policy and legal basis for dividends under German law, see “Item 8: Financial Information – Dividend Policy.”

Increases in Share Capital

German law permits Deutsche Bank to increase its share capital in any of three ways:

- Resolution by the General Meeting authorizing the issuance of new shares
- Resolution by the General Meeting authorizing the Management Board, subject to the approval of the Supervisory Board, to issue new shares up to a specified amount (no more than 50% of existing share capital) within a specified period, which may not exceed five years. This is referred to as authorized capital (*genehmigtes Kapital*)
- Resolution by the General Meeting authorizing the issuance of new shares up to a specified amount (no more than 60% of existing share capital) for specific purposes, such as for employee stock options (additional limit of no more than 20% of existing share capital), for use as consideration in a merger or to issue to holders of convertible bonds or other convertible securities (additional limit of no more than 50% of existing share capital). This is referred to as conditional capital (*bedingtes Kapital*)

The issuance of new ordinary shares by resolution of the General Meeting requires the simple majority of the votes cast and of the share capital represented at the General Meeting. Should the resolution of the General Meeting provide for the exclusion of shareholders’ preemptive rights in full or in part, the simple majority of the votes cast and a majority of at least 75% of the share capital represented at the General Meeting are required. Similarly, resolutions of the General Meeting concerning the creation of authorized or conditional capital require the simple majority of the votes cast and a majority of at least 75% of the share capital represented at the General Meeting.

Liquidation Rights

The German Stock Corporation Act requires that if the bank is liquidated, any liquidation proceeds remaining after the payment of all the bank’s liabilities will be distributed to the bank’s shareholders in proportion to their shareholdings.

Preemptive Rights

In principle, holders of Deutsche Bank shares have preemptive rights allowing them to subscribe any shares, bonds convertible into, or with attached warrants to subscribe for, the bank’s shares or participatory certificates it issues. Such preemptive rights exist in proportion to the number of shares currently held by the shareholder. Preemptive rights of shareholders may be excluded with respect to any capital increase, however, as part of the resolution by the General Meeting on such capital increase. Such a resolution by the General Meeting on a capital increase that excludes the shareholders’ preemptive rights with respect thereto requires both a majority of the votes cast and a majority of at least 75% of the share capital represented at the General Meeting. A resolution to exclude preemptive rights requires that the proposed exclusion is expressly disclosed in the agenda to the General Meeting and that the Management Board presents the reasons for the exclusion to the shareholders in a written report. Under the German Stock Corporation Act, preemptive rights may in particular be excluded with respect to capital increases not exceeding 20% of the existing share capital with an issue price payable in cash not significantly below the stock exchange price at the time of issuance. In addition, shareholders may, in a resolution by the General Meeting on authorized capital, authorize the Management Board to exclude the preemptive rights with respect to newly issued shares from authorized capital in specific circumstances set forth in the resolution.

Shareholders are generally permitted to transfer their preemptive rights. Preemptive rights may be traded on one or more German stock exchanges for a limited number of days prior to the final day the preemptive rights can be exercised.

Notices and Reports

Deutsche Bank publishes notices pertaining to its shares and the General Meeting in the German Federal Gazette (*Bundesanzeiger*).

The bank sends its New York transfer agent, through publication or otherwise, a copy of each of its notices pertaining to any General Meeting, any adjourned General Meeting or its actions with respect to any cash or other distributions or the offering of any rights. The Group provides such notices in the form given or to be given to its shareholders. The bank's New York transfer agent is requested to arrange for the mailing of such notices to all shareholders registered in the New York registry.

Charges of Transfer Agents

Deutsche Bank pays Link Market Services GmbH and its New York transfer agent customary fees for their services as transfer agents and registrars. The Group's shareholders will not be required to pay Link Market Services GmbH or its New York transfer agent any fees or charges in connection with its transfers of shares in the share register. The bank's shareholders will also not be required to pay any fees in connection with the conversion of dividends from euros to U.S. dollars.

Liability of Transfer Agents

Neither Link Market Services GmbH nor the bank's New York transfer agent will be liable to shareholders if prevented or delayed by law, or any circumstances beyond its control, from performing its obligations as transfer agents and registrars.

Notification Requirements

Disclosure of Interests in a Listed Stock Corporation

Disclosure Obligations under the German Securities Trading Act

Deutsche Bank AG, as a listed company, and its shareholders are subject to the shareholding disclosure obligations under the German Securities Trading Act (*Wertpapierhandelsgesetz*). Pursuant to the German Securities Trading Act, any shareholder whose voting interest in a listed company like Deutsche Bank AG, through acquisition, sale or by other means, reaches, exceeds or falls below a 3%, 5%, 10%, 15%, 20%, 25%, 30%, 50% or 75% threshold must notify the bank and the BaFin of its current aggregate voting interest in writing and without undue delay, but at the latest within four trading days. In connection with this requirement, the German Securities Trading Act contains various provisions regarding the attribution of voting rights to the person who actually controls the voting rights attached to the shares.

Furthermore, the voting rights attached to a third party's shares are attributed to a shareholder if the shareholder coordinates its conduct concerning the listed company with the third party (so-called “acting in concert”) either through an agreement or other means. Acting in concert is deemed to exist if the parties coordinate their voting at the listed company's general meeting or, outside the general meeting, coordinate their actions with the goal of significantly and permanently modifying the listed company's corporate strategy. Each party's voting rights are attributed to each of the other parties acting in concert.

Shareholders failing to comply with their notification obligations are prevented from exercising any rights attached to their shares (including voting rights and the right to receive dividends) until they have complied with the notification requirements. If the failure to comply with the notification obligations specifically relates to the size of the voting interest in Deutsche Bank AG and is the result of willful or grossly negligent conduct, the suspension of shareholder rights is – subject to certain exceptions in case of an incorrect notification deviating no more than 10% from the actual percentage of voting rights – extended by a six-month period commencing upon the submission of the required notification.

Except for the 3% threshold, similar notification obligations exist for reaching, exceeding or falling below the thresholds described above when a person holds, directly or indirectly, certain instruments other than shares. This applies to instruments which grant upon maturity an unconditional right to acquire existing voting shares of Deutsche Bank AG, a discretionary right to acquire such shares, as well as to instruments that refer to such shares and have an economic effect similar to that of the aforementioned instruments, irrespective of whether such instruments are physically or cash-settled. These instruments include, for example, transferable securities, options, futures contracts and swaps. Voting rights to be attributed to a person based on any such instrument will generally be aggregated with the person's other voting rights deriving from shares or other instruments.

Notice must be given without undue delay, but within four trading days at the latest. The notice period commences as soon as the person obliged to notify knows, or, under the circumstances should know, that his or her voting rights reach, exceed or fall below any of the abovementioned relevant thresholds, but in any event no later than two trading days after reaching, exceeding or falling below the threshold. Only in case that the voting rights reach, exceed or fall below any of the thresholds as a result of an event affecting all voting rights, the notice period might commence at a later stage. Deutsche Bank AG must publish the foregoing notifications without undue delay, but no later than within three trading days after their receipt, and report such publication to the BaFin. Furthermore, Deutsche Bank AG must publish a notification in case of any increase or decrease of the total number of voting rights without undue delay, but within two trading days at the latest, and such notification must be reported to the BaFin and forwarded to the German Company Register (*Unternehmensregister*). An exception applies where the increase of the total number of voting rights is due to the issue of new shares from conditional capital. In this case, Deutsche Bank AG must publish the increase at the end of the month in which it occurred. However, such increase must also be notified without undue delay, but within two trading days at the latest, where any other increase or decrease of the total number of voting rights triggers the aforementioned notification requirement.

Non-compliance with the disclosure requirements regarding shareholdings and holdings of other instruments may result in a significant fine imposed by the BaFin. In addition, the BaFin publishes, on its website, sanctions imposed, and measures taken indicating the person or entity responsible and the nature of the breach (so-called "naming and shaming").

Shareholders whose voting rights reach or exceed thresholds of 10% of the voting rights in a listed company, or higher thresholds, are obliged to inform the company within 20 trading days of the purpose of their investment and the origin of the funds used for such investment, unless the articles of association of the listed company provide otherwise. The bank's Articles of Association do not contain such a provision.

Disclosure Obligations under the German Securities Acquisition and Takeover Act

Pursuant to the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), any person whose voting interest reaches or exceeds 30% of the voting shares of a listed stock corporation must, within seven working days, publish this fact (including the percentage of its voting rights) on the Internet and by means of an electronically operated financial information dissemination system. In addition, the person must subsequently make a mandatory public tender offer within four weeks to all shareholders of the listed company unless an exemption has been granted. The German Securities Acquisition and Takeover Act contains a number of provisions intended to ensure that shareholdings are attributed to those persons who actually control the voting rights attached to the shares. The provisions regarding coordinated conduct as part of the German Securities Acquisition and Takeover Act (so-called "acting in concert") and the rules on the attribution of voting rights attached to shares of third parties are the same as the statutory securities trading provisions described above under "Disclosure Obligations under the German Securities Trading Act" except with respect to voting rights of shares underlying instruments whose holders are vested with the right to unilaterally acquire existing voting shares of the listed company or voting rights which may be acquired on the basis of instruments with similar economic effect. If a shareholder fails to provide notice on reaching or exceeding the 30% threshold, or fails to make a public tender offer, the shareholder will be precluded from exercising any rights associated with its shares (including voting and dividend rights) until it has complied with the requirements under the German Securities Acquisition and Takeover Act. In addition, non-compliance with the disclosure requirement may result in a fine.

Disclosure of Participations in a Credit Institution

The German Banking Act (*Kreditwesengesetz*) requires any person intending to acquire, alone or acting in concert with another person, directly or indirectly, a qualifying holding (*bedeutende Beteiligung*) in a credit or financial services institution to notify the BaFin and the Bundesbank without undue delay and in writing of the intended acquisition. A qualifying holding is a direct or indirect holding in an undertaking which represents 10% or more of the capital or voting rights or which makes it possible to exercise a significant influence over the management of such undertaking. The required notice must contain information demonstrating, among other things, the reliability of the person or, in the case of a corporation or other legal entity, the reliability of its directors and officers.

A person holding a qualifying holding shall also notify the BaFin and the Bundesbank without undue delay and in writing if they intend to increase the amount of the qualifying holding up to or beyond the thresholds of 20%, 30% or 50% of the voting rights or capital or in such way that the institution comes under such person's control or if such person intends to reduce the participation below 10% or below one of the other thresholds described above.

The BaFin will have to confirm the receipt of a complete notification within two working days in writing to the proposed acquirer. Within a period of 60 working days from the BaFin's written confirmation that a complete notification has been received (assessment period), the BaFin will review and, in accordance with Council Regulation (EU) No 1024/2013 of October 15, 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, forward the notification and a proposal for a decision whether or not to object to the acquisition to the ECB. The ECB will decide whether or not to object to the acquisition on the basis of the applicable assessment criteria. Within the assessment period the ECB may prohibit the intended acquisition in particular if there appears to be reason to assume that the acquirer or its directors and officers are not reliable or that the acquirer is not financially sound, that the participation would impair the effective supervision of the relevant credit institution, that a prospective managing director (*Geschäftsleiter*) is not reliable or not qualified, that money laundering or financing of terrorism has occurred or been attempted in connection with the intended acquisition, or that there would be an increased risk of such illegal acts as a result of the intended acquisition. During the assessment period the BaFin may request further information necessary for its or the ECB's assessment. Generally, such a request delays the expiration of the assessment period by up to 30 business days. If the information submitted is incomplete or incorrect the ECB may prohibit the intended acquisition.

If a person acquires a qualifying holding despite such prohibition or without making the required notification, the competent authority may prohibit the person from exercising the voting rights attached to the shares. In addition, non-compliance with the disclosure requirement may result in the imposition of a fine in accordance with statutory provisions. Moreover, the competent authority may order that any disposition of the shares requires its approval and may ultimately appoint a trustee to exercise the voting rights attached to the shares or to sell the shares to the extent they constitute a qualifying holding.

Disclosure of Participations in Regulated Subsidiaries

The acquisition of shares in Deutsche Bank AG may trigger an obligation to notify certain national competent authorities in charge of the supervision of regulated subsidiaries of Deutsche Bank AG, provided that such acquisition of shares is treated as an indirect acquisition of a stake in the relevant subsidiaries and the applicable threshold under local law is reached or exceeded. This applies in particular to subsidiaries in a member state of the European Economic Area for which the CRR sets forth a threshold of 10%. Other jurisdictions may apply lower thresholds. For example, because the bank controls Deutsche Bank (Malaysia) Berhad, Section 87(1) of the Malaysian Financial Services Act 2013 requires approval of Bank Negara Malaysia (the Malaysian central bank) of any acquisition of 5% or more of the bank's ordinary shares. Also, because Deutsche Bank controls bank subsidiaries in the United States, including Deutsche Bank Trust Company Americas, and has securities registered under the U.S. Securities Exchange Act of 1934, the U.S. Change in Bank Control Act requires that any person or any persons acting in concert may acquire control of 10% or more of the bank's ordinary shares only subject to the approval of the Federal Reserve Board and other U.S. regulators.

Review by the German Federal Ministry of Economic Affairs and Climate Action of Acquisition of 10% of voting rights or more

Pursuant to the German Foreign Trade Act (*Außenwirtschaftsgesetz*) and the German Foreign Trade Regulation (*Außenwirtschaftsverordnung*), acquisitions may be reviewed by the German Federal Ministry of Economic Affairs and Climate Action (the “Ministry”) where the initial direct or indirect acquisition of voting rights in a German company by investors from outside the European Union (EU) and the European Free Trade Association (Iceland, Lichtenstein, Norway and Switzerland) exceed 10%, 20% or 25%, or where voting rights in a German company by investors outside the EU or European Free Trade Association exceed 20%, 25%, 40%, 50% or 75% through direct or indirect subsequent acquisitions. Both the thresholds for the applicable initial voting rights (10%, 20% or 25%) and whether a filing obligation exists or not, depend on the industry sector the target company is active in. The Ministry must be notified in writing regarding the conclusion of a contract where the direct or indirect acquisition by an investor from outside the European Union and the European Free Trade Association is 10% or 20% (or where the direct or indirect subsequent acquisitions exceeding 20%, 25%, 40%, 50% or 75% of the voting rights) of the voting rights in a German company which operates certain critical infrastructure (including inter alia certain services in the financial sector) or operates in other certain sensitive sectors (including inter alia certain technologies, IT, telecommunication, healthcare or the media). The Ministry must also be notified in writing regarding the conclusion of a contract where there is a direct or indirect acquisition by an investor from outside Germany of 10% or more of the voting rights in a German company operating in the defense or cryptology sectors (or where the direct or indirect subsequent acquisitions exceeds 20%, 25%, 40%, 50% or 75% of the voting rights). If Deutsche Bank is considered to be a company which operates in any such critical infrastructure or sensitive sector, the Ministry would need to be notified of an acquisition of voting rights in Deutsche Bank that meets the abovementioned thresholds. Pending clearance by the Ministry, an acquisition subject to this notification requirement must not be consummated without clearance and its implementation would be legally void, unless the acquisition is made via a stock exchange in which case the acquisition of voting rights becomes legally effective but the voting rights must not be exercised pending clearance.

Consummating such an acquisition without clearance may also result in administrative fines of up to € 500,000 (acting negligently) or up to five years imprisonment or monetary fines (acting willfully). The acquirer may seek voluntary pre-clearance of a proposed acquisition from the Ministry that is not subject to a mandatory filing. The Ministry may impose conditions on the acquisition, prohibit the acquisition, or require that it is unwound, if the Ministry determines that the acquisition will likely affect the public order or public security of Germany or another EU member state, or in relation to certain projects or programs of interest for the European Union pursuant to the EU-Screening regulation, or likely affects the essential security interests of Germany. The Ministry’s decision to review an acquisition must be made within two months following the Ministry’s knowledge of the conclusion of the acquisition contract, of the publication of the decision to launch a take-over bid or of the publication of the acquisition of control. The review must be completed within four months following receipt of the complete set of acquisition documents and any additional information requested by the Ministry. The Ministry can extend its review period up to an additional four months. A review is precluded if more than five years have passed since the acquisition.

EU Short Selling Regulation (ban on naked short selling)

Regulation (EU) No 236/2012 of the European Parliament and of the Council of March 14, 2012, on short selling and certain aspects of credit default swaps (the “EU Short Selling Regulation”) came into force on November 1, 2012. The EU Short Selling Regulation, the regulations adopted by the EU Commission implementing it, and the German act implementing the EU Short Selling Regulation replace the previously applicable German federal provisions governing the ban on naked short selling of shares and certain debt securities. (Short sales are sales of securities that the seller does not own, with the intention of buying back an identical security at a later point in time in order to be able to deliver the security. A short sale is “naked” when the seller has not borrowed the securities at the time of the short sale, or ensured they can be borrowed or obtained under a similar arrangement.) Under the EU Short Selling Regulation, except for certain exemptions, naked short sales of listed shares are not permitted. Short sales of listed shares that are covered by borrowing or similar arrangements are subject to the following transparency requirements. Significant net short positions in shares must be reported to the BaFin and, if a certain threshold is exceeded, they must also be publicly disclosed. Net short positions are calculated by netting the long and short positions held by a natural or legal person in the issued capital of the company concerned. The details are set forth in the EU Short Selling Regulation and the regulations adopted by the EU Commission implementing it. In certain situations, described in greater detail in the EU Short Selling Regulation, the BaFin is permitted to limit short selling and comparable transactions.

Disclosure of Transactions of Managers

Art. 19 of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014 on market abuse (the "EU Market Abuse Regulation") requires persons with management responsibilities ("Managers") in a listed company like Deutsche Bank AG to notify the company and the BaFin of their own transactions in shares or debt instruments of the company or financial instruments based thereon, in particular derivatives. Such notifications must be made promptly and no later than three business days after the date of the transaction. The notification obligation also applies to persons who are closely associated with a Manager. The obligation does not apply if the aggregate annual transactions by a Manager or persons with whom he or she is closely associated do not, individually, exceed a certain threshold amount through the end of a calendar year. The BaFin has made use of its authority to increase the threshold of € 5,000 set forth in the EU Marked Abuse Regulation to the maximum possible amount of € 20,000.

Deutsche Bank AG is required to promptly publish any notification received but, in any case, no later than two business days after receipt of such notification. The publication must be made in a manner which enables fast access to this information on a non-discriminatory basis in accordance with the implementing standards published by the European Securities and Markets Authority. Furthermore, Deutsche Bank AG must without undue delay notify the BaFin and forward the notification to the Company Register (*Unternehmensregister*). For the purposes of the EU Market Abuse Regulation, the bank identified the following persons to be a Manager: members of the Management Board and the Supervisory Board of Deutsche Bank AG as well as holders of general power of attorney (*Generalbevollmächtigte*) of Deutsche Bank AG. The following persons are deemed to be closely associated with a Manager: spouses, registered civil partners (*eingetragene Lebenspartner*), dependent children and other relatives who at the time of the transaction requiring notification have lived in the same household with the Manager for at least one year. Legal entities for which the aforementioned persons have management responsibilities are also subject to the notification requirement. The aforementioned provisions also apply to legal entities, companies and institutions directly or indirectly controlled by a Manager or by a person closely associated with a Manager, which have been founded to the benefit of such a person, or whose economic interests correspond to a considerable extent to those of such a person. Non-compliance with the notification requirements may result in a fine.

Material Contracts

In the usual course of the bank's business, Deutsche Bank enters into numerous contracts with various other entities. The bank has not, however, entered into any material contracts outside the ordinary course of its business within the past two years.

Exchange Controls

As in other member states of the European Union, regulations issued by the competent European Union authorities to comply with United Nations resolutions have caused freeze orders in Germany on assets of certain legal and natural persons designated in such regulations. In addition, the European Union maintained a wide range of autonomous economic and financial sanctions on Iran. While all nuclear-related economic and financial EU sanctions against Iran were repealed on January 16, 2016, some restrictions remain in force.

Moreover, in response to the war in Ukraine the European Union, the United States, the United Kingdom and others imposed broad-based sanctions against natural and legal persons residing in Russia, Belarus, and certain regions of Ukraine and/or of Russian or Belarusian nationality.

With some exceptions, corporations or individuals residing in Germany are required to report to the Bundesbank any payment received from, or made to or for the account of, a nonresident corporation or individual that exceeds € 12,500 (or the equivalent in a foreign currency). This reporting requirement is for statistical purposes.

Subject to the above-mentioned exceptions and the applicable sanctions, there are currently no German laws, decrees or regulations that would prevent the transfer of capital or remittance of dividends or other payments to shareholders who are not residents or citizens of Germany.

There are also no restrictions under German law or the bank's Articles of Association concerning the right of nonresident or foreign shareholders to hold the bank's shares or to exercise any applicable voting rights. Where the investment reaches or exceeds certain thresholds, however, certain reporting obligations apply and the investment may become subject to review by the BaFin, the European Central Bank and other competent authorities. For more information see "Item 10: Additional Information – Notification Requirements".

Taxation

The following is a general summary of material German and United States federal income tax consequences of the ownership and disposition of shares for a resident of the United States for purposes of the income tax convention between the United States and Germany (the "Treaty") who is fully eligible for benefits under the Treaty. A U.S. resident will generally be entitled to Treaty benefits if it is:

- The beneficial owner of shares (and of the dividends paid with respect to the shares)
- An individual resident of the United States, a U.S. corporation, or a partnership, estate or trust to the extent its income is subject to taxation in the United States in its hands or in the hands of its partners or beneficiaries.
- Not also a resident of Germany for German tax purposes and
- Not subject to "anti-treaty shopping" articles under German domestic law or the Treaty that apply in limited circumstances

The Treaty benefits discussed below generally are not available to shareholders who hold shares in connection with the conduct of business through a permanent establishment in Germany. The summary does not discuss the treatment of those shareholders.

The summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to any particular shareholder, including tax considerations that arise from rules of general application or that are generally assumed to be known by shareholders. In particular, the summary deals only with shareholders that will hold shares as capital assets and does not address the tax treatment of shareholders that are subject to special rules, such as fiduciaries of pension (e.g. U.S. pension funds), profit-sharing or other employee benefit plans, banks, insurance companies, dealers in securities or currencies, persons that hold shares as a position in a straddle, conversion transaction, synthetic security or other integrated financial transaction, persons that elect mark-to-market treatment, persons that own, directly or indirectly, 10% or more of our stock, measured by vote or value, persons that hold shares through a partnership or hybrid entity and persons whose "functional currency" is not the U.S. dollar. The summary is based on German and U.S. laws, the Treaty and regulatory interpretations, including in the current and proposed U.S. Treasury regulations as of the date hereof, all of which are subject to change (possibly with retroactive effect).

Shareholders should consult their own advisors regarding the tax consequences of the ownership and disposition of shares considering their circumstances, as well as the effect of any state, local or other national laws.

Taxation of Dividends

In general, dividends that Deutsche Bank pays are subject to German withholding tax at an aggregate rate of 26.375% (consisting of a 25% withholding tax and a 1.375% surcharge). Under the Treaty, a U.S. resident will be entitled to receive a refund from the German tax authorities of 11.375 in respect of a declared dividend of 100. For example, for a declared dividend of 100, a U.S. resident initially will receive 73.625 and may claim a refund from the German tax authorities of 11.375 and, therefore, receive a total cash payment of 85 (i.e., 85% of the declared dividend). According to the German Investment Tax Act dividends received by an investment fund within the meaning of the German Investment Tax Act are generally subject to 15% German withholding tax equal to the Treaty tax rate. U.S. residents who are entitled to a refund of more than 11.375% (e.g., U.S. pension funds) must fulfil further requirements according to para. 50j German Income Tax Act, in particular certain holding requirements.

For U.S. tax purposes, a U.S. resident will be deemed to have received total dividends of 100 in the example above. The gross amount of dividends that a U.S. resident receives (which includes amounts withheld in respect of German withholding tax) generally will be subject to U.S. federal income taxation as foreign source dividend income and will not be eligible for the dividends received deduction generally allowed to U.S. corporations. German withholding tax at the 15% rate provided under the Treaty will be treated as a foreign income tax that, subject to generally applicable limitations under U.S. tax law, is eligible for credit against a U.S. resident's U.S. federal income tax liability or, at its election, may be deducted in computing taxable income. Thus, for a declared dividend of 100, a U.S. resident will be deemed to have paid German taxes of 15. A U.S. resident cannot claim credits for German taxes that would have been refunded to it if it had filed a claim for refund. Foreign tax credits will not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions. The creditability of foreign withholding taxes may be limited in certain situations. The foreign tax credit rules are complex. U.S. residents should consult their tax advisers regarding the creditability of German taxes in their particular circumstances.

Subject to certain exceptions for short-term and hedged positions, “qualified dividends” received by certain non-corporate U.S. shareholders will generally be subject to taxation in the United States at a lower rate than other ordinary income. Dividends received will be qualified dividends if Deutsche Bank (i) is eligible for the benefits of a comprehensive income tax treaty with the United States that the U.S. Internal Revenue Service (“IRS”) has approved for purposes of the qualified dividend rules and (ii) was not, in the year prior to the year in which the dividend was paid, and is not, in the year in which the dividend is paid, a passive foreign investment company (“PFIC”). The Treaty has been approved for purposes of the qualified dividend rules, and Deutsche Bank believes it qualifies for benefits under the Treaty. The determination of whether the bank is a PFIC must be made annually and is dependent on the particular facts and circumstances at the time. It requires an analysis of the bank’s income and valuation of its assets, including goodwill and other intangible assets. Based on the audited financial statements and relevant market and shareholder data, the bank believes that it was not a PFIC for U.S. federal income tax purposes with respect to its taxable years ended December 31, 2023 or December 31, 2024. In addition, based on the Group’s current expectations regarding the value and nature of its assets, the sources and nature of its income, and relevant market and shareholder data, the bank does not currently anticipate becoming a PFIC for its taxable year ending December 31, 2025, or for the foreseeable future. However, the PFIC rules are complex and their application to financial services companies is unclear. Each U.S. shareholder should consult its own tax advisor regarding the potential applicability of the PFIC regime to Deutsche Bank and its implications for their particular circumstances.

If a U.S. resident receives a dividend paid in euros, it will recognize income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If dividends are converted into U.S. dollars on the date of receipt, a U.S. resident generally should not be required to recognize foreign currency gain or loss in respect of the dividend income but may be required to recognize foreign currency gain or loss on the receipt of a refund in respect of German withholding tax to the extent the U.S. dollar value of the refund differs from the U.S. dollar equivalent of that amount on the date of receipt of the underlying dividend.

Refund Procedures

To claim a refund, a U.S. resident must submit, within four years from the end of the calendar year in which the dividend is received, a claim for refund to the German tax authorities. The claim for refund must be accompanied by a withholding tax certificate (Kapitalertragsteuerbescheinigung) on an officially prescribed form and issued by the institution that withheld the tax.

According to para. 50c (5) German Income Tax Act, claims for refunds have to be transmitted via the officially specified interface according to the officially prescribed data set. The German claim for refund forms can be submitted to the Bundeszentralamt für Steuern via the online portal of the Bundeszentralamt für Steuern (“BOP”): https://www.elster.de/bportal/start. Every claimant needs a certificate file to login into the BOP. A U.S. resident must also submit to the German tax authorities a certification (on IRS Form 6166) with respect to its last filed U.S. federal income tax return. Requests for IRS Form 6166 are made on IRS Form 8802, which requires payment of a user fee. IRS Form 8802 and its instructions can be obtained from the IRS website at www.irs.gov. The quick-refund procedure (“Datenträgerverfahren – DTV” / “Data Medium Procedure – DMP”) was abolished from 01.01.2025 onwards and is no longer applicable.

The German tax authorities will issue refunds denominated in euros. In the case of shares held through banks or brokers participating in the Depository Trust Company, the refunds will be issued to the Depository Trust Company, which will convert the refunds to U.S. dollars. The resulting amounts will be paid to banks or brokers for the account of holders.

If a U.S. resident files a claim for refund directly with the German tax authorities, the time until the receipt of a refund is uncertain and we can give no assurances as to when any refund will be received.

The Bundeszentralamt für Steuern published on its website information regarding the tax refund process in Germany.

Taxation of Capital Gains

Under the Treaty, a U.S. resident will generally not be subject to German capital gains tax in respect of a sale or other disposition of shares. For U.S. federal income tax purposes, a U.S. holder will generally recognize capital gain or loss on the sale or other disposition of shares in an amount equal to the difference between such holder's tax basis in the shares and the U.S. dollar value of the amount realized from their sale or other disposition. Such gain or loss will be long-term capital gain or loss if the shares were held for more than one year. The net amount of long-term capital gain realized by an individual generally is subject to taxation at a lower rate than ordinary income. Any such gain generally would be treated as income arising from sources within the United States; any such loss would generally be allocated against U.S. source income. The ability to offset capital losses against ordinary income is subject to limitations.

Shareholders whose shares are held in an account with a German bank or financial services institution (including a German branch of a non-German bank or financial services institution) are urged to consult their own advisors. This summary does not discuss their particular tax situation.

United States Information Reporting and Backup Withholding

Dividends and payments of the proceeds on a sale of shares, paid within the United States or through certain U.S. related financial intermediaries are subject to information reporting and may be subject to backup withholding unless the U.S. resident (i) is a corporation (other than an S corporation) or other exempt recipient or (ii) provides a taxpayer identification number and certifies (on IRS Form W-9) that no loss of exemption from backup withholding has occurred. Shareholders that are not U.S. persons generally are not subject to information reporting or backup withholding.

However, a non-U.S. person may be required to provide a certification (generally on IRS Form W-8BEN or W-8BEN-E) of its non-U.S. status in connection with payments received in the United States or through a U.S. related financial intermediary.

Backup withholding tax is not an additional tax, and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a holder's U.S. federal income tax liability, provided the required information is furnished to the IRS.

Shareholders may be subject to other U.S. information reporting requirements. Shareholders should consult their own advisors regarding the application of U.S. information reporting rules considering their particular circumstances.

German Gift and Inheritance Taxes

Under the current estate, inheritance and gift tax treaty between the United States and Germany (the "Estate Tax Treaty"), a transfer of shares generally will not be subject to German gift or inheritance tax so long as the donor or decedent, and their donee or other beneficiary, were not domiciled in Germany for purposes of the Estate Tax Treaty at the time the gift was made, or at the time of the decedent's death, and the shares were not held in connection with a permanent establishment or fixed base in Germany.

The Estate Tax Treaty provides a credit against U.S. federal estate and gift tax liability for the amount of inheritance and gift tax paid in Germany, subject to certain limitations, where shares are subject to German inheritance or gift tax and United States federal estate or gift tax.

Other German Taxes

There are currently no German net wealth, transfer, stamp or other similar taxes that would apply to a U.S. resident as a result of the receipt, purchase, ownership or sale of shares.

Dividends and Paying Agents

Not required because this document is filed as an Annual Report.

Statement by Experts

Not required because this document is filed as an Annual Report.

Documents on Display

Deutsche Bank is subject to the informational requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, it files reports and other information with the Securities and Exchange Commission. The Group's Securities and Exchange Commission filings are available at the Securities and Exchange Commission's website at www.sec.gov under File Number 001-15242.

Subsidiary Information

Not applicable.

Item 11: Quantitative and Qualitative Disclosures about Credit, Market and Other Risk

For quantitative and qualitative disclosures about Credit, Market and Other Risk, please see "Combined Management Report: Risk Report" in the Annual Report 2024.

Please see pages S-1 through S-10 of the Supplemental Financial Information (Unaudited), which pages are included herein, for information required by Subpart 1400 of SEC Regulation S-K.

Item 12: Description of Securities other than Equity Securities

Deutsche Bank's ordinary shares are not represented by American Depositary Receipts and accordingly no information is required to be provided pursuant to Item 12.D.3 and Item 12.D.4. The remainder of the information required by this Item 12 and by Instruction 2(d) under the Instructions as to Exhibits of Form 20-F is provided as Exhibit 2.2 to this Annual Report on Form 20-F.

PART II

Item 13: Defaults, Dividend Arrearages and Delinquencies

Not applicable.

Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15: Controls and Procedures

Disclosure Controls and Procedures

An evaluation was carried out under the supervision and with the participation of Deutsche Bank's management, including the bank's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the bank's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of December 31, 2024. There are, as described below, inherent limitations to the effectiveness of any control system, including disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon such evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of Deutsche Bank's disclosure controls and procedures were effective as of December 31, 2024.

Management's Annual Report on Internal Control over Financial Reporting

Management of Deutsche Bank Aktiengesellschaft, together with its consolidated subsidiaries, is responsible for establishing and maintaining adequate internal control over financial reporting. Deutsche Bank's internal control over financial reporting is a process designed under the supervision of the bank's Chief Executive Officer and its Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Group's financial statements for external reporting purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and endorsed by the European Union. As of December 31, 2024, Deutsche Bank management conducted an assessment of the effectiveness of the bank's internal control over financial reporting based on the framework established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the assessment performed, management has determined that Deutsche Bank's internal control over financial reporting as of December 31, 2024, was effective based on the COSO framework (2013).

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, the registered public accounting firm that audited the financial statements included in this document, has issued a report on Deutsche Bank's internal control over financial reporting, which is set forth below.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Supervisory Board of Deutsche Bank Aktiengesellschaft:

Opinion on Internal Control Over Financial Reporting

We have audited Deutsche Bank Aktiengesellschaft's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Deutsche Bank Aktiengesellschaft (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2024, the related notes and the specific disclosures described in Note 1 to the consolidated financial statements as being part of the financial statements, and our report dated March 10, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft

Eschborn/Frankfurt am Main, Germany
March 10, 2025

Change in internal control over financial reporting

There was no change in Deutsche Bank's internal control over financial reporting identified in connection with the evaluation referred to above that occurred during the year ended December 31, 2024, that has materially affected, or is reasonably likely to materially affect, the bank's internal control over financial reporting.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. As such, disclosure controls and procedures or systems for internal control over financial reporting may not prevent all error and all fraud. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and any design may not succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 16A: Audit Committee Financial Expert

Please see "Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code: Auditing and Controlling: Audit Committee Financial Expert" in the Annual Report 2024.

Item 16B: Code of Ethics

Please see "Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code: Values and Leadership Principles of Deutsche Bank AG and Deutsche Bank Group: Deutsche Bank Group Code of Conduct and Code of Ethics for Senior Financial Officers" in the Annual Report 2024.

Item 16C: Principal accountant fees and services

Please see "Combined Management Report: Corporate Governance Statement/Corporate Governance Report: Auditing and Controlling: Principal Accountant Fees and Services" in the Annual Report 2024.

Item 16D: Exemptions from the Listing Standards for Audit Committees

Deutsche Bank's common shares are listed on the New York Stock Exchange, the corporate governance rules of which require a foreign private issuer such as the bank to have an audit committee that satisfies the requirements of Rule 10A-3 under the U.S. Securities Exchange Act of 1934. These requirements include a requirement that the audit committee be composed of members that are "independent" of the issuer, as defined in the corporate governance rules of the New York Stock Exchange, subject to certain exemptions, including an exemption for employees who are not executive officers of the issuer if the employees are elected or named to the board of directors or audit committee pursuant to the issuer's governing law or documents, an employee collective bargaining or similar agreement or other home country legal or listing requirements. The German Co-Determination Act of 1976 (*Mitbestimmungsgesetz*) requires that the shareholders elect half of the members of the supervisory board of large German companies, such as Deutsche Bank, and that employees in Germany elect the other half. Employee-elected members are typically themselves employees or representatives of labor unions representing employees. Pursuant to law and practice, committees of the Supervisory Board are typically composed of both shareholder- and employee-elected members. Of the current members of the Audit Committee, four – Susanne Bleidt, Manja Eifert, Claudia Fieber and Gerlinde Siebert – are current employees of Deutsche Bank who have been elected as Supervisory Board members by the employees. None of them is an executive officer. Accordingly, their service on the Audit Committee is permissible pursuant to the exemption from the independence requirements provided for by paragraph (b)(1)(iv)(C) of the Rule. The Group does not believe the reliance on such exemption would materially adversely affect the ability of the Audit Committee to act independently and to satisfy the other requirements of the Rule.

Item 16E: Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The Management Board was authorized by the 2023 Annual General Meeting to buy, on or before April 30, 2028, shares of up to 10% of the share capital at the time the resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. At the 2023 Annual General Meeting, this corresponded to a volume of 204 million shares. During the period from the 2023 Annual General Meeting until the 2024 Annual General Meeting, 40.3 million shares were purchased for equity compensation purposes in the same period or for upcoming periods. Furthermore, 71.1 million shares were purchased for cancellation with the purpose of distributing capital to shareholders. Thereof, 45.5 million shares acquired as part of the share buyback program of € 450 million in 2023 were cancelled at the beginning of 2024. The remaining amount of 25.6 million shares relates to shares bought back until May 16, 2024 as part of the € 675 million share buyback program in 2024.

The 2024 Annual General Meeting on May 16, 2024, granted the Management Board the approval to buy, on or before April 30, 2029, shares of up to 10% of the share capital at the time the resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. At the 2024 Annual General Meeting, this corresponded to 199.5 million shares. This authorization replaced the authorization of the previous year. During the period from the 2024 Annual General Meeting until December 31, 2024, 20.9 million shares were purchased as part of the € 675 million share buyback program in 2024.

At December 31, 2024, the number of shares held in Treasury from buybacks totaled 49.6 million. This figure stems from a starting balance of 48.2 million shares at the beginning of 2024 which was reduced by 45.5 million shares after the cancellation of shares acquired in the 2023 share buyback program, plus 40.3 million shares purchased for equity compensation purposes, less 39.9 million shares which were used to fulfill delivery obligations under the share-based compensation for employees, plus 46.4 million shares acquired as part of the 2024 share buyback program for cancellation.

The following table sets forth the total gross number of Deutsche Bank's shares repurchased by the bank and its affiliated purchasers (pursuant to both activities described above), on a monthly basis in 2024, the average price paid per share (based on the gross shares repurchased), the number of shares that were purchased as part of publicly announcement share buyback programs, the average price paid for the purchases under such programs as well as the maximum number of shares that at that date could yet to be purchase under such programs.

Issuer Purchases of Equity Securities in 2024

Month	Total number of shares purchased[1]	Average price paid per share (in €)	Total number of shares purchased as part of publicly announced plans or programs[2]	Maximum Euro value of shares that may yet be purchased under the plans or program (€)
January	24,126,003	11.22	0	0
February	16,221,996	11.10	0	0
March	13,293,670	13.19	13,293,670	499,622,100
April	10,078,567	14.82	10,078,567	350,215,992
May	8,382,272	15.52	8,382,272	220,145,644
June	10,417,973	14.76	10,417,973	66,364,818
July	4,276,226	15.52	4,276,226	0
August	0	0.00	0	0
September	0	0.00	0	0
October	0	0.00	0	0
November	0	0.00	0	0
December	0	0.00	0	0
Total 2024	86,796,707	12.97	46,448,708	0

[1] A total of 40.3 million shares was purchased for equity compensation purchases, i.e. other than pursuant to a publicly announced plan. Thereof 17.5 million shares were purchased in open-market transactions and 22.9 million shares were acquired via the exercise of call options.
[2] Share Buyback Program 2024-1 was announced on March 1, 2024, and provided for the purchase of up to € 675 million in shares. The program started on March 4, 2024, and was completed on July 11, 2024. In this period 46,448,708 shares were acquired. The purchase price paid at the stock exchange was on average € 14.53 per share.

Item 16F: Change in Registrant's Certifying Accountant

Not applicable.

Item 16G: Corporate Governance

Deutsche Bank's common shares are listed on the New York Stock Exchange, as well as on all seven German stock exchanges. Set forth below is a description of the significant ways in which the corporate governance practices differ from those applicable to U.S. domestic companies under the New York Stock Exchange's listing standards as set forth in its Listed Company Manual (the "NYSE Manual").

The Legal Framework. Corporate governance principles for German stock corporations (*Aktiengesellschaften*) are set forth in the German Stock Corporation Act (*Aktiengesetz*), the German Co-Determination Act of 1976 (*Mitbestimmungsgesetz*) and the German Corporate Governance Code (*Deutscher Corporate Governance Kodex*, referred to as the Code).

The Two-Tier Board System of a German Stock Corporation. The German Stock Corporation Act provides for a clear separation of management and oversight functions. It therefore requires German stock corporations to have both a supervisory board (*Aufsichtsrat*) and a management board (*Vorstand*). These boards are separate; no individual may be a member of both. Both the members of the management board and the members of the supervisory board must exercise the standard of care of a diligent businessperson to the company. In complying with this standard of care they are required to take into account a broad range of considerations, including the interests of the company and others like those of its shareholders, employees and creditors.

The management board is responsible for managing the company and representing the company in its dealings with third parties. The management board is also required to ensure appropriate risk management within the corporation and to establish an internal monitoring system. The members of the management board, including its chairperson or speaker, are regarded as peers and share a collective responsibility for all management decisions.

The supervisory board appoints and removes the members of the management board. It also may appoint a chairperson (CEO) and one or more deputy chairpersons of the management board. Although it is not permitted to make management decisions, the supervisory board has comprehensive monitoring functions with respect to the activities of the management board, including advising the management board and participating in decisions of fundamental importance to the company. To ensure that these monitoring functions are carried out properly, the management board must, among other things, regularly report to the supervisory board with regard to current business operations and business planning, including any deviation of actual developments from concrete and material targets previously presented to the supervisory board. The supervisory board may also request special reports from the management board at any time. Transactions of fundamental importance to the company, such as major strategic decisions or other actions that may have a fundamental impact on the company's assets and liabilities, financial condition or results of operations, may be subject to the consent of the supervisory board. Pursuant to the bank's Articles of Association (*Satzung*), such transactions include the granting of general powers of attorney, granting of credits, including the acquisition of participations in other companies for which the German Banking Act (*Kreditwesengesetz*) requires approval by the supervisory board, as well as major acquisitions or disposals of real estate or other participations.

Pursuant to the German Co-Determination Act, Deutsche Bank's Supervisory Board consists of representatives elected by the shareholders and representatives elected by delegates of the employees in Germany. Based on the total number of Deutsche Bank employees in Germany these employees have the right to elect one-half of the total of twenty Supervisory Board members. The chairperson of the Supervisory Board of Deutsche Bank is a shareholder representative who has the deciding vote in the event of a tie.

This two-tier board system contrasts with the unitary board of directors envisaged by the relevant laws of all U.S. states and the New York Stock Exchange listing standards for U.S. companies.

German companies which have their shares listed on a stock exchange must each year issue a statement on the company's corporate governance (corporate governance statement) and either include such statement in their annual management report or publish it separately on their website.

The Recommendations of the Code. The Code was issued in 2002 by a commission composed of German corporate governance experts appointed by the German Federal Ministry of Justice in 2001. The Code was last amended in April 28, 2022 with effect as of June 27, 2022. It describes and summarizes the basic mandatory statutory corporate governance principles found in the provisions of German law. In addition, it contains supplemental recommendations and suggestions for standards on responsible corporate governance intended to reflect generally accepted best practice.

The Code is structured from a task perspective and addresses seven core areas of corporate governance. These are the tasks of (a) management and supervision, (b) appointment to the management board, (c) composition of the supervisory board, (d) supervisory board procedures, (e) conflicts of interest, (f) transparency and external reporting as well as (g) the remuneration of the management board and the supervisory board. The Code contains three types of provisions. First, the Code contains principles which reflect material legal requirements for responsible governance, and are used in the Code to inform investors and other stakeholders. The second type of provisions is recommendations. While these are not legally binding, Section 161 of the German Stock Corporation Act requires that any German exchange-listed company declare annually that the company complies with the recommendations of the Code or, if not, which recommendations the company does not comply with and the reasons for the non-compliance ("comply or explain"). The third type of Code provisions comprises suggestions which companies may choose not to comply with without disclosure.

In its last Declaration of Conformity of October 28, 2024, the Management Board and the Supervisory Board of Deutsche Bank stated that, since the last Declaration of Conformity issued on October 25, 2023, it has acted and will act in the future in conformity with the recommendations of the Code, with certain specified exceptions. The Declaration of Conformity is available on Deutsche Bank's internet website at www.db.com/ir/en/documents.htm.

Supervisory Board Committees. The supervisory board may form committees. Pursuant to the German Stock Corporation Act, any supervisory board committee must regularly report to the supervisory board.

The German Co-Determination Act requires that the supervisory board form a mediation committee to propose candidates for the management board in the event that the two-thirds majority of the members of the supervisory board needed to appoint members of the management board is not met.

Section 107 (4) of the German Stock Corporation Act also requires that companies of "public interest", including, among others, listed companies and credit institutions, establish an "audit committee" to deal with the supervision of accounting processes, the efficiency of the internal control system the risk management system and the internal audit system as well as with the annual auditing, in particular with the selection and the independence of the external auditor and the additional services rendered by the external auditor. The Code also recommends establishing a "nomination committee" comprised only of shareholder-elected supervisory board members to prepare the supervisory board's proposals for the election or appointment of new shareholder representatives to the supervisory board. In general, the Code recommends that the supervisory board shall form, depending on the specific circumstances of the enterprise and the number of supervisory board members, committees of members with relevant specialist expertise which can handle subjects, such as corporate strategy, compensation of the members of the management board, investments and financing.

Sections 25d (7) to (12) of the German Banking Act require, depending on the size and complexity of the respective credit institution, the establishment of supervisory board committees with specific tasks to be performed as follows: risk committee, audit committee, nomination committee (with tasks and composition requirements different from those set out in the Code) and compensation control committee. The Code's recommendation that the nomination committee shall only comprise shareholder representatives is not complied with by Deutsche Bank AG because of mandatory special rules set forth in the German Banking Act, which assign further tasks to the nomination committee in addition to the preparation of proposals for the appointment of new shareholder representatives to the supervisory board. These further tasks do not justify the exclusion of employee representatives from the nomination committee. Based on an earlier version of the Code, which was applicable until March 20, 2020, this non-compliance had to be disclosed and justified in the annual Declaration of Conformity. The Code, as amended, provides that credit institutions and insurance companies are exempt from recommendations of the Code which conflict with special rules or regulations applicable to them. However, the Code recommends that in the case of such conflicts, companies indicate in their annual corporate governance statement what recommendations of the Code were not applicable to them.

The Supervisory Board of Deutsche Bank has established a Chairman's Committee (*Präsidialausschuss*) which is inter alia responsible for conclusion, amendment and termination of employment and pension contracts with members of the Management Board, taking into account the responsibility of the Supervisory Board as a whole for the remuneration of the members of the Management Board, a Nomination Committee (*Nominierungsausschuss*), an Audit Committee (*Prüfungsausschuss*), a Risk Committee (*Risikoausschuss*), a Regulatory Oversight Committee (*Regulatory Oversight Ausschuss*), a Compensation Control Committee (*Vergütungskontrollausschuss*), a Strategy and Sustainability Committee (*Strategie- und Nachhaltigkeitsausschuss*), a Technology, Data and Innovation Committee (*Technologie-, Daten- und Innovationsausschuss*) and a Mediation Committee (*Vermittlungsausschuss*). The functions of a nominating/corporate governance committee and of a compensation committee required by the NYSE Manual for U.S. companies listed on the NYSE are therefore performed by the Supervisory Board or one of its committees, in particular the Chairman's Committee, the Compensation Control Committee and the Mediation Committee.

Independent Board Members. The NYSE Manual requires that a majority of the members of the board of directors of a NYSE listed U.S. company and each member of its nominating/corporate governance, compensation and audit committees be “independent” according to strict criteria and that the board of directors determines that such member has no material direct or indirect relationship with the company.

As a foreign private issuer, Deutsche Bank is not subject to these requirements. However, its audit committee must meet the more lenient independence requirement of Rule 10A-3 under the Securities Exchange Act of 1934. German corporate law does not require an affirmative independence determination, meaning that the Supervisory Board need not make affirmative findings that audit committee members are independent. However, the German Stock Corporation Act and the Code, as the case may be, contain several rules, recommendations and suggestions to ensure the supervisory board’s independent advice to, and supervision of, the management board. As noted above, no member of the management board may serve on the supervisory board (and vice versa). Supervisory board members will not be bound by directions or instructions from third parties. Any advisory, service or similar contract between a member of the supervisory board and the company is subject to the supervisory board’s approval. A similar requirement applies to loans granted by the company to a supervisory board member or other persons, such as certain members of a supervisory board member’s family. In addition, the German Stock Corporation Act prohibits a person who within the last two years was a member of the management board from becoming a member of the supervisory board of the same company unless he or she is elected upon the proposal of shareholders holding more than 25 % of the voting rights of the company.

The Code also recommends that each member of the supervisory board inform the supervisory board of any conflicts of interest. In the case of material conflicts of interest or ongoing conflicts, the Code recommends that the mandate of the Supervisory Board member shall end either as a result of such supervisory board member’s withdrawal or, failing which, based on his or her removal from office by the shareholders’ meeting. The Code further recommends that any conflicts of interest that have occurred be reported by the supervisory board at the annual general meeting, together with the action taken, and that potential conflicts of interest also be taken into account in the nomination process for the election of supervisory board members.

Audit Committee Procedures. Pursuant to the NYSE Manual the audit committee of a U.S. company listed on the NYSE must have a written charter addressing its purpose, an annual performance evaluation, and the review of an auditor’s report describing internal quality control issues and procedures and all relationships between the auditor and the company. The Audit Committee of Deutsche Bank operates under written terms of reference and reviews the efficiency of its activities regularly.

Disclosure of Corporate Governance Guidelines. Deutsche Bank discloses its Articles of Association, the Terms of Reference of its Management Board, its Supervisory Board, the Chairman’s Committee, the Audit Committee, the Risk Committee, the Regulatory Oversight Committee, the Compensation Control Committee, the Nomination Committee, the Strategy Committee and the Technology, Data and Innovation Committee, its Declaration of Conformity under the Code pursuant to Section 161 of the German Stock Corporation Act, the Corporate Governance Statement and other documents pertaining to its corporate governance on its internet website at www.db.com/ir/en/documents.htm.

Item 16H: Mine Safety Disclosure

Not applicable

Item 16I: Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

Item 16J: Insider Trading Policies

Deutsche Bank has adopted insider trading policies that govern the purchase, sale and other dispositions of the bank's securities by directors, senior management and employees that are reasonably designed to promote compliance with applicable insider trading laws, rules and regulations, and listing standards applicable to the registrant.

In particular, all staff, including members of the bank's Management Board, are subject to the bank's Personal Account Dealing Policy, as well as to the bank's Code of Conduct, which refers to such policy. An essential requirement of such policy is that such staff must pre-clear transactions in all relevant securities including shares and debt instruments issued by Deutsche Bank AG. Trading derivatives, including those related to securities of Deutsche Bank AG, is prohibited.

Trading shares of Deutsche Bank AG or of DWS Group GmbH & Co. KGaA, the bank's 79.49% owned, publicly traded subsidiary ("DWS"), and related financial instruments is additionally prohibited during "Restricted Periods" prior to the release of annual or quarterly earnings releases, with all staff being restricted from trading in the three days prior to the release of earnings, staff designated as "private" being restricted in the 30 days up to and including the release of earnings and staff designated as "permanent insiders" being restricted outside of a 30-day window following the release of earnings.

The Personal Account Dealing Policy is filed as Exhibit 11.1 hereto. An excerpt from the Code of Conduct is filed as Exhibit 11.2 hereto.

Item 16K: Cybersecurity

For information on Cybersecurity see "Combined Management Report: Risk Report: Information security" in the Annual Report 2024.

Disclosures Under Iran Threat Reduction and Syria Human Rights Act of 2012

Under Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) of the U.S. Securities Exchange Act of 1934, as amended, an issuer of securities registered under the Securities Exchange Act of 1934 is required to disclose in its periodic reports filed under the Securities Exchange Act of 1934 certain of its activities and those of its affiliates relating to Iran and to other persons sanctioned by the U.S. under programs relating to terrorism and proliferation of weapons of mass destruction that occurred during the period covered by the report. The bank describes below a number of potentially disclosable activities of Deutsche Bank AG and its affiliates. Disclosure is generally required regardless of whether the activities, transactions or dealings were conducted in compliance with applicable law. Deutsche Bank also reports transactions in which other Iranian persons or entities listed on OFAC sanctions lists were involved, whether or not they are directly or indirectly owned or controlled by the Iranian government.

Legacy Contractual Obligations Related to Guarantees and Letters of Credit. Prior to 2007, Deutsche Bank provided guarantees to a number of Iranian entities. In almost all of these cases, the bank issued counter-indemnities in support of guarantees issued by Iranian banks because the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. In 2007, the bank made a decision to discontinue issuing new guarantees to Iranian or Iran-related beneficiaries. Although the pre-existing guarantees stipulate that they must be either extended or honored if the bank receives such a demand and is legally not able to terminate these guarantees, the firm decided to reject any “extend or pay” demands under such guarantees. Even though the bank had exited, where possible, many of these guarantees, guarantees with an aggregate face amount of approximately € 8.1 million are still outstanding as of year-end 2024. The gross revenues from this business in 2024 which the bank received from non-Iranian parties were approximately € 27,000 and the net profit derived from these activities was less than this amount.

Deutsche Bank also has outstanding legacy guarantees in relation to a Syrian bank sanctioned by the United States under its non-proliferation program. The aggregate face amount of these legacy guarantees was approximately € 9.2 million as of December 31, 2024, the gross revenues received from non-Syrian parties for these guarantees were approximately € 15,000 in 2024 and the net profit derived from these activities was less than this amount. The bank intends to exit these guarantee arrangements.

Payments Executed. Deutsche Bank continues to severely restrict its policy on Iran and consequently the execution of payments relating to Iran. In 2024, no incoming or outgoing payments were executed on behalf of Iranian parties outside of Germany; with regards to the Iranian Embassy in Germany, see below.

Operations of Iranian Bank Branches and Subsidiaries in Germany. Several Iranian banks, including Bank Melli Iran, Bank Saderat, Bank Sepah, and Europäisch-Iranische Handelsbank, have branches or offices in Germany, even though their funds and other economic resources had been frozen earlier under European law. As part of the payment clearing system in Germany and other European countries, when these branches or offices needed to make payments in Germany or Europe to cover their day-to-day operations such as rent, taxes, insurance premiums and salaries for their remaining staff, or for any other kind of banking-related operations, fund transfers from these Iranian banks had been accepted through Target2 or in SEPA format.

In 2024, Deutsche Bank executed approximately € 3.1 million in (almost only in-coming) transfers through Target2 or SEPA across approximately 1,000 transactions and credited the relevant amounts to the non-Iranian clients. The gross revenues derived from these payments were approximately € 4,300.

The bank does not consider the execution of such transactions to be significant and expects to continue to execute such transactions in the future.

Maintaining of Accounts for Iranian Consulates and Embassies. In 2024, Iranian embassies and consulates in Germany held accounts with Deutsche Bank. The purpose of these accounts is the funding of day-to-day operational costs of the embassies and consulates, such as salaries, rent and electricity. In 2024, the total volume of outgoing payments from these accounts was approximately € 4.5 million which have been funded through € 8.8 million of incoming payments. From these activities, the bank derived gross revenues of approximately € 0.17 million and net profits which were less than this amount. The German government has requested that Deutsche Bank provide these services to enable the government of Iran to conduct its diplomatic relations and the bank intends to continue maintenance of such accounts.

Activities of Entities in Which Deutsche Bank Has Interests. Section 13(r) requires the Group to provide the specified disclosure with respect to Deutsche Bank and its “affiliates,” as defined in Exchange Act Rule 12b-2. Although the bank has minority equity interests in certain entities that could arguably result in these entities being deemed “affiliates,” it does not have the authority or the legal ability to acquire in every instance the information from these entities that would be necessary to determine whether they are engaged in any disclosable activities under Section 13(r). In some cases, legally independent entities are not permitted to disclose the details of their activities to the bank because of German privacy and data protection laws or the applicable banking laws and regulations. In such cases, voluntary disclosure of such details could violate such legal and/or regulatory requirements and subject the relevant entities to criminal prosecution or regulatory investigations.

PART III

Item 17: Financial Statements

Not applicable.

Item 18: Financial Statements

The financial statements of this Annual Report on Form 20-F consist of the consolidated financial statements including Notes 1 to 42 thereto, which are set forth as Part 2 of the Annual Report 2024, and, as described in Note 1 “Material accounting policies and critical accounting estimates” thereto under “Basis of accounting”, certain parts of the Management Report set forth as Part 1 of the Annual Report 2024.

The consolidated financial statements have been audited by EY GmbH & Co. KG Wirtschaftspruefungsgesellschaft, Eschborn, Germany - PCAOB ID: 1251, as described in their “Report of Independent Registered Public Accounting Firm” included in the Annual Report 2024.

Item 19: Exhibits

We have filed the following documents as exhibits to this document.

Exhibit number	Description of Exhibit
1.1	English translation of the Articles of Association of Deutsche Bank AG, furnished as Exhibit 99.6 to our Report on Form 6-K, dated January 30, 2025, and incorporated by reference herein.
2.1	The total amount of long-term debt securities of us or our subsidiaries authorized under any instrument does not exceed 10 percent of the total assets of our Group on a consolidated basis. We hereby agree to furnish to the Commission, upon its request, a copy of any instrument defining the rights of holders of long-term debt of us or of our subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.
2.2	Descriptions of securities registered under the Securities Exchange Act of 1934.
4.1	Equity Plan Rules 2020, furnished as Exhibit 4.5 to our 2019 Annual Report on Form 20-F and incorporated by reference herein.
4.2	Equity Plan Rules 2021, furnished as Exhibit 4.5 to our 2020 Annual Report on Form 20-F and incorporated by reference herein.
4.3	Equity Plan Rules 2022, furnished as Exhibit 4.6 to our 2021 Annual Report on Form 20-F and incorporated by reference herein.
4.4	Equity Plan Rules 2023, furnished as Exhibit 4.6 to our 2022 Annual Report on Form 20-F and incorporated by reference herein.
4.5	Equity Plan Rules 2024, furnished as Exhibit 4.6 to our 2023 Annual Report on Form 20-F and incorporated by reference herein.
4.6	Equity Plan Rules 2025.
4.7	Restricted Share Plan Rules 2021, furnished as Exhibit 4.10 to our 2020 Annual Report on Form 20-F and incorporated by reference herein.
4.8	Restricted Share Plan Rules 2022, furnished as Exhibit 4.9 to our 2021 Annual Report on Form 20-F and incorporated by reference herein.
4.9	Restricted Share Plan Rules 2023, furnished as Exhibit 4.10 to our 2022 Annual Report on Form 20-F and incorporated by reference herein.
4.10	Restricted Share Plan Rules 2024, furnished as Exhibit 4.11 to our 2023 Annual Report on Form 20-F and incorporated by reference herein.
4.11	Restricted Share Plan Rules 2025.
8.1	List of Subsidiaries.
11.1	Personal Account Dealing Policy.
11.2	Excerpts from Code of Conduct
12.1	Principal Executive Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
12.2	Principal Financial Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
13.1	Chief Executive Officer Certification Required by 18 U.S.C. Section 1350.
13.2	Chief Financial Officer Certification Required by 18 U.S.C. Section 1350.
15.1	Consent of EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft.
97.1	Compensation Recovery Policy for Deutsche Bank Management Board Members, furnished as Exhibit 97.1 to our 2023 Annual Report on Form 20-F and incorporated by reference herein.
97.2	Compensation Recovery Policy for Executive Officers, furnished as Exhibit 97.2 to our 2023 Annual Report on Form 20-F and incorporated by reference herein.
101.1	Interactive Data File.

Signatures

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: March 13, 2025

Deutsche Bank Aktiengesellschaft

/s/ CHRISTIAN SEWING

Christian Sewing
Chairman of the Management Board
Chief Executive Officer

/s/ JAMES VON MOLTKE

James von Moltke
Member of the Management Board
President and Chief Financial Officer

Deutsche Bank

Annual Report 2024

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Operating and financial review

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes. Deutsche Bank's operating and financial review includes qualitative and quantitative disclosures on segment results of operations and entity-wide disclosures on net revenue components as required by International Financial Reporting Standard (IFRS) 8, "Operating Segments". For additional business segment disclosure under IFRS 8 please refer to Note 4 "Business Segments and related information" of the consolidated financial statements.

Executive summary

Global economy

Economic growth (in %)[1]	2024[2]	2023[3]	Main driver
Global Economy	**3.2**	3.2	The global economy saw robust growth in 2024. However, growth momentum varied across regions. While economic growth in Europe was weak, the U.S. economy grew strongly. Also, Asia including India expanded dynamically. Due to lower inflation, many central banks began lowering interest rates
Of which: Developed countries	1.5	1.6	Economic momentum in developed economies varied regionally. While economic growth in the U.S. expanded noticeably, momentum in Europe was comparatively weak, and even weaker in Japan. In Europe and the U.S., central banks began to loosen their monetary policy. In Japan, on the other hand, there was a slight tightening
Emerging markets	4.3	4.3	Emerging markets grew robustly, led by strong performance in Asia. Growth in European emerging markets, however, was subdued, reflecting the ongoing impact of geopolitical spillovers and weakness in some key industrialized trading partners. In many regions, moderately lower inflation provided scope for central banks to reduce key interest rates
Eurozone Economy	**0.7**	0.4	Growth has been largely export-led. Despite lower inflation and rising wages, a real income-driven consumption recovery has been slow to materialize. Weakening of inflation enabled the ECB to start an interest rate cut cycle
Of which: German economy	(0.2)	(0.3)	The German economy shrank slightly for another year, as both domestic and foreign economic drivers remained weak. Private consumption stagnated despite easing inflation and strong wage growth. The weakening of the competitive position burdened the manufacturing industry and thus foreign trade. The labor market showed signs of slowing down
U.S. Economy	**2.8**	2.9	The U.S. economy expanded strongly, despite the restrictive monetary policy. Inflation weakened and the labor market came more into balance, so that the Federal Reserve was able to slowly begin key interest rate cuts in the second half of the year
Japanese Economy	**(0.2)**	1.5	The weak export demand noticeably dampened the Japanese economy. Domestic economic momentum could not offset the headwinds. As a result of the higher inflation, the Bank of Japan began raising key interest rates
Asian Economy[4]	**5.2**	5.3	The Asian economic area benefited from both China's and India's growth contributions, as well as from the positive development in other economies of the region. The weakening of inflation supported private household consumption
Of which: Chinese Economy	5.0	5.4	China's economy faced headwinds from a weak property sector, but benefited from stronger fiscal support in the second half of the year. Weaker trading partners limited foreign trade momentum. The Peoples Bank of China loosened monetary policy through various measures

[1] Annual Real GDP Growth (% YoY). Sources: National Authorities unless stated otherwise
[2] Sources: Deutsche Bank Research
[3] Some economic data for 2023 were revised by public statistics authorities due to the economic effects of the pandemic. As a result, this data may differ from that previously published
[4] Includes China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, South Korea, Taiwan, Thailand and Vietnam; excludes Japan

Banking Industry

					Dec 31, 2024
Growth year-over-year (in %)	Corporate Lending	Retail Lending	Corporate Deposits	Retail Deposits	Main driver
Eurozone	0.6	0.3	3.5	4.2	Following a mild contraction at the beginning of 2024, lending to both companies and households recovered slightly in the last few months, in line with moderately declining interest rates. Both corporate and retail deposits picked up reasonable momentum during the course of the year
Of which: Germany	0.1	0.8	3.6	5.7	Contrary to the EU as a whole, corporate lending in Germany stagnated in 2024, mainly as a result of the weak macro economy. During the year, retail loan growth fell to the slowest level since 2010, but has since bottomed out. Asset quality has been deteriorating, with non-performing loans rising in line with insolvency numbers. There have been signs of a modest turnaround in credit demand in recent months, according to the bank lending survey. The expansion in deposits on the other hand accelerated significantly, both with companies and households
U.S.	1.3	2.0	2.5[1]	2.5[1]	Retail lending slowed in the course of the year as a result of considerably higher interest rates, while corporate credit continued to expand slightly. Likewise, higher rates contributed to a moderate recovery in total deposits following two years of contraction
China	9.1	3.4	(0.4)	10.4	Lending to households lost further momentum, with year on year growth down to the weakest level on record (since 2007). Corporate lending slowed too, yet remained more robust. Deposits developed in the opposite direction: inflows from private customers slowed but stayed relatively strong, whereas deposits from businesses shrank

[1] Total U.S. deposits as segment breakdown is not available

The global Origination & Advisory industry fee pool in 2024 rose 25% to exceed € 80 billion, making this the second highest percentage increase since 2021. While the size of the growth was significant, an increase was expected following the material fee pool decline seen over the previous two years – 2022 fell 34% from the 2021 peak, 2023 down a further 13%. The Mergers & Acquisitions fee pool in 2024 exceeded € 30 billion, an increase of 10% compared to 2023, and 30% higher than the pre-COVID average. In contrast, while equity capital markets experienced significant year on year growth, the fee pool is still below pre-COVID levels and further growth is anticipated in 2025, especially in the initial public offerings market. Leverage debt capital markets issuances in 2024 reached record levels as high costs of credit eased somewhat and sponsors returned to the market. The investment grade debt market equaled record issuance levels from 2020 and was up 30% from 2023. In Fixed Income, revenue pools remained at elevated levels and Deutsche Bank's assessment is that an unusually strong fourth quarter may have pushed levels even higher than in 2023. Foreign exchange activity is expected to be broadly flat across the ten most traded currencies globally, with Rates revenue pools declining from strong levels in the prior year driven by several factors, including the continued uncertainty around changes in the global interest rate environment. Emerging Markets revenue pools looks to have increased in 2024, while within Credit performance is also expected to be higher than the prior year, as the favorable environment for secondary trading with the general trend of tightening spreads continued and client demand in financing remained strong.

Deutsche Bank performance

Deutsche Bank's net profit was € 4.5 billion in 2024, down from € 6.5 billion in 2023. This year on year development reflected both litigation as well as restructuring and severance charges in 2024 and the non-recurrence of € 1.0 billion in Deferred Tax Assets (DTA) valuation adjustments which positively impacted 2023. Provision for credit losses was € 1.8 billion in 2024, up from € 1.5 billion in 2023, or 38 basis points of average loans, in line with the guidance the bank provided after the third quarter of 2024. Deutsche Bank announced plans for € 2.1 billion in further capital distributions to shareholders in 2025: The bank has received supervisory authorization for further share repurchases of € 750 million in 2025 and plans to propose 2024 dividends of € 1.3 billion, or € 0.68 per share, at its Annual General Meeting in May 2025, up 50% from € 0.45 per share for 2023. These measures would increase cumulative capital distributions to shareholders to € 5.4 billion since 2022, in excess of the € 5 billion goal in the bank's transformation program launched in 2019. The bank reaffirms its ambition to exceed its capital distribution goal of € 8 billion in respect of the financial years 2021-25, to be paid in 2022-26.

Profit before tax was € 6.7 billion for the full year 2024, down 16% compared to 2023. Revenues grew by 1% year on year to € 31.5 billion. Noninterest expenses were € 23.0 billion, up 6%, and included € 2.6 billion in nonoperating costs relating to litigation as well as restructuring and severance charges. Adjusted costs, which exclude nonoperating costs, were down 1% to € 20.4 billion. The cost/income ratio was 73%, compared to 70% in 2023. Post-tax return on average shareholders' equity (RoE) was 5.5%, compared to 9.1% in the prior year. Post-tax return on average tangible shareholders' equity (RoTE) was 6.2% in 2024, compared to 10.2% in 2023. The year on year development in both ratios reflected both the litigation as well as restructuring and severance charges in 2024 and the non-recurrence of the DTA valuation adjustments which positively impacted 2023.

Key Performance Indicators

Financial targets	Financial targets and capital objectives 2025	Status end of 2024	Status end of 2023
Post-tax return on average tangible shareholders' equity[1]	Above 10%	6.2%	10.2%
Compound annual growth rate of revenues from 2021[2]	5.5% to 6.5%	7.2%	10.5%
Cost/income ratio[3]	Below 62.5%[4]	72.9%	69.6%
Capital objectives			
Common Equity Tier 1 capital ratio[5]	~ 13%[6]	13.8%	13.7%
Total payout ratio[7]	50%[8]	27%	22%

[1] Based on profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report
[2] Twelve months period until the end of the respective reporting period compared to full year 2021
[3] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income
[4] Target ratio until December 31, 2024; reset at the beginning of 2025 to below 65%
[5] Further details on the calculation of this ratio are provided in the Risk Report in this report
[6] Target ratio while maintaining a buffer of 200 basis points above the bank's expected maximum distributable amount (MDA) threshold
[7] Distributions in form of common share dividend paid and share buybacks for cancellation executed in the reporting period in relation to prior period net income attributable to Deutsche Bank shareholders
[8] In respect of financial year 2024 onwards

Net revenues were € 31.5 billion in 2024, up 1% year on year. Net commissions and fee income grew 13% to € 10.4 billion, while net interest income in key segments of the banking book remained resilient, reflecting higher deposit volumes and loan margin expansion. Compound annual revenue growth since 2021 was 7.2% through the end of 2024, well above the bank's target range of 5.5% to 6.5% for the period from 2021 to 2025.

Provision for credit losses was € 1.8 billion in 2024, or 38 basis points of average loans, in line with the guidance the bank provided after the third quarter of 2024, reflecting specific headwinds including cyclical events in the Commercial Real Estate sector, certain larger corporate credit events and temporary effects following the Postbank integration. In 2023, provision for credit losses was € 1.5 billion, or 31 basis points of average loans.

Noninterest expenses were € 23.0 billion in 2024, up 6% year on year. This development was primarily driven by an increase in nonoperating costs to € 2.6 billion, up from € 1.1 billion in 2023, relating to litigation as well as restructuring and severance charges. Adjusted costs were € 20.4 billion, down 1% compared to the prior year. Higher compensation and benefit expenses were largely offset by lower technology and professional services costs during the year. In 2025, the bank expects to reduce noninterest expenses. Nonoperating costs in 2025 are expected to decrease as litigation as well as restructuring and severance charges are expected to normalize, while adjusted costs are expected to remain essentially flat compared to 2024, creating significant operating leverage. The bank is on track to achieve its target of € 2.5 billion euros in cost savings from its operational efficiency program, which offset additional investments to support further business growth and increased returns to shareholders beyond 2025. Reflecting both operational efficiencies and additional investments, the bank now targets a cost/income ratio of below 65% in 2025, slightly above its original target of below 62.5%.

Income tax expense was € 2.2 billion in 2024, compared to an income tax expense of € 1.5 billion in the prior year. The effective tax rate in 2024 of 33% reflected the above-mentioned costs relating to litigation charges and the non-occurrence of € 1.0 billion DTA valuation adjustments, which positively impacted 2023.

Common Equity Tier 1 capital ratio was 13.8% at the end of 2024, slightly up from 13.7% at the end of 2023. Organic capital generation offset the combined impacts of dividends, share buybacks and business growth during the year. Capital efficiency measures, which form part of Deutsche Bank's accelerated execution of its *Global Hausbank* strategy, delivered RWA reductions of € 24 billion during 2024, close to the bank's end-2025 target of € 25 to € 30 billion.

Deutsche Bank's financial and regulatory targets are based on the financial results prepared in accordance with IFRS as issued by the IASB and endorsed by the EU. For further details, please refer to the section 'Basis of preparation/impact of changes in accounting principles' in this report.

Adjusted costs and Post-tax return on average tangible shareholders' equity are Non-GAAP financial measures. Please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this Annual Report for the definitions of such measures and reconciliations to the IFRS measures on which they are based.

Deutsche Bank Group

Deutsche Bank's Organization

Headquartered in Frankfurt am Main, Germany, Deutsche Bank is the largest bank in Germany and one of the largest financial institutions in the world, as measured by total assets of € 1,391 billion as of December 31, 2024. As of that date, the bank had 89,753 full-time equivalent internal employees and operated in 56 countries with 1,307 branches, of which 67% were located in Germany.

Deutsche Bank Value Chain

Deutsche Bank's business model considers impacts, risks and opportunities in relation to Environmental, Social and Governance ("ESG") matters along the bank's value chain, which includes its upstream value chain, its own operations and its downstream value chain.

The bank's upstream value chain includes capital providers such as the bank's shareholders, bond holders and depositors, as well as suppliers of goods and services such as providers of banking services, data and technology, consultants and advisors, workforce services and facility management, amongst others.

Deutsche Bank's own operations are driven by the bank's business divisions and infrastructure functions operating in legal entities and branches across geographic locations, as described below in "Deutsche Bank's organizational model". Own operations also include human resources and the employee representation through the worker's council.

Deutsche Bank's downstream value chain includes retail, corporate and institutional clients of the bank's segments and is further detailed below in "Deutsche Bank's organizational model".

In addition, partnerships such as joint ventures, fintech cooperations, cross-industry alliances and distribution channels, as well as resources and the financing, geographical, geopolitical and regulatory environments have an impact on the entire value chain in which the bank operates.

Intangible resources

The most important intangible resources for Deutsche Bank 's business model from an economic point of view are its customer relationships and its workforce. Other important intangible resources are the bank 's brand name and its data and software. If required under IFRS, some of these important intangible resources are recognized in the balance sheet as described in the financial statements.

Deutsche Bank's organizational model

As of December 31, 2024, the bank was organized into the following segments:

- Corporate Bank
- Investment Bank
- Private Bank
- Asset Management
- Corporate & Other

Deutsche Bank has a country and regional organizational layer to facilitate a consistent implementation of global strategies.

The bank has operations or dealings with existing and potential customers in most countries in the world. These operations and dealings include working through:

- Subsidiaries and branches
- Representative offices
- One or more representatives assigned to serve customers

Capital expenditures or divestitures related to the divisions are included in the respective corporate division overview.

Management Structure

The Management Board has structured the Group as a matrix organization, comprising business segments and infrastructure functions operating in legal entities and branches across geographic locations.

The Management Board is responsible for the management of the company in accordance with the law, the Articles of Association and the Terms of Reference for the Management Board with the objective of creating sustainable value in the interests of the company. It considers the interests of shareholders, employees and other company-related stakeholders. The Management Board manages Deutsche Bank Group in accordance with uniform guidelines; it exercises general control over all entities and branches.

The Management Board decides on all matters prescribed by law and the Articles of Association and ensures compliance with the legal requirements and internal guidelines (compliance) and also takes the necessary measures to ensure that adequate internal guidelines are developed and implemented. The Management Board's responsibilities include the bank’s strategic management and direction, the allocation of resources, financial accounting and reporting, control and risk management, as well as corporate control and a properly functioning business organization. The members of the Management Board are collectively responsible for managing the bank’s business.

The allocation of functional responsibilities to the individual members of the Management Board is described in its Business Allocation Plan, which sets the framework for the delegation of responsibilities to senior management below the Management Board. The Management Board endorses individual accountability of senior position holders as opposed to joint decision-taking in committees. At the same time, the Management Board recognizes the importance of having comprehensive and robust information across all businesses in order to take well informed decisions. Governance fora are established across the bank with the purpose of providing the necessary information to support the accountable individuals in their decision-making process.

Corporate Bank

Corporate Division Overview

Corporate Bank is primarily focused on serving corporate clients, including the German “Mittelstand”, larger and smaller sized commercial and business banking clients in Germany as well as multinational companies. The division also provides financial institutions with certain transaction banking services. Corporate Bank reports revenues based on three client categories: Corporate Treasury Services, Institutional Client Services and Business Banking.

There have been no significant capital expenditures or divestitures since January 1, 2022.

Products and Services

Corporate Bank is a global provider of risk management solutions, cash management, lending, trade finance, trust and agency services as well as securities services. Cash management services include integrated payments and FX solutions. Trade finance and lending offering spans from documentary and guarantee business to structured trade finance and lending. Trust and agency services cover depository receipts, corporate trust and document custody. Focusing on the finance departments of corporate and commercial clients and financial institutions in Germany and across the globe, its holistic expertise and global network allows the bank to offer integrated solutions.

In addition to Corporate Bank’s product suite, coverage teams provide clients with access to the expertise of Investment Bank.

Distribution Channels and Marketing

The corporate coverage function of Corporate Bank focuses on international mid and large corporate clients and is organized into three units: Global Coverage, MidCorps Coverage and Risk Management Solutions. Coverage includes multi-product generalists covering headquarter level and subsidiaries via global, regional and local coverage teams for multinational companies. MidCorps Coverage includes multi-product generalists with a special focus to medium sized enterprises. Risk Management Solutions includes Foreign Exchange, Emerging Markets and Rates product specialists. This unit is managed regionally in Asia Pacific Middle East & Africa, Americas and Europe to ensure close connectivity to clients.

Corporate clients are served out of all three of the Corporate Bank’s client categories. Corporate Treasury Services covers mid and large corporate clients across two brands, Deutsche Bank and Postbank, and offers the whole range of solutions across cash, trade financing, lending and risk management for the corporate treasurer. Institutional Client Services comprises of Cash Management for Institutional clients, Trust and Agency Services, as well as Securities Services. Business Banking covers small corporates and entrepreneur clients and offers a largely standardized product suite and selected contextual-banking partner offerings (e.g., accounting solutions).

Investment Bank

Corporate Division Overview

Investment Bank combines Deutsche Bank's Fixed Income & Currencies and Origination & Advisory businesses, as well as Deutsche Bank Research. The Investment Bank focuses on its traditional strengths in these markets, bringing together wholesale banking expertise across risk management, sales and trading, investment banking and infrastructure. This enables the Investment Bank to align resourcing and capital across its client and product perimeter to effectively support the bank's strategic goals.

In April 2023, Deutsche Bank announced that it reached an agreement on an all-cash offer for the acquisition of Numis Corporation Plc ("Numis"). On October 13, 2023, Deutsche Bank completed the transaction and acquired a 100% interest in Numis for a cash purchase price of GBP 397 million. After the initial purchase price allocation, a goodwill of € 233 million related to the transaction was identified. Deutsche Bank assigned the identified goodwill to the Investment Bank cash-generating unit (CGU). Given the value of the Investment Bank CGU, the goodwill was considered impaired and written off in the fourth quarter of 2023.

There have been no significant divestitures since January 1, 2022.

Products and Services

Fixed Income & Currencies is split into two sub-categories: "Fixed Income & Currencies: Financing", the Financing business, which provides comprehensive, customized financing solutions across industries and asset classes, and "Fixed Income & Currencies: Ex-Financing", which brings together institutional sales, trading and structuring expertise across Foreign Exchange, Rates, Emerging Markets and Credit Trading. The Fixed Income & Currencies business operates globally and provides both corporate and institutional clients liquidity, market making services and a range of specialized risk management solutions across a broad range of Fixed Income & Currencies products. The application of technology and continued innovation of transaction lifecycle processes is enabling Deutsche Bank to increase automation/electronification in order to respond to client and regulatory requirements.

Origination & Advisory is responsible for the division's Debt Origination business, Mergers and Acquisitions, and a focused Equity Advisory and Origination platform. It is comprised of regional and industry-focused coverage teams, co-led from the bank's hubs in Europe, the U.S. and Asia Pacific. This facilitates the delivery of a range of financial products and services to the bank's corporate clients.

Distribution Channels and Marketing

Coverage of the Investment Bank's clients is provided principally by three groups working in conjunction with each other: The Institutional Client Group, which houses the debt sales team, Investment Banking Coverage within Origination & Advisory and Risk Management Solutions in Corporate Bank, which covers capital markets and treasury solutions. The close cooperation between these groups helps to create enhanced synergies leading to increased cross selling of products/solutions to clients.

Private Bank

Corporate Division Overview

Private Bank serves personal and private clients, wealthy individuals, entrepreneurs and families. The international businesses also focus on commercial clients in selected markets. Private Bank is organized along the client sectors Wealth Management & Private Banking and Personal Banking.

This customer-focused approach reflects the aim to serve clients in a more targeted and effective way across the Private Bank. Wealth Management & Private Banking combines the coverage of private banking, high net-worth and ultra-high net-worth clients, as well as business clients in selected international businesses. The client sector Personal Banking includes retail and affluent customers as well as commercial banking clients in Italy and Spain (i.e., all small business clients and small sized corporate clients that are not covered as part of the Wealth Management & Private Banking client sector).

In August 2021, Deutsche Bank SpA signed an agreement to sell its Deutsche Bank Financial Advisors business in Italy to Zurich Insurance Group (Zurich Italy). The transaction was closed after regulatory approval on October 17, 2022.

There have been no significant capital expenditures since January 1, 2022.

Products and Services

Private Bank's product range includes payment and account services, credit and deposit products as well as investment advice. These offerings include a range of ESG products, which enable clients to access ESG compliant lending and investment products in line with sustainability related values and according to specified ESG strategies, scores and exclusionary criteria.

Personal Banking Germany pursues a differentiated, customer-focused approach with two strong and complementary main brands: Deutsche Bank and Postbank. The Deutsche Bank brand focuses on providing its private customers with banking and financial products and services that include sophisticated and individual advisory solutions. The focus of the Postbank brand is on providing its retail customers with standard products and daily retail banking services supported by direct banking capabilities. In cooperation with Deutsche Post DHL AG, the retail bank in Germany also offers postal and parcel services in the Postbank brand branches. In international markets of Italy, Spain, Belgium and India, the bank provides retail and affluent customers with daily banking services as well as sophisticated investment advisory solutions.

Wealth Management & Private Banking offers its private banking, high-net-worth and ultra-high-net-worth clients globally, bespoke and sophisticated services in planning, managing and investing wealth, financing personal and business interests and servicing institutional and corporate needs.

Distribution Channels and Marketing

Private Bank pursues an omni-channel approach and customers can flexibly choose between different possibilities to access services and products.

The distribution channels include branch networks, supported by advisory and customer call centers, self-service terminals as well as digital offerings including online and mobile banking. Private Bank also has collaborations with self-employed financial advisors and other sales and cooperation partners, including various cooperations with Business-to-Business-to-Consumer partners in Germany. For the Wealth Management & Private Banking client category, the Private Bank has a distinct client coverage team approach with relationship and investment managers supported by client service executives assisting clients with wealth management services and open-architecture products. In addition, in Germany, Deutsche Oppenheim Family Offices AG provides family office services, discretionary funds and advisory solutions.

The expansion of digital capabilities remains a strong focus across the businesses as a significant change in client behavior towards digital channels is observed. The Private Bank will continue to optimize the omni-channel mix in the future in order to provide customers with the most convenient access to products and services.

Asset Management

Corporate Division Overview

With € 1.0 trillion of assets under management as of December 31, 2024, the Asset Management division, which operates under the brand DWS, aspires to be a leading asset manager. DWS serves a diverse client base of retail and institutional investors worldwide, with a strong presence in the bank's home market in Germany. These clients include large government institutions, corporations and foundations as well as individual investors. As a regulated asset manager, DWS acts as a fiduciary for clients and is conscious of its societal impact. Responsible investing has been an important part of DWS's heritage for more than twenty years, and it is committed to act and invest in its clients' best interest.

Deutsche Bank retains 79.49% ownership interest in DWS, and asset management remains a core business for the Group. The shares of DWS are listed on the Frankfurt stock exchange.

There have been no significant capital expenditures since January 1, 2022.

Products and Services

DWS offers individuals and institutions access to investment capabilities across all major asset classes in active equity, fixed income, cash, multi asset and systematic and quantitative investments as well as passive investments including Xtrackers range and alternative investments. Alternative investments include real estate, infrastructure, liquid real assets and sustainable investments. In addition, DWS's solution strategies are targeted to client needs that cannot be addressed by traditional asset classes alone. Such services include insurance and pension solutions, asset-liability management, portfolio management solutions and asset allocation advisory.

Distribution Channels and Marketing

DWS product offerings are managed by a global investment platform and distributed across EMEA, the Americas and Asia Pacific through a global distribution network. DWS also leverages third-party distribution channels, including other divisions of Deutsche Bank Group.

Infrastructure

The Infrastructure functions perform control and service activities for the businesses, including tasks relating to Group-wide, cross-divisional resource-planning, steering and control, as well as tasks relating to risk, liquidity and capital management.

The Infrastructure functions are organized into the following areas of responsibility linked to a dedicated member of the Management Board:

- Chief Executive Office
- Chief Financial Office
- Chief Risk Office
- Chief Operating Office
- Compliance & Anti-Financial Crime
- Legal & Group Governance
- Technology, Data and Innovation

Infrastructure also includes Communications & Corporate Social Responsibility, Chief Sustainability Office, Group Audit, Global Procurement, Global Real Estate, Human Resources and Investor Relations.

In the first quarter of 2023, the bank introduced a Driver-Based Cost Management methodology for the allocation of costs originated in respective infrastructure functions which aims to provide transparency over the drivers of Infrastructure costs and links costs more closely to service consumption by segments. During 2023, costs relating to Infrastructure functions were allocated using an actuals to plan approach, with the exception of technology development costs which were charged to the divisions based on actual expenditures. Beginning 2024, all infrastructure costs were charged to divisions based on actual costs and service consumption in support of the bank's continued focus on cost discipline.

Significant capital expenditures and divestitures [Initial updates included]

Information on each corporate division's significant capital expenditures and divestitures for the last three financial years has been included in the above descriptions of the corporate divisions.

Since January 1, 2022, there have been no public takeover offers by third parties with respect to Deutsche Bank's shares.

Results of operations

Consolidated results of operations

The following discussion and analysis should be read in conjunction with the consolidated financial statements.

Condensed consolidated statement of income

in € m.				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
(unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net interest income	15,161	16,122	13,983	(961)	(6)	2,139	15
Provision for credit losses	1,830	1,505	1,226	325	22	280	23
Net interest income after provision for credit losses	**13,331**	14,617	12,757	(1,286)	(9)	1,860	15
Net commissions and fee income[1]	10,372	9,206	9,838	1,166	13	(632)	(6)
Net gains (losses) on financial assets/liabilities at fair value through profit or loss[1]	5,655	5,575	2,962	81	1	2,613	88
Net gains (losses) on financial assets at fair value through other comprehensive income	48	(0)	(216)	49	N/M	216	(100)
Net gains (losses) on financial assets at amortized cost	(11)	(96)	(2)	85	(89)	(94)	N/M
Net income (loss) from equity method investments	12	(38)	152	49	N/M	(190)	N/M
Other income (loss)	267	387	346	(120)	(31)	40	12
Total noninterest income	**16,344**	15,033	13,080	1,310	9	1,953	15
Memo: Total net revenues[2]	**31,504**	31,155	27,063	349	1	4,092	15
Compensation and benefits	11,731	11,131	10,712	601	5	418	4
General and administrative expenses	11,243	10,112	9,728	1,131	11	384	4
Impairment of goodwill and other intangible assets	0	233	68	(233)	N/M	165	N/M
Restructuring activities	(3)	220	(118)	(223)	N/M	338	N/M
Total noninterest expenses	**22,971**	21,695	20,390	1,276	6	1,305	6
Profit (loss) before tax	**6,703**	7,955	5,447	(1,251)	(16)	2,508	46
Income tax expense (benefit)	2,223	1,503	(107)	719	48	1,610	N/M
Profit (loss)	**4,481**	6,452	5,554	(1,971)	(31)	898	16
Profit (loss) attributable to noncontrolling interests	138	119	134	19	16	(15)	(11)
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components	4,342	6,332	5,420	(1,990)	(31)	913	17
Profit (loss) attributable to additional equity components	668	560	500	108	19	60	12
Profit (loss) attributable to Deutsche Bank shareholders	3,674	5,772	4,919	(2,098)	(36)	853	17

N/M – Not meaningful

[1] For further details please refer to Note 1 “Material accounting policies and critical accounting estimates” of this report

[2] Total net revenues defined as net interest income before provision for credit losses plus noninterest income

Net interest income

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	 in %	2023 increase (decrease) from 2022 in € m.	 in %
Total interest and similar income	48,996	43,546	24,449	5,449	13	19,097	78
Total interest expenses	33,835	27,424	10,466	6,411	23	16,958	162
Net interest income	**15,161**	16,122	13,983	(961)	(6)	2,139	15
Average interest-earning assets[1]	1,001,695	977,624	987,124	24,071	2	(9,500)	(1)
Average interest-bearing liabilities[1]	797,184	735,956	727,265	61,228	8	8,691	1
Gross interest yield[2]	4.88%	4.44%	2.33%	0.44ppt	10	2.11ppt	91
Gross interest rate paid[3]	4.24%	3.71%	1.24%	0.53ppt	14	2.47ppt	199
Net interest spread[4]	0.65%	0.73%	1.09%	(0.08)ppt	(11)	(0.36)ppt	(33)
Net interest margin[5]	1.51%	1.65%	1.42%	(0.14)ppt	(8)	0.23ppt	16

ppt – Percentage points
[1] Average balances for the year calculated based on month-end balances
[2] Gross interest yield as the average interest rate earned on average interest-earning assets
[3] Gross interest rate paid as the average interest rate paid on average interest-bearing liabilities
[4] Net interest spread as the difference between the average interest rate earned on average interest-earning assets and the average interest rate paid on average interest-bearing liabilities
[5] Net interest margin as net interest income as a percentage of average interest-earning assets

2024

Net interest income was € 15.2 billion in 2024, down 6% compared to 2023. The decrease of € 1.0 billion was driven by higher interest paid on deposits and partly offset by higher interest revenues. Net interest income included interest expenses of € 144 million under the Targeted Long-Term Refinancing Operation III (TLTRO III) program in 2024, whereas 2023 included interest expenses of € 741 million under this program. Overall, the bank's net interest margin was 1.51 % in 2024, up from 1.65% in 2023.

2023

Net interest income was € 16.1 billion in 2023, up 15% compared to 2022. The increase of € 2.1 billion was driven by gains on portfolio hedges of interest rate risk, where fair-value hedge accounting cannot be applied under IFRS as issued by the IASB. Net interest income included interest expenses of € 741 million under the Targeted Long-Term Refinancing Operation III (TLTRO III) program in 2023, whereas 2022 included interest income of € 211 million under this program. Overall, the bank's net interest margin was 1.65% in 2023, up from 1.42% in 2022.

Net gains (losses) on financial assets/liabilities at fair value through profit or loss

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	 in %	2023 increase (decrease) from 2022 in € m.	 in %
Trading income	5,563	5,506	2,745	56	1	2,761	101
Net gains (losses) on non-trading financial assets mandatory at fair value through profit or loss	(65)	217	(61)	(282)	N/M	278	N/M
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	158	(148)	277	306	N/M	(426)	N/M
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	5,655	5,575	2,962	81	1	2,613	88

N/M – Not meaningful

2024

Net gains on financial assets/liabilities at fair value through profit or loss amounted to € 5.7 billion in 2024, compared to € 5.6 billion in 2023, reflecting an increase of € 81 million, or 1%. This increase was primarily driven by valuation adjustments primarily on guaranteed funds in Asset Management, which had a corresponding offset in other income. Corporate & Other also recorded an increase mainly due to higher interest rate hedges. These gains are partly offset by changes in the market valuation of derivatives in the Investment Bank.

2023

Net gains on financial assets/liabilities at fair value through profit or loss were € 5.6 billion in 2023, compared to € 3.0 billion in 2022. The increase of € 2.6 billion, or 88% was driven by positive impacts from interest rate hedges in Corporate & Other and an increase in Asset Management from valuation adjustments on guaranteed funds, which had a corresponding offset in other income. The Investment Bank benefited from the non-recurrence of prior year losses on loan commitments and hedge activities in 2023. These drivers were partly offset by decreases in the Private Bank, mainly due to lower mark-to-market impacts from hedge activities, which had a partial offsetting effect in other income and revaluation losses in the Corporate Bank compared to gains in the prior year.

Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss

The bank's trading and risk management activities include interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments at fair value through profit or loss (i.e., coupon and dividend income) and the costs of funding net trading positions are part of net interest income. The bank's trading activities can periodically shift income between net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies.

In order to provide a more business-focused discussion, the following table presents net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss by corporate division.

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	 in %	2023 increase (decrease) from 2022 in € m.	 in %
Net interest income	15,161	16,122	13,983	(961)	(6)	2,139	15
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	5,655	5,575	2,962	81	1	2,613	88
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	**20,816**	21,697	16,945	(881)	(4)	4,752	28
Breakdown by corporate division:[1]							
Corporate Bank	4,919	5,067	3,720	(147)	(3)	1,346	36
Investment Bank	8,395	8,102	8,265	293	4	(163)	(2)
Private Bank	5,998	6,377	6,610	(379)	(6)	(233)	(4)
Asset Management	269	(11)	(250)	280	N/M	239	(95)
Corporate & Other	1,235	2,163	(1,401)	(928)	(43)	3,563	N/M
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	**20,816**	21,697	16,945	(881)	(4)	4,752	28

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] This breakdown reflects net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss; for a discussion of the corporate divisions' total revenues by product please refer to Note 4 "Business Segments and related information" of this report

2024

Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss amounted to € 20.8 billion in 2024, compared to € 21.7 billion in 2023, reflecting a decrease of € 0.9 billion. This decrease is driven by lower net interest income. The overall decrease was predominantly driven by Corporate & Other, which recorded lower results of € 0.9 billion compared to prior year, primarily due to lower net interest income. In the Private Bank, net interest income and net gains (losses) decreased by € 0.4 billion, mainly due to higher funding costs and hedging activities partially offset by growth in deposits and lending. In the Corporate Bank, net interest income and net gains (losses) decreased by € 0.1 billion primarily due to lower interest income and higher funding costs. These decreases were partially offset by the Investment Bank, which reported an increase of € 0.3 billion primarily driven by higher net interest income partly offset by lower net gains on financial assets/liabilities mainly from a lower mark-to-market from derivatives in FIC Ex-Financing. Net interest income and net gains (losses) in Asset Management increased by € 0.3 billion, reflecting a more favorable valuation adjustment primarily on guaranteed funds with offset in other income.

2023

Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were € 21.7 billion in 2023, compared to € 16.9 billion in 2022, an increase of € 4.8 billion. This impact was largely attributable to positive impacts from interest rate hedges as well as an overall increase in net interest income. In the Corporate Bank, total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss increased by € 1.3 billion, primarily due to higher net interest income driven by an improved interest rate environment and continued pricing discipline. Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss in Investment Bank decreased by € 0.2 billion due to lower net interest income, partly offset by mark-to-market gains on derivatives in FIC. Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss in the Private Bank decreased by € 0.2 billion compared to 2022, driven by mark-to-market impacts from hedge activities, with an offsetting effect in other income, partly offset by higher interest income from an improved interest rate environment. The overall movement was supported by positive impacts in Corporate & Other amounting to approximately € 3.6 billion, including benefits from interest rate hedges, as well as in Asset Management of € 0.2 billion, mainly from a more favorable change in the fair value of guarantees.

Provision for credit losses

2024

Provision for credit losses was € 1.8 billion in 2024, up from € 1.5 billion in 2023 and 38 basis points (bps) of average loans, in line with the guidance the bank provided after the third quarter. The increase was driven by cyclical events in the commercial real estate sector, certain larger corporate credit events and temporary effects following the Postbank integration. The wider portfolios performed broadly in line with expectations despite the challenging macroeconomic and interest rate environment.

2023

Provision for credit losses was € 1.5 billion in 2023, up from € 1.2 billion in 2022 or 31 basis points of average loans reflecting the continued challenging macroeconomic and interest rate conditions for parts of the credit portfolio during the year. In particular, the Commercial Real Estate sector, and specifically the office sector, was affected by a post-COVID-19-pandemic-driven change in demand and came under further pressure from interest rate increases, which led to higher refinancing risks. Provision for non-performing loans related to Stage 3 was € 1.5 billion, spread across various regions and segments, including a notable share of € 400 million related to Commercial Real Estate, especially affecting the Investment Bank. Stage 1 and Stage 2 provision for performing loans was a release of € 33 million, driven by an improved macro-economic outlook compared to 2022 and benefits from model-related changes.

The sections “Segment results of operations” and “Risk Report” provide further details on provision for credit losses.

Remaining noninterest income

in € m.				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
(unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net commissions and fee income[1]	10,372	9,206	9,838	1,166	13	(632)	(6)
Net gains (losses) on financial assets at fair value through other comprehensive income	48	(0)	(216)	49	N/M	216	(100)
Net gains (losses) on financial assets at amortized cost	(11)	(96)	(2)	85	(89)	(94)	N/M
Net income (loss) from equity method investments	12	(38)	152	49	N/M	(190)	N/M
Other income (loss)	267	387	346	(120)	(31)	40	12
Total remaining noninterest income	**10,688**	9,458	10,118	1,230	13	(660)	(7)
[1] includes:							
Net commissions and fees from fiduciary activities:							
Commissions for administration	317	280	300	37	13	(19)	(6)
Commissions for assets under management	4,022	3,700	3,792	322	9	(93)	(2)
Commissions for other securities	433	441	490	(8)	(2)	(49)	(10)
Total	**4,772**	4,421	4,582	351	8	(161)	(4)
Net commissions, broker's fees, mark-ups on securities underwriting and other securities activities:							
Underwriting and advisory fees	1,669	1,105	1,283	564	51	(179)	(14)
Brokerage fees	455	366	540	89	24	(174)	(32)
Total	**2,124**	1,471	1,824	653	44	(353)	(19)
Net fees for other customer services	3,476	3,314	3,432	162	5	(119)	(3)
Total net commissions and fee income	**10,372**	9,206	9,838	1,166	13	(632)	(6)

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

Net commissions and fee income

2024

Net commissions and fee income was € 10.4 billion in 2024, an increase of € 1.2 billion or 13% compared to 2023. The increase was driven by higher underwriting and advisory fees in Origination & Advisory in the Investment Bank and a particularly strong contribution from the Trade Finance business in the Corporate Bank. In addition, higher management fees in Asset Management from higher assets under management contributed to the increase.

2023

Net commissions and fee income was € 9.2 billion in 2023, a decrease of € 632 million or 6% compared to 2022. The decrease was driven by lower intermediary fees and transactional revenues as well as changes in contractual conditions in the Private Bank and lower fee income in the Investment Bank primarily due to lower Merger & Acquisition activities. In addition, the decrease was also driven by lower management fees from unfavorable market conditions coupled with margin compression in Asset Management.

Net gains (losses) on financial assets at fair value through other comprehensive income

2024

Net gains (losses) on financial assets at fair value through other comprehensive income were € 48 million in 2024 and € (0) million in 2023, mainly driven by a sale of bonds and securities from the strategic liquidity reserve.

2023

Net gains (losses) on financial assets at fair value through other comprehensive income were € (0) million in 2023 and € (216) million in 2022, with the result in 2022 driven by a sale of bonds and securities from the strategic liquidity reserve.

Net gains (losses) on financial assets at amortized cost

2024

Net gains (losses) on financial assets at amortized cost were € (11) million in 2024 compared to € (96) million in 2023, driven by sales primarily related to the hold-to-collect portfolio.

2023

Net gains (losses) on financial assets at amortized cost were € (96) million in 2023 compared to € (2) million in 2022, driven by realized losses on disposal of loans held in the hold to collect portfolio.

Net income (loss) from equity method investments

2024

Net income (loss) from equity method investments was € 12 million in 2024 compared to € (38) million in 2023, an increase of € 49 million, mainly related to an upward valuation of the underlying loan assets in Harvest Fund Management Company Limited.

2023

Net income (loss) from equity method investments was € (38) million in 2023 compared to € 152 million in 2022, a decrease of € 190 million, mainly related to the downward valuation of the underlying loan assets in Huarong Rongde Asset Management Company Limited as well as a gain on exit in 2022 which did not repeat in 2023.

Other income (loss)

2024

Other income (loss) was € 267 million in 2024 compared to € 387 million in 2023. The decrease was primarily related to the market movements in the hedge portfolio compared to gains in 2023.

2023

Other income (loss) was € 387 million in 2023 compared to € 346 million in 2022. The improvement was primarily related to gains in the hedging portfolios and the non-recurrence from gains on disposal of assets held for sale, including a gain from the sale of the Deutsche Bank Financial Advisors business in Italy, as well as from workout activities related to Sal. Oppenheim recognized in other revenues in 2022. This was partly offset by an unfavorable impact from valuation adjustments on fair value of guarantees in Asset Management, which had a corresponding offset in net gains (losses) on financial assets/ liabilities at fair value through profit and loss.

Noninterest expenses

in € m.				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
(unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Compensation and benefits	11,731	11,131	10,712	601	5	418	4
General and administrative expenses[1]	11,243	10,112	9,728	1,131	11	384	4
Impairment of goodwill and other intangible assets	0	233	68	(233)	N/M	165	N/M
Restructuring activities	(3)	220	(118)	(223)	N/M	338	N/M
Total noninterest expenses	**22,971**	21,695	20,390	1,276	6	1,305	6

N/M – Not meaningful

[1] includes:							
Information Technology	3,610	3,755	3,680	(145)	(4)	76	2
Occupancy, furniture and equipment expenses	1,624	1,478	1,429	147	10	49	3
Regulatory, tax & insurance[2]	1,028	1,399	1,285	(371)	(27)	114	9
Professional services	763	899	858	(136)	(15)	41	5
Banking Services and outsourced operations	964	964	881	1	0	82	9
Market Data and Research services	400	374	378	26	7	(4)	(1)
Travel expenses	153	143	110	10	7	33	30
Marketing expenses	149	203	165	(54)	(26)	37	23
Other expenses[3]	2,552	899	943	1,654	184	(44)	(5)
Total general and administrative expenses	**11,243**	10,112	9,728	1,131	11	384	4

[2] Includes bank levy of € 172 million in 2024, € 528 million in 2023 and € 762 million in 2022

[3] Includes litigation related expenses of € 2,035 million in 2024, € 311 million in 2023 and € 413 million in 2022. For more details, please refer to Note 27 “Provisions” of this report

Compensation and benefits

2024

Compensation and benefits increased by € 601 million or 5% to € 11.7 billion in 2024 compared to € 11.1 billion in 2023. The increase was driven mainly by higher performance-related compensation, wage growth and increases in internal workforce related to the bank’s targeted investments as part of the bank’s *Global Hausbank* strategy, as well higher severance costs.

2023

Compensation and benefits increased by € 418 million or 4% to € 11.1 billion in 2023 compared to € 10.7 billion in 2022. The increase was driven mainly by wage growth, an increase in external workforce as well as an increase in severance costs resulting from the accelerated execution of the bank’s *Global Hausbank* strategy.

General and administrative expenses

2024

General and administrative expenses increased by € 1.1 billion, or 11%, to € 11.2 billion in 2024 compared to € 10.1 billion in 2023. The increase was driven by an increase in other expenses, mainly due to increased litigation charges related to the Postbank takeover litigation matter and the Polish FX Mortgage matters as well as the reversal of the RusChemAlliance indemnification asset. This was partly offset by a decrease in bank levies of € 355 million in 2024, lower fees for professional services and lower expenses in information technology mainly relating to lower vendor costs and lower IT platform costs.

2023

General and administrative expenses increased by € 384 million, or 4%, to € 10.1 billion in 2023 compared to € 9.7 billion in 2022. The increase was driven by higher expenses in information technology mainly relating to increased vendor and software costs as well as higher operational taxes. This was partly offset by lower litigation expenses which decreased by € 103 million, related to a release of litigation provision and a decrease in bank levies of € 235 million.

Impairment of goodwill and other intangible assets

2024

Impairment of goodwill and other intangible assets was € 0 million in 2024 compared to € 233 million in 2023 relating to the impaired goodwill of Numis in the Investment Bank.

2023

Impairment of goodwill and other intangible assets was € 233 million in 2023 relating to the impaired goodwill of Numis in the Investment Bank, compared to € 68 million in 2022 relating to a historic acquisition of an unamortized intangible asset associated with U.S. mutual fund retail contracts in Asset Management.

Restructuring

2024

Restructuring activities were a release of € (3) million in 2024 compared to charges of € 220 million in 2023. The development in both periods was primarily driven by Private Bank in the context of the execution of strategic initiatives.

2023

Restructuring activities were charges of € 220 million in 2023 compared to a release of € (118) million in 2022. The charges were driven primarily by Private Bank in the context of the execution of strategic initiatives.

Income tax expense

2024

Income tax expense was € 2.2 billion in 2024, compared to € 1.5 billion in the prior year. The effective tax rate in 2024 of 33% was mainly affected by litigation charges that are non-tax deductible.

2023

Income tax expense was € 1.5 billion in 2023, compared to an income tax benefit of € 107 million in the prior year. The effective tax rate in 2023 of 19% benefited from positive year end deferred tax asset valuation adjustments of € 1.0 billion, largely reflecting continuously strong performance in the UK.

Net profit (loss)

2024

Net profit in 2024 was € 4.5 billion, compared to € 6.5 billion in the prior year. The decrease in net profit was primarily driven by the aforementioned increase in litigation expenses and higher income tax expenses compared to 2023.

2023

Net profit in 2023 was € 6.5 billion, up 16% year on year, due to higher net interest income as well as noninterest revenues. These effects were partly offset by an increase in provision for credit losses as well an increase in income tax expense, including the aforementioned year end deferred tax asset valuation adjustments.

Segment results of operations

The following section is a discussion of the results of the business segments. Please refer to Note 4 “Business Segments and related information” to the consolidated financial statements for information regarding:

- Changes in the format of the bank’s segment disclosure
- The framework of the bank’s management reporting systems

Deutsche Bank’s segment reporting follows the organizational structure as reflected in the Group’s internal management reporting systems, which are the basis for assessing the financial performance of the business segments and for allocating resources to them. The segmentation is based on the structure of the Group as of December 31, 2024. Prior years’ comparatives were aligned to the presentation in the current year.

						2024
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	7,506	10,558	9,386	2,649	1,406	31,504
Provision for credit losses	347	549	851	(1)	83	1,830
Noninterest expenses						
Compensation and benefits	1,603	2,682	2,934	919	3,593	11,731
General and administrative expenses	3,481	3,979	4,372	904	(1,494)	11,243
Impairment of goodwill and other intangible assets	0	0	0	0	0	0
Restructuring activities	(1)	(0)	(3)	0	0	(3)
Total noninterest expenses	5,084	6,661	7,304	1,823	2,099	22,971
Noncontrolling interests	0	5	0	194	(199)	0
Profit (loss) before tax	2,075	3,343	1,231	632	(577)	6,703
Assets (in € bn)[2]	280	756	324	11	21	1,391
Loans (gross of allowance for loan losses, in € bn)	117	110	257	0	5	490
Additions to non-current assets	12	3	160	30	1,884	2,091
Deposits (in € bn)	313	22	320	0	13	668
Average allocated shareholders' equity	11,682	23,672	13,990	5,329	11,679	66,353
Risk-weighted assets (in € bn)	78	130	97	18	34	357
of which: operational risk RWA (in € bn)[3]	11	15	14	5	13	58
Leverage exposure (in € bn)	339	593	336	10	38	1,316
Employees (full-time equivalent)	26,317	20,107	37,072	5,169	1,088	89,753
Post-tax return on average shareholders’ equity[4,5]	11.7%	9.1%	5.2%	8.0%	N/M	5.5%
Post-tax return on average tangible shareholders’ equity[4,5]	12.6%	9.4%	5.2%	18.0%	N/M	6.2%
Cost/income ratio[6]	67.7%	63.1%	77.8%	68.8%	N/M	72.9%
[1] includes:						
Net interest income	4,960	3,398	5,786	25	991	15,161
Net income (loss) from equity method investments	(1)	(46)	21	36	2	12
[2] includes:						
Equity method investments	90	379	102	451	6	1,028

N/M – Not meaningful

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[5] The post-tax return on average shareholders’ equity and average tangible shareholders’ equity at the Group level reflects the reported effective tax rate for the Group, which was 33% for the year ended December 31, 2024; for the post-tax return on average shareholders’ equity and average tangible shareholders’ equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2024; for further information, please refer to “Supplementary Information (Unaudited): Non-GAAP Financial Measures” of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

						2023
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	7,718	9,160	9,571	2,383	2,324	31,155
Provision for credit losses	266	431	783	(1)	26	1,505
Noninterest expenses						
Compensation and benefits	1,530	2,526	2,805	891	3,378	11,131
General and administrative expenses	3,122	4,091	4,696	934	(2,731)	10,112
Impairment of goodwill and other intangible assets	0	233	0	0	0	233
Restructuring activities	(4)	(3)	228	0	(1)	220
Total noninterest expenses	4,648	6,847	7,730	1,825	646	21,695
Noncontrolling interests	0	3	0	163	(166)	0
Profit (loss) before tax	2,804	1,879	1,058	396	1,817	7,955
Assets (in € bn)[2]	264	658	331	10	54	1,317
Loans (gross of allowance for loan losses, in € bn)	117	101	261	0	6	485
Additions to non-current assets	13	89	90	73	1,853	2,118
Deposits (in € bn)	289	18	308	0	10	625
Average allocated shareholders' equity	11,547	23,544	13,219	5,157	9,681	63,149
Risk-weighted assets (in € bn)	69	140	86	15	40	350
of which: operational risk RWA (in € bn)[3]	6	22	8	3	19	57
Leverage exposure (in € bn)	307	546	339	10	39	1,240
Employees (full-time equivalent)	25,439	20,063	38,411	4,963	1,254	90,130
Post-tax return on average shareholders' equity[4,5]	16.6%	4.8%	4.8%	5.1%	N/M	9.1%
Post-tax return on average tangible shareholders' equity[4,5]	17.8%	4.9%	5.2%	12.0%	N/M	10.2%
Cost/income ratio[6]	60.2%	74.7%	80.8%	76.6%	N/M	69.6%
[1] includes:						
Net interest income	5,115	3,013	6,156	(124)	1,963	16,122
Net income (loss) from equity method investments	(6)	(70)	(5)	42	2	(38)
[2] includes:						
Equity method investments	91	413	84	420	5	1,013

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[5] The post-tax return on average shareholders' equity and average tangible shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was 19% for the year ended December 31, 2023; for the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2023; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

						2022
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	6,337	10,016	9,152	2,608	(1,050)	27,063
Provision for credit losses	335	319	583	(2)	(9)	1,226
Noninterest expenses						
Compensation and benefits	1,416	2,379	2,783	899	3,235	10,712
General and administrative expenses	2,790	4,061	4,193	883	(2,199)	9,728
Impairment of goodwill and other intangible assets	0	0	0	68	0	68
Restructuring activities	(19)	15	(113)	0	(2)	(118)
Total noninterest expenses	4,187	6,455	6,863	1,850	1,035	20,390
Noncontrolling interests	0	15	0	174	(190)	0
Profit (loss) before tax	1,816	3,228	1,705	585	(1,886)	5,447
Assets (in € bn)[2]	258	677	333	10	67	1,344
Loans (gross of allowance for loan losses, in € bn)	122	103	265	0	6	496
Additions to non-current assets	3	4	177	41	2,267	2,494
Deposits (in € bn)	289	16	317	0	7	629
Average allocated shareholders' equity	11,668	22,478	12,945	5,437	7,580	60,109
Risk-weighted assets (in € bn)	74	139	88	13	46	360
of which: operational risk RWA (in € bn)[3]	5	23	8	3	19	58
Leverage exposure (in € bn)	321	530	344	9	36	1,240
Employees (full-time equivalent)	22,621	17,946	37,710	4,778	1,876	84,930
Post-tax return on average shareholders' equity[4,5]	10.3%	9.3%	8.6%	7.3%	N/M	8.2%
Post-tax return on average tangible shareholders' equity[4,5]	11.1%	9.6%	9.2%	17.0%	N/M	9.1%
Cost/income ratio[6]	66.1%	64.4%	75.0%	70.9%	N/M	75.3%
[1] includes:						
Net interest income	3,628	3,467	5,222	(65)	1,732	13,983
Net income (loss) from equity method investments	4	50	27	66	6	152
[2] includes:						
Equity method investments	90	501	99	415	20	1,124

N/M – Not meaningful

Prior year's comparatives aligned to presentation in the current year

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[5] The post-tax return on average shareholders' equity and average tangible shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (2)% for the year ended December 31, 2022; for the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

Corporate Bank

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Corporate Treasury Services	4,223	4,399	3,827	(176)	(4)	572	15
Institutional Client Services	1,956	1,895	1,580	62	3	314	20
Business Banking	1,326	1,424	930	(98)	(7)	494	53
Total net revenues	**7,506**	7,718	6,337	(212)	(3)	1,381	22
Of which:							
Net interest income	**4,960**	5,115	3,628	(154)	(3)	1,487	41
Net commissions and fee income	**2,434**	2,328	2,356	106	5	(28)	(1)
Remaining income	**111**	275	354	(164)	(59)	(79)	(22)
Provision for credit losses	**347**	266	335	81	30	(68)	(20)
Noninterest expenses							
Compensation and benefits	1,603	1,530	1,416	73	5	114	8
General and administrative expenses	3,481	3,122	2,790	359	12	332	12
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	(1)	(4)	(19)	4	(86)	15	(77)
Total noninterest expenses	**5,084**	4,648	4,187	436	9	461	11
Noncontrolling interests	**0**	0	0	0	N/M	0	N/M
Profit (loss) before tax	**2,075**	2,804	1,816	(729)	(26)	988	54
Employees (front office, full-time equivalent)[1]	7,943	7,682	7,332	261	3	350	5
Employees (business-aligned operations, full-time equivalent)[1]	8,089	7,976	7,114	113	1	862	12
Employees (allocated central infrastructure, full-time equivalent)[1]	10,285	9,781	8,175	504	5	1,606	20
Total employees (full-time equivalent)[1]	26,317	25,439	22,621	878	3	2,818	12
Total assets (in € bn)[1,2]	280	264	258	16	6	6	2
Risk-weighted assets (in € bn)[1]	78	69	74	9	13	(5)	(7)
of which: operational risk RWA (in € bn)[1,3]	11	6	5	5	94	0	5
Leverage exposure (in € bn)[1]	339	307	321	33	11	(14)	(4)
Deposits (in € bn)[1]	313	289	289	23	8	1	0
Loans (gross of allowance for loan losses, in € bn)[1]	117	117	122	(0)	(0)	(5)	(4)
Cost/income ratio[4]	67.7%	60.2%	66.1%	N/M	7.5ppt	N/M	(5.8)ppt
Post-tax return on average shareholders' equity[5,6]	11.7%	16.6%	10.3%	N/M	(4.8)ppt	N/M	6.2ppt
Post-tax return on average tangible shareholders' equity[5,6]	12.6%	17.8%	11.1%	N/M	(5.3)ppt	N/M	6.8ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[5] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[6] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

2024

Profit before tax was € 2.1 billion in 2024, down by 26% from 2023, primarily driven by higher noninterest expenses. Post-tax return on average shareholders’ equity was 11.7%, down from 16.6% in the prior year, and post-tax return on average tangible shareholders’ equity was 12.6%, down from 17.8%. The cost/income ratio was 68%, up from 60% in 2023.

Net revenues were € 7.5 billion, 3% lower year on year as the normalization of deposit margins was mostly offset by higher deposit volumes and growth in net commissions and fee income. Corporate Treasury Services revenues were € 4.2 billion, down 4% year on year, driven by lower deposit margins mostly offset by higher deposit volumes and growth in net commissions and fee income. Institutional Client Services revenues rose 3% year on year to € 2.0 billion, driven by growth in Securities Services and Trust and Agency Services. Business Banking revenues were € 1.3 billion, down 7% year on year, driven by the normalization of deposit margins.

Provision for credit losses was € 347 million in 2024, or 30 basis points of average loans, up from € 266 million in the last year, mainly driven by certain larger corporate credit events.

Noninterest expenses were € 5.1 billion, up 9% year on year, driven by a litigation item, while adjusted costs rose 2% year on year to € 4.6 billion driven by higher internal service cost allocations and front office investments.

2023

Profit before tax of the Corporate Bank was € 2.8 billion for the full year 2023, up from € 1.8 billion in 2022, driven by higher revenues and lower provision for credit losses, partly offset by higher noninterest expenses. Post-tax return on average shareholders’ equity was 16.6%, up from 10.3% in the prior year. Post-tax return on average tangible shareholders’ equity was 17.8%, up from 11.1% in the prior year. The cost/income ratio was 60%, down from 66% in 2022.

Net revenues were € 7.7 billion, 22% higher year on year, driven by increased interest rates and continued pricing discipline, while net commissions and fee income remained essentially flat. Corporate Treasury Services revenues were € 4.4 billion, up 15% year on year, Institutional Client Services revenues rose 20% year on year to € 1.9 billion and Business Banking revenues were € 1.4 billion, up 53% year on year.

Provision for credit losses in 2023 was € 266 million, or 23 basis points of average loans, compared to provisions of € 335 million, or 28 basis points of average loans, in 2022. The reduction reflects releases of Stage 1 and 2 provisions driven by improved macroeconomic outlook and model changes.

Noninterest expenses were € 4.6 billion, up 11% year on year, mainly due to increased nonoperating costs, internal service cost allocations and noncompensation direct costs.

Investment Bank

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Fixed Income & Currencies (FIC)	8,610	7,893	8,861	717	9	(968)	(11)
Fixed Income & Currencies: Financing	3,205	2,867	2,953	339	12	(86)	(3)
Fixed Income & Currencies: Ex-Financing	5,405	5,026	5,909	378	8	(882)	(15)
Origination & Advisory	2,012	1,246	998	765	61	249	25
Debt Origination	1,290	843	412	447	53	431	105
Equity Origination	187	102	101	84	82	1	1
Advisory	535	301	485	234	78	(184)	(38)
Research and Other	(64)	21	157	(85)	N/M	(136)	(87)
Total net revenues	**10,558**	9,160	10,016	1,398	15	(856)	(9)
Provision for credit losses	**549**	431	319	119	28	112	35
Noninterest expenses							
Compensation and benefits	2,682	2,526	2,379	155	6	147	6
General and administrative expenses	3,979	4,091	4,061	(111)	(3)	30	1
Impairment of goodwill and other intangible assets	0	233	0	(233)	N/M	233	N/M
Restructuring activities	(0)	(3)	15	3	(98)	(18)	N/M
Total noninterest expenses	**6,661**	6,847	6,455	(186)	(3)	391	6
Noncontrolling interests	**5**	3	15	2	52	(12)	(79)
Profit (loss) before tax	**3,343**	1,879	3,228	1,463	78	(1,348)	(42)
Employees (front office, full-time equivalent)[1]	4,869	4,843	4,333	26	1	510	12
Employees (business-aligned operations, full-time equivalent)[1]	3,129	3,120	2,811	9	0	309	11
Employees (allocated central infrastructure, full-time equivalent)[1]	12,109	12,101	10,802	8	0	1,299	12
Total employees (full-time equivalent)[1]	20,107	20,063	17,946	44	0	2,117	12
Total assets (in € bn)[1,2]	756	658	677	98	15	(18)	(3)
Risk-weighted assets (in € bn)[1]	130	140	139	(10)	(7)	0	0
of which: operational risk RWA (in € bn)[1,3]	15	22	23	(7)	(32)	(2)	(7)
Leverage exposure (in € bn)[1]	593	546	530	46	8	17	3
Deposits (in € bn)[1]	22	18	16	4	23	1	9
Loans (gross of allowance for loan losses, in € bn)[1]	110	101	103	9	9	(2)	(2)
Cost/income ratio[4]	63.1%	74.7%	64.4%	N/M	(11.6)ppt	N/M	10.3ppt
Post-tax return on average shareholders' equity[5,6]	9.1%	4.8%	9.3%	N/M	4.3ppt	N/M	(4.5)ppt
Post-tax return on average tangible shareholders' equity[5,6]	9.4%	4.9%	9.6%	N/M	4.4ppt	N/M	(4.6)ppt

N/M – Not meaningful

Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[5] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[6] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

2024

Profit before tax was € 3.3 billion in 2024, up by 78% year on year, with growth across both Fixed Income and Currencies (FIC) and Origination & Advisory revenues, combined with the non-repeat of a goodwill impairment in 2023, partially offset by higher provision for credit losses in 2024. Post-tax return on average shareholders' equity was 9.1%, up from 4.8% in 2023, and post-tax return on average tangible shareholders' equity was 9.4%, up from 4.9%. The cost/income ratio was 63%, down from 75% in 2023.

Net revenues were € 10.6 billion, 15% higher year on year reflecting market share gains in a growing Origination & Advisory fee pool, as well as strength in FIC. FIC ex. Financing revenues were € 5.4 billion, an increase of 8% year on year benefiting from strength in Credit Trading and increased client engagement more broadly. FIC Financing revenues grew 12% to € 3.2 billion driven by both increased net interest income and higher commission and fees. Origination & Advisory revenues rose 61% year on year to € 2.0 billion primary due to increasing market share by around 50 basis points, combined with industry fee pool growth during the year (source: Dealogic).

Provision for credit losses was € 549 million in the year, or 52 basis points of average loans, and significantly higher year on year, reflecting increased Stage 3 provisions, primarily in CRE.

Noninterest expenses were € 6.7 billion in 2024, down 3% year on year, mainly reflecting the non-repeat of a goodwill impairment in 2023. Adjusted costs were essentially flat at € 6.4 billion, with the full year impact of strategic investments in the second half of 2023 and adverse FX impact largely offset by a reduction in bank levies.

2023

Profit before tax in 2023 was € 1.9 billion, down € 1.3 billion, or 42% compared to 2022. This reflects a decline in FIC revenues compared to a very strong prior year, higher costs driven by strategic investments into the business, including the acquisition of Numis, and increased provision for credit losses. Post-tax return on average shareholders' equity was 4.8%, down from 9.3% in the prior year. Post-tax return on average tangible shareholders' equity was 4.9%, down from 9.6% in the prior year. The cost/income ratio in 2023 was 75%, compared to 64% in 2022.

Net revenues were € 9.2 billion, a decrease of € 856 million, or 9% year on year. Revenues in FIC were € 7.9 billion, down € 968 million, or 11% compared to 2022, which was the best FIC revenue performance in a decade. Revenues in Rates, Emerging Markets and Foreign Exchange were all significantly lower, reflecting reduced levels of market volatility and activity. Credit Trading revenues were significantly higher due to the improved performance of Credit Flow following investments into the business. Financing revenues were robust and essentially flat to the prior year.

Origination & Advisory revenues were € 1.2 billion, an increase of € 249 million, or 25% year on year. This was primarily driven by the non-recurrence of material leveraged lending markdowns in Leveraged Debt Capital Markets. Investment Grade debt revenues were lower, reflecting a decline in the industry fee pool (source: Dealogic). Advisory revenues were significantly lower due to reduced levels of announced deals coming into 2023. Equity Origination revenues were essentially flat to the prior year.

Research and Other revenues were € 21 million, compared to positive € 157 million in 2022. The year on year decrease was materially driven by a loss of € 47 million relating to the impact of debt valuation adjustments on certain derivative liabilities versus a gain of € 49 million in the prior year.

Provision for credit losses was € 431 million, or 42 basis points of average loans, an increase of € 112 million year on year due to increased levels of stage 3 impairments, primarily in relation to Commercial Real Estate.

Noninterest expenses in 2023 were € 6.8 billion, an increase of € 391 million or 6% year on year, primarily driven by an impairment of Goodwill due to the Numis acquisition, as well as strategic investments made across the business and in line with the previously communicated strategy.

Private Bank

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	2024 increase (decrease) from 2023 in %	2023 increase (decrease) from 2022 in € m.	2023 increase (decrease) from 2022 in %
Net revenues:							
Personal Banking	5,304	5,570	5,005	(267)	(5)	566	11
Wealth Management & Private Banking	4,082	4,000	4,147	82	2	(147)	(4)
Total net revenues	**9,386**	9,571	9,152	(185)	(2)	419	5
of which:							
Net interest income	5,786	6,156	5,222	(370)	(6)	934	18
Net commissions and fee income	2,956	2,852	3,155	104	4	(303)	(10)
Remaining income	643	563	775	80	14	(212)	(27)
Provision for credit losses	**851**	783	583	68	9	201	34
Noninterest expenses:							
Compensation and benefits	2,934	2,805	2,783	130	5	22	1
General and administrative expenses	4,372	4,696	4,193	(324)	(7)	503	12
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	(3)	228	(113)	(231)	N/M	341	N/M
Total noninterest expenses	**7,304**	7,730	6,863	(426)	(6)	866	13
Noncontrolling interests	**0**	0	0	(0)	(45)	(0)	(12)
Profit (loss) before tax	**1,231**	1,058	1,705	173	16	(648)	(38)
Employees (front office, full-time equivalent)[1]	16,961	18,403	18,853	(1,442)	(8)	(450)	(2)
Employees (business-aligned operations, full-time equivalent)[1]	7,917	7,802	8,018	115	1	(216)	(3)
Employees (allocated central infrastructure, full-time equivalent)[1]	12,193	12,205	10,839	(12)	(0)	1,366	13
Total employees (full-time equivalent)[1]	37,072	38,411	37,710	(1,339)	(3)	701	2
Total assets (in € bn)[1,2]	324	331	333	(7)	(2)	(2)	(1)
Risk-weighted assets (in € bn)[1]	97	86	88	11	13	(1)	(2)
of which: operational risk RWA (in € bn)[1,3]	14	8	8	7	88	0	0
Leverage exposure (in € bn)[1]	336	339	344	(2)	(1)	(6)	(2)
Deposits (in € bn)[1]	320	308	317	13	4	(10)	(3)
Loans (gross of allowance for loan losses, in € bn)[1]	257	261	265	(4)	(1)	(4)	(1)
Assets under Management (in € bn)[1,4]	633	578	543	55	10	35	6
Net flows (in € bn)	29	23	31	6	26	(8)	(26)
Cost/income ratio[5]	77.8%	80.8%	75.0%	N/M	(2.9)ppt	N/M	5.8ppt
Post-tax return on average shareholders' equity[6,7]	5.2%	4.8%	8.6%	N/M	0.4ppt	N/M	(3.8)ppt
Post-tax return on average tangible shareholders' equity[6,7]	5.2%	5.2%	9.2%	N/M	0.1ppt	N/M	(4.0)ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] As of year-end
[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances
[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report
[4] Assets under Management include assets held on behalf of customers for investment purposes and/or client assets that are advised or managed by Deutsche Bank. They are managed on a discretionary or advisory basis or are deposited with the bank. Deposits are considered Assets under Management if they serve investment purposes. In Personal Banking, this includes Term deposits and Savings deposits. In Wealth Management & Private Banking (excl. Business Banking), it is assumed that all customer deposits are held with the bank primarily for investment purposes and accordingly are classified as Assets under Management. Within the Private Bank business 'Wealth Management & Private Banking', private clients benefit from a wider product range with increased emphasis on investment advice. As a result, starting 2024, demand deposits of Private Banking in Germany were reclassified to Assets under Management, ensuring a consistent treatment within 'Wealth Management & Private Banking'. In instances in which Private Bank distributes investment products qualifying as Assets under Management which are managed by DWS, these assets are reported as Assets under Management for Private Bank and for Asset Management (DWS) because they are two distinct, independent qualifying services
[5] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income
[6] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report
[7] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

2024

Private Bank reported a profit before tax of € 1.2 billion in 2024, up € 173 million or 16% year on year reflecting slightly lower noninterest expenses. Post-tax return on average shareholders' equity increased to 5.2% compared to 4.8% in 2023, while post-tax return on average tangible shareholders' equity remained the same at 5.2%. The cost/income ratio of 78%, improved compared to 81% in the prior year.

Net revenues were € 9.4 billion in 2024, down 2% year on year. Net interest income declined by 6% in an environment of normalizing interest rates; this was partly offset by growth in investment products, reflecting the Private Bank's strategy of growing noninterest income.

In Personal Banking, net revenues were down 5% year on year to € 5.3 billion in 2024, reflecting continued higher funding costs, including the impact from minimum reserves, certain hedging costs and higher Group neutral central treasury allocation to the segment. These impacts were partly offset by growth in deposit revenues during 2024.

In Wealth Management & Private Banking, net revenues grew by 2% year on year to € 4.1 billion in 2024. Higher investment product revenues, as well as slightly higher lending revenues, were partially offset by lower deposit revenues.

Provision for credit losses was € 851 million, or 33 basis points of average loans, compared to 30 basis points of average loans in the prior year. The increase mainly reflected the continued elevated transitory effects from Postbank integration. Overall, the quality of the segment's portfolios remains very solid.

Noninterest expenses were € 7.3 billion in 2024, down 6% year-on-year including lower direct restructuring and severance cost and the nonrecurrence of provisions for individual litigation cases. The improvement in adjusted cost by 4% to 7.0 billion in 2024 reflecting normalized investment spend and benefits from transformation initiatives including workforce reductions and the closure of 125 branches in 2024, as well as lower regulatory costs, partially offset by inflation impacts.

Assets under management were € 633 billion at year end 2024, up € 55 billion in the year. The increase was mainly supported by net inflows of € 29 billion, as well as € 20 billion positive market movements, and € 9 billion of positive foreign exchange movements.

2023

Private Bank recorded a profit before tax of € 1.1 billion in 2023, compared to € 1.7 billion in the prior year, a decline of 38%. The year-on-year development reflected significant nonoperating costs and revenue items. Nonoperating costs were € 468 million in 2023, compared to a benefit of € 147 million in 2022. Furthermore, 2022 revenues included € 430 million in specific items which did not recur in 2023. These items impacted key ratios, with the cost/income ratio rising to 81%, from 75% in the prior year, while post-tax return on average shareholders' equity declined to 4.8%, from 8.6% in 2022 and post-tax return on average tangible shareholders' equity declined to 5.2%, from 9.2% in the prior year. Excluding nonoperating cost and specific revenue items, profit before tax would have been up 35% year on year.

Net revenues were € 9.6 billion, up 5% year on year, or up 10% if adjusted for the non-recurrence of the aforementioned € 430 million of specific items from last year. These included a gain of approximately € 310 million from the sale of the Deutsche Bank Financial Advisors business in Italy, and positive impacts from Sal. Oppenheim workout activities. Revenue growth was driven by higher net interest income from deposit products, partly offset by lower fee income and lower loan revenues in a rising interest rate environment. The Private Bank attracted net inflows into assets under management of € 23 billion in 2023, with net inflows in both investment products and deposits. Loan development reflected lower client demand, mainly in mortgage loans in Germany and client deleveraging in APAC.

In Personal Banking, net revenues grew by 11% to € 5.6 billion as higher net interest income from deposit products more than offset impacts from lower fee income due to changes in contractual and regulatory conditions.

In Wealth Management & Private Banking, net revenues were € 4.0 billion, down 4% year on year, or up 6% if adjusted for the aforementioned impact of specific items, from non-recurring revenues of approximately € 50 million following the business divestiture in Italy. Higher deposit revenues were offset by lower lending and investment revenues mainly in APAC.

Assets under management in the Private Bank were € 578 billion at year end, up € 35 billion in the year. The increase was mainly driven by net inflows of € 23 billion and by a € 19 billion beneficial impact from higher market levels partly offset by € 4 billion negative impact from foreign exchange rate movements.

Provision for credit losses was € 783 million, or 30 basis points of average loans, compared to € 583 million, or 22 basis points of average loans in the prior year. The increase mainly reflected a more difficult macroeconomic environment, higher impacts of single name losses in the International Private Bank and effects from temporary operational backlog related to the Postbank IT migration, while provision for credit losses in 2022 benefited from releases following sales of non-performing loans. The development of the overall portfolio continued to reflect the high quality of the loan book, especially in the retail businesses, and ongoing tight risk discipline.

Noninterest expenses were € 7.7 billion, up 13% year on year, driven predominantly by the aforementioned € 468 million in nonoperating costs, including restructuring and severance of € 346 million and litigation charges of € 123 million, compared to releases of nonoperating costs of € 147 million in 2022. Adjusted costs, which exclude these items, were up 4%, mainly reflecting investments in Group control functions, strategic initiatives, higher internal cost allocations, Postbank service remediation and inflation impacts. These were partly mitigated by continued savings from transformation programs and reduced regulatory charges.

Asset Management

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Management fees	2,479	2,314	2,458	164	7	(143)	(6)
Performance and transaction fees	148	128	125	20	16	2	2
Other	23	(59)	24	82	N/M	(84)	N/M
Total net revenues	**2,649**	2,383	2,608	267	11	(225)	(9)
Provision for credit losses	**(1)**	(1)	(2)	0	(23)	1	(50)
Noninterest expenses							
Compensation and benefits	919	891	899	28	3	(8)	(1)
General and administrative expenses	904	934	883	(29)	(3)	51	6
Impairment of goodwill and other intangible assets	0	0	68	0	N/M	(68)	N/M
Restructuring activities	0	0	0	(0)	(43)	(0)	(15)
Total noninterest expenses	**1,823**	1,825	1,850	(1)	(0)	(26)	(1)
Noncontrolling interests	**194**	163	174	32	20	(12)	(7)
Profit (loss) before tax	**632**	396	585	236	60	(188)	(32)
Employees (front office, full-time equivalent)[1]	2,069	2,062	2,059	7	0	3	0
Employees (business-aligned operations, full-time equivalent)[1]	2,506	2,325	2,225	181	8	100	4
Employees (allocated central infrastructure, full-time equivalent)[1]	594	576	494	18	3	82	17
Total employees (full-time equivalent)[1]	5,169	4,963	4,778	206	4	185	4
Total assets (in € bn)[1,2]	11	10	10	0	2	0	2
Risk-weighted assets (in € bn)[1]	18	15	13	3	22	2	18
of which: operational risk RWA (in € bn)[1,3]	5	3	3	1	35	0	2
Leverage exposure (in € bn)[1]	10	10	9	0	4	0	3
Assets under Management (in € bn)[1,4]	1,012	896	821	115	13	75	9
Net flows (in € bn)	26	28	(20)	(3)	(9)	48	N/M
Cost/income ratio[5]	68.8%	76.6%	70.9%	N/M	(7.8)ppt	N/M	5.6ppt
Post-tax return on average shareholders' equity[6,7]	8.0%	5.1%	7.3%	N/M	2.9ppt	N/M	(2.2)ppt
Post-tax return on average tangible shareholders' equity[6,7]	18.0%	12.0%	17.0%	N/M	6.1ppt	N/M	(5.1)ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Assets under Management (AuM) means assets (a) the segment manages on a discretionary or non-discretionary advisory basis; including where it is the management company and portfolio management is outsourced to a third party; and (b) a third party holds or manages and on which the segment provides, on the basis of contract, advice of an ongoing nature including regular or periodic assessment, monitoring and/or review. AuM represent both collective investments (including mutual funds and exchange-traded funds) and separate client mandates. AuM are measured at current market value based on the local regulatory rules for asset managers at each reporting date, which might differ from the fair value rules applicable under IFRS. Measurable levels are available daily for most retail products but may only update monthly, quarterly or even yearly for some products. While AuM do not include the segment's investments accounted for under equity method, they do include seed capital and any committed capital on which the segment earns management fees. In instances in which Private Bank distributes investment products qualifying as Assets under Management which are managed by DWS, these assets are reported as Assets under Management for Private Bank and for Asset Management (DWS) because they are two distinct, independent qualifying services

[5] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[6] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[7] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

2024

Profit before tax was € 632 million, up 60% from 2023, mainly driven by higher revenues and stable noninterest expenses. Post-tax return on average shareholders' equity was 8.0%, up from 5.1% in the prior year. Post-tax return on average tangible shareholders' equity was 18.0%, up from 12.0% in the prior year. The cost/income ratio was 69%, down from 77% in 2023.

Net revenues in 2024 were € 2.6 billion, up 11% compared to 2023. Management fees were € 2.5 billion, up 7% year on year, driven by Active and Passive products from higher average assets under management. Performance and transaction fees increased by 16% to € 148 million, predominately driven by a significant Multi Asset performance fee. Other revenues increased by € 82 million to € 23 million driven by lower treasury funding charges, partly offset by unfavourable outcome of fair value of guarantees.

Noninterest expenses were € 1.8 billion in 2024, essentially flat year on year. Adjusted costs increased by 1%, mainly due to higher compensation and benefits, due to variable compensation and increasing number of employees, as well as higher banking servicing costs driven by a rise in assets under management, partly offset by lower IT costs and professional services fees from adopting a hybrid approach to the platform transformation. Non-operating costs were significantly lower due to lower litigation costs and severance payments compared to 2023.

Net flows were positive € 26 billion, primarily in Passive, Systematic & Quantitative Investments (SQI) and Cash products. This was partly offset by net outflows in Multi Assets, Equity, Alternatives and Fixed Income. ESG products attracted net inflows of € 6 billion in 2024 primarily into Xtrackers.

Assets under Management increased by € 115 billion, or 13%, to € 1,012 billion during 2024, driven by positive market developments, net inflows and foreign exchange rate movements.

The following table provides the development of assets under management during 2024, broken down by product type as well as the respective management fee margins:

in € bn.	Active Equity	Active Fixed Income	Active Multi Asset	Active SQI	Active Cash	Passive	Alternatives	Assets under managemen t
Balance as of December 31, 2023	107	204	76	66	85	247	111	896
Inflows	14	42	7	14	717	124	10	929
Outflows	(19)	(43)	(19)	(12)	(715)	(82)	(13)	(903)
Net Flows	(5)	(1)	(11)	2	2	41	(3)	26
FX impact	1	6	0	0	4	11	3	26
Performance	13	6	3	5	1	35	1	64
Other	0	0	(4)	3	0	1	(0)	(0)
Balance as of December 31, 2024	116	215	64	77	93	335	111	1,012
Management fee margin (in bps)	68	11	31	33	6	16	45	26

2023

Profit before tax was € 396 million, down 32%, mainly driven by lower revenues. Post-tax return on average shareholders' equity was 5.1%, down from 7.3% in the prior year. Post-tax return on average tangible shareholders' equity was 12.0%, down from 17.0% in the prior year. The cost/income ratio was 77%, up from 71% in 2022.

Net revenues in 2023 were € 2.4 billion, down 9% compared to 2022, resulting from significantly lower other revenues driven by higher funding costs and lower investment income, as well as slightly lower management fees due to negative market developments, the composition of the net inflows in Alternatives and margin compression in other product classes. Performance and transaction fees were essentially flat compared to full year 2022.

Noninterest expenses were € 1.8 billion in 2023, down 1%. Adjusted costs increased by 3%, mainly due to higher IT costs to support transformation and higher banking servicing costs driven by a rise in assets under management in the Passive business, while compensation and benefits remained essentially flat. Non-operating costs were significantly lower due to a € 68 million impairment of an unamortized intangible asset related to U.S. mutual fund retail contracts in the prior year.

Net flows were positive € 28 billion, primarily in Passive, Cash and Multi Assets products. This was partly offset by net outflows in Equity and Systematic & Quantitative Investments (SQI), while net flows in Alternatives and Fixed Income being essentially flat. ESG products attracted net inflows of € 5 billion in 2023 primarily into Xtrackers.

Assets under Management increased by € 75 billion, or 9%, to € 896 billion during 2023, mainly driven by positive market developments and net inflows, while foreign exchange rate movements had a negative impact.

The following table provides the development of assets under management during 2023, broken down by product type as well as the respective management fee margins:

in € bn.	Active Equity	Active Fixed Income	Active Multi Asset	Active SQI	Active Cash	Passive	Alternatives	Assets under managemen t
Balance as of December 31, 2022	99	194	68	64	80	199	118	821
Inflows	13	37	15	10	608	93	14	788
Outflows	(15)	(36)	(11)	(11)	(602)	(71)	(13)	(760)
Net Flows	(2)	0	4	(2)	6	21	0	28
FX impact	(1)	(3)	(0)	(0)	(2)	(4)	(2)	(12)
Performance	11	12	3	5	1	31	(5)	57
Other	0	0	1	(1)	0	0	0	1
Balance as of December 31, 2023	107	204	76	66	85	247	111	896
Management fee margin (in bps)	69	11	30	31	4	17	47	27

Corporate & Other

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	 in %	2023 increase (decrease) from 2022 in € m.	 in %
Net revenues	**1,406**	2,324	(1,050)	(918)	(40)	3,373	N/M
Provision for credit losses	**83**	26	(9)	57	N/M	35	N/M
Noninterest expenses							
Compensation and benefits	3,593	3,378	3,235	215	6	143	4
General and administrative expenses	(1,494)	(2,731)	(2,199)	1,237	(45)	(532)	24
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	0	(1)	(2)	1	N/M	1	(40)
Total noninterest expenses	**2,099**	646	1,035	1,453	N/M	(388)	(38)
Noncontrolling interests	**(199)**	(166)	(190)	(33)	20	24	(12)
Profit (loss) before tax	**(577)**	1,817	(1,886)	(2,394)	N/M	3,703	N/M
Total Employees (full-time equivalent)[1]	36,269	35,917	32,186	352	1	3,731	12
Risk-weighted assets (in € bn)[1]	34	40	46	(6)	(15)	(6)	(13)
Leverage exposure (in € bn)[1]	38	39	36	(1)	(3)	3	7

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] As of year-end

2024

Corporate & Other reported a loss before tax of € 577 million, primarily driven by legacy litigation matters including the Postbank takeover litigation and Polish FX mortgages offset by positive valuation and timing revenues. This compared to a profit before tax of € 1.8 billion in the prior year.

Net revenues for the full year were positive € 1.4 billion, compared to positive € 2.3 billion for the prior year, primarily driven by revenues in valuation and timing differences reflecting gains on portfolio hedges of interest rate risk, where fair value hedge accounting cannot be applied under IFRS as issued by the IASB.

Noninterest expenses were negative € 2.1 billion for the full year, driven by the aforementioned legacy litigation matters, compared to negative € 646 million in the prior year. Expenses associated with shareholder activities were € 648 million for the full year, compared to € 582 million in the prior year.

Noncontrolling interests are reversed in Corporate & Other after deduction from the divisional profit before tax. These were positive € 199 million for the full year, mainly related to DWS.

2023

Corporate & Other reported a profit before tax of € 1.8 billion in 2023 compared to a loss before tax of € 1.9 billion in 2022, primarily reflecting higher revenues.

Net revenues were positive € 2.3 billion in 2023, compared to negative € 1.1 billion in 2022. Revenues related to valuation and timing differences were positive € 3.1 billion in 2023, reflecting gains on portfolio hedges of interest rate risk, where fair-value hedge accounting cannot be applied under IFRS as issued by the IASB. Net revenues relating to funding and liquidity were negative € 242 million in 2023, versus negative € 311 million in 2022.

Noninterest expenses were € 646 million in 2023, a reduction of € 388 million, or 38%, compared to 2022. The reduction was primarily driven by positive € 37 million litigation releases in 2023, compared to a charge of € 261 million in 2022. Expenses associated with shareholder activities as defined in the OECD Transfer Pricing guidelines not allocated to the business divisions were € 582 million in 2023, versus € 510 million in 2022.

Noncontrolling interests are deducted from the profit before tax of the divisions and reversed in Corporate & Other. These amounted to € 166 million in 2023, compared to € 190 million in 2022, mainly related to DWS.

Financial Position

Assets

in € m. (unless stated otherwise)	Dec 31, 2024	Dec 31, 2023	Absolute Change	Change in %
Cash, central bank and interbank balances	153,654	184,556	(30,903)	(17)
Central bank funds sold, securities purchased under resale agreements and securities borrowed	40,846	14,764	26,083	177
Financial assets at fair value through profit or loss	545,895	465,273	80,623	17
Of which: Trading assets	139,772	125,275	14,497	12
Of which: Positive market values from derivative financial instruments	291,800	251,877	39,923	16
Of which: Non-trading financial assets mandatory at fair value through profit and loss	114,324	88,047	26,278	30
Financial assets at fair value through other comprehensive income	42,090	35,546	6,544	18
Loans at amortized cost	483,897	479,353	4,544	1
Remaining assets	124,650	137,774	(13,124)	(10)
Of which: Brokerage and securities related receivables	60,690	72,566	(11,876)	(16)
Total assets	**1,391,033**	1,317,266	73,767	6

Liabilities and Equity

in € m. (unless stated otherwise)	Dec 31, 2024	Dec 31, 2023	Absolute Change	Change in %
Deposits	667,700	625,486	42,214	7
Central bank funds purchased, securities sold under repurchase agreements and securities loaned	3,742	3,042	701	23
Financial liabilities at fair value through profit or loss	412,409	366,494	45,916	13
Of which: Trading liabilities	43,498	44,005	(506)	(1)
Of which: Negative market values from derivative financial instruments	276,410	238,278	38,131	16
Of which: Financial liabilities designated at fair value through profit or loss	92,047	83,727	8,321	10
Other short-term borrowings	9,895	9,620	274	3
Long-term debt	114,899	119,390	(4,491)	(4)
Remaining liabilities	100,522	116,903	(16,381)	(14)
Of which: Brokerage and securities related payables	63,755	81,539	(17,784)	(22)
Total liabilities	**1,309,168**	1,240,935	68,232	5
Total equity	**81,865**	76,330	5,535	7
Total liabilities and equity	**1,391,033**	1,317,266	73,767	6

Movements in Assets and Liabilities

As of December 31, 2024, the total balance sheet of € 1.4 trillion was slightly higher compared to year-end 2023.

Cash, central bank and interbank balances decreased by € 30.9 billion, as a result of an increase in central bank funds sold, securities purchased under resale agreements, and securities borrowed across all applicable measurement categories by € 52.7 billion, mainly driven by increased firm trading activities and client flows.

Trading assets increased by € 14.5 billion, primarily driven by an increase in bond positions in the bank's debt securities portfolio due to client flows and desk positioning, as well as an increase in traded loans.

Positive and negative market values of derivative financial instruments increased by € 39.9 billion and € 38.1 billion, respectively, mainly due to increased volatility in foreign exchange products caused by political uncertainty towards the end of the year and the strengthening of the U.S. dollar against the euro.

Non trading financial assets mandatory at fair value through profit or loss increased by € 26.3 billion, driven by aforementioned increase in securities purchased under resale agreements measured under non-trading financial assets mandatory at fair value through profit and loss.

Financial assets at fair value through other comprehensive income increased by € 6.5 billion, driven by an increase in holdings of government securities in line with the bank's initiative to optimize return on liquidity.

Loans at amortized cost increased by € 4.5 billion, driven by a significant impact from foreign exchange movements and growth in Fixed Income & Currencies business in the Investment Bank which was partly offset by lower mortgage origination in the Private Bank.

Brokerage and securities related receivables and payables decreased by € 11.9 billion and € 17.8 billion, respectively, mainly due to a decrease in receivables and payables from pending settlement of regular way trades.

Deposits increased by € 42.2 billion, primarily driven by growth in Corporate Cash Management business in the Corporate Bank as well as higher inflows in the Private Bank and Global Emerging Markets in the Investment Bank.

Financial liabilities designated at fair value through profit or loss increased by € 8.3 billion, mainly attributable to an increase in long term debt driven by new issuances in FIC business in the Investment Bank.

Long term debt at amortized cost decreased by € 4.5 billion, mainly due to repayments of the TLTRO funding which were partly offset by new issuances.

The overall movement of the balance sheet included an increase of € 31.4 billion due to foreign exchange rate movements, mainly driven by a strengthening of the U.S. dollar versus the euro. The effects from foreign exchange rate movements are embedded in the movement of the balance sheet line items discussed in this section.

Liquidity

Total High Quality Liquid Assets (HQLA) as defined by the Commission Delegated Regulation (EU) 2015/61 and amended by Regulation (EU) 2018/1620 increased to € 226 billion as of December 31, 2024 vs € 219 billion as at December 31, 2023. The increase in HQLA is primarily on account of increased deposits and long-term debt issuance largely offset by remaining TLTRO repayment and asset growth across businesses. The Liquidity Coverage Ratio was 131% at the end fourth quarter of 2024, a surplus to regulatory requirements of € 53 billion as compared to 140% as at the end of fourth quarter of 2023, a surplus to regulatory requirements of € 62 billion.

Equity

Total equity as of December 31, 2024, was € 81.9 billion compared to € 76.3 billion as of December 31, 2023, an increase of € 5.5 billion. This change was driven by a number of factors including the profit attributable to Deutsche Bank shareholders and additional equity components reported for the period of € 4.3 billion, the issuance of Additional Tier 1 equity instruments (AT1) treated as equity in accordance with IFRS of € 3.0 billion as well as unrealized net gains on accumulated other comprehensive income of € 475 million, net of tax, mainly on foreign currency translation of € 918 million, net of tax, primarily resulting from the strengthening of the U.S. dollar against the Euro. This was partially offset by negative impacts from financial assets at fair value through other comprehensive income of € 317 million, net of tax, and change in own credit risk of financial liabilities designated at fair value through profit and loss of € 126 million, net of tax. Further contributing factors include treasury shares distributed under share-based compensation plans of € 444 million and remeasurement gains related to defined benefit plans of € 148 million, net of tax. These positive effects were partially offset by net purchases of treasury shares of € 1.1 billion, cash dividends paid to Deutsche Bank shareholders of € 883 million, coupons paid on additional equity components of € 574 million as well as a change in noncontrolling interests of negative € 156 million.

On January 31, 2024, the Management Board of Deutsche Bank AG resolved a share repurchase program of up to € 675 million which started on March 4, 2024 and was completed on July 11, 2024. In this period Deutsche Bank AG repurchased 46.4 million common shares. The repurchase of these shares has reduced total equity by € 675 million.

On March 5, 2024, Deutsche Bank AG cancelled 45.5 million of its common shares, concluding its 2023 share buyback program. The cancellation reduced the nominal value of the shares by € 117 million. The cancelled shares had been held in common shares in treasury at their acquisition cost of € 450 million. The difference between the common shares at cost and their nominal value has reduced additional paid-in capital by € 333 million. The shares had already been deducted from the reported total equity on December 31, 2023. Therefore, the cancellation did not reduce total equity in 2024.

Own Funds

Deutsche Bank's CRR/CRD Common Equity Tier 1 capital as of December 31, 2024, increased by € 1.4 billion to € 49.5 billion, compared to € 48.1 billion as of December 31, 2023. The Risk-weighted assets (RWA) increased by € 7.7 billion to € 357.4 billion as of December 31, 2024, compared to € 349.7 billion as of December 31, 2023. The CET 1 capital ratio as of December 31, 2024, increased to 13.8% compared to 13.7% as of December 31, 2023.

The Bank's Tier 1 capital as of December 31, 2024, amounted to € 60.8 billion, consisting of a CET 1 capital of € 49.5 billion and Additional Tier 1 capital of € 11.4 billion. The Tier 1 capital was € 4.4 billion higher than at the end of 2023, driven by an increase in AT1 capital of € 3.1 billion and an increase in CET 1 capital of € 1.4 billion. The Tier 1 capital ratio as of December 31, 2024, increased to 17.0% compared to 16.1% as of December 31, 2023.

Total capital as of December 31, 2024, amounted to € 68.5 billion compared to € 65.0 billion at the end of 2023. The Total capital increase was driven by an increase in Tier 1 capital of € 4.4 billion, which was partly offset by a decrease in Tier 2 capital of € 0.9 billion since year end 2023. The Total capital ratio as of December 31, 2024, increased to 19.2% compared to 18.6% as of December 31, 2023.

Liquidity and capital resources

For a detailed discussion of the bank's liquidity risk management, please see the Risk Report in this annual report.

Tabular Disclosure of Contractual Obligations

Cash payment requirements outstanding as of December 31, 2024.

Contractual obligations					Payment due by period
in € m.	Total	Less than 1 year	1–3 years	3–5 years	More than 5 years
Long-term debt obligations[1]	131,223	24,847	41,428	28,243	36,706
Trust preferred securities[1,2]	302	302	0	0	0
Long-term financial liabilities designated at fair value through profit or loss[3]	22,266	4,000	4,729	7,823	5,713
Future cash outflows not reflected in the measurement of Lease liabilities[4]	4,771	30	182	293	4,267
Lease liabilities[1]	5,664	615	967	967	3,116
Purchase obligations	3,765	817	1,328	825	795
Long-term deposits[1]	26,407	0	12,593	3,392	10,422
Other long-term liabilities	1,676	1,592	16	11	57
Total	**196,074**	32,202	61,243	41,553	61,076

[1] Includes interest payments
[2] Contractual payment date or first call date
[3] Long-term debt and long-term deposits designated at fair value through profit or loss
[4] For further detail please refer to Note 22 "Leases"

Purchase obligations for goods and services include future payments for, among other things, information technology services and facility management. Some figures above for purchase obligations represent minimum contractual payments and actual future payments may be higher. Long-term deposits exclude contracts with a remaining maturity of less than one year. Under certain conditions future payments for some long-term financial liabilities designated at fair value through profit or loss may occur earlier. See the following notes to the consolidated financial statements for further information: Note 5 "Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss", Note 22 "Leases", Note 26 "Deposits" and Note 30 "Long-Term Debt and Trust Preferred Securities".

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Risk Report

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Introduction

Disclosures in line with IFRS 7

The following Risk Report provides qualitative and quantitative disclosures about credit, market and other risks in line with the requirements of International Financial Reporting Standard 7 (IFRS 7) Financial Instruments: Disclosures. It also considers the underlying classification and measurement and impairment requirements in IFRS 9 with further details to be found in the "Credit Risk Management and Asset quality" section, in the "Asset quality" section, in the "Credit risk mitigation" section and in Note 1 "Material accounting policies and critical accounting estimates" to the consolidated financial statements. Information which forms part of and is incorporated by reference into the financial statements of this report is marked by a light blue shading throughout this Risk Report.

Since June 30, 2020, the Group applies the transitional arrangements in relation to IFRS 9 as provided in the current CRR/CRD for all CET1 measures.

In 2024, Deutsche Bank implemented a new client reference data system as well as completed the Postbank integration into the Deutsche Bank platform. Both measures led to process alignments and refinements consequently changing the presentation of certain client exposures by geography and industry (NACE). The process alignments and refinements had no impact on the overall Group's total client exposures as of December 31, 2024.

Disclosures according to Pillar 3 of the Basel III Capital Framework

Deutsche Bank's disclosures according to Pillar 3 of the Basel 3 Capital Framework, which are implemented in the European Union by the Regulation (EU) No 575/2013 on prudential requirements for credit institutions (Capital Requirements Regulation or CRR), including recent amendments; and supported by the EBA guideline "Final draft implementing technical standards on public disclosures by institutions of the information referred to in Titles II and III of Part Eight of Regulation (EU) No 575/2013" and related guidelines applicable to Pillar 3 disclosures, are published in the Group's Pillar 3 Report, which can be found on Deutsche Bank's website.

Disclosures according to principles and recommendations of the Enhanced Disclosure Task Force

In 2012 the Enhanced Disclosure Task Force (EDTF) was established as a private sector initiative under the auspices of the Financial Stability Board (FSB), with the primary objective to develop fundamental principles for enhanced risk disclosures and to recommend improvements to existing risk disclosures. Deutsche Bank adheres to the disclosure recommendations in this Risk Report and also in its Pillar 3 report.

Disclosure following Amendments to the Capital Requirements Regulation

During 2024, the EU co-legislators finalized, adopted and published the comprehensive package of reforms with respect to European Union banking rules which implement the Final Basel III set of global reforms, changing how banks calculate their RWA (Regulation (EU) 2024/1623 (CRR3)), applicable from January 1, 2025. It includes, among other things, an until 2030 gradually introduced output floor establishing minimum RWA that will ultimately be set at 72.5% of the RWA calculated under the standardized approach, changes to standardized and internal ratings-based approaches for determining credit risk, changes to the credit valuation adjustment, a revision of the approaches for operational risks and reforms to the market risk framework as set out in the Fundamental Review of the Trading Book (FRTB, applicable as of January 1, 2026). The implementation of the changes to CRR affect among others Deutsche Bank's risk-weighted assets and regulatory capital.

Risk and capital overview

Key risk metrics

The following section provides qualitative and quantitative disclosures about credit, market, liquidity and other risk metrics and its developments within the twelve months ended December 31, 2024. Disclosures according to Pillar 3 of the Basel III Capital Framework, which are implemented in the European Union by the Capital Requirements Regulation (CRR) and supported by EBA Implementing Technical Standards or the EBA Guideline, are published in the Group's separate Pillar 3 report.

The following selected key risk ratios and corresponding metrics form part of the bank's holistic risk management across individual risk types. The Common Equity Tier 1 ratio, Economic Capital Adequacy ratio, Leverage ratio, Total Loss Absorbing Capacity, Minimum Requirement for Own Funds and Eligible Liabilities, Liquidity Coverage Ratio, Stressed Net Liquidity Position and Net Stable Funding Ratio serve as high-level metrics and are fully integrated across strategic planning, risk appetite framework, stress testing as well as recovery and resolution planning practices, which are reviewed and approved by the Management Board at least annually.

Common Equity Tier 1 (CET1) Ratio	
31.12.2024	13.8%[1]
31.12.2023	13.7%

Economic Capital Adequacy (ECA) Ratio	
31.12.2024	199%
31.12.2023	205%

Leverage Ratio	
31.12.2024	4.6%[1]
31.12.2023	4.5%

Total loss absorbing capacity (TLAC)	
31.12.2024 (Risk Weighted Asset based)	33.2%
31.12.2024 (Leverage Exposure based)	9.0%
31.12.2023 (Risk Weighted Asset based)	32.6%
31.12.2023 (Leverage Exposure based)	9.2%

Liquidity Coverage Ratio (LCR)	
31.12.2024	131%
31.12.2023	140%

Risk-Weighted Assets (RWA)	
31.12.2024	€ 357.4 bn[1]
31.12.2023	€ 349.7 bn

Economic Capital (EC)	
31.12.2024	€ 24.2 bn
31.12.2023	€ 23.3 bn

Leverage Exposure	
31.12.2024	€ 1,316 bn[1]
31.12.2023	€ 1,240 bn

Minimum requirement for own funds and eligible liabilities (MREL)	
31.12.2024	37.5%
31.12.2023	35.2%

Stressed Net Liquidity Position (sNLP)	
31.12.2024	€ 56.3 bn
31.12.2023	€ 57.7 bn

Net Stable Funding Ratio (NSFR)	
31.12.2024	121%
31.12.2023	121%

[1] Starting with the third quarter of 2024 Deutsche Bank adopted the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR; without application of this rule CET1 ratio would have been 13.5% with respective CET1 capital of € 48.4 billion and RWA of € 358.6 billion and in addition, the leverage ratio would have been 4.6% with respective Tier1 capital of € 59.8 billion and leverage exposure of € 1,315 billion

Deutsche Bank regularly assesses the potential impacts of risks on its balance sheet and profitability through portfolio reviews and stress tests. Stress tests are also used to test the resilience of Deutsche Bank's strategic plans. The results of these tests indicate that the currently available capital and liquidity reserves, in combination with available mitigation measures, are sufficient to withstand periods of potential stress.

The Group concludes that the risks, as described above or in the following sections, to which Deutsche Bank is exposed to, including potential impacts on its business strategy, provide a true and fair picture of its risk profile.

For further details please refer to sections "Risk profile", "Risk appetite and capacity", "Risk and capital plan", "Stress testing", "Recovery and resolution planning", "Risk and capital management", "Capital, leverage ratio, TLAC and MREL", "Liquidity coverage ratio", and "Stress testing and scenario analysis".

Risk profile

Deutsche Bank's mix of business activities results in diverse risk taking. The Group measures key risks inherent to the respective business models through the total economic capital metric, which captures the business division's risk profile and considers cross-risk effects at Group level.

Corporate Bank's risk profile mainly arises from the products and services offered in Corporate Treasury Services (including Trade Finance, Lending and Corporate Cash Management), Strategic Corporate Lending and Business Banking. Economic capital demand in these segments arises largely from credit risk.

Investment Bank's risk profile is dominated by its financing and trading activities, which give rise to all major risk types. Credit risk in the Investment Bank is broadly distributed across business units but most prominent in Fixed Income & Currencies and Leveraged Debt Capital Markets. Market risk arises mainly from trading and market making activities.

Private Bank's risk profile comprises credit risks from business with German and international retail clients, business clients and wealth management clients as well as non-trading market risks from modelling of client deposits and credit spread risk.

Asset Management, as a fiduciary asset manager, invests money on behalf of clients. As such, the main risk drivers are non-financial. The economic capital demand for market risk is mainly driven by non-trading market risks, which arise from guaranteed products and co-investments in the funds.

Corporate & Other's risk profile embeds a range of different risk drivers including those pertaining to Treasury, certain corporate items, and legacy portfolios. The economic capital demand mainly comprises of non-trading market risk from interest rate risk in Treasury, structural foreign exchange risk, pension risk and equity compensation risk, credit risk from Treasury's investments, strategic risk from tax-related risks and software asset risks and operational risk from legacy portfolios.

The table below shows Deutsche Bank's overall risk position as measured by the economic capital demand calculated for credit, market, operational and strategic risk for the dates specified. Deutsche Bank's overall economic risk position also considers diversification benefits across risk types.

Risk profile of Deutsche Bank's business divisions as measured by economic capital

							Dec 31, 2024
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total	Total (in %)
Credit risk	3,455	4,512	2,164	46	2,329	12,507	52
Market risk	1,040	2,086	1,561	304	3,676	8,667	36
Operational risk	863	1,182	1,155	376	1,069	4,645	19
Strategic risk	0	0	0	0	1,936	1,936	8
Diversification benefit[1]	(715)	(1,007)	(803)	(190)	(814)	(3,530)	(15)
Total EC	4,643	6,772	4,077	536	8,196	24,225	100
Total EC in %	19	28	17	2	34	100	N/M

[1] Diversification benefit across credit, market, operational and strategic risk

							Dec 31, 2023
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total	Total (in %)
Credit risk	2,612	4,395	2,182	48	2,639	11,875	51
Market risk	801	2,009	1,346	217	3,955	8,328	36
Operational risk	445	1,729	613	278	1,507	4,572	20
Strategic risk	0	0	0	0	1,874	1,874	8
Diversification benefit[1]	(460)	(1,197)	(589)	(130)	(1,009)	(3,385)	(15)
Total EC	3,399	6,936	3,551	413	8,967	23,265	100
Total EC in %	15	30	15	2	39	100	N/M

[1] Diversification benefit across credit, market, operational and strategic risk

As of December 31, 2024, Deutsche Bank's economic capital demand amounted to € 24.2 billion, which was € 1.0 billion or 4% higher than € 23.3 billion economic capital demand as of December 31, 2023. This was mainly driven by an increase in economic capital demand for credit risk and market risk.

The economic capital demand for credit risk totaled to € 12.5 billion as of December 31, 2024, which was € 0.6 billion or 5% higher compared to year-end 2023. The increase was mainly driven by a change in composition of the Corporate Bank loan portfolio.

The economic capital demand for market risk totaled to € 8.7 billion as of December 31, 2024, which was € 0.3 billion or 4% higher compared to year-end 2023. The increase was mainly driven by higher behavioral interest rate risk arising from modelling assumptions in non-maturity deposit portfolios and increase in USD structural foreign exchange exposure, partially offset by a decrease in interest rate risk exposure in Treasury.

Key risk themes

The latest developments and key uncertainties during 2024 are part of the bank's ongoing credit risk management activities and governance framework. These activities include, but are not limited to, regular emerging risk reviews (amongst others Germany, Middle East) as well as portfolio deep dives, day to day risk management on the level of individual borrowers, and regular model validations. Portfolios which have been identified for enhanced monitoring and downside risk assessment for the Group in 2024 include CRE, Automotives and sectors or clients considered vulnerable to Climate transition and physical risks.

CRE markets still face headwinds due to the impacts of higher interest rates, decreasing market liquidity combined with tightened lending conditions, and structural changes in the office sector. In the current environment, the main risk for Deutsche Bank's CRE portfolio is related to refinancing and extension of maturing loans particularly in the U.S. where the Group continues to proactively work with borrowers to address upcoming maturities to establish terms for loan amendments and extensions.

The automotive industry faces a challenging economic environment in Europe including potential U.S. tariffs, in addition to electric vehicle (EV) transition targets and competition from China. The difficult industry environment has limited impact on Deutsche Bank's automotive and supplier portfolio thus far with only moderate downward rating migrations observed across small portfolio comprising 1.5 % of the Group's loan book.

Climate transition and physical risks present growing risks to the bank's sectoral and regional portfolios. Managing climate transition and physical risks is a key component of Deutsche Bank's risk management and wider sustainability strategy, where 2024 materiality assessments and climate stress test results conclude that potential credit risk impacts are well-contained in the short term.

Further details are provided in the section Focus areas in 2024.

Risk and capital framework

Risk management principles

Deutsche Bank's business model inherently involves taking risks. Risks can be financial and non-financial and include on and off-balance sheet risks. Deutsche Bank's objective is to create sustainable value in the interests of the company taking into consideration shareholders, employees and other company related stakeholders. The risk management framework contributes to this by aligning planned and actual risk taking with risk appetite as expressed by the Management Board, while being in line with available capital and liquidity.

Deutsche Bank's risk management framework consists of various components, which include the established internal control mechanisms. Principles and standards are set for each component:

- Organizational structures must follow the Three Lines of Defense ("3LoD") model with a clear definition of roles and responsibilities for all risk types
  - The 1st Line of Defense ("1st LoD") refers to those roles in the Bank whose activities generate risks, whether financial or non-financial, and who own and are accountable for these risks. The 1st LoD manages these risks within the defined risk appetite, establishes an appropriate risk governance and risk culture, and adheres to the risk type frameworks defined by the 2nd Line of Defense ("2nd LoD")
  - The 2nd LoD refers to the roles in the Bank who define the risk management framework for a specific risk type. The 2nd LoD independently assesses and challenges the implementation of the risk type framework and adherence to the risk appetite, and acts as an advisor to the 1st LoD on how to identify, assess and manage risks.
  - The 3rd Line of Defense ("3rd LoD") is Group Audit, which is accountable for providing independent and objective assurance on the adequacy of the design, operating effectiveness and efficiency of the risk management system and systems of internal control
- Every employee must act as a risk manager consistent with the bank's risk appetite, risk management standards and values
- The Management Board approved risk appetite must be cascaded and adhered to across all dimensions of the Group, with appropriate consequences in the event of a breach
- Risks must be identified and assessed
- Risks must be actively managed including appropriate risk mitigation and effective internal control systems
- Risks must be measured and reported using accurate, complete and timely data using approved models
- Regular stress tests must be performed against adverse scenarios and appropriate crisis response planning must be established

The Group promotes a strong risk culture where every employee must fully understand and take a holistic view of the risks which could result from their actions, understand the consequences and manage them appropriately against the risk appetite of the bank. The bank expects employees to exhibit behaviors that support a strong risk culture in line with the bank's Code of Conduct. To promote this, Deutsche Bank's policies require that risks taken (including against risk appetite) must be taken into account during the bank's performance assessment and compensation processes. This expectation continues to be reinforced through communications campaigns and mandatory training courses for all DB employees. In addition, Management Board members and senior management frequently communicate the importance of a strong risk culture to support a consistent tone from the top.

Deutsche Bank's risk management and internal control system is described in more detail in Deutsche Bank's Pillar 3 report (specifically in the section "Risk management objectives and policies, Enterprise Risk"). The risk management and internal control system also covers sustainability-related objectives.

The Management Board is of the opinion that a risk management framework and internal control system has been established which is, in its entirety, appropriate and effective for the bank's business model and risk profile.

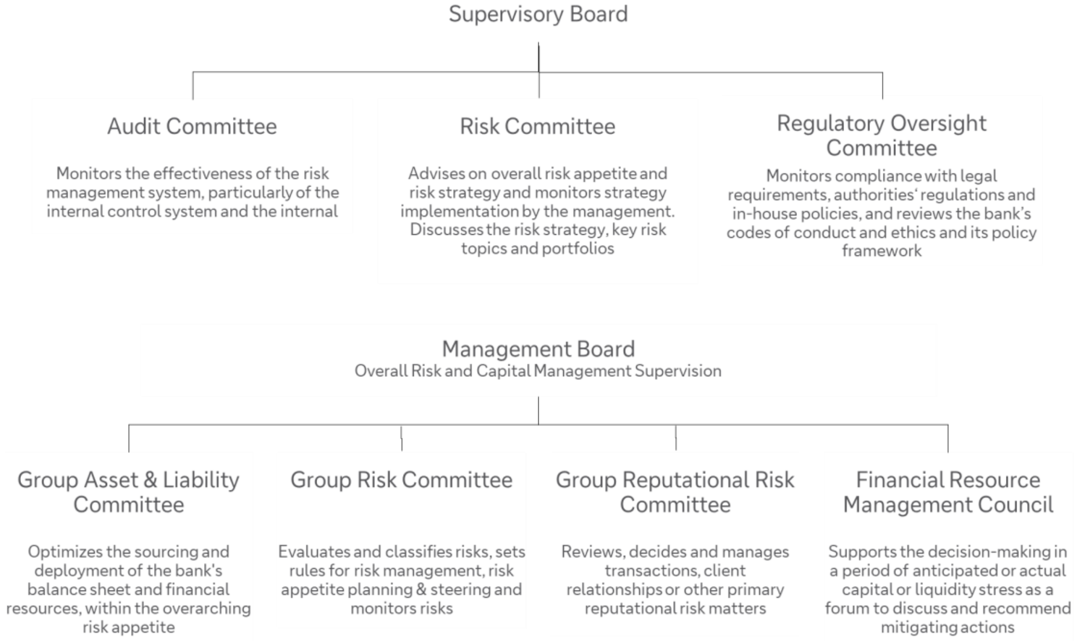
Risk governance

Deutsche Bank's operations throughout the world are regulated and supervised by relevant authorities in each of the jurisdictions in which the bank conducts business. Such regulation focuses on licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. The European Central Bank (ECB) in connection with the competent authorities of EU countries which joined the Single Supervisory Mechanism via the Joint Supervisory Team act in cooperation as Deutsche Bank's primary supervisors to monitor the bank's compliance with the German Banking Act and other applicable laws and regulations.

Several layers of management provide cohesive risk governance:

- Deutsche Bank's Supervisory Board is informed regularly on the risk situation, risk management and risk controlling, including reputational risk related items as well as material litigation cases; it has formed various committees to handle specific topics (for a detailed description of these committees, please see the "Report of the Supervisory Board", as well as chapter "Supervisory Board" in the "Corporate Governance Report")
  - At the meetings of the Risk Committee, the Management Board reports on current and forward-looking risk exposures, portfolios, on risk appetite and strategy and on matters deemed relevant for the assessment and oversight of the risk situation of Deutsche Bank AG; it also reports on loans requiring a Supervisory Board resolution pursuant to law or the Articles of Association; the Risk Committee advises on issues related to the overall risk appetite, aggregate risk position and the risk strategy and keeps the Supervisory Board informed of its activities
  - The Regulatory Oversight Committee, among other responsibilities, monitors the Management Board's measures that promote the company's compliance with legal requirements, authorities' regulations and the company's own policies; it also reviews the bank's codes of conduct and ethics as well as its policy framework, and, upon request, supports the Risk Committee in monitoring and analyzing the bank's legal and reputational risks; the Management Board informs the committee about contacts with regulators with a significant relevance for the business activity
  - The Audit Committee, among other matters, supports the Supervisory Board in monitoring the effectiveness of the risk management system, particularly the internal control system and the internal audit system, as well as the Management Board's remediation of deficiencies identified
- The Management Board is responsible for managing Deutsche Bank Group in accordance with the law, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the company, thus taking into consideration the interests of the shareholders, employees and other company related stakeholders; the Management Board is responsible for ensuring a proper business organization, encompassing appropriate and effective risk management, as well as compliance with legal requirements and internal guidelines; the Management Board established the Group Risk Committee as the central forum for review and decision on material risk and capital-related topics; the Group Risk Committee is described in more detail below

Risk management governance structure of the Deutsche Bank Group



Supervisory Board

Audit Committee

Monitors the effectiveness of the risk management system, particularly of the internal control system and the internal

Risk Committee

Advises on overall risk appetite and risk strategy and monitors strategy implementation by the management. Discusses the risk strategy, key risk topics and portfolios

Regulatory Oversight Committee

Monitors compliance with legal requirements, authorities' regulations and in-house policies, and reviews the bank's codes of conduct and ethics and its policy framework

Management Board

Overall Risk and Capital Management Supervision

Group Asset & Liability Committee

Optimizes the sourcing and deployment of the bank's balance sheet and financial resources, within the overarching risk appetite

Group Risk Committee

Evaluates and classifies risks, sets rules for risk management, risk appetite planning & steering and monitors risks

Group Reputational Risk Committee

Reviews, decides and manages transactions, client relationships or other primary reputational risk matters

Financial Resource Management Council

Supports the decision-making in a period of anticipated or actual capital or liquidity stress as a forum to discuss and recommend mitigating actions

The following functional committees are central to the management of risk at Deutsche Bank:

- The Group Risk Committee has various duties and dedicated authority, including approval of new or changed material risk and capital models and review of the inventory of risks, high-level risk portfolios, risk exposure developments, and internal and regulatory Group-wide stress testing results; in addition, the Group Risk Committee reviews and recommends items for Management Board approval, such as key risk management principles, the Group risk appetite statement, the Group recovery plan and the contingency funding plan, over-arching risk appetite parameters, and recovery and escalation indicators; the Group Risk Committee also supports the Management Board during Group-wide risk and capital planning processes
- The Group Reputational Risk Committee has the responsibility to review, decide and manage all transactions, client relationships or other primary reputational risk matters escalated in line with the underlying reputational risk policies and framework, including from the Regional Reputational Risk Committees
- The Financial Resource Management Council is an ad-hoc governance body, chaired by the Chief Financial Officer and the Chief Risk Officer, with delegated authority from the Management Board, to oversee financial crisis management at the bank; the Financial Resource Management Council provides a single forum to oversee execution of both the contingency funding plan and the Group recovery plan; the council recommends upon mitigating actions to be taken in a time of anticipated or actual capital or liquidity stress; specifically, the Financial Resource Management Council is tasked with analyzing the bank's capital and liquidity position, in anticipation of a stress scenario recommending proposals for capital and liquidity related matters and overseeing the execution of decisions
- The Group Asset & Liability Committee has been established by the Management Board with the mandate to optimize the sourcing and deployment of the bank's balance sheet and financial resources within the overarching risk appetite set by the Management Board

Deutsche Bank's Chief Risk Officer, who is a member of the Management Board, has Group-wide, supra-divisional responsibility for establishing a risk management framework with appropriate identification, measurement, monitoring, mitigation and reporting of liquidity, credit, market, enterprise, model and non-financial risks (including operational and reputational); however, frameworks for certain risks are established by other functions as per the business allocation plan.

The Chief Risk Officer has direct management responsibility for the Chief Risk Office function. Risk management and control duties in the Chief Risk Office function are generally assigned to specialized risk management units focusing on the management of

- Specific risk types
- Risks within a specific business
- Risks in a specific region.

These specialized risk management units generally handle the following core tasks:

- Foster consistency with the risk appetite set by the Management Board and applied to business divisions and their business units
- Determine and implement risk and capital management policies, procedures and methodologies that are appropriate to the businesses within each division
- Establish and approve risk limits
- Conduct periodic portfolio reviews to keep the portfolio of risks within acceptable parameters
- Develop and implement risk and capital management infrastructures and systems that are appropriate for each division

Chief Risk Officers for each business division as well as each region, having a holistic view of the respective business, challenge and influence the divisional and regional strategies, risk awareness and ownership as well as their adherence to risk appetite.

While operating independently from each other and the business divisions, the Finance and Risk functions have the joint responsibility to quantify and verify the risk that the bank assumes.

Risk appetite and capacity

Risk appetite expresses the aggregate level and types of risk that Deutsche Bank is willing to assume to achieve strategic objectives, as defined by a set of quantitative metrics and qualitative statements. Risk capacity is defined as the maximum level of risk that can be assumed given Deutsche Bank's capital and liquidity base, risk management and control capabilities, and regulatory constraints.

Risk appetite is an integral element in business planning processes via risk strategy and plan, to promote the appropriate alignment of risk, capital and performance targets, while at the same time considering risk capacity, risk-return and appetite constraints from both financial and non-financial risks. Compliance of the plan with risk appetite and capacity is also tested under stressed market conditions. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions.

The Management Board reviews and approves risk appetite and capacity on an annual basis, or more frequently in the event of unexpected changes to the risk environment, with the aim of ensuring that they are consistent with the Group's strategy, business and regulatory environment and stakeholders' requirements.

In order to determine risk appetite and capacity, different group level triggers and thresholds on a forward-looking basis are set and the escalation requirements for further action are defined. Deutsche Bank assigns risk metrics that are sensitive to the material risks to which Deutsche Bank is exposed and which function as indicators of financial health. In addition to that, the risk and recovery management framework is linked with the risk appetite framework.

Reports relating to risk profile as compared to Deutsche Bank's risk appetite and strategy and the monitoring thereof are presented regularly up to the Management Board. In the event that desired risk appetite is breached, a predefined escalation governance matrix is applied so these breaches are highlighted to the appropriate governance bodies.

Risk and capital plan

Strategic and capital plan

Deutsche Bank conducts annually an integrated strategic planning process which lays out the development of the future strategic direction for the Group and for the business areas. The strategic plan aims to create a holistic perspective on capital, funding, and risk under risk-return considerations. This process translates long-term strategic targets into measurable short- to medium-term financial targets and enables intra-year performance monitoring and management. Thereby the Group aims to identify growth options by considering the risks involved and the allocation of available capital resources to drive sustainable performance. Risk-specific portfolio strategies complement this framework and allow for an in-depth implementation of the risk strategy on portfolio level, addressing risk specifics including risk concentrations.

The strategic planning process consists of two phases: a top-down target setting and a bottom-up substantiation.

In a first phase – the top-down target setting – Deutsche Bank's key targets for profit and loss (including revenues and costs), capital supply, capital demand as well as leverage, funding and liquidity are defined and discussed for the group and the key business areas. In this process step, the targets for the next five years are based on the global macro-economic outlook and the expected regulatory framework. Subsequently, the targets are challenged and approved by the Management Board.

In a second phase, the top-down targets are substantiated bottom-up by detailed business unit plans, which consist of a month by month operative plan for year one; years two and three are planned per quarter and years four and five are annual plans. The proposed bottom-up plans are reviewed and challenged by Finance and Risk and are discussed individually with the respective business heads. Thereby, the specifics of the business are considered, and concrete targets agreed in line with the bank's strategic direction. The bottom-up phase includes the preparation of plans for key legal entities to review local risk and capitalization levels. Stress tests complement the strategic plan to consider the resilience of the plan against adverse market conditions.

The resulting Strategic and Capital Plan is presented to the Management Board for discussion and approval. The final plan is furthermore presented to the Supervisory Board.

The Strategic and Capital Plan is designed to support the Groups' vision of being a leading German bank with strong European roots and a global network and aims to ensure:

- Balanced risk adjusted performance across business areas and units
- High risk management standards with focus on risk concentrations
- Compliance with regulatory requirements
- Strong capital and liquidity position
- Stable funding and liquidity strategy allowing for business planning within the liquidity risk appetite and regulatory requirements

The Strategic and Capital Planning process allows to:

- set earnings and key risk and capital adequacy targets considering the bank's strategic focus and business plans
- assess the capital adequacy with regard to internal and external requirements (i.e., economic capital and regulatory capital)
- apply appropriate stress test analyses to assess the impact on capital demand, capital supply and liquidity

All externally communicated financial targets are monitored on an ongoing basis in appropriate management committees. Any projected shortfall versus targets is discussed together with potential mitigating strategies with the aim to ensure that the Group remains on track to achieve the targets. Amendments to the strategic and capital plan must be approved by the Management Board. Achieving the externally communicated solvency targets ensures that the Group also complies with the solvency ratio related Group Supervisory Review and Evaluation Process (SREP) requirements as articulated by the home supervisor.

Internal capital adequacy assessment process

Deutsche Bank's internal capital adequacy assessment process (ICAAP) consists of several well-established components which ensure that Deutsche Bank maintains sufficient capital to cover the risks to which the bank is exposed on an ongoing basis:

- Risk identification and assessment: The risk identification process forms the basis of the ICAAP and results in an inventory of risks for the Group; all risks identified are assessed for their materiality; further details can be found in section "Risk identification and assessment"
- Capital demand/risk measurement: Risk measurement models are applied to quantify the regulatory and economic capital demand which is required to cover all material risks except for those which cannot be adequately limited by capital e.g. liquidity risk; further details can be found in sections "Risk profile" and "Capital, Leverage Ratio, TLAC and MREL"
- Capital supply: Capital supply quantification refers to the definition of available capital resources to absorb unexpected losses; further details can be found in sections "Capital, Leverage Ratio, TLAC and MREL" and "Economic Capital Adequacy"
- Risk appetite: Deutsche Bank has established a set of qualitative statements, quantitative metrics and thresholds which express the level of risk that Deutsche Bank is willing to assume to achieve strategic objectives; threshold breaches are subject to a dedicated governance framework triggering management actions aimed to safeguard capital adequacy; further details can be found in sections "Risk appetite and capacity" and "Key risk metrics"
- Capital planning: The risk appetite thresholds for capital adequacy metrics constitute boundaries which have to be met in the capital plan to safeguard capital adequacy on a forward-looking basis; further details can be found in section "Strategic and capital plan"
- Stress testing: Capital plan figures are also considered under various stress test scenarios to prove resilience and overall viability of the bank; regulatory and economic capital adequacy metrics are also subject to regular stress tests throughout the year to constantly evaluate Deutsche Bank's capital position in hypothetical stress scenarios and to detect vulnerabilities under stress; further details can be found in section "Stress testing"
- Capital adequacy assessment: Although capital adequacy is constantly monitored throughout the year, the ICAAP concludes with a dedicated annual capital adequacy statement (CAS); the assessment consists of a Management Board statement about Deutsche Bank's capital adequacy, which is linked to specific conclusions and management actions to be taken to safeguard capital adequacy on a forward-looking basis

As part of its ICAAP, Deutsche Bank distinguishes between a normative and economic internal perspective. The normative internal perspective refers to a multi-year assessment of the ability to fulfil all capital-related legal requirements and supervisory demands. The economic internal perspective refers to an internal process using internal economic capital demand models and an internal economic capital supply definition. Both perspectives focus on maintaining the continuity of Deutsche Bank on an ongoing basis under a baseline and adverse scenario.

Stress testing

Deutsche Bank has implemented a stress test framework to satisfy internal as well as external stress test requirements. The internal stress tests are based on in-house developed methods and inform a variety of risk management use cases (risk type specific as well as cross risk). Internal stress tests form an integral part of Deutsche Bank's risk management framework complementing traditional risk measures. The cross-risk stress test framework, the Group Wide Stress Test Framework (GWST), serves a variety of bank management processes, in particular the strategic planning process, the ICAAP, the risk appetite framework and tangible equity allocation to business units. Capital plan stress testing is performed to assess the viability of the bank's capital plan in adverse circumstances and to demonstrate a clear link between risk appetite, business strategy, capital plan and stress testing. The regulatory stress tests, e.g. the EBA stress test and the US-based CCAR (Comprehensive Capital Analysis and Review) stress tests, are strictly following the processes and methodologies as prescribed by the regulatory authorities.

Deutsche Bank's internal stress tests are performed on a regular basis in order to assess the impact of severe economic downturns as well as adverse bank-specific events on the bank's risk profile and financial position. The bank's stress testing framework comprises regular sensitivity-based and scenario-based approaches addressing different severities and regional hotspots. All material risk types are included in the stress testing activities. These activities are complemented by portfolio- and country-specific downside analysis as well as further regulatory requirements, such as annual reverse stress tests and additional stress tests requested by regulators on group or legal entity level. The applied methodologies undergo regular scrutiny from Deutsche Bank's internal validation team (Model Risk Management) to ensure they correctly capture the impact of a given stress scenario. In addition, the group wide stress framework is subject to regular reviews by Deutsche Bank's group audit function.

The initial phase of Deutsche Bank's cross-risk stress test consists of defining a macroeconomic downturn scenario by ERM Risk Research in cooperation with business specialists through a formal governance forum, the Scenario Design Working Group. ERM Risk Research monitors the political and economic developments around the world and maintains a macro-economic heat map that identifies potentially harmful scenarios. Based on quantitative models and expert judgments, economic parameters such as foreign exchange rates, interest rates, GDP growth or unemployment rates are set accordingly and define the narrative under which the bank's solvency position is assessed. The scenario parameters are translated into specific risk drivers by subject matter experts in the risk units. Based on the bank's internal model framework for stress testing, the following major metrics are calculated under stress: risk-weighted assets, impacts on profit and loss and economic capital by risk type. These results are aggregated at the Group level, and key metrics such as the CET 1 ratio, Total Capital ratio, Economic Capital Adequacy ratio, MREL ratio and Leverage Ratio under stress are derived. Stress impacts on the Liquidity Coverage Ratio (LCR) and other Liquidity indicators are also considered. The time-horizon of internal stress tests is between one and five years, depending on the use case and scenario assumptions. The Stress Test Working Group (STWG) reviews the final stress results followed by selected presentations to the Enterprise Risk Committee (ERC). After comparing these results against the bank's defined risk appetite, a specific mitigation strategy may be developed and applied to remediate the stress impacts in case of risk appetite threshold breaches. The stress results also feed into the recovery planning which is crucial for the recoverability of the bank in times of crisis. The outcome is presented to senior management up to the Management Board to raise awareness on the highest level as it provides key insights into specific business vulnerabilities and contributes to the overall risk profile assessment of the bank.

The group wide stress tests performed in 2024 indicated that the bank's capitalization together with available mitigation measures as defined in the Group Recovery Plan is adequate to reach the internally set stress exit levels.

The cross-risk reverse stress test leverages the GWST framework and is typically performed annually in order to challenge Deutsche Bank's business model by determining scenarios which would cause the bank to become unviable. Such a reverse stress test is based on a hypothetical macroeconomic scenario enriched by idiosyncratic events based on the top risks monitored by each risk type. Comparing the non-viability scenario to the current economic environment, the probability of occurrence of such a hypothetical stress scenario is considered to be extremely low. Given this, it is the bank's view that its business continuity is not at risk.

In 2024, the bank has performed multi-year stress tests as part of the annual strategic planning process for 2024 using two adverse heatmap scenarios, namely a “EU led hard landing scenario” and a “Upside rates and inflation shock” scenario.

In addition to the GWST that includes all material risk types and major revenue streams, Deutsche Bank has individual stress test programs in place for all relevant risk metrics in line with regulatory requirements. The relevant stress test programs are described in the sections about the individual risk management methods.

Deutsche Bank’s core US subsidiary, DB USA Corporation, also took part in a major regulatory stress test in 2024 i.e. the US-based CCAR stress test, as implemented pursuant to the U.S. Dodd-Frank Act. In the CCAR stress test, the Federal Reserve (FRB) disclosed the stress capital depletion for DB USA Corporation and DWS USA Corporation; the outcome of which showed that each entity remains very well-capitalized even after withstanding a hypothetical severe stress environment.

In 2024, the bank has continued to enhance its internal climate stress testing capabilities, extending its framework to include physical risk and long-term transition risk scenarios across global portfolios. In addition, all relevant risk types with material climate risk exposure are now covered. The results of the stress test are integrated into relevant processes, including risk appetite, business planning and ICAAP.

Risk measurement and reporting systems

Overview

Deutsche Bank’s risk measurement systems support regulatory reporting and external disclosures, as well as internal management reporting across all risk types. The risk infrastructure incorporates the relevant legal entities and business divisions and provides the basis for reporting on risk positions, capital adequacy and limit, threshold, or target utilization to the relevant functions on a regular and ad-hoc basis. Established units within the CFO and CRO function assume responsibility for measurement, analysis and reporting of risk while promoting sufficient quality and integrity of risk-related data and consider, where relevant, the principles for effective risk data aggregation and risk reporting as per the Basel Committee on Banking Supervision's regulation number 239 (“BCBS 239”). The Group’s risk management systems are reviewed by Group Audit following a risk-based audit approach.

Deutsche Bank’s reporting is an integral part of Deutsche Bank’s risk management framework and as such aligns with the organizational setup by delivering consistent information on Group level and for material legal entities as well as breakdowns by risk types, business division and material business units.

The following principles guide Deutsche Bank’s “risk measurement and reporting” practices:

- Deutsche Bank monitors risks taken against risk appetite on various levels across the Group, e.g. Group, business divisions, material business units, material legal entities, risk types, material asset classes, portfolio and counterparty levels
- Risk reporting is required to be accurate, clear, useful and complete and must convey reconciled and validated risk data to communicate information in a concise manner to ensure, across material Financial and Non-Financial Risks, the bank’s risk profile is clearly understood
- Senior risk committees, such as the Enterprise Risk Committee and the Group Risk Committee, as well as the Management Board who are responsible for risk and capital management receive regular reporting (as well as ad-hoc reporting as required)
- Dedicated teams within Deutsche Bank proactively manage material Financial and Non-Financial Risks and must ensure that required management information is in place to enable proactive identification and management of risks and avoid undue concentrations within a specific Risk Type and across risks (Cross-Risk view)

In applying the previously mentioned principles, Deutsche Bank maintains a common basis for all risk reports and aims to minimize segregated reporting efforts to allow Deutsche Bank to provide consistent information, which only differs by granularity and audience focus.

Key risk metrics

The Bank identifies a large number of metrics within its risk measurement systems which support regulatory reporting and external disclosures, as well as internal management reporting across risks and for material risk types. Deutsche Bank designates a subset of those as “Key Risk Metrics” that represent the most critical ones for which the Bank places an appetite, limit, threshold or target at Group level and / or are reported routinely to senior management for discussion or decision making. The identified Key Risk Metrics include Capital Adequacy and Liquidity metrics; further details can be found in the section “Key risk metrics”.

Key risk reports

While a large number of reports are used across the Bank, Deutsche Bank designates a subset of these as "Key Risk Reports" that are critical to support Deutsche Bank's Risk Management Framework through the provision of risk information to senior management and therefore enable the relevant governing bodies to monitor, steer and control the Bank's risk taking activities effectively. To ensure that Key Risk Reports meet recipients' requirements, report producing functions regularly check whether the Key Risk Reports are clear and useful.

The main reports on risk and capital management that are used to provide Deutsche Bank's central governance bodies with information relating to the Group risk profile are the following:

- The monthly Risk and Capital Profile report is a Cross-Risk report, provides a comprehensive view of Deutsche Bank's risk profile and is used to inform the ERC, the Group Risk Committee as well as the Management Board and subsequently the Risk Committee of the Supervisory Board; the Risk and Capital Profile includes Risk Type specific and Business-Aligned overviews and Enterprise-wide risk topics; it also includes updates on Key Group Risk Appetite Metrics and other Key Portfolio Risk Type Control Metrics as well as updates on Key Risk Developments, highlighting areas of particular interest with updates on corresponding risk management strategies
- The Weekly Risk Report is a weekly briefing covering high-level topical issues across key risk areas and is submitted every Friday to the Members of the Enterprise Risk Committee, the Group Risk Committee and the Management Board and subsequently to the Members of the Risk Committee of the Supervisory Board; the Weekly Risk Report is characterized by the ad-hoc nature of its commentary as well as coverage of themes and focuses on more volatile risk metrics
- Deutsche Bank runs several Group-wide macroeconomic stress tests. A monthly Risk Appetite scenario serves the purpose to set and regularly monitor the bank's stress loss appetite; in addition, there are topical scenarios which are reported to and discussed in the Enterprise Risk Committee and escalated to the Group Risk Committee if deemed necessary; the stressed key performance indicators are benchmarked against the Group Risk Appetite thresholds

While the above reports are used at a Group level to monitor and review the risk profile of Deutsche Bank holistically, there are other, supplementing standard and ad-hoc management reports, including for Risk Types or Focus Portfolios, which are used to monitor and control the risk profile.

Recovery and resolution planning

In the EU, the Single Resolution Mechanism Regulation (SRM Regulation) and the Bank Recovery and Resolution Directive (BRRD) aim at reducing the likelihood of another financial crisis, enhance the resilience of institutions under stress, and eventually support the long-term stability of the financial systems without exposing taxpayers' money to losses.

In line with the provisions of the SRM Regulation and the BRRD (which were mainly implemented in Germany by the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, SAG)), Deutsche Bank maintains a recovery and resolution planning framework designed to identify and manage the impact of adverse events in a timely and coordinated manner.

The bank maintains a group recovery plan specifying measures to restore the financial position following a significant deterioration of its financial situation. The group recovery plan is updated at least annually and approved by the Management Board.

The group resolution plan on the other hand is prepared by the resolution authorities, rather than by the bank itself. Deutsche Bank works closely with the Single Resolution Board and the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) who establish the group resolution plan for Deutsche Bank, which is currently based on a single point of entry open bank bail-in as the preferred resolution strategy. Under the single point of entry bail-in strategy, the parent entity Deutsche Bank AG would be recapitalized through a write-down and/or conversion to equity of capital instruments (Common Equity Tier 1, Additional Tier 1, Tier 2) and other eligible liabilities in order to stabilize the group. Within one month after the application of the bail-in tool to recapitalize an institution, the BRRD (as implemented in the SAG) requires such institution to prepare a business reorganization plan, addressing the causes of failure and aiming to restore the institution's long-term viability. To further support and improve operational continuity of the bank for resolution planning purposes, Deutsche Bank has completed additional preparations, such as adding termination stay clauses into client financial agreements governed by non-EU law and including continuity provisions into key service agreements. Financial contracts and service agreements governed by EU law are already covered by statutory laws which prevent termination solely due to any resolution measure.

The BRRD requires banks in EU member states to maintain minimum requirements for own funds and eligible liabilities to make resolution credible by establishing sufficient loss absorption and recapitalization capacity. Apart from MREL-requirements, Deutsche Bank, as a global systemically important bank, is subject to global minimum standards for Total Loss-Absorbing Capacity, which set out strict requirements for the amount and eligibility of instruments to be maintained for bail-in purposes. In particular, TLAC instruments must be subordinated (including so-called senior non-preferred debt, but also in the form of regulatory capital instruments) to other senior liabilities. This ensures that a bail-in would be applied first to equity and TLAC instruments, which must be exhausted before a bail-in may affect other senior (preferred) liabilities such as senior preferred plain vanilla bonds, debt instruments that are structured, deposits and derivatives.

In the United States, Deutsche Bank AG is required under Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act), as amended, to prepare and submit to the Federal Reserve Board and the Federal Deposit Insurance Corporation (FDIC) either a full or targeted resolution plan (the U.S. Resolution Plan) on a timeline prescribed by such agencies. The U.S. Resolution Plan must demonstrate that the Deutsche Bank AG has the ability to execute and implement a strategy for the orderly resolution of its designated U.S. material entities and operations. For foreign-based companies subject to these resolution planning requirements such as Deutsche Bank AG, the U.S. Resolution Plan relates only to subsidiaries, branches, agencies and businesses that are domiciled in or whose activities are carried out in whole or in material part in the United States. Deutsche Bank's U.S. Resolution Plan describes the single point of entry strategy for Deutsche Bank's U.S. material entities and operations and prescribes that DB USA Corporation, one of the bank's intermediate holding companies, would provide liquidity and capital support to its U.S. material entity subsidiaries and ensure their solvent wind-down outside of applicable resolution proceedings.

Deutsche Bank filed its first 'targeted' U.S. Resolution Plan on December 17, 2021, which described the core elements of Deutsche Bank's U.S. resolution strategy, such as capital, liquidity, and recapitalization strategies, as well as how Deutsche Bank has integrated lessons learned from its response to the COVID-19 pandemic into its resolution planning process. On December 16, 2022, the Federal Reserve Board (FRB) and the FDIC (Agencies) announced the results of their review of Deutsche Bank's 2021 U.S. Resolution Plan, as well as those of other banks, and did not find any shortcomings or deficiencies in Deutsche Bank's plan. In their feedback letter to Deutsche Bank, the Agencies noted areas where further progress will help improve resolvability. Joint guidance was finalized in July 2024 by the FDIC and August 2024 by the FRB that amended resolution planning requirements for certain foreign filers, including Deutsche Bank, and extended the resolution plan submission deadline to October 1 2025. Deutsche Bank intends to address the noted areas of improvement from the feedback letter and updated guidance as part of the U.S. Resolution Plan submission.

Risk and Capital Management

Capital management

Deutsche Bank's Treasury function manages solvency, capital adequacy, leverage, and bail-in capacity ratios at Group level and locally in each region, as applicable. Treasury implements Deutsche Bank's capital strategy, which itself is developed by the Group Risk Committee and approved by the Management Board. Treasury, directly or through the Group Asset and Liability Committee, manages, among other things, issuance and repurchase of shares and capital instruments, hedging of capital ratios against foreign exchange swings, setting capacities for key financial resources, the design of shareholders' equity allocation, and regional capital planning. The bank is fully committed to maintaining Deutsche Bank's sound capitalization both from an economic and regulatory perspective considering both book equity based on IFRS accounting standards, regulatory and economic capital as well as specific capital requirements from rating agencies. The bank continuously monitors and adjusts Deutsche Bank's overall capital demand and supply to always achieve an appropriate balance.

Treasury manages the issuance and repurchase of capital instruments, namely Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments as well as TLAC/MREL eligible debt instruments. Treasury constantly monitors the market for liability management trades. Such trades represent a countercyclical opportunity to create Common Equity Tier 1 capital by buying back Deutsche Bank's issuances below par.

Treasury manages the sensitivity of Deutsche Bank's CET 1 ratio and capital towards swings in foreign currency exchange rates against the euro. For this purpose, Treasury develops and executes suitable hedging strategies within the constraints of a Management Board approved Risk Appetite. Capital invested into Deutsche Bank's foreign subsidiaries and branches is either not hedged, partially hedged or fully hedged. Thereby, Treasury aims to balance effects from foreign exchange rate movements on capital, capital deduction items and risk weighted assets in foreign currency. In addition, Treasury also accounts for associated hedge cost and implications on market risk weighted assets.

Resource limit setting

Usage of key financial resources is influenced through the following governance processes and incentives.

Target resource capacities are reviewed in Deutsche Bank's annual strategic plan in line with Deutsche Bank's CET 1 and Leverage Ratio ambitions. As a part of Deutsche Bank's quarterly process, the Group Asset and Liability Committee approves divisional resource limits for total capital demand (defined as the sum of RWA and certain RWA equivalents of Capital Deduction Items and certain RWA equivalents of Capital Buffer Requirements items) and leverage exposure that are based on the strategic plan but adjusted for market conditions and the short-term outlook. Limits are enforced through a close monitoring process and an excess charging mechanism.

Overall regulatory capital requirements are principally driven by either Deutsche Bank's CET 1 ratio (solvency) or leverage ratio (leverage) requirements, whichever is the more binding constraint. For the internal capital allocation, the combined contribution of each segment to the Group's Common Equity Tier 1 ratio, the Group's Leverage ratio and the Group's Capital Loss under Stress are weighted to reflect their relative importance and level of constraint to the Group. Contributions to the Common Equity Tier 1 ratio and the Leverage ratio are measured through RWA and Leverage Ratio Exposure (LRE). The Group's Capital Loss under Stress is a measure of the Group's overall economic risk exposure under a defined stress scenario. Goodwill, other intangible assets, and business-related regulatory capital deduction items included in total capital demand are directly allocated to the respective segments, supporting the calculation of the allocated tangible shareholders equity and the respective rate of return.

Most of Deutsche Bank's subsidiaries and several of Deutsche Bank's branches are subject to legal and regulatory capital requirements. In developing, implementing, and testing Deutsche Bank's capital and liquidity position, the bank fully takes such legal and regulatory requirements into account. Any material capital requests of Deutsche Bank's branches and subsidiaries across the globe are presented to and approved by the Group Investment Committee prior to execution.

Further, Treasury is a member of Deutsche Bank's Pensions Committee and represented in relevant Investment Committees overseeing the management of the assets of the largest Deutsche Bank pension funds in Germany. These investment committees set the investment strategy for these funds in line with the bank's investment objective to protect the capital base and distribution capacity of the bank.

Risk identification and assessment

Risks to Deutsche Bank's businesses and infrastructure functions, including under stressed conditions, are regularly identified. This assessment incorporates input from both first and second line of defense, with the identified risks assessed for materiality based on their severity and likelihood of materialization. The assessment of risks is complemented by a view on emerging risks applying a forward-looking perspective. This risk identification and assessment process results in the risk inventory which captures the material risks for the Group, and where relevant, across businesses, entities and branches.

Regular updates to the Group risk inventory are reported to the Enterprise Risk Committee for review and approval. The inventory is also discussed in the Group Risk Committee and reported to the Management Board. The inventory informs key risk management processes, including the development of stress scenarios tailored to Deutsche Bank's risk profile and informing risk appetite setting and monitoring. Risks in the inventory are also mapped to risks in the Group risk type taxonomy, where a corresponding materiality assessment is also provided.

Credit Risk Management

Credit risk framework

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower, obligor or issuer (which Deutsche Bank refers to collectively as "counterparties") exist, including those claims that Deutsche Bank plans to distribute. It captures the risk of loss because of a deterioration of a counterparty's creditworthiness or the failure of a counterparty to meet the terms of any contract with Deutsche Bank or otherwise perform as agreed.

Based on the Risk Type Taxonomy, credit risk is grouped into four material categories, namely default/migration risk, transaction/settlement risk (exposure risk), mitigation risk and concentration risk. This is complemented by a regular risk identification and materiality assessment.

- Default/migration risk as the main element of credit risk, is the risk that a counterparty defaults on its payment obligations or experiences material credit quality deterioration increasing the likelihood of a default
- Transaction/settlement risk is the risk that arises from any existing, contingent or potential future positive exposure
- Mitigation risk is the risk of higher losses due to risk mitigation measures not performing as anticipated
- Credit concentration risk is the risk of an adverse development in a specific single counterparty, country, industry or product leading to a disproportionate deterioration in the risk profile of Deutsche Bank's credit exposures to that counterparty, country, industry or product

Deutsche Bank manages its credit risk using the following philosophy and principles:

- Credit Risk is only accepted:
  - for adopted clients
  - after completed appropriate due diligence led by the respective origination teams as 1st LoD
  - New products and changes to existing products have to be assessed within DB Group's new product approval (NPA) framework
  - If a rating has been assigned in line with agreed and approved processes
  - If all credit relevant exposures are correctly reflected in the relevant risk systems
  - If plans for an orderly termination of the risk positions have been considered
- Credit Risk is assumed within the applicable Risk Appetite
- P&L responsibility for credit exposures is owned by the originating Group Division
- Risk taken needs to be adequately compensated
- Risk must be continuously monitored and managed across 1st and 2nd LoD
- Credit standards are applied consistently across all Group Divisions in order to maintain a favorable risk profile in line with the Risk Appetite
- Collateral or other risk mitigating, hedging or rating transfer instruments, which can be an alternative source of repayment do not substitute for underwriting standards and a thorough assessment of the debt service ability of a counterparty has to be performed during the credit process
- Deutsche Bank strives to adequately secure, guarantee or hedge outright cash risk and longer tenor-exposures; this approach does usually not include lower risk short-term transactions and facilities supporting specific trade finance or other lower risk products where the margin allows for adequate loss coverage
- Deutsche Bank measures and consolidates globally all exposure and facilities to the same Obligor.

- Deutsche Bank has established within Credit Risk Management – where appropriate – specialized teams for deriving internal client ratings, analyzing and approving transactions or covering workout clients; for transaction approval purposes, structured credit risk management teams are aligned to the respective products or specific risks to ascertain adequate product expertise
- Where required, Deutsche Bank has established processes to manage credit exposures at a legal entity or regional level

To meet the requirements of Article 190 CRR, Deutsche Bank has allocated the various control requirements for the credit processes to units best suited to perform such controls

Climate and environmental risks are integrated across the different stages of the credit lifecycle including transaction approval / client onboarding, risk classification and credit ratings, portfolio analysis and monitoring and, collateral valuation.

Climate and environmental risks are incorporated into the credit approval process for corporate clients via enhanced due diligence requirements. New loan requests (defined as increments, renewals/tenor extensions) above selected tenor and rating-based thresholds to corporate clients in high-carbon intensive sectors as well as those in sectors vulnerable to climate-physical and nature (or “other environmental”) risks require dedicated climate risk assessment from the front office and review by Credit Risk Management. More information on additional controls and processes around the appetite and management of environmental risks in the bank’s lending portfolio are reported in the following sections of this chapter.

Measuring Credit Risk

Credit risk is measured by credit rating, regulatory and internal capital demand and other key components like credit limits as mentioned below.

The credit rating is an essential part of the bank’s underwriting and credit process and provides – amongst others – a cornerstone for credit limit determination on an individual counterparty level, credit decision and transaction pricing as well the determination of regulatory capital demand for credit risk. Each counterparty must be rated, and each rating has to be reviewed at least annually supported by ongoing monitoring of counterparties. A credit rating is a prerequisite for any credit limit established/approved. For each credit rating, the appropriate rating approach has to be applied and the derived credit rating has to be established in the relevant systems. Specific rating approaches have been established to best reflect the respective characteristics of exposure classes, including specific product types, central governments and central banks, institutions, corporates and retail.

Counterparties in the bank’s non-retail portfolios are rated by Deutsche Bank’s independent Credit Risk Management function partly using automated or semi-automated rating systems. Given the largely homogeneous nature of the retail portfolio, counterparty creditworthiness and ratings are predominately derived by utilizing an automated decision engine. Country risk-related ratings are provided by Enterprise Risk Management (ERM) Risk Research.

Deutsche Bank’s rating analysis is based on a combination of qualitative (including environmental) and quantitative factors. When rating a counterparty Deutsche Bank applies in-house assessment methodologies and, scorecards, as well as its 21-grade rating scale.

Changes to existing credit models and introduction of new models are approved by the Regulatory Credit Risk Model Committee (RCRMC) chaired by the Head of Credit Risk Management before the models are used for credit decisions and capital calculation for the first time or before they are significantly changed. Separately, for all model changes and for new models an approval by Model Risk Management is required. Proposals with high impact are recommended for approval to the Group Risk Committee. Furthermore, regulatory approval may also be required. The model validation is performed independently of model development by Model Risk Management. The results of the regular validation processes as stipulated by internal policies are brought to the attention of the RCRMC, even if the validation results do not lead to a change.

Deutsche Bank measures risk-weighted assets to determine the regulatory capital demand for credit risk using “advanced”, “foundation” and “standard” approaches of which “advanced” and “foundation” approaches are approved by the bank’s regulator.

The advanced Internal Ratings Based Approach (IRBA) is the most sophisticated approach available under the regulatory framework for credit risk and allows Deutsche Bank to make use of its internal credit rating models as well as internal estimates of specific further risk parameters. These methods and parameters represent long-used key components of the internal risk measurement and management process supporting the credit approval process, the economic capital and expected loss calculation and the internal monitoring and reporting of credit risk. The relevant parameters include the probability of default (PD), the loss given default (LGD) and the maturity (M) driving the regulatory risk-weight and the credit conversion factor (CCF) as part of the regulatory exposure at default (EAD) estimation. For the majority of derivative counterparty exposures as well as securities financing transactions (SFT), Deutsche Bank makes use of the internal model method (IMM) in accordance with CRR to calculate EAD. For most of the bank's internal rating systems more than seven years of historical information is available to assess these parameters. Deutsche Bank's internal rating methodologies aim at point-in-time rather than a through-the-cycle rating, but in line with regulatory solvency requirements, they are calibrated based on long-term averages of observed default rates.

The foundation IRBA is an approach available under the regulatory framework for credit risk allowing institutions to make use of their internal rating methodologies while using pre-defined regulatory values for all other risk parameters. Parameters subject to internal estimates include the PD while the LGD and the CCF are defined in the regulatory framework. Foundation IRBA remains in place for some exposures stemming from ex-Postbank.

Deutsche Bank applies the standardized approach to a subset of its credit risk exposures. The standardized approach measures credit risk either pursuant to fixed risk weights, which are predefined by the regulator, or through the application of external ratings. Deutsche Bank assigns certain credit exposures permanently to the standardized approach in accordance with Article 150 CRR. These are predominantly exposures to the Federal Republic of Germany and other German public sector entities as well as exposures to central governments of other European Member States that meet the required conditions. These exposures make up the majority of the exposures carried in the standardized approach and receive predominantly a risk weight of zero percent. For internal purposes, however, these exposures are subject to an internal credit assessment and fully integrated in the risk management and economic capital processes.

In addition to the above-described regulatory capital demand, Deutsche Bank determines the internal capital demand for credit risk via an economic capital model.

Deutsche Bank calculates economic capital for the default risk, country risk and settlement risk as elements of credit risk. In line with the bank's economic capital framework, economic capital for credit risk is set at a level to absorb with a probability of 99.9% very severe aggregate unexpected losses within one year. Deutsche Bank's economic capital for credit risk is derived from the loss distribution of a portfolio via Monte Carlo Simulation of correlated rating migrations. The loss distribution is modeled in two steps. First, individual credit exposures are specified based on parameters for the probability of default, exposure at default and loss given default. In a second step, the probability of joint defaults is modeled through the introduction of economic factors, which correspond to geographic regions and industries. The simulation of portfolio losses is then performed by an internally developed model, which takes rating migration and maturity effects into account as well as LGD volatility. Effects due to wrong-way derivatives risk (i.e., the credit exposure of a derivative in the default case is higher than in non-default scenarios) are modeled by applying the bank's own alpha factor when deriving the exposure at default for derivatives and securities financing transactions under the CRR. Deutsche Bank allocates expected losses and economic capital derived from loss distributions down to transaction level to enable management on transaction, customer and business level.

Besides the credit rating, as a key component for managing the bank's credit portfolio, including individual transaction approval and the setting of risk appetite, Deutsche Bank establishes credit limits for all credit exposures. Credit limits set forth maximum credit exposures Deutsche Bank is willing to assume over specified periods. In determining the credit limit for a counterparty, Deutsche Bank considers the counterparty's credit quality above others by reference to its internal credit rating. Credit limits and credit exposures are both measured on a gross and net basis where net is derived by deducting appropriate hedges and certain collateral from respective gross figures. For derivatives, Deutsche Bank looks at current market values and the potential future exposure over the relevant time horizon, which is based upon the bank's legal agreements with the counterparty.

IFRS 9 Impairment

In the following chapter, the Group provides an overview of the IFRS 9 impairment framework and how it is embedded into Deutsche Bank's credit risk management activities. The disclosure provides a description of the Group's IFRS 9 model and methodology, changes implemented in 2024 as well as key model assumptions. This chapter also highlights uncertainties noted in 2024 and at year end, along with the impact from reasonable changes in the Group's key model assumptions.

These credit risk management activities and assessments are embedded in the bank's overall control and governance framework for credit risk which includes the estimation of expected credit losses under IFRS 9 and the governance around the models used. These activities include, but are not limited to, regular emerging and novel risk reviews as well as portfolio deep dives, day to day risk management on the level of individual borrowers, as well as regular model validations. Further explanations are provided regarding management overlays applied to the credit loss allowance, how reviews of relevant assumptions and inputs to the ECL calculation are performed and how, as part of the model reviews, potential model imprecision and whether any overlays were necessary, are assessed. The Group also presents background on management overlays recorded at the end of 2023, throughout 2024 and at the end of 2024. To provide additional transparency on the impact of reasonable changes to the key assumptions, model sensitivities are presented in a separate section which concludes with the key drivers for the IFRS 9 model results.

Description of IFRS 9 model and methodology

The impairment requirements of IFRS 9 apply to all credit exposures that are measured at amortized cost or fair value through other comprehensive income and to off balance sheet lending commitments, such as loan commitments and financial guarantees. For purposes of the bank's impairment approach, the Group refers to these instruments as financial assets.

The Group determines its allowance for credit losses in accordance with IFRS 9 as follows:

- Stage 1 reflects financial assets where it is assumed that credit risk has not increased significantly after initial recognition
- Stage 2 contains all financial assets, that are not defaulted, but have experienced a significant increase in credit risk since initial recognition
- Stage 3 consists of financial assets which deemed to be in default in accordance with Deutsche Bank's policies, which are based on the Capital Requirements Regulation (CRR) Article 178. The Group defines these financial assets as impaired, non-performing and defaulted
- Significant increase in credit risk is determined using quantitative and qualitative information based on the Group's historical experience, credit risk assessment and forward-looking information
- Purchased or Originated Credit-Impaired (POCI) financial assets are assets where at the time of initial recognition, there is objective evidence of impairment and the Group purchased at a discount.

The IFRS 9 impairment approach is an integral part of the Group's credit risk management procedures. The estimation of ECL is either performed via the automated, parameter based ECL calculation using the Group's ECL model or determined by credit officers. In both cases, the calculation takes place for each financial asset individually. Similarly, the determination of the need to transfer between stages is made on an individual asset basis. The Group's ECL model is used to calculate the allowance for credit losses for all financial assets in Stage 1 and Stage 2, as well as for Stage 3 in the homogeneous portfolio (i.e., retail and small business loans with similar credit risk characteristics). For financial assets in the bank's non-homogeneous portfolio in Stage 3 and for POCI assets, the allowance for credit losses is determined individually by credit officers.

The Group uses three main components to measure ECL. These are Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD). The Group leverages existing parameters used for determination of capital demand under the Basel Internal Ratings Based Approach (IRBA) and internal risk management practices as much as possible to calculate ECL. These parameters are adjusted where necessary to comply with IFRS 9 requirements (e.g., use of point in time ratings and removal of downturn add-ons in the regulatory parameters). Incorporating forecasts of future economic variables into the measurement of ECL influences the allowance for credit losses. In order to calculate lifetime ECL, the Group's calculation derives the corresponding lifetime PDs from migration matrices that reflect economic forecasts.

In 2023, the Group completed three migration waves of the Postbank clients into the IT systems of Deutsche Bank, which resulted in the Group-wide alignment of the IFRS 9 impairment model and methodologies, while specific models previously applied for the Postbank were to a large extent decommissioned. The final wave of the IT migration took place in the third quarter of 2024 and included the BHW mortgage and Postbank factoring portfolios. The migration led to an immaterial ECL increase.

Stage determination and significant increase in credit risk

At initial recognition, financial assets are reflected in Stage 1, unless the financial assets are POCI. If there is a significant increase in credit risk, the financial asset is transferred to Stage 2. A significant increase in credit risk is determined by using rating-related and process-related indicators. The transfer of financial assets to Stage 3 is based on the status of the borrower being in default. If a borrower is in default, all financial assets of the borrower are transferred to Stage 3.

Rating-related Stage 2 indicators: The Group compares a borrower's lifetime PD at the reporting date with lifetime PD expectations at the date of initial recognition to determine if there has been a significant change in the borrower's PDs and consequently to any of the borrower's transaction in the scope of IFRS 9 impairment. Based on historically observed migration behavior and a sampling of different economic scenarios, a lifetime PD distribution is obtained. A quantile of this distribution, which is defined for each counterparty class, is chosen as the lifetime PD threshold. If the remaining lifetime PD of a transaction according to current expectations exceeds this threshold, the financial asset is deemed to have incurred a significant increase in credit risk and is transferred to Stage 2. The quantiles used to define Stage 2 thresholds are determined using expert judgment, are reviewed annually and have not changed since implementation of IFRS 9. The thresholds applied vary depending on the original credit quality of the borrower, elapsed lifetime, remaining lifetime and counterparty class. Management believes that the defined approach and quantiles represent a meaningful indicator that a financial asset has incurred a significant increase in credit risk. In 2024 the Group started a review of the appropriateness of the quantile approach, which is still ongoing. An alternative approach has been developed and is currently being tested. Initial preliminary impacts appear to be neutral. As an interim step Deutsche Bank decided to introduce the threefold PD increase as additional Stage 2 trigger as a backstop, which went live in August 2024 and only lead to an immaterial impact on ECL.

Process-related Stage 2 indicators are derived via the use of existing risk management indicators, which in the bank's view represent situations where the credit risk of financial assets has significantly increased. These include borrowers being added to the Group's watchlist, being transferred to workout status, payments being 30 days or more past due or being in forbearance. As long as the condition for one or more of the process-related or rating-related indicators is fulfilled and the borrower of the financial asset has not met the definition of default, the asset will remain in Stage 2. If the Stage 2 indicators are no longer fulfilled and the financial asset has not defaulted, the financial asset transfers back to Stage 1. In case of performing forborne financial assets, the probation period is two years before the financial asset is reclassified to Stage 1, which is aligned with regulatory guidance.

If the borrower defaults, all transactions of the borrower are allocated to Stage 3. If, at a later date, the borrower is no longer in default, the curing criteria according to regulatory guidance is applied (including probation periods), which are at least three months or one year in case of distressed restructurings. Once the regulatory cure period or criteria has been met, the borrower will cease to be classified as defaulted and will be transferred back to Stage 2 or Stage 1.

The ECL calculation for Stage 3 distinguishes between transactions in the homogeneous and non-homogenous portfolios, as well as POCI financial assets. For transactions that are in Stage 3 and in a homogeneous portfolio, the Group uses a parameter-based automated approach to determine the credit loss allowance per transaction. For these transactions, the LGD parameters are to a large extent modelled to be time-dependent, i.e., consider the declining recovery expectation as time elapses after default. The allowance for credit losses for financial assets in the bank's non-homogeneous portfolios in Stage 3, as well as for POCI assets are determined by credit officers and have to be approved along an established authority grid up to and including the Management Board. This allows credit officers to consider currently available information and recovery expectations specific to the borrowers and the financial assets at the reporting date.

Estimation techniques for key input factors

The first key input factor in the Group ECL calculation is the one-year PD for borrowers which is derived from the bank's internal rating systems. The Group assigns a PD to each borrower credit exposure based on a 21-grade master rating scale for all of the Group's exposure.

The borrower ratings assigned are derived based on internally developed rating models which specify consistent and distinct customer-relevant criteria and assign a rating grade based on a specific set of criteria as given for a certain customer. The set of criteria is generated from information sets relevant for the respective customer segments including general customer behavior, financial and external data (e.g., credit bureau). The methods in use range from statistical scoring models to expert-based models taking into account the relevant available quantitative and qualitative information. Expert-based models are usually applied for borrowers in the exposure classes "Central governments and central banks", "Institutions" and "Corporates" with the exception of those "Corporates" for which a sufficient data basis is available for statistical scoring models. For the latter, as well as for the retail segment, statistical scoring or hybrid models combining both approaches are commonly used. Quantitative rating methodologies are developed based on applicable statistical modelling techniques, such as logistic regression.

One-year PDs are extended to multi-year PD curves using through-the-cycle matrices and macroeconomic forecasts. Based on economic scenarios centered around the macroeconomic baseline forecast, through-the-cycle matrices are first transformed into point-in-time rating migration matrices, typically for a two-year period. The calculation of the point-in-time matrices provides the link between macroeconomic variables and the default and rating behavior of borrowers, which is derived from time series through regression techniques involving macroeconomic variables (MEVs) and historical rating and default data. In a final step, multi-year PD curves are derived from point-in-time rating migration matrices for periods where reasonable and supportable forecasts are available and extrapolated based on through-the-cycle rating migration matrices beyond those periods.

The second key input factor into the ECL calculation is the LGD parameter, which is defined as the likely loss intensity in case of a borrower's default. It provides an estimation of the exposure that cannot be recovered in a default event and therefore captures the severity of a loss. Conceptually, LGD estimates are independent of a borrower's probability of default. The LGD models applied in Stages 1 and 2, which are based on regulatory LGD models, but adjusted for IFRS 9 requirements (i.e., removal of downturn-add-on and removal of indirect costs of workout), ensure that the main drivers for losses (i.e., different levels and quality of collateralization and customer or product types or seniority of facility) are reflected as risk drivers in LGD estimates. In the bank's LGD models, the Group assigns collateral type specific LGD parameters to the collateralized exposure (collateral value after application of haircuts).

Forward-looking information (FLI) is also incorporated into LGD projections in terms of FLI LGD scaling factors for exposures in Stages 1 and 2 based on forecasts for key MEVs. LGD adjustments are quantified relative to long-term historical averages, which represent a neutral reference point throughout an economic cycle.

The LGD setting for defaulted homogeneous portfolios are partially dependent on time after default and are either calibrated based on the Group's multi-decade loss and recovery experience using statistical methods or for less significant portfolios certain LGD model input parameters (e.g., cure rates) are determined by expert judgement.

The third key input factor is the exposure at default over the lifetime of a financial asset which is modelled taking into account expected repayment profiles (e.g., linear amortization, annuities, bullet loan structures). Prepayment options are modelled for some portfolios. The bank applies specific credit conversion factors (CCFs) in order to calculate an EAD value. Conceptually, the EAD is defined as the expected amount of the credit exposure to a borrower at the time of its default. In instances where a transaction involves an unused limit, a percentage share of this unused limit is added to the outstanding amount in order to appropriately reflect the expected outstanding amount in case of a borrower's default. This reflects the assumption that for commitments, the utilization at the time of default might be higher than the current outstanding balance. In case a transaction involves an additional contingent component (i.e., guarantees) a further percentage share is applied as part of the CCF model in order to estimate the amount of guarantees drawn in case of default. The calibrations of such parameters are based on internal historical data and are either based on empirical analysis or supported by expert judgement and consider borrower and product type specifics. Where supervisory CCF values need to be applied for regulatory purposes, internal estimates are used for IFRS 9.

Expected lifetime

IFRS 9 requires the determination of lifetime ECL for which the expected lifetime of a financial asset is a key input factor. Lifetime ECL represent default events over the expected life of a financial asset. The Group measures ECL considering the risk of default over the maximum contractual period (including any borrower's extension options) over which the Group is exposed to credit risk.

Retail overdrafts, credit card facilities and certain corporate revolving facilities typically include both a loan and an undrawn commitment component. The expected lifetime of such on-demand facilities exceeds their contractual life as they are typically cancelled only when the Group becomes aware of an increase in credit risk. The expected lifetime is estimated by taking into consideration historical information and the Group's credit risk management actions such as credit limit reductions and facility cancellation. Where such facilities are subject to an individual review by credit risk management, the lifetime for calculating ECL is 12 months. For facilities not subject to individual review by credit risk management, the bank applies a lifetime for calculating ECL of 24 months.

Interest rate used in the IFRS 9 model

In the context of the ECL calculation, the Group applies in line with IFRS 9 an approximation of the effective interest rate (EIR), which is usually the contractual interest rate. The contractual interest rate is deemed to be an appropriate approximation, as the interest rate is consistently used in the ECL model, interest recognition and for discounting of the ECL and does not materially differ from the EIR.

Consideration of collateralization in IFRS 9 Expected Credit Loss calculation

The ECL model projects the level of collateralization for each point in time in the life of a financial asset. At the reporting date, the model uses the existing collateral distribution process applied in Deutsche Bank's economic capital model. In this model, the liquidation value of each eligible collateral is allocated to relevant financial assets to distinguish between collateralized and uncollateralized parts of each financial asset. In the ECL calculation, the Group subsequently applies the aforementioned LGDs for secured and unsecured exposures to derive the ECL for the secured and unsecured part of the exposure separately.

For personal collateral (e.g., guarantees), the ECL model assumes that the relative level of collateralization remains stable over time. In the case of an amortizing loan, the outstanding exposure and collateral values decrease together over time. For physical collateral (e.g., real estate property), the ECL shall assume that the absolute collateral value remains constant. In case of an amortizing loan, the collateralized part of the exposure increases over time and the loan-to-value decreases accordingly.

Certain financial guarantee contracts are integral to the financial assets guaranteed. In such cases, the financial guarantee is considered as collateral for the financial asset and the benefit of the guarantee is used to mitigate the ECL of the guaranteed financial asset.

Forward looking information

Under IFRS 9, the allowance for credit losses is based on reasonable and supportable forward-looking information available without undue cost or effort, which takes into consideration past events, current conditions and forecasts of future economic conditions.

To incorporate forward looking information into the Group's allowance for credit losses, the bank uses two key elements:

- As its base scenario, the Group uses external survey-based macroeconomic forecasts (e.g., consensus views on GDP and unemployment rates); in addition, the scenario expansion model, which has been initially developed for stress testing, is used for forecasting macroeconomic variables that are not covered by external consensus data; all forecasts are assumed to reflect the most likely development of the respective variables; the Group regularly updates its forecasts for macro-economic factors during the quarter and reviews aspects of potential model imprecision (e.g., MEV parameters outside the historic range used for model calibration, if not already included in the model) as part of an MEV monitoring framework to assess if an overlay is required
- Statistical techniques are then applied to transform the base scenario projections into a probability distribution of the macroeconomic variables; these scenarios specify deviations from the baseline forecasts; the scenario distribution is then used for deriving multi-year PD curves for different rating and counterparty classes, which are applied in the ECL calculation and in the identification of significant deterioration in credit quality of financial assets as described above in the rating-related Stage 2 indicators

The Group's Risk and Finance Credit Loss Provision Forum monitors the impact of forward-looking information, including the latest macroeconomic variables, on a quarterly basis and determines if any additional overlays are required. Although interest rates and inflation are not separately included in the MEVs, the economic impact of these risks is reflected in GDP growth rates, unemployment, equities and credit spreads as higher rates and inflation filter through these forecasts. As of December 31, 2024, the consensus data applied in the ECL model was deemed to have reflected the latest macroeconomic developments and after considering all relevant uncertainties in the MEVs no additional overlays were required.

As described earlier, the Group's approach to reflect forward-looking information into the calculation of ECL is to incorporate forecasts for the next two to three years into PD and LGD projections. For periods beyond those covered in terms of reasonable and supportable economic forecasts, reversion to historically observed behavior of defaults, rating migrations and recoveries is used for ECL measurement.

The tables below contain relevant forward-looking information by macroeconomic variable included in the Group's IFRS 9 model as of December 31, 2024, and as of December 31, 2023.

Forward-looking information applied

	December 31, 2024[1] [2]	
	Year 1 (4 quarter avg)	Year 2 (4 quarter avg)
GDP - USA	2.23%	2.04%
GDP - Eurozone	1.04%	1.19%
GDP - Germany	0.38%	1.14%
GDP - Italy	0.74%	1.02%
GDP - Developing Asia	4.53%	4.26%
GDP - Emerging Markets	4.11%	3.81%
Unemployment - USA	4.29%	4.20%
Unemployment - Eurozone	6.46%	6.42%
Unemployment - Germany	3.46%	3.40%
Unemployment - Italy	6.50%	6.76%
Unemployment - Spain	11.12%	10.93%
Unemployment - Japan	2.48%	2.40%
Real Estate Prices - CRE Index USA	312.27	316.81
Real Estate Prices - CRE Index Eurozone	107.75	108.39
Real Estate Prices - House Price Index USA	325.05	333.47
Real Estate Prices - House Price Index Germany	152.78	158.19
Real Estate Prices - House Price Index Italy	103.82	104.92
Real Estate Prices - House Price Index Spain	1,959.68	2,000.70
Equity - S&P500	6,109	6,436
Equity - Eurostoxx50	4,965	5,162
Equity - DAX40	20,131	20,968
Equity - MSCI EAFE	1,069	1,112
Equity - MSCI Asia	1,602	1,630
Equity - Nikkei	38,972	39,582
Credit - High Yield Index	312.32	358.66
Credit - CDX High Yield	332.33	374.29
Credit - CDX IG	56.50	64.29
Credit - CDX Emerging Markets	177.90	202.59
Credit - ITX Europe 125	62.15	68.66
Commodity - WTI	70.46	65.85
Commodity - Gold	2,588.02	2,612.91

[1] MEV as of December 5, 2024, which barely changed until December 31, 2024
[2] Year 1 equals fourth quarter of 2024 to third quarter of 2025, Year 2 equals fourth quarter of 2025 to third quarter of 2026

	December 31, 2023[1] [2]	
	Year 1 (4 quarter avg)	Year 2 (4 quarter avg)
GDP - USA	1.75%	1.31%
GDP - Eurozone	0.13%	1.08%
GDP - Germany	0.12%	1.30%
GDP - Italy	0.33%	1.03%
GDP - Developing Asia	4.94%	4.37%
GDP - Emerging Markets	4.08%	4.01%
Unemployment - USA	4.19%	4.40%
Unemployment - Eurozone	6.67%	6.64%
Unemployment - Germany	3.12%	3.13%
Unemployment - Italy	7.75%	7.68%
Unemployment - Spain	11.96%	11.67%
Unemployment - Japan	2.58%	2.42%
Real Estate Prices - CRE Index USA	353.41	347.99
Equity - S&P500	4,514	4,621
Equity - MSCI Asia	1,293	1,297
Equity - Nikkei	33,188	34,051
Credit - High Yield Index	404.65	418.52
Credit - CDX High Yield	451.57	466.40
Credit - CDX IG	70.04	72.12
Credit - CDX Emerging Markets	195.16	192.83
Credit - ITX Europe 125	73.09	72.21
Commodity - WTI	82.52	83.56
Commodity - Gold	1,957.34	1,958.16

[1] MEV as of December 6, 2023, which barely changed until December 29, 2023
[2] Year 1 equals fourth quarter of 2023 to third quarter of 2024, Year 2 equals fourth quarter of 2024 to third quarter of 2025

Model sensitivity

The Group has identified three key model assumptions included in the IFRS 9 model. These include forward looking macroeconomic variables, the quantitative criteria for determining if a borrower has incurred a significant increase in credit risk and is transferred to Stage 2, and the LGD setting on homogenous portfolios in Stage 3. Below the bank provides sensitivity analysis on the potential impact if these key assumptions applied in the ECL model were to deviate from the bank's base case expectations.

Macroeconomic variables

The sensitivity of the ECL model with respect to potential changes in projections for key MEVs is shown in the tables below, which provides ECL impacts for Stages 1 and 2 from downward and upward shifts applied separately to each group of MEV as of December 31, 2024, and December 31, 2023. The magnitude of the shifts is selected in the range of one standard deviation, which is a statistical measure of the dispersion of the values of a random variable. Each of these groups consists of MEVs from the same category:

- GDP growth rates: includes USA, Eurozone, Germany, Italy, Developing Asia, Emerging Markets
- Unemployment rates: includes USA, Eurozone, Germany, Italy, Japan, Spain
- Equities: S&P500, Eurostoxx50, DAX 40, Nikkei, MSCI Asia, MSCI EAFE
- Credit spreads: ITX Europe 125, High Yield Index, CDX IG, CDX High Yield, CDX Emerging Markets
- Real Estate: CRE Index Eurozone, House Price Index USA, House Price Index Germany, House Price Index Italy, House Price Index Spain
- Commodities: WTI oil price, Gold price

Although interest rates and inflation are not included in the above set of MEVs, adverse effects associated with changes in these risk drivers typically manifest themselves in other economic forecasts incorporated in the ECL model, such as lower GDP growth, higher unemployment or wider credit spreads

In addition, the sensitivity analysis only includes the impact of the aggregated MEV group (i.e., potential correlations between different MEV groups or the impact of management overlays is not taken into consideration). ECL quantification for Stage 3 does not follow a model-based process for various portfolios and is therefore excluded from the following tables.

Compared to December 31, 2023, higher sensitivities to real estate prices are observed as of December 31, 2024, since sensitivities as of December 31, 2024 include effects from the FLI LGD model, which went live in 2024. Lower sensitivities to GDPs are due to methodological adjustments to the specification of shock amounts. Previously, the Group applied shock amounts to GDP growth rate projections for the first and second year but going forward for the first year only. This ensures that returns of MEV levels are now consistently shifted for the first year only across all MEV groups.

IFRS 9 – Sensitivities of forward-looking information applied on Stage 1 and Stage 2 – Group Level

				December 31, 2024
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(66.4)	(1)pp	71.8
Unemployment rates	(0.5)pp	(44.9)	0.5pp	49.0
Real estate prices[2]	5%	(13.9)	(5)%	16.0
Equities	10%	(14.1)	(10)%	17.8
Credit spreads	(40)%	(20.7)	40%	24.2
Commodities[1]	10%	(7.7)	(10)%	8.7

[1] Here the sign of the shift applies to oil prices changes. Gold price changes have the opposite sign. 1pp (percentage point), e.g., GDP shifts from 3% to 4% // 1% (percentage change), e.g., Real estate price shifts from 100 to 101
[2] For a more severe stress test relating to the CRE portfolio that also takes into consideration existing and potential exposure in Stage 3 reference is made to the section on Commercial Real Estate above

				December 31, 2023
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(80.4)	(1)pp	88.9
Unemployment rates	(0.5)pp	(43.1)	0.5pp	45.9
Real estate prices	5%	(5.9)	(5)%	6.2
Equities	10%	(9.0)	(10)%	12.2
Credit spreads	(40)%	(20.5)	40%	22.8
Commodities	10%	(8.5)	(10)%	9.2

At divisional level, the sensitivity analysis below was performed for the year ended December 31, 2024, and 2023, respectively, and revealed GDP growth rates, credit spreads and commodities prices to be the dominant factors for the Investment Bank, whereas the model sensitivity for the Corporate Bank and Private Bank is mainly associated with changes in GDP growth rates and unemployment rates. The model sensitivity table for the Private Bank shows GDP growth rates and unemployment rates only, as the key MEVs relevant to the underlying portfolios.

IFRS 9 – Sensitivities of forward-looking information applied on Stage 1 and Stage 2 - Corporate Bank

				December 31, 2024
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(18.2)	(1)pp	20.3
Unemployment rates	(0.5)pp	(12.6)	0.5pp	14.2
Real estate prices[2]	5%	(2.1)	(5)%	2.2
Credit spreads	(40)%	(4.5)	40%	5.0
Commodities[1]	10%	(2.8)	(10)%	3.1

[1] Here the sign of the shift applies to oil prices changes. Gold price changes have the opposite sign.
[2] For a more severe stress test relating to the CRE portfolio that also takes into consideration existing and potential exposure in Stage 3 reference is made to the section on Commercial Real Estate above

				December 31, 2023
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(18.1)	(1)pp	20.7
Unemployment rates	(0.5)pp	(10.4)	0.5pp	11.0
Real estate prices	5%	(1.5)	(5)%	1.6
Credit spreads	(40)%	(3.8)	40%	4.4
Commodities	10%	(2.6)	(10)%	2.9

IFRS 9 – Sensitivities of forward-looking information applied on Stage 1 and Stage 2 - Investment Bank

				December 31, 2024
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(26.4)	(1)pp	28.9
Unemployment rates	(0.5)pp	(11.0)	0.5pp	12.1
Real estate prices[2]	5%	(8.6)	(5)%	10.2
Equities	10%	(4.7)	(10)%	5.9
Credit spreads	(40)%	(13.5)	40%	16.2
Commodities[1]	10%	(4.6)	(10)%	5.3

[1] Here the sign of the shift applies to oil prices changes. Gold price changes have the opposite sign.
[2] For a more severe stress test relating to the CRE portfolio that also takes into consideration existing and potential exposure in Stage 3 reference is made to the section on Commercial Real Estate above.

				December 31, 2023
		Upward sensitivity		Downward sensitivity
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(30.6)	(1)pp	33.5
Unemployment rates	(0.5)pp	(6.7)	0.5pp	7.5
Real estate prices	5%	(4.0)	(5)%	4.2
Equities	10%	(3.3)	(10)%	4.4
Credit spreads	(40)%	(13.6)	40%	14.7
Commodities	10%	(5.5)	(10)%	5.9

IFRS 9 – Sensitivities of forward-looking information applied on Stage 1 and Stage 2 - Private Bank

	December 31, 2024			
	Upward sensitivity		Downward sensitivity	
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(18.3)	(1)pp	19.3
Unemployment rates	(0.5)pp	(19.5)	0.5pp	20.6

	December 31, 2023			
	Upward sensitivity		Downward sensitivity	
	Upward shift	ECL impact in € m.	Downward shift	ECL impact in € m.
GDP growth rates	1pp	(24.4)	(1)pp	26.3
Unemployment rates	(0.5)pp	(22.4)	0.5pp	23.3

Impact of lifetime expected credit losses for Stage 1 borrowers

As described above, the Group uses a mixture of quantitative and qualitative criteria to determine significant increase in credit risk which require, for affected borrowers, a move to lifetime ECL (Stage 2). If for all Stage 1 borrowers Deutsche Bank were to record lifetime expected credit losses, the Group’s allowance for credit losses amounting to € 6.2 billion as of December 31, 2024 and € 5.7 billion as of December 31, 2023 would increase by approximately 34 % as of year end 2024 and 38 % as of 2023, respectively.

Stage 3 LGD setting

The Group’s allowance for credit losses in Stage 3 for the homogeneous portfolios amounts to € 3.0 billion as of December 31, 2024 and € 2.2 billion as of December 31, 2023. The key driver in determining the ECL provision is the loss given default estimate, which differs by individual portfolios. Loss given default is influenced by recovery rates, proceeds from the sale of collateral, and cure rates. Some of the drivers for different portfolios include elements of expert judgment and in particular on expected cure rates. If the LGD for all homogeneous portfolios were to increase by 1%, then Stage 3 ECL would increase as of December 31, 2024 by approximately € 26 million (thereof € 17 million in Germany, € 5 million in Italy and € 2 million in Spain), and by approximately € 22 million as of December 31, 2023 (thereof € 14 million in Germany, € 5 million in Italy and € 2 million in Spain).

Management overlays applied to the IFRS 9 model output

The Group regularly reviews the IFRS 9 methodology and processes, key inputs into the ECL calculation and discusses upcoming model changes, potential model imprecisions or other estimation uncertainties, for example in the macroeconomic environment to determine if any material overlays are required. Moreover, regular reviews for evolving or emerging risks are performed, especially in the current geopolitical environment. Measures applied include client surveys and interviews, along with analysis of portfolios across businesses, regions and sectors. In addition, the Group regularly reviews and validates key model inputs and assumptions (including those in feeder models) and ensures where expert judgement is applied, it is in line with the Group’s risk management framework. As of December 31, 2024, the Group did not identify any model weaknesses that would require an additional overlay, except for the ECL model related changes, for which overlays have been recorded.

As of year end 2024, the Group’s IFRS9 management overlays amounted to € 124 million, compared to € 84 million for year end 2023 (which resulted in an increase of Allowance for Credit Losses in both periods). In the second quarter 2024, the Group reduced it‘s management overlay relating to FLI following the deployment of the related model refinement which led to the expected ECL increase. Further, the Group introduced two new overlays following a review of model performance to bring forward the expected impacts from a model refinement related to refinancing risk, which is the main contributor of the total overlay amount, represents a change in estimate and is envisaged for future technical implementation, as well as from a PD parameter recalibration envisaged for the first half of 2025.

Overall Assessment of ECL’s

To ensure that Deutsche Bank’s ECL model accounted for the uncertainties in the macroeconomic environment throughout 2024, the Group continued to review emerging risks, assessed potential baseline and downside impacts and required actions to manage the bank’s credit strategy and risk appetite. The outcome of these reviews concluded that the bank adequately provisioned for its expected credit losses as of December 31, 2024, and December 31, 2023.

Results from the above reviews and development of key portfolio indicators are regularly discussed at the Credit Risk Appetite and Management Forum and Group Risk Committee. Where necessary, actions and measures are taken to mitigate the risks. Client ratings are regularly reviewed to reflect the latest macroeconomic developments and where potentially significant risks are identified clients are moved to the watchlist (Stage 2), forbearance measures may be negotiated, and credit limits and collateralization are reviewed. Overall, the Group believes that based on its day-to-day risk management activities and regular reviews of emerging risks it has adequately provided for its ECL.

IFRS 9 model results

Provision for credit losses was € 1.8 billion in 2024, up from € 1.5 billion in 2023 and 38 basis points (bps) of average loans, in line with the guidance the bank provided after the third quarter. The increase was driven by cyclical events in the Commercial Real Estate sector, certain larger corporate credit events and temporary effects following the Postbank integration. The wider portfolios performed broadly in line with expectations despite the challenging macroeconomic and interest rate environment.

With regard to climate risks, estimates of higher transition and physical risk exposures and their impact on the Expected Credit Loss (ECL) did not result in any adjustment of credit loss provisions for the years ended December 31, 2024 as well and December 31, 2023.

For details of the provision for credit losses related to the segments, please refer to section Segment results of operations.

For details on the Group's accounting policy related to IFRS 9 Impairment, please refer to Note 1 - Material accounting policies and critical accounting estimates of the consolidated financial statements.

Managing and mitigation of credit risk

Managing credit risk on counterparty level

Credit-relevant counterparties are principally allocated to credit officers within credit teams which are organized by type of counterparty (such as financial institutions, corporates or private individuals), economic area (e.g., emerging markets) or product and supported by dedicated rating analyst teams where deemed necessary. The individual credit officers have the relevant expertise and experience to manage the credit risks associated with these counterparties and their associated credit related transactions. For retail clients, credit decision making and credit monitoring is highly automated due to standardized products and processes. Credit Risk Management has full oversight of the respective processes and tools used in these highly automated retail credit processes. It is the responsibility of each credit officer to undertake ongoing credit monitoring for their allocated counterparties. Deutsche Bank also has procedures in place intended to identify at an early-stage credit exposures for which there may be an increased risk of deteriorated risk/ loss.

In instances where Deutsche Bank has identified counterparties with emerging concern about their credit quality deteriorating or likely to deteriorate to the point where they present a heightened risk of default / loss, the respective counterparty is generally placed on the "Watchlist". Deutsche Bank aims to identify those counterparties at an early stage to ensure that credit exposures with increased risks are effectively managed, the Bank's risk management tools are appropriately applied aiming to minimize potential losses. The objective of this early warning system is to address potential problems while adequate options for action are still available. This early risk detection is a tenet of Deutsche Bank's credit culture and is designed to raise management awareness of these positions. Environmental risks are now considered as potential triggers for discretionary inclusion in watchlist for groups or counterparties facing climate and environmental related risks without adequate risk mitigation strategy in place.

Credit limits for individual counterparties are established by the Credit Risk Management function applying credit authorities assigned to individual Credit Officers. This also applies to settlement risk that must fall within limits pre-approved by Credit Risk Management and in a manner that reflects expected settlement patterns for the subject counterparty. Credit approvals are documented by electronic signature under 4-eye principle by the respective credit authority holders and are retained for future reference.

Credit authority is generally assigned as a personal credit authority according to the individual's professional qualification and experience. All assigned credit authorities are reviewed on a periodic basis to help ensure that they are commensurate with the individual performance of the authority holder.

Where credit authority is insufficient to establish required credit limits, the transaction is referred to a credit authority holder with the respective credit authority or if exceeding the highest personal authority to an appropriate credit committee. Where personal and committee authorities are insufficient to establish appropriate limits, the case is referred to the Management Board for approval.

Mitigation of credit risk on counterparty level

In addition to determine counterparty credit quality by assigning internal ratings and the alignment of the exposure with the Bank’s counterparty concentration risk guidelines, Deutsche Bank also uses various credit risk mitigation and protection techniques to optimize credit exposure and reduce potential credit losses. These techniques are applied in the following forms:

- Comprehensive and enforceable credit documentation with adequate terms and conditions
- Collateral in its various forms to reduce losses by increasing the recovery of obligations; key principles for collateral management include legal effectiveness and enforceability, prudent and realistic collateral valuations, risk and regulatory capital reduction, as well as cost efficiency
- Risk transfers, which shift the risk of default of an obligor to a third-party including hedging executed by the bank’s Strategic Corporate Lending (SCL) team or entity; other de-risking tools, such as securitizations etc., may also be employed
- Netting and collateral arrangements which reduce the credit exposure from derivatives and securities financing transactions (e.g. repo transactions)
- Hedging of derivatives counterparty risk including CVA, using primarily CDS contracts via the bank’s Counterparty Portfolio Management desk

Collateral

Deutsche Bank regularly agrees on collateral to be received from customers that are subject to credit risk or to be provided by third parties agreed by legally effective and enforceable contracts as documented by a written and reasoned legal opinion. Collateral is credit protection in the form of (funded) assigned or pledged assets or (unfunded) third-party obligations that serves to mitigate the inherent risk of credit loss in an exposure, by either substituting the counterparty default risk or improving recoveries in the event of a default. Deutsche Bank generally takes all types of eligible collateral for its respective businesses but may limit accepted collateral types for specific businesses or regions as customary in the respective market or driven by purpose of efficiency. While collateral can be an alternative source of repayment, it does not replace the necessity of high-quality underwriting standards and a thorough assessment of the debt service ability of the counterparty in line with Article 194 (9) CRR.

Deutsche Bank distinguishes the following two types of credit protection approaches:

- Funded Credit Protection like financial and other collateral, which enables Deutsche Bank to recover all or part of the outstanding exposure by liquidating the collateral / asset provided, in cases where the counterparty is unable or unwilling to fulfill its primary obligations. Cash collateral, securities (equity, bonds), collateral pledges or assignments of other claims or inventory, movable assets (i.e., plant, machinery, ships and aircraft) and real estate typically fall into this category; all financial collateral is regularly, mostly daily, revalued and measured against the respective credit exposure; the value of other collateral, including real estate, is monitored based upon established processes that includes regular reviews or revaluations by internal and/or external experts
- Unfunded Credit Protection like Guarantees, which complement the counterparty’s ability to fulfill its obligation under the legal contract and as such is provided by uncorrelated third parties. Letters of credit, insurance contracts, export credit insurance, guarantees, credit derivatives and (unfunded) risk participations typically fall into this category. Guarantees and strong letters of comfort provided by correlated group members of customers (generally the parent company) may also be accepted and considered in approved rating approaches; guarantee collateral with a non-investment grade rating of the guarantor is limited

Deutsche Bank’s processes seek to ensure that the collateral accepted for risk mitigation purposes is of high quality. This includes processes to generally ensure legally effective and enforceable documentation for realizable and measurable collateral or assets which are evaluated within the on-boarding process by dedicated internal appraisers or teams with the respective qualification, skills and experience or adequate external valuers mandated in regulated processes. The applied valuations follow generally accepted valuation methods or models and include the identification of material climate physical and transition risks. Ongoing correctness of values is monitored by collateral type-specific, appropriately frequent, and event-driven reviews considering relevant risk parameters. Revaluations are applied in cases of identified probable material deterioration and future monitoring may be adjusted respectively. The assessment of the suitability of collateral for a specific transaction is part of the credit decision and must be undertaken in a conservative way, including collateral haircuts that are applied. Deutsche Bank has collateral type specific haircuts in place which are regularly reviewed and approved. In this regard, Deutsche Bank strives to avoid “wrong-way” risk characteristics where the counterparty’s risk is positively correlated with the risk of deterioration in the collateral value. If collateral with material correlation risk is accepted anyhow, a potential impact on its value is considered conservatively in the valuation. For unfunded credit protection like guarantees, the process for the analysis of the guarantor’s creditworthiness is aligned to the credit assessment process for credit-relevant counterparties.

The valuation of collateral is considered under a liquidation scenario. The liquidation value is equal to the expected proceeds of collateral monetization / realization in a base case scenario, wherein a fair price is achieved through careful preparation and orderly liquidation of the collateral. Collateral can either move in value over time (dynamic value) or not (static value). The dynamic liquidation value generally includes a safety margin or haircut over realizable value to address liquidity and marketability aspects.

The Deutsche Bank Group assigns a liquidation value to eligible collateral, based on, among other things:

- The market value and / or lending value, notional amount or face value of a collateral as a starting point
- The type of collateral; the currency mismatch, if any, between the secured exposure and the collateral; and a maturity mismatch, if any
- The applicable legal environment or jurisdiction (onshore versus offshore collateral)
- The market liquidity and volatility in relation to agreed termination clauses
- The correlation between the performance of the borrower and the value of the collateral, e.g., in the case of the pledge of a borrower’s own shares or securities (in this case generally full correlation leads to no liquidation value)
- The quality of physical collateral and potential for litigation or environmental risks; and
- A determined collateral type specific haircut (0 – 100 %) reflecting collection risks (i.e. price risks over the average liquidation period and processing/utilization/sales costs) as specified in the respective documents

Collateral haircut settings are typically based on available historic internal and / or external recovery data (expert opinions may also be used, where appropriate). They also incorporate a forward-looking component in the form of collection and valuation forecast provided by experts within Risk Management. Considering the expected proceeds from the liquidation of the different collateral types, respective value fluctuations, market specific liquidation costs, and time applied haircuts vary between 0 to 100 %. When data is not sufficiently available or inconclusive, more conservative haircuts than otherwise used must be applied. Haircut settings are reviewed at least annually. Historically validated proceeds from collateral liquidation are also implied respectively in current Loss-Given-Default calculations where market values of collateral instead of liquidation values are applied.

Risk transfers

Risk transfers to third parties form a key part of the bank’s overall risk management process and are executed in various forms, including outright sales, single name and portfolio hedging, and securitizations (significant risk transfers). Risk transfers are conducted by the respective business units and / or by Strategic Corporate Lending, in accordance with specifically approved mandates.

Strategic Corporate Lending manages the residual credit risk of loans and lending-related commitments of the institutional and corporate credit portfolio, part of the leveraged lending portfolio and the medium-sized German companies’ portfolio across the bank’s Corporate Bank and Investment Bank divisions.

Acting as a central pricing reference, Strategic Corporate Lending provides the businesses with an observed or derived capital market rate for loan applications; however, the decision of whether or not the business can enter into the credit risk remains exclusively with Credit Risk Management.

Strategic Corporate Lending concentrates on two primary objectives within the credit risk framework to enhance risk management discipline, improve returns and use capital more efficiently:

- To reduce single-name credit risk concentrations within the credit portfolio and
- To manage credit exposures by utilizing techniques including loan sales, securitization (significant risk transfer) via collateralized loan obligations, sub-participations and single-name and portfolio credit default swaps

Netting and collateral arrangements for derivatives and securities financing transactions

Netting is applicable to both exchange traded derivatives and OTC derivatives (whether cleared or uncleared). Netting is also applied to securities financing transactions (e.g. repurchase, securities lending and margin lending transactions) as far as documentation, structure and nature of the risk mitigation allow netting with the underlying credit risk in accordance with applicable law and the bank’s Financial Contracts Netting and Collateral KOD – Legal (“Netting Policy”). While cross-product netting between derivatives and securities financing transactions may be used in certain cases, the bank does not make use of cross-product netting for regulatory purposes.

All exchange traded derivatives are cleared through Central Counterparties (CCPs) , which interpose themselves between the trading entities by becoming the counterparty to each of the entities. Where legally required or where available and to the extent agreed with the bank’s counterparties, Deutsche Bank also uses CCP clearing for its OTC derivative transactions.

The Dodd-Frank Act and related Commodity Futures Trading Commission (CFTC) rules require CCP clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps, subject to limited exceptions when facing certain counterparties. The European Regulation (EU) No 648/2012 on OTC Derivatives, CCPs and Trade Repositories (EMIR) and the Commission Delegated Regulations (EU) 2015/2205, (EU) 2015/592 and (EU) 2016/1178 based thereupon introduced mandatory CCP clearing in the EU for certain standardized OTC derivatives transactions. Mandatory CCP clearing in the EU began for certain interest rate derivatives on June 21, 2016 and for certain iTraxx-based credit derivatives and additional interest rate derivatives on February 9, 2017. Article 4 (2) of EMIR authorizes competent authorities to exempt intragroup transactions from mandatory CCP clearing, provided certain requirements, such as full consolidation of the intragroup transactions and the application of an appropriate centralized risk evaluation, measurement and control procedure are met. The bank successfully applied for the clearing exemption for a number of its regulatory-consolidated subsidiaries with intragroup derivatives, including e.g., Deutsche Bank Securities Inc. and Deutsche Bank Luxembourg S.A. As of December 31, 2024, the bank is allowed to make use of intragroup exemptions from the EMIR clearing obligation for a number of bilateral intragroup relationships. The extent of the exemptions differs as not all entities enter into relevant transaction types subject to the clearing obligation. Of the intragroup relationships, some are relationships where both entities are established in the European Union (EU) for which a full exemption has been granted, and most are relationships where one is established in a third country (“Third Country Relationship”). Third Country Relationships required repeat applications for each new asset class being subject to the clearing obligation; the process took place in the course of 2017. Due to “Brexit”, the status of some group entities has changed from an EU entity to a third country entity, but there has been no impact for the bank in respect clearing exemptions. Due to amendments of EMIR entering into force 24 December 2024, there are some changes to the intragroup exemption requirements, but, as a matter of principle, Deutsche Bank will be able to continue to use pre-existing clearing exemptions.

The rules and regulations of CCPs typically provide for the bilateral set off of all amounts payable on the same day and in the same currency (“payment netting”) thereby reducing the bank’s settlement risk. Depending on the business model applied by the CCP, this payment netting applies either to all of the bank’s derivatives cleared by the CCP or at least to those that form part of the same class of derivatives. Many CCPs’ rules and regulations also provide for the termination, close-out and netting of all cleared transactions upon the CCP’s default (“close-out netting”), which reduces the bank’s credit risk. In its risk measurement and risk assessment processes Deutsche Bank applies close-out netting only to the extent Deutsche Bank believes that the relevant CCP’s close-out netting provisions are legally valid and enforceable and have been approved in accordance with the bank’s Netting Policy.

In order to reduce the credit risk resulting from OTC derivative transactions, where CCP clearing is not available, Deutsche Bank regularly seeks the execution of standard master agreements (such as master agreements for derivatives published by the International Swaps and Derivatives Association, Inc. (ISDA) or the German Master Agreement for Financial Derivative Transactions with the bank’s counterparties. A master agreement allows for the close-out netting of rights and obligations arising under derivative transactions that have been entered into under such a master agreement upon the counterparty’s default, resulting in a single net claim owed by or to the counterparty. Payment netting may be agreed from time to time with the bank’s counterparties for multiple transactions having the same payment dates (e.g., foreign exchange transactions) pursuant to the terms of master agreements which can, reduce the bank’s settlement risk. In its risk measurement and risk assessment processes Deutsche Bank applies close-out netting only to the extent Deutsche Bank has concluded that the master agreement is legally valid and enforceable in all relevant jurisdictions and the recognition of close-out netting has been approved in accordance with the bank’s Netting Policy .

Deutsche Bank also enters into credit support annexes (CSAs) to master agreements in order to further reduce the bank’s derivatives-related credit risk. These annexes generally provide risk mitigation through periodic, usually daily, margining of the covered exposure. The CSAs also provide for the right to terminate the related derivative transactions upon the counterparty’s failure to honor a margin call. As with netting, when Deutsche Bank believes the annex is enforceable, Deutsche Bank reflects this in its exposure measurement.

Certain CSAs to master agreements provide for rating-dependent triggers, where additional collateral must be pledged if a party’s rating is downgraded. Deutsche Bank also enters into master agreements that provide for an additional termination event upon a party’s rating downgrade. These downgrade provisions in CSAs and master agreements usually apply to both parties but in some agreements may apply to Deutsche Bank only. Deutsche Bank analyzes and monitors its potential contingent payment obligations resulting from a rating downgrade in its stress testing and liquidity coverage ratio approach for liquidity risk on an ongoing basis. For an assessment of the quantitative impact of a downgrading of the bank’s credit rating please refer to table “Stress Testing Results” in the section “Liquidity Risk”.

The Dodd-Frank Act and CFTC rules thereunder, including CFTC rule § 23.504, as well as EMIR and Commission Delegated Regulation based thereon, namely Commission Delegated Regulation (EU) 2016/2251, introduced the mandatory use of master agreements and related CSAs, which must be executed prior to or contemporaneously with entering into an uncleared OTC derivative transaction. Certain documentation is also required by the U.S. margin rules adopted by U.S. prudential regulators. Under the U.S. prudential regulators' margin rules, Deutsche Bank is required to post and collect initial margin for its derivatives exposures with other derivatives dealers, as well as with the bank's counterparties that (a) are "financial end users," as that term is defined in the U.S. margin rules, and (b) have an average daily aggregate notional amount of uncleared swaps, uncleared security-based swaps, foreign exchange forwards and foreign exchange swaps exceeding U.S.$ 8 billion in June, July and August of the previous calendar year. The U.S. margin rules additionally requires Deutsche Bank to post and collect variation margin for its derivatives with other derivatives dealers and certain financial end user counterparties. These margin requirements are subject to a U.S.$ 50 million threshold for initial margin, but no threshold for variation margin, with a combined U.S.$ 500,000 minimum transfer amount. The U.S. margin requirements have been in effect for large banks since September 2016, with additional variation margin requirements having come into effect March 1, 2017 and additional initial margin requirements having been phased in from September 2017 through September 2022.

Under Commission Delegated Regulation (EU) 2016/2251, which implements the EMIR margin requirements, the CSA must provide for daily valuation and daily variation margining based on a zero threshold and a minimum transfer amount of not more than € 500,000. For large derivative exposures exceeding € 8 billion, initial margin has to be posted as well. The variation margin requirements under EMIR apply as of March 1, 2017; the initial margin requirements originally were subject to a staged phase-in until September 1, 2021. However, legislative changes published on February 17, 2021 extended deadlines into 2022. Under Article 31 of Commission Delegated Regulation (EU) 2016/2251, an EU party may decide to not exchange margin with counterparties in certain non-netting jurisdictions provided certain requirements are met. Pursuant to Article 11 (5) to (10) of EMIR, competent authorities are authorized to exempt intragroup transactions from the margining obligation, provided certain requirements are met. While some of those requirements are the same as for the EMIR clearing exemptions (see above), there are additional requirements such as the absence of any current or foreseen practical or legal impediment to the prompt transfer of funds or repayment of liabilities between intragroup counterparties. The bank is making use of this exemption. The bank has successfully applied for the collateral exemption for some of its regulatory-consolidated subsidiaries with intragroup derivatives, including, e.g., Deutsche Bank Securities Inc. and Deutsche Bank Luxembourg S.A. As of December 31, 2023, the bank is allowed to use intragroup exemptions from the EMIR collateral obligation for a number of bilateral intragroup relationships which are published under db.com/legal-resources/european-market-infrastructure-regulation/intra-group-exemptions-margining. For some bilateral intragroup relationships, the EMIR margining exemption may be used based on Article 11 (5) of EMIR, i.e. without the need for any application or publication, because both entities are established in the same EU Member State. For third country subsidiaries, the intragroup exemption was originally limited until the earlier of June 30, 2022 and four months after the publication of an equivalence decision by the EU Commission under Article 13(2) EMIR, unless, in the case of an equivalence decision being applicable, a follow-up exemption application is made and granted. On February 13, 2023, an amendment to Regulation (EU) 2016/2251 has been published in the Official Journal, which amendment relates to the extension of the exemption end date until June 30, 2025. With the EMIR amendments having entered into force on 24 December 2024 (Regulation (EU) 2024/2987), a so-called "equivalence decision" is no longer a requirement for a margin exemption. As a matter of principle, Deutsche Bank will be able to continue to use pre-existing margin exemptions.

Concentrations within credit risk mitigation

Concentrations within credit risk mitigations taken may occur if a number of guarantors and credit derivative providers with similar economic characteristics are engaged in comparable activities with changes in economic or industry conditions affecting their ability to meet contractual obligations. Concentration risk may also occur in collateral portfolios (e.g. multiple claims and receivables against third parties) which are considered conservatively within the valuation process and / or on-site inspections where applicable. Deutsche Bank uses a range of tools and metrics to monitor its credit risk mitigating activities and potential concentrations.

For more qualitative and quantitative details in relation to the application of credit risk mitigation and potential concentration effects please refer to the section "Maximum exposure to credit risk".

Managing credit risk on portfolio level

Enterprise Risk Management (ERM) Portfolio sets the framework for the management of concentration risks at a portfolio level. This includes strategically setting, monitoring, reviewing, reporting, and controlling credit risk appetites across various dimensions such as Deutsche Bank Group, Corporate Division, Business Unit , legal entity, branch, country, and industry level that need to be considered in the context of credit approvals. ERM Portfolio is also responsible for calibrating and monitoring the single name counterparty concentration grid that provides guidance to credit officers on limit sizing at counterparty level. In addition, ERM Portfolio provides a comprehensive and holistic view of the bank's risk profile across risk types.

On a portfolio level, significant concentrations of credit risk could result from having material exposures to a number of counterparties with similar economic characteristics, or who are engaged in comparable activities, where these similarities may cause their ability to meet contractual obligations to be affected in the same manner by changes in economic or industry conditions.

Deutsche Bank's portfolio management framework supports a comprehensive assessment of concentrations within its credit risk portfolio in order to keep concentrations within acceptable levels.

Emerging Risks and portfolio developments are discussed at the monthly Credit Risk and Portfolio Management Forum which includes representation from senior credit risk managers including the Head of Credit Risk Management, as well as ERM Portfolio.

Industry risk management

To manage industry risk, Deutsche Bank has grouped its corporate and financial institutions counterparties into various industry sub-portfolios. Portfolios are regularly reviewed at least on an annual basis. Reviews highlight industry developments and risks to the bank's credit portfolio, review cross-risk concentration risks, analyze the risk/reward profile of the portfolio and incorporate the results of an economic downside stress test. Finally, this analysis is used to define the credit strategies and risk appetite for respective industries. The setting of industry risk appetite takes into consideration the group-wide credit risk appetite.

In the bank's industry risk management framework, thresholds are established by ERM for aggregate credit limits to counterparties within each industry sub-portfolio. For risk management purposes, the aggregation of limits across industry sectors follows an internal risk view that does not have to be congruent with NACE (Nomenclature des Activities Economiques dans la Communate Europeenne) code-based view applied elsewhere in this report. Regular industry portfolio overviews are prepared for the Enterprise Risk Committee to discuss recent risk developments and to agree on risk management actions where necessary.

Beyond credit risk, the bank's industry risk framework comprises of thresholds for Traded Credit Positions while key industry relevant non-financial risks are considered.

Country risk management

Avoiding undue concentrations from a regional and country perspective is also an integral part of the bank's credit risk management framework. In order to achieve this, country risk thresholds are applied to countries in Non-Japan Asia, Central Eastern Europe, Middle East & Africa and Latin America as well as selected Developed Markets countries (based on internal country risk ratings). These thresholds are set for all counterparties based on their assigned specific 'country of risk', which reflects a counterparty's main (macro) economic risk, balance sheet earnings, jurisdiction, or other financial dependencies. Country of risk is typically aligned with the counterparty's 'country of domicile'.

Country portfolios are regularly reviewed with the frequency of review dependent on portfolio size and risk profile as well as risk developments. Larger / riskier portfolios are reviewed at least on an annual basis. These reviews assess amongst other factors, key macroeconomic and political risk developments and outlook; portfolio composition, quality and cross-risk concentrations under normal and stress conditions. Based on this and taking into account the Group's Risk Appetite and strategy, country risk appetite and strategies are set by ERM.

In addition to country thresholds, gap risk thresholds are set to control the country-on-country wrong-way risk exposure. As such, for risk management purposes, the aggregation of exposures across countries follows an internal risk view that may differ from the geographical exposure view applied elsewhere in this report. Beyond credit risk, the bank's country risk framework comprises thresholds for trading positions that measure the aggregate market value of traded credit risk positions. For Emerging Markets, market risk thresholds are also set to measure the profit and loss impact under specific country stress scenarios on trading positions across the bank's portfolio. Furthermore, thresholds are set for capital and intra-group funding exposure of Deutsche Bank entities in above countries given the transfer risk inherent in these cross-border positions. Key non-financial risks are considered and factored into financial threshold setting considerations where relevant. Deutsche Bank's country risk ratings represent a key tool in its assessment of country risk. They include:

- Sovereign rating (set and managed by ERM Risk Research): A measure of the probability of the sovereign defaulting on its foreign or local currency obligations
- Transfer risk rating (set and managed by ERM Risk research): A measure of the probability of a "transfer risk event", i.e., the risk that an otherwise solvent debtor is unable to meet its obligations due to inability to obtain foreign currency or to transfer assets as a result of direct sovereign intervention

All sovereign and transfer risk ratings are reviewed, at least on an annual basis.

Climate and environmental risk management

The bank established a dedicated framework for the management of climate and environmental risks. The framework sets out key requirements around governance, risk identification and materiality assessment, risk appetite, risk monitoring, controls and stress testing.

Concentrations of climate and environmental risks are monitored, via dedicated reports, by key committees of the Bank (e.g., Enterprise Risk Committee and the Group Risk Committee), and are managed through:

- Risk Appetite thresholds around the bank's decarbonization targets, established for eight priority sectors (Upstream Oil and Gas, Power Generation, Automotives - Light Duty, Steel, Coal Mining, Cement and Aviation) and the overall financed emissions of the Corporate Loan Book
- Early Warning Indicators, established across different portfolios (Corporates, Sovereigns and Fis) for climate-transition, climate-physical and nature-related risks

New transactions with a significant impact on the bank's financed emissions and/or net-zero targets are reviewed by the Group Net-Zero Forum consisting of senior representatives from the Business, Risk, and the Chief Sustainability Office. The review of the forum's members includes an assessment of client sustainability disclosures, transition strategies, decarbonization targets and governance. New transactions must fit within Deutsche Bank's internal sectoral risk appetite aligned to net-zero targets. In 2024, the Group-level sectoral risk appetite metrics were cascaded to the divisions, to enhance their responsibility and support their business strategies. In this context, dedicated Divisional Net-Zero Fora in the Corporate Bank and the Investment Bank have been established.

Product/Asset class specific risk management

Complementary to the bank's counterparty, industry and country risk approach, Deutsche Bank has a framework to manage certain asset class risk concentrations and sets limits or thresholds where required for risk management purposes. For purposes of DB's internal portfolio risk management, asset classes are groups of financial exposures that exhibit similar performance and behaviours in both normal operating conditions and under severe stress. The exposures in an asset class will typically have a common characteristic or sensitivity to the same economic and/or market factors and business, legal and regulatory developments. When such characteristic or sensitivity is triggered, transactions in the asset class may react and perform in a similar manner. These are portfolios which the bank's Risk division considers as having the potential for sizeable tail risks and require additional monitoring. Group-wide credit risk appetite is considered in the setting of asset class risk limits or thresholds.

Private Bank and certain Corporate Bank businesses are managed via product-specific strategies setting the bank's risk appetite for portfolios with similar credit risk characteristics, such as the retail portfolios of mortgages and consumer finance products as well as products for business clients. Risk analyses are performed on portfolio level including further breakdown into business units as well as countries/regions. In Wealth Management, target levels are set for global concentrations along products as well as based on type and liquidity of collateral.

Underwriting of capital markets transactions

Specific focus is placed on transactions with underwriting risks where Deutsche Bank underwrites commitments with the intention to sell down or distribute part of the risk to third parties. These commitments include the undertaking to provide bank loans for syndication into the debt capital market and bridge loans for the issuance of notes. The inherent risks of being unsuccessful in the distribution of the facilities or the placement of the notes, comprise of a delayed distribution, funding of the underlying loans as well as a pricing risk as some underwriting commitments are additionally exposed to market risk in the form of widening credit spreads. Where applicable, Deutsche Bank dynamically hedges this credit spread risk to be within the approved market risk limit framework.

A major asset class, in which Deutsche Bank is active in underwriting, is leverage lending, which Deutsche Bank mainly executes through its Leveraged Debt Capital Markets business unit. The business model is a fee-based, originate to distribute approach focused on the distribution of largely unfunded underwriting commitments into the capital market. The afore-mentioned risks regarding distribution and credit spread movement apply to this business unit, however, are managed under a range of specific notional as well as market risk limits. The latter require the business to also hedge its underwriting pipeline against market dislocations. The fee-based model of the bank's Leveraged Debt Capital Markets business unit includes a restrictive approach to single-name risk concentrations retained on Deutsche Bank's balance sheet, which results in a diversified overall portfolio without any material concentrations. The resulting longer-term on-balance sheet portfolio is also subject to a comprehensive credit limit and hedging framework.

Deutsche Bank also provides material underwriting activity through its Debt Capital Markets desk which is focused on supporting Investment Grade and cross-over rated corporate borrowers, usually in connection with M&A transaction financing. These exposures are typically 12-24 month bridge loans, which are expected to be repaid by syndicated loans and/or capital markets issuance by the borrower. Deutsche Bank does not bear market placement or pricing risk on these exposures but faces funding risk and credit risk for the duration of the commitment, which are managed through notional underwriting limits for the Group and an industry concentration framework.

Market Risk Management

Market Risk framework

The vast majority of Deutsche Bank's businesses are subject to market risk, defined as the potential for change in the market value of the Group's trading and invested positions. Risk can arise from changes in interest rates, credit spreads, foreign exchange rates, equity prices, commodity prices and other relevant parameters, such as market volatility and market implied default probabilities. The market risk can affect accounting, economic and regulatory views of the exposure.

Market Risk Management is part of Deutsche Bank's independent Risk function and sits within the Market and Valuations Risk Management group. One of the primary objectives of Market Risk Management is to ensure that the business units' risk exposure is within the approved risk appetite commensurate with its defined strategy. To achieve this objective, Market Risk Management works closely together with risk takers ("the business units") and other control and support groups.

The Group distinguishes between three substantially different types of market risk:

- Trading market risk arises primarily through the market-making and client facilitation activities of the Investment Bank division. This involves taking positions in debt, equity, foreign exchange, other securities and commodities as well as in equivalent derivatives
- Traded default risk arising from defaults and rating migrations relating to trading instruments
- Non-trading market risk arises from market movements, primarily outside the activities of the trading units, in the banking book and from off-balance sheet items; this includes interest rate risk, credit spread risk, investment risk and foreign exchange risk as well as market risk arising from pension schemes, guaranteed funds and equity compensation; non-trading market risk also includes risk from the modeling of client deposits as well as savings and loan products

Market Risk Management governance is designed and established to promote oversight of all market risks, effective decision-making and timely escalation to senior management.

Market Risk Management defines and implements a framework to systematically identify, assess, monitor and report the Group's market risk. Market risk managers identify market risks through active portfolio analysis and engagement with the business units.

Market Risk measurement

The Group aims to accurately measure all types of market risks by a comprehensive set of risk metrics embedding accounting, economic and regulatory considerations.

The market risks are measured by several internally developed key risk metrics and regulatory defined market risk approaches.

Trading Market Risk

The Group's primary mechanism to manage trading market risk is the application of the bank's risk appetite framework of which the limit framework is a key component. The Management Board, supported by Market Risk Management, sets group-wide value-at-risk, economic capital and portfolio stress testing limits for market risk in the trading book. Market Risk Management allocates this overall appetite to the Corporate Divisions and their individual business units based on established and agreed business plans. Deutsche Bank also has business aligned heads within Market Risk Management who establish business unit limits, by allocating the limit down to individual portfolios, geographical regions and types of market risks.

Value-at-risk, economic capital and portfolio stress testing limits are used for managing all types of market risk at an overall portfolio level. As an additional and important complementary tool for managing certain portfolios or risk types, Market Risk Management performs risk analysis and business specific stress testing. Limits are also set on sensitivity and concentration/liquidity, exposure, business-level stress testing and event risk scenarios, taking into consideration business plans and the risk versus return assessment.

Business units are responsible for adhering to the limits against which exposures are monitored and reported. The market risk limits set by Market Risk Management are monitored on a daily, weekly and monthly basis, dependent on the risk management tool being used.

Internally developed Market Risk Models

Value-at-Risk (VaR)

VaR is a quantitative measure of the potential loss (in value) of Fair Value positions due to market movements that should not be exceeded in a defined period of time and with a defined confidence level.

The Group's value-at-risk for the trading businesses is based on historical simulation model (internal model approach) predominantly utilizing full revaluation, although some portfolios remain on a sensitivity-based approach. The approach is used for both Risk Management and capital requirements.

Risk management VaR is calibrated to a 99% confidence level and a one day holding period. This means we estimate there is a 1 in 100 chance that a mark-to-market loss from our trading positions will be at least as large as the reported VaR. For regulatory capital purposes, the VaR model is calibrated to a 99% confidence interval and a ten day holding period.

The calculation employs a historical simulation technique that uses one year of historical market data as input and observed correlations between the risk factors during this one year period.

The VaR model is designed to take into account a comprehensive set of risk factors across all asset classes. Key risk factors are swap/government curves, index and issuer-specific credit curves, single equity and index prices, foreign exchange rates, commodity prices as well as their implied volatilities. To help ensure completeness in the risk coverage, second order risk factors, e.g., money market basis, implied dividends, option-adjusted spreads and precious metals lease rates are also considered in the VaR calculation. The list of risk factors included in the VaR model is reviewed regularly and enhanced as part of ongoing model performance reviews.

The model incorporates both linear and, especially for derivatives, nonlinear impacts predominantly through a full revaluation approach but it also utilizes a sensitivity-based approach for certain portfolios. The full revaluation approach uses the historical changes to risk factors as input to pricing functions. Whilst this approach is computationally expensive, it does yield a more accurate view of market risk for nonlinear positions, especially under stressed scenarios. The sensitivity-based approach uses sensitivities to underlying risk factors in combination with historical changes to those risk factors.

For each business unit a separate VaR is calculated for each risk type, e.g., interest rate risk, credit spread risk, equity risk, foreign exchange risk and commodity risk. "Diversification effect" reflects the fact that the total VaR on a given day will be lower than the sum of the VaR relating to the individual risk types. Simply adding the VaR figures of the individual risk types to arrive at an aggregate VaR would imply the assumption that the losses in all risk types occur simultaneously.

The VaR enables the Group to apply a consistent measure across the fair value exposures. It allows a comparison of risk in different businesses, and also provides a means of aggregating and netting positions within a portfolio to reflect correlations and offsets between different asset classes. Furthermore, it facilitates comparisons of the market risk both over time and against the daily trading results.

When using VaR results a number of considerations should be taken into account. These include:

- The use of historical market data may not be a good indicator of potential future events, particularly those that are extreme in nature; this "backward-looking" limitation can cause VaR to understate future potential losses (as in financial credit crisis 2008/09), but can also cause it to be overstated immediately following a period of significant stress (as in COVID-19 pandemic)
- The one day holding period does not fully capture the market risk arising during periods of illiquidity, when positions cannot be closed out or hedged within one day
- VaR does not indicate the potential loss beyond the 99th quantile
- Intra-day risk is not reflected in the end of day VaR calculation
- There may be risks in the trading or banking book that are not fully captured in the VaR model (either partially captured or missing entirely)

The process of systematically capturing and evaluating risks currently not captured in the bank's VaR model has been further developed and improved. An assessment is made to determine the level of materiality of these risks and material risks are prioritized for inclusion in the bank's internal model. Risks not in VaR are monitored and assessed on a regular basis through the Risk Not In VaR (RNIV) framework. This framework is consistent with the Historical Simulation approach which in turn yields a more accurate estimate of the contribution of these missing items and their potential capitalization.

Deutsche Bank is committed to the ongoing development of the internal risk models, and substantial resources are allocated to review, validate and improve them.

Stressed Value-at-Risk

Stressed Value-at-Risk (SVaR) calculates a stressed value-at-risk measure based on a one year period of significant market stress. The Group calculates a stressed value-at-risk measure using a 99 % confidence level. Stressed VaR is calculated with a holding period of ten days. The SVaR calculation utilizes the same systems, trade information and processes as those used for the calculation of value-at-risk. The only difference is that historical market data and observed correlations from a period of significant financial stress (i.e., characterized by high volatilities) are used as an input for the historical simulation.

The stress period selection process for the stressed value-at-risk calculation is based on the comparison of VaR calculated using historical time windows compared to the current SVaR. If a historical window produces a VaR which is higher than the current SVaR, it is further investigated and the SVaR window can subsequently be updated accordingly. This process runs on a quarterly basis.

During 2024, the stress period selection process for the Group was conducted as outlined above. As a result, the SVaR window used at various periods in 2024 included the financial credit crisis of 2008/09, the European sovereign crisis of 2011/12 and Covid crisis of 2019/20.

Incremental Risk Charge

Incremental Risk Charge captures default and credit rating migration risks for credit-sensitive positions in the trading book. The Group uses a Monte Carlo Simulation for calculating incremental risk charge as the 99.9 % quantile of the portfolio loss distribution over a one-year capital horizon under a constant position approach and for allocating contributory incremental risk charge to individual positions.

The model captures the default and migration risk in an accurate and consistent quantitative approach for all portfolios. Important parameters for the incremental risk charge calculation are exposures, recovery rates, maturities, ratings with corresponding default and migration probabilities and parameters specifying issuer correlations.

Market Risk Standardized Approach

The Market Risk Standardized Approach (“MRSA”) is used to determine the regulatory capital charge for the specific market risk of trading book securitizations, for certain types of investment funds and for longevity risk as set out in CRR/CRD regulations.

Market Risk Stress Testing

Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and movements in individual risk factors. It is one of the core quantitative tools used to assess the market risk of Deutsche Bank’s positions and complements VaR and Economic Capital. Market Risk Management performs several types of stress testing to capture the variety of risks (Portfolio Stress Testing, individual specific stress tests and Event Risk Scenarios) and also contributes to Group-wide stress testing. These stress tests cover a wide range of severities designed to test the earnings stability and capital adequacy of the bank.

Trading Market Risk Economic Capital

Deutsche Bank’s trading market risk economic capital model-scaled Stressed VaR based EC (SVaR based EC) - comprises two core components, the “common risk” component covering risk drivers across all businesses and the “business-specific risk” component, which enriches the Common Risk via a suite of Business Specific Stress Tests. Both components are calibrated to historically observed severe market shocks. Common risk is calculated using a scaled version of the SVaR framework while Business Specific Stress Tests are designed to capture more product/business-related bespoke risks (e.g., complex basis risks) as well as higher order risks not captured in the common risk component. The SVaR based EC uses the Monte Carlo SVaR framework.

Traded Default Risk Economic Capital

The Traded Default Risk Economic Capital captures the relevant credit exposures across our trading and fair value banking books. Trading book exposures are monitored by Market Risk Management via single name concentration and portfolio thresholds which are set based upon rating, size and liquidity. Single name concentration risk thresholds are set for two key metrics: Default Exposure, i.e., the P&L impact of an instantaneous default at the current recovery rate, and bond equivalent Market Value, i.e., default exposure at 0 % recovery. In order to capture diversification and concentration effects we perform a joint calculation for traded default risk economic capital and credit risk economic capital. Important parameters for the calculation of traded default risk are exposures, recovery rates and default probabilities as well as maturities. The probability of joint rating downgrades and defaults is determined by the default and rating correlations of the portfolio model. These correlations are specified through systematic factors that represent countries, geographical regions and industries.

Trading Market Risk Reporting

Market Risk Management reporting creates transparency on the risk profile and facilitates the understanding of core market risk drivers to all levels of the organization. The Management Board and Senior Governance Committees receive regular reporting, as well as ad hoc reporting as required, on market risk, regulatory capital and stress testing. Senior Risk Committees receive risk information at a number of frequencies, including weekly or monthly.

Additionally, Market Risk Management produces daily and weekly Market Risk specific reports and daily limit utilization reports for each business owner.

Regulatory prudent valuation of assets carried at fair value

Pursuant to Article 34 CRR, institutions shall apply the prudent valuation requirements of Article 105 CRR to all assets measured at fair value and shall deduct from CET 1 capital the amount of any additional value adjustments necessary.

Deutsche Bank determined the amount of the additional value adjustments based on the methodology defined in the Commission Delegated Regulation (EU) 2016/101.

As of December 31, 2024, the amount of the additional value adjustments was € 1.7 billion. The December 31, 2023, amount was € 1.7 billion. No material changes noted year-on-year.

As of December 31, 2024, the reduction of the expected loss from subtracting the additional value adjustments was € 96 million, which partly mitigated the negative impact of the additional value adjustments on our CET 1 capital.

Non-trading Market Risk

Non-trading market risk arises primarily from activities outside of the trading units, in the banking book, including pension schemes and guarantees, and embedding considerations of different accounting treatments of transactions. Significant market risk factors the Group is exposed to and are overseen by risk management groups in that area are interest rate risk (including risk from embedded optionality and changes in behavioral patterns for certain product types), credit spread risk, foreign exchange risk (including structural foreign exchange risk), equity risk (including equity compensation related risk and investments in public and private equity as well as real estate, infrastructure and fund assets).

As for trading market risks the Group's risk appetite and limit framework is also applied to manage our exposure to non-trading market risk. On group level those are captured by the management board set limits for market risk economic capital capturing exposures to all market risks across asset classes as well as earnings and economic value based limits for interest rate risk in the banking books. Those limits are cascaded down by market risk management to the divisional or portfolio level. The limit framework for non-trading market risk exposure is further complemented by a set of business specific stress tests, value-at-risk & sensitivity limits monitored on a daily or monthly basis dependent on the risk measure being used.

Interest Rate Risk in the Banking Book

Interest rate risk in the banking book (IRRBB) is the current or prospective risk, to both the Group's capital and earnings, arising from movements in interest rates, which affect the Group's banking book exposures. This includes gap risk, which arises from the term structure of banking book instruments, basis risk, which describes the impact of relative changes in interest rates for financial instruments that are priced using different interest rate curves, as well as option risk, which arises from option derivative positions or from optional elements embedded in financial instruments.

The Group manages its IRRBB exposures using economic value as well as earnings based measures. The Group Treasury function is mandated to manage the interest rate risk centrally, with Treasury Risk Management acting as 2nd Line of Defense (LoD) independently assessing and challenging the implementation of the framework and adherence to the risk appetite. Group Audit in its role as the 3rd LoD is accountable for providing independent and objective assurance on the adequacy of the design, operating effectiveness and efficiency of the risk management system and systems of internal control. The Group Asset & Liability Committee ("ALCo") oversees and steers the Group's structural interest risk position with particular focus on banking book risks and the management of the net interest income. The ALCo monitors the sensitivity of financial resources and associated metrics to key market parameters such as interest rate curves and oversees adherence to divisional/business financial resource limits.

Economic value based measures look at the change in economic value of banking book assets, liabilities and off-balance sheet exposures resulting from interest rate movements, independent of the accounting treatment. Thereby the Group measures the change in economic value of equity (ΔEVE) as the maximum decrease of the banking book economic value under the six standard scenarios defined by the EBA in addition to internal stress scenarios for risk steering purposes. For the reporting of internal stress scenarios and risk appetite the Group applies a few different modelling assumptions as used in this disclosure. When aggregating the economic value of equity ΔEVE across different currencies, DB adds up negative and positive changes without applying weight factors for positive changes. Furthermore, the Group is using behavioral model assumptions about the interest rate duration of own equity capital as well as non-maturity deposits from financial institutions.

Earnings-based measures look at the expected change in net interest income (NII) resulting from interest rate movements over a defined time horizon, compared to a defined benchmark scenario. Thereby the Group measures net interest income ΔNII as the maximum reduction under the six standard scenarios defined by the EBA in addition to internal stress scenarios for risk steering purposes, compared to a market implied curve scenario, over a period of 12 months.

The Group employs mitigation techniques to hedge the interest rate risk arising from non-trading positions within given limits. The interest rate risk arising from non-trading asset and liability positions is managed through Treasury Markets & Investments. Thereby the Group uses derivatives and applies different hedge accounting techniques such as fair value hedge accounting or cash flow hedge accounting. For fair value hedges, the Group uses interest rate swaps and options contracts to manage the fair value movements of fixed rate financial instruments due to changes in benchmark interest. For hedges in the context of the cash flow hedge accounting, the Group uses interest rate swaps to manage the exposure to cash flow variability of the variable rate instruments as a result of changes in benchmark interest rates.

The Group assesses and measures hedge effectiveness of a hedging relationship based on the change in the fair value or cash flows of the derivative hedging instrument relative to the change in the fair value or cash flows of the hedged item attributable to the hedged risk.

The "Model Risk Management" function performs independent validation of models used for IRRBB measurement, as for all market risk models, in line with Deutsche Bank's group-wide risk governance framework.

The calculation of VaR and sensitivities of interest rate risk is performed daily, whereas the measurement and reporting of economic value interest rate and earnings risk is performed on a monthly basis. The Group generally uses the same metrics in its internal management systems as it applies for the disclosure in this report.

Deutsche Bank's key modelling assumptions are applied to the positions in the Private Bank and Corporate Bank divisions. Those positions are subject to risk of changes in client's behavior with regard to their deposits as well as loan products. The Group regularly tests the assumptions and updates them where appropriate following a defined governance process. In particular, the Group has made changes to its assumptions during the early phase of rising interest rates where a slower repricing in deposits was observed than it was anticipated.

The Group manages the interest rate risk exposure of its non-maturity deposits through a replicating portfolio approach to determine the average repricing maturity of the portfolio. For the purpose of constructing the replicating portfolio, the portfolio of non-maturity deposits is clustered by dimensions such as business unit, currency, product and geographical location. The main dimensions influencing the repricing maturity are elasticity of deposit rates to market interest rates, volatility of deposit balances and observable client behavior. For the reporting period the average repricing maturity assigned across all such replicating portfolios is 2.40 years and Deutsche Bank uses 15 years as the longest repricing maturity.

In the loan and some of the term deposit products Deutsche Bank considers early prepayment/withdrawal behavior of its customers. The parameters are based on historical observations, statistical analyses and expert assessments.

Furthermore, the Group generally calculates IRRBB related metrics in contractual currencies and aggregates the resulting metrics for reporting purposes. When calculating economic value based metrics the commercial margin is excluded for material parts of the balance sheet.

Credit spread risk in the banking book

Deutsche Bank is exposed to credit spread risk in the Banking Book (CSRBB) mainly from bonds held by Treasury for liquidity reserve and asset liability interest rate risk management activities. The credit spread risk in the banking book is managed by the businesses, with Market Risk Management acting as an independent oversight function ensuring that the exposure is within the approved risk appetite. The perimeter for the measurement and monitoring of CSRBB exposure extends beyond fair value assets and liabilities and also includes positions accounted for at amortized cost whose pricing is linked to an observable market benchmark. The calculation of credit spread sensitivities and value-at-risk for material credit spread exposure is in general performed on a daily basis, the measurement and reporting of economic capital and specific CSRBB stress tests are performed on a monthly basis.

Foreign exchange risk

Foreign exchange risk arises from non-trading asset and liability positions that are denominated in currencies other than the functional currency of the respective entity. The majority of this foreign exchange risk is transferred through internal hedges to trading books within the Investment Bank and is therefore reflected and managed via the value-at-risk figures in the trading books. The remaining foreign exchange risks that have not been transferred are mitigated through match funding the investment in the same currency, so that only residual risk remains in the portfolios. Small exceptions to above approach follow the general Market Risk Management monitoring and reporting process, as outlined for the trading portfolio.

The bulk of non-trading open foreign exchange risk arises from the foreign exchange translation of local capital into the reporting currency of the Group and related capital hedge positions. Thereby structural open long positions are taken for a selected number of relevant currencies to immunize the sensitivity of the capital ratio of the Group against changes in the exchange rates.

Equity and investment risk

Non-trading equity risk is arising predominantly from our non-consolidated investment holdings in the banking book and from our equity compensation plans.

Deutsche Bank’s non-consolidated equity investment holdings in the banking book are categorized into strategic and alternative investment assets. Strategic investments typically relate to acquisitions made to support the bank’s business franchise and are undertaken with a medium to long-term investment horizon. Alternative assets are comprised of principal investments and other non-strategic investment assets. Principal investments are direct investments in private equity, real estate, venture capital, hedge or mutual funds whereas assets recovered in the workout of distressed positions or other legacy investment assets in private equity and real estate are of a non-strategic nature.

Investment proposals for strategic investments as well as monitoring of progress and performance against committed targets are evaluated by the Group Investment Committee. Depending on size, strategic investments may require approval from the Group Investment Committee, the Management Board or the Supervisory Board.

Credit Risk Management Principal Investments is responsible for the risk-related governance and monitoring of our alternative asset activities. The review of new or increased principal investment commitments is the task of the Principal Investment Commitment Approval Group, established by the Enterprise Risk Committee as a risk management forum for alternative asset investments. The Principal Investment Commitment Approval Group approves investments under its authority or recommends decisions above its authority to the Management Board for approval. The Management Board also sets investment limits for business divisions and various portfolios of risk upon recommendation by the Enterprise Risk Committee.

The equity investment holdings are included in regular group wide stress tests and the monthly market risk economic capital calculations.

Pension risk

The Group is exposed to market risks from defined benefit pension schemes for past and current employees. Market risks in pension plans materialize due to a potential decline in the market value of plan assets or an increase in the present value of the pension liability of each of the pension plans. Market Risk Management is responsible for a regular measurement, monitoring, reporting and control of market risks of the asset and liability side of the defined benefit pension plans. Thereby, market risks in pension plans include but are not restricted to interest rate risk, inflation risk, credit spread risk, equity risk, and longevity risk. For further details on the Group's defined benefit pension obligations and their management, please refer to Note 33 “Employee Benefits” in the “Notes to the Consolidated Financial Statements” section.

Other risks in the banking book

Market risks in the Asset Management business primarily result from principal guaranteed funds or accounts, but also from co-investments in the bank's funds.

Non-trading Market Risk Economic Capital

Non-trading market risk economic capital is calculated either by applying the standard traded market risk EC methodology or through the use of non-traded market risk models that are specific to each risk class and which consider, among other factors, historically observed market moves, the liquidity of each asset class, and changes in client's behavior in relation to products with behavioral optionality.

Operational risk management

Operational Risk Management Framework

Deutsche Bank applies the European Banking Authority's Single Rulebook definition of operational risk: "Operational risk means the risk of losses stemming from inadequate or failed internal processes, people and systems or from external events. Operational risk includes legal risks but excludes business and reputational risk and is embedded in all banking products and activities." Operational risk forms a subset of the bank's non-financial risks.

Deutsche Bank's operational risk appetite sets out the amount of operational risk it is willing to accept as a consequence of doing business. The bank takes on operational risks consciously, both strategically as well as in day-to-day business. While the bank may have no appetite for certain types of operational risk events (such as violations of laws or regulations and misconduct), in other cases a certain amount of operational risk must be accepted if the bank is to achieve its business objectives. In case a residual risk is assessed to be outside risk appetite, risk reducing actions must be undertaken, including remediating the risks, insuring risks or ceasing business.

The Operational Risk Management Framework is a set of interrelated tools and processes that are used to identify, assess, mitigate and monitor the bank's operational risks. Its components have been designed to operate together to provide a comprehensive, risk-based approach to managing the bank's most material operational risks. Operational Risk Management Framework components include the Group's approach to setting and adhering to operational risk appetite, the operational risk type and control taxonomies, the policies and procedures for operational risk management processes including the respective tools, and the bank's operational risk capital model.

Organizational and governance structure

While the day-to-day management of operational risk is the primary responsibility of business divisions and infrastructure functions, where these risks are generated, Non-Financial Risk Management (NFRM) oversees the Group-wide management of operational risks, identifies, and reports risk concentrations, and promotes a consistent application of the Operational Risk Management Framework across the bank. NFRM is part of the Group's risk function, the Chief Risk Office, which is headed by the Chief Risk Officer.

The Chief Risk Officer appoints the Head of NFRM, who is accountable for the design, oversight and maintenance of an effective, efficient and regulatory compliant Operational Risk Management Framework, including the operational risk capital model. The Head of NFRM monitors and challenges the Operational Risk Management Framework's Group wide implementation and monitors overall risk levels against the bank's operational risk appetite.

The Non-Financial Risk Committee is responsible for the oversight, governance, and coordination of the management of operational risk in the Group, by establishing a cross-risk and holistic perspective of the key operational risks of the Group. Its decision-making and policy related authorities include the review, advice and management of all operational risk issues that may impact the risk profile of business divisions and infrastructure functions. Several sub-fora with attendees from both the 1st LoD and 2nd LoD support the Non-Financial Risk Committee to effectively fulfil its mandate. In addition to the Group level Non-Financial Risk Committee, business divisions have established 1st LoD non-financial risk fora for the oversight and management of operational risks on various levels of the organization.

The governance of operational risks follows the bank's 3LoD approach to managing all of its financial and non-financial risks. The Operational Risk Management Framework establishes the operational risk governance standards including the core 1st and 2nd LoD roles and their responsibilities, to ensure effective risk management and appropriate independent challenge.

Operational risk requirements for the 1st LoD: Risk owners as the 1st LoD have full accountability for their operational risks and manage these against a defined risk appetite.

Risk owners are those roles in the bank whose activities generate - or who are exposed to - operational risks. As heads of business divisions and infrastructure functions, they must determine the appropriate organizational structure to identify their operational risk profile, actively manage these risks within their organization, take business decisions on the mitigation or acceptance of operational risks to ensure they remain within risk appetite, and establish and maintain 1st LoD controls.

Operational risk requirements for the 2nd LoD: Risk Type Controllers act as the 2nd LoD control functions for all sub-risk types under the overarching risk type "Operational Risk".

Risk Type Controllers establish the framework and define Group level risk appetite statements for the specific operational risk type they oversee. Risk Type Controllers define the minimum risk management and control standards and independently monitor and challenge risk owners' implementation of these standards in their day-to-day processes, as well as their risk-taking and risk management activities. Risk Type Controllers provide independent operational risk oversight and monitor the risk type's profile against the defined risk appetite. As risk type experts, Risk Type Controllers define the risk type and its taxonomy and support and facilitate the implementation of the risk type framework in the 1st LoD. To maintain their independence, Risk Type Controller roles are located only in infrastructure functions.

Operational risk requirements for NFRM as the Risk Type Controller for the overarching risk type "Operational Risk": As the Risk Type Controller / risk control function for operational risk, NFRM establishes and maintains the overarching Operational Risk Management Framework and determines the appropriate level of capital to underpin the Group's operational risk.

- As the 2nd LoD risk control function, NFRM defines the bank's approach to operational risk appetite and monitors its adherence and consequences in case of operational risks outside the defined risk appetite. NFRM provides the oversight of risk and control mitigation plans to return the bank's operational risk into its defined risk appetite, where required; it also establishes and regularly reports the bank's operational risk profile including operational risks which are outside the defined risk appetite.
- As the subject matter expert for operational risk, NFRM provides independent risk views to facilitate forward-looking management of operational risks, actively engages with risk owners (1st LoD) and facilitates the implementation of risk management and control standards across the bank
- NFRM is accountable for the design, implementation, and maintenance of the approach to determine the adequate level of capital required for operational risk, for recommendation to the Management Board; This includes the calculation and allocation of operational risk capital demand and expected loss under the Advanced Measurement Approach (AMA)

Managing operational risk

To manage the broad range of sub-risk types underlying operational risk, the Operational Risk Management Framework provides a set of tools and processes that apply to all operational risk types across the bank. These enable the bank to determine its operational risk profile in relation to risk appetite for operational risk, to systematically identify operational risk themes and concentrations, and to define risk mitigating measures and priorities.

In 2024, the bank continued to mature the management of Operational Risk. This was achieved through the enhancement of the granularity of the Risk and Control Assessment; through the migration of the central control repository into a more efficient application and by uplifting the Risk Appetite Framework.

Loss data collection: Data on internal and relevant external operational risk events (with a P&L impact ≥ €10,000) is independently validated in a timely manner. Material operational risk events trigger clearly defined lessons learned and read-across analyses, which are performed in the 1st LoD in close collaboration between business partners, risk control and other infrastructure functions. Lessons learned reviews analyze the reasons for significant operational risk events, identify their root causes, and document appropriate remediation actions to reduce the likelihood of their reoccurrence. Read across reviews take the conclusions of the lessons learned process and seek to analyze whether similar risks and control weaknesses identified in a lessons learned review exist in other areas of the bank, even if they have not yet resulted in problems or losses. This allows preventative actions to be undertaken.

Scenario analysis: The operational risk profile is complemented and further substantiated by incorporating exploratory scenario analysis into day-to-day risk management activities. Scenario analysis is used as a risk identification and management tool that enables risk owners and Risk Type Controllers to explore potential exposure to risk as the basis for identifying potential gaps in the banks existing operational risk profile. Furthermore, it is used as an input into the calculation of the operational risk capital for the bank. Scenario storylines build on internal losses, emerging risk reviews, top risks and risk concentrations, and findings, as well as the review of external peer operational risk loss events. Information from actual and potential future loss events are systematically utilized to identify thematic susceptibilities and actively seek to reduce the likelihood of similar incidents, for example through deep dive analyses or risk profile reviews. In 2024, the new 'Structured scenario' approach was piloted, which allows for better quantification of potential Operational Risks.

Risk & Control Assessment: The risk and control assessment process comprise of a series of bottom-up assessments of the risks generated by business divisions and infrastructure functions, the effectiveness of the controls in place to manage them, and the remediation actions required to bring the risks within the risk appetite. The Risk & Control Assessment is performed at a global business level and as such covers all jurisdictions. It is designed to assist Senior Management to determine whether operational risks are being managed and controlled adequately via a dynamic assessment approach which covers all applicable Risk Types from the Group's Non-Financial Risk Type Taxonomy (NFRTT). The Risk & Control Assessment puts a greater emphasis on assessing and mitigating risks that are outside of appetite and risks that drive unethical and inappropriate market conduct within the bank. In 2024, the RCA granularity was enhanced to provide specific risk insights and ensuring a more accurate risk profile for comparison against the defined risk appetite.

Top risks: The Top Risk Reporting process is a regular process to identify the risks which pose greatest concern across Group and divisions, in addition to ensuring there is commensurate remediation activity associated to mitigate the risk. The associated Top Risk reporting provides a forward-looking perspective on the impact of top risk reduction programs, comprising of planned remediation and control enhancements, indicating the expected timeframe for reduction. The reporting also contains emerging risks and themes that have the potential to influence the top risk population in the future. The top risk identification process is closely connected to both the risk and control assessment and risk appetite, consuming the risk exposure from the former and the appetite levels from the latter to help inform the top risk population. In 2024, the Top Risk Reporting Process was decommissioned and integrated into the risk appetite process.

Transformation Risk Assessment: To identify and appropriately manage risks from material change initiatives within the bank, a transformation risk assessment process is in place to assess the impact of transformation (including bank's future joint ventures and strategic investments) on the bank's risk profile and control environment. The assessment considers impacts to financial and non-financial risk types and is mandatory for a subset of initiatives, categorized as key deliverables (typically includes regulatory initiatives, technology migrations, remediation initiatives, strategy and organizational changes).

Risk appetite: Non-financial risk appetite reflects the amount of non-financial risk the bank is willing to accept to pursue its strategy. The non-financial risk appetite framework provides a common approach to define the level of risk appetite across the firm and monitor exposure against this appetite. The operational risk profile is regularly monitored against the bank's defined risk appetite, to alert the organization on impending problems in a timely fashion. In 2024, the concept of residual risk zones was further enhanced by introducing Operating Conditions the 1st LOD must operate within. This allows for a more precise articulation of risk appetite for a given risk type including defined breach and consequences management requirements.

Findings and issue management: The findings and issue management process facilitates mitigating the risks associated with known control weaknesses and deficiencies, and enables management to make risk-based decisions over the need for further remediation or risk acceptance. Outputs from the findings management process must be able to demonstrate to internal and external stakeholders that the bank is actively identifying its control weaknesses and taking steps to manage associated risks within acceptable levels of risk appetite.

Framework Adherence: Operational Risk Framework Adherence monitoring is a key activity to oversee, monitor and test the conformity to OR Framework component requirements by key stakeholders in the 1st and 2nd LoD. Operational Risk Framework Adherence results aim to proactively identify implementation improvements required of users of the OR Framework and highlight potential Framework design improvements. In 2024 framework adherence consequence management was enhanced whereby material adherence deficiencies identified through framework adherence reviews will result in risk-identified issues against the responsible 1st or 2nd LoD function, unless a finding already exists to appropriately remediate the deficiency identified.

Operational risk type frameworks

Operational risk is a risk type on the Group's Risk Type Taxonomy. Together with Reputational Risk it forms Non-Financial risk. The Operational Risk Management Framework is a set of interrelated tools and processes that are used to identify, assess, measure, monitor and mitigate Deutsche Bank Group's operational risks according to regulatory and industry-established definition of operational risk. It applies to the operational sub-risk types on a more granular level and enables the bank to aggregate and monitor its operational risk profile. These operational sub-risk types are controlled by various infrastructure functions and include the following:

- The Compliance department performs an independent 2nd line control function that protects the bank's license to operate by promoting and enforcing compliance with the law and driving a culture of compliance and ethical conduct in the bank. The Compliance department assists, reviews and challenges the business divisions and works with other infrastructure functions and regulators to establish and maintain a risk-based approach to the management of the bank's compliance risks in accordance with the bank's risk appetite and to help the bank detect, mitigate and prevent breaches of laws, rules and regulations as well as internal policies. The Compliance department performs the following principal activities: regulatory engagement and management in collaboration with Regulatory and Exam Management Group; identification and assessment of new and changed laws, rules and regulations; acting as trusted advisor through independent review and challenge; performing second line controls; the identification, assessment, mitigation, monitoring and reporting on compliance risk; the results of these assessments and controls are regularly reported to the Management Board and Supervisory Board.
- Financial crime risks are managed by the Anti-Financial Crime (AFC) function via maintenance and development of a dedicated program; the AFC program is based on regulatory and supervisory requirements; AFC has defined roles and responsibilities and established dedicated functions for the identification and management of financial crime risks resulting from money laundering, terrorism financing, compliance with sanctions and embargoes, the facilitation of tax evasion as well as other criminal activities including fraud, bribery and corruption and other crimes; AFC updates its strategy for financial crime prevention via regular development of internal policies processes and controls, institution-specific risk assessment and staff training
- Legal & Group Governance is a fully independent infrastructure function, mandated to provide legal advice both to the Management Board as well as to the business divisions and infrastructure functions and to support the Management Board in setting up and guarding Deutsche Bank's Governance framework and manage the bank's Legal and Governance Risk. Legal has a monopoly for giving legal advice, retaining and controlling outside counsel.

  The independency of Legal & Group Governance is ensured through
  - a direct reporting line into the Management Board and not into any business division
  - a ring-fenced incentive system and compensation where performance evaluation is tied principally to risk management and not to business revenues
- Deutsche Bank's New Product Approval and Systematic Product Review processes form a control framework designed to manage the risks associated with new products and services and their lifecycle management; these processes are overseen by Product Governance, within the Non-Financial Risk function; existing products and services are reviewed in one- to three year cycles designed to assess whether they remain fit for purpose and consistent with their respective target markets' characteristics and objectives; each product or service must be sponsored by a business Managing Director who bears ultimate accountability for it; breaches of the New Product Approval requirements are in scope of the bank's Red Flag consequence management process
- NFRM function includes the Risk Type Controller role for a number of non-financial and operational resilience risks; its mandate includes second line oversight of controls over transaction processing activities, as well as infrastructure risks to prevent technology or process disruption, maintain the confidentiality, integrity and availability of data, records and information security, and ensure business divisions and infrastructure functions have robust plans in place to recover important business processes and functions in the event of disruption including technical or building outage, or the effects of cyber-attack or natural disaster as well as any physical security or safety risk; NFRM Risk Type Controller also manages the risks arising from the bank's internal and external vendor engagements via the provision of a comprehensive third party risk management framework.

Measuring Operational Risks

Deutsche Bank calculates and measures the regulatory and economic capital requirements for operational risk using the Advanced Measurement Approach (AMA) methodology. The AMA capital calculation is based upon the loss distribution approach. Gross losses from historical internal and external loss data (Operational Riskdata eXchange Association consortium data) complemented by scenario data are used to estimate the risk profile (i.e., a loss frequency and a loss severity distribution). The loss distribution approach model includes conservatism by recognizing losses on events that arise over multiple years as single events in the historical loss profile.

Within the loss distribution approach model, the frequency and severity distributions are combined in a Monte Carlo simulation to generate potential losses over a one-year time horizon. Finally, the risk mitigating benefits of insurance are applied to each loss generated in the Monte Carlo simulation. Correlation and diversification benefits are applied to the net losses in a manner compatible with regulatory requirements to arrive at a net loss distribution at Group level, covering expected and unexpected losses. Capital is then allocated to each of the business divisions considering qualitative adjustments after deducting expected loss.

The regulatory and economic capital requirements for operational risk is derived from the 99.9% percentile. Both regulatory and economic capital requirements are calculated for a time horizon of one year.

The regulatory and economic capital demand calculations are performed on a quarterly basis. NFRM establishes and maintains the approach for capital demand quantification and ensures that appropriate development, validation and change governance processes are in place, whereby the validation is performed by an independent validation function and in line with the Group’s model risk management process.

With the go-live of the European Capital Requirements Regulation (CRR3), the regulatory capital requirement will no longer be based on the AMA methodology from 2025 onwards. Instead, the Standardized Measurement Approach for operational risk will be used. Deutsche Bank will continue to apply the AMA methodology to calculate its economic capital requirement.

Drivers for operational risk capital development

By design of the AMA capital calculation, Deutsche Bank’s operational risk capital demand is predominantly driven by historical internal loss events.

In view of the relevance of legal risks within the bank’s operational risk profile, specific attention is dedicated to the management and measurement of open civil litigation and regulatory enforcement matters where the bank relies both on information from internal as well as external data sources to consider developments in legal matters that affect the bank specifically but also the banking industry as a whole. Reflecting the multi-year nature of legal proceedings the measurement of these risks furthermore takes into account changing levels of certainty by capturing the risks at various stages throughout the lifecycle of a legal matter.

Conceptually, the bank measures operational risk including legal risk by determining the annual operational risk loss that will not be exceeded with a given probability. This loss amount is driven by a component that due to the IFRS criteria is reflected in the bank’s financial statements and a component beyond the amount reflected as provisions within the bank’s financial statements.

The legal losses which the bank expects with a likelihood of more than 50% are already reflected in the IFRS group financial statements. These losses include net changes in provisions for existing and new cases in a specific period where the loss is deemed probable and is reliably measurable in accordance with IAS 37.

Uncertain legal losses which are not reflected in the bank’s financial statements as provisions because they do not meet the recognition criteria under IAS 37 are considered within “regulatory or economic capital demand”.

To quantify the litigation losses in the AMA model, the bank takes into account historical losses, provisions, contingent liabilities and legal forecasts. Legal forecasts generally comprise ranges of potential losses covering risks of outflows greater than the provision and adjustments which are deemed remote or relate to yet unknown matters. Such forecasts may result from ongoing and new legal matters which are reviewed at least quarterly by the attorneys handling the legal matters.

The legal forecasts are included in the “relevant loss data” used in the AMA model. The projection range of the legal forecasts is not restricted to the one year capital time horizon but goes beyond and conservatively assumes early settlement of the underlying losses in the reporting period - thus considering the multi-year nature of legal matters.

Liquidity risk management

Liquidity risk arises from Deutsche Bank Group's potential inability to meet payment obligations when they come due or without incurring excessive costs. The Group's risk taxonomy differentiates between two aspects of liquidity risk: Short-term liquidity risk and Structural funding risk, both embedded in an overarching liquidity risk management framework. The framework's objective is to ensure that robust governance and controls are established within the Group to fulfil its payment obligations (including intraday) at all times, including periods of stress and to manage its liquidity and funding risks within the Management Board's approved risk appetite, when executing the strategic plan. The framework considers all relevant and significant drivers of liquidity risk, whether on-balance sheet or off-balance sheet.

Liquidity and funding risk framework

The Management Board defines the liquidity and funding risk strategy for the Group and sets the risk appetite, based on recommendations made by the Group Risk Committee. The Management Board reviews and approves the risk appetite at least annually. The risk appetite is applied at the Group level and to internally defined Key Liquidity Entities e.g., Deutsche Bank AG to monitor and control liquidity risk as well as the Group's long-term funding and issuance plan.

The Liquidity Risk Management Framework defines the organization of the liquidity managing functions in alignment with the three lines of defence structure, which is described in the "Risk Management Policy". The Corporate Divisions and Treasury comprise the first line of defence, responsible for executing the steps needed to most effectively manage the liquidity of the Group and steer business activities. CRO comprises the second line of defence, responsible for defining the liquidity risk management framework, providing independent risk oversight, challenge, and validation of activities conducted by the first line of defence, including establishing the risk appetite. Group Audit comprises the third line of defence, responsible for overseeing the activities of both the first line of defence and second line of defence.

The Group Asset and Liability Committee is the Group's decision making governing body mandated by the Management Board to optimize the sourcing and deployment of the Group's balance sheet and financial resources in line with the Management Board's risk appetite and strategy. The Group Asset and Liability Committee has the overarching responsibility to define, approve and optimize the Group's funding strategy. Regarding the second line of defence the Group Risk Committee is mandated by the Management Board with decision-making authority regarding material risk-related topics. In addition, it reviews and recommends items for the Management Board's approval, including key risk management principles, the Group's risk appetite statement, recovery plan, the contingency funding plan, over-arching risk appetite parameters, and recovery and escalation indicators.

The Group's liquidity risk management principles are documented in the "Group Liquidity Risk Management Policy" and the framework is described in the "Global Liquidity Risk Framework" and "Global Funding Risk Framework" documents. Both the policy and framework documents adhere to and articulate how the eight key risk management practices are applied to liquidity risk, with such key practices including risk governance, risk organization (3 lines of defence), risk culture, risk appetite and -strategy, risk identification and -assessment, risk mitigation and controls, risk measurement and reporting, stress planning and -execution. The individual roles and responsibilities relevant to each of these practices are laid out and documented in the Global Responsibility Matrix for liquidity risk, which provides further clarity and transparency on the roles and responsibilities across all involved stakeholders. All additional procedures and supporting documents (both global and local) issued by the liquidity risk management functions further define the requirements specific to liquidity risk practices. All these procedures are subordinate to the "Group Liquidity Risk Management Policy" and are subject to the standards it sets forth.

In accordance with the European Central Bank's Supervisory Review and Evaluation Process (and revised Internal Liquidity Adequacy Assessment Process requirement issued in November 2018), the Group has implemented an Internal Liquidity Adequacy Assessment Process, which is assessed, documented and reviewed at least annually and approved by the Management Board.

As part of an annual strategic planning process, Treasury projects the development of the key liquidity and funding metrics including the U.S. Dollar currency exposure based on anticipated business activities to ensure that the strategic plan can be executed in accordance with the Group's risk appetite.

Risk appetite and control setting

The Group's liquidity risk appetite, which is defined through qualitative principles and supporting quantitative metrics, is laid out in the "Risk Appetite Statement" and is subject to the standards defined in the "Risk Appetite Policy". This Risk Appetite Statement is further underpinned by the liquidity risk controls framework consisting of "Key Limits" based on risk appetite, as well as a suite of additional limits, thresholds and early warning indicators.

Deutsche Bank implemented a dedicated Risk Appetite framework covering regulatory Pillar 1 as well as internal stress metrics (Pillar 2), thus ensuring that the Group's liquidity position is balanced on a consolidated basis at the Group level as well as across Key Liquidity Entities and across currencies.

Treasury manages liquidity and funding, in accordance with the risk appetite across a range of relevant metrics and implements several tools including business level risk limits further cascading aspects of risk appetite to divisional level, ensuring ease of compliance with business level risk limits. As such, Treasury works closely with Liquidity Risk Management under its delegated authority and the business divisions to identify, analyze and monitor underlying liquidity risk characteristics within business portfolios. These parties are engaged in regular dialogue regarding changes in the Group's liquidity position arising from business activities and market events.

Furthermore, the Group ensures at the level of each Liquidity Relevant Entity that all local liquidity metrics are managed in compliance with the defined risk appetite. Local liquidity surpluses are pooled in Deutsche Bank AG hubs and local liquidity shortfalls can be met through support from these hubs. Transfers of liquidity capacity between entities are subject to the Intercompany Funding approval framework involving the Group's liquidity steering function as well as the local liquidity managers considering the compliance with Pillar 1 metrics including Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR) as well as the stressed Net Liquidity Position (sNLP), which is a Pillar 2 metric. Any available surplus that resides in entities with restrictions on transferring liquidity to other Group entities, due to for example regulatory lending requirements, is treated as trapped and as such not considered in the calculation of the consolidated Group liquidity surplus.

The Management Board is informed about the Group's performance against the key liquidity metrics, including the risk appetite and internal and market indicators, via a weekly liquidity dashboard.

Liquidity risk monitoring and management

Finance teams - Liquidity & Treasury Reporting & Analysis (LTRA) and Global Reporting, together own the overall accountability for the accurate and timely production of both external regulatory liquidity reporting (Pillar 1) as well as internal management reporting (Pillar 2) for the liquidity risk of the Group. In addition, Liquidity & Treasury Reporting & Analysis is responsible for the development of management information systems and the related analysis to support the liquidity risk framework and its governance for Treasury and Liquidity Risk Management.

Liquidity Coverage Ratio

The LCR, which is also a key regulatory and risk appetite limit, is intended to promote the short-term resilience of a bank's liquidity risk profile over a 30-day stress scenario. The ratio is defined as the amount of High-Quality Liquid Assets that could be used to raise liquidity in a stressed scenario, measured against the total volume of net cash outflows, arising from both contractual and prescribed modelled exposures over a 30-day time horizon on a consolidated currency basis.

By maintaining a ratio in excess of the minimum regulatory requirements, the LCR seeks to ensure that the Group holds adequate liquidity resources to mitigate a short-term liquidity stress.

An internal liquidity stress test position (sNLP) is also calculated and monitored to assist in liquidity steering. Key differences between the internal liquidity stress test (sNLP) and the LCR include the risk appetite time horizon (eight weeks versus 30 days, respectively), the classification and haircut differences between debt securities within the sNLP and the LCR High-Quality Liquid Assets, outflow rates for various categories of funding, as well as inflow assumption for various assets (for example, loan repayments). The Group's internal liquidity stress test also includes outflows related to intraday liquidity assumptions, which are not explicitly reflected in the LCR.

Net Stable Funding Ratio

The Net Stable Funding Ratio is a regulatory and risk appetite metric for assessing the Bank's structural funding profile. The NSFR is intended to reduce medium to long-term funding risks by requiring banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities. The ratio is defined as the amount of Available Stable Funding (the portion of capital and liabilities expected to be a stable and/or consistent source of funding), relative to the amount of Required Stable Funding for different types of on-balance sheet assets (with Required Stable Funding levels, a function of the liquidity characteristics of various assets held).

Based on the risk appetite, a NSFR limit has been set for the Group as well as for all Key Liquidity Entities and Liquidity Relevant Entities subject to a respective regulatory requirement to ensure ongoing compliance.

Liquidity stress testing and scenario analysis

Global internal liquidity stress testing and scenario analysis is used for measuring liquidity risk and evaluating the Group’s short-term liquidity position within the liquidity framework. This complements the daily operational cash management process. The long-term liquidity strategy based on contractual and behavioural modelled cash flow information is represented by a long-term metric known as the Funding Matrix (refer to Funding risk management and funding diversification section below for additional information).

The global liquidity stress testing process is managed by Treasury towards a respective risk appetite. Treasury is responsible for the design of the overall methodology, the choice of liquidity risk drivers and the determination of appropriate assumptions (parameters) to translate input data into stress testing output. Liquidity Risk Management is responsible for the definition of the stress scenarios. Laid out by the Model Risk Management Policy and Procedure, Liquidity Risk Management and Model Risk Management perform the independent validation of liquidity risk models. Finance teams -Liquidity & Treasury Reporting & Analysis and Global Reporting, are responsible for implementing these methodologies and performing the stress test calculation in conjunction with Treasury, Liquidity Risk Management, Group Strategic Analytics and IT.

Stress testing and scenario analysis are used to describe and evaluate the impact of sudden and severe stress events on the Group’s liquidity position. Deutsche Bank has selected four scenarios to calculate the Group’s stressed Net Liquidity Position. These scenarios are designed to capture potential outcomes which may be experienced by the Group. The most severe scenario assesses the potential consequences of a combined market-wide and idiosyncratic stress event, including downgrades of Deutsche Bank credit rating. Under each of the scenarios, the impact of a liquidity stress event over different time horizons and across multiple liquidity risk drivers, covering all business lines and product areas and with that all portfolios and balance sheet, is considered. The output from this scenario analysis feeds the Group Wide Stress Test run by the Enterprise Risk Management, which analysis liquidity risk in conjunction with the other defined risk types and evaluates their impact and interplay to both - Capital and Liquidity positions.

In addition, potential funding requirements from contingent liquidity risks which can arise under stress, including drawdowns on lending facilities, increased collateral requirements under derivative agreements, and outflows from deposits with a contractual rating linked trigger are included in the analysis. Subsequently, countermeasures, which are the actions the Group would take to counterbalance the outflows incurred during a stress event, are taken into consideration. These countermeasures include the usage of the Group’s liquidity reserve and generating liquidity from other unencumbered, marketable assets without causing any material impact on the Group’s business model.

Stress testing is conducted at a global level and for defined entities relevant for liquidity risk management. The stress analysis covers an eight-week stress horizon which is considered to be the most critical time span during a liquidity crisis requiring that liquidity is actively assessed and steered on a Group level. In addition to the consolidated currency stress test, further stress tests are performed for material currencies, namely EUR and USD. At the global level as well as for the U.S. liquidity stress tests also cover a twelve-months period whereby a risk appetite key limit has also been set. Ad-hoc analysis may be conducted to reflect the impact of potential downside events that could affect the Group such as climate / ESG-related events. Relevant stress assumptions are applied to reflect liquidity flows from risk drivers and on-balance sheet and off-balance sheet products. The suite of stress testing scenarios and assumptions are reviewed on a regular basis and are updated when enhancements are made to stress testing methodologies.

Funding Risk Management and Funding Diversification

Funding Management

In line with regulatory guidelines, Deutsche Bank has developed a set of internal indicators to measure its inherent funding risks. These are considered for risk management and steering purposes in addition to the Pillar 1 requirements.

The Group relies on a vast range of funding sources including deposits, unsecured wholesale funding, Capital Markets Issuances and secured funding. These funding sources protect the Group’s liquidity position two ways. First, since stress events may impact funding markets differently, maintaining a well-diversified funding portfolio will lower the average impact of these events. Second, when experiencing a liquidity stress, having access to a wide range of funding sources significantly improves the Group’s ability to tap different funding markets. The diversification across products is complemented by Risk thresholds which have been set to monitor tenor concentration and counterparty concentration for both secured and unsecured funding sources.

The stability of Deutsche Bank Group's funding position can be negatively impacted by various forms of industry risks which often manifests medium to long term structural trends with a potentially significant long-term impact on the economy and banks' balance sheets. Deutsche Bank performs ad-hoc analyses on such emerging risks to assess the impact of such trends on its funding position to ensure that mitigating measures are taken on a timely basis when deemed necessary. In addition, Treasury evaluates current market access information in its significant funding markets on a monthly basis with results compiled and presented to the Group Asset and Liability Committee.

Deutsche Bank's tool for monitoring and managing the Group's funding profile for greater than one year time horizon, is the Funding Matrix. To produce the Funding Matrix, all assets and liabilities are mapped into time buckets corresponding to their baseline contractual or modelled maturities. This allows the Group to identify expected excesses and shortfalls in term liabilities over assets in each time bucket, facilitating the management of potential liquidity exposures over time. The liquidity profile is based on contractual cash flow information. If the contractual maturity profile of a product does not adequately reflect the liquidity profile or in case of non-maturing products, the maturity is replaced by baseline modelling assumptions.

Capital Markets Issuance

The main objective of debt issuance is to raise medium term funding in the most cost optimal manner. Debt issuance, encompassing senior unsecured bonds, covered bonds, and capital securities, is a key source of term funding for the Group and is managed directly by Treasury. At least once a year, following endorsement by the Asset and Liability Committee, Treasury submits an annual long-term funding plan to the Group Risk Committee for recommendation and then to Management Board for approval. This plan is driven by global and local funding and liquidity requirements based on expected business development. The Group's capital markets issuance portfolio is dynamically managed through annual issuance plans to avoid excessive maturity concentrations.

Deutsche Bank holds a license to issue mortgage Pfandbriefe and maintains a program to issue structured covered bonds. In 2024, the Pfandbrief platform was enriched to support callable Pfandbriefe which further broadens the bandwidth offered to investors. Additionally, the Group continues to run a program for the purpose of issuing covered bonds under Spanish law (Cedulas). In 2023, Deutsche Bank further diversified its investor base through inaugural transactions in China. The issuances of these so-called Panda bonds was expanded throughout 2024. Since 2020 the Group maintains its Green Bond framework which the bank offers green note issuances to both, institutional and retail investors. Furthermore, multiple green structured notes, first green deposits and first green repurchase agreements (repos) were executed. In 2024, sustainability framework was enriched to also support social assets. This was utilized for the first time in July 2024 through the issuance of DB's inaugural social bond.

Risk Mitigation

High Quality Liquid Assets

High-quality Liquid Assets (HQLA) is a Pillar 1 calculation which feeds into LCR and is a key limit per the risk appetite. HQLA comprise available cash and cash equivalents and unencumbered high quality liquid securities (including government and government guaranteed bonds), representing the most readily available and most important countermeasure in a stress event.

The vast majority of the Group's HQLA are held centrally across major currencies at the central bank accounts of the parent entity and foreign branches in the key locations in which we are active and in a dedicated Treasury-owned Strategic liquidity reserves portfolio, set up exclusively to serve as a mitigant during periods of stress.

Asset Encumbrance

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. Generally, loans are encumbered to support long-term capital markets secured issuance such as covered bonds or other self-securitization structures, while financing debt and equity inventory on a secured basis is a regular activity for the Investment Bank business. Additionally, in line with the European Banking Authority technical standards on regulatory asset encumbrance reporting, assets pledged with settlement systems (including default funds and initial margins) as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks are considered encumbered assets. Derivative margin receivable assets as encumbered under these European Banking Authority guidelines are also included.

Funds transfer pricing

FTP is a cost allocation and business steering tool to manage costs and benefits (remuneration) associated with funding and contingent liquidity risk, aligned to firm's risk appetite. FTP applies to all Corporate Divisions and entities with balance sheet items requiring active management and funding from the Group and promotes pricing of (i) assets in accordance with their underlying liquidity risk, (ii) liabilities in accordance with their liquidity value and (iii) contingent liquidity exposures in accordance with the cost of providing for appropriate High Quality Liquid Assets.

Within this framework funding and liquidity risk costs and benefits are allocated to the Group's business units based on rates which reflect the economic costs of liquidity for Deutsche Bank. Treasury might set further financial incentives in line with the Group's liquidity risk guidelines.

Additional details are included in Note 4 "Business segments and related information" of the consolidated financial statements.

Contingency Funding Planning

Deutsche Bank's Group Contingency Funding Plan outlines how Deutsche Bank would respond to an actual or anticipated liquidity stress event. It specifies the provisions, procedures and action plans for responding to potential disruptions to the Bank's ability to fund itself. It covers actions that can be taken to raise cash and/or recover the Bank's liquidity metrics in breach. The Contingency Funding Plan outlines governance arrangements for its activation and presents the framework of liquidity indicators enabling the bank to identify deteriorating market circumstances in a timely manner and that determine quickly what actions need to be taken, including communication and coordination during a liquidity stress event. Deutsche Bank has established the Financial Resource Management Council, which is responsible for oversight of capital and liquidity across contingency, recovery, and resolution scenarios in a defined crisis situation.

Enterprise risk management

Enterprise Risk Management (ERM) provides a holistic view of the Bank’s risk profile across risk types, businesses and geographies. Key responsibilities include:

- Defining the overarching risk management policy, including setting of risk management standards.
- Setting and monitoring the Bank’s overarching risk appetite and cascading to business & entity dimensions.
- Delivering insight through emerging risks and trends analysis, forward-looking stress tests, portfolio concentration, deep-dive analyses and ad-hoc event reporting.
- Developing and managing the climate risk management framework.
- Providing risk reporting and analytics to key stakeholders, including senior management and regulators.
- Acting as risk controlling function for credit risk

Strategic risk

Strategic risk is the risk of a shortfall in planned earnings (excluding other material risks) due to incorrect business plans, ineffective plan execution, or inability to effectively respond to material plan deviations. Strategic risk arises from the exposure of the bank to the macroeconomic environment, changes in the competitive landscape, and regulatory and technological developments. Additionally, it could occur due to errors in strategic positioning, the bank’s failure to execute its planned strategy and/or a failure to effectively address underperformance versus plan targets.

The strategic plan is developed annually and presented to the Management Board for discussion and approval. The final plan is presented to the Supervisory Board. The plan is challenged in an iterative process with respect to its assumptions, credibility and integrity. During the year, execution of business strategies is regularly monitored to assess the performance against targets. A more comprehensive description of this process is detailed in the section ‘Strategic and Capital Plan’.

Strategic risk is measured through a dedicated risk model that quantifies potential losses caused by unexpected pre-tax earnings shortfalls that cannot be offset by cost reductions under extreme but plausible market conditions over a 12-month period. Strategic risk appetite is also established for the Group via dedicated metrics.

Enterprise Risk Management is the independent risk control function for Strategic Risk. A framework that includes setting risk appetite and monitoring adherence has been implemented in line with the control standards the Enterprise Risk Management function set.

Capital risk

Capital risk is defined as the risk that Deutsche Bank has an insufficient level or composition of capital supply to support its current and planned business activities and associated risks during normal and stressed conditions. ERM considers available capital resources when setting the bank’s overarching risk appetite and cascade to Business Divisions.

The Group’s capital risk framework consists of several elements which aim to ensure that Deutsche Bank maintains on an ongoing basis an adequate capitalization to cover the risks to which is exposed. The framework is strongly integrated with the bank-wide strategic planning process and closely linked to Deutsche Bank’s internal capital adequacy assessment process (see section “Internal Capital Adequacy Assessment Process” for further details). Treasury together with the divisions is the key risk manager of the associated risks and represents the 1st LoD. Treasury Risk Management (TRM) acts as the 2nd LoD for capital risk.

The Treasury function manages capital risk at group level and locally in each region, as applicable. This includes managing issuances and repurchases of capital instruments (see section on “Capital management” for details). Additionally, divisional limits for key capital resources are approved by the Group Asset and Liability Committee to ensure alignment with the capital risk appetite (see section on “Resource limit setting” for details).

TRM sets the capital risk framework, assesses the capital risk profile and provides independent challenge. This includes setting of risk appetite thresholds for key capital ratios. Threshold breaches are subject to a dedicated governance framework triggering management actions up to the execution of Deutsche Bank’s recovery plan. Thresholds also provide boundaries to the capital plan and are fully integrated into the regular assessment of capital risk under stress scenarios.

Portfolio concentration risk

Risk concentrations refer to clusters of the same or similar risk drivers within specific risk types (intra-risk concentrations in credit, market, operational and strategic risks) as well as across different risk types (inter-risk concentrations). They occur within and across counterparties, businesses, regions/countries, industries and products. The management and monitoring of risk concentrations is achieved through a quantitative and qualitative approach, as follows:

- Intra-risk concentrations are assessed, monitored and mitigated by the individual risk functions (enterprise, credit, market, operational and liquidity risk management). This is supported by risk appetite including limit setting on different levels and/or management according to each risk type
- Inter-risk concentrations are managed through quantitative top-down stress-testing and qualitative bottom-up reviews, identifying and assessing risk themes independent of any risk type and providing a holistic view across the bank. The diversification effects between credit, market, operational and strategic risk are measured through a dedicated risk model that quantifies the diversification benefit caused by non-perfect correlations between these risk types. The calculation of the risk type diversification benefit is intended to ensure that the standalone economic capital figures for the individual risk types are aggregated in an economically meaningful way

The most senior governance body for the oversight of risk concentrations is the Group Risk Committee (GRC).

Environmental, social and governance risk

The impacts of rising global average temperatures, the enhanced focus on climate change and the transition to a net-zero economy from society, regulators and the banking sector have led to the emergence of new and increasing sources of financial and non-financial risks. These include the physical risks arising from extreme weather events growing in frequency and severity, as well as transition risks as carbon intensive sectors are expected to face higher taxation, reduced demand and restricted access to financing. These risks can impact Deutsche Bank across a broad range of financial and non-financial risk types. Financial institutions are also facing increased scrutiny on climate and broader ESG-related issues from governments, regulators, shareholders and other bodies, leading to reputational risks if the Group is not seen to support the transition to a lower carbon economy, to protect biodiversity and human rights, among other themes.

Deutsche Bank's risk strategy recognizes ESG as a theme that represents a broad range of areas of concern related to environmental, social, or governance factors that cuts across multiple scenarios or risks. It must be ensured that all non-financial ESG-related risks are identified and adequately assessed to include potential impacts driven by ESG factors; the bank must also ensure that controls are effective and any potential deficiencies are promptly escalated and addressed. Deutsche Bank is regularly reviewing and enhancing its ESG risk management frameworks in alignment with regulatory guidance and to ensure that ESG risks are actively managed and greenwashing risk is mitigated. Limitations in terms data, methodologies and industry standards for measuring and assessing climate and other environmental risks continue to lead to a higher degree of uncertainty into climate-related disclosures. Anti-ESG measures that were already established in some jurisdictions are now reinforced and taken further may result in the loss of existing business and the inability to conduct new business within those jurisdictions, while complying may lead to reputational risks.

The management of risks stemming from environmental factors relies first and foremost with Deutsche Bank's net zero-aligned decarbonization targets for eight sectors: Oil and Gas (upstream), Power Generation, Automotive (light duty vehicles), Steel, Coal mining, Cement, Shipping and Commercial Aviation. The pathways to achieve these targets are incorporated into the bank's risk management framework. Environmental risks are assessed through an annual climate and environmental materiality assessment and internal stress test, across businesses, portfolios and risk types (Credit, Market, Liquidity, Reputational and Operational); They are monitored through dedicated reports discussed in senior risk committees and managed through risk appetite thresholds, policies requirements and exclusions (Environmental and Social policy framework), and portfolio Early Warning Indicators (EWIs). Climate and environmental risks are incorporated into the credit approval process for corporate clients via enhanced due diligence requirements. New loan requests above selected tenor and rating-based thresholds to corporate clients in carbon-intensive sectors as well as those in sectors vulnerable to climate-physical and nature (or "other environmental") risks require a dedicated risk assessment from the Front Office and review by Credit Risk Management. Overall, these risks are embedded within the bank's business model and financial planning through the carbon budgets attributed to the bank's businesses derived from its decarbonization targets and through the inclusion of environmental risks within the Internal Capital Adequacy Assessment Process (ICAAP).

The Group Sustainability Committee acts as the main governance and decision-making body for sustainability-related matters across Deutsche Bank. This includes the assessment of material impacts as well as risks and opportunities for the Bank. The committee also sets the net zero targets for the bank.

The Management Board has delegated sustainability related decisions to this committee, which is chaired by the Chief Executive Officer and the Chief Sustainability Officer (Vice Chair). It receives monthly updates on financed emissions and net-zero alignment.

The Group Risk Committee, chaired by the Chief Risk Officer and established by the Management Board has the mandate to oversee several risk & capital related matters. This includes the responsibility for developing the bank's Climate Risk Framework. The Committee approves the Bank's climate and environmental risk appetite, including appetite for deviation from net-zero decarbonization linear reduction pathways. A number of other committees of the Group Risk Committee are responsible for the development and management of specific elements of climate and environmental risk.

The Enterprise Risk Committee and the Net Zero Forum receive, in addition to the quarterly reports, monthly flash reports on key metrics (i.e. measuring alignment with decarbonization targets and the consumption of divisional carbon budgets).

Model Risk Management

Introduction

Model risk is the potential for adverse consequences from decisions based on incorrect models or their misused outputs. Model risk can lead to financial loss, poor business or strategic decision making, or damage to its reputation. Deutsche Bank recognizes the use of models can affect other risk-types, and that model risk is a distinct risk that can increase or decrease aggregate risk across other risk-types.

Deutsche Bank uses models for a broad range of decision-making activities, such as: underwriting credits; valuing exposures, instruments, and positions; measuring risk; managing and safeguarding client assets and determining capital and reserve adequacy. The term ‘model’ is a quantitative or qualitative method, system, or approach that applies expert judgement, statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates. Models are simplified representations of real-world relationships and are based on assumptions and judgment. Accordingly, the bank is exposed to model risk, which must be identified, measured, and controlled appropriately.

Model risk management oversight is provided by all levels of management, including the Management Board. Management of model risk is underpinned by a framework designed and monitored by a 2nd Line of Defense control function independent from developer, owner, and user of models.

Model Risk Management Framework and Governance

Model risk is one of the bank’s Level 1 risks, and is overseen by the Chief Risk Officer through the setting of a quantitative and qualitative risk appetite statement, and managed through:

- The Model Risk Policy and Procedure, and supporting documents aligned to risk appetite, regulatory requirements, and industry best practice, with clear roles and responsibilities for stakeholders.
- Inventorization of all models, supporting ongoing model risk framework components including risk assessments and attestations.
- Key controls for models from development through to decommissioning, including validation, approval, deployment and monitoring.
- Models are assessed for their materiality, complexity, uncertainty and reliance and in aggregate assigned a risk Tier, which is used to identify those which present the higher risk to Deutsche Bank.
- A risk based approach to managing the models by Tier is applied.
- Independent Validations, and subsequent independent approvals, verify that models have been appropriately designed and implemented for their intended scope and purpose, and that respective controls are in place to assure that they continue to perform as expected during their use.
- The controls identify models’ limitations and weaknesses, resulting in findings and compensating controls, these may be conditions for use, such as adjustments or overlays.
- Model risk governance, including senior forums for monitoring and escalation of model risk related topics, as well as monthly updates to the Management Board on the model risk appetite metrics, and periodic model risk updates to the Supervisory Board.

Reputational Risk Management

Within the group's risk management process, reputational risk is defined as the risk of possible damage to Deutsche Bank's brand and reputation, and the associated risk to earnings, capital or liquidity arising from any association, action or inaction which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with Deutsche Bank's Code of Conduct.

Deutsche Bank has limited appetite for transactions or relationships with material reputational risk or in areas which inherently pose a higher reputational risk such as the defense, gaming, or adult entertainment sectors, or where there are certain environmental concerns. Reputational risk cannot be precluded as it can be driven by unforeseeable changes in perception of its practices by its various stakeholders (e.g. public, clients, shareholders and regulators).

The Reputational Risk Framework (the Framework) is in place to manage the process through which active decisions are taken on matters which may pose a reputational risk, before the event, and in doing so to prevent damage to Deutsche Bank's reputation wherever possible. The Framework provides consistent standards for the identification, assessment and management of reputational risk issues. Reputational impacts which may arise as a consequence of a failure from another risk type, control or process are addressed separately via the associated risk type framework and are therefore not addressed in this section.

The reputational risk could arise from multiple sources including, but not limited to, potential issues with the profile of the counterparty, the business purpose / economic substance of the transaction or product, high risk industries, environmental and social considerations, and the nature of the transaction or product or its structure and terms.

The modelling and quantitative measurement of reputational risk internal capital is implicitly covered in the bank's economic capital framework primarily within strategic risk.

Governance and Organizational Structure

The Framework is applicable to all business units and regions. Matters specific to DWS are reviewed by the DWS Reputational Risk Committee and, if necessary, escalated to the DWS Executive Board. Decisions are subject to the DWS and Deutsche Bank internal Corporate Governance policies. Whilst every employee has a responsibility to protect the bank's reputation, the primary responsibility for the identification, assessment, management, monitoring and, if necessary, referring or reporting of reputational risk matters lies with Deutsche Bank's Business Divisions as the primary risk owners. Each Business Division has an established process through which matters, which are deemed to be a moderate or greater reputational risk are assessed, the Unit Reputational Risk Assessment Process.

The Unit Reputational Risk Assessment Process is required to refer any material reputational risk matters to the respective Regional Reputational Risk Committee. The Framework also sets out a number of matters which are considered inherently higher risk from a reputational risk perspective and are therefore mandatory referrals to the Regional Reputational Risk Committees. The Regional Reputational Risk Committees, which are 2nd LoD Committees and meet on an ad hoc basis as required. The Group Reputational Risk Committee (GRRC) reviews cases with a Group wide impact and in exceptional circumstances, those that could not be resolved at a regional level. The Head of NFRM is responsible for ensuring the oversight, governance and coordination of the management of reputational risk of Deutsche Bank.

Information security

Deutsche Bank operates in an environment with increasing levels of digitization and a constantly evolving threat landscape related to information security. Amid ongoing developments, threats and challenges, Deutsche Bank has the responsibility to preserve the confidentiality, integrity, and availability of clients', as well as business partners' data and of its own information assets, including the bank's employees' information. Doing so consistently and effectively is essential for retaining the trust of the various stakeholders and preserving their interests.

Due to the dynamic and complex nature of the environment, Deutsche Bank is continuously monitoring the security threat landscape. The bank vigilantly observes technological developments, the geopolitical landscape and economic impacts driving security risks and assesses their relevance for potential impacts to itself and the wider financial ecosystem. Deutsche Bank adjusts its security capabilities accordingly to safeguard its ability to provide products and services to clients and protect the continued operations of the bank's businesses.

This section provides a comprehensive insight into Deutsche Bank's approach to information security, detailing the bank's continuous efforts to protect data and services robustly, including its security governance structure, security strategy, and security risk management.

Governance

Responsibility for security matters at Deutsche Bank sits within the Chief Security Office. The Group Chief Security Officer (CSO) has delegated authority from the Management Board, including approval of the security policies and the security strategy for the Deutsche Bank Group. The CSO reports directly to the Chief Technology, Data, and Innovation Officer, who is a member of the Management Board. The Management Board is accountable for the implementation of the information security framework, with oversight from the Supervisory Board. There are multiple mechanisms in place for the CSO to escalate security issues directly to the Management Board if required.

Deutsche Bank's CSO has served in various roles in information security for more than 20 years. This includes roles as global Chief Information Security Officer (CISO)/Chief Security Officer (CSO) for three different large European financial institutions and a partner position in a global strategy and consulting firm, leading security work for financial service clients.

The Group Chief Security Officer is supported by security role holders at various seniority levels across the bank to ensure that security requirements are met from a regional, divisional, and technical perspective. All information security activities are overseen by two dedicated governance forums chaired by the CSO: the Group IT Security Council (interface to the bank's IT units), and the Group Information Security Committee (interface to the bank's business and infrastructure divisions). The independent Risk Management function for Information Security is represented in both forums. Both forums provide advice on the security strategy and oversee the progress and performance of key information security deliverables, the remediation status of information security related audit findings and information security incidents as well as the information security posture of Deutsche Bank Group against defined targets. In the event of critical issues, members are assigned specific actions according to their responsibility.

Security indicators and reporting provided to the bank's relevant governance forums support appropriate security risk awareness and decision taking. The comprehensive metrics framework maintained by the Chief Security Office is underpinned by an extensive data set allowing for various dedicated views. The Management Board receives a quarterly information security risk posture report, as well as ad hoc information if required. Furthermore, the CSO provides regular updates on material topics relating to security to the Supervisory Board's Committee responsible for Technology, Data and Innovation.

Strategy

The Chief Security Office develops the bank's group-wide security strategy and oversees its implementation and operationalization globally via the organizational set-up, governance, and implemented security policies. The security strategy, which is reviewed on a regular basis, incorporates developments in the threat landscape, technology, the regulatory environment, the bank's corporate and IT strategy, and other internal and external parameters. The approach provides comprehensive and layered security controls. The Chief Security Office works closely with the bank´s divisions to enable alignment with the security by design approach throughout bank wide programs and initiatives. Security investments are prioritized and adjusted by a threat-driven perspective, leveraging the regular review and assessment of the maturity of the bank's security implementation.

A key element of the bank's security strategy is to foster responsibility and active awareness among Deutsche Bank staff. By embedding these principles into daily practices, Deutsche Bank aims to bring about long-term behavioral changes that help mitigate risks and enhance overall security. The bank's security culture and awareness campaign, "Mission Security", communicated to all employees worldwide, reinforces these efforts. Another way the bank strengthens security culture is by periodically conducting simulations and testing exercises, including phishing simulation and mandatory training.

Impact, risk, and opportunity management

Impacts, risks, and opportunities

Clients expect secure access to their bank's services anytime, anywhere, and through a variety of channels. As part of doing business with the bank, clients entrust Deutsche Bank with sensitive data. Deutsche Bank has the responsibility to preserve the confidentiality, integrity, and availability of clients', as well as business partners' data and of its own information assets, including the bank's employees' information. Doing so consistently and effectively is essential for retaining the trust of these stakeholders and preserving their interests. Consequently, the bank continues to invest in security risk mitigation. Based on stringent risk management processes, Deutsche Bank adjusts its security capabilities to safeguard its ability to provide products and services to clients and protect the continued operations of the bank's businesses. Stable and resilient services support stakeholder trust, help grow business and revenue opportunities and protect brand value.

Increasing frequency and complexity of recent cyberattacks has resulted in an elevated risk profile for many organizations around the world, including Deutsche Bank. The bank continuously monitors the security threat landscape and vigilantly observes technological developments, the geopolitical landscape and economic impacts driving security risks, assessing their relevance for potential impacts. Sophisticated and often financially motivated cyberattacks, including ransomware, can be observed as persistent threats across industries and are expected to become even more frequent. Additional threats are posed by supply chain attacks, a growing number of critical software vulnerabilities potentially exploited by threat actors (zero-day exploits), and an increased threat surface introduced by, for example, remote ways of working.

2024 focus areas continued to include supply chain risk and common attack scenarios like Ransomware or Denial of Service, as well as emerging risks such as Artificial Intelligence and Quantum Computing. Ongoing geopolitical unrest continues to drive cyber-attack activity across various threat actor types. Distributed Denial of Service (DDoS) attacks are growing in occurrence, frequency, and intensity.

Technological advancements pose demands on data privacy and security. As the use of artificial intelligence becomes widespread, there are also increased risks to cybersecurity, such as the criminal use of deepfakes, and more sophisticated social engineering attacks.

Third-party software or technology solution providers will continue to be a key target for threat actors, who see such supply chain attacks as means to compromise or disrupt a larger number of downstream customers and assets, amplifying the impact of their attacks.

Failure to embed and ensure oversight of security requirements into the bank's framework to best address associated risks and subsequent appropriate implementation can lead to breaches of confidentiality and integrity of information, and unavailability of information and/or services. Additionally, Deutsche Bank may face operational risks arising from failures in the control environment, including errors in the performance of processes or security controls, as well as loss of data, which may disrupt business and lead to material losses.

Security breaches can occur due to unauthorized access to networks or resources, unauthorized access to or loss/destruction of confidential information, unintentional exposure of vulnerabilities in the bank's infrastructure, the introduction of computer viruses or malware, technology failures or other forms of cybersecurity attacks or incidents, including breaches of the security of third-party computer systems.

In case of a successful attack, there might be impact on Deutsche Bank’s stakeholders and the wider financial ecosystem due to compromised data, unintentional spread of malware, unavailability of services, and the inaccessibility of systems and/or data. This encompasses internal and third-parties information technology systems.

A successful cyberattack could have a significant negative direct or indirect impact on the bank that may result in the disclosure or misuse of client, as well as proprietary information, damage to or inability to access information technology systems, statutory or regulatory non-compliance and financial losses. Potential consequences range from reputational damage and client dissatisfaction via contractual non-compliance (e.g., if services are not provided as agreed) to remediation costs (such as for investigation and reestablishing services), increased cybersecurity costs (such as for additional personnel, technology, or third-party vendors), and potential penalties and fines, to personal data breach notification obligations, and litigation exposure.

Deutsche Bank maintains insurance as an additional risk mitigant for cyber risk. The bank´s insurance coverage is designed to include mitigation of the financial impact of security incidents, it may however not fully cover all potential losses, including reputational damage or indirect costs associated with a cyber event. Notwithstanding the bank’s security measures, there can be no assurance that its policies, controls, or cyber insurance coverage will be sufficient to prevent or fully mitigate the impact of future cyber incidents and it could have a material adverse effect on its financial condition.

Policies and risk management

The bank’s policies and controls support risk reduction and mitigation for potential negative impacts. Information Security Risk is managed as an Operational Risk under the Non-Financial Risk Management Framework of the bank. The Chief Security Office is responsible for and executes security matters against the Non-Financial Risk Management Framework and leverages the results of its various instruments whereas Non-Financial Risk Management provides oversight, review, and challenge. Measures for the further reduction of material residual risks may include policy changes or policy amendments at divisional or group level as well as prioritized investment and accelerated implementation of risk mitigating activities.

Security risks are assessed on a continual basis, through analysis of internal and external events, events at peer institutions, monitoring of the threat environment, and discussion in various forums. The annual risk and control assessment process evaluates risk scenarios such as service disruption, system misuse, data distortion, asset or data destruction, data disclosure, financial theft and non-adherence or non-conduct to regulatory policies and laws. It leverages industry standard threat assessment frameworks, such as MITRE, and provides the foundation for the assessment of financial industry relevant risk scenarios.

The thorough analysis comprises potentially affected stakeholders, including clients and suppliers, as well as the external threat landscape. The process considers contextual data and controls such as major events, threat assessments, findings, scenario analysis, control metrics, lessons learned, events at peer institutions, read across, regulatory expectations and remediation activities, when assessing control suites and residual risk positions. In case of emerging developments, additional risk reviews are conducted. The results are evaluated against the bank's control capabilities to cope with these risks.

As part of the annual risk and control assessment process, internal security subject matter experts provide a risk evaluation, supported by other areas such as Legal, Compliance or Group Data Privacy, as necessary. That evaluation is reviewed and challenged by risk subject matter experts to arrive at a final residual risk position. Additionally, senior information security experts from all divisions and functions assess the exposure of the group, based on their divisional or functional background. Those divisional and functional assessments are also reviewed and challenged by risk subject matter experts to arrive at a final residual risk position for divisions and functions.

A comprehensive information security management system (ISMS) is crucial for an organization handling vast amounts of financial assets and sensitive data. In alignment with its Non-Financial Risk Management policies, Deutsche Bank’s globally applicable security policy framework defines the core principles of and the fundamentals for security management. The policy framework is reviewed annually, and any changes are approved by the CSO. It is governed centrally and applied globally across all product groups and business and infrastructure divisions. It also defines the roles, responsibilities, and accountabilities of key personnel identified to manage information security risk. The framework is aligned with the security strategy and sets out measures to manage and resolve information security breaches, and related communication procedures.

The bank’s ISMS has been certified by an accredited certification body according to ISO 27001, for all information security domains defined within that standard since 2012. To maintain the ISO 27001 certification, the bank performs a full recertification process every three years, with the latest taking place in 2024. With the last recertification, Deutsche Bank upgraded its ISMS to the 2022 version of ISO 27001. Furthermore, the bank performs an annual surveillance audit designed to ensure compliance between the certification intervals.

Dependency on third-party products and services can expose the bank to cyber risks and impact its risk posture, as these can be prime targets for information security attacks. Third-party information security risks are managed by Deutsche Bank through a combination of capabilities, implementing a comprehensive approach to mitigate these risks and cover regulatory requirements (incl. the EU DORA regulation). Key components include the bank's global third-party risk management program, which is designed to identify, monitor, and mitigate risks associated with third-party engagements. In combination, the bank demands adherence to an information security policy with specific control objectives for third parties, which include incident notification requirements. To ensure adherence, the information security posture of the third parties is reevaluated on a periodic basis (defined by the criticality of the vendor). In response to specific threats and incidents, proactive engagement and outreach with these parties is taking place. This is complemented by security assessments, which also include onsite assessments of third parties. These measures collectively contribute to the bank's oversight and support that third-party services align with the bank's security requirements.

Actions and resources

To address the evolving threat landscape, Deutsche Bank has a variety of prevention methods and controls in place. These include, for example, network security, identity and access management, endpoint and data security (including data classification and leakage prevention), threat intelligence, cyber hygiene, and encryption solutions. Those preventive controls are backed by a threat-driven detection set-up and a robust incident-response process.

The bank continually reviews and enhances its information security controls through multiple layers of technology, including databases, infrastructure, devices, and applications. This is complemented by organizational controls and security training and awareness. The purpose of this layered approach is to strengthen the end-to-end protection by utilizing multiple opportunities to detect, prevent, respond to, and recover from cyber threats.

Deutsche Bank employs various mechanisms to self-identify areas for improvements and control enhancements. These include security testing, security problem management and lessons learned. Deutsche Bank´s independent Group Audit function is mandated to regularly assess security controls as part of their audit plan. Furthermore, the regular annual audit conducted by the bank´s external auditor considers identity and access management controls. The overall information security program of the bank is evaluated on a regular basis by third-party organizations.

The bank actively shares security best practices and threat information with national and international security organizations, government authorities, and peer organizations. These relationships help ensure that the bank's security technology and procedures reflect current financial industry's best practices and keep pace with the threat environment.

As digitalization advances, the need to enhance literacy on information security topics grows. Deutsche Bank addresses this by educating and informing clients through informational materials and client events, highlighting information security threats and the bank's protective measures. This also includes response to client inquiries on information security topics through its client relationship function.

Deutsche Bank also requires a yearly mandatory information security baseline training for all employees and eligible contractor staff. This training encompasses the content of the information security policy, the process to report security incidents or any other security-related concerns, as well as important and current security threats. To address the latter and to comply with internal standards, the training is updated at least on a yearly basis. For Deutsche Bank employees, failure to complete this training and late completion can result in disciplinary consequences. In 2024, a learning completion rate of 99,65% was achieved for the e-Learning-based mandatory information security training, compared to 99,94% in 2023.

Deutsche Bank’s security incident management covers on a day-to-day-basis security events that may affect the bank, its clients and business partners, or employees. The Cyber Threat Operations Centers located in Asia Pacific, Europe and USA support global and group-wide detection of threats and response to incidents 24/7. The related management and reporting processes performed with involvement of subject matter experts, such as divisional Chief Information Security Officers, Compliance, Legal, Group Communications and Group Data Privacy, are designed to enable a quick and effective response to cyberattacks and information security threats. The objective is to minimize the risk of impacts on Deutsche Bank and to use insights gained from incident handling to continuously improve the bank’s processes.

As in prior years, Deutsche Bank in 2024 experienced attacks on computer systems, including attacks aimed at obtaining unauthorized access to confidential company or client information, damaging, or interfering with company data, resources, or business activities, or otherwise exploiting vulnerabilities in its infrastructure, including attacks that occurred along the bank’s supply chain. The bank, however, did not experience any material effect on its business strategy, results of operation, or financial condition as the result of an information security incident, including attempted cyber-attacks.

Consequently, the bank continues to invest in security risk mitigation. As in previous years, in 2024 Deutsche Bank adapted its security capabilities through several programs across information and physical security. As examples, the bank further strengthened its perimeter security and expanded its comprehensive staff security training offering, including the launch of a security academy.

Risk and capital performance

Capital, Leverage Ratio, TLAC and MREL

Own Funds

The calculation of Deutsche Bank’s own funds incorporates the capital requirements following the “Regulation (EU) No 575/2013 on prudential requirements for credit institutions” (CRR) and the “Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions” (CRD), which have been further amended with subsequent Regulations and Directives. The CRD has been implemented into German law. The information in this section as well as in the section “Development of risk-weighted assets” is based on the regulatory principles of consolidation.

This section refers to the capital adequacy of the group of entities consolidated for banking regulatory purposes pursuant to the CRR and the German Banking Act (“Kreditwesengesetz” or “KWG”), which does not include insurance companies and companies outside the finance sector.

The total own funds pursuant to the effective regulations as of year-end 2024 comprises Tier 1 and Tier 2 capital. Tier 1 capital is subdivided into Common Equity Tier 1 capital and Additional Tier 1 capital.

CET 1 capital consists primarily of common share capital (net of own holdings) including related share premium accounts, retained earnings (including losses for the financial year, if any) and accumulated other comprehensive income, subject to prudential filters and regulatory adjustments as well as minority interests qualifying for inclusion in consolidated CET 1 capital. Prudential filters for CET 1 capital, according to Articles 32 to 35 CRR, include securitization gains on sale, cash flow hedges and changes in the value of own liabilities, and additional value adjustments. CET 1 capital regulatory adjustments for instance includes intangible assets (exceeding their prudential value), adoption of the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR which applies until year-end 2025, deferred tax assets that rely on future profitability, negative amounts resulting from the calculation of expected loss amounts, net defined benefit pension fund assets, reciprocal cross holdings in the capital of financial sector entities and, significant and non-significant investments in the capital (CET 1, AT1, Tier 2) of financial sector entities above certain thresholds. All items which are not deducted (i.e., amounts below the threshold) are subject to risk-weighting.

Additional Tier 1 capital consists of AT1 capital instruments and related share premium accounts as well as noncontrolling interests qualifying for inclusion in consolidated AT1 capital. To qualify as AT1 capital under CRR/CRD, instruments must have principal loss absorption through a conversion to common shares or a write-down mechanism allocating losses at a trigger point and must also meet further requirements such as perpetual with no incentive to redeem and institution must have full dividend/coupon discretion at all times.

Tier 2 capital comprises eligible capital instruments, the related share premium accounts and subordinated long-term debt, certain loan loss provisions and noncontrolling interests that qualify for inclusion in consolidated Tier 2 capital. To qualify as Tier 2 capital, capital instruments or subordinated debt must have an original maturity of at least five years. Moreover, eligible capital instruments may inter alia not contain an incentive to redeem, a right of investors to accelerate repayment, or a credit sensitive dividend feature.

Capital instruments

The Management Board was authorized by the 2023 Annual General Meeting to buy, on or before April 30, 2028, shares of up to 10% of the share capital at the time this resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. As at the 2023 Annual General Meeting, this corresponded to a volume of up to 204.0 million shares. Thereof, a volume of up to 5% of the total share capital or 102.0 million shares can be purchased by using derivatives, including derivatives with a volume of up to 2% of the total share capital with a maturity exceeding 18 months. During the period from the 2023 Annual General Meeting until the 2024 Annual General Meeting, 40.3 million shares were purchased for equity compensation purposes in the same period or upcoming periods. Thereof, 22.9 million shares were purchased by exercising call options. In addition, 16.1 million new call options were purchased for equity compensation purposes in upcoming periods. Furthermore, 71.1 million shares were purchased for cancellation with the purpose of distributing capital to shareholders in the same period. Thereof, 45.5 million shares that were acquired as part of the share buyback program of € 450 million in 2023 were cancelled at the beginning of the year 2024. The number of shares held in Treasury, after delivery of shares for equity compensation and share cancellations, amounted to 31.6 million as of the 2024 Annual General Meeting. Thereof, 25.6 million shares relate to shares bought back for cancellation as part of the € 675 million share buyback program in 2024. The remaining volume of 6.0 million shares relates to shares to be used for equity compensation purposes in upcoming periods.

The Annual General Meeting on May 16 , 2024 granted the Management Board the approval to buy, on or before April 30, 2029, shares of up to 10% of the share capital at the time of this resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. As at the 2024 Annual General Meeting, this corresponded to 199.5 million shares. Thereof, a volume of up to 5% of the total share capital or 99.7 million shares can be purchased by using derivatives, including derivatives with a volume of up to 2% of the total share capital with a maturity exceeding 18 months. These authorizations replaced the authorizations of the previous year. During the period from the 2024 Annual General Meeting until December 31, 2024, 20.9 million shares were purchased for cancellation with the purpose of distributing capital to shareholders. The number of shares held in Treasury from buybacks amounted to 49.6 million as of December 31, 2024. Thereof 46.4 million shares relate to shares bought back for cancellation as part of the € 675 million share buyback program in 2024. The remaining volume of 3.1 million shares relates to shares to be used for equity compensation purposes in upcoming periods.

Since the 2017 Annual General Meeting, renewed at the 2021 Annual General Meeting, and as of December 31, 2024, authorized capital available to the Management Board is € 2,560 million (1,000 million shares).

Since the 2022 Annual General Meeting, the Management Board is authorized to issue participatory notes and other hybrid debt securities that fulfill the regulatory requirements to qualify as Additional Tier 1 capital with an equivalent value of € 9.0 billion on or before April 30, 2027. Deutsche Bank issued € 4.25 billion new AT1 notes under this authorization, thereof € 3.0 billion new AT1 notes were issued in 2024.

The current CRR as applicable since June 27, 2019, provides further grandfathering rules for AT1 and Tier 2 instruments issued prior to June 27, 2019. AT1 and Tier 2 instruments issued through special purpose entities were grandfathered until December 31, 2021. In 2024, transitional arrangements only exist for AT1 and Tier 2 instruments which continue to qualify until June 26, 2025, even if they do not meet certain new requirements that apply since June 27, 2019. Deutsche Bank had an immaterial number of instruments that qualified during 2024.

Based on the current CRR, the amount recognized as regulatory AT1 capital amounted to € 11.4 billion. The corresponding nominal amount of outstanding AT1 instruments was € 11.6 billion as of December 2024. In 2024, the bank issued new AT1 notes with a nominal amount of € 3.0 billion.

As of December 31, 2024, the amount recognized as regulatory Tier 2 amounted capital to € 7.7 billion. The corresponding nominal amount of outstanding Tier 2 instruments was € 11.8 billion as of December 2024. In 2024, Tier 2 instruments with a nominal value of € 104.4 million matured. There were no new issuances of Tier 2 instruments in 2024.

Minimum capital requirements and additional capital buffers

The Pillar 1 CET 1 minimum capital requirement applicable to the Group is 4.50% of RWA. The Pillar 1 total capital requirement of 8.00% demands further resources that may be met with up to 1.50% Additional Tier 1 capital and up to 2.00% Tier 2 capital.

Failure to meet minimum capital requirements can result in supervisory measures such as restrictions of profit distributions or limitations on certain businesses such as lending. Deutsche Bank complied with the minimum regulatory capital adequacy requirements in 2024.

In addition to these minimum capital requirements, the following combined capital buffer requirements were fully effective beginning 2024 onwards. These buffer requirements must be met in addition to the Pillar 1 minimum capital requirements but can be drawn down in times of economic stress.

The capital conservation buffer is implemented in Section 10c German Banking Act, based on Article 129 CRD and equals a requirement of 2.50% CET 1 capital of RWA.

The countercyclical capital buffer is deployed in a jurisdiction when excess credit growth is associated with an increase in system-wide risk. It may vary between 0% and 2.50% CET 1 capital of RWA. In exceptional cases, it could also be higher than 2.50%. The institution-specific countercyclical buffer that applies to Deutsche Bank is the weighted average of the countercyclical capital buffers that apply in the jurisdictions where relevant credit exposures are located. As per December 31, 2024, the institution-specific countercyclical capital buffer was at 0.49%.

In addition to the aforementioned buffers, national authorities, such as the BaFin, may require a systemic risk buffer to prevent and mitigate long-term non-cyclical systemic or macro-prudential risks that are not covered by the CRR. They can require an additional buffer of up to 5.00% CET 1 capital of RWA. As of the year end 2024, the systemic risk buffer applied to Deutsche Bank is 0.22%.

Deutsche Bank continues to be designated as a global systemically important institution (G-SII) by the BaFin in agreement with the Deutsche Bundesbank, resulting in a G-SII buffer requirement of 1.50% CET 1 capital of RWA in 2024 based on the indicators as published in 2020. This assessment has been confirmed by the FSB in 2024. Further, BaFin has announced that the G-SII buffer requirement for Deutsche Bank will remain unchanged for the years 2025 and 2026.

Additionally, Deutsche Bank has been classified by BaFin in agreement with the Deutsche Bundesbank as an “other systemically important institution” (O-SII) with an additional capital buffer requirement of 2.00% in 2023 that has to be met on a consolidated level and remained unchanged for 2024 and 2025. The higher of the buffers for systemically important institutions (G-SII buffer or O-SII buffer) must be applied.

Pursuant to the Pillar 2 SREP, the ECB may impose capital requirements on individual banks which are more stringent than statutory requirements (so-called Pillar 2 requirement).

In December 2023, the ECB informed Deutsche Bank of its decision effective January 1, 2024, that the bank’s Pillar 2 requirement changed compared to 2023. This results in ECB’s Pillar 2 requirement to 2.65% of RWA. As of December 31, 2024, Deutsche Bank needs to maintain on a consolidated basis a CET 1 ratio of at least 11.20%, a Tier 1 ratio of at least 13.20% and a Total Capital ratio of at least 15.86%. The CET 1 requirement comprises the Pillar 1 minimum capital requirement of 4.50%, the Pillar 2 requirement (SREP add-on) of 1.49%, the capital conservation buffer of 2.50%, the countercyclical buffer of 0.49% and the systemic risk buffer of 0.22% (both subject to changes throughout the year) as well as the higher of our G-SII/O-SII buffer of 2.00%. Correspondingly, the Tier 1 capital requirement includes additionally a Tier 1 minimum capital requirement of 1.50% plus a Pillar 2 requirement of 0.50%, and the Total Capital requirement includes further a Tier 2 minimum capital requirement of 2.00% and a Pillar 2 requirement of 0.66%. Also, following the results of the 2023 SREP, the ECB communicated to Deutsche Bank an individual expectation to hold a further Pillar 2 CET 1 capital add-on, commonly referred to as the Pillar 2 guidance. The capital add-on pursuant to the Pillar 2 guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the Pillar 2 guidance although it is not legally binding, and failure to meet the Pillar 2 guidance does not lead to automatic restrictions of capital distributions.

On December 10, 2024, Deutsche Bank was informed by the ECB of its decision regarding prudential minimum capital requirements for 2025 that applies from January 1, 2025, onwards, following the results of the 2024 SREP. The decision set ECB’s Pillar 2 requirement to 2.90% of RWA, effective as of January 1, 2025, of which at least 1.63% must be covered by CET 1 capital and 2.18% by Tier 1 capital.

The following table gives an overview of the different Pillar 1 and Pillar 2 minimum capital buffer requirements (but excluding the Pillar 2 guidance) as applicable to Deutsche Bank for the years 2024 and 2025.

Overview total capital requirements and capital buffers

	2024	2025
Pillar 1		
Minimum CET 1 requirement	4.50%	4.50%
Combined buffer requirement	5.21%	5.23%
Capital Conservation Buffer	2.50%	2.50%
Countercyclical Buffer[1]	0.49%	0.51%
Systemic Risk Buffer[2]	0.22%	0.22%
Maximum of:	2.00%	2.00%
G-SII Buffer	1.50%	1.50%
O-SII Buffer	2.00%	2.00%
Pillar 2		
Pillar 2 SREP Add-on of Total capital (excluding the "Pillar 2" guidance)	2.65%	2.90%
of which covered by CET 1 capital	1.49%	1.63%
of which covered by Tier 1 capital	1.99%	2.18%
of which covered by Tier 2 capital	0.66%	0.72%
Total CET 1 requirement from Pillar 1 and 2[3]	**11.20%**	11.36%
Total Tier 1 requirement from Pillar 1 and 2	**13.20%**	13.41%
Total capital requirement from Pillar 1 and 2	**15.86%**	16.13%

[1] Deutsche Bank's countercyclical buffer requirement is subject to country-specific buffer rates decreed by EBA and the Basel Committee of Banking Supervision (BCBS) as well as Deutsche Bank's relevant credit exposures as per respective reporting date; the countercyclical buffer rate for 2025 has been calculated to be 0.51% based on known countercyclical buffer changes in 2025. The countercyclical buffer is subject to Deutsche Bank portfolio changes and further changes of countercyclical buffer rates throughout the year

[2] The Systemic risk buffer rate for 2025 has been calculated to be 0.22% based on known systemic risk buffer changes in 2025. The Systemic risk buffer is subject to Deutsche Bank portfolio changes and further changes in systemic risk buffer rates throughout the year

[3] The total Pillar 1 and Pillar 2 CET 1 requirement (excluding the "Pillar 2" guidance) is calculated as the sum of the SREP requirement, the systemic risk buffer requirement, the capital conservation buffer requirement and countercyclical buffer requirement as well as the higher of the G-SII/O-SII requirement

Development of Own Funds

Deutsche Bank's CET 1 capital as of December 31, 2024, amounted to € 49.5 billion, an increase of € 1.4 billion compared to € 48.1 billion at the end of 2023. AT1 capital was € 11.4 billion as of December 31, 2024, an increase of € 3.1 billion compared to € 8.3 billion at the end of 2023. Tier 1 capital was € 60.8 billion as of December 31, 2024, compared to € 56.4 billion at the end of 2023. Tier 2 capital amounted to € 7.7 billion as of December 31, 2024, a decrease of € 0.9 billion compared to € 8.6 billion at the end of 2023. Total capital amounted to € 68.5 billion December 31, 2024, an increase of € 3.5 billion compared to € 65.0 billion at the end of 2023.

CET 1 capital increased by € 1.4 billion during 2024. This development included a net profit of € 3.4 billion for the year 2024 reduced by regulatory deductions for future shareholder distribution and AT1 coupon payments of € 2.6 billion which is in line with the ECB Decision (EU) (2015/656) on the recognition of interim or year-end profits in CET 1 capital in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4). In addition, CET 1 capital increased due to adoption of the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR by € 1.0 billion, lower deferred tax assets of € 0.7 billion and a reduction in prudential filters of € 0.3 billion which includes additional value adjustments as well as gains and losses arising due to changes in own credit risk on fair valued liabilities. The increase was partially offset by completed share buybacks of € 0.7 billion during the year and an increase in deduction for expected loss shortfall by € 0.7 billion which is mainly due to amended Internal Ratings-Based Approach models following model approval by ECB.

The AT1 capital increase of € 3.1 billion was mainly due to the issuance of two new AT1 capital instruments during the year amounting to € 1.5 billion each.

The Tier 2 capital decrease of € 0.9 billion was mainly due to amortization of € 1.0 billion and € 0.4 billion in carrying amount change arising from accrued interest and fair value hedge. This was partially offset by € 0.4 billion due to foreign exchange effects.

Own Funds Template (including RWA and capital ratios)

	Dec 31, 2024	Dec 31, 2023
in € m.	CRR/CRD	CRR/CRD
Common Equity Tier 1 (CET 1) capital: instruments and reserves		
Capital instruments, related share premium accounts and other reserves	44,130	44,908
Retained earnings	19,978	16,509
Accumulated other comprehensive income (loss), net of tax	(1,229)	(1,760)
Independently reviewed interim profits net of any foreseeable charge or dividend[1]	801	3,493
Other	1,020	973
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	**64,700**	64,124
Common Equity Tier 1 (CET 1) capital: regulatory adjustments		
Additional value adjustments (negative amount)	(1,680)	(1,727)
Other prudential filters (other than additional value adjustments)	95	(126)
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,277)	(5,014)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (negative amount)	(3,463)	(4,207)
Negative amounts resulting from the calculation of expected loss amounts	(3,037)	(2,386)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,173)	(920)
Direct, indirect and synthetic holdings by an institution of own CET 1 instruments (negative amount)	0	(0)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10 % / 15 % thresholds and net of eligible short positions) (negative amount)	0	0
Deferred tax assets arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (amount above the 10 % / 15 % thresholds) (negative amount)	0	0
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 468 CRR	1,012	0
Other regulatory adjustments[2]	(1,721)	(1,679)
Total regulatory adjustments to Common Equity Tier 1 (CET 1) capital	**(15,244)**	(16,058)
Common Equity Tier 1 (CET 1) capital	**49,457**	48,066
Additional Tier 1 (AT1) capital: instruments		
Capital instruments and the related share premium accounts	11,508	8,578
Amount of qualifying items referred to in Art. 484 (4) CRR and the related share premium accounts subject to phase out from AT1	0	0
Additional Tier 1 (AT1) capital before regulatory adjustments	**11,508**	8,578
Additional Tier 1 (AT1) capital: regulatory adjustments		
Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(130)	(250)
Residual amounts deducted from AT1 capital with regard to deduction from CET 1 capital during the transitional period pursuant to Art. 472 CRR		
Other regulatory adjustments	0	0
Total regulatory adjustments to Additional Tier 1 (AT1) capital	**(130)**	(250)
Additional Tier 1 (AT1) capital	**11,378**	8,328
Tier 1 capital (T1 = CET 1 + AT1)	**60,835**	56,395
Tier 2 (T2) capital	**7,676**	8,610
Total capital (TC = T1 + T2)	**68,511**	65,005
Total risk-weighted assets	**357,427**	349,742
Capital ratios		
Common Equity Tier 1 capital ratio (as a percentage of risk-weighted assets)	13.8	13.7
Tier 1 capital ratio (as a percentage of risk-weighted assets)	17.0	16.1
Total capital ratio (as a percentage of risk-weighted assets)	19.2	18.6

[1] Full year profit is recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4); current year profits of € 3.4 billion reduced by deductions for AT1 coupons of € 475 million and deductions for announced distribution to shareholders in relation to FY 2024 of € 2.1 billion, which includes an intended dividend of € 1.3 billion (68 Cents per share) and the ECB approved share buyback of € 750 million

[2] Includes capital deductions of € 1.4 billion (December 2023: € 1.4 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.3 billion (December 2023: € 0.3 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures

Reconciliation of shareholders' equity to Own Funds

	CRR/CRD	
in € m.	Dec 31, 2024	Dec 31, 2023
Total shareholders' equity per accounting balance sheet (IASB IFRS)	**68,709**	65,999
Difference between equity per IASB IFRS / EU IFRS[3]	(2,433)	(1,513)
Total shareholders' equity per accounting balance sheet (EU IFRS)	**66,276**	64,486
Deconsolidation/Consolidation of entities	(24)	(35)
Of which:		
Additional paid-in capital	0	0
Retained earnings	(24)	(35)
Accumulated other comprehensive income (loss), net of tax	0	0
Total shareholders' equity per regulatory balance sheet	**66,252**	64,451
Minority Interests (amount allowed in consolidated CET 1)	1,020	973
AT1 coupon and shareholder distribution deduction[1]	(2,565)	(1,279)
Capital instruments not eligible under CET 1 as per CRR 28(1)	(7)	(21)
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	**64,700**	64,124
Prudential filters	**(1,585)**	(1,853)
Of which:		
Additional value adjustments	(1,680)	(1,727)
Any increase in equity that results from securitized assets	0	(0)
Fair value reserves related to gains or losses on cash flow hedges and gains or losses on liabilities designated at fair value resulting from changes in own credit standing	95	(126)
Regulatory adjustments	(13,659)	(14,205)
Of which:		
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,277)	(5,014)
Deferred tax assets that rely on future profitability	(3,463)	(4,207)
Negative amounts resulting from the calculation of expected loss amounts	(3,037)	(2,386)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,173)	(920)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	0
Securitization positions not included in risk-weighted assets	0	0
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 468 CRR	1,012	0
Others[2]	(1,721)	(1,679)
Common Equity Tier 1 capital	**49,457**	48,066

[1] Full year profit is recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4); current year deductions include deductions for AT1 coupons of € 475 million and deductions for announced distribution to shareholders in relation to FY 2024 of € 2.1 billion, which includes an intended dividend of € 1.3 billion (68 Cents per share) and the ECB approved share buyback of € 750 million

[2] Negative amounts from expected loss shortfall has been disclosed separately in the current year which was shown as part of 'Other Regulatory Adjustments' for the previous year and includes capital deductions of € 1.4 billion (December 2023: € 1.4 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.3 billion (December 2023: € 0.3 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures

[3] Differences in "equity per balance sheet" result entirely from deviations in profit (loss) after taxes due to the application of EU carve-out rules as set forth in the chapter "Material accounting policies and critical accounting estimates". These rules were initially applied in the first quarter 2020

Development of Own Funds

in € m.	twelve months ended Dec 31, 2024	CRR/CRD twelve months ended Dec 31, 2023
Common Equity Tier 1 (CET 1) capital - opening amount	**48,066**	48,097
Common shares, net effect	(115)	(69)
Additional paid-in capital	(430)	(332)
Retained earnings	3,341	4,794
Common shares in treasury, net effect/(+) sales (–) purchase	(232)	(150)
Movements in accumulated other comprehensive income	530	(445)
AT1 coupon and shareholder distribution deduction[1]	(2,565)	(1,279)
Additional value adjustments	47	300
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(263)	11
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	744	(962)
Negative amounts resulting from the calculation of expected loss amounts	(651)	(1,920)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(253)	230
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	0
Deferred tax assets arising from temporary differences (amount above 10 % and 15 % threshold, net of related tax liabilities where the conditions in Art. 38 (3) CRR are met)	0	0
Other, including regulatory adjustments	1,238	(208)
Common Equity Tier 1 (CET 1) capital - closing amount	**49,457**	48,066
Additional Tier 1 (AT1) Capital – opening amount	**8,328**	8,518
New Additional Tier 1 eligible capital issues	2,950	0
Matured and called instruments	0	0
Other, including regulatory adjustments	100	(190)
Additional Tier 1 (AT1) Capital – closing amount	**11,378**	8,328
Tier 1 capital	**60,835**	56,395
Tier 2 (T2) capital – closing amount	**7,676**	8,610
Total regulatory capital	**68,511**	65,005

[1] Full year profit is recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4); current year deductions include deductions for AT1 coupons of € 475 million and deductions for announced distribution to shareholders in relation to FY 2024 of € 2.1 billion, which includes an intended dividend of € 1.3 billion (68 Cents per share) and the ECB approved share buyback of € 750 million

Minimum loss coverage for Non Performing Exposure (NPE)

In April 2019, the EU published requirements Regulation (EU) 2019/630 amending the CRR (Regulation (EU) No 575/2013) for a prudential backstop reserve for non-performing exposure (NPE). This regulation results in a Pillar 1 deduction from CET 1 capital when a minimum loss coverage requirement is not met. It is applied to exposures originated and defaulted after April 25, 2019.

In addition, in March 2018, the ECB published its “Addendum to the ECB Guidance to banks on non-performing loans: supervisory expectations for prudential provisioning of non-performing exposures” and in August 2019, its “Communication on supervisory coverage expectations for NPEs”.

The ECB guidance issued is applicable to all newly defaulted loans after April 1, 2018 (ECB - new NPE’s after April 1, 2018) and, similar to the EU rules, it requires banks to take measures in case a minimum impairment coverage requirement is not met. Within the annual SREP discussions ECB may impose Pillar 2 measures on banks in case ECB is not confident with measure taken by the individual bank.

For the year end 2020, the bank introduced a framework to determine the prudential provisioning of non-performing exposure as a Pillar 2 measure as requested in the before mentioned ECB’s guidance and SREP recommendation.

For the minimum loss coverage expectation for NPE´s arising from clients defaulted before April 1, 2018 (ECB – NPE Stock) a phase-in path to 100 % coverage expectation was envisaged with an annual increase of 10 %. In a first step, banks were allocated to three comparable groups on the basis of the bank’s net NPL ratios as of end-2017 and in a second step an assessment of capacity regarding the potential impact was carried out for each individual bank with a horizon of end-2026. Deutsche Bank has been assigned to Group 1 which requires a full applicability of 100 % minimum loss coverage by year end 2024 for secured loans respectively by year end 2023 for unsecured loans.

The shortfall between the minimum loss coverage requirements for non-performing exposure and the risk reserves recorded in line with the IFRS 9 for defaulted (Stage 3) assets amounted to € 302 million as of December 31, 2024 and was deducted from CET 1. This additional CET 1 charge can be considered as additional regulatory loss reserve and leads to a € 2.7 billion RWA relief.

Non-performing exposure loss coverage

				Dec 31, 2024
in € m. (unless stated otherwise)	Exposure value[1]	Total minimum coverage requirement	Available coverage	Applicable amount of insufficient coverage
Corporate Bank	4,107	696	1,818	48
Investment Bank	9,602	3,355	4,986	171
Private Bank	8,139	1,224	3,674	53
Asset Management	0	0	0	0
Corporate & Other	969	58	177	29
Total	22,817	5,334	10,654	302

[1] Exposure value in accordance with Article 47c CRR

				Dec 31, 2023
in € m. (unless stated otherwise)	Exposure value[1]	Total minimum coverage requirement	Available coverage	Applicable amount of insufficient coverage
Corporate Bank	3,745	650	1,299	51
Investment Bank	9,415	3,684	4,753	223
Private Bank	6,621	1,428	3,169	43
Asset Management	0	0	0	0
Corporate & Other	491	59	98	4
Total	20,271	5,820	9,319	322

[1] Exposure value in accordance with Article 47c CRR

Development of risk-weighted assets

The table below provides an overview of RWA broken down by risk type and corporate division. It includes the aggregated effects of the segmental reallocation of infrastructure related positions, if applicable, as well as reallocations between the segments.

Risk-weighted assets by risk type and corporate division

						Dec 31, 2024
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total
Credit Risk	67,115	95,869	82,655	13,683	17,633	276,955
Settlement Risk	0	4	0	0	11	15
Credit Valuation Adjustment (CVA)	29	2,907	161	0	334	3,431
Market Risk	248	16,270	27	31	2,390	18,965
Operational Risk	10,784	14,775	14,438	4,700	13,363	58,061
Total	78,176	129,825	97,281	18,414	33,732	357,427

						Dec 31, 2023
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total
Credit Risk	63,156	94,246	78,422	11,652	18,314	265,789
Settlement Risk	0	1	13	0	0	14
Credit Valuation Adjustment (CVA)	82	4,654	110	0	429	5,276
Market Risk	181	19,019	22	28	2,260	21,510
Operational Risk	5,568	21,611	7,659	3,475	18,839	57,153
Total	68,987	139,532	86,226	15,155	39,842	349,742

RWA of Deutsche Bank were € 357.4 billion as of December 31, 2024, compared to € 349.7 billion at the end of 2023. The increase of € 7.7 billion was driven by credit risk RWA and operational risk RWA, partially offset by market risk RWA and credit valuation adjustment RWA. Credit risk RWA increased by € 11.2 billion, primarily driven by business growth, refinements of internal models, foreign exchange movements, increased equity positions in guaranteed funds and higher RWA for deferred tax assets. These increases were partially offset by credit risk RWA reductions from capital efficiency measures especially within the Corporate Bank and the Investment Bank. Deutsche Bank´s operational risk RWA increased by € 0.9 billion, mainly driven by increased internal losses as well as the adverse development of external losses feeding into the capital model. Market risk RWA decreased by € 2.5 billion, primarily driven by Value-at-Risk component due to overall lower market volatility and reduced risk levels, which also resulted in a reduction of the Stressed-Value-at-Risk (SVaR) and the incremental risk charge components. Credit valuation adjustment RWA decreased by € 1.8 billion, mainly driven by a movement in risk levels and a reduction from market data changes.

The tables below provide an analysis of key drivers for risk-weighted asset movements observed for credit risk, credit valuation adjustments as well as market and operational risk in the reporting period. They also show the corresponding movements in minimum capital requirements, which are 8% of RWA.

Development of risk-weighted assets for Credit Risk including Counterparty Credit Risk

	Dec 31, 2024		Dec 31, 2023	
in € m.	Credit risk RWA	Capital requirements	Credit risk RWA	Capital requirements
Credit risk RWA balance, beginning of year	**265,789**	**21,263**	269,214	21,537
Book size	4,944	396	(3,694)	(296)
Book quality	(7,793)	(623)	(886)	(71)
Model updates	3,668	293	298	24
Methodology and policy	3,443	275	5,831	466
Acquisition and disposals	0	0	571	46
Foreign exchange movements	5,410	433	(4,174)	(334)
Other	1,494	119	(1,371)	(110)
Credit risk RWA balance, end of year	**276,955**	**22,156**	265,789	21,263

Of which: Development of risk-weighted assets for Counterparty Credit Risk

	Dec 31, 2024		Dec 31, 2023	
in € m.	Counterparty credit risk RWA	Capital requirements	Counterparty credit risk RWA	Capital requirements
Counterparty credit risk RWA balance, beginning of year	**19,868**	**1,589**	23,589	1,887
Book size	(1,194)	(96)	(4,664)	(373)
Book quality	(47)	(4)	1,278	102
Model updates	186	15	0	0
Methodology and policy	0	0	312	25
Acquisition and disposals	0	0	0	0
Foreign exchange movements	657	53	(646)	(52)
Other	0	0	0	0
Counterparty credit risk RWA balance, end of year	**19,470**	**1,558**	19,868	1,589

Organic changes in the Group´s portfolio size and composition are considered in the category “book size”. The category “book quality” mainly represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral and netting coverage activities. “Model updates” include model refinements and advanced model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g., applying new regulations, are considered in the “methodology and policy” section. “Acquisition and disposals” shows significant exposure movements which can be clearly assigned to new businesses or disposal-related activities. Changes that cannot be attributed to the above categories are reflected in the category “other”.

RWA for credit risk increased by € 11.2 billion, or 4.2%, since December 31, 2023, which is mainly driven by the categories “foreign exchange movements”, “book size”, “model updates”, “methodology and policy” as well as “other” and was partly offset by category “book quality”. The increase in category “book size” is reflecting Deutsche Bank´s business growth in 2024 and increased equity shares in guaranteed funds, partly offset by capital efficiency measures in the form of synthetic securitizations in the Corporate Bank, the Private Bank and the Investment Bank. Furthermore, credit risk RWA increased in the category “model updates” compared to 2023, mainly driven by a refinement of internal model for loss given default calculation and a margin of conservatism applied on a key model input. The category “methodology and policy” mainly reflects impacts from the introduction of new models due to regulatory changes, including impacts from an early adoption of rules as per CRR3, which was partly offset by impacts from the remediation of regulatory obligations. Additionally, the increase in category “other” reflects higher RWA for deferred tax assets and investments in financial sector entities. The aforementioned increases were partly offset by decreases in category “book quality” which is mainly driven by RWA reductions from capital efficiency measures, partly offset by counterparty rating deteriorations.

RWA for counterparty credit risk decreased by € 0.4 billion, or 2.0%, since December 31, 2023, mainly driven by the decrease in category “book size” reflecting a change in the derivative portfolio with reduced risk weights, which more than compensated the increase in exposures. Additionally, exposures for SFTs decreased. These decreases were partly offset by increases in categories “foreign exchange movements” and “model updates” reflecting an update to the determination of input parameters.

Based on the CRR/CRD regulatory framework, Deutsche Bank is required to calculate RWA using the CVA which takes into account the credit quality of our counterparties. RWA for CVA covers the risk of mark-to-market losses on the expected counterparty risk in connection with OTC derivative exposures and securities financing transactions. Deutsche Bank calculates the majority of the CVA based on our own internal model as approved by the BaFin.

Development of risk-weighted assets for Credit Valuation Adjustment

	Dec 31, 2024		Dec 31, 2023	
in € m.	CVA RWA	Capital requirements	CVA RWA	Capital requirements
CVA RWA balance, beginning of year	**5,276**	**422**	6,184	495
Movement in risk levels	(1,205)	(96)	170	14
Market data changes and recalibrations	(640)	(51)	(656)	(52)
Model updates	0	0	(683)	(55)
Methodology and policy	0	0	261	21
Acquisitions and disposals	0	0	0	0
Foreign exchange movements	0	0	0	0
CVA RWA balance, end of year	**3,431**	**274**	5,276	422

The development of CVA RWA is broken down into a number of categories: “Movement in risk levels”, which includes changes to the portfolio size and composition; “Market data changes and calibrations”, which includes changes in market data levels and volatilities as well as recalibrations; “Model updates”, which refers to changes to either the IMM credit exposure models or the value-at-risk models that are used for CVA RWA; “Methodology and policy”, which relates to changes to the regulation. Any significant business acquisitions or disposals would be presented in the category “Acquisitions and disposals”.

As of December 31, 2024, the RWA for CVA amounted to € 3.4billion, representing a decrease of € 1.8billion (-35%) compared to December 31, 2023. This includes € 1.2billion decrease in movement in risk levels and € 0.6billion decrease in market data changes.

Development of risk-weighted assets for Market Risk

						Dec 31, 2024
in € m.	VaR	SVaR	IRC	Other	Total RWA	Total capital requirements
Market risk RWA balance, beginning of year	3,750	7,090	7,129	3,542	21,510	1,721
Movement in risk levels	(307)	(513)	(860)	(194)	(1,874)	(150)
Market data changes and recalibrations	(767)	(336)	0	330	(773)	(62)
Model updates/changes	29	(37)	0	0	(8)	(1)
Methodology and policy	0	0	0	0	0	0
Acquisitions and disposals	0	0	0	0	0	0
Foreign exchange movements	0	0	0	109	109	9
Other	0	0	0	0	0	0
Market risk RWA balance, end of year	2,705	6,204	6,268	3,787	18,965	1,517

						Dec 31, 2023
in € m.	VaR	SVaR	IRC	Other	Total RWA	Total capital requirements
Market risk RWA balance, beginning of year	7,413	12,221	3,639	2,857	26,131	2,091
Movement in risk levels	(1,901)	(1,724)	3,647	72	95	8
Market data changes and recalibrations	(393)	(10)	0	(53)	(456)	(36)
Model updates/changes	77	(663)	(158)	0	(745)	(60)
Methodology and policy	(1,446)	(2,735)	0	722	(3,459)	(277)
Acquisitions and disposals	0	0	0	0	0	0
Foreign exchange movements	0	0	0	(57)	(57)	(5)
Other	0	0	0	0	0	0
Market risk RWA balance, end of year	3,750	7,090	7,129	3,542	21,510	1,721

The analysis for market risk covers movements in the bank’s internal models for value-at-risk (VaR), stressed value-at-risk, incremental risk charge (IRC) as well as results from the market risk standardized approach (MRSA), which is captured in the category “Other”. MRSA is used to determine the regulatory capital charge for the specific market risk of trading book securitizations, for certain types of investment funds and for longevity risk as set out in CRR/CRD regulations.

Market risk RWA movements due to changes in market data levels, volatilities, correlations, liquidity and ratings are included under the “Market data changes and recalibrations” category. Changes to market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category “Model updates”. In the “Methodology and policy” category regulatory driven changes to market risk RWA models and calculations are reported. Significant new businesses and disposals would be assigned to the line item “Acquisition and disposals”. The impacts of “Foreign exchange movements” are only calculated for the CRM and Standardized approach methods.

As of December 31, 2024 the RWA for market risk was € 19.0 billion, a decrease of € 2.5 billion, or -12% since December 31, 2023. The decrease was driven by lower value-at-risk RWA due to roll-off of high market volatility period of Q2 2023 from the historical VaR observation period and lower stressed value-at-risk RWA due to overall reduced risk levels in Q4 2024 under Fixed Income and Currencies Trading business. Similarly, reduction in incremental risk charge RWA is driven by reduced risk levels under Fixed Income and Currencies Trading business.

Development of risk-weighted assets for operational risk

	Dec 31, 2024		Dec 31, 2023	
in € m.	Operational risk RWA	Capital requirements	Operational risk RWA	Capital requirements
Operational risk RWA balance, beginning of year	**57,153**	**4,572**	58,349	4,668
Loss profile changes (internal and external)	1,352	108	(1,577)	(126)
Expected loss development	(211)	(17)	150	12
Forward looking risk component	(37)	(3)	130	10
Model updates	(174)	(14)	0	0
Methodology and policy	(23)	(2)	100	8
Acquisitions and disposals	0	0	0	0
Operational risk RWA balance, end of year	**58,061**	**4,645**	57,153	4,572

Changes in internal and external loss events are reflected in the category “Loss profile changes”. The category “Expected loss development” is based on divisional business plans as well as historical losses and is deducted from the AMA capital figure within certain constraints. The category “Forward looking risk component” reflects qualitative adjustments and, as such, the effectiveness and performance of the day-to-day operational risk management activities via Non-Financial Risk appetite metrics and Risk and Control Assessment (RCA) scores, focusing on the business environment and internal control factors. The category “Model updates” covers model refinements, such as the implementation of model changes. The category “Methodology and policy” represents externally driven changes such as regulatory add-ons. The category “Acquisition and disposals” represents significant exposure movements which can be clearly assigned to new or disposed businesses.

The overall increase of RWA for operational risk by € 0.9 billion during 2024 was mainly driven by increased internal losses as well as the adverse development of external losses feeding into our capital model.

Economic Capital

Economic capital adequacy

Deutsche Bank’s internal capital adequacy assessment process (ICAAP) aims at maintaining the continuity of the bank on an ongoing basis. Internal capital adequacy is assessed from an economic perspective as the ratio of economic capital supply divided by economic capital demand as shown in the table below.

Total economic capital supply and demand

in € m. (unless stated otherwise)	Dec 31, 2024	Dec 31, 2023
Components of economic capital supply		
Shareholders' equity	65,535	64,486
Noncontrolling interests[1]	957	899
AT1 coupons deduction	(475)	(381)
Gain on sale of securitizations, cash flow hedges	(36)	(45)
Fair value gains on own debt and debt valuation adjustments, subject to own credit risk	131	(82)
Additional valuation adjustments	(1,680)	(1,727)
Intangible assets	(3,847)	(3,692)
IFRS deferred tax assets excl. temporary differences	(4,073)	(4,737)
Expected loss shortfall	(3,037)	(2,386)
Defined benefit pension fund assets	(1,174)	(947)
Other adjustments	(4,182)	(3,782)
Economic capital supply	**48,119**	47,607
Components of economic capital demand		
Credit risk	12,507	11,875
Market risk	8,667	8,328
Operational risk	4,645	4,572
Strategic risk	1,936	1,874
Diversification benefit	(3,530)	(3,385)
Total economic capital demand	**24,225**	23,265
Economic capital adequacy ratio	**199%**	205%

[1] Includes noncontrolling interest up to the economic capital requirement for each subsidiary

The economic capital adequacy ratio was 199% as of December 31, 2024, compared with 205% as of December 31, 2023. The overall decline was due to an increase in economic capital demand for credit risk and market risk, which is explained in the section "Risk Profile". This was partly offset by an increase in economic capital supply.

The increase in economic capital supply by € 0.5 billion compared to year-end 2023 was mainly driven by a positive net income of € 3.4 billion, currency translation adjustments of € 0.9 billion and lower capital deductions for IFRS deferred tax assets excluding temporary differences of € 0.7 billion. These increases were partly offset by deductions for future shareholder distribution and AT1 coupon payments of € 2.6 billion as well as higher capital deduction from expected loss shortfall of € 0.7 billion which is mainly due to amended Internal Ratings-Based Approach models following model approval by ECB. Additionally, economic capital supply decreased due to completed share buybacks of € 0.7 billion in 2024, increase in unrealized losses of € 0.4 billion and higher capital deduction from defined benefit pension fund assets of € 0.2 billion.

Leverage Ratio

Leverage Ratio according to CRR/CRD framework

The non-risk-based leverage ratio is intended to act as a supplementary measure to the risk-based capital requirements. Its objectives are to constrain the build-up of leverage in the banking sector, helping avoid destabilizing deleveraging processes which can damage the broader financial system and the economy, and to reinforce the risk-based requirements with a simple, non-risk based "backstop" measure.

A minimum leverage ratio requirement of 3% was introduced effective June 28, 2021. Starting with January 1, 2023, an additional leverage ratio buffer requirement of 50% of the applicable G-SII buffer rate applies. This additional requirement equals 0.75% for Deutsche Bank. Furthermore, the European Central Bank has set a Pillar 2 requirement for the leverage ratio for the first time; effective January 1, 2024, this requirement is 0.10%. This adds up to an overall leverage ratio requirement of 3.85%. Also, following the results of the 2023 SREP, the ECB communicated to Deutsche Bank an individual expectation to hold a further Pillar 2 Tier 1 capital add-on in relation to the leverage ratio, commonly referred to as the Pillar 2 guidance. The capital add-on pursuant to the Pillar 2 guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the Pillar 2 guidance although it is not legally binding, and failure to meet the Pillar 2 guidance does not lead to automatic restrictions of capital distributions.

Deutsche Bank calculates its leverage ratio exposure in accordance with Articles 429 to 429g of the CRR.

The Group's total leverage ratio exposure includes derivatives, securities financing transactions (SFTs), off-balance sheet exposure and other on-balance sheet exposure (excluding derivatives and SFTs).

The leverage exposure for derivatives is calculated by using a modified version of the standardized approach for counterparty credit risk (SA-CCR), comprising the current replacement cost plus a regulatory defined add-on for the potential future exposure. The effective notional amount of written credit derivatives, i.e., the notional reduced by any negative fair value changes that have been incorporated in Tier 1 capital is included in the leverage ratio exposure measure; the resulting exposure measure is further reduced by the effective notional amount of purchased credit derivative protection on the same reference name provided certain conditions are met.

The SFT component includes the gross receivables for SFTs, which are netted with SFT payables if specific conditions are met. In addition to the gross exposure a regulatory add-on for the counterparty credit risk is included.

The off-balance sheet exposure component follows the standardized approach for credit risk with credit risk conversion factors (CCF) depending on the risk category (0% for low risk, 20% for medium/low risk, 50% for medium risk, or 100% for full risk). For the determination of the leverage exposure a floor of 10% is applied leading to a 10% CCF for the low risk category.

The on-balance sheet exposures (excluding derivatives and SFTs) component reflects the accounting values of the assets (excluding derivatives, SFTs and regular-way purchases and sales awaiting settlement). The exposure value of regular-way purchases and sales awaiting settlement is determined as offset between those cash receivables and cash payables where the related regular-way sales and purchases are both settled on a delivery-versus payment basis.

Assets can be excluded from the leverage ratio exposure measure if they have been deducted in the determination of Tier 1 capital. The corresponding regulatory adjustments are reflected in the asset amounts deducted in determining Tier 1 capital component.

The following tables show the leverage ratio exposure and the leverage ratio. For further details on Tier 1 capital please also refer to the section “Development of Own Funds”.

Summary reconciliation of accounting assets and leverage ratio exposures

in € bn.	Dec 31, 2024	Dec 31, 2023
Total assets as per published financial statements	**1,387**	1,312
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	2	2
Adjustments for derivative financial instruments	(156)	(122)
Adjustment for securities financing transactions (SFTs)	4	4
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	158	127
Other adjustments	(79)	(83)
Leverage ratio total exposure measure	**1,316**	1,240

Leverage ratio common disclosure

in € bn. (unless stated otherwise)	Dec 31, 2024	Dec 31, 2023
Total derivative exposures	137	131
Total securities financing transaction exposures	152	99
Total off-balance sheet exposures	158	127
Other Assets	883	897
Asset amounts deducted in determining Tier 1 capital	(13)	(14)
Tier 1 capital	60.8	56.4
Leverage ratio total exposure measure	1,316	1,240
Leverage ratio (in %)	4.6	4.5

Description of the factors that had an impact on the leverage ratio in 2024

As of December 31, 2024, the leverage ratio was 4.6% compared to 4.5% as of December 31, 2023. This takes into account a Tier 1 capital of € 60.8 billion over an applicable exposure measure of € 1,315.9 billion as of December 31, 2024 (€ 56.4 billion and € 1,240.3 billion as of December 31, 2023, respectively).

During the year 2024 the leverage exposure increased by € 75.6 billion to € 1,315.9 billion, largely driven by securities financing transactions (SFTs) which increased by € 52.7 billion, largely in line with the development on the balance sheet (for additional information please refer to section “Movements in assets and liabilities” in this report). In addition, off-balance sheet leverage exposures increased by € 30.7 billion corresponding to higher notional amounts for irrevocable lending commitments and financial guarantees, including impacts from early adoption of rules for commitments as per Article 5 (10) CRR3. Furthermore, the leverage exposure related to derivatives increased by € 5.6 billion. Asset amounts deducted in determining Tier 1 capital increased by € 0.9 billion mainly driven by the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR which applies until year-end 2025. These increases were partly offset by the leverage exposure for the asset items not related to derivatives and SFTs (other assets) which decreased by € 14.3 billion largely reflecting the development of the balance sheet: the decrease in cash and central bank/interbank balances of € 31.0 billion was partly offset by increases in non-derivative trading assets by € 5.9 billion, loans by € 4.1 billion and in receivables from unsettled regular way trades by € 4.1 billion on a net basis; remaining asset items not outlined separately increased by € 2.6 billion.

The development of the leverage exposure in 2024 includes a positive foreign exchange impact of € 32.4 billion mainly due to the strengthening of the U.S. Dollar versus the Euro. The effects from foreign exchange rate movements are embedded in the movement of the leverage exposure items discussed in this section.

For main drivers of the Tier 1 capital development please refer to section “Development of Own Funds”.

Minimum Requirement of Own Funds and Eligible Liabilities and Total Loss Absorbing Capacity

MREL Requirements

The minimum requirement for own funds and eligible liabilities (MREL) was introduced by the European Union's Regulation establishing uniform rules and a uniform procedure for the resolution of credit institutions (Single Resolution Mechanism Regulation or SRMR) and the European Union's Directive establishing a framework for the recovery and resolution of credit institutions (Bank Recovery and Resolution Directive or BRRD) as implemented into German law by the German Recovery and Resolution Act.

The currently required level of MREL is determined by the competent resolution authorities for each supervised bank individually, depending on the respective preferred resolution strategy. In the case of Deutsche Bank AG, MREL is determined by the Single Resolution Board. While there is no statutory minimum level of MREL, the SRMR, BRRD and a delegated regulation set out criteria which the resolution authority must consider when determining the relevant required level of MREL. Guidance is provided through an MREL policy published annually by the SRB. Any binding MREL ratio determined by the SRB is communicated to Deutsche Bank via the German Federal Financial Supervisory Authority (BaFin).

As a result of its regular annual review the SRB has updated Deutsche Bank AG's binding MREL ratio requirements in the second quarter of 2024 applicable immediately. The MREL ratio requirement on a consolidated basis is now 25.77% of RWA and 6.95% of LRE of which 19.39% of RWA and 6.95% of LRE must be met with own funds and subordinated instruments.

The combined buffer requirements of 5.21% as of December 31, 2024 must be met in addition to the RWA based MREL and subordinated MREL requirements.

TLAC Requirements

Since June 27, 2019, Deutsche Bank, as a global systemically important bank, has also become subject to global minimum standards for its Total Loss-Absorbing Capacity (TLAC). The TLAC requirement was implemented via amendments to the Capital Requirements Regulation and the Capital Requirements Directive provided in June 2019 with the publication of Regulation (EU) 2019/876 and Directive (EU) 2019/878.

This TLAC requirement is based on both risk-based and non-risk-based denominators and set at the higher-of 18% of RWA plus the combined buffer requirements and 6.75% of LRE since January 1, 2022.

MREL ratio development

As of December 31, 2024, available MREL were € 133.9 billion, corresponding to a ratio of 37.45% of RWA and 10.17% of LRE. This means that Deutsche Bank has a MREL surplus of € 23.1 billion above Deutsche Bank's MREL requirement of € 110.7 billion (i.e. 30.98% of RWA including combined buffer requirement). Compared to December 31, 2023 the surplus has increased as a higher MREL requirement and higher RWA were more than offset by higher MREL capacity.

€ 118.5 billion of Deutsche Bank's available MREL were own funds and subordinated liabilities, corresponding to a MREL subordination ratio of 33.15% of RWA and 9.0% of LRE, a buffer of € 27.0 billion over Deutsche Bank's subordination requirement of € 91.5 billion (i.e. 6.95% of LRE). Compared to December 1, 2023 , the surplus has remained stable.

TLAC ratio development

As of December 31, 2024, TLAC was € 118.5 billion and the corresponding TLAC ratios were 33.15% of RWA and 9.0% of LRE. This means that Deutsche Bank has a TLAC surplus of € 29.7 billion over its TLAC requirement of € 88.8 billion (6.75% of LRE). Compared to December 31, 2023 the surplus has remained stable.

MREL and TLAC disclosure

in € m. (unless stated otherwise)	Dec 31, 2024	Dec 31, 2023
Regulatory capital elements of TLAC/MREL		
Common Equity Tier 1 capital (CET 1)	49,457	48,066
Additional Tier 1 (AT1) capital instruments eligible under TLAC/MREL	11,378	8,328
Tier 2 (T2) capital instruments eligible under TLAC/MREL		
Tier 2 (T2) capital instruments before TLAC/MREL adjustments	7,676	8,610
Tier 2 (T2) capital instruments adjustments for TLAC/MREL	628	2,478
Tier 2 (T2) capital instruments eligible under TLAC/MREL	8,304	11,088
Total regulatory capital elements of TLAC/MREL	**69,139**	67,483
Other elements of TLAC/MREL		
Senior non-preferred plain vanilla	49,352	46,624
Holdings of eligible liabilities instruments of other G-SIIs (TLAC only)	0	0
Total Loss Absorbing Capacity (TLAC)	**118,491**	114,106
Add back of holdings of eligible liabilities instruments of other G-SIIs (TLAC only)	0	0
Available Own Funds and subordinated Eligible Liabilities (subordinated MREL)	**118,491**	114,106
Senior preferred plain vanilla	8,939	5,538
Senior preferred structured	6,441	3,609
Available Minimum Own Funds and Eligible Liabilities (MREL)	**133,871**	123,253
Risk Weighted Assets (RWA)	357,427	349,742
Leverage Ratio Exposure (LRE)	1,315,906	1,240,318
TLAC ratio		
TLAC ratio (as percentage of RWA)	33.15	32.63
TLAC requirement (as percentage of RWA)	23.21	23.14
TLAC ratio (as percentage of Leverage Exposure)	9.00	9.20
TLAC requirement (as percentage of Leverage Exposure)	6.75	6.75
TLAC surplus over RWA requirement	35,538	33,167
TLAC surplus over LRE requirement	29,667	30,385
MREL subordination		
MREL subordination ratio (as percentage of RWA)	33.15	32.63
MREL subordination requirement (as percentage of RWA)	24.60	24.68
MREL subordination ratio (as percentage of LRE)	9.00	9.20
MREL subordination requirement (as percentage of LRE)	6.95	6.92
MREL subordination surplus over RWA requirement	30,570	27,781
MREL subordination surplus over LRE requirement	27,036	28,276
MREL ratio		
MREL ratio (as percentage of RWA)	37.45	35.24
MREL requirement (as percentage of RWA)	30.98	30.35
MREL ratio (as percentage of LRE)	10.17	9.94
MREL requirement (as percentage of LRE)	6.95	6.92
MREL surplus over RWA requirement	23,146	17,098
MREL surplus over LRE requirement	42,415	37,424

Own Funds and Eligible Liabilities

To meet the MREL and TLAC requirement, Deutsche Bank needs to ensure that enough eligible liabilities instruments are maintained. Instruments eligible for MREL and TLAC are regulatory capital instruments (own funds) and liabilities that meet certain criteria, which are referred to as eligible liabilities.

Own funds used for MREL and TLAC include the full amount of Tier 2 capital instruments with a remaining maturity of greater than 1 year and less than 5 years which are reflected in regulatory capital on a pro-rata basis only.

Eligible liabilities are liabilities issued out of the resolution entity Deutsche Bank AG that meet eligibility criteria which are supposed to ensure that they are structurally suited as loss-absorbing capital. As a result, eligible liabilities exclude deposits which are covered by an insurance deposit protection scheme or which are preferred under German insolvency law (e.g., deposits from private individuals as well as small and medium-sized enterprises). Among other things, secured liabilities and derivatives liabilities are generally excluded as well. Debt instruments with embedded derivative features can be included under certain conditions (e.g., a known and fixed or increasing principal). In addition, eligible liabilities must have a remaining time to maturity of at least one year and must either be issued under the law of a Member State of the European Union or must include a bail-in clause in their contractual terms to make write-down or conversion effective. The SRB has granted a transitional period for liabilities issued under the UK law on or before November 15, 2018, which do not include an enforceable and effective bail-in clause but can still be included in eligible liabilities after Brexit until June 28, 2025.

In addition, eligible liabilities need to be subordinated to be counted against the TLAC and MREL subordination requirements. Effective January 1, 2017, the German Banking Act provided for a new class of statutorily subordinated debt securities that rank as senior non-preferred below the bank’s other senior liabilities (but in priority to the bank’s contractually subordinated liabilities, such as those qualifying as Tier 2 instruments). Following a harmonization effort by the European Union implemented in Germany effective July 21, 2018, banks are permitted to now decide if a specific issuance of eligible senior debt will be in the non-preferred or in the preferred category. Any such senior non-preferred debt instruments issued by Deutsche Bank AG under such rules rank on parity with its outstanding debt instruments that were classified as senior non-preferred under the prior rules. All these senior non-preferred issuances meet the TLAC and MREL subordination criteria.

Credit Risk Exposure

Deutsche Bank defines its credit exposure by taking into account all transactions where losses might occur due to the fact that counterparties may not fulfill their contractual payment obligations as defined under 'Credit Risk Framework'.

Maximum Exposure to Credit Risk

The maximum exposure to credit risk table shows the direct exposure before consideration of associated collateral held and other credit enhancements (netting and hedges) that do not qualify for offset in the financial statements for the periods specified. The netting credit enhancement component includes the effects of legally enforceable netting agreements as well as the offset of negative mark-to-markets from derivatives against pledged cash collateral. The collateral credit enhancement component mainly includes real estate, collateral in the form of cash as well as securities-related collateral. In relation to collateral, the Group applies internally determined haircuts and additionally cap all collateral values at the level of the respective collateralized exposure.

Maximum Exposure to Credit Risk

						Dec 31, 2024
			Credit Enhancements			
in € m.	Maximum exposure to credit risk[1]	Subject to impairment	Netting	Collateral	Guarantees and Credit derivatives[2]	Total credit enhancements
Financial assets at amortized cost[3]						
Cash and central bank balances	147,511	147,511	–	0	–	0
Interbank balances (w/o central banks)	6,169	6,169	–	0	0	0
Central bank funds sold and securities purchased under resale agreements	40,802	40,802	–	40,580	–	40,580
Securities borrowed	44	44	–	32	–	32
Loans	489,579	489,579	–	264,252	44,211	308,463
Other assets subject to credit risk[4,5]	81,985	76,702	24,750	1,668	270	26,687
Total financial assets at amortized cost[3]	766,091	760,807	24,750	306,532	44,481	375,763
Financial assets at fair value through profit or loss[6]						
Trading assets	134,118	–	–	1,207	612	1,819
Positive market values from derivative financial instruments	291,800	–	229,605	45,613	115	275,333
Non-trading financial assets mandatory at fair value through profit or loss	113,433	–	1,638	103,339	292	105,269
Of which:						
Securities purchased under resale agreement	88,736	–	1,638	87,091	0	88,729
Securities borrowed	15,913	–	–	15,671	0	15,671
Loans	1,954	–	–	485	272	757
Financial assets designated at fair value through profit or loss	0	–	–	0	0	0
Total financial assets at fair value through profit or loss	539,350	–	231,243	150,159	1,019	382,421
Financial assets at fair value through OCI	42,090	42,090	0	4,077	1,168	5,244
Of which:						
Securities purchased under resale agreement	2,786	2,786	–	2,455	0	2,455
Securities borrowed	0	0	–	0	0	0
Loans	5,068	5,068	–	454	1,168	1,621
Total financial assets at fair value through OCI	42,090	42,090	–	4,077	1,168	5,244
Financial guarantees and other credit related contingent liabilities[7]	73,468	73,467	–	4,410	9,227	13,637
Revocable and irrevocable lending commitments and other credit related commitments[7]	269,699	268,373	–	21,737	8,227	29,964
Total off-balance sheet	343,167	341,840	–	26,147	17,455	43,602
Maximum exposure to credit risk	1,690,698	1,144,738	255,993	486,915	64,122	807,029

[1] Does not include credit derivative notional sold € 597.9 billion and credit derivative notional bought protection
[2] Bought Credit protection is reflected with the notional of the underlying
[3] All amounts at gross value before deductions of allowance for credit losses
[4] All amounts at amortized cost (gross) except for qualifying hedge derivatives, which are reflected at Fair value through P&L
[5] Includes Asset Held for Sale regardless of accounting classification
[6] Excludes equities, other equity interests and commodities
[7] Figures are reflected at notional amounts

						Dec 31, 2023
						Credit Enhancements
in € m.	Maximum exposure to credit risk[1]	Subject to impairment	Netting	Collateral	Guarantees and Credit derivatives[2]	Total credit enhancements
Financial assets at amortized cost[3]						
Cash and central bank balances	178,424	178,424	–	0	–	0
Interbank balances (w/o central banks)	6,144	6,144	–	0	0	0
Central bank funds sold and securities purchased under resale agreements	14,725	14,725	–	13,761	–	13,761
Securities borrowed	39	39	–	33	–	33
Loans	484,527	484,527	–	260,047	42,191	302,239
Other assets subject to credit risk[4,5]	82,826	77,541	24,019	914	626	25,559
Total financial assets at amortized cost[3]	**766,685**	**761,400**	**24,019**	**274,755**	**42,817**	**341,591**
Financial assets at fair value through profit or loss[6]						
Trading assets	122,841	–	–	1,458	951	2,408
Positive market values from derivative financial instruments	251,877	–	195,517	40,036	30	235,583
Non-trading financial assets mandatory at fair value through profit or loss	87,153	–	1,931	76,894	92	78,917
Of which:						
Securities purchased under resale agreement	65,937	–	1,931	63,877	0	65,807
Securities borrowed	13,036	–	–	12,863	0	12,863
Loans	812	–	–	89	72	160
Financial assets designated at fair value through profit or loss	75	–	–	0	0	0
Total financial assets at fair value through profit or loss	**461,946**	**–**	**197,447**	**118,388**	**1,072**	**316,908**
Financial assets at fair value through OCI	35,546	35,546	0	2,744	988	3,732
Of which:						
Securities purchased under resale agreement	1,805	1,805	–	1,740	0	1,740
Securities borrowed	0	0	–	0	0	0
Loans	4,867	4,867	–	16	976	991
Total financial assets at fair value through OCI	**35,546**	**35,546**	**–**	**2,744**	**988**	**3,732**
Financial guarantees and other credit related contingent liabilities[7]	65,131	64,798	–	4,127	7,136	11,263
Revocable and irrevocable lending commitments and other credit related commitments[7]	255,409	254,016	–	21,736	6,779	28,515
Total off-balance sheet	**320,540**	**318,814**	**–**	**25,863**	**13,915**	**39,777**
Maximum exposure to credit risk	**1,584,717**	**1,115,760**	**221,466**	**421,750**	**58,792**	**702,008**

[1] Does not include credit derivative notional sold € 540.1 billion and credit derivative notional bought protection
[2] Bought Credit protection is reflected with the notional of the underlying
[3] All amounts at gross value before deductions of allowance for credit losses
[4] All amounts at amortized cost (gross) except for qualifying hedge derivatives, which are reflected at Fair value through P&L
[5] Includes Asset Held for Sale regardless of accounting classification
[6] Excludes equities, other equity interests and commodities
[7] Figures are reflected at notional amounts

The overall increase in maximum exposure to credit risk for December 31, 2024 was € 106.0 billion, mainly driven by increases of € 39.9 billion in positive market values from derivatives financial instruments, € 26.1 billion in central bank funds sold and securities purchased, € 22.8 billion in securities purchased under resale agreement at fair value through profit or loss, € 22.6 billion in off-balance sheet exposure, € 11.3 billion in trading assets, € 6.5 billion in financial assets at fair value through OCI, and € 5.1 billion in loans at amortized cost. These increases were partly offset by a decrease in cash and central bank balances of € 30.9 billion.

Trading assets as of December 31, 2024, includes traded bonds of € 120.0 billion (€ 112.5 billion as of December 31, 2023) of which over 82 % were investment-grade (over 85 % as of December 31, 2023).

Credit Enhancements are split into three categories: netting, collateral and guarantees/credit derivatives. Haircuts, parameter setting for regular margin calls as well as expert judgments for collateral valuation are employed to prevent market developments from leading to a build-up of uncollateralized exposures. All categories are monitored and reviewed regularly. Overall credit enhancements received are diversified and of adequate quality being largely cash, highly rated government bonds and third-party guarantees mostly from well rated banks and insurance companies. These financial institutions are domiciled mainly in European countries and the United States. Furthermore, the bank has collateral pools of highly liquid assets and mortgages (principally consisting of residential properties mainly in Germany) for the homogeneous retail portfolio.

Main Credit Exposure Categories

The tables in this section show details about several of Deutsche Bank’s main credit exposure categories, namely Loans, Revocable and Irrevocable Lending Commitments, Contingent Liabilities Over-The-Counter (“OTC”) Derivatives, Debt Securities and Repo and repo-style transactions:

- “Loans” are gross loans as reported on our balance sheet at amortized cost, loans at fair value through profit and loss and loans at fair value through other comprehensive income before deduction of allowance for credit losses; this includes “Traded loans” that are bought and held for the purpose of selling them in the near term, or the material risks of which have all been hedged or sold; from a regulatory perspective the latter category principally covers trading book positions
- “Revocable and irrevocable lending commitments” consist of the undrawn portion of revocable and irrevocable lending-related commitments
- “Contingent liabilities” consist of financial and performance guarantees, standby letters of credit and other similar arrangements (mainly indemnity agreements)
- “OTC derivatives” are the bank’s credit exposures from over-the-counter derivative transactions that the Group has entered into, after netting and cash collateral received; on the bank’s balance sheet, these are included in financial assets at fair value through profit or loss or, for derivatives qualifying for hedge accounting, in other assets, in either case only applying cash collateral received and netting eligible under IFRS
- “Debt securities” include debentures, bonds, deposits, notes or commercial paper, which are issued for a fixed term and redeemable by the issuer, as reported on our balance sheet within accounting categories at amortized cost and at fair value through other comprehensive income before deduction of allowance for credit losses, it also includes category at fair value through profit and loss; this includes “Traded bonds”, which are bonds, deposits, notes or commercial paper that are bought and held for the purpose of selling them in the near term; from a regulatory perspective the latter category principally covers trading book positions
- “Repo and repo-style transactions” consist of reverse repurchase transactions, as well as securities or commodities borrowing transactions, only applying collateral received and netting eligible under IFRS

Although considered in the monitoring of maximum credit exposures, the following are not included in the details of the Group’s main credit exposure: brokerage and securities related receivables, cash and central bank balances, interbank balances (without central banks), assets held for sale, accrued interest receivables, traditional securitization positions.

Unless stated otherwise, the tables below reflect credit exposure before the consideration of collateral and risk mitigation or structural enhancements, except for OTC derivatives wherein they are post credit enhancements.

Main Credit Exposure Categories by Business Divisions

							Dec 31, 2024
				Loans		Off-balance sheet	OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Corporate Bank	116,674	212	508	4,110	170,667	67,067	47
Investment Bank	110,077	11,068	1,443	958	61,692	3,268	24,031
Private Bank	257,476	6	0	0	37,110	2,815	391
Asset Management	1	0	0	0	130	9	0
Corporate & Other	5,352	93	3	0	100	309	2,431
Total	489,579	11,380	1,954	5,068	269,699	73,468	26,900

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							Dec 31, 2024
			Debt Securities			Repo and repo-style transactions[7]	Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Corporate Bank	266	14	0	9,033	0	0	368,598
Investment Bank	5,369	122,813	1,268	31,813	104,248	0	478,048
Private Bank	409	1	1	0	0	0	298,209
Asset Management	0	4,526	82	0	0	0	4,748
Corporate & Other	15,612	390	32,885	0	401	2,786	60,362
Total	21,655	127,744	34,236	40,846	104,649	2,786	1,209,964

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 15.6 billion as of December 31, 2024
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 60.7 million as of December 31, 2024
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.2 billion as of December 31, 2024
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 41.6 million as of December 31, 2024
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 25.6 million as of December 31, 2024
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed

							Dec 31, 2023
				Loans		Off-balance sheet	OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Corporate Bank	116,732	456	303	4,393	158,490	59,781	55
Investment Bank	100,645	7,614	582	474	56,939	2,169	18,991
Private Bank	261,250	0	0	0	39,515	3,128	301
Asset Management	3	0	0	0	99	9	0
Corporate & Other	5,896	165	3	0	365	44	3,208
Total	484,527	8,235	887	4,867	255,409	65,131	22,555

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							Dec 31, 2023
			Debt Securities			Repo and repo-style transactions[7]	Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Corporate Bank	294	19	0	595	0	0	341,118
Investment Bank	4,611	114,741	1,520	14,169	74,878	0	397,333
Private Bank	447	1	1	0	0	0	304,644
Asset Management	0	4,483	82	0	0	0	4,675
Corporate & Other	16,516	1,242	27,271	0	4,096	1,805	60,611
Total	21,868	120,485	28,874	14,764	78,973	1,805	1,108,381

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 13.4 billion as of December 31, 2023
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 44.2 million as of December 31, 2023
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.3 billion as of December 31, 2023
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 39.5 million as of December 31, 2023
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 1.5 million as of December 31, 2023
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed

Deutsche Bank's total main credit exposure increased by € 101.5 billion year-on-year where € 80.7 billion of an increase in Investment Bank mainly driven by higher repo and repo style holding due to increased firm trading activities and client flows as well as growth in loans and € 27.5 billion of an increase in the Corporate Bank driven by growth in off balance sheet exposure due to new and refinanced deals which is partly offset by a decrease in the Private Bank by € 6.4 billion Exposure increases have been observed across all the products included in main credit exposures by business divisions.

Main Credit Exposure Categories by Industry Sectors

The below tables give an overview of the bank's credit exposure by industry based on the NACE code of the counterparty. NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) is a standard European industry classification system and does not have to be congruent with an internal risk based view applied elsewhere in this report.

							Dec 31, 2024
	Loans				Off-balance sheet		OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Agriculture, forestry and fishing	336	0	0	0	239	24	1
Mining and quarrying	1,885	2,392	66	0	5,934	1,275	145
Manufacturing	26,634	525	5	1,195	56,933	14,331	1,205
Electricity, gas, steam and air conditioning supply	4,346	632	0	38	8,870	4,489	150
Water supply, sewerage, waste management and remediation activities	595	0	0	3	1,013	264	50
Construction	4,330	244	0	30	3,039	3,244	13
Wholesale and retail trade, repair of motor vehicles and motorcycles	21,405	165	103	809	18,290	6,339	180
Transport and storage	4,766	416	63	103	5,373	1,201	164
Accommodation and food service activities	2,665	64	0	19	1,314	150	2
Information and communication	8,930	757	16	237	16,501	3,014	384
Financial and insurance activities[8]	126,640	3,944	1,177	1,589	95,492	34,889	22,093
Real estate activities[9]	49,859	1,005	136	535	7,868	399	326
Professional, scientific and technical activities	6,276	133	0	214	5,754	2,129	161
Administrative and support service activities	8,921	319	95	161	5,025	493	138
Public administration and defense, compulsory social security	5,740	458	14	24	7,438	120	286
Education	295	17	0	0	99	55	55
Human health services and social work activities	4,130	29	0	12	1,850	91	46
Arts, entertainment and recreation	820	4	0	15	1,166	83	17
Other service activities	6,719	260	280	81	7,013	628	1,305
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	204,282	0	0	0	20,488	246	174
Activities of extraterritorial organizations and bodies	5	17	0	0	1	3	4
Total	489,579	11,380	1,954	5,068	269,699	73,468	26,900

							Dec 31, 2024
			Debt Securities			Repo and repo-style transactions[7]	Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Agriculture, forestry and fishing	0	2	0	0	0	0	602
Mining and quarrying	41	553	2	0	0	0	12,293
Manufacturing	23	1,389	50	43	42	0	102,375
Electricity, gas, steam and air conditioning supply	71	915	28	0	0	0	19,541
Water supply, sewerage, waste management and remediation activities	0	143	1	0	0	0	2,070
Construction	264	344	285	0	0	0	11,793
Wholesale and retail trade, repair of motor vehicles and motorcycles	0	612	3	0	0	0	47,904
Transport and storage	159	461	3	0	0	0	12,710
Accommodation and food service activities	5	90	1	0	0	0	4,311
Information and communication	31	1,048	0	0	0	0	30,918
Financial and insurance activities[8]	5,379	29,863	5,671	40,437	104,150	2,786	474,109
Real estate activities[9]	198	1,277	181	324	7	0	62,114
Professional, scientific and technical activities	48	256	105	0	0	0	15,075
Administrative and support service activities	19	471	4	0	16	0	15,661
Public administration and defense, compulsory social security	14,160	83,873	27,354	0	110	0	139,577
Education	0	262	14	0	0	0	797
Human health services and social work activities	103	289	0	0	1	0	6,550
Arts, entertainment and recreation	0	19	0	0	0	0	2,124
Other service activities	450	3,514	13	42	207	0	20,514
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	0	0	0	0	0	0	225,190
Activities of extraterritorial organizations and bodies	704	2,362	522	0	117	0	3,735
Total	21,655	127,744	34,236	40,846	104,649	2,786	1,209,964

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 15.6 billion as of December 31, 2024
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 60.7 million as of December 31, 2024
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.2 billion as of December 31, 2024
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 41.6 million as of December 31, 2024
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 25.6 million as of December 31, 2024
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed
[8] Includes exposure to Corporates including Holding Companies of € 108 billion, Asset-Backed Securities of € 49 billion, Banks of € 66 billion, Insurance of € 9 billion, Financial Intermediaries of € 15 billion and Public Sector of € 17 billion, all based on internal client classification
[9] Non-recourse Commercial Real Estate portfolio based on Deutsche Bank's definition is € 36 billion

							Dec 31, 2023
	Loans				Off-balance sheet		OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Agriculture, forestry and fishing	384	2	0	0	224	32	1
Mining and quarrying	2,774	230	126	0	4,893	1,409	47
Manufacturing	28,397	285	5	1,877	53,572	13,809	1,303
Electricity, gas, steam and air conditioning supply	4,081	307	75	272	6,475	2,967	142
Water supply, sewerage, waste management and remediation activities	486	0	0	0	523	148	38
Construction	4,257	217	1	20	2,965	3,060	7
Wholesale and retail trade, repair of motor vehicles and motorcycles	21,030	233	79	784	16,540	6,247	599
Transport and storage	4,924	616	13	63	6,088	1,108	173
Accommodation and food service activities	1,862	3	0	0	1,015	138	10
Information and communication	7,589	372	21	100	13,244	3,209	289
Financial and insurance activities[8]	110,901	3,840	276	1,281	90,138	28,491	18,176
Real estate activities[9]	49,267	1,302	103	122	7,061	183	304
Professional, scientific and technical activities	6,889	68	0	0	6,190	2,213	172
Administrative and support service activities	8,911	148	169	157	5,007	577	486
Public administration and defense, compulsory social security	5,731	364	10	27	6,759	123	303
Education	279	2	0	0	72	55	68
Human health services and social work activities	4,390	42	0	0	1,725	127	53
Arts, entertainment and recreation	1,017	22	0	33	1,402	102	49
Other service activities	5,302	183	10	130	4,534	850	165
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	216,055	0	0	1	26,981	282	140
Activities of extraterritorial organizations and bodies	0	0	0	0	0	2	29
Total	484,527	8,235	887	4,867	255,409	65,131	22,555

							Dec 31, 2023
			Debt Securities			Repo and repo-style transactions[7]	Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Agriculture, forestry and fishing	0	0	0	0	0	0	643
Mining and quarrying	46	486	2	0	0	0	10,012
Manufacturing	0	1,481	54	0	0	0	100,783
Electricity, gas, steam and air conditioning supply	175	776	20	0	0	0	15,289
Water supply, sewerage, waste management and remediation activities	29	26	0	0	0	0	1,250
Construction	130	387	133	0	0	0	11,177
Wholesale and retail trade, repair of motor vehicles and motorcycles	0	458	2	0	0	0	45,973
Transport and storage	66	481	15	0	0	0	13,548
Accommodation and food service activities	5	90	0	0	0	0	3,124
Information and communication	95	531	0	0	0	0	25,449
Financial and insurance activities[8]	4,639	25,416	4,789	14,695	76,785	1,805	381,232
Real estate activities[9]	227	1,159	546	69	0	0	60,343
Professional, scientific and technical activities	49	151	111	0	0	0	15,843
Administrative and support service activities	51	436	8	0	0	0	15,950
Public administration and defense, compulsory social security	15,907	83,791	22,725	0	2,154	0	137,893
Education	0	160	9	0	0	0	645
Human health services and social work activities	99	95	11	0	0	0	6,543
Arts, entertainment and recreation	0	58	0	0	0	0	2,683
Other service activities	146	3,028	151	0	34	0	14,531
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	0	0	0	0	0	0	243,459
Activities of extraterritorial organizations and bodies	205	1,476	298	0	0	0	2,010
Total	21,868	120,485	28,874	14,764	78,973	1,805	1,108,381

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 13.4 billion as of December 31, 2023
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 44.2 million as of December 31, 2023
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.3 billion as of December 31, 2023
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 39.5 million as of December 31, 2023
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 1.5 million as of December 31, 2023
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed
[8] Includes exposure to Corporates including Holding Companies of € 96 billion, Asset-Backed Securities of € 44 billion, Banks of € 55 billion, Insurance of € 13 billion, Financial Intermediaries of € 10 billion and Public Sector of € 16 billion, all based on internal client classification
[9] Non-recourse Commercial Real Estate portfolio based on Deutsche Bank's definition is € 38 billion

All credit exposures are subject to the same credit underwriting requirements stipulated in the bank's "Principles for Managing Credit Risk", including various controls according to single name, country, industry and product/asset class-specific concentration.

Material transactions, such as loans underwritten with the intention to sell down or distribute part of the risk to third parties, are subject to review and approval by senior credit risk management professionals and (depending upon size) an underwriting committee and/or the Management Board. High emphasis is placed on structuring and pricing such transactions so that de-risking can be achieved in a timely manner and – where Deutsche Bank takes market price risk – to mitigate such market risk.

The Group's credit exposure to the ten largest counterparties accounted for 11% of the bank's aggregated total credit exposure in these categories as of December 31, 2024, compared with 12% as of December 31, 2023. The top ten counterparty exposures were well-rated counterparties or otherwise related to structured trades which show high levels of risk mitigation.

The Group's amortized cost loan exposure within above categories is mostly with borrowers of good credit quality. Moreover, with the focus on the Corporate Bank and Investment Bank, loan exposure is subject to further risk mitigation through the bank's e.g. Strategic Corporate Lending unit.

Deutsche Bank's household loan exposure is principally associated with Private Bank portfolios.

The bank's amortized cost loan exposure of € 49.9 billion to Real Estate activities as reported above is based on NACE code classification and comprises of recourse and non-recourse financing, across various parts of the Group and client segments. This includes € 24.0 billion of loans which is based on Deutsche Bank's definition of non-recourse CRE loans. For more information on non-recourse CRE loans, see section Focus areas in 2024.

The Group's commercial real estate loans, primarily originated in the U.S. and Europe, are generally secured by first mortgages on the underlying real estate property. Deutsche Bank originates fixed and floating rate loans and selectively acquires (generally at substantial discount) sub- /non-performing loans sold by financial institutions. The underwriting process is stringent and the exposure is managed under separate portfolio limits. Credit underwriting policy guidelines provide that LTV ratios of generally less than 75 % are adhered to at loan origination. Additionally, given the significance of the underlying collateral, independent external appraisals are commissioned for all secured loans by a valuation team (part of the independent Credit Risk Management function) which is also responsible for reviewing and challenging the reported real estate values regularly. Deutsche Bank originates loans for distribution in the banking market or via securitization. In this context Deutsche Bank frequently retains a portion of the syndicated loans while securitized positions may be entirely sold (except where regulation requires retention of economic risk). Mezzanine or other junior tranches of debt are retained only in exceptional cases. The bank also participates in conservatively underwritten unsecured lines of credit to well-capitalized real estate investment trusts and other real estate operating companies.

Commercial real estate property valuations and rental incomes can be significantly impacted by macro-economic conditions and idiosyncratic events affecting the underlying properties. Accordingly, the portfolio is categorized as higher risk and hence subject to the aforementioned tight restrictions on concentration.

Deutsche Bank's exposure to Financial and Insurance Activities is € 474.1 billion as of December 31, 2024 which also includes exposures to Asset Backed Securities, Banks, Insurance, Financial intermediaries, Public Sector as well as to Corporates including Holding Companies. Exposures are managed using bespoke risk management frameworks, trade-by-trade approvals and relevant risk appetite metrics. Total loans across all applicable measurement categories amounted to € 133.4 billion, total repo and repo style transactions across all applicable measurement categories amounted to € 147.4 billion and off-balance sheet activities amounted to € 130.4 billion as of December 31, 2024 and were principally associated with Investment Bank and Corporate Bank portfolios, which were majorly held in North America and Europe.

Main credit exposure categories by geographical region

							Dec 31, 2024
	Loans				Off-balance sheet		OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Europe	331,232	3,420	702	1,843	146,860	42,033	15,611
Of which:							
Germany	220,959	304	353	512	72,341	15,761	4,393
United Kingdom	11,044	365	23	163	12,589	4,418	3,594
France	4,319	69	39	33	6,967	2,111	746
Luxembourg	17,119	944	14	131	8,737	546	1,780
Italy	23,190	229	24	69	4,424	5,302	266
Netherlands	9,593	265	4	332	9,452	2,964	1,460
Spain	15,580	109	40	123	3,833	4,633	169
Ireland	6,483	271	195	61	5,057	295	568
Switzerland	6,050	19	0	196	8,562	2,548	434
Poland	2,890	0	0	15	2,358	181	5
Belgium	1,991	33	0	80	1,685	1,582	181
Russian Federation[8]	102	0	0	12	1	21	0
Ukraine[8]	98	172[9]	0	0	0	5	0
Other Europe[8]	11,813	639	10	116	10,855	1,665	2,016
North America	108,465	3,262	931	2,324	110,332	14,856	5,890
Of which:							
U.S.	95,186	2,986	507	2,095	102,989	13,462	4,923
Cayman Islands	5,969	151	319	87	2,770	660	515
Canada	1,491	121	33	118	2,584	223	202
Other North America	5,819	4	72	24	1,989	511	250
Asia/Pacific	40,066	1,433	309	611	9,941	15,232	5,156
Of which:							
Japan	1,744	151	42	77	532	645	598
Australia	3,404	238	0	9	2,918	1,371	512
India	9,001	24	25	0	1,405	3,789	104
China	4,245	4	95	24	443	1,852	755
Singapore	5,146	95	17	129	1,136	2,128	291
Hong Kong	3,062	90	0	87	723	366	229
Other Asia/Pacific	13,466	831	130	285	2,783	5,082	2,666
Other geographical areas	9,816	3,265	11	289	2,567	1,348	244
Total	489,579	11,380	1,954	5,068	269,699	73,468	26,900

							Dec 31, 2024
	Debt Securities			Repo and repo-style transactions[7]			Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Europe	10,425	57,024	15,388	27,957	34,516	283	687,293
Of which:							
Germany	321	7,899	1,887	2,033	855	0	327,619
United Kingdom	503	12,141	1,983	12,407	14,163	0	73,393
France	1,511	7,855	3,888	4,077	8,058	0	39,672
Luxembourg	0	2,699	472	127	3,615	0	36,184
Italy	4,914	8,038	985	4,144	1,425	0	53,011
Netherlands	87	2,014	33	0	71	0	26,276
Spain	1,489	4,096	359	1,388	33	0	31,853
Ireland	1,326	1,695	8	29	1,065	0	17,053
Switzerland	0	1,657	1	2,658	280	0	22,404
Poland	0	262	3,554	0	84	0	9,349
Belgium	0	4,197	1,572	0	5	0	11,325
Russian Federation[8]	0	3	0	0	0	0	138
Ukraine[8]	0	165	13	0	0	0	454
Other Europe[8]	273	4,304	634	1,094	4,861	283	38,562
North America	7,227	34,972	12,695	8,205	52,388	0	361,546
Of which:							
U.S.	6,854	33,637	12,499	4,991	39,389	0	319,517
Cayman Islands	373	370	0	3,032	9,388	0	23,634
Canada	0	872	195	0	3,575	0	9,415
Other North America	0	93	0	182	36	0	8,979
Asia/Pacific	3,844	28,246	5,995	3,839	17,524	1,006	133,202
Of which:							
Japan	6	2,985	964	178	8,815	0	16,736
Australia	2,526	2,374	311	212	2,720	0	16,596
India	658	6,630	75	0	0	681	22,391
China	0	4,400	274	0	952	0	13,042
Singapore	61	946	738	0	711	0	11,397
Hong Kong	9	559	553	0	329	0	6,007
Other Asia/Pacific	584	10,353	3,081	3,449	3,997	326	47,032
Other geographical areas	160	7,501	158	845	222	1,497	27,923
Total	21,655	127,744	34,236	40,846	104,649	2,786	1,209,964

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 15.6 billion as of December 31, 2024
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 60.7 million as of December 31, 2024
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.2 billion as of December 31, 2024
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 41.6 million as of December 31, 2024
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 25.6 million as of December 31, 2024
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed
[8] Thematic addition on back of the ongoing border conflict between the Russian Federation and Ukraine
[9] Ukraine trading loan exposure driven by financing, materially guaranteed by supranational development bank. Net exposure considering broader risk mitigation structure is deminimis

							Dec 31, 2023
	Loans				Off-balance sheet		OTC derivatives
in € m.	at amortized cost[1]	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI[2]	Revocable and irrevocable lending commitments[3]	Contingent liabilities	at fair value through P&L[4]
Europe	338,507	2,906	516	1,698	148,778	39,716	14,814
Of which:							
Germany	231,287	321	70	409	76,810	16,532	4,146
United Kingdom	8,323	239	97	252	13,175	3,102	4,834
France	4,587	76	75	317	7,868	1,876	694
Luxembourg	18,056	612	23	142	8,493	641	970
Italy	23,490	138	32	16	4,842	5,021	219
Netherlands	8,996	248	8	252	9,279	2,863	1,463
Spain	16,073	230	24	91	3,738	4,330	219
Ireland	5,273	331	184	87	4,237	351	542
Switzerland	6,827	37	1	0	8,206	2,558	355
Poland	2,617	0	0	16	2,569	176	6
Belgium	1,742	23	0	58	1,551	623	144
Russian Federation[8]	243	6	0	7	26	21	0
Ukraine[8]	8	208[9]	0	0	3	5	0
Other Europe[8]	10,984	435	2	50	7,981	1,617	1,222
North America	101,306	2,325	238	2,378	95,768	12,172	4,745
Of which:							
U.S.	89,570	2,202	178	2,247	89,460	10,754	3,269
Cayman Islands	4,985	50	0	0	2,383	787	963
Canada	1,396	49	3	106	2,048	226	324
Other North America	5,356	24	56	24	1,877	405	188
Asia/Pacific	35,807	1,746	123	597	9,031	12,093	2,745
Of which:							
Japan	1,404	328	34	10	481	451	459
Australia	3,203	250	0	0	2,652	830	153
India	7,576	78	88	23	921	3,774	53
China	4,254	1	0	22	413	1,442	762
Singapore	3,789	362	0	189	1,558	1,357	157
Hong Kong	2,259	64	0	82	836	607	242
Other Asia/Pacific	13,323	662	1	271	2,170	3,632	919
Other geographical areas	8,906	1,259	10	193	1,831	1,151	252
Total	484,527	8,235	887	4,867	255,409	65,131	22,555

							Dec 31, 2023
	Debt Securities			Repo and repo-style transactions[7]			Total
in € m.	at amortized cost[5]	at fair value through P&L	at fair value through OCI[6]	at amortized cost	at fair value through P&L	at fair value through OCI	
Europe	9,682	52,205	12,884	6,021	17,184	395	645,306
Of which:							
Germany	830	10,114	1,388	348	1,351	0	343,606
United Kingdom	240	10,475	1,504	461	3,773	0	46,476
France	0	7,756	2,901	657	5,100	0	31,906
Luxembourg	0	2,180	537	9	206	0	31,870
Italy	4,890	7,953	1,030	2,251	1,688	0	51,571
Netherlands	0	2,289	27	0	99	0	25,526
Spain	1,487	3,144	358	1,587	35	0	31,318
Ireland	1,563	1,269	7	0	960	0	14,804
Switzerland	0	1,289	1	0	225	0	19,499
Poland	0	473	2,899	0	98	0	8,852
Belgium	0	1,759	1,606	0	11	0	7,517
Russian Federation[8]	0	31	0	0	0	0	333
Ukraine[8]	0	73	7	0	0	0	305
Other Europe[8]	672	3,401	619	707	3,638	395	31,724
North America	9,433	32,184	11,503	5,855	47,782	0	325,688
Of which:							
U.S.	9,415	31,042	11,320	2,979	14,357	0	266,793
Cayman Islands	0	495	0	2,876	33,284	0	45,823
Canada	0	546	183	0	54	0	4,936
Other North America	18	101	0	0	88	0	8,137
Asia/Pacific	2,428	31,297	4,295	2,620	13,860	858	117,499
Of which:							
Japan	22	3,017	485	431	8,818	0	15,941
Australia	1,725	2,387	315	0	284	0	11,800
India	414	5,858	62	0	0	279	19,126
China	0	7,977	98	0	1,365	0	16,334
Singapore	0	1,396	665	0	683	0	10,156
Hong Kong	9	738	463	0	124	0	5,424
Other Asia/Pacific	258	9,922	2,206	2,189	2,587	579	38,718
Other geographical areas	325	4,799	191	268	148	552	19,887
Total	21,868	120,485	28,874	14,764	78,973	1,805	1,108,381

[1] Includes stage 3 and stage 3 POCI loans at amortized cost amounting to € 13.4 billion as of December 31, 2023
[2] Includes stage 3 and stage 3 POCI loans at fair value through OCI amounting to € 44.2 million as of December 31, 2023
[3] Includes stage 3 and stage 3 POCI off-balance sheet exposure amounting to € 2.3 billion as of December 31, 2023
[4] Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting
[5] Includes stage 3 and stage 3 POCI debt securities at amortized cost amounting to € 39.5 million as of December 31, 2023
[6] Includes stage 3 and stage 3 POCI debt securities at fair value through OCI amounting to € 1.5 million as of December 31, 2023
[7] Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed
[8] Thematic addition on back of the ongoing border conflict between the Russian Federation and Ukraine
[9] Ukraine trading loan exposure driven by financing, materially guaranteed by supranational development bank. Net exposure considering broader risk mitigation structure is deminimis

The tables above provide an overview of Deutsche Bank’s credit exposure by geographical region, allocated based on the counterparty’s country of domicile. The domicile view might differ from any internal risk based view applied elsewhere in this report.

The Group’s largest concentration of credit risk within loans from a regional perspective is in its home market Germany, with a significant share in households, which includes the majority of the mortgage lending and home loan business.

Within OTC derivatives, tradable assets as well as repo and repo-style transactions, the largest concentrations from a regional perspective were in Europe and North America.

Credit Exposure Classification

Deutsche Bank also classifies its credit exposure along business divisions, which is in line with the divisionally aligned chief risk officer mandates. The section below discloses the credit exposure of the Corporate Bank and the Investment Bank together. The subsequent section provides the credit exposure for the Private Bank.

Corporate Bank and Investment Bank credit exposure

The tables below show the main Corporate Bank and Investment Bank Credit Exposure by product types and internal rating bands. Please refer to section "Measuring Credit Risk" for more details about the bank's internal ratings.

Main Corporate Bank and Investment Bank credit exposure categories according to the bank's internal creditworthiness categories of the counterparties – gross

								Dec 31, 2024
in € m. (unless stated otherwise)					Loans		Off-balance sheet	OTC derivatives
Ratingband	Probability of default in %[1]	at amortized cost	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI	Revocable and irrevocable lending commitments	Contingent liabilities	at fair value through P&L[2]
iAAA–iAA	> 0.00 ≤ 0.04	18,371	177	84	209	28,227	6,007	10,133
iA	> 0.04 ≤ 0.11	47,908	60	542	1,167	69,746	32,937	7,441
iBBB	> 0.11 ≤ 0.5	66,741	3,207	131	2,537	88,790	22,201	4,101
iBB	> 0.5 ≤ 2.27	64,486	4,983	561	1,080	34,521	6,015	2,202
iB	> 2.27 ≤ 10.22	21,094	713	399	10	8,865	2,244	104
iCCC and below	> 10.22 ≤ 100	8,153	2,141	235	65	2,210	931	97
Total		226,751	11,280	1,951	5,068	232,359	70,335	24,077

								Dec 31, 2024
in € m. (unless stated otherwise)				Debt Securities			Repo and repo-style transactions	
Ratingband	Probability of default in %[1]	at amortized cost	at fair value through P&L	at fair value through OCI	at amortized cost	at fair value through P&L	at fair value through OCI	Total
iAAA–iAA	> 0.00 ≤ 0.04	694	64,329	192	17,775	39,458	–	185,657
iA	> 0.04 ≤ 0.11	2,469	14,985	46	7,374	8,817	–	193,491
iBBB	> 0.11 ≤ 0.5	1,021	19,851	149	7,506	13,055	–	229,290
iBB	> 0.5 ≤ 2.27	1,319	22,194	431	7,390	41,123	–	186,303
iB	> 2.27 ≤ 10.22	90	643	402	686	1,795	–	37,044
iCCC and below	> 10.22 ≤ 100	42	825	47	115	0	–	14,862
Total		5,635	122,827	1,268	40,846	104,248	–	846,646

[1] Reflects the probability of default for a one year time horizon
[2] Includes the effect of netting agreements and cash collateral received where applicable

Main Corporate Bank and Investment Bank credit exposure categories according to the bank's internal creditworthiness categories of the counterparties – net

								Dec 31, 2024[1]
in € m. (unless stated otherwise)					Loans		Off-balance sheet	OTC derivatives
Ratingband	Probability of default in %[2]	at amortized cost	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI	Revocable and irrevocable lending commitments	Contingent liabilities	at fair value through P&L
iAAA–iAA	> 0.00 ≤ 0.04	10,671	99	84	64	26,953	5,128	4,893
iA	> 0.04 ≤ 0.11	36,198	60	392	953	67,092	29,677	4,141
iBBB	> 0.11 ≤ 0.5	30,736	2,869	56	1,836	82,049	17,106	2,948
iBB	> 0.5 ≤ 2.27	27,152	4,122	480	520	30,381	4,366	1,889
iB	> 2.27 ≤ 10.22	6,049	503	189	10	8,258	1,290	103
iCCC and below	> 10.22 ≤ 100	4,285	1,570	57	55	2,127	348	96
Total		115,091	9,223	1,258	3,438	216,860	57,915	14,069

in € m. (unless stated otherwise)								Dec 31, 2024[1]
				Debt Securities			Repo and repo-style transactions	
Ratingband	Probability of default in %[2]	at amortized cost	at fair value through P&L	at fair value through OCI	at amortized cost	at fair value through P&L	at fair value through OCI	Total
iAAA–iAA	> 0.00 ≤ 0.04	694	64,254	192	7	261	–	113,301
iA	> 0.04 ≤ 0.11	2,469	14,985	46	106	13	–	156,131
iBBB	> 0.11 ≤ 0.5	562	19,756	136	6	35	–	158,096
iBB	> 0.5 ≤ 2.27	860	21,684	334	0	1,087	–	92,874
iB	> 2.27 ≤ 10.22	20	537	362	0	0	–	17,321
iCCC and below	> 10.22 ≤ 100	42	711	47	0	0	–	9,338
Total		4,647	121,927	1,117	119	1,396	–	547,060

[1] Net of eligible collateral, guarantees and hedges based on IFRS requirements
[2] Reflects the probability of default for a one year time horizon

The tables below show the main Corporate Bank and Investment Bank credit exposure for 2023 by product types and internal rating bands.

Main Corporate Bank and Investment Bank credit exposure categories according to the bank's internal creditworthiness categories of the counterparties – gross

in € m. (unless stated otherwise)								Dec 31, 2023
					Loans		Off-balance sheet	OTC derivatives
Ratingband	Probability of default in %[1]	at amortized cost	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI	Revocable and irrevocable lending commitments	Contingent liabilities	at fair value through P&L[2]
iAAA–iAA	> 0.00 ≤ 0.04	21,676	149	14	188	24,401	4,461	7,389
iA	> 0.04 ≤ 0.11	38,612	344	167	663	65,969	29,510	5,409
iBBB	> 0.11 ≤ 0.5	72,532	922	307	3,546	84,267	19,602	3,807
iBB	> 0.5 ≤ 2.27	54,351	3,566	50	369	29,111	5,248	1,978
iB	> 2.27 ≤ 10.22	21,562	1,268	62	35	9,262	2,492	413
iCCC and below	> 10.22 ≤ 100	8,645	1,822	284	65	2,420	636	51
Total		217,378	8,070	884	4,867	215,429	61,950	19,046

in € m. (unless stated otherwise)								Dec 31, 2023
				Debt Securities			Repo and repo-style transactions	
Ratingband	Probability of default in %[1]	at amortized cost	at fair value through P&L	at fair value through OCI	at amortized cost	at fair value through P&L	at fair value through OCI	Total
iAAA–iAA	> 0.00 ≤ 0.04	1,085	60,918	71	1,267	24,801	–	146,420
iA	> 0.04 ≤ 0.11	1,614	18,476	23	4,244	7,727	–	172,758
iBBB	> 0.11 ≤ 0.5	1,181	18,180	180	2,467	9,207	–	216,197
iBB	> 0.5 ≤ 2.27	836	16,009	962	2,840	30,237	–	145,555
iB	> 2.27 ≤ 10.22	150	755	282	3,947	2,907	–	43,136
iCCC and below	> 10.22 ≤ 100	39	421	1	0	0	–	14,385
Total		4,905	114,760	1,520	14,764	74,878	–	738,451

[1] Reflects the probability of default for a one year time horizon
[2] Includes the effect of netting agreements and cash collateral received where applicable

Main Corporate Bank and Investment Bank credit exposure categories according to the bank's internal creditworthiness categories of the counterparties – net

in € m. (unless stated otherwise)								Dec 31, 2023[1]
					Loans		Off-balance sheet	OTC derivatives
Ratingband	Probability of default in %[2]	at amortized cost	trading - at fair value through P&L	Designated / mandatory at fair value through P&L	at fair value through OCI	Revocable and irrevocable lending commitments	Contingent liabilities	at fair value through P&L
iAAA–iAA	> 0.00 ≤ 0.04	13,529	149	14	30	22,874	3,766	4,817
iA	> 0.04 ≤ 0.11	28,218	38	167	663	64,306	27,109	3,424
iBBB	> 0.11 ≤ 0.5	35,191	426	242	2,842	78,680	15,924	2,855
iBB	> 0.5 ≤ 2.27	21,830	2,947	24	256	25,986	3,611	1,833
iB	> 2.27 ≤ 10.22	6,239	831	45	5	8,674	1,234	374
iCCC and below	> 10.22 ≤ 100	4,155	1,387	70	65	2,336	365	50
Total		109,162	5,778	562	3,861	202,856	52,009	13,353

								Dec 31, 2023[1]
in € m. (unless stated otherwise)		Debt Securities			Repo and repo-style transactions			
Ratingband	Probability of default in %[2]	at amortized cost	at fair value through P&L	at fair value through OCI	at amortized cost	at fair value through P&L	at fair value through OCI	Total
iAAA–iAA	> 0.00 ≤ 0.04	1,085	60,918	71	50	0	–	107,303
iA	> 0.04 ≤ 0.11	1,614	18,476	23	105	16	–	144,160
iBBB	> 0.11 ≤ 0.5	600	17,959	180	0	4	–	154,903
iBB	> 0.5 ≤ 2.27	263	15,640	345	0	6	–	72,739
iB	> 2.27 ≤ 10.22	59	380	282	1,445	1,845	–	21,414
iCCC and below	> 10.22 ≤ 100	33	400	1	0	0	–	8,861
Total		3,653	113,773	903	1,600	1,870	–	509,381

[1] Net of eligible collateral, guarantees and hedges based on IFRS requirements
[2] Reflects the probability of default for a one year time horizon

The above tables show an overall increase in the Corporate Bank and Investment Bank gross exposure in 2024 of € 108.2 billion or 15%. Repo and repo-style transactions increased by € 55.5 billion, mainly driven by increased firm trading activities and client flows. From a regional perspective, the increase was primarily attributable to counterparties domiciled in the United Kingdom and United State of America. Off-balance sheet positions increased by € 25.3 billion, mainly driven by new commitments issued during the period. Loans increased by € 13.8 billion, primarily in the Investment Bank. Debt Securities at fair value through profit and loss increased by € 8.1 billion, mainly due to client flows and desk positioning and increase in OTC Derivatives of € 5.0 billion is primarily due to increase in foreign exchange derivatives product.

The Group uses risk mitigation techniques as described above to optimize Corporate Bank and Investment Bank credit exposures and reduce potential credit losses. The tables for "net" exposure disclose the development of the bank's Corporate Bank and Investment Bank credit exposures net of collateral, guarantees and hedges.

Risk Mitigation for Credit Exposure

Strategic Corporate Lending ("SCL") unit helps to mitigate the risk of the bank's corporate credit exposures. The notional amount of SCL's risk reduction activities increased from € 37.7 billion as of December 31, 2023, to € 43.2 billion as of December 31, 2024.

As of year-end 2024, SCL mitigated the credit risk of € 38.4 billion of loans and lending-related commitments, through synthetic collateralized loan obligations supported predominantly by financial guarantees. This position totaled € 32.0 billion as of December 31, 2023.

SCL also held credit derivatives with an underlying notional amount of € 4.7 billion as of December 31, 2024. The position totaled € 5.7 billion as of December 31, 2023. The credit derivatives used for the bank's portfolio management activities are accounted for at fair value.

The bank executes additional hedges in other businesses and at a Group level to reduce single name concentration risks and manage its capital efficiently. These hedges are likely to increase in the medium-term as the bank drives the next stages of its strategic delivery. The Bank also uses private risk insurance and export credit agency cover to manage noncollateralized exposures.

Private Bank credit exposure

Private Bank credit exposure, credit exposure in stage 3 and net credit costs

	Total exposure in € m.		of which loan book in € m.		Credit exposure stage 3 in € m.		Net credit costs as a % of total exposure[1]	
	Dec 31, 2024	Dec 31, 2023	Dec 31, 2024	Dec 31, 2023	Dec 31, 2024	Dec 31, 2023	Dec 31, 2024	Dec 31, 2023
Consumer Finance	40,098	41,341	25,571	25,707	1,689	1,728	1.26%	0.97%
Mortgage	162,057	169,260	159,510	164,892	2,212	1,620	0.09%	0.08%
Business Finance	15,878	16,469	12,420	13,314	1,058	1,052	0.63%	0.55%
Wealth Management	79,592	76,179	59,894	56,581	3,134	2,155	0.13%	0.20%
Other	583	1,396	81	757	24	34	(0.01 %)	0.26%
Total	**298,209**	304,644	**257,476**	261,250	**8,118**	6,589	**0.29%**	0.26%

[1] Net credit costs for the twelve months period ended at the respective balance sheet date divided by the total exposure at that balance sheet date.

Consumer Finance is divided into personal instalment loans, credit lines and credit cards. Consumer Finance business is uncollateralized, loan risk depends on client quality. Various lending requirements are stipulated, including (but not limited to) client rating, maximum loan amounts and maximum tenors, and are adapted to individual circumstances of the borrower (i.e., for consumer loans maximum loan amount and maximum tenor taking into account amongst others customer net income). Given the largely homogeneous nature of this portfolio, counterparty credit-worthiness and ratings are derived by utilizing an automated decision engine.

Mortgage business is financing of real estates with focus on residential properties (primarily owner-occupied) sold by various business channels in Europe, primarily in Germany but also in Spain and Italy. The level of credit risk of the mortgage loan portfolio is determined by assessing the quality of the client and the underlying collateral. The loan amounts are generally larger than Consumer Finance loans and they are extended for longer time horizons. Based on the bank's underwriting criteria and processes and the diversified portfolio (customers/properties) with respective collateralization, the mortgage portfolio is categorized as lower risk, while consumer finance is categorized as high risk.

Business Finance represents credit products for small businesses, SME up to large corporates. Products range from current accounts and credit lines to investment loans or revolving facilities, factoring, leasing and derivatives. Clients are located primarily in Italy and Spain, but credit can also be extended to subsidiaries abroad, mostly in Europe.

Wealth Management offers globally customized wealth management solutions and private banking services including discretionary portfolio management and traditional and alternative investment solutions, complemented by structured risk management, wealth planning, lending and family office services for wealth, high-net-worth (HNW) and ultra-high-net-worth (UHNW) individuals and family offices. Wealth Management's total exposure is divided into Lombard Lending (against readily marketable liquid collateral / securities) and Structured Lending (against less liquid collateral). While the level of credit risk for the Lombard portfolio is determined by assessing the quality of the underlying collateral, the level of credit risk for the structured portfolio is determined by assessing both the quality of the client and the collateral. Products range from secured Lombard and mortgage loans to current accounts (Europe only), credit lines and other loans; to a lesser extent derivatives and contingencies.

Private Bank mortgage loan-to-value[1]

	Dec 31, 2024	Dec 31, 2023
≤ 50 %	65 %	65 %
> 50 ≤ 70 %	16 %	16 %
> 70 ≤ 90 %	10 %	11 %
> 90 ≤ 100 %	3 %	3 %
> 100 ≤ 110 %	2 %	2 %
> 110 ≤ 130 %	2 %	2 %
> 130 %	1 %	1 %

[1] When assigning the exposure to the corresponding LTV buckets, the exposure amounts are distributed according to their relative share of the underlying assessed real estate value

The LTV expresses the amount of exposure as a percentage of the underlying real estate value.

The Group's LTV ratios are calculated using the total exposure divided by the current determined value of the respective properties. These values are monitored and updated if necessary, on a regular basis. The exposure of transactions that are additionally backed by liquid collateral is reduced by the respective collateral values, whereas any prior charges increase the corresponding total exposure. The LTV calculation includes exposure which is secured by real estate collateral. Any mortgage lending exposure that is collateralized exclusively by any other type of collateral is not included in the LTV calculation.

The creditor's creditworthiness, the LTV and the quality of collateral is an integral part of the Group's risk management when originating loans and when monitoring and steering the Group's credit risks. In general, the Group is willing to accept higher LTV's, the better the creditor's creditworthiness is. Nevertheless, restrictions of LTV apply e.g. for countries with negative economic outlook or expected declines of real estate values.

As of December 31, 2024, 65% of the Group's exposure related to the mortgage lending portfolio had an LTV ratio below or equal to 50% compared to 65% as of December 31, 2023.

Focus areas in 2024

As previously mentioned in the Key risk themes section, Deutsche Bank has identified commercial real estate, the automotive industry and climate risk as focus areas of the Group in 2024.

Commercial Real Estate

Commercial Real Estate (CRE) markets continue to face headwinds due to the impacts of higher interest rates, reduced market liquidity combined with tightened lending conditions, and structural changes in the office sector. The market stress has been more pronounced in the U.S. where property price indices show a more substantial decline of CRE asset values from recent peaks compared to Europe and APAC. Especially, within the office segment, the market weakness is most evident in the U.S., reflected in subdued leasing activity and higher vacancy rates compared to Europe. Recent market data indicate stabilization in some markets. For example, a key CRE price index curve in the U.S. has flattened over the past year, indicating property market values in the U.S. have bottomed out on a broad average while some value decline can still be observed in weak office submarkets. In Europe, signs of stabilization are emerging particularly in residential, logistics and hospitality property sectors.

In the current environment, the main risk for the portfolio is related to refinancing and extension of maturing loans which is negatively affected by the impact of higher interest rates on collateral values and debt service. CRE loans often have a significant portion of principal payable at maturity. Under current market conditions, borrowers may have difficulty obtaining a new loan to repay the maturing debt or to meet conditions that allow extension of loans. This risk is further amplified for loans in the office segment due to increased uncertainty about letting prospects for office properties. Deutsche Bank is closely monitoring the CRE portfolio for development of such risks.

The Group continues to proactively work with borrowers to address upcoming maturities to establish terms for loan amendments and extensions, which in many cases, are classified as forbearance triggering Stage 2 classification under IFRS 9 but are not always deemed modifications under IFRS (please see modification of financial assets and financial liabilities section). However, in certain cases, no agreement can be reached on loan extensions or loan amendments and the borrower's inability to restructure or refinance leads to a default. This has resulted in higher Stage 3 ECL's in 2023 and 2024. Overall, uncertainty remains with respect to future defaults and the timing of a full recovery in the CRE markets.

The CRE portfolio consists of lending arrangements originated across various parts of the bank and client segments. The CRE portfolio under the Group's CRE definition includes exposures reported under the Main Credit Exposure Categories by Industry Sectors for Real Estate Activities NACE and exposures reported under other NACE classifications including Financial and Insurance Activities.

Within the CRE portfolio, the Group differentiates between recourse and non-recourse financing. Recourse CRE financings typically have a lower inherent risk profile based on recourse to creditworthy entities or individuals, in addition to mortgage collateral. Recourse CRE exposures range from secured recourse lending for business or commercial properties to property companies, Wealth Management clients, as well as other private and corporate clients.

Non-recourse financings rely on sources of repayment that are typically limited to the cash flows generated by the financed property and the ability to refinance such loans may be constrained by the underlying property value and income stream generated by such property at the time of refinancing.

The entire CRE loan portfolio is subject to periodic stress testing under Deutsche Bank's Group Wide Stress Test Framework. In addition, Deutsche Bank uses bespoke portfolio stress testing for certain sub-segments of the CRE loan portfolio to obtain a more comprehensive view of potential downside risks. For the year ending December 31, 2024, the Group performed a bespoke portfolio stress test on a subset of the non-recourse financing portfolio deemed higher risk based on its heightened sensitivity to current CRE market stress factors, including higher interest rates, declining collateral values and elevated refinancing risk due to loan structures with a high proportion of their outstanding principal balance payable at maturity.

As of December 31, 2024, the non-recourse portfolio subject to bespoke portfolio stress testing, also referred to as the higher risk CRE portfolio or the stress-tested CRE portfolio, amounted to € 29.3 billion of the € 36.5 billion non-recourse CRE portfolio, excluding only sub-portfolios with less impacted risk drivers such as data centers and municipal social housing, which benefit from strong underlying demand fundamentals. The reduction in the non-recourse CRE portfolio and stress-tested CRE portfolio since December 31, 2023 was € 1.7 billion and € 1.9 billion, respectively, mainly driven by loan repayments and loan sales partially offset by new loan originations.

The following table provides an overview of the Group's Real Estate Activities and other industry sectors (NACE classification) contributing to Deutsche Bank's non-recourse and stress-tested CRE portfolio as of December 31, 2024, and December 31, 2023, respectively.

Overview of CRE portfolio

	Dec 31, 2024		Dec 31, 2023	
in € m.	Gross Carrying Amount[1]	Allowance for Credit Losses[2]	Gross Carrying Amount[1]	Allowance for Credit Losses[2]
Real Estate Activities[3]	49,859	664	49,267	460
thereof: non-recourse	23,979	547	25,073	382
thereof: stress-tested portfolio	20,361	527	21,331	364
Other industry sectors[3] non-recourse	12,484	248	13,119	225
thereof: stress-tested portfolio	8,944	126	9,879	114
Total non-recourse CRE portfolio	**36,463**	**795**	38,192	606
thereof: stress-tested portfolio	29,305	653	31,210	478

[1] Loans at amortized cost
[2] Allowance for credit losses do not include allowance for country risk
[3] Industry sector by NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) code

The following table shows the non-recourse CRE portfolio by IFRS 9 stages as well as provision for credit losses recorded as of December 31, 2024 and December 31, 2023.

Non-recourse CRE portfolio

	Dec 31, 2024	Dec 31, 2023
in € m.	Gross Carrying Amount[1]	Gross Carrying Amount[1]
Exposure by stages		
Stage 1	24,095	27,325
Stage 2	9,132	7,661
Stage 3	3,236	3,206
Total	**36,463**	38,192
	2024	2023
Provision for Credit Losses[2]	500	445

[1] Loans at amortized cost
[2] Provision for Credit Losses do not include country risk provisions

The year on year increase in Stage 2 and Stage 3 exposures is reflective of the deterioration in CRE markets leading to higher number of loans added to the watchlist and forbearance measures as well as increasing defaults.

The following table shows the stress-tested CRE portfolio by IFRS 9 stages, region, property type and average weighted loan to value (LTV) as well as provision for credit losses recorded for the year ended December 31, 2024, and December 31, 2023, respectively.

Stress-tested CRE portfolio

	Dec 31, 2024	Dec 31, 2023
in € m.	Gross Carrying Amount[1]	Gross Carrying Amount[1]
Exposure by stages		
Stage 1	18,756	21,568
Stage 2	7,713	6,889
Stage 3	2,836	2,753
Total	**29,305**	31,210
thereof:		
North America	54%	56%
Western Europe (including Germany)	39%[2]	36%
Asia/Pacific	7%	7%
thereof: offices	42%	42%
North America	24%	23%
Western Europe (including Germany)	17%[3]	17%
Asia/Pacific	2%	2%
thereof: residential	12%	14%
thereof: hospitality	10%	10%
thereof: retail	10%	9%
Weighted average LTV, in %		
Investment Bank	66%	66%
Corporate Bank	56%	53%
Other Business	71%	68%
	2024	2023
Provision for Credit Losses[4]	492	388
thereof: North America	400	298

[1] Loans at amortized cost
[2] Germany accounts for ca 8 % of the total stress-tested CRE portfolio
[3] Office loans in Germany account for 10 % of total office loans in the stress-tested CRE portfolio
[4] Provision for Credit Losses do not include country risk provisions

The average LTV in the U.S. office loan segment was 81 % as of December 31, 2024, unchanged versus December 31, 2023. LTV calculations are based on latest externally appraised values which are additionally subject to regular interim internal adjustments. While the Group is updating CRE collateral values where applicable, such values and their underlying assumptions are subject to a higher degree of fluctuation and uncertainty in the current environment of heightened market volatility and reduced market liquidity. A continuation of the current stressed market conditions could have a further adverse impact on commercial real estate property values and LTV ratios.

Stage classification and provisioning levels are primarily based on the Group's assessment of a borrower's ability to generate recurring cash flows, its ability to obtain refinancing at the loan's maturity, and an assessment of the financed property's collateral value. Deutsche Bank actively monitors these factors for potential signs of deterioration to ensure timely adjustment of the borrower's loan classifications. When a loan is deemed to be impaired, the Group calculates required credit loss provisions using multiple potential scenarios for loan resolution, weighted by their expected probabilities and taking into account information available at that point. Such assessments are inherently subjective with respect to scenario weightings and subject to various assumptions, including future cash flows generated by a property and potential property liquidation proceeds. These assumptions are subject to uncertainties which are exacerbated in the current volatile market environment such that deviating developments to initial assumptions could have a material future impact on calculated provisions. Additional uncertainty exists within the office sector due to the uncertain long-term impact of remote working arrangements on demand for office space. The Group remains highly selective around new business, focusing on more resilient property types such as industrial or logistics.

While central banks have started to cut short-term interest rates, the Group expects current CRE market conditions to continue, in the near-term particularly in the office sector which could result in further deterioration of asset quality and elevated credit loss provisions, which is reflected in the communicated guidance for credit loss provisions for 2025.

Since the onset of the CRE market deterioration, the Group aims to assess the downside risk of additional credit losses in its higher risk non-recourse portfolio through a temporary bespoke stress testing focused on examining property values movements as basis of to identify potential losses on a portfolio basis. Stressed values are derived by applying an observed peak-to-trough market index decline (a commercial property value market index) to the appraised values plus an additional haircut, differentiated by property type and region. Implying a liquidation scenario, the stress analysis assumes a loss to occur on a loan when the stressed property value is less than the outstanding loan balance, i.e., the stress LTV beyond 100 %.

Based on the stress test assumptions and utilizing the stress-tested CRE portfolio of € 29.3 billion as of December 31, 2024, as a starting point, stress could result, in a worst case scenario, in approximately € 1.2 billion of credit losses, over multiple years based on the respective maturity profile. The allowance recorded against the stress tested portfolio was € 0.7 billion as of December 31, 2024. In a normalized stress scenario, taking into account recently observed trends and information, including indications of stabilizing CRE markets, the bank would expect incremental provisions of € 0.5 billion over the aforementioned period.

The bespoke stress test has numerous limitations, including but not restricted to lack of differentiation based on individual asset performance, specific location or asset desirability, all of which could have a material impact on potential stress losses. Furthermore, calculated stress losses are sensitive to potential further deterioration of peak-to-trough index values and assumptions about incremental haircuts and incremental stress loss can therefore change in future. Changes in underlying assumptions could lead to a wider range of stress results and hence the Group's bespoke stress approach should be viewed as one of multiple possible scenarios. While the stress test aims to assess potential losses in an adverse scenario, Deutsche Bank believes that based on currently available information, the ECL estimate related to the Group's CRE portfolio is within a reasonable range and thus represents the bank's best estimate, considering the advanced stage of the current down cycle which is pointing towards stabilization as real estate values have adjusted to the shocks from higher interest rates and remote working trends

Automotives

The automotive industry environment poses a growing risk to Deutsche Bank's Automotive and Supplier portfolio which is monitored closely given the challenging economic environment in Europe, Electric Vehicle (EV) transition and competition from China.

The industry outlook from automotives remains subdued. Although car registrations have stabilized during 2024, the trend remains negative in key markets Germany, France, and Italy, while the U.S. and China have shown solid volume growth in 2024. The outlook however remains challenging especially for EU domiciled companies amid risks from Automotive Manufacturers facing potential EU fines as EV sales are well below mandated targets, potential U.S. import tariffs affecting sales in the key market U.S, competition from China and persistent excess capacities around the globe.

The difficult industry environment has had limited impact on Deutsche Bank's automotive and supplier portfolio thus far with only moderate downward rating migrations observed across overall portfolio with 68 % of clients rated as investment grade, a 6 % point decrease year on year.

The Group feels comfortable with the portfolio size and composition, where the broader automotive sector represents 1.5 % of Deutsche Bank's loans at amortized cost, with the core portfolio focused on strong quality Original Equipment Manufacturers (OEMs) and larger suppliers. Higher risk portfolios, including smaller suppliers, are closely tracked and tightly managed. Additionally, there have been limited loan loss allowance increases across counterparties domiciled in Germany where most of the allowance relates to historical stage 3 cases. Exposures in Automotives have been pro-actively screened over the past 18 months with higher risk clients added to watchlists. The bank believes the current macroeconomic and sector-specific challenges are thus adequately reflected in ratings, staging and credit loss allowances.

The information below is based on an internal industry risk classification, aligned to the industry of the counterparty which is not fully congruent with the NACE applied elsewhere in this report, e.g. in the Asset Quality section.

Group Automotive Loans Portfolio

	Dec 31, 2024		Dec 31, 2023	
in €	Gross Carrying Amount	Allowance for Credit Losses	Gross Carrying Amount	Allowance for Credit Losses
Exposure / allowances by stages				
Stage 1	5,402	5	5,768	4
Stage 2	1,374	9	984	10
Stage 3	291	173	439	124
Total	**7,068**	**188**	7,191	139
thereof: Germany[1]	2,421	133	2,774	119

[1] Counterparty country of domicile

Climate Risk

Background and definitions

Climate transition and physical risks present growing risks to the bank's sectoral and regional portfolios.

Transition risks, defined as the risks arising from the policy, technology and behavioural changes needed to decarbonize the global economy, are expected to lead to a progressive shift away from fossil fuel-based technologies in favour of renewable energy sources. This will generate increased risks for companies with carbon intensive business models who are unable to execute on credible transition plans. Deutsche Bank is exposed to transition risks via its lending to, and other business activities with, carbon intensive clients and physical assets.

Physical risks, defined as the potential for physical damage and associated financial and non-financial losses due to rising temperatures, are increasing in frequency and intensity. Deutsche Bank is exposed to physical risks via its lending to, and other business activities with, clients and physical assets in regions which are vulnerable to acute events (e.g. wildfires, hurricanes) and chronic events (e.g. rising sea levels).

Risk identification, assessment and management

Managing climate transition and physical risks is a key component of the bank's risk management and wider sustainability strategy. Climate risks are embedded into the bank's risk frameworks and appetite, prioritizing clients and portfolios with the highest vulnerability based on a broad range of bespoke climate risk identification and classification approaches, including risk concentrations. All economic sectors are included in the analysis and the carbon-intensive sectors are subject to particular focus.

A comprehensive Climate materiality assessment is performed on an annual basis which assesses potential impacts across a range of scenarios and timeframes. The assessment utilizes a range of quantitative estimation approaches including emissions and emission intensity estimates, physical risk loss estimates across a range of different temperature scenarios and client transition and physical risk scorecards. The materiality assessment is based on internal ratings migration for corporate lending exposures and the impact on collateral value for real estate exposures The quantitative assessment is supplemented by qualitative views from internal subject matter experts. The bank also conducts annual stress testing of climate and physical risks across a range of scenarios and timeframes.

The results of these assessments are utilized to quantify potential downside risks and to identify clients in higher risk portfolios which are subject to enhanced due diligence as part of the bank's credit approval process. Risk assessments are integrated into the internal credit rating process and are considered as potential triggers for inclusion in the Watchlist. Dedicated requirements for insurance arrangements are in place for real estate lending. To manage climate transition risks, net zero targets have been established for key carbon intensive sectors with dedicated governance in place to review transactions with a significant impact on target metrics. A detailed presentation and discussion of the bank's net zero targets is provided in the Initial Transition Plan published in October 2023.

Forward-looking impact analysis

Based on the 2024 materiality assessment and climate stress test results the Group concludes that potential credit risk impacts are well-contained in both the short (1-2yr) and medium term (3-5yr) under current policy assumptions, and also in a scenario where all stated pledges by governments are enforced. The former scenario is considered most likely to occur in the short-to-medium term, that latter scenario is considered less likely to materialize in the current geopolitical environment.

The 2024 materiality assessment concludes that long-term risks are potentially material across all scenarios but with a high degree of uncertainty over the results reflecting the very long-time frame, up to 25 years, and based on several conservative assumptions including static balance sheet.

Risks to the portfolio would be significantly higher in a disorderly net zero scenario where following a prolonged period of inaction governments introduced punitive climate taxes and other policies with a very short implementation period. Deutsche Bank considers this scenario to be extremely unlikely to materialize in the short to medium term and thus the risk is reflected in our Economic Capital calculation rather than ECL.

Both the materiality assessment and bespoke climate stress test have several limitations including but not limited to high levels of uncertainty on policy developments over the medium-to-long term, difficulty with precisely forecasting the location and severity of physical risk events and assumptions around the adaptive capabilities of our clients. Utilization of multiple scenarios is designed to mitigate these uncertainties.

Based on these estimates Deutsche Bank believes that ECL estimates for higher transition and physical risk exposures are within reasonable ranges and require no additional corrective measure.

A sensitivity analysis has been undertaken as part of the climate stress test that is based on reasonable ranges of potential variation for carbon prices and energy prices. The stressed ECL impacts at a one-year horizon were found to be from a single digit number for a Current Policies scenario to a low 2-digit figure for a Delayed Transition scenario. These estimations are aligned with the outputs of the materiality assessment.

Conclusion

To ensure that Deutsche Bank's expected credit losses (ECL) model was taking into account the uncertainties in the macroeconomic environment throughout 2024, the Group reviewed emerging risks to assess its potential downside and to manage the bank's credit strategy and risk appetite on an ongoing basis. Overall, Deutsche Bank believes the actions taken as a result of these reviews were designated to ensure the bank was adequately provisioned for its expected credit losses as of December 31, 2024.

Asset Quality

This section describes the quality of debt instruments subject to impairment, which under IFRS 9 consist of debt instruments measured at amortized cost, financial instruments at fair value through other comprehensive income (FVOCI) as well as off balance sheet lending commitments such as loan commitments and financial guarantees (hereafter collectively referred to as "Financial Assets").

Overview of financial assets subject to impairment

The following tables provide an overview of the exposure amount and allowance for credit losses by financial asset class broken down into stages as per IFRS 9 requirements.

Overview of financial assets subject to impairment

					Dec 31, 2024					Dec 31, 2023
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Amortized cost[1]										
Gross carrying amount	681,147	63,836	15,214	609	760,807	692,091	55,704	12,799	806	761,400
Allowance for credit losses[2]	438	736	4,412	213	5,799	447	680	3,960	198	5,285
of which Loans										
Gross carrying amount	417,456	56,540	14,974	609	489,579	418,311	52,834	12,576	806	484,527
Allowance for credit losses[2]	411	718	4,326	213	5,668	424	673	3,874	198	5,170
Fair value through OCI										
Fair value	36,828	5,176	86	0	42,090	34,424	1,076	46	0	35,546
Allowance for credit losses	12	16	10	0	38	13	13	22	0	48
Off-balance sheet										
Notional amount	313,625	25,983	2,225	7	341,840	292,747	23,778	2,282	8	318,814
Allowance for credit losses[3]	106	82	173	0	361	117	88	187	0	393

[1] Financial assets at amortized cost consist of: loans at amortized cost, cash and central bank balances, Interbank balances (w/o central banks), central bank funds sold and securities purchased under resale agreements, securities borrowed and certain subcategories of other assets
[2] Allowance for credit losses do not include allowance for country risk amounting to € 14 million as of December 31, 2024 and € 4 million as of December 31, 2023
[3] Allowance for credit losses do not include allowance for country risk amounting to € 2 million as of December 31, 2024 and € 9 million as of December 31, 2023

Financial assets at amortized cost

The following tables provide an overview of development of financial assets at amortized cost and related allowance for credit losses in each of the relevant reporting periods broken down into stages as per IFRS 9 requirements.

Development of exposures in the current reporting period

					Dec 31, 2024
					Gross carrying amount
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	692,091	55,704	12,799	806	761,400
Movements in financial assets including new business and credit extensions	73,483	934	2,151	(33)	76,536
Transfers due to changes in creditworthiness	(11,473)	9,079	2,394	0	0
Changes due to modifications that did not result in derecognition	(0)	9	(55)	0	(46)
Changes in models	-	-	-	-	-
Financial assets that have been derecognized during the period	(86,710)	(2,906)	(2,598)	(180)	(92,394)
Recovery of written off amounts	0	0	157	0	157
Foreign exchange and other changes	13,756	1,016	367	16	15,154
Balance, end of reporting period	681,147	63,836	15,214	609	760,807

Financial assets at amortized cost subject to impairment slightly decreased by € 1 billion in 2024, driven by stage 1:
- Stage 1 exposures decreased by € 11 billion or 2 %, primarily due a reduction in cash and central bank balances, partly offset by the increase in securities purchased under resale agreements.
- Stage 2 exposures went up by € 8 billion or 15 % mainly due to a large single client in Corporate & Other and an increase in Private Bank mainly driven by residual temporary impacts following the Postbank integration.
- Stage 3 exposures increased by € 2 billion or 16 % in 2024, mainly driven by new defaults in Private Bank and Corporate & Other. The latter were related to the CRE portfolio.

Development of exposures in the previous reporting period

					Dec 31, 2023
					Gross carrying amount
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	729,021	45,335	11,379	1,041	786,776
Movements in financial assets including new business and credit extensions	15,413	10,074	2,498	99	28,084
Transfers due to changes in creditworthiness	(4,513)	3,111	1,402	0	0
Changes due to modifications that did not result in derecognition	0	8	(40)	0	(32)
Changes in models	0	0	0	0	0
Financial assets that have been derecognized during the period	(41,331)	(2,182)	(2,397)	(315)	(46,226)
Recovery of written off amounts	0	0	93	0	93
Foreign exchange and other changes	(6,499)	(641)	(136)	(18)	(7,295)
Balance, end of reporting period	692,091	55,704	12,799	806	761,400

Financial assets at amortized cost subject to impairment decreased by € 25 billion or 3 % in 2023, largely driven by Stage 1:

- Stage 1 exposures declined by € 37 billion or 5 %, primarily due to a reduction in cash and central bank balances and loans at amortized cost.
- Stage 2 exposures increased by € 10 billion or 23 % largely driven by loans at amortized cost.
- Stage 3 exposures went up by € 1 billion or 10 % in 2023, mainly driven by new defaults of single large clients in Private Bank as well as within the CRE portfolio in Investment Bank.

Development of allowance for credit losses in the current reporting period

					Dec 31, 2024
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI[4]	Total
Balance, beginning of year	447	680	3,960	198	5,285
Movements in financial assets including new business and credit extensions	(150)	194	1,814	3	1,861
Transfers due to changes in creditworthiness	128	(128)	0	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	(2)	(7)	0	0	(9)
Financial assets that have been derecognized during the period[3]	0	0	(1,229)	0	(1,229)
Recovery of written off amounts	0	0	157	0	157
Foreign exchange and other changes	15	(3)	(290)	11	(267)
Balance, end of reporting period	438	736	4,412	213	5,799
Provision for Credit Losses excluding country risk[1]	(24)	59	1,814	3	1,852

[1] Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk
[2] Allowance for credit losses does not include allowance for country risk amounting to € 14 million as of December 31, 2024
[3] This position includes charge offs of allowance for credit losses
[4] The total amount of undiscounted expected credit losses at initial recognition on financial assets that are purchased or originated credit-impaired initially recognized during the reporting period was € 0 million in 2024 and € 0 million in 2023

Allowance for credit losses for financial assets at amortized cost subject to impairment went up by € 513 million or 10 % in 2024, driven by stage 3:

- Stage 1 allowances decreased by € 9 million or 2 % mainly driven by Private Bank due to the exposure reduction and almost offset by the increases in Corporate Bank and Investment Bank.
- Stage 2 allowances increased by € 56 million or 8 % largely due to Private Bank and Corporate Bank.
- Stage 3 allowances went up by € 466 million or 11 %, driven by additional charges in the CRE portfolio and in Corporate Bank as well as new defaults in Private Bank. The latter were offset to a large extent by non-performing loans sales.

The Group’s Stage 3 coverage ratio (defined as allowance for credit losses in Stage 3 (excluding POCI) as a percentage of financial assets at amortized cost in Stage 3 (excluding POCI)) amounted to 29 % in the current fiscal year, compared to 31 % in the prior year.

Due to model recalibrations as well as larger amounts of new defaults, net outflows from stage 1 due to changes in creditworthiness increased in 2024 on a year-over-year basis. Net inflows in stage 2 due to changes in creditworthiness increased in 2024, which was mainly due to model recalibrations and stage 2 reclassifications in the CRE portfolio. In 2024, net inflows in stage 3 (excluding POCI) increased compared to 2023. The increase in transfers to stage 3 due to creditworthiness in 2024 resulted from new defaults in Private Bank and Corporate & Other, as mentioned above.

Development of allowance for credit losses in the previous reporting period

					Dec 31, 2023
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI[4]	Total
Balance, beginning of year	**533**	**626**	**3,656**	**180**	**4,995**
Movements in financial assets including new business and credit extensions	(195)	294	1,647	32	1,778
Transfers due to changes in creditworthiness	170	(150)	(20)	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	(57)	(53)	0	0	(110)
Financial assets that have been derecognized during the period[3]	0	0	(1,145)	(52)	(1,197)
Recovery of written off amounts	0	0	93	0	93
Foreign exchange and other changes	(3)	(38)	(271)	38	(273)
Balance, end of reporting period	**447**	**680**	**3,960**	**198**	**5,285**
Provision for Credit Losses excluding country risk[1]	(83)	92	1,627	32	1,668

[1] Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk

[2] Allowance for credit losses does not include allowance for country risk amounting to € 4 million as of December 31, 2023

[3] This position includes charge offs of allowance for credit losses

[4] The total amount of undiscounted expected credit losses at initial recognition on financial assets that are purchased or originated credit-impaired initially recognized during the reporting period was € 0 million in 2023 and € 46 million in 2022

Allowance for credit losses for financial assets at amortized cost subject to impairment went up by € 291 million or 6 % in 2023, driven by stage 3:

- Stage 1 allowances decreased by € 86 million or 16 % driven by non-recurring positive ECL model changes and an improved macroeconomic outlook.
- Stage 2 allowances increased by € 54 million or 9 % due to the aforementioned overlays mainly related to envisaged ECL model changes (Forward Looking Information on LGDs), which led to an increase of Allowance for Credit Losses.
- Stage 3 allowances decreased by € 323 million or 8 %, mainly driven by new provisions and the release of the existing overlay related to parameter recalibrations required due to the new definition of default in Private Bank (which at first application led to a decrease of Allowance for Credit Losses), as mentioned in the Annual Report 2023.

The Group’s stage 3 coverage ratio (defined as allowance for credit losses in stage 3 (excluding POCI) as a percentage of financial assets at amortized cost in stage 3 (excluding POCI)) amounted to 31 % in the previous fiscal year.

Due to non-recurring positive ECL model changes, net transfers into stage 1 resulting from changes in creditworthiness increased in 2023 on a year-over-year basis. Net outflows from stage 2 due to changes in creditworthiness increased in 2023, which was mainly as a result of the improved macroeconomic environment. In 2023, net outflows from stage 3 (excluding POCI) increased compared to 2022. The immaterial amount of net outflows from stage 3 due to creditworthiness in 2023 resulted from a release of an overlay, as mentioned in the Annual Report 2023.

Financial assets at amortized cost by business division

										Dec 31, 2024
					Gross Carrying Amount[1]					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Corporate Bank	115,541	12,770	3,015	0	131,326	86	121	1,006	0	1,212
Investment Bank	179,230	12,380	3,462	609	195,682	138	112	714	213	1,176
Private Bank	224,098	30,564	7,864	0	262,526	205	489	2,583	0	3,277
Asset Management	1,213	11	0	0	1,224	(0)	0	0	0	0
Corporate & Other	161,066	8,111	873	0	170,050	9	14	110	0	133
Total	681,147	63,836	15,214	609	760,807	438	736	4,412	213	5,799

[1] Gross Carrying Amount numbers per business division are reported after a reallocation of cash balances from business divisions to Corporate & Other.

										Dec 31, 2023
					Gross Carrying Amount[1]					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Corporate Bank	105,812	13,706	2,812	0	122,329	67	110	876	0	1,053
Investment Bank	150,562	13,309	3,127	806	167,804	119	108	536	198	962
Private Bank	233,744	26,815	6,400	0	266,960	249	445	2,497	0	3,191
Asset Management	1,224	8	0	0	1,232	(0)	0	0	0	(0)
Corporate & Other	200,749	1,866	460	0	203,075	11	16	51	0	79
Total	692,091	55,704	12,799	806	761,400	447	680	3,960	198	5,285

[1] Gross Carrying Amount numbers per business division are reported after a reallocation of cash balances from business divisions to Corporate & Other

Financial assets at amortized cost by industry sector

The below table provides an overview of the Group’s asset quality by industry and is based on the NACE code of the counterparty. NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) is a standard European industry classification system.

										Dec 31, 2024
					Gross Carrying Amount					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Agriculture, forestry and fishing	360	55	12	0	427	0	1	5	0	6
Mining and quarrying	1,687	234	4	0	1,926	3	5	3	0	11
Manufacturing	21,327	4,382	1,303	32	27,044	23	39	534	2	597
Electricity, gas, steam and air conditioning supply	3,898	407	210	0	4,515	6	8	77	0	92
Water supply, sewerage, waste management and remediation activities	527	63	5	0	595	1	1	3	0	4
Construction	3,643	713	207	45	4,609	5	8	81	13	106
Wholesale and retail trade, repair of motor vehicles and motorcycles	18,487	2,453	709	23	21,672	16	26	334	3	378
Transport and storage	4,145	829	259	24	5,257	4	4	45	(0)	53
Accommodation and food service activities	2,224	386	63	0	2,673	3	5	25	(0)	32
Information and communication	8,220	977	212	0	9,409	11	14	55	0	79
Financial and insurance activities	344,869	15,962	2,213	133	363,176	130	110	580	50	870
Real estate activities	35,812	10,860	3,604	173	50,448	18	48	512	88	666
Professional, scientific and technical activities	5,279	861	223	1	6,364	4	10	89	1	104
Administrative and support service activities	7,864	1,265	117	24	9,269	8	6	39	8	61
Public administration and defense, compulsory social security	23,217	1,018	641	0	24,876	10	3	31	0	44
Education	251	38	7	0	295	0	0	2	0	3
Human health services and social work activities	3,695	453	115	0	4,264	4	10	15	0	29
Arts, entertainment and recreation	716	95	11	0	822	0	1	4	0	6
Other service activities	16,190	810	419	113	17,532	13	6	144	30	193
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	178,025	21,971	4,879	42	204,917	180	431	1,835	18	2,464
Activities of extraterritorial organizations and bodies	711	5	0	0	716	0	0	0	0	0
Total	681,147	63,836	15,214	609	760,807	438	736	4,412	213	5,799

										Dec 31, 2023
	Gross Carrying Amount					Allowance for Credit Losses				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Agriculture, forestry and fishing	288	77	20	0	384	0	1	4	(0)	6
Mining and quarrying	2,538	277	8	0	2,823	2	3	4	0	9
Manufacturing	23,474	4,061	1,445	44	29,024	27	48	456	2	533
Electricity, gas, steam and air conditioning supply	4,253	206	73	0	4,532	3	3	16	0	23
Water supply, sewerage, waste management and remediation activities	491	21	5	0	517	1	0	3	0	5
Construction	3,248	893	213	60	4,414	5	9	80	12	107
Wholesale and retail trade, repair of motor vehicles and motorcycles	17,237	3,407	698	25	21,366	16	31	351	3	402
Transport and storage	4,083	1,075	165	24	5,346	6	10	30	(0)	46
Accommodation and food service activities	1,471	320	76	3	1,869	2	3	26	(0)	31
Information and communication	7,398	814	89	0	8,302	10	11	28	0	49
Financial and insurance activities	342,352	12,189	1,691	351	356,583	96	90	491	92	769
Real estate activities	37,907	8,954	2,630	185	49,675	19	49	321	75	464
Professional, scientific and technical activities	5,887	918	179	1	6,985	6	12	75	1	94
Administrative and support service activities	7,980	1,107	351	24	9,463	7	11	114	9	141
Public administration and defense, compulsory social security	26,536	489	742	0	27,767	15	1	28	0	45
Education	226	46	11	0	283	0	1	2	0	3
Human health services and social work activities	3,986	482	34	0	4,503	5	7	14	0	25
Arts, entertainment and recreation	769	229	31	1	1,030	1	5	3	0	10
Other service activities	8,436	648	225	86	9,395	11	6	119	6	143
Activities of households as employers, undifferentiated goods- and services- producing activities of households for own use	193,318	19,492	4,113	3	216,927	212	379	1,792	(2)	2,381
Activities of extraterritorial organizations and bodies	213	0	0	0	213	0	0	0	0	0
Total	692,091	55,704	12,799	806	761,400	447	680	3,960	198	5,285

Financial assets at amortized cost by region

										Dec 31, 2024
	Gross Carrying Amount					Allowance for Credit Losses				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Germany	256,977	24,236	4,579	0	285,792	205	447	2,181	(2)	2,831
Western Europe (excluding Germany)	158,729	13,601	3,525	321	176,177	117	186	1,114	154	1,572
Eastern Europe	8,996	804	205	0	10,004	4	12	38	0	54
North America	178,548	15,549	4,888	62	199,047	51	70	619	11	752
Central and South America	5,445	459	73	0	5,978	4	2	19	0	25
Asia/Pacific	61,195	8,423	979	114	70,711	41	15	281	(3)	333
Africa	4,159	530	604	0	5,293	10	3	33	0	46
Other	7,098	234	361	113	7,806	6	2	127	52	186
Total	681,147	63,836	15,214	609	760,807	438	736	4,412	213	5,799

										Dec 31, 2023
					Gross Carrying Amount					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Germany	297,495	21,499	3,653	0	322,648	214	390	1,936	(4)	2,537
Western Europe (excluding Germany)	134,375	15,228	3,410	560	153,573	116	179	1,076	194	1,564
Eastern Europe	8,768	1,058	396	0	10,221	4	11	47	0	62
North America	175,011	12,133	3,442	89	190,674	51	74	445	12	582
Central and South America	3,936	261	80	5	4,282	2	1	16	0	19
Asia/Pacific	52,290	5,031	909	92	58,322	28	23	317	1	370
Africa	4,099	187	717	0	5,003	8	1	30	0	39
Other	16,116	307	192	62	16,677	23	0	94	(5)	113
Total	692,091	55,704	12,799	806	761,400	447	680	3,960	198	5,285

Financial assets at amortized cost by rating class

										Dec 31, 2024
					Gross Carrying Amount					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
iAAA–iAA	226,138	7,186	0	0	233,324	2	0	0	0	2
iA	110,279	2,061	0	10	112,351	10	1	0	0	11
iBBB	179,697	7,150	0	0	186,847	54	12	0	0	66
iBB	140,755	20,146	0	0	160,901	246	111	0	0	358
iB	23,090	21,692	0	0	44,782	115	351	0	0	466
iCCC and below	1,188	5,601	15,214	599	22,603	11	260	4,412	213	4,896
Total	681,147	63,836	15,214	609	760,807	438	736	4,412	213	5,799

										Dec 31, 2023
					Gross Carrying Amount					Allowance for Credit Losses
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
iAAA–iAA	244,750	518	0	0	245,268	2	0	0	0	3
iA	101,538	2,359	0	9	103,907	8	1	0	0	9
iBBB	186,168	8,446	0	0	194,614	66	16	0	0	82
iBB	128,493	18,153	0	0	146,646	173	78	0	0	251
iB	28,531	20,040	0	0	48,571	165	294	0	0	459
iCCC and below	2,611	6,188	12,799	797	22,395	32	290	3,960	198	4,481
Total	692,091	55,704	12,799	806	761,400	447	680	3,960	198	5,285

The Group's existing commitments to lend additional funds to debtors with Stage 3 financial assets at amortized cost amounted to € 710 million as of December 31, 2024, and € 816 million as of December 31, 2023.

Collateral held against financial assets at amortized cost in Stage 3

			Dec 31, 2024			Dec 31, 2023
in € m.	Gross Carrying Amount	Collateral	Guarantees	Gross Carrying Amount	Collateral	Guarantees
Financial Assets at Amortized Cost (Stage 3)[1]	**15,214**	**6,242**	**1,368**	12,799	4,451	1,435

[1] Stage 3 excluding POCI assets

In 2024, collateral and guarantees held against financial assets at amortized cost in Stage 3 increased by € 1.7 billion, or 29 % mainly driven by Private Bank.

Due to full collateralization the Group did not recognize an allowance for credit losses against financial assets at amortized cost in Stage 3 for € 1.6 billion in 2024 and € 408 million in 2023.

Modified assets at amortized cost

A financial asset is considered modified when its contractual cash flows are renegotiated or otherwise modified. Renegotiation or modification may or may not lead to derecognition of the old and recognition of the new financial instrument. This section covers modified financial assets that have not been derecognized.

Under IFRS 9, when the terms of a Financial Asset are renegotiated or modified and the modification does not result in derecognition, a gain or loss is recognized in the income statement as the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate (EIR). For modified financial assets the determination of whether the asset's credit risk has increased significantly reflects the comparison of:

- The remaining lifetime probability of default (PD) at the reporting date based on the modified terms; with
- The remaining lifetime PD estimated based on data at initial recognition and based on the original contractual terms.

The following table provides the overview of modified financial assets at amortized cost broken down into IFRS 9 stages.

Modified Assets at Amortized Cost

	Dec 31, 2024					Dec 31, 2023				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Amortized cost carrying amount prior to modification	0	726	132	0	858	0	1,072	220	0	1,292
Net modification gain/losses recognized	**0**	**9**	**(55)**	**0**	**(46)**	0	5	(40)	0	(35)

In 2024, the bank has observed the decrease of € 434 million in modified assets at amortized cost due to client related modifications, driven by Investment Bank and Private Bank.

In 2024, the Group has not observed any amounts of modified assets that have been upgraded to Stage 1. The bank has not observed any subsequent re-deterioration of those assets into Stages 2 and 3.

In 2023, the Group has not observed any amounts of modified assets that have been upgraded to Stage 1. The bank has not observed any subsequent re-deterioration of those assets into Stages 2 and 3.

Financial assets at fair value through other comprehensive income

The fair value of financial assets at fair value through other comprehensive income (FVOCI) subject to impairment under IFRS 9 was € 42 billion at December 31, 2024, compared to € 36 billion at December 31, 2023. Allowance for credit losses against these assets remained at very low levels (€ 38 million as of December 31, 2024 and € 48 million as of December 31, 2023). Due to immateriality no further breakdown is provided for financial assets at FVOCI.

Off-balance sheet lending commitments and guarantee business

The following tables provide an overview of the nominal amount and credit loss allowance for the Group's off-balance sheet financial asset class broken down into stages as per IFRS 9 requirements.

Development of nominal amount in the current reporting period

	Dec 31, 2024				
	Nominal Amount				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	292,747	23,778	2,282	8	318,814
Movements including new business	14,542	(662)	(25)	(0)	13,855
Transfers due to changes in creditworthiness	(2,108)	2,215	(107)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	8,444	652	76	(0)	9,171
Balance, end of reporting period	313,625	25,983	2,225	7	341,840
of which: Financial guarantees	61,279	11,752	436	0	73,467

Development of nominal amount in the previous reporting period

					Dec 31, 2023
					Nominal Amount
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	296,062	18,478	2,625	8	317,173
Movements including new business	4,062	2,510	(235)	0	6,337
Transfers due to changes in creditworthiness	(3,040)	3,094	(54)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	(4,337)	(304)	(54)	0	(4,696)
Balance, end of reporting period	292,747	23,778	2,282	8	318,814
of which: Financial guarantees	58,405	5,991	401	0	64,798

Development of allowance for credit losses in the current reporting period

					Dec 31, 2024
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	117	88	187	0	393
Movements including new business	(22)	3	(19)	0	(38)
Transfers due to changes in creditworthiness	10	(9)	(0)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	1	(1)	5	0	6
Balance, end of reporting period	106	82	173	0	361
of which: Financial guarantees	67	49	99	0	214
Provision for Credit Losses excluding country risk[1]	(13)	(6)	(20)	0	(38)

[1] The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models
[2] Allowance for credit losses does not include allowance for country risk amounting to € 2 million as of December 31, 2024

Development of allowance for credit losses in the previous reporting period

					Dec 31, 2023
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	144	97	310	0	551
Movements including new business	(39)	(3)	(118)	0	(160)
Transfers due to changes in creditworthiness	11	(4)	(7)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	1	(2)	3	0	2
Balance, end of reporting period	117	88	187	0	393
of which: Financial guarantees	84	37	113	0	233
Provision for Credit Losses excluding country risk[1]	(28)	(7)	(125)	0	(160)

[1] The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models
[2] Allowance for credit losses does not include allowance for country risk amounting to € 9 million as of December 31, 2023

Legal claims

Assets subject to enforcement activity consist of assets, which have been fully or partially written off and the Group still continues to pursue recovery of the asset. Such enforcement activity comprises for example cases where the bank continues to devote resources (e.g. our Legal Department/CRM workout unit) towards recovery, either via legal channels or third party recovery agents. Enforcement activity also applies to cases where the Bank maintains outstanding and unsettled legal claims. This is irrespective of whether amounts are expected to be recovered and the recovery timeframe. It may be common practice in certain jurisdictions for recovery cases to span several years.

Amounts outstanding on financial assets that were written off during the reporting period and are still subject to enforcement activity amounted to € 222 million and € 334 million in 2024 and 2023 respectively, mainly in Corporate Bank.

Renegotiated and forborne assets at amortized costs

For economic or legal reasons the bank might enter into a forbearance agreement with a borrower who faces or will face financial difficulties in order to ease the contractual obligation for a limited period of time. A case-by-case approach is applied for corporate clients considering each transaction and client-specific facts and circumstances. For consumer loans the bank offers forbearances for a limited period of time, in which the total or partial outstanding or future instalments are deferred to a later point of time. However, the amount not paid including accrued interest during this period must be re-compensated at a later point of time. Repayment options include distribution over residual tenor, a one-off payment or a tenor extension. Forbearances are restricted and depending on the economic situation of the client, the Group's risk management strategies and the local legislation. In case a forbearance agreement is entered into, an impairment measurement is conducted as described below, an impairment charge is taken if necessary and the loan is subsequently recorded as impaired.

In the Group's management and reporting of forborne assets at amortized costs, the bank follows the EBA definition for forbearances and non-performing loans (Implementing Technical Standards (ITS) on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013). Once the conditions mentioned in the ITS are met, the Group reports the loan as being forborne; removes the asset from the bank's forbearance reporting, once the discontinuance criteria in the ITS are met (i.e., the contract is considered as performing, a minimum two year probation period has passed, regular payments of more than an insignificant aggregate amount of principal or interest have been made during at least half of the probation period, and none of the exposures to the debtor is more than 30 days past-due at the end of the probation period).

Forborne financial assets at amortized cost

	Dec 31, 2024						Dec 31, 2023					
	Performing		Non-performing			Total forborne loans at amortized cost	Performing		Non-performing			Total forborne loans at amortized cost
in € m.	Stage 1	Stage 2	Stage 1	Stage 2	Stage 3		Stage 1	Stage 2	Stage 1	Stage 2	Stage 3	
German	174	2,248	0	4	1,056	3,481	426	2,356	0	7	812	3,600
Non-German	93	7,049	0	16	4,687	11,845	639	4,399	0	194	3,632	8,864
Total	**267**	**9,297**	**0**	**20**	**5,742**	**15,326**	1,065	6,755	0	201	4,444	12,464

Development of forborne financial assets at amortized cost

in € m.	Dec 31, 2024	Dec 31, 2023
Balance beginning of period	**12,464**	11,143
Classified as forborne during the year	8,572	4,007
Transferred to non-forborne during the year (including repayments)	(6,020)	(2,500)
Charge-offs	(211)	(80)
Exchange rate and other movements	521	(106)
Balance end of period	**15,326**	12,464

Forborne assets at amortized cost increased by € 2.9 billion, or 23% in 2024, largely driven by real estate exposures across various divisions.

Forborne assets at amortized cost increased by € 1.3 billion, or 12% in 2023. This was driven by an increase in Investment Bank.

Collateral Obtained

The Group obtains collateral on the balance sheet only in certain cases by either taking possession of collateral held as security or by calling upon other credit enhancements. Collateral obtained is made available for sale in an orderly fashion or through public auctions, with the proceeds used to repay or reduce outstanding indebtedness. Generally, the bank does not occupy obtained properties for its business use.

Collateral Obtained during the reporting period

in € m.	2024	2023
Commercial real estate	251	0
Residential real estate[1]	3	3
Other	0	11
Total collateral obtained during the reporting period	**254**	14

[1] Carrying amount of foreclosed residential real estate properties amounted to € 17 million as of December 31, 2024 and € 30 million as of December 31, 2023

The increase of € 240 million in collateral obtained during 2024 relates to a small number of foreclosed commercial real estate properties in the US.

The collateral obtained, as shown in the table above, excludes collateral recorded as a result of consolidating securitization trusts under IFRS 10. In 2024 and 2023, the Group obtained € 4 million of collateral related to these trusts.

Derivatives – Credit Valuation Adjustment

The bank establishes counterparty Credit Valuation Adjustment (CVA) for OTC derivative transactions to cover expected credit losses. The adjustment amount is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the credit risk, based on available market information, including CDS spreads.

Treatment of default situations under derivatives

Unlike standard loan assets, the bank generally has more options to manage the credit risk in its derivatives transactions when movement in the current replacement costs or the behavior of its counterparty indicate that there is the risk that upcoming payment obligations under the transactions might not be honored. In these situations, the bank is frequently able under the relevant derivatives agreements to obtain additional collateral or to terminate and close-out the derivative transactions at short notice.

The master agreements and associated collateralization agreements for OTC derivative transactions executed with its clients typically result in the majority of its credit exposure being secured by collateral. It also provides for a broad set of standard or bespoke termination rights, which allows the bank to respond swiftly to a counterparty’s default or to other circumstances which indicate a high probability of failure.

The banks contractual termination rights are supported by internal policies and procedures with defined roles and responsibilities which ensure that potential counterparty defaults are identified and addressed in a timely fashion. These procedures include necessary settlement and trading restrictions. When its decision to terminate derivative transactions results in a residual net obligation owed by the counterparty, the bank restructures the obligation into a non-derivative claim and manage it through its regular work-out process. As a consequence, for accounting purposes the bank typically does not show any nonperforming derivatives.

Wrong-way risk occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. In compliance with Article 291(2) and (4) CRR the bank has a monthly process to monitor several layers of wrong-way risk (specific wrong-way risk, general explicit wrong-way risk at country/industry/region levels and general implicit wrong-way risk, whereby relevant exposures arising from transactions subject to wrong-way risk are automatically selected and presented for comment to the responsible credit officer). A wrong-way risk report is then sent to Credit Risk senior management on a monthly basis. In addition, the bank utilized its established process for calibrating its own alpha factor (as defined in Article 284 (9) CRR) to estimate the overall wrong-way risk in its derivatives and securities financing transactions portfolio. The Private Bank Germany’s derivative counterparty risk is immaterial to the Group and collateral held is typically in the form of cash.

Credit Exposure from Derivatives

All exchange traded derivatives are cleared through central counterparties ("CCPs"), the rules and regulations of which provide for daily margining of all current and future credit risk positions emerging out of such transactions. To the extent possible, the bank also uses CCP services for OTC derivative transactions ("OTC clearing"); the bank thereby benefits from the credit risk mitigation achieved through the CCP's settlement system.

The Dodd-Frank Act provides for an extensive framework for the regulation of OTC derivatives, including mandatory clearing, platform trading and transaction reporting of certain OTC derivatives, as well as rules regarding registration, capital, margin, business conduct standards, recordkeeping and other requirements for swap dealers, security-based swap dealers, major swap participants and major security-based swap participants. The Dodd-Frank Act and related CFTC rules require OTC clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps. Margin requirements for non-cleared derivative transactions in the US started in September 2016. The European Regulation (EU) No 648/2012 on OTC Derivatives, Central Counterparties and Trade Repositories ("EMIR") introduced a number of risk mitigation techniques for non-centrally cleared OTC derivatives in 2013 and the reporting of OTC and exchange traded derivatives in 2014. Mandatory clearing of certain standardized OTC derivatives transactions in the EU began in June 2016, and margin requirements for un-cleared OTC derivative transactions in the EU started in February 2017. Deutsche Bank implemented the exchange of both initial and variation margin in the EU from February 2017 for the first category of counterparties subject to the EMIR margin for un-cleared derivatives requirements.

The CFTC has adopted rules implementing the most significant provisions of the Dodd-Frank Act. More recently, in September 2020, the CFTC issued a final rule on the cross-border application of U.S. swap rules, which builds on, and in some cases supersedes the CFTC's cross-border guidance from 2013 and related no-action relief letters. In October 2020, also pursuant to the Dodd-Frank Act, the CFTC finalized regulations to impose position limits on certain commodities and economically equivalent swaps, futures and options.

The SEC has also finalized rules regarding registration, trade reporting, capital, margin, risk mitigation techniques, business conduct standards, trade acknowledgement and verification, recordkeeping and financial reporting, and cross-border requirements for security-based swap dealers and major security-based swap participants. Compliance with these requirements was generally required as of November 2021.

Finally, U.S. prudential regulators (the Federal Reserve, the FDIC, the Office of the Comptroller of the Currency, the Farm Credit Administration and the Federal Housing Finance Agency) have adopted final rules establishing margin requirements for non-cleared swaps and security-based swaps that are applicable to swap dealers and security-based swap dealers that are subject to U.S. prudential regulations (such as Deutsche Bank) in lieu of the CFTC's and the SEC's margin rules. Deutsche Bank implemented the exchange of both initial and variation margin for uncleared derivatives in the U.S. from September 2016, for the first category of counterparties subject to the U.S. prudential regulators' margin requirements. Additional initial margin requirements for smaller counterparties have been phased in from September 2017 through September 2022, with the relevant compliance dates depending in each case on the transactional volume of the parties and their affiliates.

The following table shows a breakdown of notional amounts and gross market values for assets and liabilities of exchange traded and OTC derivative transactions on the basis of clearing channel.

Notional amounts of derivatives on basis of clearing channel and type of derivative

Dec 31, 2024

	Notional amount maturity distribution						
in € m.	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total	Positive market value	Negative market value	Net market value
Interest rate related:							
OTC	15,951,107	14,364,208	9,997,538	40,312,853	122,114	111,053	11,061
Bilateral (Amt)	2,396,075	2,537,847	1,557,885	6,491,807	98,528	88,114	10,414
CCP (Amt)	13,555,032	11,826,361	8,439,653	33,821,046	23,586	22,939	647
Exchange-traded	3,292,886	498,496	590	3,791,972	239	268	(29)
Total Interest rate related	19,243,992	14,862,704	9,998,128	44,104,825	122,353	111,321	11,032
Currency related:							
OTC	7,718,689	1,225,352	508,959	9,453,000	147,876	144,688	3,188
Bilateral (Amt)	7,496,403	1,209,689	508,809	9,214,900	144,648	141,847	2,800
CCP (Amt)	222,287	15,664	150	238,100	3,228	2,841	388
Exchange-traded	78,320	0	0	78,320	384	477	(93)
Total Currency related	7,797,010	1,225,352	508,959	9,531,321	148,260	145,165	3,095
Equity/index related:							
OTC	22,675	9,048	15,544	47,268	1,332	2,741	(1,409)
Bilateral (Amt)	22,675	9,048	15,544	47,268	1,332	2,741	(1,409)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	174,707	28,489	2,348	205,544	1,818	1,827	(9)
Total Equity/index related	197,382	37,537	17,892	252,812	3,150	4,568	(1,418)
Credit derivatives related							
OTC	278,974	896,712	73,668	1,249,354	15,609	14,322	1,288
Bilateral (Amt)	87,962	96,506	28,063	212,531	3,366	2,186	1,180
CCP (Amt)	191,012	800,206	45,605	1,036,823	12,243	12,136	107
Exchange-traded	0	0	0	0	0	0	0
Total Credit derivatives related	278,974	896,712	73,668	1,249,354	15,609	14,322	1,288
Commodity related:							
OTC	11,316	34,566	1,448	47,330	226	160	66
Bilateral (Amt)	11,316	34,566	1,448	47,330	226	160	66
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	34,816	2,645	0	37,461	168	169	(1)
Total Commodity related	46,132	37,211	1,448	84,791	394	329	65
Other:							
OTC	155,359	7,012	151	162,521	2,339	2,355	(16)
Bilateral (Amt)	155,313	7,012	151	162,476	2,336	2,313	23
CCP (Amt)	45	0	0	45	3	42	(39)
Exchange-traded	18,687	0	0	18,687	31	24	7
Total Other	174,045	7,012	151	181,208	2,370	2,379	(9)
Total OTC business	24,138,119	16,536,899	10,597,308	51,272,326	289,497	275,319	14,177
Total bilateral business	10,169,744	3,894,668	2,111,900	16,176,312	250,436	237,362	13,075
Total CCP business	13,968,376	12,642,231	8,485,408	35,096,014	39,060	37,958	1,103
Total exchange-traded business	3,599,416	529,630	2,938	4,131,984	2,640	2,766	(126)
Total	27,737,535	17,066,528	10,600,247	55,404,310	292,137	278,085	14,052
Positive market values after netting and cash collateral received	–	–	–	–	27,392	–	–

							Dec 31, 2023
	Notional amount maturity distribution						
in € m.	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total	Positive market value	Negative market value	Net market value
Interest rate related:							
OTC	17,224,862	13,754,903	9,568,113	40,547,878	124,837	112,997	11,840
Bilateral (Amt)	2,037,922	2,251,346	1,446,299	5,735,567	103,140	92,035	11,105
CCP (Amt)	15,186,940	11,503,557	8,121,813	34,812,310	21,696	20,961	735
Exchange-traded	1,916,294	403,196	47	2,319,537	418	493	(75)
Total Interest rate related	19,141,156	14,158,099	9,568,160	42,867,415	125,255	113,490	11,764
Currency related:							
OTC	6,609,578	1,055,879	427,832	8,093,289	108,652	105,818	2,834
Bilateral (Amt)	6,443,644	1,046,148	427,719	7,917,512	107,415	104,614	2,801
CCP (Amt)	165,933	9,730	113	175,777	1,237	1,204	33
Exchange-traded	11,265	0	0	11,265	1	17	(16)
Total Currency related	6,620,842	1,055,879	427,832	8,104,553	108,653	105,835	2,818
Equity/index related:							
OTC	17,014	7,937	647	25,599	1,209	2,574	(1,365)
Bilateral (Amt)	17,014	7,937	647	25,599	1,209	2,574	(1,365)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	164,955	25,648	1,523	192,126	2,391	2,103	288
Total Equity/index related	181,970	33,586	2,170	217,726	3,600	4,677	(1,077)
Credit derivatives related							
OTC	200,396	855,230	71,584	1,127,210	13,895	13,379	517
Bilateral (Amt)	72,835	94,804	33,716	201,355	3,142	2,715	427
CCP (Amt)	127,561	760,426	37,868	925,854	10,754	10,664	90
Exchange-traded	0	0	0	0	0	0	0
Total Credit derivatives related	200,396	855,230	71,584	1,127,210	13,895	13,379	517
Commodity related:							
OTC	7,150	31,576	2,037	40,763	203	140	63
Bilateral (Amt)	7,150	31,576	2,037	40,763	203	139	64
CCP (Amt)	0	0	0	0	0	1	(1)
Exchange-traded	25,369	1,347	0	26,716	141	139	2
Total Commodity related	32,519	32,923	2,037	67,479	344	279	65
Other:							
OTC	57,766	3,924	102	61,791	971	819	152
Bilateral (Amt)	57,750	3,924	102	61,776	956	819	137
CCP (Amt)	15	0	0	15	15	0	15
Exchange-traded	11,008	21	0	11,029	27	33	(6)
Total Other	68,774	3,945	102	72,820	998	852	146
Total OTC business	24,116,765	15,709,449	10,070,316	49,896,530	249,766	235,726	14,041
Total bilateral business	8,636,315	3,435,736	1,910,521	13,982,573	216,064	202,895	13,169
Total CCP business	15,480,450	12,273,713	8,159,794	35,913,957	33,702	32,830	872
Total exchange-traded business	2,128,891	430,212	1,570	2,560,673	2,979	2,786	193
Total	26,245,656	16,139,661	10,071,885	52,457,203	252,745	238,511	14,234
Positive market values after netting and cash collateral received	–	–	–	–	23,312	–	–

Equity Exposure

The table below presents the carrying values of equity investments split by trading and non-trading for the respective reporting dates. Deutsche Bank manages its respective positions within market risk and other appropriate risk frameworks.

Composition of Equity Exposure

in € m.	Dec 31, 2024	Dec 31, 2023
Trading Equities	2,753	1,984
Non-trading Equities[1]	2,052	2,008
Total Equity Exposure	**4,806**	3,992

[1] Includes equity investment funds amounting to € 70 million as of December 31, 2024 and € 113 million as of December 31, 2023

As of December 31, 2024, the group's trading equities exposure in Investment Bank was € 2.4 billion compared to € 1.7 billion on December 31, 2023, The movement is mainly driven by new deals in FIC financing business.

Trading Market Risk Exposures

Value-at-Risk Metrics of Trading Units of Deutsche Bank Group

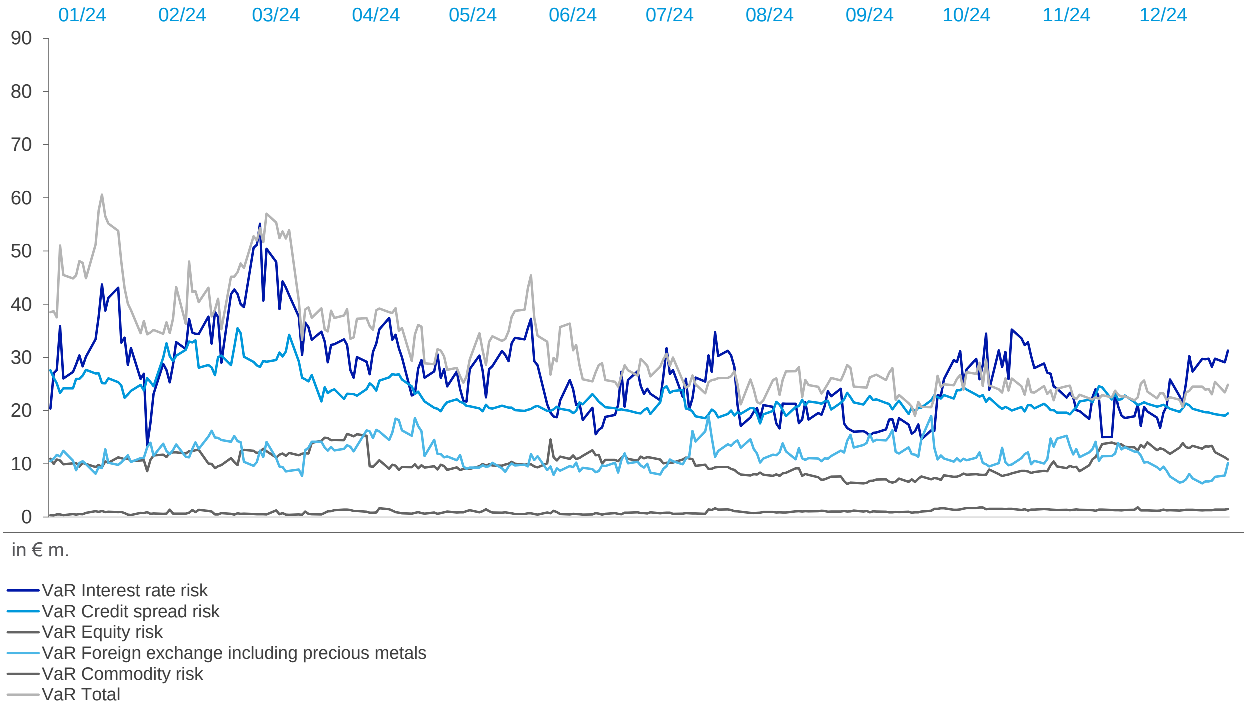
The tables and graph below present the Historic Simulation value-at-risk metrics calculated with a 99% confidence level and a one-day holding period for the Group's trading units.

Value-at-Risk of Trading Units by Risk Type[1]

	Total		Diversification effect		Interest rate risk		Credit spread risk		Equity price risk		Foreign exchange risk[2]		Commodity price risk	
in € m.	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Average	31.4	40.7	(41.2)	(46.3)	26.9	27.5	22.9	38.6	10.2	7.8	11.6	12.1	1.0	0.9
Maximum	60.6	74.3	(27.2)	(21.2)	55.1	40.1	35.5	68.4	15.6	14.9	19.0	17.4	1.8	2.8
Minimum	19.0	23.2	(56.2)	(64.9)	13.4	15.7	17.6	21.9	6.2	4.5	6.3	8.2	0.3	0.2
Period-end	24.9	39.0	(48.3)	(31.9)	31.3	20.3	19.5	28.4	10.8	11.0	10.1	10.9	1.5	0.3

[1] Figures for 2024 as of December 31, 2024. Figures for 2023 as of December 31, 2023
[2] Includes value-at-risk from gold and other precious metal positions

Development of historic simulation value-at-risk by risk types in 2024



The average 1d trading value-at-risk over 2024 was € 31 million, which decreased by € 9.2 million (-23%) compared to the average for 2023; this was primarily driven by roll-off of high market volatility period of H1 2023 from the historical VaR observation period and reduction in risk levels under Fixed Income and Currencies Trading business.

For regulatory reporting purposes, the incremental risk charge for the respective reporting dates represents the higher of the spot value at the reporting dates, and their preceding 12-week average calculation.

Average, Maximum and Minimum Incremental Risk Charge of Trading Units (with a 99.9% confidence level and one-year capital horizon)[1,2,3]

	Total		Credit Trading		Global Rates		Emerging Markets		Other	
in € m.	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Average	604.9	563.3	191.8	(15.0)	210.1	363.4	205.9	228.1	(2.9)	(13.2)
Maximum	755.5	904.6	247.3	121.4	375.7	892.5	350.1	349.9	49.5	32.0
Minimum	501.5	330.3	95.3	(130.9)	125.4	198.7	142.9	122.4	(54.2)	(80.6)
Period-end	501.5	570.3	176.5	90.8	125.4	198.7	229.5	284.5	(29.9)	(3.6)

[1] Amounts show the bands within which the values fluctuated during the 12-weeks preceding December 31, 2024 and December 31, 2023, respectively
[2] Business line breakdowns have been updated for 2024 reporting to better reflect the current business structure
[3] All liquidity horizons are set to 12 months

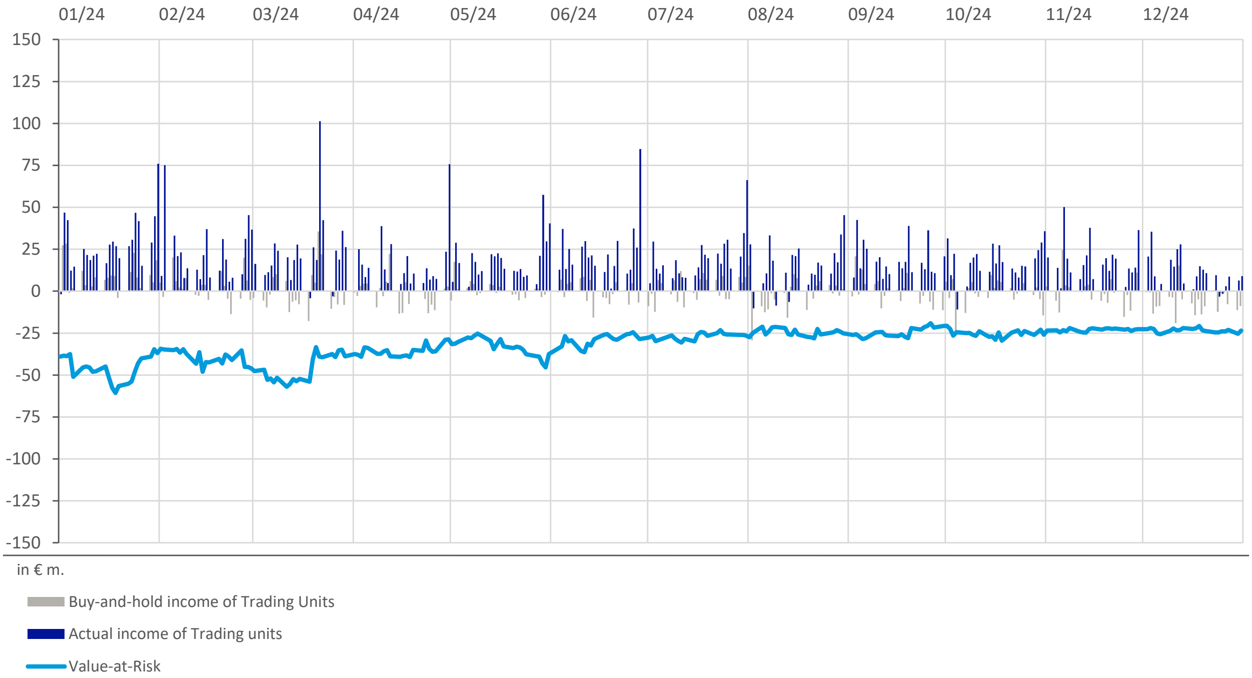
The incremental risk charge as at the end of 2024 was € 501 million, which has reduced by € 69 million (-12%) compared to year-end 2023. The change was driven by risk reduction under Global Rates and Emerging Markets business.

Results of Regulatory Backtesting of Trading Market Risk

In 2024, the Group observed two outliers where the Group's loss on a buy-and-hold basis exceeded the value-at-risk of the Trading books. The outliers in August 2024 and October 2024 were driven by increased market volatility stemming from macroeconomic data releases and central bank actions on interest rate policy.

The following graph shows the trading units daily buy-and-hold and Actual income in comparison to the value-at-risk as of the close of the previous business day for the trading days of the reporting period. The value-at-risk is presented in negative amounts to visually compare the estimated potential loss of the trading positions with the buy and hold income given buy-and-hold is the relevant portion of daily profit and loss for comparison against the previous day's value at risk which excludes new trades, reserves, and any carry profit and loss ordinarily part of actual income. Figures are shown in millions of euro. The chart shows that the trading units achieved a positive buy and hold income for 49 % of the trading days in 2024 as well as displays the group outliers experienced in 2024.

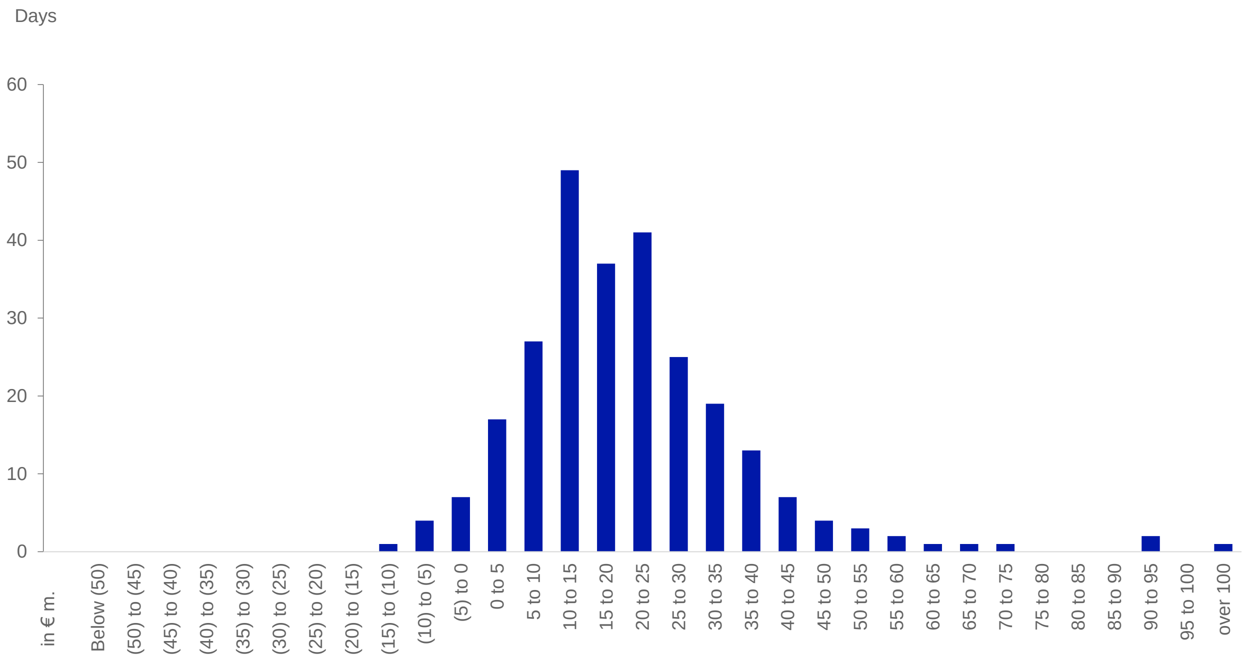
EU MR4 – Comparison of VAR estimates with gains/losses



Daily Income of Deutsche Bank Group Trading Units

The following histogram shows the distribution of daily income of Group trading units. Daily income is defined as total income which consists of new trades, fees & commissions, buy & hold income, reserves, carry and other income. It displays the number of trading days on which the Group reached each level of trading income shown on the horizontal axis in millions of euro.

Distribution of daily income of Group's trading units in 2024



The trading units achieved a positive income for 95% of the trading days in 2024 compared with 93% in the full year 2023.

Non-trading Market Risk Exposures

Economic Capital Usage for Non-trading Market Risk

The following table shows the Non-trading Market Risk economic capital usage by risk type:

Economic Capital Usage by risk type.

	Economic capital usage	
in € m.	Dec 31, 2024	Dec 31, 2023
Interest rate risk	2,770	2,980
Credit spread risk	184	60
Equity and Investment risk	1,172	1,044
Foreign exchange risk	1,665	1,273
Pension risk	944	1,106
Guaranteed funds risk	100	59
Total non-trading market risk portfolios	**6,835**	6,523

The economic capital figures do take into account diversification benefits between the different risk types.

Economic Capital Usage for Non-trading Market Risk totaled € 6.8 billion as of December 31, 2024, which is € 0.3 billion above the economic capital usage at year-end 2023. The increase in economic capital was predominantly driven by higher structural positions taken to protect the bank’s capital ratio against changes in exchange rates, partially offset by the reduction in exposures to interest rate risks.

- Interest rate risk; economic capital charge for interest rate risk in the banking book, including gap risk, basis risk and option risk, such as the risk of a change in client behavior embedded in modelled non-maturity deposits or prepayment risk; in total the economic capital usage for December 31, 2024 was € 2.8 billion, compared to € 3.0 billion for December 31, 2023
- Credit spread risk; economic capital charge for portfolios in the banking book subject to credit spread risk; economic capital usage was € 184 million as of December 31, 2024, versus € 60 million as of December 31, 2023
- Equity and Investment risk; economic capital charge for equity risk from a structural short position in the bank’s own share price arising from the Group’s equity compensation plans, and from the non-consolidated investment holdings, such as strategic investments and alternative assets the economic capital usage was € 1.2 billion as of December 31, 2024, compared to € 1.0 billion as of December 31, 2023
- Foreign exchange risk; foreign exchange risk predominantly arises from the Group’s structural position taken to protect the sensitivity of the bank’s capital ratio against changes in the exchange rates. The economic capital usage was € 1.7 billion as of December 31, 2024, versus € 1.3 billion as of December 31, 2023
- Pension risk; this risk arises from the Group’s defined benefit obligations, including interest rate risk and inflation risk, credit spread risk, equity risk and longevity risk. The economic capital usage was € 0.9 billion as of December 31, 2024, compared to € 1.1 billion as of December 31, 2023
- Guaranteed funds risk; risk arising from guaranteed fund products offered by our asset management division offering a partial or full guarantee on the clients’ investment. The risk materializes if the value of the underlying investment fund on guarantee date is lower than the guaranteed amount. The economic capital usage was € 100 million as of December 31, 2024, versus € 59 million as of December 31, 2023.

Interest Rate Risk in the Banking Book

The following table shows the impact on the Group's net interest income in the banking book as well as the change of the economic value for the banking book positions from interest rate changes under the six standard scenarios defined by the EBA:

Economic value and net interest income interest rate risk in the banking book by EBA scenario

	Delta EVE		Delta NII[1]	
in € bn.	Dec 31, 2024	Dec 31, 2023	Dec 31, 2024	Dec 31, 2023
Parallel up	(5.8)	(5.1)	0.2	0.3
Parallel down	1.3	1.8	(0.7)	(0.3)
Steepener	(0.8)	(0.8)	(0.1)	0.1
Flattener	(0.7)	(0.3)	(0.0)	(0.1)
Short rates up	(2.1)	(1.6)	0.0	(0.0)
Short rates down	0.6	0.8	(0.6)	(0.1)
Maximum	**(5.8)**	(5.1)	**(0.7)**	(0.3)

in € bn.	Dec 31, 2024	Dec 31, 2023
Tier 1 Capital	**60.8**	56.4

[1] Delta Net Interest Income (NII) reflects the difference between projected NII in the respective scenario with shifted rates vs. market implied rates. Sensitivities are based on a static balance sheet at constant exchange rates, excluding trading positions and DWS. Figures do not include Mark-to-Market (MtM) / Other Comprehensive Income (OCI) effects on centrally managed positions not eligible for hedge accounting

The maximum economic value of equity loss was € (5.8) billion as of December 2024, compared to € (5.1) billion as of December 2023. As per December 2024 the maximum EVE loss represents 9.6 % of Tier 1 Capital.

The maximum economic value of equity (EVE) loss due to a +200 basis points parallel shift of the yield curve across all currencies as defined by the BaFin was € (5.8) billion as of December 2024, representing 8.4 % of Total Capital.

The change in economic value of equity loss for the "Parallel up" interest rate scenario was driven by model changes and by additional risk positions to stabilize and protect net interest income as well as rebalancing activities related to the interest rate risk positions within the Bank's Treasury portfolio.

The maximum one-year loss in net interest income for the "Parallel down" interest rate scenario was € (0.7) billion as of December 2024, compared to € (0.3) billion as of December 2023.

The increase in the maximum net interest income loss in the "Parallel down" scenario was mainly driven by additional downside risk arising from the behavioral model assumptions applied to Deutsche Bank's Private Bank and Corporate Bank deposits, changes in the interest rate environment as well as a result of Deutsche Bank's net interest income risk hedge strategy.

The following table shows the variation of the economic value for Deutsche Bank's banking book positions resulting from downward and upward interest rate shocks by currency:

Economic value interest rate risk in the banking book by currency

	Dec 31, 2024	
in € bn.	Parallel up	Parallel down
EUR	(5.1)	1.2
USD	(0.7)	0.4
Other	(0.0)	(0.3)
Total	(5.8)	1.3

Operational risk exposure

Operational risk – risk profile

Operational risk losses by event type (profit and loss view)[2]

in € m.	2024	2023[1]
Clients, Products and Business Practices	1,909	676
Execution, Delivery and Process Management	163	127
External Fraud	52	106
Others	22	55
Natural Disasters and Public Safety	18	11
Internal Fraud	18	(332)
Group	**2,182**	644

[1] Prior year losses have been revised to account for subsequent capture of losses and reclassification
[2] Losses are reported after offsetting insurance

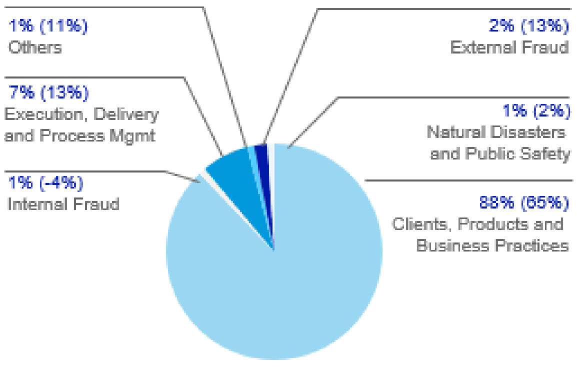
As of December 31, 2024, operational risk losses increased year-on-year from € 644 million to € 2.2 billion. This was driven by an increase in litigation expenses of € 2.0 billion mainly due to provision for the Postbank takeover litigation matter, as well as the reversal of RusChemAlliance indemnification asset and the Polish FX mortgage provision, and is not deemed to be representative of a deterioration in the control environment. Non-legal losses decreased year-on-year from € 214 million in 2023 to € 175 million in 2024.

Operational risk losses by event type[1]

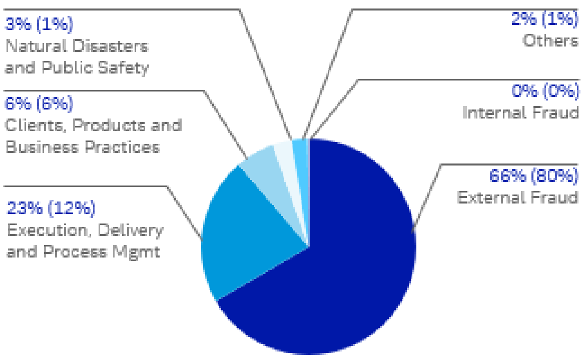
The diagram “Distribution of Operational Risk Losses” summarizes the value of net operational risk loss postings by event type in 2024, against the average for the comparative five-year period 2019-2023. The event type “Clients, Products and Business Practices” forms the most significant portion of operational losses with a share of 88% largely made up of provisions from legacy litigation cases due to settlements reached and increased litigation reserves for unsettled cases.

The diagram “Frequency of Operational Losses” summarizes the operational risk events by event type (based on a count of events where losses were first recognized in 2024), related to the average for the comparative five-year period 2019-2023. “External Fraud” remains the highest frequency event type at 66% with notable reduction versus the five-year average, leading to increase in share of events in other categories.

Distribution of Operational Losses[2]



Frequency of Operational Losses[3]



[1] Prior year losses have been revised to account for subsequent capture of losses and reclassification
[2] Distribution of operational risk losses is based on posting date
[3] Frequency of operational risk losses is based on first posting date
[4] The bank seeks to ensure the comprehensive capture of all operational risk loss events with a net operational risk loss impact of € 10,000 or greater, the totals shown in this section may be underestimated due to delayed detection and recording of loss events

Liquidity Risk Exposure

Funding Markets and Capital Markets Issuance

Multiple macro topics emerged during 2024 and weighed on markets, including CRE-related worries in February, political turmoil in France during June, an unexpected rate hike of the BOJ end of July as well as weak economic data out of the US in August put investors into a risk-off mood. Despite creating a dent, those events were not material enough to outweigh risk-on mood. Against this backdrop, the Bank navigated well through the markets and successfully concluded its issuance activity at € 18.0 billion, in line with our guidance of ending the year at the upper end of a 13 to 18 billion euro range.

In contrast to market fears, credit markets showed a constructive performance despite the multiple disruptions with broader indices trading tighter vs. year end 2023. Following rating upgrades in 2023, DB's spreads rallied in the first half of 2024 while trading roughly flat in the second half. Otherwise, no idiosyncratic anomalies, which led to wider levels. DB's CDS and EUR spreads performed well this year, DB's USD spreads exhibited an even better performance.

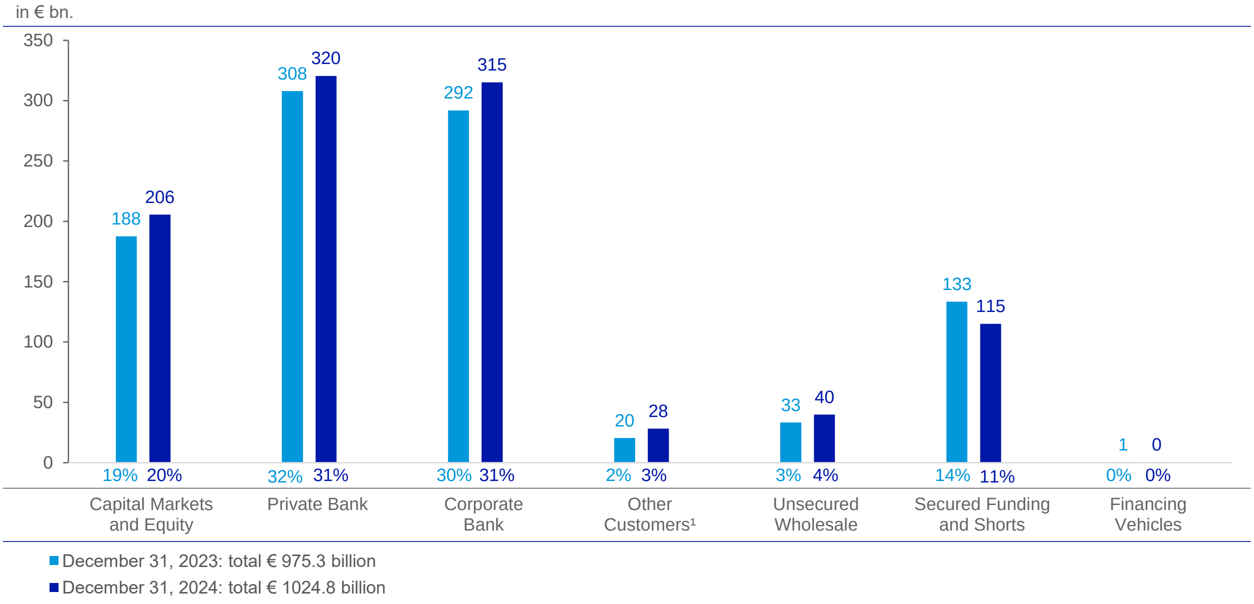
The total issuance volume of € 18.0 billion is split as follows: € 3.0 billion in capital issuances, € 6.9 billion of senior non-preferred funding, € 8.1 billion in senior preferred. From a currency perspective, the total issuance volume is divided as follows: Euros(€ 9.6 billion), US dollars (€ 6.2 billion), Japanese Yen (€ 0.6 billion) and other currencies aggregated (€ 1.6 billion). The Group's investor base for 2024 issuances was as follows: asset managers and pension funds (62 %), banks (11 %), retail customers (8 %), insurance companies (7 %), other institutional investors (7 %), Governments and agencies (2 %) and Other (3 %). The geographical distribution was split between Germany (16 %), rest of Europe (44 %), U.S. (23 %), Asia/Pacific (14 %) and Other (3 %). The average spread of issuance over 3-months-Euribor/RFR (Risk Free Rate) was 110 bps for the full year. The average tenor was 5.6 years. The Group issued the following volumes over each quarter: Q1: € 5.1 billion, Q2: € 5.6 billion, Q3: € 5.6 billion and Q4: € 1.7 billion.

Deutsche Bank's issuance plan for 2025 is € 15-20 billion, broadly in line with last year's plan. Focus will be on senior non-preferred bonds and capital instruments. Senior preferred issuances will be primarily in non-benchmark format. The Group also plans to raise a portion of this funding in U.S. dollar and may enter into cross currency swaps to manage any residual requirements. The Bank has total capital markets maturities, excluding legally exercisable calls, of approximately € 12 billion. Furthermore, the Bank issued structured notes with a volume of around € 10 billion in 2024 and plans to issue ~ € 9 billion in 2025. This activity is conducted by the FIC division and not part of the Treasury issuance plan.

Funding Diversification

In 2024, total external funding increased by € 49.5 billion from € 975.3 billion at December 31, 2023, to € 1,024.8 billion at December 31, 2024. Funding from the Corporate Bank has increased by € 23.3 billion, most pronounced in sight deposits. In the Private Bank, growth of € 12.6 billion was primarily driven by term deposits. The unsecured Wholesale Funding portfolio increased by € 6.5 billion, thereof € 3.6 billion from Investment Bank deposits. In addition, Capital Markets and Equity increased by € 17.9 billion driven by an increase of € 2.6 billion in Equity and € 15.3 billion in long-term Debt Issuances. Secured funding and shorts have decreased by € 18.3 billion, driven by € 15.0 billion prepayments of TLTRO (Targeted Longer-Term Refinancing Operations) and € 3.3 billion reductions in repurchase operations. Additional growth of € 7.7 billion in the Other Customers bucket was mainly driven by increase in Long-Term Debt due to growth from the ETF structures.

Composition of External Funding Sources



[1] Other Customers includes fiduciary deposits, X-markets notes and margin/Prime Brokerage cash balances (shown on a net basis)
Reference: Reconciliation to total balance sheet of € 1,391.0 billion (€ 1,317.3 billion): Derivatives & settlement balances € 288.8 billion (€ 266.5 billion), add-back for netting effect for margin/Prime Brokerage cash balances (shown on a net basis) € 42.2 billion (€ 40.2 billion), other non-funding liabilities € 35.3 billion (€ 35.4 billion) for December 31, 2024, and December 31, 2023, respectively

Maturity of unsecured wholesale funding, ABCP and capital markets issuance[1]

								Dec 31, 2024
in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	829	697	1,294	1,277	4,098	56	0	4,153
Deposits from other wholesale customers	3,106	7,919	4,698	5,396	21,119	2,231	1,013	24,363
CDs and CP	1,107	3,623	2,647	3,688	11,064	10	117	11,190
ABCP	0	0	0	0	0	0	0	0
Senior non-preferred plain vanilla	239	1,467	1,788	5,190	8,685	12,054	33,279	54,018
Senior preferred plain vanilla	171	360	1,681	1,712	3,923	4,442	7,930	16,294
Senior structured	239	793	1,029	1,381	3,442	2,187	20,094	25,723
Covered bonds/ABS	765	343	225	757	2,091	3,301	10,163	15,554
Subordinated liabilities	0	1,264	3,945	1,190	6,399	4,239	12,991	23,630
Other	49	0	0	0	49	0	7	57
Total	6,505	16,468	17,307	20,591	60,870	28,519	85,593	174,982
Of which:								
Secured	765	343	225	757	2,091	3,301	10,163	15,554
Unsecured	5,740	16,124	17,081	19,834	58,779	25,218	75,430	159,428

[1] Includes additional Tier 1 notes reported as additional equity components in the financial statements. Liabilities with call features are shown at earliest legally exercisable call date. No assumption is made as to whether such calls would be exercised
Capital markets issuances volume reported post own debt elimination

The total volume of unsecured wholesale liabilities, ABCP and capital markets issuance maturing within one year amount to € 61 billion as of December 31, 2024, and should be viewed in the context of our total High Quality Liquid Assets of € 226 billion.

								Dec 31, 2023
in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	1,942	1,419	692	402	4,455	558	103	5,117
Deposits from other wholesale customers	9,838	4,740	3,475	1,984	20,038	422	633	21,093
CDs and CP	1,085	2,143	2,041	1,623	6,891	84	0	6,976
ABCP	0	0	0	0	0	0	0	0
Senior non-preferred plain vanilla	91	1,173	2,852	4,146	8,261	7,700	36,328	52,289
Senior preferred plain vanilla	198	442	1,293	718	2,650	3,494	5,325	11,470
Senior structured	121	458	748	1,275	2,603	2,919	12,401	17,923
Covered bonds/ABS	21	2,065	235	750	3,070	1,867	13,063	18,000
Subordinated liabilities	10	15	291	94	410	5,887	14,039	20,336
Other	0	0	0	0	0	0	0	0
Total	13,306	12,454	11,627	10,992	48,380	22,931	81,892	153,204
Of which:								
Secured	21	2,065	235	750	3,070	1,867	13,063	18,000
Unsecured	13,285	10,389	11,392	10,242	45,309	21,065	68,829	135,203

The following table shows the currency breakdown of our short-term unsecured wholesale funding, of our ABCP funding and of our capital markets issuance.

Unsecured wholesale funding, ABCP and capital markets issuance (currency breakdown)

					Dec 31,2024					Dec 31,2023
in € m.	in EUR	in USD	in GBP	in other CCYs	Total	in EUR	in USD	in GBP	in other CCYs	Total
Deposits from banks	629	2,583	40	902	4,153	666	2,409	108	1,934	5,117
Deposits from other wholesale customers	7,722	13,836	264	2,542	24,363	8,857	9,128	248	2,860	21,093
CDs and CP	3,695	7,230	0	266	11,190	3,776	2,816	0	383	6,976
ABCP	0	0	0	0	0	0	0	0	0	0
Senior non-preferred plain vanilla	23,485	24,503	2,167	3,862	54,018	22,309	23,199	3,611	3,171	52,289
Senior preferred plain vanilla	8,919	5,390	15	1,970	16,294	6,445	4,424	8	593	11,470
Senior structured	10,704	12,250	50	2,719	25,723	8,278	7,502	43	2,100	17,923
Covered bonds/ ABS	14,822	732	0	0	15,554	17,710	290	0	0	18,000
Subordinated liabilities	12,553	9,938	952	187	23,630	9,845	9,380	932	179	20,336
Other	8	0	0	49	57	0	0	0	0	0
Total	**82,536**	**76,461**	**3,489**	**12,495**	**174,982**	77,886	59,148	4,949	11,220	153,204
Of which:										
Secured	14,822	732	0	0	15,554	17,710	290	0	0	18,000
Unsecured	67,714	75,729	3,489	12,495	159,428	60,176	58,858	4,949	11,220	135,203

High quality liquid assets

Composition of Group's HQLA by parent company (including branches) and subsidiaries

	Dec 31, 2024		Dec 31, 2023	
in € bn.	Market Value	Value according to Article 9 CRR	Market Value	Value according to Article 9 CRR
Available-Cash and Central Bank Reserves	124	124	156	156
Parent (incl. foreign branches)	97	97	133	133
Subsidiaries	26	26	23	23
High Quality liquid securities (includes government, government guaranteed and agency securities	106	102	66	63
Parent (incl. foreign branches)	98	94	54	51
Subsidiaries	8	8	12	12
Total HQLA	**230**	**226**	222	219
Parent (incl. foreign branches)	195	191	187	184
Subsidiaries	34	34	35	35

As of December 31, 2024, the Group's HQLA increased to €226 billion compared to December 31, 2023, at € 219 billion. This is primarily due increased deposits and issuance of long-term debt largely offset by TLTRO repayment and increased business held assets.

Liquidity Coverage Ratio

The Liquidity Coverage Ratio was 131% at the end of 2024, a surplus to regulatory requirements of € 53 billion as compared to 140% as at the end of 2023, a surplus to regulatory requirements of € 62 billion. Significant deposit growth and new issuance activity were more than offset by increased business assets, TLTRO repayment and increased modelled outflows under commitments and guarantees.

The Group's twelve month weighted average LCR was 134%. This has been calculated in accordance with the Commission Delegated Regulation (EU) 2015/61 and the EBA Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 CRR.

LCR components

	Dec 31, 2024	Dec 31, 2023
in € bn. (unless stated otherwise)	Total adjusted weighted value (average)	Total adjusted weighted value (average)
Number of data points used in the calculation of averages	**12**	12
High Quality Liquid Assets	**224**	215
Total net cash outflows	**167**	157
Liquidity Coverage Ratio (LCR) in %	134 %	137 %

Funding Risk Management

Structural Funding

All funding matrices (the aggregate currency, the USD and the GBP funding matrix) were in line with the targets as at year ends 2024 and 2023.

Stress Testing and Scenario Analysis

At the end of 2024 the Group's stressed Net Liquidity Position stood at €56 billion compared to € 58 billion as at the end of 2023.

Global All Currency Daily Stress Testing Results

			Dec 31, 2024			Dec 31, 2023
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position
Systemic market risk	208	265	56	123	242	119
1 notch downgrade (DB specific)	34	174	140	38	180	142
Severe downgrade (DB specific)	142	241	99	161	259	97
Combined[3 4]	216	275	59	203	261	58

[1] Funding gap caused by impaired rollover of liabilities and other projected outflows
[2] Based on liquidity generation through Liquidity Reserves and other business mitigants
[3] Combined impact of systemic market risk and severe downgrade

Global EUR Daily Stress Testing Results

			Dec 31, 2024			Dec 31, 2023
in € m.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position
Combined[3]	91	104	13	90	116	25

[1] Funding gap caused by impaired rollover of liabilities and other projected outflows
[2] Based on liquidity generation through Liquidity Reserves and other business mitigants
[3] Combined impact of systemic market risk and severe downgrade

Global USD Daily Stress Testing Results

			Dec 31, 2024			Dec 31, 2023
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position
Combined[3]	80	102	22	91	102	11

[1] Funding gap caused by impaired rollover of liabilities and other projected outflows
[2] Based on liquidity generation through Liquidity Reserves and other business mitigants
[3] Combined impact of systemic market risk and severe downgrade

Global GBP Daily Stress Testing Results

			Dec 31, 2024			Dec 31, 2023
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position	Funding Gap	Gap Closure	Net Liquidity Position
Combined[3]	5	10	5	4	5	1

[1] Funding gap caused by impaired rollover of liabilities and other projected outflows
[2] Based on liquidity generation through Liquidity Reserves and other business mitigants
[3] Combined impact of systemic market risk and severe downgrade

The following table presents the amount needed to meet collateral requirements from contractual obligations in the event of a one- or two-notch downgrade by rating agencies for all currencies.

Contractual Obligations

		Dec 31, 2024		Dec 31, 2023
in € m.	One-notch downgrade	Two-notch downgrade	One-notch downgrade	Two-notch downgrade
Contractual derivatives funding or margin requirements	182	309	402	526
Other contractual funding or margin requirements	0	0	0	0

Net stable funding ratio

The Net Stable Funding Ratio was 121% at the end of 2024, a surplus to regulatory requirements of € 110 billion as compared to 121% as at the end of 2023, a surplus to regulatory requirements of € 107 billion. The increased surplus was primarily driven by deposit growth partially offset by ECB TLTRO repayments and increased business assets.

Net stable funding ratio

	Dec 31, 2024	Dec 31, 2023
in € bn. (unless stated otherwise)	Total adjusted weighted value	Total adjusted weighted value (average)
Available stable funding (ASF)	**625**	605
Required stable funding (RSF)	**515**	499
Net Stable Funding Ratio (NSFR) in %	121 %	121 %

Asset Encumbrance

This section refers to asset encumbrance in the group of institutions consolidated for banking regulatory purposes pursuant to the German Banking Act. Therefore this excludes insurance companies or companies outside the finance sector. Assets pledged by our insurance subsidiaries are included in Note 20 “Assets Pledged and Received as Collateral” of the consolidated financial statements, and restricted assets held to satisfy obligations to insurance companies’ policy holders are included within Note 37 “Information on Subsidiaries” of the consolidated financial statements.

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. Additionally, in line with EBA technical standards on regulatory asset encumbrance reporting, assets placed with settlement systems, including default funds and initial margins, as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks, are considered encumbered. We also include derivative margin receivable assets as encumbered under these EBA guidelines.

Readily available assets are those on- and off-balance sheet assets that are not otherwise encumbered, and which are in freely transferrable form. Unencumbered financial assets at fair value, other than securities borrowed or purchased under resale agreements and positive market value from derivatives, and available for sale investments are all assumed to be readily available.

The readily available value represents the on- and off-balance sheet carrying amount or fair value rather than any form of stressed liquidity value (see the “High quality liquid assets” for an analysis of unencumbered liquid assets available under a liquidity stress scenario). Other unencumbered on- and off-balance sheet assets are those assets that have not been pledged as collateral against secured funding or other collateralized obligations, or are otherwise not considered to be readily available. Included in this category are securities borrowed or purchased under resale agreements and positive market value from derivatives. Similarly, for loans and other advances to customers, these would only be viewed as readily available to the extent they are already in a pre-packaged transferrable format, and have not already been used to generate funding. This represents the most conservative view given that an element of such loans currently shown in Other assets could be packaged into a format that would be suitable for use to generate funding.

Encumbered and unencumbered assets

	Dec 31, 2024			
	Carrying value			
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Debt securities	179	80	99	0
Equity instruments	4	0	4	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	154	14	139	0
Securities borrowed or purchased under resale agreements[1]	41	0	0	41
Financial assets at fair value through profit and loss[2]				
Trading assets	12	0	12	0
Positive market value from derivative financial instruments	292	0	0	292
Securities borrowed or purchased under resale agreements[1]	105	0	0	105
Other financial assets at fair value through profit or loss	3	0	3	0
Financial assets at fair value through other comprehensive income[2]	8	0	5	3
Loans	517	48	41	427
Other assets	75	40	0	35
Total	1,389	183	303	903

[1] Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below
[2] Excludes Debt securities and Equity instruments (separately disclosed above)

	Dec 31, 2024			
	Fair value of collateral received			
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Collateral received:	479	366	110	3
Debt securities	473	363	110	0
Equity instruments	1	1	0	0
Other collateral received	6	2	0	3

				Dec 31, 2023
				Carrying value
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Debt securities	167	84	83	0
Equity instruments	3	0	3	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	184	12	172	0
Securities borrowed or purchased under resale agreements[1]	0	0	0	0
Financial assets at fair value through profit and loss[2]				
Trading assets	9	0	9	0
Positive market value from derivative financial instruments	252	0	0	252
Securities borrowed or purchased under resale agreements[1]	0	0	0	0
Other financial assets at fair value through profit or loss	1	0	1	0
Financial assets at fair value through other comprehensive income[2]	7	0	5	2
Loans	528	57	14	457
Other assets	69	36	0	34
Total	1,314	189	287	838

[1] Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below
[2] Excludes Debt securities and Equity instruments (separately disclosed above)

				Dec 31, 2023
				Fair value of collateral received
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Collateral received:	379	325	49	6
Debt securities	370	321	48	0
Equity instruments	1	1	0	0
Other collateral received	8	3	0	6

Maturity Analysis of Assets and Financial Liabilities

Treasury manages the maturity analysis of assets and liabilities. Modeling of assets and liabilities is necessary in cases where the contractual maturity does not adequately reflect the liquidity risk position. The most significant example in this context would be immediately repayable deposits from retail and transaction banking customers which have consistently displayed high stability throughout even the most severe financial crises.

The modeling profiles are part of the overall liquidity risk management framework (see section “Liquidity Stress Testing and Scenario Analysis” for short-term liquidity positions ≤ 1 year and section “Structural Funding” for long-term liquidity positions > 1 year) which is defined and approved by the Management Board.

The following tables present a maturity analysis of total assets based on carrying value and upon earliest legally exercisable maturity as of December 31, 2024 and 2023, respectively.

Analysis of the earliest contractual maturity of assets

Dec 31, 2024

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances[1]	133,755	10,423	3,118	131	20	46	0	0	0	147,494
Interbank balances (w/o central banks)[1]	4,590	1,238	156	85	49	37	0	0	6	6,160
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	640	3,564	8,696	14,690	3,143	1,329	5,591	3,151	0	40,803
With banks	597	468	3,838	6,228	1,995	0	4,322	2,710	0	20,158
With customers	43	3,096	4,859	8,462	1,147	1,329	1,269	440	0	20,645
Securities borrowed	0	32	0	0	0	0	11	0	0	44
With banks	0	0	0	0	0	0	0	0	0	0
With customers	0	32	0	0	0	0	11	0	0	44
Financial assets at fair value through profit or loss	448,881	71,938	9,475	3,531	1,783	3,041	2,123	1,622	3,501	545,895
Trading assets	137,706	0	0	0	0	2,026	0	0	40	139,772
Fixed-income securities and loans	131,418	0	0	0	0	0	0	0	0	131,418
Equities and other variable-income securities	2,753	0	0	0	0	2,026	0	0	40	4,819
Other trading assets	3,535	0	0	0	0	0	0	0	0	3,535
Positive market values from derivative financial instruments	291,753	0	0	0	0	0	2	19	25	291,800
Non-trading financial assets mandatory at fair value through profit or loss	19,422	71,938	9,475	3,531	1,783	1,015	2,121	1,603	3,436	114,324
Securities purchased under resale agreements	8,109	68,159	6,241	3,022	1,564	248	995	398	0	88,736
Securities borrowed	11,200	2,070	2,620	0	0	0	22	0	0	15,913
Fixed-income securities and loans	30	445	601	480	214	107	999	1,003	2,549	6,429
Other non-trading financial assets mandatory at fair value through profit or loss	82	1,264	12	29	5	660	104	202	887	3,246
Financial assets designated at fair value through profit or loss	0	0	0	0	0	0	0	0	0	0
Positive market values from derivative financial instruments qualifying for hedge accounting	0	27	83	29	22	12	89	45	30	337
Financial assets at fair value through other comprehensive income	0	3,735	2,896	1,703	1,601	605	4,266	7,189	20,096	42,090
Securities purchased under resale agreements	0	1,355	1,275	0	0	0	153	0	3	2,786
Securities borrowed	0	0	0	0	0	0	0	0	0	0
Debt securities	0	2,004	1,039	1,345	904	541	3,440	5,098	19,865	34,236
Loans	0	376	582	358	696	65	673	2,091	227	5,068
Other	0	0	0	0	0	0	0	0	0	0
Loans	14,095	39,776	23,242	23,857	16,390	13,804	41,424	109,587	201,722	483,897
To banks	226	2,085	1,135	987	346	725	126	840	1,907	8,376
To customers	13,869	37,691	22,107	22,870	16,045	13,079	41,297	108,748	199,815	475,521
Retail	2,381	8,813	2,317	1,965	1,185	1,159	5,716	23,646	154,729	201,912
Corporates and other customers	11,488	28,878	19,791	20,905	14,859	11,920	35,582	85,101	45,086	273,610
Other financial assets	59,518	8,436	1,191	1,508	512	1,701	1,928	4,848	13,121	92,762
Total financial assets	661,478	139,169	48,857	45,534	23,519	20,576	55,432	126,442	238,476	1,359,482
Other assets	7,946	247	5	4,574	13	4,923	267	1,248	12,328	31,552
Total assets	669,424	139,416	48,862	50,107	23,532	25,499	55,699	127,690	250,804	1,391,033

[1] The positions “Cash and central bank balances” and “Interbank balances (w/o central banks)” include € 379 million cash held with Russian Banks, predominantly with the Central Bank of Russia.

Dec 31, 2023

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances[1]	164,942	11,301	1,905	185	39	45	0	0	0	178,416
Interbank balances (w/o central banks)[1]	4,599	653	42	63	78	100	0	0	606	6,140
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	16	2,010	3,388	514	1,434	901	4,180	2,282	0	14,725
With banks	7	393	1,250	93	936	862	2,389	2,282	0	8,212
With customers	10	1,617	2,138	421	497	39	1,791	0	0	6,513
Securities borrowed	0	32	0	0	0	0	6	0	0	39
With banks	0	0	0	0	0	0	0	0	0	0
With customers	0	32	0	0	0	0	6	0	0	39
Financial assets at fair value through profit or loss	390,280	51,826	11,152	3,130	563	2,655	700	1,287	3,660	465,253
Trading assets	123,907	0	0	0	0	1,353	0	0	16	125,275
Fixed-income securities and loans	120,731	0	0	0	0	0	0	0	0	120,731
Equities and other variable-income securities	1,968	0	0	0	0	1,353	0	0	16	3,336
Other trading assets	1,207	0	0	0	0	0	0	0	0	1,207
Positive market values from derivative financial instruments	251,856	0	0	0	0	0	0	0	1	251,857
Non-trading financial assets mandatory at fair value through profit or loss	14,517	51,826	11,152	3,130	563	1,302	626	1,287	3,643	88,047
Securities purchased under resale agreements	5,331	48,697	7,987	2,242	299	550	161	669	0	65,937
Securities borrowed	9,159	2,001	1,859	0	0	0	17	0	0	13,036
Fixed-income securities and loans	12	521	1,301	861	264	136	386	580	2,373	6,434
Other non-trading financial assets mandatory at fair value through profit or loss	16	607	5	27	0	616	62	38	1,270	2,640
Financial assets designated at fair value through profit or loss	0	0	0	0	0	0	74	0	1	75
Positive market values from derivative financial instruments qualifying for hedge accounting	0	337	211	104	55	38	17	69	37	869
Financial assets at fair value through other comprehensive income	36	3,590	1,514	1,106	666	482	2,315	8,761	17,077	35,546
Securities purchased under resale agreements	0	1,805	0	0	0	0	0	0	0	1,805
Securities borrowed	0	0	0	0	0	0	0	0	0	0
Debt securities	0	1,476	980	771	475	336	1,548	6,337	16,951	28,874
Loans	36	309	534	335	190	146	767	2,424	126	4,867
Other	0	0	0	0	0	0	0	0	0	0
Loans	15,107	42,752	31,048	17,534	12,418	14,272	38,335	91,628	216,259	479,353
To banks	227	537	348	332	41	1,535	862	519	801	5,202
To customers	14,880	42,215	30,700	17,201	12,377	12,736	37,473	91,108	215,459	474,151
Retail	2,375	11,452	4,879	1,721	1,302	2,170	4,786	16,929	168,184	213,796
Corporates and other customers	12,505	30,763	25,822	15,480	11,075	10,567	32,688	74,180	47,275	260,354
Other financial assets	68,187	9,243	3,875	2,729	778	1,445	1,136	4,225	15,204	106,823
Total financial assets	643,168	121,744	53,134	25,365	16,030	19,936	46,690	108,252	252,843	1,287,164
Other assets	8,390	269	1	4,169	2	4,185	194	2,080	10,771	30,061
Total assets	651,558	122,013	53,135	29,534	16,032	24,121	46,884	110,332	263,614	1,317,225

[1] The positions “Cash and central bank balances” and “Interbank balances (w/o central banks)” include € 614 million cash held with Russian Banks, predominantly with the Central Bank of Russia.

The following tables present a maturity analysis of total liabilities based on carrying value and upon earliest legally exercisable maturity as of December 31, 2024 and 2023, respectively.

Analysis of the earliest contractual maturity of liabilities

Dec 31, 2024

in € m.	On demand (incl. Over-night and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	375,255	64,076	93,692	69,346	21,845	18,207	9,612	5,538	10,130	667,701
Due to banks	53,385	1,721	10,520	11,102	6,515	1,033	1,927	2,984	8,731	97,920
Due to customers	321,870	62,355	83,171	58,244	15,330	17,174	7,685	2,553	1,399	569,781
Retail	135,531	16,455	44,218	34,930	8,890	6,577	1,389	491	22	248,504
Corporates and other customers	186,339	45,899	38,953	23,314	6,440	10,596	6,296	2,062	1,377	321,277
Trading liabilities	319,908	0	0	0	0	0	0	0	0	319,908
Trading securities	41,864	0	0	0	0	0	0	0	0	41,864
Other trading liabilities	1,635	0	0	0	0	0	0	0	0	1,635
Negative market values from derivative financial instruments	276,410	0	0	0	0	0	0	0	0	276,410
Financial liabilities designed at fair value through profit or loss	32,343	24,338	11,059	4,417	539	304	3,310	10,009	5,713	92,032
Securities sold under repurchase agreements	30,294	23,772	10,739	3,254	302	0	760	0	0	69,121
Long-term debt	2,023	335	228	1,043	136	235	2,543	9,947	5,713	22,203
Other financial liabilities designated at fair value through profit or loss	26	232	91	120	101	69	6	62	0	708
Investment contract liabilities	0	0	0	0	0	454	0	0	0	454
Negative market values from derivative financial instruments qualifying for hedge accounting	0	357	621	342	197	75	14	14	57	1,676
Central bank funds purchased	1,227	0	0	0	0	0	0	0	0	1,227
Securities sold under repurchase agreements	268	23	1,017	175	0	0	715	289	25	2,513
Due to banks	88	2	917	152	0	0	605	158	9	1,929
Due to customers	180	21	101	23	0	0	111	131	16	583
Securities loaned	2	0	0	0	0	0	0	0	0	2
Due to banks	0	0	0	0	0	0	0	0	0	0
Due to customers	2	0	0	0	0	0	0	0	0	2
Other short term borrowings	1,345	3,380	2,372	1,845	227	726	0	0	0	9,895
Long-term debt	0	1,474	4,280	5,971	5,079	3,825	18,543	42,140	33,587	114,899
Debt securities - senior	0	1,315	2,873	4,081	4,764	3,158	14,957	36,395	15,067	82,611
Debt securities - subordinated	0	0	1,248	1,635	0	0	2,000	2,436	4,307	11,626
Other long-term debt - senior	0	159	158	254	315	667	1,545	3,289	14,190	20,578
Other long-term debt - subordinated	0	0	0	0	0	0	42	20	22	85
Trust Preferred Securities	0	0	0	287	0	0	0	0	0	287
Other financial liabilities	72,776	526	665	881	137	256	1,988	1,360	2,508	81,098
Total financial liabilities	803,124	94,174	113,705	83,264	28,024	23,847	34,182	59,350	52,020	1,291,691
Other liabilities	17,477	0	0	0	0	0	0	0	0	17,477
Total equity	0	0	0	0	0	0	0	0	81,865	81,865
Total liabilities and equity	820,601	94,174	113,705	83,264	28,024	23,847	34,182	59,350	133,885	1,391,033
Off-balance sheet commitments given	42,360	11,136	16,635	22,017	18,465	29,279	45,442	122,123	35,709	343,167
Banks	1,038	1,584	2,164	2,827	2,766	2,080	3,213	4,697	6,169	26,540
Retail	13,776	455	642	134	79	1,502	279	891	2,977	20,734
Corporates and other customers	27,546	9,097	13,829	19,057	15,620	25,697	41,950	116,535	26,563	295,893

Dec 31, 2023

in € m.	On demand (incl. Over-night and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	349,522	55,380	93,682	61,316	23,849	18,642	7,724	5,065	10,305	625,486
Due to banks	48,482	1,741	10,139	8,791	5,902	478	3,126	3,398	8,977	91,034
Due to customers	301,041	53,639	83,543	52,525	17,947	18,164	4,598	1,667	1,328	534,453
Retail	130,097	9,882	47,506	34,857	8,635	7,031	1,272	502	43	239,826
Corporates and other customers	170,944	43,758	36,036	17,669	9,312	11,133	3,326	1,166	1,285	294,627
Trading liabilities	282,283	0	0	0	0	0	0	0	0	282,283
Trading securities	43,114	0	0	0	0	0	0	0	0	43,114
Other trading liabilities	890	0	0	0	0	0	0	0	0	890
Negative market values from derivative financial instruments	238,278	0	0	0	0	0	0	0	0	238,278
Financial liabilities designed at fair value through profit or loss	33,974	24,883	11,547	3,081	217	499	1,727	5,770	2,025	83,722
Securities sold under repurchase agreements	32,183	24,790	11,422	2,748	58	301	537	339	0	72,377
Long-term debt	1,618	6	43	275	139	89	1,147	5,368	2,024	10,709
Other financial liabilities designated at fair value through profit or loss	173	87	82	58	20	109	43	62	1	636
Investment contract liabilities	0	0	0	0	0	484	0	0	0	484
Negative market values from derivative financial instruments qualifying for hedge accounting	0	40	92	10	9	4	10	8	60	233
Central bank funds purchased	1,057	0	0	0	0	0	0	0	0	1,057
Securities sold under repurchase agreements	274	288	295	302	0	0	2	773	48	1,981
Due to banks	63	265	7	302	0	0	2	771	0	1,410
Due to customers	211	23	287	0	0	0	0	2	48	571
Securities loaned	3	0	0	0	0	0	0	0	0	3
Due to banks	0	0	0	0	0	0	0	0	0	0
Due to customers	3	0	0	0	0	0	0	0	0	3
Other short term borrowings	1,479	2,973	2,345	1,522	493	808	0	0	0	9,620
Long-term debt	0	435	15,286	6,016	3,601	5,604	17,936	41,861	28,652	119,390
Debt securities - senior	0	378	3,991	4,487	858	5,408	14,665	35,848	16,050	81,685
Debt securities - subordinated	0	10	9	0	26	8	2,703	4,356	4,051	11,163
Other long-term debt - senior	0	47	11,287	1,529	2,680	161	568	1,594	8,529	26,394
Other long-term debt - subordinated	0	0	0	0	37	27	0	62	22	149
Trust Preferred Securities	0	0	0	289	0	0	0	0	0	289
Other financial liabilities	89,980	754	635	1,837	173	308	733	1,209	2,478	98,108
Total financial liabilities	758,572	84,754	123,882	74,373	28,342	26,349	28,133	54,685	43,568	1,222,657
Other liabilities	18,278	0	0	0	0	0	0	0	0	18,278
Total equity	0	0	0	0	0	0	0	0	76,330	76,330
Total liabilities and equity	776,850	84,754	123,882	74,373	28,342	26,349	28,133	54,685	119,898	1,317,266
Off-balance sheet commitments given	42,501	10,875	21,158	15,720	14,318	24,459	37,389	113,593	40,527	320,540
Banks	1,016	1,177	2,354	2,242	2,090	2,278	2,289	2,820	5,829	22,095
Retail	14,707	1,354	1,206	503	718	2,281	971	583	4,940	27,262
Corporates and other customers	26,778	8,344	17,597	12,976	11,510	19,899	34,130	110,190	29,758	271,182

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Employees

Group Headcount

As of December 31, 2024, the bank employed a total of 89,753 employees compared to 90,130 as of December 31, 2023. The bank calculates its employee figures on a full-time equivalent basis, meaning it includes proportionate numbers of part-time employees.

The following table shows the bank's numbers of full-time equivalent employees as of December 31, 2024, 2023 and 2022.

Employees[1]	Dec 31, 2024	Dec 31, 2023	Dec 31, 2022
Germany	35,160	36,195	35,594
Europe (outside Germany)	17,672	18,103	17,875
Asia/Pacific, Middle East and Africa	28,930	27,601	23,740
North America[2]	7,744	8,033	7,534
Latin America	247	199	187
Total employees	**89,753**	90,130	84,930

[1] Full-time equivalent employees, prior year's comparatives aligned to presentation in the current year, numbers may not add up due to rounding
[2] Primarily the United States

In 2024, the number of the bank's employees decreased by 377 or 0.4% mainly due to reductions in Germany, partly offset by increases in Asia/Pacific, Middle East and Africa.

- Germany (-1,035; -2.9%) mainly driven by restructuring measures primarily in the Private Bank
- North America (-289; -3.6%) mainly driven by decreases across all operating businesses and infrastructure functions
- Europe ex Germany (-431; -2,4%) mainly driven by decreases in the UK, Italy and Spain, partly offset by increases in Romania and its Operations Center
- Asia/Pacific, Middle East and Africa (+1.329; +4.8%) primarily driven by increases in India and its Operations Center

The following table shows the distribution of full-time equivalent employees by division as of December 31, 2024, 2023 and 2022.

Employees[1]	Dec 31, 2024	Dec 31, 2023	Dec 31, 2022
Corporate Bank (CB)	17.9 %	17.4 %	17.0 %
Investment Bank (IB)	8.9 %	8.8 %	8.4 %
Private Bank (PB)	27.7 %	29.1 %	31.6 %
Asset Management (AM)	5.1 %	4.9 %	5.0 %
Infrastructure	40.4 %	39.9 %	37.9 %

[1] Full-time equivalent employees, prior year's comparatives aligned to presentation in the current year, numbers may not add up due to rounding

- Corporate Bank (+374; +2.4%) driven by increases in all segments of the Corporate Bank
- Investment Bank (+36; +0.5%) mainly driven by increases in Fixed Income & Currencies
- Private Bank (-1,327; -5.1%) mainly driven by reductions in Germany
- Asset Management (+188; +4.3%) primarily driven by strengthening Technology and Operations
- Infrastructure functions (+352; +1.0%) primarily driven by increases in Technology, Data & Innovation due to the bank's internalization strategy and in Compliance and Anti-Financial Crime, partly offset by reductions in all other infrastructure functions

Post-Employment Benefit Plans

The Group sponsors a number of post-employment benefit plans on behalf of the Group’s employees, both defined contribution plans and defined benefit plans.

In the Group’s globally coordinated accounting process covering defined benefit plans with a defined benefit obligation exceeding € 2 million the Group’s global actuary reviews the valuations provided by locally appointed actuaries in each country.

By applying the Group’s global principles for determining the financial and demographic assumptions the Group ensures that the assumptions are best-estimate, unbiased and mutually compatible, and that they are globally consistent.

For a further discussion on the Group’s employee benefit plans see Note 33 “Employee Benefits” to the Group’s consolidated financial statements.

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Consolidated Statement of Income

in € m.	Notes	2024	2023	2022
Interest and similar income[1]	5	48,996	43,546	24,449
Interest expense	5	33,835	27,424	10,466
Net interest income	5	**15,161**	16,122	13,983
Provision for credit losses	19	1,830	1,505	1,226
Net interest income after provision for credit losses		**13,331**	14,617	12,757
Net commissions and fee income	6	10,372	9,206	9,838
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	5	5,655	5,575	2,962
Net gains (losses) from derecognition of financial assets measured at amortized cost	7	(11)	(96)	(2)
Net gains (losses) on financial assets at fair value through other comprehensive income		48	(0)	(216)
Net income (loss) from equity method investments	16	12	(38)	152
Other income (loss)	8	267	387	346
Total noninterest income		**16,344**	15,033	13,080
Compensation and benefits	33	11,731	11,131	10,712
General and administrative expenses	9	11,243	10,112	9,728
Impairment of goodwill and other intangible assets	23	0	233	68
Restructuring activities	10	(3)	220	(118)
Total noninterest expenses		**22,971**	21,695	20,390
Profit (loss) before income taxes		**6,703**	7,955	5,447
Income tax expense (benefit)	34	2,223	1,503	(107)
Profit (loss)		**4,481**	6,452	5,554
Profit (loss) attributable to noncontrolling interests		139	120	134
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components		4,342	6,332	5,420

[1] Interest and similar income included € 36.5 billion, € 34.0 billion and € 19.8 billion for the year ended December 31, 2024, 2023 and 2022, respectively, calculated based on effective interest method

Earnings per Share

	Notes	2024	2023	2022
Earnings per share:[1]	11			
Basic		€ 1.89	€ 2.83	€ 2.37
Diluted		€ 1.85	€ 2.77	€ 2.32
Number of shares in million:				
Denominator for basic earnings per share – weighted-average shares outstanding		1,993.6	2,064.1	2,084.9
Denominator for diluted earnings per share – adjusted weighted-average shares after assumed conversions		2,039.3	2,104.0	2,125.6

[1] Earnings were adjusted by € 574 million, € 498 million and € 479 million before tax for the coupons paid on Additional Tier 1 Notes in the second quarter of 2024, 2023 and 2022, respectively. The coupons paid on Additional Tier 1 Notes are not attributable to Deutsche Bank shareholders and therefore need to be deducted in the calculation in accordance with IAS 33.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Statement of Comprehensive Income

in € m.	2024	2023	2022
Profit (loss) recognized in the income statement	**4,481**	6,452	5,554
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement gains (losses) related to defined benefit plans, before tax	264	(286)	1,203
Net fair value gains (losses) attributable to credit risk related to financial liabilities designated as at fair value through profit or loss, before tax	(180)	(62)	91
Total of income tax related to items that will not be reclassified to profit or loss	(61)	155	(667)
Items that are or may be reclassified to profit or loss			
Financial assets at fair value through other comprehensive income			
Unrealized net gains (losses) arising during the period, before tax	(395)	205	(1,496)
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(48)	0	216
Derivatives hedging variability of cash flows			
Unrealized net gains (losses) arising during the period, before tax	(242)	439	(819)
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	234	395	71
Assets classified as held for sale			
Unrealized net gains (losses) arising during the period, before tax	0	0	0
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	0	0	0
Foreign currency translation			
Unrealized net gains (losses) arising during the period, before tax	822	(1,284)	331
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	3	(3)	(20)
Equity Method Investments			
Net gains (losses) arising during the period	(2)	(25)	20
Total of income tax related to items that are or may be reclassified to profit or loss	282	(32)	654
Other comprehensive income (loss), net of tax	**676**	(497)	(417)
Total comprehensive income (loss), net of tax	**5,156**	5,955	5,137
Attributable to:			
Noncontrolling interests	192	77	185
Deutsche Bank shareholders and additional equity components	4,965	5,878	4,952

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Balance Sheet

in € m.	Notes	Dec 31, 2024	Dec 31, 2023
Assets:			
Cash and central bank balances		147,494	178,416
Interbank balances (w/o central banks)		6,160	6,140
Central bank funds sold and securities purchased under resale agreements	20	40,803	14,725
Securities borrowed	20	44	39
Financial assets at fair value through profit or loss			
Trading assets		139,772	125,275
Positive market values from derivative financial instruments		291,800	251,877
Non-trading financial assets mandatory at fair value through profit and loss		114,324	88,047
Financial assets designated at fair value through profit or loss		0	75
Total financial assets at fair value through profit or loss	12, 13, 20, 35	545,895	465,273
Financial assets at fair value through other comprehensive income	15	42,090	35,546
Equity method investments	16	1,028	1,013
Loans at amortized cost	18, 19, 20	483,897	479,353
Property and equipment	21, 22	6,193	6,185
Goodwill and other intangible assets	23	7,749	7,327
Other assets [1]	24, 25	101,178	114,698
Assets for current tax		1,801	1,513
Deferred tax assets	34	6,702	7,039
Total assets		**1,391,033**	1,317,266
Liabilities and equity:			
Deposits	26	667,700	625,486
Central bank funds purchased and securities sold under repurchase agreements	20	3,740	3,038
Securities loaned	20	2	3
Financial liabilities at fair value through profit or loss			
Trading liabilities		43,498	44,005
Negative market values from derivative financial instruments		276,410	238,278
Financial liabilities designated at fair value through profit or loss		92,047	83,727
Investment contract liabilities		454	484
Total financial liabilities at fair value through profit or loss	12, 13, 20, 35	412,409	366,494
Other short-term borrowings	29	9,895	9,620
Other liabilities [1]	22, 24, 25	95,616	113,018
Provisions	19, 27	3,326	2,448
Liabilities for current tax		720	631
Deferred tax liabilities	34	574	517
Long-term debt	30	114,899	119,390
Trust preferred securities	30	287	289
Total liabilities		**1,309,168**	1,240,935
Common shares, no par value, nominal value of € 2.56	32	5,106	5,223
Additional paid-in capital		39,744	40,187
Retained earnings		25,872	22,845
Common shares in treasury, at cost	32	(713)	(481)
Accumulated other comprehensive income (loss), net of tax		(1,300)	(1,775)
Total shareholders' equity		**68,709**	65,999
Additional equity components		11,550	8,569
Noncontrolling interests		1,606	1,763
Total equity		**81,865**	76,330
Total liabilities and equity		**1,391,033**	1,317,266

[1] Includes non-current assets and disposal groups held for sale.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

					Unrealized net gains (losses)										
in € m.	Common shares (no par value)	Additional paid-in capital	Retained earnings	Common shares in treasury, at cost	On financial assets at fair value through other comprehensive income, net of tax[2]	Attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax[2]	On derivatives hedging variability of cash flows, net of tax[2]	On assets classified as held for sale, net of tax[2]	Foreign currency translation, net of tax[2]	Unrealized net gains (losses) from equity method investments	**Accumulated other comprehensive income, net of tax[1]**	Total shareholders' equity	Additional equity components[3]	Noncontrolling interests	Total equity
Balance as of December 31, 2021	5,291	40,580	12,680	(6)	(124)	(3)	(33)	0	(282)	(6)	(449)	**58,096**	8,305	1,698	**68,099**
Total comprehensive income (loss), net of tax[1]	0	0	5,420	0	(1,019)	65	(537)	0	454	16	(1,020)	4,399	0	177	4,576
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0	0	(0)	0	0	0	0	(0)	0	0	0	0
Common shares cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash dividends paid	0	0	(406)	0	0	0	0	0	0	0	0	(406)	0	(96)	(502)
Coupon on additional equity components, before tax	0	0	(479)	0	0	0	0	0	0	0	0	(479)	0	0	(479)
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	553	0	0	0	0	0	0	0	0	553	0	8	561
Net change in share awards in the reporting period	0	(48)	0	0	0	0	0	0	0	0	0	(48)	0	(1)	(49)
Treasury shares distributed under share-based compensation plans	0	0	0	370	0	0	0	0	0	0	0	370	0	0	370
Tax benefits related to share-based compensation plans	0	17	0	0	0	0	0	0	0	0	0	17	0	0	17
Option premiums and other effects from options on common shares	0	(58)	0	0	0	0	0	0	0	0	0	(58)	0	0	(58)
Purchases of treasury shares	0	0	0	(695)	0	0	0	0	0	0	0	(695)	0	0	(695)
Sale of treasury shares	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net gains (losses) on treasury shares sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	22	1	0	0	0	0	0	0	0	0	24	273[4]	5	301
Balance as of December 31, 2022	5,291	40,513	17,769	(331)	(1,143)	62	(570)	0	172	10	(1,470)	**61,772**	8,578	1,791	**72,141**
Total comprehensive income (loss), net of tax[1]	0	0	6,332	0	264	(43)	592	0	(1,102)	(16)	(306)	6,027	0	78	6,104
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0	0	(0)	0	0	0	0	(0)	0	0	0	0
Common shares cancelled[5]	(68)	(232)	0	300	0	0	0	0	0	0	0	0	0	0	0
Cash dividends paid	0	0	(610)	0	0	0	0	0	0	0	0	(610)	0	(100)	(710)
Coupon on additional equity components, before tax	0	0	(498)	0	0	0	0	0	0	0	0	(498)	0	0	(498)
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(148)	0	0	0	0	0	0	0	0	(148)	0	(1)	(149)
Net change in share awards in the reporting period	0	(94)	0	0	0	0	0	0	0	0	0	(94)	0	(1)	(95)
Treasury shares distributed under share-based compensation plans	0	0	0	407	0	0	0	0	0	0	0	407	0	0	407
Tax benefits related to share-based compensation plans	0	27	0	0	0	0	0	0	0	0	0	27	0	(1)	26
Option premiums and other effects from options on common shares	0	(65)	0	0	0	0	0	0	0	0	0	(65)	0	0	(65)
Purchases of treasury shares	0	0	0	(857)	0	0	0	0	0	0	0	(857)	0	0	(857)
Sale of treasury shares	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net gains (losses) on treasury shares sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	39	0	0	0	0	0	0	0	0	0	39	(9)[4]	(4)	26
Balance as of December 31, 2023	5,223	40,187	22,845	(481)	(879)	18	22	0	(930)	(6)	(1,775)	**65,999**	8,569	1,763	**76,330**
Total comprehensive income (loss), net of tax[1]	0	0	4,342	0	(317)	(131)	1	0	918	(1)	469	4,811	0	191	5,002
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	(5)	0	0	5	0	0	0	0	5	0	0	0	0
Common shares cancelled[5]	(117)	(333)	0	450	0	0	0	0	0	0	0	0	0	0	0
Cash dividends paid	0	0	(883)	0	0	0	0	0	0	0	0	(883)	0	(264)	(1,147)
Coupon on additional equity components, before tax	0	0	(574)	0	0	0	0	0	0	0	0	(574)	0	0	(574)
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	148	0	0	0	0	0	0	0	0	148	0	1	149
Net change in share awards in the reporting period	0	(23)	0	0	0	0	0	0	0	0	0	(23)	0	(0)	(23)
Treasury shares distributed under share-based compensation plans	0	0	0	444	0	0	0	0	0	0	0	444	0	0	444
Tax benefits related to share-based compensation plans	0	53	0	0	0	0	0	0	0	0	0	53	0	(0)	53
Option premiums and other effects from options on common shares	0	(41)	0	0	0	0	0	0	0	0	0	(41)	0	0	(41)
Purchases of treasury shares	0	0	0	(1,126)	0	0	0	0	0	0	0	(1,126)	0	0	(1,126)
Sale of treasury shares	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net gains (losses) on treasury shares sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	(99)	0	0	0	0	0	0	0	0	0	(99)	2,981[4]	(84)	2,798
Balance as of December 31, 2024	**5,106**	**39,744**	**25,873**	**(713)**	(1,196)	(108)	23	0	(12)	(7)	**(1,300)**	**68,709**	**11,550**	**1,606**	**81,865**

[1] Excluding remeasurement gains (losses) related to defined benefit plans, net of tax

[2] Excluding unrealized net gains (losses) from equity method investments

[3] Includes Additional Tier 1 Notes, which constitute unsecured and subordinated notes of Deutsche Bank and are classified as equity in accordance with IFRS

[4] Includes net proceeds from issuance, purchase and sale of Additional Equity Components

[5] On March 5, 2024, Deutsche Bank cancelled 45.5 million of its common shares. The cancellation reduced the nominal value of the shares by € 117 million. The cancelled shares had been held in common shares in treasury, at their acquisition cost of € 450 million. The difference between the common shares at cost and their nominal value has reduced additional paid-in capital by € 333 million. On February 28, 2023, Deutsche Bank cancelled 26.5 million of its common shares; the cancellation reduced the nominal value of the shares by € 68 million; the cancelled shares had been held in common shares in treasury, at their acquisition cost of € 300 million; the difference between the common shares at cost and their nominal value has reduced additional paid-in capital by € 232 million.

Consolidated Statement of Cash Flows

in € m.	2024	2023	2022
Profit (loss)	**4,481**	6,452	5,554
Cash flows from operating activities:			
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Provision for credit losses	1,830	1,505	1,226
Restructuring activities	(3)	220	(118)
Gain on sale of financial assets at fair value through other comprehensive income, equity method investments and other	(76)	(84)	128
Deferred income taxes, net	909	163	(894)
Impairment, depreciation and other amortization, and accretion	2,758	3,601	3,338
Share of net income from equity method investments	4	107	(129)
Adjustments for net change in operating assets and liabilities:			
Interest-earning time deposits with central banks and banks	(1,188)	(699)	102
Central bank funds sold, securities purchased under resale agreements, securities borrowed	(25,975)	(3,285)	(3,046)
Non-Trading financial assets mandatory at fair value through profit and loss	(25,214)	793	1,511
Financial assets designated at fair value through profit or loss	75	93	(31)
Loans at amortized cost	211	9,686	(12,059)
Other assets	13,990	(1,384)	(459)
Deposits	36,893	(2,299)	19,191
Financial liabilities designated at fair value through profit or loss and investment contract liabilities[1]	5,425	29,493	(6,046)
Central bank funds purchased, securities sold under repurchase agreements, securities loaned	625	2,456	(187)
Other short-term borrowings	182	4,534	1,065
Other liabilities	(19,800)	777	12,377
Senior long-term debt[2]	(6,339)	(11,880)	(17,019)
Trading assets and liabilities, positive and negative market values from derivative financial instruments, net	(15,020)	(35,515)	2,145
Other, net	(2,350)	872	(8,762)
Net cash provided by (used in) operating activities	**(28,584)**	5,606	(2,113)
Cash flows from investing activities:			
Proceeds from:			
Sale of financial assets at fair value through other comprehensive income	18,267	15,646	15,450
Maturities of financial assets at fair value through other comprehensive income	22,658	19,437	21,557
Sale of debt securities held to collect at amortized cost	20	(0)	0
Maturities of debt securities held to collect at amortized cost	7,216	8,025	6,519
Sale of equity method investments	0	20	118
Sale of property and equipment	20	33	22
Purchase of:			
Financial assets at fair value through other comprehensive income	(46,502)	(38,648)	(42,991)
Debt Securities held to collect at amortized cost	(6,498)	(4,859)	(16,696)
Equity method investments	(63)	(60)	(171)
Property and equipment	(528)	(422)	(337)
Net cash received in (paid for) business combinations/divestitures	3	(361)	439
Other, net	(1,375)	(1,386)	(1,086)
Net cash provided by (used in) investing activities	**(6,781)**	(2,576)	(17,175)
Cash flows from financing activities:			
Issuances of subordinated long-term debt[3]	20	1,432	2,716
Repayments and extinguishments of subordinated long-term debt[3]	(153)	(1,471)	(90)
Issuances of trust preferred securities[4]	0	0	0
Repayments and extinguishments of trust preferred securities[4]	(6)	(225)	0
Principal portion of lease payments[5]	(552)	(534)	(607)
Common shares issued	0	0	0
Purchases of treasury shares	(1,126)	(857)	(695)
Sale of treasury shares	0	0	0
Additional Equity Components (AT1) issued	3,000	0	2,000
Additional Equity Components (AT1) repaid	0	0	(1,750)
Purchases of Additional Equity Components (AT1)	(3,341)	(400)	(4,058)
Sale of Additional Equity Components (AT1)	3,316	415	4,074
Coupon on additional equity components, pre tax	(574)	(498)	(479)
Dividends paid to noncontrolling interests	(264)	(100)	(96)
Net change in noncontrolling interests	(84)	(5)	5
Cash dividends paid to Deutsche Bank shareholders	(883)	(610)	(406)
Net cash provided by (used in) financing activities	**(646)**	(2,852)	614
Net effect of exchange rate changes on cash and cash equivalents	**2,910**	(2,036)	4,354
Net increase (decrease) in cash and cash equivalents	(33,102)	(1,857)	(14,320)
Cash and cash equivalents at beginning of period	163,768	165,626	179,946
Cash and cash equivalents at end of period	130,666	163,768	165,626

in € m.	2024	2023	2022
Net cash provided by (used in) operating activities include			
Income taxes paid (received), net	1,392	955	1,288
Interest paid[6]	33,573	25,454	9,286
Interest received[6]	48,384	42,886	22,817
Dividends received	110	106	87
Cash and cash equivalents comprise			
Cash and central bank balances[7]	126,353	159,326	159,876
Interbank balances (w/o central banks)[8]	4,313	4,442	5,749
Total	**130,666**	163,768	165,626

[1] Included are senior long-term debt issuances of € 13.5 billion and € 6.5 billion and repayments and extinguishments of € 2.4 billion and € 1.2 billion through December 31, 2024 and December 31, 2023, respectively

[2] Included are issuances of € 25.9 billion and € 26.8 billion and repayments and extinguishments of € 33.2 billion and € 40.1 billion through December 31, 2024 and December 31, 2023, respectively

[3] Non-cash changes for Subordinated Long Term Debt are € 532 million in total and mainly driven by Fair Value changes of € 90 million and Foreign Exchange movements of € 432 million through December 31, 2024 and € (31) million in total mainly driven by Fair Value changes of € 139 million and Foreign Exchange movements of € (173) million through December 31, 2023

[4] Non-cash changes for Trust Preferred Securities are € 3 million in total and mainly driven by Fair Value changes of € (3) million through December 31, 2024 and € 15 million in total and mainly driven by Fair Value changes of € 8 million through December 31, 2023

[5] Non-cash changes for Lease liabilities are € 673 million in total including Foreign Exchange movements of € 107 million through December 31, 2024 and € 669 million in total including Foreign Exchange movements of € (65) million through December 31, 2023

[6] Includes interest paid and interest received from derivatives qualifying as hedging instruments under the Group’s fair value hedge accounting application, which includes portfolio hedges of interest rate risk in accordance with the EU carve-out version of IAS 39

[7] Not included: Interest-earning time deposits with central banks of € 21.2 billion as of December 31, 2024 and € 19.1 billion as of December 31, 2023

[8] Not included: Interest-earning time deposits with banks of € 1.9 billion as of December 31, 2024 and € 1.7 billion as of December 31, 2023

As of December 31, 2024 cash and central bank balances include time and demand deposits at the Russian Central Bank of € 377 million (€ 612 million as of December 31, 2023). These are subject to foreign exchange restrictions. Thereof, demand deposits of € 15 million (€ 30 million as of December 31, 2023) qualify as Cash and cash equivalents at end of period.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Notes to the consolidated financial statements

01 – Material accounting policies and critical accounting estimates

Basis of accounting

Deutsche Bank Aktiengesellschaft, Taunusanlage 12, 60325 Frankfurt am Main, Germany ("Deutsche Bank" or the "Parent") is a stock corporation organized under the laws of the Federal Republic of Germany. Deutsche Bank together with all entities in which Deutsche Bank has a controlling financial interest (collectively the "Group" or "Deutsche Bank" is a global provider of a full range of corporate and investment banking, private clients and asset management products and services.

The accompanying consolidated financial statements are stated in euros, the presentation currency of the Group. All financial information presented in million euros has been rounded to the nearest million. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Prior to publication on March 13, 2025, the Supervisory Board approved the Consolidated Financial Statements 2024 of the Group on March 12, 2025, which were drawn up by the Management Board on March 6, 2025.

EU carve-out

For purposes of the Group's primary financial reporting outside the United States, the Group prepares its consolidated financial statements in accordance with IFRS as endorsed by the EU. For purposes of the Group's consolidated financial statements prepared in accordance with IFRS as endorsed by the EU, the Group applies fair value hedge accounting for portfolio hedges of interest rate risk (fair value macro hedges) in accordance with the EU carve out version of IAS 39. The purpose of applying the EU carve out version of IAS 39 is to align the Group's hedge accounting approach with its risk management practice and the accounting practice of its major European peers. Under the EU carve out version of IAS 39 fair value macro hedge accounting may be applied to core deposits. In addition, the EU carve out version of IAS 39 hedge ineffectiveness is only recognized when the revised estimate of the amount of cash flows in scheduled time buckets falls below the original designated amount of that bucket. If the revised amount of cash flows in scheduled time buckets is more than the original designated amount, then there is no hedge ineffectiveness. Under IFRS as issued by the IASB, hedge accounting for fair value macro hedges cannot be applied to core deposits. In addition, under IFRS as issued by the IASB hedge ineffectiveness arises for all fair value macro hedge accounting relationships whenever the revised estimate of the amount of cash flows in scheduled time buckets is either more or less than the original designated amount of that bucket. The EU carve out version of IAS 39 also removes the prohibition on identifying a benchmark risk component in a financial instrument priced at sub–benchmark. This may arise when financial instruments carry a negative spread such that the identified non–contractually specified risk component is larger than the interest carry on the contract itself.

For the financial year ended December 31, 2024, the application of the EU carve-out version of IAS 39 had a negative impact of € 1.4 billion on profit before tax and of € 1.0 billion on profit after tax. For the financial year ended December 31, 2023, the application of the EU carve-out had a negative impact of € 2.3 billion on profit before taxes and of € 1.6 billion on profit post taxes.

The Group's regulatory capital and ratios thereof are also reported on the basis of the EU carve-out version of IAS 39. The impact on total equity also impacts the calculation of the CET1 capital ratio. For the financial year ended December 31, 2024, application of the EU carve-out had a negative impact on the CET1 capital ratio of about 68 basis points and a negative impact of about 43 basis points for the financial year ended December 31, 2023.

IFRS 7 disclosures (including climate risk related disclosures)

Disclosures about the nature and the extent of risks arising from financial instruments as required by IFRS 7, “Financial Instruments: Disclosures” are set forth in the Risk Report section of the Combined Management Report and are an integral part of the Consolidated Financial Statements.

Disclosures on climate related risk can be found in the section, “Risk and Capital Management”, chapter “Enterprise Risk Management“ (Environmental, Social and Governance Risk) as well as in the section “Risk and Capital Performance”, chapter “Credit Risk Exposure” (Focus Areas 2024) in the Risk Report. The Group is exposed to environmental, social and governance (ESG) risk. The following are examples of how such risk may impact the financial results of the Group:

- Increases in the frequency and severity of climate events could impact client ability to service principal and interest payments under instruments subject to IFRS 9.
- Failure to comply with environmental and social legislation may impact client ability to generate sustainable returns to service their loans.
- If in the future clients do not hold sufficient insurance for physical assets against certain risks (e.g., flooding), this may impact the value of collateral held against certain type of loans.

The Group considers such ESG risk as part of the credit risk assessment and due diligence process before relevant clients are granted credit. The Group also manages its credit portfolio within the established risk appetite and limits. Further accounting considerations, including risk consideration, for ESG indexed loans can be found in the section “Financial assets” in the description of the material accounting policies below.

These audited disclosures are marked in light blue in the Risk Report.

As of January 1, 2024, the Group discontinued its disclosure relating to exposures to Russia and the impact on allowance for credit losses as a result of the war in Ukraine. The Group continues to monitor its risks related to Russia as part of its regular risk management activities and enhanced governance oversight in place.

Since the beginning of the fourth quarter 2023, High Quality Liquid Assets (HQLA, as defined in the Commission Delegated Regulation (EU) 2015/61) is a key limit per the Group’s liquidity risk appetite, replacing the previously reported Liquidity Reserve. HQLA comprise available cash and cash equivalents and unencumbered high quality liquid securities (including government and government guaranteed bonds), representing the most readily available and most important countermeasure in a stress event. Accordingly, the Group discontinued the disclosure of Liquidity Reserves from 2024 onwards.

Critical accounting estimates

The preparation of financial statements under IFRS requires management to make estimates and assumptions for certain categories of assets and liabilities. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management’s estimates. The Group’s material accounting policies are described in “Material Accounting Policies”.

- Certain of the Group’s accounting policies require critical accounting estimates that involve complex and subjective judgments and the use of assumptions, some of which may be for matters that are inherently uncertain and susceptible to change. Such critical accounting estimates could change from period to period and may have a material impact on the Group’s financial condition, changes in financial condition or results of operations. Critical accounting estimates could also involve estimates where management could have reasonably used another estimate in the current accounting period. The Group has identified the following material accounting policies that involve critical accounting estimates:

- The impairment of loans and provisions for off-balance sheet positions (see “Impairment of Loans and Provision for Off-balance Sheet Positions” below)
- The impairment of financial assets at fair value through other comprehensive income (see “Impairment of Loans and Provision for Off-balance Sheet Positions” below)
- The determination of fair value (see “Determination of Fair Value” below)
- The recognition of trade date profit (see “Recognition of Trade Date Profit” below)
- The impairment of goodwill and other intangibles (see “Goodwill and Other Intangible Assets” below)
- The recognition and measurement of deferred tax assets (see “Income Taxes” below)
- The accounting for legal and regulatory contingencies and uncertain tax positions (see “Provisions” below)

Material accounting policies

The following is a description of the significant accounting policies of the Group. Except for the changes in accounting policies and changes in accounting estimates described previously and noted below these policies have been consistently applied for 2022, 2023 and 2024.

Principles of consolidation

The financial information in the Consolidated Financial Statements includes the parent company, Deutsche Bank AG, together with its consolidated subsidiaries, including certain structured entities presented as a single economic unit.

Subsidiaries

The Group's subsidiaries are those entities which it directly or indirectly controls. Control over an entity is evidenced by the Group's ability to exercise its power in order to affect any variable returns that the Group is exposed to through its involvement with the entity.

The Group sponsors the formation of structured entities and interacts with structured entities sponsored by third parties for a variety of reasons, including allowing clients to hold investments in separate legal entities, allowing clients to invest jointly in alternative assets, for asset securitization transactions, and for buying or selling credit protection.

When assessing whether to consolidate an entity, the Group evaluates a range of control factors, namely:

- Purpose and design of the entity
- Relevant activities and how these are determined
- Whether the Group's rights result in the ability to direct the relevant activities
- Whether the Group has exposure or rights to variable returns
- Whether the Group has the ability to use its power to affect the amount of its returns

Where voting rights are relevant, the Group is deemed to have control where it holds, directly or indirectly, more than half of the voting rights over an entity unless there is evidence that another investor has the practical ability to unilaterally direct the relevant activities.

Potential voting rights that are deemed to be substantive are also considered when assessing control.

Likewise, the Group also assesses existence of control where it does not control the majority of the voting power but has the practical ability to unilaterally direct the relevant activities. This may arise in circumstances where the size and dispersion of holdings of the shareholders give the Group the power to direct the activities of the investee.

Associates

Investments in associates are accounted for under the equity method of accounting. An associate is an entity in which the Group has significant influence, but not a controlling interest, over the operating and financial management policy decisions of the entity. Significant influence is generally presumed when the Group holds between 20% and 50% of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Group has significant influence. Among the other factors that are considered in determining whether the Group has significant influence are representation on the board of directors (supervisory board in the case of German stock corporations) and material intercompany transactions. The existence of these factors could require the application of the equity method of accounting for a particular investment even though the Group's investment is less than 20% of the voting stock.

Under the equity method of accounting, the Group's investments in associates and jointly controlled entities are initially recorded at cost including any directly related transaction costs incurred in acquiring the associate, and subsequently increased (or decreased) to reflect both the Group's pro-rata share of the post-acquisition net income (or loss) of the associate or jointly controlled entity and other movements included directly in the equity of the associate or jointly controlled entity. The Group's share of the results of associates is adjusted to conform to the accounting policies of the Group and is reported in the Consolidated Statement of Income as Net income (loss) from equity method investments.

If there is objective evidence of impairment, an impairment test is performed by comparing the investment's recoverable amount, which is the higher of its value in use and fair value less costs to sell, with its carrying amount.

Foreign currency translation

The Consolidated Financial Statements are prepared in Euro, which is the presentation currency of the Group. Various entities in the Group use a different functional currency, being the currency of the primary economic environment in which the entity operates.

An entity records foreign currency revenues, expenses, gains and losses in its functional currency using the exchange rates prevailing at the dates of recognition.

Monetary assets and liabilities denominated in currencies other than the entity’s functional currency are translated at the period end closing rate. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the Consolidated Statement of Income as net gains (losses) on financial assets/liabilities at fair value through profit or loss in order to align the translation amounts with those recognized from foreign currency related transactions (derivatives) which hedge these monetary assets and liabilities.

Non-monetary items that are measured at historical cost are translated using the historical exchange rate at the date of the transaction. Translation differences on non-monetary items which are held at fair value through profit or loss are recognized in profit or loss.

For purposes of translation into the presentation currency, assets and liabilities of foreign operations are translated at the period end closing rate and items of income and expense are translated into euros at the rates prevailing on the dates of the transactions, or average rates of exchange where these approximate actual rates. The exchange differences arising on the translation of a foreign operation are included in other comprehensive income. For foreign operations that are subsidiaries, the amount of exchange differences attributable to any noncontrolling interests is recognized in noncontrolling interests.

Upon disposal of a foreign subsidiary and associate (which results in loss of control or significant influence over that operation) the total cumulative exchange differences recognized in other comprehensive income are reclassified to profit or loss.

Upon partial disposal of a foreign operation that is a subsidiary and which does not result in loss of control, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to noncontrolling interests as this is deemed a transaction with equity holders. For a partial disposal of an associate which does not result in a loss of significant influence, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to profit or loss.

Interest, commissions and fees

Net interest income – Interest income and expense from all interest-bearing assets and liabilities is recognized as net interest income using the effective interest rate method. The effective interest rate (EIR) is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or expense over the relevant period using the estimated future cash flows.

The estimated future cash flows used in the EIR calculation include those determined by all of the contractual terms of the asset or liability, all fees (including commissions) that are considered to be integral to the effective interest rate, direct and incremental transaction costs and all other premiums or discounts. However, if the financial instrument is carried at fair value through profit or loss, any associated fees are recognized in trading income when the instrument is initially recognized, provided there are no significant unobservable inputs used in determining its fair value.

If a financial asset is credit-impaired, interest revenue is calculated by applying the effective interest rate to the amortized cost amount. The amortized cost amount of a financial asset is the gross carrying amount of a financial asset after adjusting for any impairment allowance. For assets which are initially recognized as purchased or credit-impaired, interest revenue is calculated through the use of a credit-adjusted effective interest rate which takes into consideration expected credit losses.

The Group presents negative interest paid on interest-bearing assets as interest expense, and interest revenue received from interest-bearing liabilities as interest income.

The Group presents interest income and expense calculated using the EIR method separately in the Group’s consolidated statement of income.

Commissions and fee income –The Group applies the IFRS 15, "Revenue from Contracts with Customers" five-step revenue recognition model to the recognition of Commissions and Fee Income, under which income must be recognized when control of goods and services is transferred, hence the contractual performance obligations to the customer have been satisfied.

Accordingly, after a contract with a customer has been identified in the first step, the second step is to identify the performance obligation – or a series of distinct performance obligations – provided to the customer. The Group must examine whether the service is capable of being distinct and is actually distinct within the context of the contract. A promised service is distinct if the customer can benefit from the service either on its own or together with other resources that are readily available to the customer, and the promise to transfer the service to the customer is separately identifiable from other promises in the contract. The amount of income is measured on the basis of the contractually agreed transaction price for the performance obligation defined in the contract. If a contract includes a variable consideration, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the promised goods or services to a customer. Income is recognized in profit and loss when the identified performance obligation has been satisfied. The Group does not present information about its remaining performance obligations if it is part of a contract that has an original expected duration of one year or less.

The Group determines the stand-alone selling price at contract inception of a distinct service underlying each performance obligation in the contract and allocates the transaction price in proportion to those stand-alone selling prices. The stand-alone selling price is the price at which Deutsche Bank would sell a promised service separately to a customer on an unbundled basis. The best evidence of a stand-alone selling price is the observable price of a service when the Group sells that service separately in similar circumstances and to similar customers. If the Group does not sell the service to a customer separately, it estimates the stand-alone selling price at an amount using a suitable method, for example, in loan syndication transactions the Group applies the requirements for recognition of trade day profit and considers the price at which other market participants provide the same service on an unbundled basis. As such when estimating a stand-alone selling price, the Group considers all information (including market conditions) that is reasonably available to it. In doing so, the Group maximizes the use of observable inputs and applies estimation methods consistently in similar circumstances.

The Group provides asset management services that give rise to asset management and performance fees and constitute a single performance obligation. The asset management and performance fee components are variable considerations such that at each reporting date the Group estimates the fee amount to which it will be entitled in exchange for transferring the promised services to the customer. The benefits arising from the asset management services are simultaneously received and consumed by the customer over time. The Group recognizes revenue over time by measuring the progress towards complete satisfaction of that performance obligation, subject to the removal of any uncertainty as to whether it is highly probable that a significant reversal in the cumulative amount of revenue recognized would occur or not. For the management fee component this is the end of the monthly or quarterly service period. For performance fees this date is when any uncertainty related to the performance component has been fully removed.

Loan commitment fees related to commitments that are accounted for off balance sheet are recognized in commissions and fee income over the life of the commitment if it is unlikely that the Group will enter into a specific lending arrangement. If it is probable that the Group will enter into a specific lending arrangement, the loan commitment fee is deferred until the origination of a loan and recognized as an adjustment to the loan's effective interest rate.

Commissions and Fee Income predominantly earned from services that are received and consumed by the customer over time: Administration, assets under management, foreign commercial business, loan processing and guarantees sundry other customer services. The Group recognizes revenue from these services over time by measuring the progress towards complete satisfaction of that performance obligation, subject to the removal of any uncertainty as to whether it is highly probable that a significant reversal in the cumulative amount of revenue recognized would occur or not.

Commissions and Fee Income predominantly earned from providing services at a point in time or transaction-type services include other securities, underwriting and advisory fees, brokerage fees, local payments, foreign currency/ exchange business and intermediary fees.

Expenses that are directly related and incremental to the generation of Commissions and Fee Income are presented net in Commissions and Fee Income in the Consolidated Statement of Income. This includes income and associated expense where the Group contractually owns the performance obligation (i.e. as Principal) in relation to the service that gives rise to the revenue and associated expense. In contrast, it does not include situations where the Group does not contractually own the performance obligation and is acting as agent. The determination of whether the Group is acting as principal or agent is based on the contractual terms of the underlying service arrangement. The gross Commissions and Fee Income and Expense amounts are disclosed in “Note 6 – Commissions and Fee Income”.

Financial assets

The Group classifies financial assets in line with the classification and measurement requirements of IFRS 9, where financial assets are classified based on both the business model used for managing the financial assets and the contractual cash flow characteristics of the financial asset (known as Solely Payments of Principal and Interest or “SPPI”). There are three business models available:

- Hold to Collect - Financial assets held with the objective to collect contractual cash flows. They are subsequently measured at amortized cost and are recorded in multiple lines on the Group’s consolidated balance sheet.
- Hold to Collect and Sell - Financial assets held with the objective of both collecting contractual cash flows and selling financial assets. They are recorded as Financial assets at Fair Value through Other Comprehensive Income on the Group’s consolidated balance sheet.
- Other - Financial assets that do not meet the criteria of either “Hold to Collect” or “Hold to Collect and Sell”. They are recorded as Financial Assets at Fair Value through Profit or Loss on the Group’s consolidated balance sheet.

The assessment of business model requires judgment based on facts and circumstances upon initial recognition. As part of this assessment, the Group considers quantitative factors (e.g., the expected frequency and volume of sales) and qualitative factors such as how the performance of the business model and the financial assets held within that business model are evaluated and reported to the Group’s key management personnel. In addition to taking into consideration the risks that affect the performance of the business model and the financial assets held within that business model, in particular, the way in which those market and credit risks are managed; and how managers of the business are compensated (e.g., whether the compensation is based on the fair value of the assets managed or on the contractual cash flows collected). This assessment results in an asset being classified in either a Hold to Collect, Hold to Collect and Sell or Other business model.

If the Group holds a financial asset either in a Hold to Collect or a Hold to Collect and Sell business model, then an assessment at initial recognition to determine whether the contractual cash flows of the financial asset are Solely Payments of Principal and Interest on the principal amount outstanding is required to determine the financial asset classification. Contractual cash flows, that are SPPI on the principal amount outstanding, are consistent with a basic lending arrangement. Interest in a basic lending arrangement is consideration for the time value of money and the credit risk associated with the principal amount outstanding during a particular period of time. It can also include consideration for other basic lending risks (e.g., liquidity risk) and costs (e.g., administrative costs) associated with holding the financial asset for a particular period of time; and a profit margin that is consistent with a basic lending arrangement. Where cash flows can change over time due to contingent events, such as terms where the margin on a loan adjusts depending on the performance of the borrower on certain contractual ESG metrics, the contingent event and cash flows are assessed to determine if the instrument cash flows are SPPI. The nature of the contingent event and the size of the possible change in cash flows are taken into account in this assessment on an absolute and relative basis compared to the overall coupon. Additionally, as part of the SPPI assessment where the lending is non-recourse in nature then further assessment is made to determine if the cash flows are consistent with SPPI which is dependent on the nature of the underlyings, the level of subordination and the contractual cash flows of the instrument held. The Group originates and purchases debt instruments from entities issuing multiple tranches of debt. Where these instruments meet the definition of a contractually linked instruments then further analysis is performed on the cash flows and credit risk exposure of the instrument held as well as the underlying collateral held at purchase and can be held in the future.

Financial assets at fair value through profit or loss

Financial assets are classified at fair value through profit or loss if they are held in the Other business model because they are either held for trading or because they do not meet the criteria for Hold to Collect or Hold to Collect and Sell. In addition, it includes financial assets that meet the criteria for Hold to Collect or Hold to Collect and Sell business model, but the financial asset fails SPPI or where the Group designated the financial assets under the fair value option.

Financial assets classified as Financial assets at fair value through profit or loss are measured at fair value with realized and unrealized gains and losses included in Net gains (losses) on financial assets/liabilities at fair value through profit or loss. Interest on interest earning assets such as trading loans and debt securities and dividends on equity instruments are presented in Interest and Similar Income.

The Group applies trade date accounting to financial assets classified at fair value through profit or loss.

Trading assets – Financial assets are classified as held for trading if they have been originated, acquired or incurred principally for the purpose of selling or repurchasing them in the near term, or they form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking. Trading assets include debt and equity securities, derivatives held for trading purposes, and trading loans. This also includes loan commitments that are allocated to the Other business model and that are presented as derivatives held for trading.

Non-trading financial assets mandatory at fair value through profit and loss –The Group assigns any non-trading financial asset that does not fall into the Hold to Collect nor Hold to Collect and Sell business models into the Other business model and classifies them as Non-Trading Financial Assets mandatory at Fair Value through Profit and Loss. This includes predominately reverse repurchase agreements which are managed on a fair value basis. Additionally, any financial asset that falls into the Hold to Collect or Hold to Collect and Sell business models for which the contractual cash flow characteristics are not SPPI is classified by the Group as Non-Trading Financial Assets Mandatory at Fair Value through Profit and Loss.

Financial assets designated at fair value through profit or loss – Certain financial assets that would otherwise be measured subsequently at amortized cost or at fair value through other comprehensive income, may be designated at Fair Value through Profit or Loss if the designation eliminates or significantly reduces a measurement or recognition inconsistency. The Group allows the fair value option to be designated only for those financial instruments for which a reliable estimate of fair value can be obtained.

Financial assets at fair value through other comprehensive income

A financial asset shall be classified and measured at Fair Value through Other Comprehensive Income (“FVOCI”), if the financial asset is held in a Hold to Collect and Sell business model and the contractual cash flows are SPPI, unless designated under the fair value option.

The amortization of premiums and accretion of discounts are recorded in net interest income. Realized gains and losses are reported in net gains (losses) on financial assets at FVOCI. Generally, the weighted-average cost method is used to determine the cost of FVOCI financial assets.

The Group applies trade date accounting to financial assets classified at FVOCI.

It is possible to designate non-trading equity instruments as FVOCI. However, this category is expected to have limited usage by the Group and has not been used to date.

Financial assets at amortized cost

A financial asset is classified and subsequently measured at amortized cost if the financial asset is held in a Hold to Collect business model and the contractual cash flows are SPPI.

Under this measurement category, the financial asset is measured at fair value at initial recognition. Subsequently the carrying amount is reduced for principal payments, plus or minus the cumulative amortization using the effective interest method. The financial asset is assessed for impairment under the IFRS 9 expected credit loss model where provisions are recognized based on expectations of potential credit losses. The Group's impairment of financial instruments policy is described further in the section "Impairment of Loans and Provision for Off-Balance Sheet Positions (IFRS 9)". The Group applies settlement date accounting to financial assets measured at amortized cost.

Financial Assets at amortized cost include predominately Loans at amortized cost, Central bank funds sold and securities purchased under resale agreements, Securities borrowed and certain receivables presented in Other Assets.

Modification of financial assets and financial liabilities

When the terms of a financial asset are renegotiated or modified and the modification does not result in derecognition, a gain or loss is recognized in the income statement as the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate. The modified financial asset will continue to accrue interest at its original EIR. When a modification results in derecognition the original instrument is derecognized and the new instrument recognized at fair value.

Non-credit related or commercial renegotiations where an obligor has not experienced a significant increase in credit risk since origination and has a readily exercisable right to early terminate the financial asset results in derecognition of the original agreement and recognition of a new financial asset based on the newly negotiated commercial terms.

For credit related modifications (i.e. those modifications due to significant increase in credit risk since inception) or those where the obligor does not have the readily exercisable right to early terminate, the Group assesses whether the modified terms result in the financial asset being significantly modified and therefore derecognized. This assessment includes a quantitative assessment of the impact of the change in cash flows from the modification of contractual terms and additionally, where necessary, a qualitative assessment of the impact of the change in the contractual terms. Where these modifications are not concluded to be significant, the financial asset is not derecognized and is accounted for as a modification as described above.

If the changes are concluded to be significant, the old instrument is derecognized and a new instrument recognized. The Group then recognizes a credit loss allowance based on 12-month expected credit losses. However, if following a modification that results in a derecognition of the original financial asset, there is evidence that the new financial asset is credit-impaired on initial recognition; then the new financial asset should be recognized as an originated credit-impaired financial asset and initially classified in Stage 3 (refer to section "Impairment of Loans and Provision for Off-Balance Sheet Positions" below).

When the terms of a financial liability are renegotiated or modified then the Group assesses whether the modified terms result in the financial liability being significantly modified and therefore derecognized. This assessment includes a quantitative assessment of the impact of the change in cash flows from the modification of contractual terms and additionally, where necessary, a qualitative assessment of the impact of the change in the contractual terms. Where these modifications are not concluded to be significant, the financial liability is not derecognized and a gain or loss is recognized in the income statement as the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate. Where there is derecognition the original financial liability is derecognized and the new liability recognized at its fair value.

Loan commitments

Loan commitments remain off-balance sheet, unless allocated to the Other business model and presented as derivatives held for trading. The Group does not recognize and measure changes in fair value of off-balance sheet loan commitments that result from changes in market interest rates or credit spreads. However, as specified in the sections "Impairment of Loans and Provision for Off-Balance Sheet Positions" below, these off-balance sheet loan commitments are in scope of the IFRS 9 impairment model.

Financial liabilities

Under IFRS 9 financial liabilities are measured at amortized cost using the effective interest method, except for financial liabilities at fair value through profit or loss.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include Trading Liabilities, Financial Liabilities Designated at Fair Value through Profit or Loss and Non-Participating Investment Contracts ("Investment Contracts"). Under IFRS 9 they are carried at fair value with realized and unrealized gains and losses included in net gains (losses) on financial assets and liabilities at fair value through profit or loss. For financial liabilities designated at fair value through profit and loss the fair value movements attributable to the Group's own credit component for fair value movements is recognized in Other Comprehensive Income.

The Group applies trade date accounting to financial liabilities classified at fair value through profit or loss.

Interest on interest paying liabilities are presented in interest expense for financial instruments at fair value through profit or loss.

Trading liabilities - Financial liabilities that arise from debt issued are classified as held for trading if they have been originated or incurred principally for the purpose of repurchasing them in the near term. Trading liabilities consist primarily of derivative liabilities (including certain loan commitments) and short positions. This also includes loan commitments where the resulting loan upon funding is allocated to the other business model such that the undrawn loan commitment is classified as derivatives held for trading.

Financial liabilities designated at fair value through profit or loss - Certain financial liabilities that do not meet the definition of trading liabilities are designated at fair value through profit or loss using the fair value option. To be designated at fair value through profit or loss, financial liabilities must meet one of the following criteria: (1) the designation eliminates or significantly reduces a measurement or recognition inconsistency; (2) a group of financial liabilities is managed and its performance is evaluated on a fair value basis in accordance with a documented risk management or investment strategy; or (3) the instrument contains one or more embedded derivatives unless: (a) the embedded derivative does not significantly modify the cash flows that otherwise would be required by the contract; or (b) it is clear with little or no analysis that separation is prohibited. In addition, the Group allows the fair value option to be designated only for those financial instruments for which a reliable estimate of fair value can be obtained. Financial liabilities which are designated at fair value through profit or loss, under the fair value option, include repurchase agreements, loan commitments and structured note liabilities.

Investment contracts - All of the Group's investment contracts are unit-linked contracts that match specific assets held by the Group. The contracts oblige the Group to use these assets to settle investment contract liabilities. They do not contain significant insurance risk or discretionary participation features. The contract liabilities are determined using current unit prices multiplied by the number of units attributed to the contract holders as of the balance sheet date. As this amount represents fair value, the liabilities have been classified as financial liabilities at fair value through profit or loss. Deposits collected under investment contracts are accounted for as an adjustment to the investment contract liabilities. Investment income attributable to investment contracts is included in the consolidated statement of Income. Investment contract claims reflect the excess of amounts paid over the account balance released. Investment contract policyholders are charged fees for policy administration, investment management, surrenders or other contract services.

Embedded derivatives

Some hybrid financial liability contracts contain both a derivative and a non-derivative component. In such cases, the derivative component is termed an embedded derivative, with the non-derivative component representing the host financial liability contract. If the economic characteristics and risks of embedded derivatives are not closely related to those of the host financial liability contract and the hybrid financial liability contract itself is not carried at fair value through profit or loss, the embedded derivative is bifurcated and reported at fair value, with gains and losses recognized in net gains (losses) on financial assets/liabilities at fair value through profit or loss. The host financial liability contract will continue to be accounted for in accordance with the appropriate accounting standard. The carrying amount of an embedded derivative is reported in the same Consolidated balance sheet line item as the host financial liability contract. Certain hybrid financial liability instruments have been designated at fair value through profit or loss using the fair value option.

Financial liabilities at amortized cost

Financial liabilities measured at amortized cost include long-term and short-term debt issued which are initially measured at fair value, which is the consideration received, net of transaction costs incurred. Repurchases of issued debt in the market are treated as extinguishments and any related gain or loss is recorded in the Consolidated Statement of Income. A subsequent sale of own bonds in the market is treated as a reissuance of debt. The Group applies settlement date accounting to financial liabilities measured at amortized cost.

Offsetting of financial instruments

Financial assets and liabilities are offset, with the net amount presented in the Consolidated balance sheet, only if the Group holds a currently enforceable legal right to set off the recognized amounts and there is an intention to settle on a net basis or to realize an asset and settle the liability simultaneously. The legal right to set off the recognized amounts must be enforceable in both the normal course of business and in the event of default, insolvency or bankruptcy of both the Group and its counterparty. In all other situations they are presented gross. When financial assets and financial liabilities are offset in the Consolidated balance sheet, the associated income and expense items will also be offset in the Consolidated Statement of Income, unless specifically prohibited by an applicable accounting standard.

The majority of the offsetting applied by the Group relates to repurchase and reverse repurchase agreements. For further information please refer to Note 17 “Offsetting Financial Assets and Financial Liabilities”.

Determination of fair value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an arm’s length transaction between market participants at the measurement date. The fair value of instruments that are quoted in active markets is determined using the quoted prices where they represent those at which regularly and recently occurring transactions take place.

The Group measures certain portfolios of financial assets and financial liabilities on the basis of their net risk exposures when the following criteria are met:

– The group of financial assets and liabilities is managed on the basis of its net exposure to a particular market risk (or risks) or to the credit risk of a particular counterparty, in accordance with a documented risk management strategy,
– The fair values are provided to key management personnel, and
– The financial assets and liabilities are measured at fair value through profit or loss.

This portfolio valuation approach is consistent with how the Group manages its net exposures to market and counterparty credit risks.

Critical accounting estimates – The Group uses valuation techniques to establish the fair value of instruments where prices quoted in active markets are not available. Therefore, where possible, parameter inputs to the valuation techniques are based on observable data derived from prices of relevant instruments traded in an active market. These valuation techniques involve some level of management estimation and judgment, the degree of which will depend on the price transparency for the instrument or market and the instrument’s complexity.

In reaching estimates of fair value management judgment needs to be exercised. The areas requiring significant management judgment are identified, documented and reported to senior management as part of the valuation control process and the standard monthly reporting cycle. The specialist model validation and valuation control groups focus attention on the areas of subjectivity and judgment.

The level of management judgment required in establishing fair value of financial instruments for which there is a quoted price in an active market is usually minimal. Similarly, there is little subjectivity or judgment required for instruments valued using valuation models which are standard across the industry and where all parameter inputs are quoted in active markets.

The level of subjectivity and degree of management judgment required is more significant for those instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less liquid or less observable. Management judgment is required in the selection and application of appropriate parameters, assumptions and modelling techniques. In particular, where data are obtained from infrequent market transactions then extrapolation and interpolation techniques must be applied. Where no market data are available for a particular instrument then pricing inputs are determined by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions and making appropriate adjustment to reflect the actual instrument being valued and current market conditions. Where different valuation techniques indicate a range of possible fair values for an instrument then management has to decide what point within the range of estimates appropriately represents the fair value. Further, some valuation adjustments may require the exercise of management judgment to achieve fair value.

Financial assets and liabilities carried at fair value are required to be disclosed according to the inputs to the valuation method that are used to determine their fair value. Specifically, segmentation is required between those valued using quoted market prices in an active market (level 1), valuation techniques based on observable parameters (level 2) and valuation techniques using significant unobservable parameters (level 3). Management judgment is required in determining the category to which certain instruments should be allocated. This specifically arises when the valuation is determined by a number of parameters, some of which are observable and others are not. Further, the classification of an instrument can change over time to reflect changes in market liquidity and therefore price transparency.

The Group provides a sensitivity analysis of the impact upon the level 3 financial instruments of using a reasonably possible alternative for the unobservable parameter. The determination of reasonably possible alternatives requires significant management judgment.

For financial instruments measured at amortized cost (which include loans, deposits and short and long term debt issued) the Group discloses the fair value. Generally, there is limited or no trading activity in these instruments and therefore the fair value determination requires significant management judgment.

For further discussion of the valuation methods and controls and quantitative disclosures with respect to the determination of fair value, please refer to Note 13 “Financial Instruments carried at Fair Value” and Note 14 “Fair Value of Financial Instruments not carried at Fair Value”.

Recognition of trade date profit

Trade date profit is recognized if the fair value of the financial instrument measured at fair value through profit or loss is obtained from a quoted market price in an active market, or otherwise evidenced by comparison to other observable current market transactions or based on a valuation technique incorporating observable market data. If there are significant unobservable inputs used in the valuation technique, the financial instrument is recognized at the transaction price and any profit implied from the valuation technique at trade date is deferred.

Using systematic methods, the deferred amount is recognized over the period between trade date and the date when the market is expected to become observable, or over the life of the trade (whichever is shorter). Such methodology is used because it reflects the changing economic and risk profile of the instrument as the market develops or as the instrument itself progresses to maturity. Any remaining trade date deferred profit is recognized in the Consolidated Statement of Income when the transaction becomes observable.

Critical Accounting Estimates – Management judgment is required in determining whether there exist significant unobservable inputs in the valuation technique of the underlying financial instrument (refer to section “Determination of Fair Value” for management judgment required in establishing fair value of financial instruments). Once deferred, the decision to subsequently recognize the trade date profit requires a careful assessment of the then current facts and circumstances supporting observability of parameters and/or risk mitigation.

Derivatives and hedge accounting

Derivatives are used to manage exposures to interest rate, foreign currency, credit and other market price risks, including exposures arising from forecast transactions. All freestanding contracts that are considered derivatives for accounting purposes are carried at fair value on the Consolidated balance sheet regardless of whether they are held for trading or non-trading purposes.

The changes in fair value on derivatives held for trading are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss.

Hedge accounting

IFRS 9 includes an accounting policy choice to defer the adoption of IFRS 9 hedge accounting and to continue with IAS 39 hedge accounting. The Group decided to exercise this accounting policy choice and did not adopt IFRS 9 hedge accounting as of January 1, 2018.

For accounting purposes, the Group applies the following types of hedges:

- For hedges of changes in fair value, the changes in the fair value of the hedged asset, liability or unrecognized firm commitment, or a portion thereof, attributable to the risk being hedged, are recognized in the Consolidated Statement of Income along with changes in the entire fair value of the derivative. When hedging interest rate risk, any interest accrued or paid on both the derivative and the hedged item is reported in interest income or expense and the unrealized gains and losses from the hedge accounting fair value adjustments are reported in other revenue. Hedge ineffectiveness is reported in other revenue and is measured as the net effect of changes in the fair value of the hedging instrument and changes in the fair value of the hedged item arising from changes in the market rate or price related to the risk(s) being hedged.
  If a fair value hedge of a debt instrument is discontinued prior to the instrument's maturity because the derivative is terminated or the relationship is de-designated, any remaining interest rate-related fair value adjustments made to the carrying amount of the debt instrument (basis adjustments) are amortized to interest income or expense over the remaining term of the original hedging relationship. For other types of fair value adjustments and whenever a fair value hedged asset or liability is sold or otherwise derecognized, any basis adjustments are included in the calculation of the gain or loss on derecognition.
- For hedges of variability in future cash flows, there is no change to the accounting for the hedged item and the derivative is carried at fair value, with changes in value reported initially in other comprehensive income to the extent the hedge is effective. These amounts initially recorded in other comprehensive income are subsequently reclassified into the Consolidated Statement of Income in the same periods during which the forecast transaction affects the Consolidated Statement of Income. Thus, for hedges of interest rate risk, the amounts are amortized into interest income or expense at the same time as the interest is accrued on the hedged transaction.
  Hedge ineffectiveness is recorded in other income and is measured as changes in the excess (if any) in the absolute cumulative change in fair value of the actual hedging derivative over the absolute cumulative change in the fair value of the hypothetically perfect hedge.
  When hedges of variability in cash flows attributable to interest rate risk are discontinued, amounts remaining in accumulated other comprehensive income are amortized to interest income or expense over the remaining life of the original hedge relationship, unless the hedged transaction is no longer expected to occur in which case the amount will be reclassified into other income immediately. When hedges of variability in cash flows attributable to other risks are discontinued, the related amounts in accumulated other comprehensive income are reclassified into either the same Consolidated Statement of Income caption and period as profit or loss from the forecast transaction, or into other income when the forecast transaction is no longer expected to occur.
- For hedges of the translation adjustments resulting from translating the functional currency financial statements of foreign operations (hedges of net investments in foreign operations) into the functional currency of the parent, the portion of the change in fair value of the derivative due to changes in the spot foreign exchange rates is recorded as a foreign currency translation adjustment in other comprehensive income to the extent the hedge is effective; the remainder is recorded as other income in the Consolidated Statement of Income.

Changes in fair value of the hedging instrument relating to the effective portion of the hedge are subsequently recognized in profit or loss on disposal of the foreign operations.

Hedging derivatives are reported as other assets and other liabilities. In the event that a derivative is subsequently de-designated from a hedging relationship, it is transferred to financial assets/liabilities at fair value through profit or loss.

Impairment of loans and provision for off-balance sheet positions

The impairment requirements of IFRS 9 apply to all credit exposures that are measured at amortized cost or FVOCI, and to off balance sheet lending commitments such as loan commitments and financial guarantees. For purposes of the impairment policy below, these instruments are referred to as ("Financial Assets")

The determination of impairment losses under IFRS 9 uses an expected credit loss ("ECL") model, where allowances are taken upon initial recognition of the Financial Asset, based on expectations of potential credit losses at the time of initial recognition.

Staged approach to the determination of expected credit losses

IFRS 9 states a three-stage approach to impairment for Financial Assets that are not credit-impaired at the date of origination or purchase. This approach is summarized as follows:

- Stage 1: The Group recognizes a credit loss allowance at an amount equal to 12-month expected credit losses for all Financial Assets. This represents the portion of lifetime expected credit losses from default events that are expected within 12 months of the reporting date, assuming that credit risk has not increased significantly after initial recognition.
- Stage 2: The Group recognizes a credit loss allowance at an amount equal to lifetime expected credit losses for those Financial Assets which are considered to have experienced a significant increase in credit risk since initial recognition. This requires the determination of the ECL based on lifetime probability of default, lifetime loss given default and lifetime exposure at default that represents the probability of default occurring over the remaining lifetime of the Financial Asset. Allowance for credit losses are higher in this stage because of an increase in credit risk since origination or purchase and the impact of a longer time horizon being considered compared to 12 months in Stage 1.
- Stage 3: The Group recognizes a loss allowance at an amount equal to lifetime expected credit losses, reflecting a Probability of Default of 100 %, via the expected recoverable cash flows for the asset, for those Financial Assets that are credit-impaired. The Group's definition of default is aligned with the regulatory definition of default. Financial Assets that are credit-impaired upon initial recognition are categorized within Stage 3 with a carrying value already reflecting the lifetime expected credit losses. The accounting treatment for these purchased or originated credit-impaired ("POCI") assets is discussed further below.

ECL are calculated using three main parameters: probability of default (PD), loss given default (LGD) and exposure at default (EAD). These parameters are generally derived from internally developed statistical models combined with historical, current and forward-looking information, including macro-economic data. The 12-month and lifetime PD represent the expected point-in-time probability of a default over the next 12 months and remaining expected lifetime of the financial instrument, respectively, based on conditions existing at the balance sheet date and future economic conditions that affect credit risk. The LGD represents expected loss conditional on default, incorporating the mitigating effect of collateral, its expected value when realized and the time value of money. The EAD represents the expected exposure at default, factoring in the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdown of a facility.

Forward-Looking Information is incorporated into the measurement of the Group Allowance for Credit Losses in terms of adjustments to multi-year PD curves based on macro-economic forecasts.

The Group's ECL model is used to calculate the allowance for credit losses for all financial assets in Stage 1 and Stage 2, as well as for Stage 3 in the homogeneous portfolio (i.e. retail and small business loans with similar credit risk characteristics). For financial assets in the bank's non-homogeneous portfolio in Stage 3 and for POCI assets, the allowance for credit losses is determined individually by credit officers.

Significant increase in credit risk

When determining whether the credit risk (i.e., risk of default) of a Financial Asset has increased significantly since initial recognition, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes quantitative and qualitative information based on the Group's historical experience, credit risk assessment and forward-looking information (including macro-economic factors). The assessment of significant credit deterioration is key in determining when to move from measuring an allowance based on 12-month ECLs to one that is based on lifetime ECLs (i.e., transfer from Stage 1 to Stage 2).

The Group's framework for determining if there has been a significant increase in credit risk aligns with the internal Credit Risk Management ("CRM") process and utilizes:

- Rating related indicators – based on a model that compares lifetime probability of default (PD) at the reporting date with the lifetime PD expectations at the date of initial recognition and subsequently applies a quantile approach to determine a threshold to define the trigger point for a financial asset's transition into Stage 2; and
- Process related indicators – which uses existing risk management indicators, that in Management's view represent situations where the credit risk of financial assets has significantly increased. These include obligors being added to a credit watchlist, being mandatorily transferred to workout status, payments being 30 days or more past due or in forbearance.

These indicators are discussed further in section "IFRS 9 Impairment Approach" in the Risk Report.

Credit-impaired financial assets in Stage 3

The Group has aligned its definition of credit-impaired under IFRS 9 to when a Financial Asset has defaulted for regulatory purposes, according to the Capital Requirements Regulation under Art. 178.

The determination of whether a Financial Asset is credit-impaired and therefore in Stage 3 focusses exclusively on default risk, without taking into consideration the effects of credit risk mitigants such as collateral or guarantees. Specifically, a Financial Asset is credit-impaired and in Stage 3 when:

- The Group considers the obligor is unlikely to pay its credit obligations to the Group. Determination may include forbearance actions, where a concession has been granted to the borrower or economic or legal reasons that are qualitative indicators of credit-impairment; or
- Contractual payments of either principal or interest by the obligor are past due by more than 90 days.

For Financial Assets considered to be credit-impaired, the ECL allowance covers the amount of loss the Group is expected to suffer. The estimation of ECLs is undertaken on a case-by-case basis for non-homogeneous portfolios, or by applying portfolio based parameters to individual Financial Assets in these portfolios via the Group's ECL model for homogeneous portfolios. This estimate includes the use of discounted cash flows that are adjusted for scenarios.

Forecasts of future economic conditions when calculating ECLs are considered. The lifetime expected losses are estimated based on the probability-weighted present value of the difference between the contractual cash flows that are due to the Group under the contract; and the cash flows that the Group expects to receive.

A Financial Asset can be classified as credit-impaired in Stage 3 but without an allowance for credit losses (i.e., no impairment loss is expected). This may be due to the value of collateral. The Group's engine based ECL calculation is conducted on a monthly basis, whereas the case-by-case assessment of ECL in Stage 3 for non-homogeneous portfolio has to be performed at least on a quarterly basis.

Purchased or originated credit-impaired financial assets in Stage 3

A Financial Asset is considered purchased or originated credit-impaired if there is objective evidence of impairment at the time of initial recognition. Such credit-impaired Financial Assets are termed POCI Financial Assets. POCI Financial Assets are measured to reflect lifetime expected credit losses, and all subsequent changes in lifetime expected credit losses, whether positive or negative, are recognized in the income statement as a component of the provision for credit losses. POCI Financial Assets can only be classified in Stage 3 over the life of the Financial Asset.

Write-offs

The Group reduces the gross carrying amount of a Financial Asset when there is no reasonable expectation of recovery. Write-offs can relate to a Financial Asset in its entirety, or to a portion of it, and constitute a derecognition event. The Group considers all relevant information in making this determination, including but not limited to:

- Foreclosure actions taken by the Group which have not been successful or have a high probability of not being successful
- Collateral liquidation which has not, or will not lead to further considerable recoveries
- Situations where no further recoveries are reasonably expected

Write-offs can take place before legal actions against the borrower to recover the debt have been concluded, and a write-off does not involve the Group forfeiting its legal right to recover the debt.

Interest rate used in the IFRS 9 model

In the context of the ECL calculation, the Group applies in line with IFRS 9 an approximation of the EIR, which is usually the contractual interest rate ("CIR") and which does not materially differ from the EIR. The CIR is deemed to be an appropriate approximation, as the interest rate is consistently used in the ECL model, interest recognition and for discounting of the ECL.

Collateral for financial assets considered in the impairment analysis

IFRS 9 requires cash flows expected from collateral and other credit enhancement to be reflected in the ECL calculation. The following are key aspects with respect to collateral and guarantees:

- Eligibility of collateral, i.e. which collateral should be considered in the ECL calculation;
- Collateral evaluation, i.e. what collateral (liquidation) value should be used; and
- Projection of the available collateral amount over the life of a transaction.

These concepts are outlined in more detail in section "IFRS 9 Impairment Approach" in the Risk Report.

Critical accounting estimates – The accounting estimates and judgments related to the impairment of Financial Assets is a critical accounting estimate because the underlying assumptions used can change from period to period and may significantly affect the Group's results of operations.

In assessing assets for impairments, management judgment is required, particularly in projecting forward looking information and scenarios in particular in circumstances of economic and financial uncertainty, when developments and changes to expected cash flows can occur both with greater rapidity and less predictability. The actual amount of the future cash flows and their timing may differ from the estimates used by management and consequently may cause actual losses to differ from reported allowances.

For those non-homogeneous loans in Stage 3 the determination of the impairment allowance often requires the use of considerable judgment concerning such matters as local economic conditions, the financial performance of the counterparty and the value of any collateral held, for which there may not be a readily accessible market.

The determination of the expected credit losses in Stages 1 and 2 and for homogeneous loans in Stage 3 is calculated using the Group's ECL model. The model incorporates numerous estimates and judgments. The Group performs a regular review of the model and underlying data and assumptions. The probability of defaults, loss recovery rates and judgments concerning ability of borrowers in foreign countries to transfer the foreign currency necessary to comply with debt repayments, amongst other things, are incorporated into this review. Management judgement is required over the following critical accounting estimates:

- Forward-Looking Information: The identification of key macro-economic variables (MEVs) reflects a balance of quantitative and qualitative judgements. Statistical analysis, including for example, back-testing and model sensitivities, are performed to assess the explanatory power of MEVs, while expert input from credit officers ensures management comfort in the overall model behavior. The final model parameterization is based on a review and challenge of impacts in internal governance forums and an independent validation performed by the Model Risk Management function. Furthermore, conceptual soundness of the estimation approach is ensured by model testing analysis prepared as part of model changes and an ongoing monitoring framework in order for the ECL provision to reflect management's best estimate in the calculation of expected credit losses.
- Significant Increase in Credit Risk: In line with the section "IFRS 9 Impairment Approach" in the Risk Report, the Group uses rating-related indicators to determine whether a financial asset's credit risk has significantly increased since inception. For financial assets in non-homogeneous portfolios the ratings are determined for every counterparty individually based on credit officer's expert judgement. For financial assets in the homogeneous portfolios (due to the large number of client relationships) the rating process is significantly automated with less judgement required by credit officers on individual counterparties. For both homogeneous and non-homogenous portfolios the rating-related indicators to determine whether the credit risk for a financial asset has significantly increased are based on a model that compares lifetime PDs at the reporting date with the lifetime PD expectations at the date of initial recognition and subsequently applying a quantile approach to determine a threshold which defines the trigger point for a financial asset's transition into Stage 2. The determination of the quantile to define Stage 2 thresholds are determined by subject matter experts in the Group's Risk function. This represents one of the key critical judgments in the Group's IFRS 9 framework and is reviewed on an annual basis based on detailed stage-mover analyses, benchmarking with historical behaviors and peer comparisons.

- Stage 3 Loss Given Default (LGD) Setting for Homogeneous Portfolios: The allowance for credit losses in Stage 3 is determined for the Group's homogeneous portfolios by an automated process based on partially time dependent LGDs reflecting the lower recovery expectation the longer the client is in default, thereby differentiating between secured and unsecured exposures. The LGDs are calibrated using the Group's loss history built up over preceding decades, experienced market prices of non-performing portfolios sold and expert judgement. In the case of less material portfolios, the empirical calibration of the LGD is partially supported by expert credit officer judgements, especially for determining the client cure rates as one of the key inputs. The LGD settings are validated on an annual basis and are regularly reviewed by the Group's independent model validation process which is part of the Model Risk Management function.
- Model adjustments: The Group regularly reviews key inputs into the ECL calculation and discusses potential model imprecision to assess the need for corrective measures in the form of overlays. Overlays are an essential output of management judgment which feeds into the model. On a quarterly basis, a senior management forum discusses the need for the recognition and/or the release of overlays. The discussion will be based on an overview of potential reasons which might require an overlay considering specific trigger points. The ultimate decision for creating overlays is jointly made by the Chief Financial Officer (CFO) and Chief Risk Officer (CRO).

The quantitative disclosures are provided in Note 18 "Loans" and Note 19 "Allowance for credit losses" as well as the Risk Report, section "IFRS 9 Impairment", sub-section "Model Sensitivity".

Derecognition of financial assets and liabilities

Financial asset derecognition

A financial asset is considered for derecognition when the contractual rights to the cash flows from the financial asset expire, or the Group has either transferred the contractual right to receive the cash flows from that asset or has assumed an obligation to pay those cash flows to one or more recipients, subject to certain criteria.

The Group derecognizes a transferred financial asset if it transfers substantially all the risks and rewards of ownership.

The Group enters into transactions in which it transfers previously recognized financial assets but retains substantially all the associated risks and rewards of those assets; for example, a sale to a third party in which the Group enters into a concurrent total return swap with the same counterparty. These types of transactions are accounted for as secured financing transactions.

Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. If an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the Consolidated Statement of Income.

Certain OTC derivative contracts and most exchange-traded futures and option contracts cleared through central clearing counterparties and exchanges have payment or receipt of variation margin on a daily basis that represents legal or economic settlement of the outstanding derivative's present value. This results in derecognition of the associated derivative financial asset and financial liabilities.

Repurchase and reverse repurchase agreements

Securities purchased under resale agreements ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralized financings and are recognized initially at fair value, being the amount of cash disbursed and received, respectively.

The Group allocates reverse repurchase portfolios that are managed on a fair value basis to the other business model under IFRS 9 and classifies them as "Non-trading financial assets mandatory at fair value through profit or loss".

Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements is reported as interest income and interest expense, respectively.

Securities borrowed and securities loaned

Securities borrowed transactions generally require the Group to deposit cash with the securities lender. In a securities loaned transaction, the Group generally receives either cash collateral, in an amount equal to or in excess of the market value of securities loaned, or securities.

The securities borrowed are not themselves recognized in the financial statements. If they are sold to third parties, the obligation to return the securities is recorded as a financial liability at fair value through profit or loss and any subsequent gain or loss is included in the Consolidated Statement of Income in net gains (losses) on financial assets/liabilities at fair value through profit or loss. Securities lent to counterparties are also retained on the Consolidated balance sheet.

The Group records the amount of cash advanced or received as securities borrowed and securities loaned, respectively, in the Consolidated balance sheet.

Fees received or paid are reported in interest income and interest expense, respectively. Securities lent to counterparties which are not derecognized from the Consolidated balance sheet and where the counterparty has the right by contract or custom to sell or repledge the collateral are disclosed in Note 20 “Transfer of Financial Assets, Assets Pledged and Received as Collateral”.

Goodwill and other intangible assets

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition.

For the purpose of calculating goodwill, fair values of acquired assets, liabilities and contingent liabilities are determined by reference to market values or by discounting expected future cash flows to present value. This discounting is either performed using market rates or by using risk-free rates and risk-adjusted expected future cash flows. Any noncontrolling interests in the acquiree are measured either at fair value or at the noncontrolling interests’ proportionate share of the acquiree’s identifiable net assets (this is determined for each business combination).

Goodwill on the acquisition of subsidiaries is capitalized and reviewed for impairment annually or more frequently if there are indications that impairment may have occurred. For the purposes of impairment testing, goodwill acquired in a business combination is allocated to cash-generating units (“CGUs”), which are the smallest identifiable groups of assets that generate cash inflows largely independent of the cash inflows from other assets or groups of assets and that are expected to benefit from the synergies of the combination and considering the business level at which goodwill is monitored for internal management purposes. In identifying whether cash inflows from an asset (or a group of assets) are largely independent of the cash inflows from other assets (or groups of assets) various factors are considered, including how management monitors the entity’s operations or makes decisions about continuing or disposing of the entity’s assets and operations.

If goodwill has been allocated to a CGU and an operation within that unit is disposed of, the attributable goodwill is included in the carrying amount of the operation when determining the gain or loss on its disposal.

Corporate assets are allocated to a CGU when the allocation can be done on a reasonable and consistent basis. If this is not possible, the individual CGU is tested without the corporate assets. They are then tested on the level of the minimum collection of CGUs to which they can be allocated on a reasonable and consistent basis.

Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. Intangible assets that have a finite useful life are stated at cost less any accumulated amortization and accumulated impairment losses. Customer-related intangible assets that have a finite useful life are amortized over periods of between 1 and 20 years on a straight-line basis based on their expected useful life. These assets are tested for impairment and their useful lives reaffirmed at least annually.

Certain intangible assets have an indefinite useful life and hence are not amortized, but are tested for impairment at least annually or more frequently if events or changes in circumstances indicate that impairment may have occurred.

Costs related to software developed or obtained for internal use are capitalized if it is probable that future economic benefits will flow to the Group and the cost can be measured reliably. Capitalized costs are amortized using the straight-line method over the asset's useful life which is deemed to be either three, five or ten years. Eligible costs include external direct costs for materials and services, as well as payroll and payroll-related costs for employees directly associated with an internal-use software project. Overhead costs, as well as costs incurred during the research phase or after software is ready for use, are expensed as incurred. Capitalized software costs are tested for impairment either annually if still under development or any time when there is an indication of impairment once the software is in use.

Critical accounting estimates – The determination of the recoverable amount in the impairment assessment of non-financial assets requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques (such as the cost approach), or a combination thereof, necessitating management to make subjective judgments and assumptions. Because these estimates and assumptions could result in significant differences to the amounts reported if underlying circumstances were to change, the Group considers these estimates to be critical.

The quantitative disclosures are provided in Note 23 “Goodwill and other intangible assets”.

Provisions

Provisions are recognized if the Group has a present legal or constructive obligation as a result of past events, if it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation as of the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party (for example, because the obligation is covered by an insurance policy), an asset is recognized if it is virtually certain that reimbursement will be received.

If the Group has a contract that is onerous, the present obligation under the contract is recognized and measured as a provision. An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

Critical accounting estimates –The use of estimates is important in determining provisions for potential losses that may arise from litigation and regulatory proceedings. The Group estimates and provides for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be estimated, in accordance with IAS 37, “Provisions, Contingent Liabilities and Contingent Assets”. Significant judgment is required in making these estimates and the Group's final liabilities may ultimately be materially different.

Contingencies in respect of legal matters are subject to many uncertainties and the outcome of individual matters is not predictable with assurance. Significant judgment is required in assessing probability and making estimates in respect of contingencies, and the Group's final liability may ultimately be materially different. The Group's total liability in respect of litigation, arbitration and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case, the Group's experience and the experience of others in similar cases, and the opinions and views of legal counsel. Predicting the outcome of the Group's litigation matters is inherently difficult, particularly in cases in which claimants seek substantial or indeterminate damages. See Note 27 “Provisions” for further information on the uncertainties from the Group's judicial, regulatory and arbitration proceedings.

Income taxes

The Group recognizes the current and deferred tax consequences of transactions that have been included in the consolidated financial statements using the provisions of the respective jurisdictions' tax laws. Current and deferred taxes are recognized in profit or loss except to the extent that the tax relates to items that are recognized directly in equity or other comprehensive income in which case the related tax is recognized either directly in equity or other comprehensive income accordingly.

Deferred tax assets and liabilities are recognized for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profit will be available against which those unused tax losses, unused tax credits and deductible temporary differences can be utilized. As an exception to the aforementioned requirements, an entity shall neither recognize nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes.

Deferred tax assets and liabilities are measured based on the tax rates that are expected to apply in the period that the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Current tax assets and liabilities are offset when (1) they arise from the same tax reporting entity or tax group of reporting entities, (2) the legally enforceable right to offset exists and (3) they are intended to be settled net or realized simultaneously.

Deferred tax assets and liabilities are offset when the legally enforceable right to offset current tax assets and liabilities exists and the deferred tax assets and liabilities relate to income taxes levied by the same taxing authority on either the same tax reporting entity or tax group of reporting entities.

Deferred tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, branches and associates and interests in joint ventures except when the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future. Deferred income tax assets are provided on deductible temporary differences arising from such investments only to the extent that it is probable that the differences will reverse in the foreseeable future and sufficient taxable income will be available against which those temporary differences can be utilized.

Deferred tax related to fair value remeasurement of financial assets classified as FVTOCI, cash flow hedges and other items, which are charged or credited directly to other comprehensive income, is also credited or charged directly to other comprehensive income and subsequently recognized in the Consolidated Statement of Income once the underlying transaction or event to which the deferred tax relates is recognized in the Consolidated Statement of Income.

For share-based payment transactions, the Group may receive a tax deduction related to the compensation paid in shares. The amount deductible for tax purposes may differ from the cumulative compensation expense recorded. At any reporting date, the Group must estimate the expected future tax deduction based on the current share price. The associated current and deferred tax consequences are recognized as income or expense in the consolidated statement of Income for the period. If the amount deductible, or expected to be deductible, for tax purposes exceeds the cumulative compensation expense, the excess tax benefit is recognized directly in equity.

Critical accounting estimates – In determining the amount of deferred tax assets, the Group uses historical tax capacity and profitability information and, if relevant, forecasted operating results based upon approved business plans, including a review of the eligible carry-forward periods, available tax planning opportunities and other relevant considerations. The analysis of the historical tax capacity includes the determination as to whether a period of past profits or a history of recent losses exists at the reporting date. The determination of a period of past profits or a history of recent losses is based on the pre-tax results adjusted for permanent differences and typically covers the current and the two preceding financial years. Each quarter, the Group re-evaluates its estimate related to deferred tax assets.

The Group believes that the accounting estimate related to the deferred tax assets is a critical accounting estimate because the underlying assumptions can change from period to period and requires significant management judgment. For example, tax law changes, changes in the historical tax capacity or variances in future projected operating performance could result in a change of the carrying amount of a deferred tax asset. If the Group was not able to realize all or part of its net deferred tax assets in the future, an adjustment to its deferred tax assets would be charged to income tax expense or directly to equity in the period such determination was made. If the Group was to recognize previously unrecognized deferred tax assets in the future, an adjustment to its deferred tax asset would be credited to income tax expense or directly to equity in the period such determination was made.

The use of estimates is also important in determining provisions for potential losses that may arise from uncertain income tax positions. The Group estimates and provides for potential losses that may arise out of uncertain income tax positions, in accordance with IAS 12, “Income Taxes” and IFRIC 23, “Uncertainty over Income Tax Treatment”. Significant judgment is required in making these estimates and the Group’s final liabilities may ultimately be materially different.

For further information on the Group’s income taxes (including quantitative disclosures on recognized deferred tax assets) see Note 34 “Income Taxes”.

Business combinations and noncontrolling Interests

The Group uses the acquisition method to account for business combinations. At the date the Group obtains control of the subsidiary, the cost of an acquisition is measured at the fair value of the consideration given, including any cash or non-cash consideration (equity instruments) transferred, any contingent consideration, any previously held equity interest in the acquiree and liabilities incurred or assumed. The excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the Group’s share of the fair value of the identifiable net assets acquired is recorded as goodwill. If the aggregate of the acquisition cost and any noncontrolling interests is below the fair value of the identifiable net assets (negative goodwill), a gain is reported in other income. Acquisition-related costs are recognized as expenses in the period in which they are incurred.

In business combinations achieved in stages (“step acquisitions”), a previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts recognized in prior periods in other comprehensive income associated with the previously held investment would be recognized on the same basis as would be required if the Group had directly disposed of the previously held equity interest.

Noncontrolling interests are shown in the consolidated balance sheet as a separate component of equity, which is distinct from the Group’s shareholders’ equity. The net income attributable to noncontrolling interests is separately disclosed on the face of the Consolidated Statement of Income. Changes in the ownership interest in subsidiaries which do not result in a change of control are treated as transactions between equity holders and are reported in additional paid-in capital (“APIC”).

Non-current assets held for sale

Individual non-current assets (and disposal groups) are classified as held for sale if they are available for immediate sale in their present condition subject only to the customary sales terms of such assets (and disposal groups) and their sale is considered highly probable. For a sale to be highly probable, management must be committed to a sales plan and be actively looking for a buyer and has no substantive regulatory approvals outstanding. Furthermore, the assets (and disposal groups) must be actively marketed at a reasonable sales price in relation to their current fair value and the sale should be expected to be completed within one year. Non-current non-financial assets (and disposal groups) which meet the criteria for held for sale classification are measured at the lower of their carrying amount and fair value less costs of disposal and are presented within “Other assets” and “Other liabilities” in the balance sheet. Financial assets and liabilities meeting the criteria continue to be measured in accordance with IFRS 9. The comparatives are not represented when non-current assets (and disposal groups) are classified as held for sale.

Property and equipment

Property and equipment includes own-use properties, leasehold improvements, furniture and equipment and software (operating systems only). Right-of-use assets are presented together with property and equipment on the Group’s consolidated balance sheet. Own-use properties are carried at cost less accumulated depreciation and accumulated impairment losses. Depreciation is generally recognized using the straight-line method over the estimated useful lives of the assets. The range of estimated useful lives is 25 to 50 years for property and 3 to 10 years for furniture and equipment (including initial improvements to purchased buildings). Leasehold improvements are capitalized and subsequently depreciated on a straight-line basis over the shorter of the term of the lease and the estimated useful life of the improvement, which generally ranges from 3 to 25 years. Depreciation of property and equipment is included in general and administrative expenses. Maintenance and repairs are also charged to general and administrative expenses. Gains and losses on disposals are included in other income.

Property and equipment are assessed for any indication of impairment at each quarterly reporting date. If such indication exists, the recoverable amount, which is the higher of fair value less costs of disposal and value in use, must be estimated and an impairment charge is recorded to the extent the recoverable amount is less than the carrying amount. Value in use is the present value of the future cash flows expected to be derived from the asset. After the recognition of impairment of an asset, the depreciation charge is adjusted in future periods to reflect the asset’s revised carrying amount. If an impairment is later reversed, the depreciation charge is adjusted prospectively.

Financial guarantees

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantees written

The Group has chosen to apply the fair value option to certain written financial guarantees that are managed on a fair value basis. Financial guarantees that the Group has not designated at fair value are initially recognized at fair value on the date the guarantee is given. Subsequent to initial recognition, the Group's liabilities under such guarantees are measured at the higher of the amount initially recognized, less cumulative amortization, and the best estimate of the expenditure required to settle any financial obligation as of the balance sheet date. These estimates are determined by management based on experience with similar transactions and history of past losses.

Any increase in the liability relating to guarantees is recorded in the Consolidated Statement of Income in provision for credit losses.

Financial guarantees purchased

Purchased financial guarantees result in reimbursements under IAS 37 to the extent that the financial guarantee is entered into to mitigate the credit exposure from debt instruments with HTC or HTC&S business models. This results in recognition of a reimbursement asset for subsequent increases in the expected credit losses, to the extent it is virtually certain that the purchased financial guarantee will reimburse the Group for the loss incurred. Accordingly, when the credit risk of the borrower significantly deteriorates a reimbursement asset is recognized equal to the life-time expected credit losses and is presented as Other Assets in the Group's Consolidated Balance Sheet. The corresponding reimbursement gain is recognized as a reduction in the Provision for credit losses in the Group's Consolidated Statement of Income.

Purchased financial guarantees entered into to mitigate credit exposure from debt instruments allocated to HTC or HTC&S business models may also be embedded in Collateralized Loan Obligations (CLO's) issued by the Group. Such embedded guarantees are not accounted for separately as a reimbursement asset and are instead accounted as part of the CLO's liability held at amortized cost. The Group regularly revises its estimated contractual redemption payment (including the benefit of such embedded guarantees) from the CLO when the credit risk of a borrower covered by the embedded financial guarantee in the CLO significantly deteriorates. The revision is based on the life-time expected credit losses of the debt instrument (to the extent covered by the CLO).

Purchased financial guarantees entered into to mitigate credit exposure from debt instruments included in the Other business model are accounted for at fair value through profit or loss.

Leasing transactions

The Group enters into lease contracts, predominantly for land and buildings, as a lessee. Other categories are company cars and technical/IT equipment.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is re-measured if there is a modification, a change in the lease term or a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments).

Right-of-use assets are assessed for any indication of impairment at each quarterly reporting date. If such indication exists, the recoverable amount, which is the fair value less costs of disposal, must be estimated and an impairment charge is recorded to the extent the recoverable amount is less than the carrying amount. As right-of-use assets do not have independently generated cash flows to calculate its value in use, the Group considers any sublease income that could reasonably be earned. After the recognition of impairment of an asset, the depreciation charge is adjusted in future periods to reflect the asset's revised carrying amount. If an impairment is later reversed, the depreciation charge is adjusted prospectively.

The Group presents right-of-use assets in "Property and Equipment" and lease liabilities in "Other Liabilities".

The Group applies the short-term lease recognition exemption to its short-term leases, i.e., those leases that have a lease term of 12 months or less from the commencement date. It also applies the lease of low-value assets recognition exemption to leases of technical/IT equipment that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

Employee benefits

Pension benefits

The Group provides a number of pension plans. In addition to defined contribution plans, there are retirement benefit plans accounted for as defined benefit plans. The assets of all the Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of salary and are expensed based on employee services rendered, generally in the year of contribution.

All retirement benefit plans accounted for as defined benefit plans are valued using the projected unit-credit method to determine the present value of the defined benefit obligation and the related service costs. Under this method, the determination is based on actuarial calculations which include assumptions about demographics, salary increases and interest and inflation rates. Actuarial gains and losses are recognized in other comprehensive income and presented in equity in the period in which they occur. The majority of the Group's benefit plans is funded.

For the Group's most significant pension plans in the key countries, the discount rate used at each measurement date is set based on a high-quality corporate bond yield curve – derived based on bond universe information sourced from reputable third-party index data providers and rating agencies – reflecting the timing, amount and currency of the future expected benefit payments for the respective plan.

Other post-employment benefits

In addition, the Group maintains unfunded contributory post-employment medical plans for a number of current and retired employees who are mainly located in the United States. These plans pay stated percentages of eligible medical and dental expenses of retirees after a stated deductible has been met. The Group funds these plans on a cash basis as benefits are due. Analogous to retirement benefit plans these plans are valued using the projected unit-credit method. Actuarial gains and losses are recognized in full in the period in which they occur in other comprehensive income and presented in equity.

Refer to Note 33 "Employee benefits" for further information on the accounting for pension benefits and other post-employment benefits.

Termination benefits

Termination benefits arise when employment is terminated by the Group before the normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits as a liability and an expense if the Group is demonstrably committed to a detailed formal plan without realistic possibility of withdrawal. In the case of an offer made to encourage voluntary redundancy, termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than twelve months after the end of the reporting period are discounted to their present value. The discount rate is determined by reference to market yields on high-quality corporate bonds.

Share-based compensation

Compensation expense for awards classified as equity instruments is measured at the grant date based on the fair value of the share-based award. For share awards, the fair value is the quoted market price of the share reduced by the present value of the expected dividends that will not be received by the employee and adjusted for the effect, if any, of restrictions beyond the vesting date. In case an award is modified such that its fair value immediately after modification exceeds its fair value immediately prior to modification, a remeasurement takes place and the resulting increase in fair value is recognized as additional compensation expense.

The Group records the offsetting amount to the recognized compensation expense in additional paid-in capital ("APIC"). Compensation expense is recorded on a straight-line basis over the period in which employees perform services to which the awards relate or over the period of the tranches for those awards delivered in tranches. Estimates of expected forfeitures are periodically adjusted in the event of actual forfeitures or for changes in expectations. The timing of expense recognition relating to grants which, due to early retirement provisions, include a nominal but non-substantive service period are accelerated by shortening the amortization period of the expense from the grant date to the date when the employee meets the eligibility criteria for the award, and not the vesting date. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately.

Compensation expense for share-based awards payable in cash is remeasured to fair value at each balance sheet date and recognized over the vesting period in which the related employee services are rendered. The related obligations are included in other liabilities until paid.

Other deferred compensation plans

Compensation expense for other deferred compensation plans is recorded on a straight-line basis over the period in which employees perform services to which the awards relate or over the period of the tranches for those awards delivered in tranches. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately. The amount recognized is based on the present value of the amount expected to be paid under the respective plan and is remeasured at each reporting date. The ultimate cumulative compensation expense recognized equals the cash or the fair value of the respective financial instruments delivered.

Government grants

The Group recognizes income from government grants when there is reasonable assurance that it will receive the grant and will comply with the conditions attached to the grant. The benefit is recognized in the period in which the grant is intended to compensate the Group for related costs and presented as a reduction of the related expense.

The Group considered the initial benefits that arose from borrowing under TLTRO III as government grant from a below-market loan under IAS 20 and recognized subsequent benefits in accordance with IFRS 9. Since November 23, 2022, all remaining TLTRO III operations are indexed to the average applicable key ECB interest rates.

For further information on the benefit recognized by the Group from the TLTRO III refinancing program see Note 5 "Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss".

Options and forwards on common shares

Option and forward contracts on Deutsche Bank shares are classified as equity if the number of shares is fixed and physical settlement is required. All other contracts in which Deutsche Bank shares are the underlying are recorded as financial assets or liabilities at fair value through profit or loss.

Consolidated statement of cash flows

The consolidated statement of cash flows is prepared in accordance with the indirect method, which adjusts Profit (loss) for non-cash transactions within operating activities and distinguishes the classification of cash flows between operating, investing, or financing activities depending on the business model and the related activities which are most appropriate to the business.

For purposes of the consolidated statement of cash flows, the Group's cash and cash equivalents include highly liquid investments that are readily convertible into cash, and which are subject to an insignificant risk of change in value. Such investments include cash and balances at central banks and demand deposits with banks.

There are various circumstances in which cash and cash equivalent balances held by Deutsche Bank are not available for use by the Group. Examples include cash and cash equivalent balances held by a subsidiary that operates in a country where exchange controls or other legal restrictions apply such that the balances are not available for general use by the Group or its subsidiaries.

Due to the nature of Deutsche Bank’s business model of providing financing to clients, cash flows related to long-term debt support the bank’s operating activities and are included as a component of operating activities. In contrast, cash flows related to transactions on own equity transactions as well as subordinated long-term debt and trust preferred securities are presented as financing activities in the consolidated statement of cash flows. These financial instruments are viewed differently from those related to senior-long term debt because they are managed as an integral part of the Group’s capital, primarily to meet regulatory capital requirements. As a result, these financial instruments are not interchangeable with other operating liabilities but can only be interchanged with equity and thus are considered part of the financing category.

The Group’s adjustments for certain non-cash transactions to Profit (loss) includes provisions for credit losses, restructuring activities, deferred income taxes and impairments, depreciations, amortization, and accretions, which also includes amortization of hedge adjustments.

For certain other non-cash transactions which are more difficult to distinguish, all movements in the operating assets and liabilities balance sheet line items are included in operating activities and are offset against the amount recognized in Profit (loss). For example, unrealized fair value changes for trading assets and liabilities held at fair value through profit and loss are included in operating activities and do not distinguish between cash and non-cash market movements. This also applies to foreign exchange movements realized in the income statement when translating the transaction currency to the entity’s functional currency. These non-cash foreign exchange movements are included in the respective asset or liability line item in operating activities.

In addition, hedge adjustments to the carrying amount of non-derivative instruments (e.g., loans at amortized cost, deposits and senior long-term debt) that arise from the application of fair value hedge accounting are not separately disclosed as non-cash adjusting items, but included in the respective balance sheet line item in operating activities. These amounts are netted in operating activities against the non-cash amount recognized in Profit (loss).

The amounts shown in the consolidated statement of cash flows do not necessarily match the movements in the consolidated balance sheet from one period to the next as they exclude certain non-cash items such as foreign exchange impacts when translating to the Group’s reporting currency, gross charge-offs on loans and movements due to changes in the Group’s consolidated entities.

The position “Other, net” presented in operating activities predominantly includes movements in (i) the application of cash flow hedge accounting or certain fair value hedge relationships where the hedged item is presented in investing activities but the hedging instrument is presented operating activities; and (ii) non-cash related foreign exchange translation effects on monetary Group intercompany transactions that are recognized in the Group’s consolidated statement of income; along with foreign exchange translation effects of converting transactional currency to functional currency, for certain balance sheet line items included in investing activities.

02 – Recently adopted and new accounting pronouncements

Recently adopted accounting pronouncements

The following are those accounting pronouncements which are relevant to the Group and which have been adopted during 2024 in the preparation of these consolidated financial statements.

IFRS 16 “Leases”

On January 1, 2024, the Group adopted amendments to IFRS 16 “Leases” that clarify how a seller-lessee subsequently measures sale and leaseback transactions that satisfy the IFRS 15 requirements to be accounted for as a sale. The amendment did not have a material impact on the Group’s consolidated financial statements.

IAS 1 “Presentation of Financial Statements”

On January 1, 2024, the Group adopted amendments to IAS 1 “Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current”. The amendments clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. The amendments also clarify that the classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability and make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. They did not have a material impact on the Group’s consolidated financial statements.

On January 1, 2024, the Group adopted a further amendment to IAS 1 that modifies the requirements described above on how an entity classifies debt and other financial liabilities as current or non-current in particular circumstances. Accordingly, it clarifies that only covenants with which an entity is required to comply on or before the reporting date affect the classification of a liability as current or non-current. The amendments did not have a material impact on the Group’s consolidated financial statements.

New accounting pronouncements

The following accounting pronouncements were not effective as of December 31, 2024, and therefore have not been applied in preparing these consolidated financial statements.

IAS 21 “The Effects of Changes in Foreign Exchange Rates”

In August 2023, the IASB issued “Lack of Exchangeability (Amendments to IAS 21)” that contains guidance to specify when a currency is exchangeable and how to determine the exchange rate when it is not. It also requires the disclosure of additional information when a currency is not exchangeable. The amendments are effective for annual periods beginning on or after January 1, 2025, with early adoption permitted. The amendments are not expected to have a material impact on the Group’s consolidated financial statements.

IFRS 18 “Presentation and Disclosures in Financial Statements”

In April 2024, the IASB issued the new standard IFRS 18 “Presentation and Disclosures in Financial Statements” that replaces IAS 1 “Presentation of Financial Statements”. The new standard contains new guidance on how to structure the Income Statement as well as disclosure requirements for Management-defined Performance Measures (MPMs). The new standard is effective for annual periods beginning on or after January 1, 2027, with early adoption permitted. The Group is currently assessing the impact of IFRS 18 on the presentation of its consolidated financial statements. The new standard has yet to be endorsed by the EU.

IFRS 19 “Subsidiaries without Public Accountability: Disclosures”

In May 2024, the IASB issued the new standard IFRS 19 “Subsidiaries without Public Accountability: Disclosures”. The new standard permits a subsidiary to provide reduced disclosures when applying IFRS Accounting Standards in its financial statements. The new standard is effective for annual periods beginning on or after January 1, 2027, with early adoption permitted. The Group does not expect a material impact of IFRS 19 on the disclosure requirements of its subsidiaries. The new standard has yet to be endorsed by the EU.

IFRS 9 “Financial Instruments” and IFRS 7 “Financial Instruments: Disclosures”

In May 2024, the IASB has issued amendments to “Amendments to the Classification and Measurement of Financial Instruments (Amendments to IFRS 9 and IFRS 7)” to address matters identified during the post-implementation review of the classification and measurement requirements of IFRS 9 “Financial Instruments”. On electronic payment systems, the amendments permit to deem a financial liability (or part of it) to be derecognized before the settlement date if specified criteria are met. Further, the amendments provide extended guidance on basic lending agreements, assets with non-recourse features and contractually linked instruments. Disclosures have been amended for contractual terms that could change the timing or amount of contractual cash flows. The amendments are effective for annual periods beginning on or after January 1, 2026, with early adoption permitted. The Group is currently assessing the impact of the amendments on classification and measurement of financial instruments as well as on its disclosures. The amendments have yet to be endorsed by the EU.

Annual Improvements to IFRS

In July 2024, the IASB issued amendments to multiple IFRS standards, which resulted from the IASB’s annual improvements project. These comprise changes in terminology as well as editorial amendments related to IFRS 1 “First-time Adoption of International Financial Reporting Standards”, IFRS 7 “Financial Instruments: Disclosures” and its accompanying Guidance on implementing IFRS 7, IFRS 9 “Financial Instruments”, IFRS 10 “Consolidated Financial Statements” and IAS 7 “Statement of Cash-Flows”. The amendments will be effective for annual periods beginning on or after January 1, 2026, with early adoption permitted. The amendments are not expected to have a material impact on the Group’s consolidated financial statements. The amendments have yet to be endorsed by the EU.

Contracts Referencing Nature-dependent Electricity

In December 2024, the IASB issued “Contracts Referencing Nature-dependent Electricity (Amendments to IFRS 9 and IFRS 7)” to address matters identified for contracts referencing to nature-dependent electricity. The own-use requirements in IFRS 9 are to be amended to include the factors an entity is required to consider for which the source of production of the electricity is nature-dependent. The hedge accounting requirements in IFRS 9 are to be amended to permit an entity using a contract for nature-dependent renewable electricity with a variable volume of forecast electricity transactions as the hedged item as well as for measuring hedge effectiveness. The IASB further amends IFRS 7 and IFRS 19 to introduce disclosure requirements about contracts for nature-dependent electricity with specified characteristics. The amendments are effective for annual periods beginning on or after January 1, 2026, with early adoption permitted. The Group does not have significant exposure to electricity purchase contracts and thus does not expect a material impact on the Group’s consolidated financial statements. The amendments have yet to be endorsed by the EU.

03 – Acquisitions and dispositions

Business combinations

During 2024 and 2022, the Group did not undertake any acquisitions accounted for as business combinations.

In April 2023, Deutsche Bank announced that it had reached an agreement on an all-cash offer for the acquisition of Numis Corporation Plc (“Numis”). On October 13, 2023, the acquisition was completed and Deutsche Bank acquired a 100 % interest in Numis for a cash purchase price of € 460 million (GBP 397 million). Following the acquisition of Numis, the determination of the fair values of the identifiable assets acquired and liabilities assumed as of the acquisition date had been finalized in the fourth quarter 2023 with details included in the table below. Other intangible assets identified in the purchase price allocation included customer relationships (€ 56 million) and tradename (€ 27 million). Goodwill of € 235 million identified in the purchase price allocation mainly represented the expected future economic benefit of synergies and the value of human capital.

Fair Value of Assets Acquired and Liabilities Assumed as of the Acquisition Date

in € m.	October 13, 2023
Cash consideration transferred	460
Total consideration transferred	460
Recognized amounts of identifiable assets acquired and liabilities assumed:[1]	
Interbank balances (w/o central banks)	126
Securities borrowed	10
Financial assets at fair value through profit or loss	44
Property and equipment	53
Other intangible assets	84
All other assets	410
Total assets acquired	727
Financial liabilities at fair value through profit or loss	14
All other liabilities	488
Total liabilities assumed	502
Total identifiable net assets	225
Goodwill	235
Total identifiable net assets and goodwill acquired	460

[1] By major class of assets acquired and liabilities assumed.

Deutsche Bank assigned goodwill resulting from the Numis acquisition to the Investment Bank cash-generating unit (CGU). Given the valuation of the Investment Bank CGU, following the acquisition, goodwill recognized for Numis was considered impaired and written off in the fourth quarter of 2023 (also refer to Note 23 “Goodwill and Other Intangible Assets”).

Dispositions

There were no dispositions in 2024, but the Group had finalized several dispositions of subsidiaries/businesses during 2023 and 2022. These disposals were mainly comprised of businesses that were previously classified as held for sale, including the transfer of the digital investment platform of DWS as part of its partnership with BlackFin, and the sale of the Italian financial advisors business to Zurich Italy in 2022 for a pre-tax gain on sale of € 312 million. The total consideration received for these dispositions (thereof in cash) in 2024, 2023 and 2022 was € 3 million (cash € 3 million), € 117 million (cash € 99 million) and € 488 million (cash € 439 million), respectively. The table below shows the assets and liabilities that were included in these disposals.

in € m.	2024	2023	2022
Cash and cash equivalents	0	7	1,126
All remaining assets	0	105	659
Total assets disposed	0	113	1,785
Total liabilities disposed	0	213	1,676

04 – Business segments and related information

Deutsche Bank’s segmental information has been prepared in accordance with the management approach, which requires presentation of the segments on the basis of the internal management reports of the entity which are regularly reviewed by the chief operating decision maker, which is the Deutsche Bank Management Board, in order to assess the financial performance of the business segments and for allocating resources to the business segments.

Business segments

Deutsche Bank’s segment reporting follows the organizational structure as reflected in the Group’s internal management reporting systems, which are the basis for assessing the financial performance of the business segments and for allocating resources to them.

The bank’s business operations are organized under the divisional structure comprising the following corporate divisions:

- Corporate Bank
- Investment Bank
- Private Bank
- Asset Management
- Corporate & Other

The Group consists of the following reportable segments: Corporate Bank, Investment Bank, Private Bank, Asset Management and Corporate & Other.

Corporate Bank reports revenues based on three client categories: Institutional Client Services, Corporate Treasury Services and Business Banking.

Investment Bank reports revenues in the categories Fixed Income & Currencies (FIC), Origination & Advisory as well as Research and Other.

Private Bank reports revenues in the client sectors Wealth Management & Private Banking and Personal Banking.

Asset Management reports revenues in the categories Management Fees, Performance and Transaction Fees and Other.

Corporate & Other includes revenues, costs and resources held centrally that are not allocated to the individual business segments as well as valuation and timing differences that arise on derivatives used to hedge the Group’s balance sheet. These are accounting impacts, and valuation losses are expected to be recovered over time as the underlying instruments approach maturity. In addition, Corporate & Other contains financial impacts of legacy portfolios, previously reported as the Capital Release Unit.

As announced in the Annual Report 2022, having fulfilled the Capital Release Unit’s de-risking and cost reduction mandate from 2019 through year end 2022, the Capital Release Unit ceased to be reported as a separate segment with effect from the first quarter of 2023. The remaining portfolio, resources and employees are reported within the Corporate & Other segment. In line with the change, the Core Bank, which previously represented the Group excluding the Capital Release Unit, ceased to be reported as of the first quarter of 2023.

In addition, based on management decisions during the reporting period further divisional changes were introduced.

The prior years' segmental information is presented in the current structure.

Changes in the presentation for segments

Commencing from the first quarter of 2024, Investment Bank renamed FIC Sales and Trading to “Fixed Income & Currencies (FIC)” and introduced additional sub-categories, entitled “Fixed Income & Currencies: Financing” and “Fixed Income & Currencies: Ex Financing” to provide additional transparency regarding the revenue composition of FIC. Origination & Advisory revenues continue to be presented with the sub-categories Debt Origination, Equity Origination and Advisory. Additionally, Research revenues are reported together with Other in “Research and Other”. Prior years’ comparatives are presented in the current reporting structure.

Commencing from the first quarter of 2024, Private Bank is following a customer-focused approach by classifying the existing customer base into two distinct global client sectors: “Personal Banking” as well as “Wealth Management & Private Banking”. This approach reflects the focus to serve clients in a more targeted and effective way across the Private Bank. Wealth Management & Private Banking combines the coverage of private banking, high-net-worth and ultra high-net-worth clients, as well as business clients in selected international businesses (reflecting the ‘Bank for Entrepreneurs’ strategy). The client sector Personal Banking includes retail and affluent customers as well as commercial banking clients in Italy and Spain (i.e., all small business clients and small sized corporate clients that are not covered as part of the Wealth Management & Private Banking client sector). Prior years’ comparatives are presented in the current reporting structure.

Within the new Private Bank coverage area ‘Wealth Management & Private Banking’, private clients benefit from a wider product range with increased emphasis on investment advice. As a result, demand deposits of Private Banking Germany were reclassified to assets under management, ensuring a consistent treatment within ‘Wealth Management & Private Banking’. Prior years’ comparatives are presented in the current reporting structure.

Measurement of segment profit or loss

Segment reporting requires a presentation of the segment results based on management reporting methods, including a reconciliation between the results of the business segments and the consolidated financial statements, which is presented in the “Segment results of operations” section within this note. The information provided about each segment is based on internal management reporting about segment profit or loss, assets and other information which is regularly reviewed by the chief operating decision maker. Segment assets are presented in the Group’s internal management reporting based on a consolidated view, i.e., the amounts do not include intersegment balances. The Group`s internal management reporting does not consider segment liabilities or interest expense separately. Similarly, depreciation and amortization, tax expenses and other comprehensive income are not presented separately internally and are therefore not disclosed here.

Non-IFRS compliant accounting methods used in the Group’s management reporting represent either valuation or classification differences. The largest valuation differences relate to measurement at fair value in management reporting versus measurement at amortized cost under IFRS and to the recognition of trading results from own shares in revenues in management reporting (in Investment Bank) and in equity under IFRS. The major classification difference relates to noncontrolling interest, which represents the net share of minority shareholders in revenues, provision for credit losses, noninterest expenses and income tax expenses. Noncontrolling interest is reported as a component of the profit before tax of the businesses in management reporting (with a reversal in Corporate & Other) and a component of net income appropriation under IFRS.

Since the Group’s business activities are diverse in nature and its operations are integrated, certain estimates and judgments have been made to apportion revenue and expense items among the business segments.

The management reporting systems allocate the Group’s external net interest income according to the value of funding consumed or provided by each business segment’s activities, in accordance with the bank’s internal funds transfer pricing framework. Furthermore, to retain comparability with those competitors that have legally independent units with their own equity funding, the Group allocates a net notional interest benefit on its consolidated capital, in line with each segment’s proportion of average shareholders’ equity.

Management uses certain measures for equity and related ratios as part of its internal reporting system because it believes that these measures provide it with a useful indication of the financial performance of the business segments. The Group discloses such measures to provide investors and analysts with further insight into how management operates the Group’s businesses and to enable them to better understand the Group’s results.

Allocation of Average Shareholder’s Equity

Shareholders’ equity is fully allocated to the Group’s segments based on the regulatory capital demand of each segment. Regulatory capital demand reflects the combined contribution of each segment to the Groups’ Common Equity Tier 1 (CET1) ratio, the Groups’ leverage ratio and the Group’s capital loss under stress. Contributions in each of the three dimensions are weighted to reflect their relative importance and level of constraint for the Group. Contributions to the CET1 ratio and the leverage ratio are measured through risk-weighted assets and leverage ratio exposure. The Group’s capital loss under stress is a measure of the Group’s overall economic risk exposure under a defined stress scenario. Goodwill and other intangible assets are directly attributed to the Group’s segments in order to allow the determination of allocated tangible shareholders’ equity and the respective returns. Shareholders’ equity and tangible shareholders’ equity is allocated on a monthly basis and averaged across quarters and for the full year.

Changes to capital allocation framework

Starting in 2024, Deutsche Bank has changed the allocation of tangible shareholders’ equity across segments. In addition, the bank now retains capital held against Deutsche Bank Group items in Corporate & Other, which has previously been allocated to the segments. Prior years’ comparatives are presented in the current reporting structure. While the adjustment of the prior periods’ allocations impact the segmental RoTE, the respective Group metrics are unaffected by the change.

Driver-Based Cost Management allocations methodology change

In the first quarter of 2023, the bank introduced a Driver-Based Cost Management methodology for the allocation of costs originated in respective infrastructure functions which aims to provide transparency over the drivers of Infrastructure costs and links costs more closely to service consumption by segments. During 2023, costs relating to Infrastructure functions were allocated using an actuals to plan approach, with the exception of technology development costs which were charged to the divisions based on actual expenditures. Beginning 2024, all infrastructure costs were charged to divisions based on actual costs and service consumption. Prior years’ comparatives are presented in the current reporting structure. For the full year 2023, the change in methodology resulted in an increase in noninterest expenses (corresponding decrease in profit before tax) for Corporate Bank of € 175 million and a corresponding decrease in noninterest expenses (corresponding increase in profit before tax) for Investment Bank of € 42 million, for Private Bank of € 48 million, for Asset Management of € 0 million and for Corporate and Other of € 84 million. While the update of the 2023 allocations impacted the segmental post-tax returns on average tangible shareholders’ equity and cost/income ratio, the respective Group metrics are unaffected by the methodology change.

Changes to Operational Risk RWA allocation framework

Starting in 2024, Deutsche Bank introduced a refined and more granular framework to allocate operational risk RWA to the segments. While the respective segmental RWA metrics are impacted by the change in methodology with a more pronounced impact from the second quarter of 2024 onwards, the Group’s operational risk RWA are unaffected by the change.

Strategic Liquidity Reserve Profit and Loss Allocation

Commencing from the first quarter of 2022, the methodology for divisional intra-year allocations of profit or loss earned on the Strategic Liquidity Reserves has been refined. As part of the introduction of the new methodology, the intra-year profit and loss volatility is held centrally in Corporate & Other in order to better reflect the underlying performance of the business divisions. The implementation of the new methodology does not impact the overall Group revenues or the annual business allocations, therefore the full year results for 2022 are not impacted.

Tax Exempt Securities

Net interest income as a component of net revenues, profit (loss) before tax and related ratios are presented on a fully taxable-equivalent basis for U.S. tax-exempt securities for the Investment Bank. This enables management to measure performance of taxable and tax-exempt securities on a comparable basis. This presentation resulted in an increase in Investment Bank net interest income of € 23 million for full year 2024, € 10 million for full year 2023 and € 33 million for full year 2022. This increase is offset in Group consolidated figures through a reversal in Corporate & Other. The predominant tax rate used for 2024, 2023 and 2022 in determining the fully taxable equivalent of net interest income was 21% and related to U.S. tax exempt securities.

Segmental results of operations

The following tables present the results of the Group’s business segments, including the reconciliation to the consolidated results of operations under IFRS.

						2024
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	7,506	10,558	9,386	2,649	1,406	31,504
Provision for credit losses	347	549	851	(1)	83	1,830
Noninterest expenses						
Compensation and benefits	1,603	2,682	2,934	919	3,593	11,731
General and administrative expenses	3,481	3,979	4,372	904	(1,494)	11,243
Impairment of goodwill and other intangible assets	0	0	0	0	0	0
Restructuring activities	(1)	(0)	(3)	0	0	(3)
Total noninterest expenses	5,084	6,661	7,304	1,823	2,099	22,971
Noncontrolling interests	0	5	0	194	(199)	0
Profit (loss) before tax	2,075	3,343	1,231	632	(577)	6,703
Assets (in € bn)[2]	280	756	324	11	21	1,391
Loans (gross of allowance for loan losses, in € bn)	117	110	257	0	5	490
Additions to non-current assets	12	3	160	30	1,884	2,091
Deposits (in € bn)	313	22	320	0	13	668
Average allocated shareholders' equity	11,682	23,672	13,990	5,329	11,679	66,353
Risk-weighted assets (in € bn)	78	130	97	18	34	357
of which: operational risk RWA (in € bn)[3]	11	15	14	5	13	58
Leverage exposure (in € bn)	339	593	336	10	38	1,316
Employees (full-time equivalent)	26,317	20,107	37,072	5,169	1,088	89,753
Post-tax return on average shareholders’ equity[4,5]	11.7%	9.1%	5.2%	8.0%	N/M	5.5%
Post-tax return on average tangible shareholders’ equity[4,5]	12.6%	9.4%	5.2%	18.0%	N/M	6.2%
Cost/income ratio[6]	67.7%	63.1%	77.8%	68.8%	N/M	72.9%
[1] includes:						
Net interest income	4,960	3,398	5,786	25	991	15,161
Net income (loss) from equity method investments	(1)	(46)	21	36	2	12
[2] includes:						
Equity method investments	90	379	102	451	6	1,028

N/M – Not meaningful

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[5] The post-tax return on average shareholders’ equity and average tangible shareholders’ equity at the Group level reflects the reported effective tax rate for the Group, which was 33% for the year ended December 31, 2024; for the post-tax return on average shareholders’ equity and average tangible shareholders’ equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2024; for further information, please refer to “Supplementary Information (Unaudited): Non-GAAP Financial Measures” of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

						2023
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	7,718	9,160	9,571	2,383	2,324	31,155
Provision for credit losses	266	431	783	(1)	26	1,505
Noninterest expenses						
Compensation and benefits	1,530	2,526	2,805	891	3,378	11,131
General and administrative expenses	3,122	4,091	4,696	934	(2,731)	10,112
Impairment of goodwill and other intangible assets	0	233	0	0	0	233
Restructuring activities	(4)	(3)	228	0	(1)	220
Total noninterest expenses	4,648	6,847	7,730	1,825	646	21,695
Noncontrolling interests	0	3	0	163	(166)	0
Profit (loss) before tax	2,804	1,879	1,058	396	1,817	7,955
Assets (in € bn)[2]	264	658	331	10	54	1,317
Loans (gross of allowance for loan losses, in € bn)	117	101	261	0	6	485
Additions to non-current assets	13	89	90	73	1,853	2,118
Deposits (in € bn)	289	18	308	0	10	625
Average allocated shareholders' equity	11,547	23,544	13,219	5,157	9,681	63,149
Risk-weighted assets (in € bn)	69	140	86	15	40	350
of which: operational risk RWA (in € bn)[3]	6	22	8	3	19	57
Leverage exposure (in € bn)	307	546	339	10	39	1,240
Employees (full-time equivalent)	25,439	20,063	38,411	4,963	1,254	90,130
Post-tax return on average shareholders' equity[4,5]	16.6%	4.8%	4.8%	5.1%	N/M	9.1%
Post-tax return on average tangible shareholders' equity[4,5]	17.8%	4.9%	5.2%	12.0%	N/M	10.2%
Cost/income ratio[6]	60.2%	74.7%	80.8%	76.6%	N/M	69.6%
[1] includes:						
Net interest income	5,115	3,013	6,156	(124)	1,963	16,122
Net income (loss) from equity method investments	(6)	(70)	(5)	42	2	(38)
[2] includes:						
Equity method investments	91	413	84	420	5	1,013

N/M – Not meaningful

Prior year's comparatives aligned to presentation in the current year

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[5] The post-tax return on average shareholders' equity and average tangible shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was 19% for the year ended December 31, 2023; for the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2023; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

						2022
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Net revenues[1]	6,337	10,016	9,152	2,608	(1,050)	27,063
Provision for credit losses	335	319	583	(2)	(9)	1,226
Noninterest expenses						
Compensation and benefits	1,416	2,379	2,783	899	3,235	10,712
General and administrative expenses	2,790	4,061	4,193	883	(2,199)	9,728
Impairment of goodwill and other intangible assets	0	0	0	68	0	68
Restructuring activities	(19)	15	(113)	0	(2)	(118)
Total noninterest expenses	4,187	6,455	6,863	1,850	1,035	20,390
Noncontrolling interests	0	15	0	174	(190)	0
Profit (loss) before tax	1,816	3,228	1,705	585	(1,886)	5,447
Assets (in € bn)[2]	258	677	333	10	67	1,344
Loans (gross of allowance for loan losses, in € bn)	122	103	265	0	6	496
Additions to non-current assets	3	4	177	41	2,267	2,494
Deposits (in € bn)	289	16	317	0	7	629
Average allocated shareholders' equity	11,668	22,478	12,945	5,437	7,580	60,109
Risk-weighted assets (in € bn)	74	139	88	13	46	360
of which: operational risk RWA (in € bn)[3]	5	23	8	3	19	58
Leverage exposure (in € bn)	321	530	344	9	36	1,240
Employees (full-time equivalent)	22,621	17,946	37,710	4,778	1,876	84,930
Post-tax return on average shareholders' equity[4,5]	10.3%	9.3%	8.6%	7.3%	N/M	8.2%
Post-tax return on average tangible shareholders' equity[4,5]	11.1%	9.6%	9.2%	17.0%	N/M	9.1%
Cost/income ratio[6]	66.1%	64.4%	75.0%	70.9%	N/M	75.3%
[1] includes:						
Net interest income	3,628	3,467	5,222	(65)	1,732	13,983
Net income (loss) from equity method investments	4	50	27	66	6	152
[2] includes:						
Equity method investments	90	501	99	415	20	1,124

N/M – Not meaningful

Prior year's comparatives aligned to presentation in the current year

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[4] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section “Note 4 - Business segments and related information” of this report

[5] The post-tax return on average shareholders' equity and average tangible shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (2) % for the year ended December 31, 2022; for the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28% for the year ended December 31, 2022; for further information, please refer to “Supplementary Information (Unaudited): Non-GAAP Financial Measures” of this report

[6] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

Corporate Bank

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Corporate Treasury Services	4,223	4,399	3,827	(176)	(4)	572	15
Institutional Client Services	1,956	1,895	1,580	62	3	314	20
Business Banking	1,326	1,424	930	(98)	(7)	494	53
Total net revenues	**7,506**	7,718	6,337	(212)	(3)	1,381	22
Of which:							
Net interest income	**4,960**	5,115	3,628	(154)	(3)	1,487	41
Net commissions and fee income	**2,434**	2,328	2,356	106	5	(28)	(1)
Remaining income	**111**	275	354	(164)	(59)	(79)	(22)
Provision for credit losses	**347**	266	335	81	30	(68)	(20)
Noninterest expenses							
Compensation and benefits	1,603	1,530	1,416	73	5	114	8
General and administrative expenses	3,481	3,122	2,790	359	12	332	12
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	(1)	(4)	(19)	4	(86)	15	(77)
Total noninterest expenses	**5,084**	4,648	4,187	436	9	461	11
Noncontrolling interests	**0**	0	0	0	N/M	0	N/M
Profit (loss) before tax	**2,075**	2,804	1,816	(729)	(26)	988	54
Employees (front office, full-time equivalent)[1]	7,943	7,682	7,332	261	3	350	5
Employees (business-aligned operations, full-time equivalent)[1]	8,089	7,976	7,114	113	1	862	12
Employees (allocated central infrastructure, full-time equivalent)[1]	10,285	9,781	8,175	504	5	1,606	20
Total employees (full-time equivalent)[1]	26,317	25,439	22,621	878	3	2,818	12
Total assets (in € bn)[1,2]	280	264	258	16	6	6	2
Risk-weighted assets (in € bn)[1]	78	69	74	9	13	(5)	(7)
of which: operational risk RWA (in € bn)[1,3]	11	6	5	5	94	0	5
Leverage exposure (in € bn)[1]	339	307	321	33	11	(14)	(4)
Deposits (in € bn)[1]	313	289	289	23	8	1	0
Loans (gross of allowance for loan losses, in € bn)[1]	117	117	122	(0)	(0)	(5)	(4)
Cost/income ratio[4]	67.7%	60.2%	66.1%	N/M	7.5ppt	N/M	(5.8)ppt
Post-tax return on average shareholders' equity[5,6]	11.7%	16.6%	10.3%	N/M	(4.8)ppt	N/M	6.2ppt
Post-tax return on average tangible shareholders' equity[5,6]	12.6%	17.8%	11.1%	N/M	(5.3)ppt	N/M	6.8ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[5] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[6] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28 % for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

Investment Bank

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Fixed Income & Currencies (FIC)	8,610	7,893	8,861	717	9	(968)	(11)
Fixed Income & Currencies: Financing	3,205	2,867	2,953	339	12	(86)	(3)
Fixed Income & Currencies: Ex-Financing	5,405	5,026	5,909	378	8	(882)	(15)
Origination & Advisory	2,012	1,246	998	765	61	249	25
Debt Origination	1,290	843	412	447	53	431	105
Equity Origination	187	102	101	84	82	1	1
Advisory	535	301	485	234	78	(184)	(38)
Research and Other	(64)	21	157	(85)	N/M	(136)	(87)
Total net revenues	**10,558**	9,160	10,016	1,398	15	(856)	(9)
Provision for credit losses	**549**	431	319	119	28	112	35
Noninterest expenses							
Compensation and benefits	2,682	2,526	2,379	155	6	147	6
General and administrative expenses	3,979	4,091	4,061	(111)	(3)	30	1
Impairment of goodwill and other intangible assets	0	233	0	(233)	N/M	233	N/M
Restructuring activities	(0)	(3)	15	3	(98)	(18)	N/M
Total noninterest expenses	**6,661**	6,847	6,455	(186)	(3)	391	6
Noncontrolling interests	**5**	3	15	2	52	(12)	(79)
Profit (loss) before tax	**3,343**	1,879	3,228	1,463	78	(1,348)	(42)
Employees (front office, full-time equivalent)[1]	4,869	4,843	4,333	26	1	510	12
Employees (business-aligned operations, full-time equivalent)[1]	3,129	3,120	2,811	9	0	309	11
Employees (allocated central infrastructure, full-time equivalent)[1]	12,109	12,101	10,802	8	0	1,299	12
Total employees (full-time equivalent)[1]	20,107	20,063	17,946	44	0	2,117	12
Total assets (in € bn)[1,2]	756	658	677	98	15	(18)	(3)
Risk-weighted assets (in € bn)[1]	130	140	139	(10)	(7)	0	0
of which: operational risk RWA (in € bn)[1,3]	15	22	23	(7)	(32)	(2)	(7)
Leverage exposure (in € bn)[1]	593	546	530	46	8	17	3
Deposits (in € bn)[1]	22	18	16	4	23	1	9
Loans (gross of allowance for loan losses, in € bn)[1]	110	101	103	9	9	(2)	(2)
Cost/income ratio[4]	63.1%	74.7%	64.4%	N/M	(11.6)ppt	N/M	10.3ppt
Post-tax return on average shareholders' equity[5,6]	9.1%	4.8%	9.3%	N/M	4.3ppt	N/M	(4.5)ppt
Post-tax return on average tangible shareholders' equity[5,6]	9.4%	4.9%	9.6%	N/M	4.4ppt	N/M	(4.6)ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

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[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

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[6] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28 % for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

Private Bank

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues:							
Personal Banking	5,304	5,570	5,005	(267)	(5)	566	11
Wealth Management & Private Banking	4,082	4,000	4,147	82	2	(147)	(4)
Total net revenues	**9,386**	9,571	9,152	(185)	(2)	419	5
of which:							
Net interest income	5,786	6,156	5,222	(370)	(6)	934	18
Net commissions and fee income	2,956	2,852	3,155	104	4	(303)	(10)
Remaining income	643	563	775	80	14	(212)	(27)
Provision for credit losses	**851**	783	583	68	9	201	34
Noninterest expenses:							
Compensation and benefits	2,934	2,805	2,783	130	5	22	1
General and administrative expenses	4,372	4,696	4,193	(324)	(7)	503	12
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	(3)	228	(113)	(231)	N/M	341	N/M
Total noninterest expenses	**7,304**	7,730	6,863	(426)	(6)	866	13
Noncontrolling interests	**0**	0	0	(0)	(45)	(0)	(12)
Profit (loss) before tax	**1,231**	1,058	1,705	173	16	(648)	(38)
Employees (front office, full-time equivalent)[1]	16,961	18,403	18,853	(1,442)	(8)	(450)	(2)
Employees (business-aligned operations, full-time equivalent)[1]	7,917	7,802	8,018	115	1	(216)	(3)
Employees (allocated central infrastructure, full-time equivalent)[1]	12,193	12,205	10,839	(12)	(0)	1,366	13
Total employees (full-time equivalent)[1]	37,072	38,411	37,710	(1,339)	(3)	701	2
Total assets (in € bn)[1,2]	324	331	333	(7)	(2)	(2)	(1)
Risk-weighted assets (in € bn)[1]	97	86	88	11	13	(1)	(2)
of which: operational risk RWA (in € bn)[1,3]	14	8	8	7	88	0	0
Leverage exposure (in € bn)[1]	336	339	344	(2)	(1)	(6)	(2)
Deposits (in € bn)[1]	320	308	317	13	4	(10)	(3)
Loans (gross of allowance for loan losses, in € bn)[1]	257	261	265	(4)	(1)	(4)	(1)
Assets under Management (in € bn)[1,4]	633	578	543	55	10	35	6
Net flows (in € bn)	29	23	31	6	26	(8)	(26)
Cost/income ratio[5]	77.8%	80.8%	75.0%	N/M	(2.9)ppt	N/M	5.8ppt
Post-tax return on average shareholders' equity[6,7]	5.2%	4.8%	8.6%	N/M	0.4ppt	N/M	(3.8)ppt
Post-tax return on average tangible shareholders' equity[6,7]	5.2%	5.2%	9.2%	N/M	0.1ppt	N/M	(4.0)ppt

N/M – Not meaningful

Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Assets under Management include assets held on behalf of customers for investment purposes and/or client assets that are advised or managed by Deutsche Bank. They are managed on a discretionary or advisory basis or are deposited with the bank. Deposits are considered Assets under Management if they serve investment purposes. In Personal Banking, this includes Term deposits and Savings deposits. In Wealth Management & Private Banking (excl. Business Banking), it is assumed that all customer deposits are held with the bank primarily for investment purposes and accordingly are classified as Assets under Management. Within the Private Bank business 'Wealth Management & Private Banking', private clients benefit from a wider product range with increased emphasis on investment advice. As a result, starting 2024, demand deposits of Private Banking in Germany were reclassified to Assets under Management, ensuring a consistent treatment within 'Wealth Management & Private Banking'. In instances in which Private Bank distributes investment products qualifying as Assets under Management which are managed by DWS, these assets are reported as Assets under Management for Private Bank and for Asset Management (DWS) because they are two distinct, independent qualifying services

[5] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[6] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[7] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28 % for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

Asset Management

				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
in € m. (unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Net revenues							
Management fees	2,479	2,314	2,458	164	7	(143)	(6)
Performance and transaction fees	148	128	125	20	16	2	2
Other	23	(59)	24	82	N/M	(84)	N/M
Total net revenues	**2,649**	2,383	2,608	267	11	(225)	(9)
Provision for credit losses	**(1)**	(1)	(2)	0	(23)	1	(50)
Noninterest expenses							
Compensation and benefits	919	891	899	28	3	(8)	(1)
General and administrative expenses	904	934	883	(29)	(3)	51	6
Impairment of goodwill and other intangible assets	0	0	68	0	N/M	(68)	N/M
Restructuring activities	0	0	0	(0)	(43)	(0)	(15)
Total noninterest expenses	**1,823**	1,825	1,850	(1)	(0)	(26)	(1)
Noncontrolling interests	**194**	163	174	32	20	(12)	(7)
Profit (loss) before tax	**632**	396	585	236	60	(188)	(32)
Employees (front office, full-time equivalent)[1]	2,069	2,062	2,059	7	0	3	0
Employees (business-aligned operations, full-time equivalent)[1]	2,506	2,325	2,225	181	8	100	4
Employees (allocated central infrastructure, full-time equivalent)[1]	594	576	494	18	3	82	17
Total employees (full-time equivalent)[1]	5,169	4,963	4,778	206	4	185	4
Total assets (in € bn)[1,2]	11	10	10	0	2	0	2
Risk-weighted assets (in € bn)[1]	18	15	13	3	22	2	18
of which: operational risk RWA (in € bn)[1,3]	5	3	3	1	35	0	2
Leverage exposure (in € bn)[1]	10	10	9	0	4	0	3
Assets under Management (in € bn)[1,4]	1,012	896	821	115	13	75	9
Net flows (in € bn)	26	28	(20)	(3)	(9)	48	N/M
Cost/income ratio[5]	68.8%	76.6%	70.9%	N/M	(7.8)ppt	N/M	5.6ppt
Post-tax return on average shareholders' equity[6,7]	8.0%	5.1%	7.3%	N/M	2.9ppt	N/M	(2.2)ppt
Post-tax return on average tangible shareholders' equity[6,7]	18.0%	12.0%	17.0%	N/M	6.1ppt	N/M	(5.1)ppt

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year

[1] As of year-end

[2] Segment assets are presented on a consolidated basis, i.e., the amounts do not include intersegment balances

[3] Starting from the first quarter of 2024, the allocation of operational risk RWA has changed. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[4] Assets under Management (AuM) means assets (a) the segment manages on a discretionary or non-discretionary advisory basis; including where it is the management company and portfolio management is outsourced to a third party; and (b) a third party holds or manages and on which the segment provides, on the basis of contract, advice of an ongoing nature including regular or periodic assessment, monitoring and/or review. AuM represent both collective investments (including mutual funds and exchange-traded funds) and separate client mandates. AuM are measured at current market value based on the local regulatory rules for asset managers at each reporting date, which might differ from the fair value rules applicable under IFRS. Measurable levels are available daily for most retail products but may only update monthly, quarterly or even yearly for some products. While AuM do not include the segment's investments accounted for under equity method, they do include seed capital and any committed capital on which the segment earns management fees. In instances in which Private Bank distributes investment products qualifying as Assets under Management which are managed by DWS, these assets are reported as Assets under Management for Private Bank and for Asset Management (DWS) because they are two distinct, independent qualifying services

[5] Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income

[6] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information, please refer to section "Note 4 - Business segments and related information" of this report

[7] For the post-tax return on average shareholders' equity and average tangible shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 28 % for the years 2024, 2023 and 2022; for further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report

Corporate & Other

in € m. (unless stated otherwise)	2024	2023	2022	2024 increase (decrease) from 2023 in € m.	 in %	2023 increase (decrease) from 2022 in € m.	 in %
Net revenues	**1,406**	2,324	(1,050)	(918)	(40)	3,373	N/M
Provision for credit losses	**83**	26	(9)	57	N/M	35	N/M
Noninterest expenses							
Compensation and benefits	3,593	3,378	3,235	215	6	143	4
General and administrative expenses	(1,494)	(2,731)	(2,199)	1,237	(45)	(532)	24
Impairment of goodwill and other intangible assets	0	0	0	0	N/M	0	N/M
Restructuring activities	0	(1)	(2)	1	N/M	1	(40)
Total noninterest expenses	**2,099**	646	1,035	1,453	N/M	(388)	(38)
Noncontrolling interests	**(199)**	(166)	(190)	(33)	20	24	(12)
Profit (loss) before tax	**(577)**	1,817	(1,886)	(2,394)	N/M	3,703	N/M
Total Employees (full-time equivalent)[1]	36,269	35,917	32,186	352	1	3,731	12
Risk-weighted assets (in € bn)[1]	34	40	46	(6)	(15)	(6)	(13)
Leverage exposure (in € bn)[1]	38	39	36	(1)	(3)	3	7

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] As of year-end

Entity-wide disclosures

The Group’s entity-wide disclosures include net revenues from internal and external counterparties. Excluding revenues from internal counterparties would require disproportionate IT investment and is not in line with the bank's management approach. For details of the net revenue components please see “Management Report: Operating and Financial Review: Results of Operations: Corporate Divisions”.

To bring several key regions closer together to better serve Deutsche Bank’s clients, an updated regional governance structure was introduced in 2024 for the bank’s markets in Europe, the Middle East and Africa (EMEA), Asia Pacific and Germany. From May 2024 onwards, the region Middle East & Africa (MEA) includes the countries Israel and Turkey and rolls up into the new main region Asia Pacific & MEA. The remaining region EMEA was renamed to Europe. Prior years’ comparatives are presented in the current reporting structure.

The following table presents total net revenues (before provision for credit losses) by geographic area for the years ended December 31, 2024, 2023 and 2022 respectively. The information presented for Corporate Bank, Investment Bank, Private Bank and Asset Management has been classified based primarily on the location of the Group’s office in which the revenues are recorded. The information for Corporate & Other is presented on a global level only, as management responsibility for Corporate & Other is held centrally.

in € m.	2024	2023	2022
Germany:			
Corporate Bank	3,811	4,225	3,166
Investment Bank	641	573	587
Private Bank	6,389	6,567	5,876
Asset Management	1,286	1,211	1,266
Total Germany	**12,127**	12,576	10,894
UK:			
Corporate Bank	193	192	143
Investment Bank	3,882	3,503	4,343
Private Bank	46	54	3
Asset Management	404	350	356
Total UK	**4,525**	4,099	4,844
Rest of Europe:			
Corporate Bank	1,238	1,196	1,109
Investment Bank	477	330	293
Private Bank	1,953	1,981	2,185
Asset Management	308	274	275
Total Rest of Europe	**3,975**	3,782	3,862
Americas (primarily United States):			
Corporate Bank	1,090	1,011	975
Investment Bank	3,869	3,042	3,033
Private Bank	475	462	466
Asset Management	562	432	580
Total Americas	**5,996**	4,946	5,053
Asia/Pacific, Middle East and Africa:			
Corporate Bank	1,173	1,094	946
Investment Bank	1,688	1,713	1,761
Private Bank	524	506	621
Asset Management	90	115	131
Total Asia/Pacific, Middle East and Africa	**3,476**	3,428	3,459
Corporate & Other	**1,406**	2,324	(1,050)
Consolidated net revenues[1]	**31,504**	31,155	27,063

Prior year’s comparatives aligned to presentation in the current year

[1] Consolidated net revenues comprise interest and similar income, interest expenses and total noninterest income (including net commission and fee income); revenues are attributed to countries based on the location in which the Group’s booking office is located; the location of a transaction on the Group’s books is sometimes different from the location of the headquarters or other offices of a customer and different from the location of the Group’s personnel who entered into or facilitated the transaction; where the Group records a transaction involving its staff and customers and other third parties in different locations frequently depends on other considerations, such as the nature of the transaction, regulatory considerations and transaction processing considerations

Notes to the consolidated income statement

05 – Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss

Net interest income

in € m.	2024	2023	2022
Interest and similar income:			
Interest income on cash and central bank balances	7,045	7,048	1,936
Interest income on interbank balances (w/o central banks)	643	607	352
Central bank funds sold and securities purchased under resale agreements	1,935	1,069	504
Loans	23,330	22,032	14,238
Other	2,140	2,103	1,969
Total Interest and similar income from assets measured at amortized cost	**35,094**	32,857	18,999
Interest income on financial assets at fair value through other comprehensive income	1,408	1,097	798
Total interest and similar income calculated using the effective interest method	**36,502**	33,955	19,798
Financial assets at fair value through profit or loss	12,493	9,592	4,652
Total interest and similar income	**48,996**	43,546	24,449
Thereof: negative interest expense on financial liabilities	**28**	76	959
Interest expense:			
Interest-bearing deposits	14,410	10,658	3,719
Central bank funds purchased and securities sold under repurchase agreements	708	388	304
Other short-term borrowings	390	310	111
Long-term debt	6,770	6,154	2,409
Trust preferred securities	17	16	13
Other	3,035	2,848	1,119
Total interest expense measured at amortized cost	**25,330**	20,374	7,676
Financial liabilities at fair value through profit or loss	8,505	7,051	2,791
Total interest expense	**33,835**	27,424	10,466
Thereof: negative interest income on financial assets	**39**	81	461
Net interest income	**15,161**	16,122	13,983

Impact of ECB Targeted Longer-term Refinancing Operations (TLTRO III program)

As of December 31, 2024, the Group had no outstanding borrowing (December 31, 2023: € 15.0 billion) under the TLTRO III-refinancing program. The prior interest rates on TLTRO III refinancing operations were indexed to the average applicable key ECB interest rates. The resulting net interest expense was € 144 million for the twelve months ended December 31, 2024 (December 31, 2023: € 741 million) under the TLTRO III program.

Net gains (losses) on financial assets/liabilities at fair value through profit or loss

in € m.	2024	2023	2022
Trading income (loss):			
FIC Sales and Trading	5,045	5,116	5,352
Other trading income (loss)	517	390	(2,607)
Total trading income (loss)	**5,563**	5,506	2,745
Net gains (losses) on non-trading financial assets mandatory at fair value through profit or loss:			
Breakdown by financial assets category:			
Debt Securities	**(94)**	89	(43)
Equity Securities	**24**	(10)	47
Loans and loan commitments	**(8)**	112	(5)
Deposits	**(4)**	(5)	14
Others non-trading financial assets mandatory at fair value through profit and loss	**18**	31	(73)
Total net gains (losses) on non-trading financial assets mandatory at fair value through profit or loss:	**(65)**	217	(61)
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss:			
Breakdown by financial asset/liability category:			
Loans and loan commitments	5	12	(2)
Deposits	2	(0)	4
Long-term debt	157	(180)	265
Other financial assets/liabilities designated at fair value through profit or loss	(7)	20	11
Total net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	**158**	(148)	277
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	**5,655**	5,575	2,962

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss

in € m.	2024	2023	2022
Net interest income	15,161	16,122	13,983
Trading income (loss)[1]	5,563	5,506	2,745
Net gains (losses) on non-trading financial assets mandatory at fair value through profit or loss	(65)	217	(61)
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	158	(148)	277
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	5,655	5,575	2,962
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss[2]	**20,816**	21,697	16,945
Corporate Treasury Services	2,832	2,936	2,457
Institutional Client Services	1,002	946	566
Business Banking	1,086	1,184	697
Corporate Bank	4,919	5,067	3,720
Fixed Income & Currency	8,521	8,121	8,696
Remaining Products	(126)	(19)	(431)
Investment Bank	8,395	8,102	8,265
Personal Banking	3,882	4,133	4,650
Wealth Management and Private Banking	2,117	2,245	1,961
Private Bank	5,998	6,377	6,610
Asset Management	269	(11)	(250)
Corporate & Other	1,235	2,162	(1,401)
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	**20,816**	21,697	16,945

[1] Trading income (loss) includes gains and losses from derivatives not qualifying for hedge accounting
[2] Prior year's comparatives aligned to presentation in the current year

The Group's trading and risk management businesses include significant activities in interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments designated at fair value through profit or loss (i.e., coupon and dividend income), and the costs of funding net trading positions, are part of net interest income. The Group's trading activities can periodically shift income to either net interest income or to net gains (losses) of financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies. The above table combines net interest income and net gains (losses) of financial assets/liabilities at fair value through profit or loss by business division.

06 – Commissions and fee income

in € m.	2024	2023	2022
Net commissions and fee income and expense:			
Commissions and fee income	13,190	11,657	12,512
Commissions and fee expense	2,818	2,452	2,675
Net commissions and fee income	**10,372**	9,206	9,838

Disaggregation of revenues by product type and business segment

						Dec 31,2024
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Major type of services:						
Commissions for administration	215	54	265	16	(0)	550
Commissions for assets under management	20	0	416	3,805	(0)	4,242
Commissions for other securities	451	0	38	1	0	491
Underwriting and advisory fees	53	1,640	6	0	66	1,764
Brokerage fees	21	327	1,052	39	1	1,440
Commissions for local payments	550	13	909	0	(9)	1,464
Commissions for foreign commercial business	483	32	20	0	(34)	502
Commissions for foreign currency/exchange business	6	0	4	0	(0)	10
Commissions for loan processing and guarantees	697	365	270	0	1	1,334
Intermediary fees	30	1	402	0	11	444
Fees for sundry other customer services	320	419	87	117	6	949
Total commissions and fee income	2,848	2,852	3,470	3,978	42	13,190
Commissions and fee expense						(2,818)
Net commissions and fee income						10,372

						Dec 31,2023
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Major type of services:						
Commissions for administration	204	55	247	11	(2)	515
Commissions for assets under management	18	0	362	3,527	(0)	3,907
Commissions for other securities	461	0	37	1	1	499
Underwriting and advisory fees	43	1,093	16	0	4	1,156
Brokerage fees	19	280	971	33	(20)	1,282
Commissions for local payments	488	0	995	0	1	1,484
Commissions for foreign commercial business	475	27	22	0	(27)	497
Commissions for foreign currency/exchange business	6	0	4	0	(0)	10
Commissions for loan processing and guarantees	646	329	230	0	1	1,207
Intermediary fees	28	3	364	0	10	405
Fees for sundry other customer services	248	290	41	117	0	695
Total commissions and fee income	2,635	2,078	3,288	3,689	(33)	11,657
Commissions and fee expense						(2,452)
Net commissions and fee income						9,206

Prior year's comparatives aligned to presentation in the current year.

						Dec 31,2022
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total Consolidated
Major type of services:						
Commissions for administration	218	33	254	17	(3)	520
Commissions for assets under management	18	1	363	3,642	(0)	4,024
Commissions for other securities	512	(0)	47	0	0	559
Underwriting and advisory fees	35	1,373	12	0	(52)	1,368
Brokerage fees	19	253	1,164	65	(1)	1,501
Commissions for local payments	479	3	1,006	0	8	1,497
Commissions for foreign commercial business	466	33	62	0	(5)	556
Commissions for foreign currency/exchange business	15	0	5	0	(0)	19
Commissions for loan processing and guarantees	618	298	292	0	5	1,213
Intermediary fees	23	2	523	0	13	562
Fees for sundry other customer services	282	277	10	122	4	695
Total commissions and fee income	2,684	2,273	3,739	3,847	(30)	12,512
Commissions and fee expense						(2,675)
Net commissions and fee income						9,838

Prior year's comparatives aligned to presentation in the current year.

Revenue is recognized when performance obligations are satisfied. Performance obligation is satisfied by fund performance exceeding a hurdle rate, an agreed minimum annual return provided to investors. As of December 31, 2024, there were performance obligations to be satisfied of € 250 million with a time band of four years from 2025 to 2028 (as of December 31, 2023, € 225 million with a time band of three years from 2025 to 2027) from Alternative funds. The increase is attributable to appreciation of the funds' assets and the expansion of the time band to a reassessed timing of future asset sales.

As of December 31, 2024 and December 31, 2023, the Group's balance of receivables from commission and fee income was € 831 million and € 903 million respectively. As of December 31, 2024 and December 31, 2023, the Group's balance of contract liabilities associated to commission and fee income was € 84 million and € 90 million, respectively. Contract liabilities arise from the Group's obligation to provide future services to a customer for which it has received consideration from the customer prior to completion of the services. The balances of receivables and contract liabilities do not vary significantly from period to period reflecting the fact that they predominately relate to recurring service contracts with service periods of less than one year such as monthly current account services and quarterly asset management services. As a result, prior period balances of contract liabilities are generally recognized in revenue in the subsequent period. There are some contracts where customer payment in exchange for services provided by the Group over the service period are not required until the end of the contract period. If the Group is virtually certain to receive payment at the end of the contract period, a contract asset and respective commission and fee income is recognized when services are performed. As of December 31, 2024 and 2023, the bank has recognized no material contract assets.

07 – Net gains (losses) from derecognition of financial assets measured at amortized cost

For the twelve months ended December 31, 2024, the Group sold financial assets measured at amortized cost of € 656 million (December 31, 2023: € 559 million and December 31, 2022: € 473 million). The sales related primarily to a Hold to Collect portfolio in Investment Bank, Private Bank, and Corporate Bank.

The table below presents the gains and (losses) arising from derecognition of these securities.

in € m.	2024	2023	2022
Gains	10	5	11
Losses	(21)	(101)	(13)
Net gains (losses) from derecognition of financial assets measured at amortized cost	(11)	(96)	(2)

08 – Other income (loss)

in € m.	2024	2023	2022
Other income (loss):			
Insurance premiums	12	4	3
Net income (loss) from hedge relationships qualifying for hedge accounting	386	335	(594)
Remaining other income (loss)[1]	(131)	48	937
Total other income (loss)	**267**	387	346

[1] Includes net gains (losses) of € 32 million, € 41 million and € 404 million for the years ended December 31, 2024, 2023 and 2022, respectively, that are related to non-current assets and disposal groups held for sale

09 – General and administrative expenses

in € m.	2024	2023	2022
General and administrative expenses:			
Information Technology	3,610	3,755	3,680
Occupancy, furniture and equipment expenses	1,624	1,478	1,429
Regulatory, Tax & Insurance[1]	1,028	1,399	1,285
Professional services	763	899	858
Banking Services and outsourced operations	964	964	881
Market Data and Research Services	400	374	378
Travel expenses	153	143	110
Marketing expenses	149	203	165
Other expenses[2]	2,552	899	943
Total general and administrative expenses	**11,243**	10,112	9,728

[1] Includes bank levy of € 172 million in 2024, € 528 million in 2023 and € 762 million in 2022
[2] Includes litigation related expenses of € 2.0 billion in 2024 and € 311 million in 2023 and € 413 million in 2022; see Note 27 “Provisions”, for more details on litigation

10 – Restructuring

In 2024, Restructuring is primarily driven by the implementation of the Group's *Global Hausbank* strategic agenda. The Group has defined and is in the process of implementing efficiency measures that aim to contribute to achieving the bank's 2025 targets. Restructuring in prior periods relates to measures as part of the previous strategy "Compete to win" which the bank continues to implement.

Restructuring expense is comprised of termination benefits, additional expenses covering the acceleration of deferred compensation awards not yet amortized due to the discontinuation of employment and contract termination costs related to real estate.

In 2024, the Group made significant progress in strategic transformation, with several restructuring programs concluding and the underlying assumptions for the remaining restructuring provisions reviewed resulting in a partial release of provisions of € 149 million. Additionally, the Group initiated new restructuring programs during 2024 requiring provisions of € 138 million and recognized further expense on existing programs of € 8 million. Overall in 2024, the Group recognized a credit of € 3 million in the Consolidated Statement of Income

Net restructuring expense by division

in € m.	2024	2023	2022
Corporate Bank	(1)	(4)	(19)
Investment Bank	(0)	(3)	15
Private Bank	(3)	228	(113)
Asset Management	0	0	0
Corporate & Other	0	(1)	(2)
Total Net Restructuring Charges	**(3)**	220	(118)

Net restructuring by type

in € m.	2024	2023	2022
Restructuring – Staff related	(5)	178	(117)
thereof:			
Termination Benefits	(6)	176	(132)
Retention Acceleration	0	1	15
Social Security	1	1	0
Restructuring – Non Staff related	1	42	(1)
Total Net Restructuring Charges	**(3)**	220	(118)

Provisions for restructuring amounted to € 273 million, € 333 million and € 248 million as of December 31, 2024, December 31, 2023 and December 31, 2022, respectively. The majority of the current provisions for restructuring are expected to be utilized in the next year.

During 2024, 168 full-time equivalent staff was reduced through restructuring (2023: 476 and 2022: 903).

Organizational changes

Full-time equivalent staff	2024	2023	2022
Corporate Bank	10	29	113
Investment Bank	5	9	54
Private Bank	116	377	594
Asset Management	2	0	1
Infrastructure	35	61	141
Total full-time equivalent staff	**168**	476	903

11 – Earnings per share

Basic earnings per share amounts are computed by dividing net income (loss) attributable to Deutsche Bank shareholders by the average number of common shares outstanding during the year. The average number of common shares outstanding is defined as the average number of common shares issued, reduced by the average number of shares in treasury and by the average number of shares that will be acquired under physically-settled forward purchase contracts, and increased by undistributed vested shares awarded under deferred share plans.

Diluted earnings per share assumes the conversion into common shares of outstanding securities or other contracts to issue common stock, such as share options, convertible debt, unvested deferred share awards and forward contracts. The aforementioned instruments are only included in the calculation of diluted earnings per share if they are dilutive in the respective reporting period.

Computation of basic and diluted earnings per share

in € m.	2024	2023	2022
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	**4,342**	6,332	5,420
Coupons paid on additional equity components	**(574)**	(498)	(479)
Net income (loss) attributable to Deutsche Bank shareholders – numerator for basic earnings per share	**3,768**	5,834	4,940
Effect of dilutive securities	0	0	0
Net income (loss) attributable to Deutsche Bank shareholders after assumed conversions – numerator for diluted earnings per share	**3,768**	5,834	4,940
Number of shares in million			
Weighted-average shares outstanding – denominator for basic earnings per share	**1,993.6**	2,064.1	2,084.9
Effect of dilutive securities:			
Deferred shares	45.7	39.9	40.7
Other (including trading options)	0.0	0.0	0.0
Dilutive potential common shares	45.7	39.9	40.7
Adjusted weighted-average shares after assumed conversions – denominator for diluted earnings per share	**2,039.3**	2,104.0	2,125.6

Earnings per share

in €	2024	2023	2022
Basic earnings per share	1.89	2.83	2.37
Diluted earnings per share	1.85	2.77	2.32

There were no instruments outstanding that could potentially dilute basic earnings per share and are not included in the calculation of diluted earnings per share as of December 31, 2024.

Notes to the consolidated balance sheet

12 – Financial assets/liabilities at fair value through profit or loss

in € m.	Dec 31, 2024	Dec 31, 2023
Financial assets classified as held for trading:		
Trading assets:		
Trading securities	124,857	115,832
Other trading assets[1]	14,914	9,443
Total trading assets	139,772	125,275
Positive market values from derivative financial instruments	291,800	251,877
Total financial assets classified as held for trading	**431,571**	377,151
Non-trading financial assets mandatory at fair value through profit or loss:		
Securities purchased under resale agreements	88,736	65,937
Securities borrowed	15,913	13,036
Loans	1,954	812
Other financial assets mandatory at fair value through profit or loss	7,721	8,261
Total Non-trading financial assets mandatory at fair value through profit or loss	**114,324**	88,047
Financial assets designated at fair value through profit or loss:		
Loans	0	75
Other financial assets designated at fair value through profit or loss	0	0
Total financial assets designated at fair value through profit or loss	**0**	75
Total financial assets at fair value through profit or loss	**545,895**	465,273

[1] Includes traded loans of € 11.4 billion and € 8.2 billion at December 31, 2024 and 2023 respectively

in € m.	Dec 31, 2024	Dec 31, 2023
Financial liabilities classified as held for trading:		
Trading liabilities:		
Trading securities	41,864	43,114
Other trading liabilities	1,635	890
Total trading liabilities	43,498	44,005
Negative market values from derivative financial instruments	276,410	238,278
Total financial liabilities classified as held for trading	**319,908**	282,283
Financial liabilities designated at fair value through profit or loss:		
Securities sold under repurchase agreements	69,121	72,377
Loan commitments	6	5
Long-term debt	22,203	10,709
Other financial liabilities designated at fair value through profit or loss	717	636
Total financial liabilities designated at fair value through profit or loss	**92,047**	83,727
Investment contract liabilities	454	484
Total financial liabilities at fair value through profit or loss	**412,409**	366,494

Financial assets & liabilities designated at fair value through profit or loss

The Group has designated various lending relationships at fair value through profit or loss. Lending facilities consist of drawn loan assets and undrawn irrevocable loan commitments. The maximum exposure to credit risk on a drawn loan is its fair value. The Group's maximum exposure to credit risk on drawn loans was € 0 million and € 75 million as of December 31, 2024, and 2023, respectively. Exposure to credit risk also exists for undrawn irrevocable loan commitments and is predominantly counterparty credit risk.

The credit risk on the securities purchased under resale agreements and securities borrowed designated under the fair value option is mitigated by the holding of collateral. The valuation of these instruments considers the credit enhancement in the form of the collateral received. As such there is no material movement during the year or cumulatively due to movements in counterparty credit risk on these instruments.

Changes in fair value of financial assets attributable to movements in counterparty credit risk

in € m.	Dec 31, 2024	Dec 31, 2023
Notional value of financial assets exposed to credit risk	0	75
Annual change in the fair value reflected in the Statement of Income	0	1
Cumulative change in the fair value	0	(0)
Notional of credit derivatives used to mitigate credit risk	0	40
Annual change in the fair value reflected in the Statement of Income	0	(0)
Cumulative change in the fair value	0	(1)

Changes in fair value of financial liabilities attributable to movements in the Group's credit risk[1]

in € m.	Dec 31, 2024	Dec 31, 2023
Presented in Other comprehensive Income		
Cumulative change in the fair value	(157)	19
Presented in Statement of income		
Annual change in the fair value reflected in the Statement of Income	0	0
Cumulative change in the fair value	0	0

[1] The fair value of a financial liability incorporates the credit risk of that financial liability. Changes in the fair value of financial liabilities issued by consolidated structured entities have been excluded as this is not related to the Group's credit risk but to that of the legally isolated structured entity, which is dependent on the collateral it holds

Transfers of the cumulative gains or losses within equity during the period

in € m.	Dec 31, 2024	Dec 31, 2023
Cumulative gains or losses within equity during the period	0	0

Amounts realized on derecognition of liabilities designated at fair value through profit or loss

in € m.	Dec 31, 2024	Dec 31, 2023
Amount presented in other comprehensive income realized at derecognition	(8)	0

The excess of the contractual amount repayable at maturity over the carrying value of financial liabilities[1]

in € m.	Dec 31, 2024	Dec 31, 2023
Including undrawn loan commitments[2]	1,085	1,769
Excluding undrawn loan commitments	497	1,104

[1] Assuming the liability is extinguished at the earliest contractual maturity that the Group can be required to repay. When the amount payable is not fixed, it is determined by reference to conditions existing at the reporting date
[2] The contractual cash flows at maturity for undrawn loan commitments assume full drawdown of the facility

13 – Financial Instruments carried at Fair Value

Valuation methods and control

The Group has an established valuation control framework which governs internal control standards, methodologies, and procedures over the valuation process.

Prices quoted in active markets – The fair value of instruments that are quoted in active markets are determined using the quoted prices where they represent prices at which regularly and recently occurring transactions take place.

Valuation techniques – The Group uses valuation techniques to establish the fair value of instruments where prices, quoted in active markets, are not available. Valuation techniques used for financial instruments include modelling techniques, the use of indicative quotes for proxy instruments, quotes from recent and less regular transactions and broker quotes.

For some financial instruments a rate or other parameter, rather than a price, is quoted. Where this is the case then the market rate or parameter is used as an input to a valuation model to determine fair value. For some instruments, modelling techniques follow industry standard models, for example, discounted cash flow analysis and standard option pricing models. These models are dependent upon estimated future cash flows, discount factors and volatility levels. For more complex or unique instruments, more sophisticated modelling techniques are required, and may rely upon assumptions or more complex parameters such as correlations, prepayment speeds, default rates and loss severity.

Frequently, valuation models require multiple parameter inputs. Where possible, parameter inputs are based on observable data or are derived from the prices of relevant instruments traded in active markets. Where observable data is not available for parameter inputs, then other market information is considered. For example, indicative broker quotes and consensus pricing information are used to support parameter inputs where they are available. Where no observable information is available to support parameter inputs then they are based on other relevant sources of information such as prices for similar transactions, historic data, economic fundamentals, and research information, with appropriate adjustment to reflect the terms of the actual instrument being valued and current market conditions.

Valuation adjustments – Valuation adjustments are an integral part of the valuation process. In making appropriate valuation adjustments, the Group follows methodologies that consider factors such as bid-offer spreads, counterparty/own credit and funding risk. Bid offer spread valuation adjustments are required to adjust mid-market valuations to the appropriate bid or offer valuation. The bid or offer valuation is the best representation of the fair value for an instrument. The carrying value of a long position is adjusted from mid to bid, and the carrying value of a short position is adjusted from mid to offer. Bid-offer valuation adjustments are determined from bid-offer prices observed in relevant trading activity and in quotes from other broker-dealers or other knowledgeable counterparties. Where the quoted price for the instrument is already a bid-offer price then no additional bid-offer valuation adjustment is necessary. Where the fair value of financial instruments is derived from a modelling technique, then the parameter inputs into that model are normally at a mid-market level. Such instruments are generally managed on a portfolio basis and, when specified criteria are met, valuation adjustments are taken to reflect the cost of closing out the net exposure the Bank has to individual market or counterparty risks. These adjustments are determined from bid-offer prices observed in relevant trading activity and quotes from other broker-dealers.

Where complex valuation models are used, or where less-liquid positions are being valued, then bid-offer levels for those positions may not be available directly from the market, and therefore for the close-out cost of these positions, models and parameters must be estimated. When these adjustments are designed, the Group closely examines the valuation risks associated with the model as well as the positions themselves, and the resulting adjustments are closely monitored on an ongoing basis.

Counterparty credit valuation adjustments (CVAs) are required to cover expected credit losses to the extent that the valuation technique does not already include an expected credit loss factor relating to the non-performance risk of the counterparty. The CVA amount is applied to all relevant over-the-counter (OTC) derivatives, and is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the probability of default, based on available market information, including credit default swap (CDS) spreads. Where counterparty CDS spreads are not available, relevant proxies are used.

The fair value of the Group’s financial liabilities at fair value through profit or loss (i.e., OTC derivative liabilities and issued note liabilities designated at fair value through profit or loss) incorporates valuation adjustments to measure the change in the Group’s own credit risk (i.e., debt valuation adjustments (DVA) for derivatives and own credit adjustment (OCA) for issued note liabilities). Issued note liabilities are discounted utilizing the spread at which similar instruments would be traded as at the measurement date as this reflects the value from the perspective of a market participant who holds the identical item as an asset. The change in this own credit component is reported under other comprehensive income (OCI).

For derivative liabilities the Group considers its own creditworthiness by assessing all counterparties expected future exposure to the Group, taking into account any collateral posted by the Group, the effect of relevant netting arrangements, the market price of the Group’s issued note liabilities, the market implied funding costs and the seniority of derivative claims under resolution (statutory subordination).

When determining CVA and DVA, additional adjustments are made where appropriate to achieve fair value, due to the expected loss estimate of a particular arrangement, or where the credit risk being assessed differs in nature to that described by the available CDS instrument.

Funding valuation adjustments (FVA) are required to incorporate the market implied funding costs into the fair value of derivative positions. The FVA reflects a discounting spread applied to uncollateralized and partially collateralized derivatives and is determined by assessing the market-implied funding costs on both assets and liabilities.

Where there is uncertainty in the assumptions used within a modelling technique, an additional adjustment is taken to calibrate the model price to the expected market price of the financial instrument. Typically, such transactions have bid-offer levels which are less observable, and these adjustments aim to estimate the bid-offer by computing the liquidity-premium associated with the transaction. Where a financial instrument is of sufficient complexity that the cost of closing it out would be higher than the cost of closing out its component risks, then an additional adjustment is taken to reflect this.

The Group uses the assumptions that market participants would use when pricing the asset or liability. Where relevant, these assumptions may include assumptions about climate change. The Group has not made material adjustment to fair value for climate change beyond that already priced into market inputs.

Valuation control – The Group has an independent specialized valuation control group within the Risk function which governs and develops the valuation control framework and manages the valuation control processes. The mandate of this specialist function includes the performance of the independent valuation control process for all businesses, the continued development of valuation control methodologies and techniques, as well as devising and governing the formal valuation control policy framework. Special attention of this independent valuation control group is directed to areas where management judgment forms part of the valuation process.

Results of the valuation control process are collected and analyzed as part of a standard monthly reporting cycle. Variances of differences outside of preset and approved tolerance levels are escalated both within the finance function and with senior business management for review, resolution and, if required, adjustment.

For instruments where fair value is determined from valuation models, the assumptions and techniques used within the models are independently validated by an independent specialist model validation group that is part of the Group’s risk management function.

Quotes for transactions and parameter inputs are obtained from a number of third party sources including exchanges, pricing service providers, firm broker quotes and consensus pricing services. Price sources are examined and assessed to determine the quality of fair value information they represent, with greater emphasis given to those possessing greater valuation certainty and relevance. The results are compared against actual transactions in the market to ensure the model valuations are calibrated to market prices.

Price and parameter inputs to models, assumptions and valuation adjustments are verified against independent sources. Where they cannot be verified to independent sources due to lack of observable information, the estimate of fair value is subject to procedures to assess its reasonableness. Such procedures include performing revaluation using independently generated models (including where existing models are independently recalibrated), assessing the valuations against appropriate proxy instruments and other benchmarks, and performing extrapolation techniques. Assessment is made as to whether the valuation techniques produce fair value estimates that are reflective of market levels by calibrating the results of the valuation models against market transactions where possible.

Valuation techniques

The Group has an established valuation control framework which governs internal control standards, methodologies, valuation techniques and procedures over the valuation process and fair value measurement. The current market conditions including the ongoing macro-economic challenges and geopolitical uncertainties required additional focus and review in certain areas, during the year 2024 including assessment of bid-offer spreads to ensure they are representative of fair value.

The following is an explanation of the valuation techniques used in establishing the fair value of the different types of financial instruments that the Group trades.

Sovereign, quasi-sovereign and corporate debt and equity securities – Where there are no recent transactions then fair value may be determined from the last market price adjusted for all changes in risks and information since that date. Where a close proxy instrument is quoted in an active market then fair value is determined by adjusting the proxy value for differences in the risk profile of the instruments. Where close proxies are not available then fair value is estimated using more complex modelling techniques. These techniques include discounted cash flow models using current market rates for credit, interest, liquidity and other risks. For equity securities modeling techniques may also include those based on earnings multiples.

Mortgage- and other asset-backed securities (MBS/ABS) include residential and commercial MBS and other ABS including collateralized debt obligations (CDO). ABS have specific characteristics as they have different underlying assets, and the issuing entities have different capital structures. The complexity increases further where the underlying assets are themselves ABS, as is the case with many of the CDO instruments.

Where no reliable external pricing is available, ABS are valued, where applicable, using either relative value analysis which is performed based on similar transactions observable in the market, or industry-standard valuation models making largest possible use of available observable inputs. The industry standard models calculate principal and interest payments for a given deal based on assumptions that can be independently price tested. The inputs include prepayment speeds, loss assumptions (timing and severity) and a discount rate (spread, yield or discount margin). These inputs/assumptions are derived from actual transactions, external market research and market indices where appropriate.

Loans – For certain loans fair value may be determined from the market price on a recently occurring transaction adjusted for all changes in risks and information since that transaction date. Where there are no recent market transactions then broker quotes, consensus pricing, proxy instruments or discounted cash flow models are used to determine fair value. Discounted cash flow models incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan or CDS markets, where available and appropriate.

Leveraged loans can have transaction-specific characteristics which can limit the relevance of market-observed transactions. Where similar transactions exist for which observable quotes are available from external pricing services then this information is used with appropriate adjustments to reflect the transaction differences. When no similar transactions exist, a discounted cash flow valuation technique is used with credit spreads derived from the appropriate leveraged loan index, incorporating the industry classification, subordination of the loan, and any other relevant information on the loan and loan counterparty.

Over-the-counter derivative financial instruments – Market standard transactions in liquid trading markets, such as interest rate swaps, foreign exchange forward and option contracts in G7 currencies, and equity swap and option contracts on listed securities or indices are valued using market standard models and quoted parameter inputs. Parameter inputs are obtained from pricing services, consensus pricing services and recently occurring transactions in active markets wherever possible.

More complex instruments are modeled using more sophisticated modeling techniques specific for the instrument and are calibrated to available market prices. Where the model output value does not calibrate to a relevant market reference then valuation adjustments are made to the model output value to adjust for any difference. In less active markets, data is obtained from less frequent market transactions, broker quotes and through extrapolation and interpolation techniques. Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions.

Financial liabilities designated at fair value through profit or loss under the fair value option – The fair value of financial liabilities designated at fair value through profit or loss under the fair value option incorporates all market risk factors including a measure of the Group's credit risk relevant for that financial liability (i.e., own credit adjustment (OCA) for structured notes). Under IFRS 9, the own credit component of change in the fair value is reported under other comprehensive income (OCI). Financial liabilities included in this classification are structured note issuances, structured deposits, and other structured securities issued by consolidated vehicles. The fair value of these financial liabilities is determined by discounting the contractual cash flows using the relevant credit-adjusted yield curve (i.e., utilizing the spread at which similar instruments would be traded as at the measurement date as this reflects the value from the perspective of a market participant who holds the identical item as an asset).

Where the financial liabilities designated at fair value through profit or loss under the fair value option are collateralized, such as securities loaned and securities sold under repurchase agreements, the credit enhancement is factored into the fair valuation of the liability.

Investment contract liabilities – Assets which are linked to the investment contract liabilities are owned by the Group. The investment contract obliges the Group to use these assets to settle these liabilities. Therefore, the fair value of investment contract liabilities is determined by the fair value of the underlying assets (i.e., amount payable on surrender of the policies).

Fair value hierarchy

The financial instruments carried at fair value have been categorized under the three levels of the IFRS fair value hierarchy as follows:

Level 1 – Instruments valued using quoted prices in active markets are instruments where the fair value can be determined directly from prices which are quoted in active, liquid markets.

These include: government bonds, exchange-traded derivatives and equity securities traded on active, liquid exchanges.

Level 2 – Instruments valued with valuation techniques using observable market data are instruments where the fair value can be determined by reference to similar instruments trading in active markets, or where a technique is used to derive the valuation but where all significant inputs to that technique are observable.

These include: many OTC derivatives, many investment-grade listed credit bonds, some CDS.

Level 3 – Instruments valued using valuation techniques using market data which is not directly observable are instruments where the fair value cannot be determined directly by reference to market-observable information, and some other pricing technique must be employed. Instruments classified in this category have an input to that technique which is unobservable, and which can have a significant impact on the fair value.

These include: more-complex OTC derivatives, distressed debt, highly-structured bonds, illiquid asset-backed securities (ABS), illiquid CDO's (cash and synthetic), some private equity placements, many commercial real estate (CRE) loans, illiquid loans, and some municipal bonds.

Financial instruments held at fair value[1]

	Dec 31, 2024			Dec 31, 2023		
in € m.	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets held at fair value:						
Trading assets	52,387	78,237	9,148	53,095	62,760	9,420
Trading securities	52,387	69,507	2,964	52,886	59,752	3,194
Other trading assets	0	8,730	6,184	210	3,007	6,226
Positive market values from derivative financial instruments	940	282,927	7,933	2,198	241,481	8,198
Non-trading financial assets mandatory at fair value through profit or loss	1,346	107,173	5,805	2,275	80,744	5,028
Financial assets designated at fair value through profit or loss	0	0	0	0	75	0
Financial assets at fair value through other comprehensive income	21,901	16,806	3,383	18,273	14,324	2,949
Other financial assets at fair value	1,460	(1,135)[2]	12	1,353	(489)[2]	5
Total financial assets held at fair value	**78,034**	**484,008**	**26,281**	77,193	398,894	25,599
Financial liabilities held at fair value:						
Trading liabilities	30,765	12,614	119	36,361	7,617	27
Trading securities	30,765	11,073	26	36,361	6,727	26
Other trading liabilities	0	1,542	93	0	890	0
Negative market values from derivative financial instruments	2,238	265,464	8,707	2,333	228,280	7,666
Financial liabilities designated at fair value through profit or loss	0	87,479	4,569	169	80,309	3,248
Investment contract liabilities	0	454	0	0	484	0
Other financial liabilities at fair value	539	3,101[2]	(13)[3]	486	1,194[2]	(85)[3]
Total financial liabilities held at fair value	**33,543**	**369,113**	**13,382**	39,349	317,884	10,856

[1] Amounts in this table are generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments, as described in Note 1 "Material Accounting Policies and Critical Accounting Estimates"

[2] Predominantly relates to derivatives qualifying for hedge accounting

[3] Relates to derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated. The separated embedded derivatives may have a positive or a negative fair value but have been presented in this table to be consistent with the classification of the host contract. The separated embedded derivatives are held at fair value on a recurring basis and have been split between the fair value hierarchy classifications

During the year 2024, there were transfers in trading securities and non-trading financial assets from Level 1 to Level 2 amounting to € 14 billion of assets and € 6 billion of liabilities; along with transfers from Level 2 to Level 1 of € 9 billion in assets and € 3 billion in liabilities. The assessment of Level 1 versus Level 2 is based on liquidity testing procedures.

Analysis of financial instruments with fair value derived from valuation techniques containing significant unobservable parameters (Level 3)

Some of the financial assets and financial liabilities in Level 3 of the fair value hierarchy have identical or similar offsetting exposures to the unobservable input. However, according to IFRS they are required to be presented gross.

Trading securities – Certain illiquid emerging market corporate bonds and illiquid highly structured corporate bonds are included in this level of the hierarchy. In addition, some of the holdings of notes issued by securitization entities, commercial and residential MBS, collateralized debt obligation securities and other ABS are reported here. The decrease in the period is driven by sales, settlements, and net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments, partially offset by purchases and gains.

Positive and negative market values from derivative instruments categorized in this level of the fair value hierarchy are valued based on one or more significant unobservable parameters. The unobservable parameters may include certain correlations, certain longer-term volatilities, certain prepayment rates, credit spreads and other transaction-specific parameters.

Level 3 derivatives include certain options where the volatility is unobservable; certain basket options in which the correlations between the referenced underlying assets are unobservable; longer-term interest rate option derivatives; multi-currency foreign exchange derivatives; and certain credit default swaps for which the credit spread is not observable.

The decrease in assets during the period are driven by settlements and net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments, partially offset by gains. The increase in liabilities during the period are driven by losses, net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments, partially offset by settlements.

Other trading Instruments classified in Level 3 of the fair value hierarchy mainly consist of traded loans valued using valuation models based on one or more significant unobservable parameters. The decrease in the period is driven by settlements, sales and net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments partially offset by issuances, purchases and gains.

Non-trading financial assets mandatory at fair value through profit or loss classified in Level 3 of fair value hierarchy include any non-trading financial asset that does not fall into the hold to collect nor hold to collect and sell business models. This includes predominately reverse repurchase agreements which are managed on a fair value basis. Additionally, any financial asset that falls into the hold to collect or hold to collect and sell business models for which the contractual cash flow characteristics are not SPPI. The increase in the period is driven by purchases, issuances and gains, partially offset by settlements and net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

Financial assets/liabilities designated at fair value through profit or loss – Certain corporate loans and structured liabilities which were designated at fair value through profit or loss under the fair value option were categorized in this level of the fair value hierarchy. The corporate loans are valued using valuation techniques which incorporate observable credit spreads, recovery rates and unobservable utilization parameters. Revolving loan facilities are reported in the third level of the hierarchy because the utilization in the event of the default parameter is significant and unobservable.

In addition, certain hybrid debt issuances designated at fair value through profit or loss containing embedded derivatives are valued based on significant unobservable parameters. These unobservable parameters include single stock volatility correlations. There are no assets designated at fair value during the period. The increase in liabilities during the period is driven by issuances and losses partially offset by net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments and settlements.

Financial assets at fair value through other comprehensive income include non-performing loan portfolios where there is no trading intent, and the market is very illiquid. The increase in the period is driven by issuances, purchases, net transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments and gains, partially offset by settlements and sales.

Reconciliation of financial instruments classified in Level 3

Reconciliation of financial instruments classified in Level 3

	Dec 31, 2024									
in € m.	Balance, beginning of year	Changes in the group of consolidated companies	Total gains/ losses[1]	Purchases	Sales	Issuances[2]	Settlements[3]	Transfers into Level 3[4]	Transfers out of Level 3[4]	Balance, end of year
Financial assets held at fair value:										
Trading securities	2,995	0	230	1,985	(1,558)	0	(482)	371	(577)	2,964
Positive market values from derivative financial instruments	8,198	0	454	0	0	0	(583)	2,257	(2,394)	7,933
Other trading assets	6,226	0	77	814	(1,378)	2,513	(2,016)	706	(756)	6,184
Non-trading financial assets mandatory at fair value through profit or loss	5,226	(1)	88	1,736	(80)	736	(1,098)	365	(1,170)	5,805
Financial assets designated at fair value through profit or loss	0	0	0	0	0	0	0	0	0	0
Financial assets at fair value through other comprehensive income	2,949	0	126[5]	776	(378)	978	(1,322)	716	(462)	3,383
Other financial assets at fair value	5	0	3	0	0	0	0	5	(1)	12
Total financial assets held at fair value	25,599	(1)	977[6,7]	5,311	(3,393)	4,227	(5,501)	4,421	(5,359)	26,281
Financial liabilities held at fair value:										
Trading securities	26	0	(0)	0	0	0	0	0	0	26
Negative market values from derivative financial instruments	7,666	0	1,186	0	0	0	(175)	2,156	(2,126)	8,707
Other trading liabilities	0	0	0	0	0	0	93	0	0	93
Financial liabilities designated at fair value through profit or loss	3,248	0	129	0	0	2,958	(474)	377	(1,669)	4,569
Other financial liabilities at fair value	(85)	0	102	0	0	0	18	1	(49)	(13)
Total financial liabilities held at fair value	10,856	0	1,417[6,7]	0	0	2,958	(537)	2,533	(3,844)	13,382

[1] Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets at fair value through other comprehensive income reported in the consolidated statement of income and unrealized net gains (losses) on financial assets at fair value through other comprehensive income and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in level 1 or level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters

[2] Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower

[3] Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements

[4] Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly, for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year

[5] Total gains and losses on financial assets at fair value through other comprehensive income include a gain of € 29 million recognized in other comprehensive income, net of tax

[6] This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a gain of € 362 million and for total financial liabilities held at fair value this is a loss of € 19 million

[7] For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains

Dec 31, 2023

in € m.	Balance, beginning of year	Changes in the group of consolidated companies	Total gains/losses[1]	Purchases	Sales	Issuances[2]	Settlements[3]	Transfers into Level 3[4]	Transfers out of Level 3[4]	Balance, end of year
Financial assets held at fair value:										
Trading securities	3,053	0	22	1,651	(974)	43	(615)	545	(532)	3,194
Positive market values from derivative financial instruments	9,564	0	104	0	0	0	(538)	2,073	(3,006)	8,198
Other trading assets	5,494	0	42	604	(997)	2,253	(1,424)	636	(383)	6,226
Non-trading financial assets mandatory at fair value through profit or loss	5,790	15	(51)	682	(254)	504	(1,190)	211	(681)	5,028
Financial assets designated at fair value through profit or loss	94	0	0	0	0	0	(94)	0	0	0
Financial assets at fair value through other comprehensive income	2,676	0	(65)[5]	238	(214)	1,918	(1,280)	184	(509)	2,949
Other financial assets at fair value	5	0	0	0	0	0	0	0	1	5
Total financial assets held at fair value	26,675	15	53[6,7]	3,176	(2,438)	4,719	(5,140)	3,650	(5,110)	25,599
Financial liabilities held at fair value:										
Trading securities	30	0	(4)	0	0	0	0	0	(0)	26
Negative market values from derivative financial instruments	8,500	0	101	0	0	0	(435)	1,848	(2,348)	7,666
Other trading liabilities	3	0	3	0	0	0	(6)	0	0	0
Financial liabilities designated at fair value through profit or loss	2,792	0	43	0	0	2,272	(853)	27	(1,032)	3,248
Other financial liabilities at fair value	(511)	0	325	0	0	0	54	3	44	(85)
Total financial liabilities held at fair value	10,815	0	468[6,7]	0	0	2,272	(1,240)	1,878	(3,336)	10,856

[1] Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets at fair value through other comprehensive income reported in the consolidated statement of income and unrealized net gains (losses) on financial assets at fair value through other comprehensive income and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in level 1 or level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters

[2] Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower

[3] Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements

[4] Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly, for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year

[5] Total gains and losses on financial assets at fair value through other comprehensive income include a loss of € 17 million recognized in other comprehensive income, net of tax and a loss of € 3 million recognized in the income statement presented in net gains (losses)

[6] This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a loss of € 273 million and for total financial liabilities held at fair value this is a gain of € 44 million

[7] For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains

Sensitivity analysis of unobservable parameters

Where the value of financial instruments is dependent on unobservable parameter inputs, the precise level for these parameters at the balance sheet date might be drawn from a range of reasonably possible alternatives. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence and in line with the Group's approach to valuation control detailed above.

The Group's sensitivity calculation of unobservable parameters for Level 3 aligns to the approach used to assess valuation uncertainty for prudent valuation purposes. Prudent valuation is a capital requirement for assets held at fair value. It provides a mechanism for quantifying and capitalizing valuation uncertainty in accordance with the European Commission Delegated Regulation (EU) 2016/101, which supplements Article 34 of Regulation (EU) No. 2019/876 (CRR), requiring institutions to apply the requirements of Article 105 (14) to all assets measured at fair value and to deduct any additional value adjustments from CET1 capital. This utilizes an exit price analysis performed for the relevant assets and liabilities in the Prudent Valuation assessment.

If the Group marked Level 3 financial instruments using parameter values drawn from the extremes of the ranges of reasonably possible alternatives, as of December 31, 2024 it could have increased fair value by as much as € 2.1 billion or decreased fair value by as much as € 1.3 billion. As of December 31, 2023 it could have increased fair value by as much as € 1.8 billion or decreased fair value by as much as € 1.3 billion.

The changes in sensitive amounts from December 31, 2023 to December 31, 2024 were an increase in positive fair value movement of € 261 million, and an increase in negative fair value movement of € 64 million.

The change in positive fair value movements from December 31, 2023 to December 31, 2024 represents a 15 % increase and the change in negative fair value movements represents a 5 % increase. In the period, the bank has made refinements to the methodology for the calculation of L3 fair value sensitivity. These do not change the fair value of the L3 financial instruments. The Group's sensitivity calculation of unobservable parameters for level 3 continues to align to the approach used to assess valuation uncertainty for prudent valuation purposes.

This disclosure is intended to illustrate the potential impact of the relative uncertainty in the fair value of financial instruments for which valuation is dependent on unobservable input parameters. However, it is unlikely in practice that all unobservable parameters would be simultaneously at the extremes of their ranges of reasonably possible alternatives. Hence, the estimates disclosed above are likely to be greater than the true uncertainty in fair value at the balance sheet date. Furthermore, the disclosure is neither predictive nor indicative of future movements in fair value.

For many of the financial instruments considered here, in particular derivatives, unobservable input parameters represent only a subset of the parameters required to price the financial instrument, the remainder being observable. Hence, for these instruments the overall impact of moving the unobservable input parameters to the extremes of their ranges might be relatively small compared with the total fair value of the financial instrument. For other instruments, fair value is determined based on the price of the entire instrument, for example, by adjusting the fair value of a reasonable proxy instrument. In addition, all financial instruments are already carried at fair values which are inclusive of valuation adjustments for the cost to close out that instrument and hence already factor in uncertainty as it reflects itself in market pricing. Any negative impact of uncertainty calculated within this disclosure, then, will be over and above that already included in the fair value contained in the financial statements.

Breakdown of the sensitivity analysis by type of instrument[1]

	Dec 31, 2024		Dec 31, 2023	
in € m.	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives
Securities:				
Debt securities	308	276	196	221
Commercial mortgage-backed securities	17	17	16	27
Mortgage and other asset-backed securities	11	11	12	19
Corporate, sovereign and other debt securities	280	248	167	176
Equity securities	78	77	94	93
Derivatives:				
Credit	207	105	200	101
Equity	36	33	44	38
Interest related	798	337	633	368
Foreign Exchange	56	24	47	17
Other	110	105	91	86
Loans:				
Loans	458	387	486	355
Other	**0**	**0**	0	0
Total	**2,052**	**1,343**	1,790	1,278

[1] Where the exposure to an unobservable parameter is offset across different instruments then only the net impact is disclosed in the table

Quantitative information about the sensitivity of significant unobservable inputs

The behavior of the unobservable parameters on Level 3 fair value measurement is not necessarily independent, and dynamic relationships often exist between the other unobservable parameters and the observable parameters. Such relationships, where material to the fair value of a given instrument, are explicitly captured via correlation parameters, or are otherwise controlled via pricing models or valuation techniques. Frequently, where a valuation technique utilizes more than one input, the choice of a certain input will bound the range of possible values for other inputs. In addition, broader market factors (such as interest rates, equity, credit or commodity indices or foreign exchange rates) can also have effects.

The range of values shown below represents the highest and lowest inputs used to value the significant exposures within Level 3. The diversity of financial instruments that make up the disclosure is significant and therefore the ranges of certain parameters can be large. For example, the range of credit spreads on mortgage-backed securities represents performing, more liquid positions with lower spreads than the less liquid, non-performing positions which will have higher credit spreads. As Level 3 contains the less liquid fair value instruments, the wide ranges of parameters seen is to be expected, as there is a high degree of pricing differentiation within each exposure type to capture the relevant market dynamics. The table below provides a brief description of each of the principal parameter types, along with a commentary on significant interrelationships between them.

Credit Parameters are used to assess the creditworthiness of an exposure, by enabling the probability of default and resulting losses of a default to be represented. The credit spread is the primary reflection of creditworthiness and represents the premium or yield return above the benchmark reference instrument (typically LIBOR, or relevant Treasury Instrument, depending upon the asset being assessed), that a bond holder would require to allow for the credit quality difference between that entity and the reference benchmark. Higher credit spreads will indicate lower credit quality, and lead to a lower value for a given bond, or other loan-asset that is to be repaid to the bank by the borrower. Recovery rates represent an estimate of the amount a lender would receive in the case of a default of a loan, or a bond holder would receive in the case of default of the bond. Higher recovery rates will give a higher valuation for a given bond position, if other parameters are held constant. Constant default rate and constant prepayment rate allow more complex loan and debt assets to be assessed, as these parameters estimate the ongoing defaults arising on scheduled repayments and coupons, or whether the borrower is making additional (usually voluntary) prepayments. These parameters are particularly relevant when forming a fair value opinion for mortgage or other types of lending, where repayments are delivered by the borrower through time, or where the borrower may pre-pay the loan (seen for example in some residential mortgages). higher constant default rate will lead to lower valuation of a given loan or mortgage as the lender will ultimately receive less cash.

Interest rates, credit spreads, inflation rates, foreign exchange rates and equity prices are referenced in some option instruments, or other complex derivatives, where the payoff a holder of the derivative will receive is dependent upon the behavior of these underlying references through time. Volatility parameters describe key attributes of option behavior by enabling the variability of returns of the underlying instrument to be assessed. This volatility is a measure of probability, with higher volatilities denoting higher probabilities of a particular outcome occurring. The underlying references (interest rates, credit spreads etc.) have an effect on the valuation of options, by describing the size of the return that can be expected from the option. Therefore, the value of a given option is dependent upon the value of the underlying instrument, and the volatility of that instrument, representing the size of the payoff, and the probability of that payoff occurring. Where volatilities are high, the option holder will see a higher option value as there is greater probability of positive returns. A higher option value will also occur where the payoff described by the option is significant.

Correlations are used to describe influential relationships between underlying references where a derivative or other instrument has more than one underlying reference. Behind some of these relationships, for example commodity correlation and interest rate-foreign exchange correlations, typically lie macroeconomic factors such as the impact of global demand on groups of commodities, or the pricing parity effect of interest rates on foreign exchange rates. More specific relationships can exist between credit references or equity stocks in the case of credit derivatives and equity basket derivatives, for example. Credit correlations are used to estimate the relationship between the credit performance of a range of credit names, and stock correlations are used to estimate the relationship between the returns of a range of equities. A derivative with a correlation exposure will be either long- or short-correlation. A high correlation suggests a strong relationship between the underlying references is in force, and this will lead to an increase in value of a long-correlation derivative. Negative correlations suggest that the relationship between underlying references is opposing, i.e., an increase in price of one underlying reference will lead to a reduction in the price of the other.

An EBITDA (‘earnings before interest, tax, depreciation and amortization’) multiple approach can be used in the valuation of less liquid securities. Under this approach the enterprise value (‘EV’) of an entity can be estimated via identifying the ratio of the EV to EBITDA of a comparable observable entity and applying this ratio to the EBITDA of the entity for which a valuation is being estimated. Under this approach a liquidity adjustment is often applied due to the difference in liquidity between the generally listed comparable used and the company under valuation. A higher EV/EBITDA multiple will result in a higher fair value.

Financial instruments classified in Level 3 and quantitative information about unobservable inputs

						Dec 31, 2024
	Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)[1]	Significant unobservable input(s) (Level 3)	Range	
Financial instruments held at fair value – Non-Derivative financial instruments held at fair value:						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	31	0	Price based	Price	0 %	102 %
			Discounted cash flow	Credit spread (bps)	167	1,486
Mortgage- and other asset-backed securities	93	0	Price based	Price	0 %	107 %
			Discounted cash flow	Credit spread (bps)	106	1,027
				Recovery rate	60 %	85 %
				Constant default rate	0 %	4 %
				Constant prepayment rate	4 %	18 %
Total mortgage- and other asset-backed securities	124	0				
Debt securities and other debt obligations	4,379	4,537	Price based	Price	0 %	300 %
Held for trading	2,726	26	Discounted cash flow	Credit spread (bps)	9	651
Corporate, sovereign and other debt securities	2,726					
Non-trading financial assets mandatory at fair value through profit or loss	1,499					
Designated at fair value through profit or loss	0	4,512				
Financial assets at fair value through other comprehensive income	154					
Equity securities	809	0	Market approach	Price per net asset value	0 %	100 %
Held for trading	114	0		Enterprise value/EBITDA (multiple)	5	14
				Enterprise value/Revenue (multiple)	1	15
Non-trading financial assets mandatory at fair value through profit or loss	695		Discounted cash flow	Weighted average cost capital	9 %	20 %
Designated at fair value through profit or loss	0		Price based	Price	0 %	100 %
Loans	10,817	93	Price based	Price	0 %	123 %
Held for trading	5,931	93	Discounted cash flow	Credit spread (bps)	100	1,621
Non-trading financial assets mandatory at fair value through profit or loss	1,779					
Designated at fair value through profit or loss	0	0		Recovery rate	40 %	84 %
Financial assets at fair value through other comprehensive income	3,107					
Loan commitments	0	6	Discounted cash flow	Credit spread (bps)	226	954
				Recovery rate	40 %	84 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	2,208[2]	51[3]	Discounted cash flow	IRR	7 %	13 %
				Repo rate (bps)	30	285
Total non-derivative financial instruments held at fair value	18,336	4,688				

[1] Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position

[2] Other financial assets include € 253 million of other trading assets, € 1.8 billion of other non-trading financial assets mandatory at fair value, and € 123 million other financial assets at fair value through other comprehensive income

[3] Other financial liabilities include € 51 million of securities sold under repurchase agreements designated at fair value

						Dec 31, 2024
	Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)		Range
Financial instruments held at fair value:						
Market values from derivative financial instruments:						
Interest rate derivatives	5,218	5,207	Discounted cash flow	Swap rate (bps)	(4,176)	3,975
				Inflation swap rate	0 %	5 %
				Constant default rate	0 %	12 %
				Constant prepayment rate	4 %	16 %
			Option pricing model	Inflation volatility	0 %	6 %
				Interest rate volatility	0 %	3 %
				IR - IR correlation	(10) %	99 %
				Hybrid correlation	(70) %	55 %
Credit derivatives	510	562	Discounted cash flow	Credit spread (bps)	15	1,148
				Recovery rate	0 %	40 %
			Correlation pricing model	Credit correlation	0 %	0 %
Equity derivatives	642	1,201	Option pricing model	Stock volatility	2 %	86 %
				Index volatility	9 %	27 %
				Index - index correlation	0 %	0 %
				Stock - stock correlation	0 %	0 %
				Stock Forwards	0 %	1 %
				Index Forwards	0 %	1 %
FX derivatives	995	1,470	Option pricing model	Volatility	(9) %	33 %
				Quoted Vol	0 %	0 %
			Discounted cash flow	Swap rate (bps)	(3)	100
Other derivatives	580	254[1]	Discounted cash flow	Credit spread (bps)	286	626
			Option pricing model	Index volatility	0 %	160 %
				Price	17 %	75 %
				Commodity correlation	0 %	87 %
Total market values from derivative financial instruments	7,945	8,694				

[1] Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated

						Dec 31, 2023
	Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)[1]	Significant unobservable input(s) (Level 3)	Range	
Financial instruments held at fair value – Non-Derivative financial instruments held at fair value:						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	86	0	Price based	Price	0 %	102 %
			Discounted cash flow	Credit spread (bps)	220	1,830
Mortgage- and other asset-backed securities	94	0	Price based	Price	0 %	104 %
			Discounted cash flow	Credit spread (bps)	110	1,828
				Recovery rate	50 %	85 %
				Constant default rate	0 %	2 %
				Constant prepayment rate	2 %	29 %
Total mortgage- and other asset-backed securities	180	0				
Debt securities and other debt obligations	4,385	3,116	Price based	Price	0 %	300 %
Held for trading	2,887	26	Discounted cash flow	Credit spread (bps)	84	651
Corporate, sovereign and other debt securities	2,887					
Non-trading financial assets mandatory at fair value through profit or loss	1,254					
Designated at fair value through profit or loss	0	3,089				
Financial assets at fair value through other comprehensive income	244					
Equity securities	778	0	Market approach	Price per net asset value	0 %	100 %
Held for trading	127	0		Enterprise value/EBITDA (multiple)	5	15
Non-trading financial assets mandatory at fair value through profit or loss	652		Discounted cash flow	Weighted average cost capital	18 %	20 %
Designated at fair value through profit or loss	0		Price based	Price	0 %	100 %
Loans	9,405	0	Price based	Price	0 %	124 %
Held for trading	6,121	0	Discounted cash flow	Credit spread (bps)	12	1,207
Non-trading financial assets mandatory at fair value through profit or loss	696					
Designated at fair value through profit or loss	0	0		Recovery rate	40 %	75 %
Financial assets at fair value through other comprehensive income	2,588					
Loan commitments	0	5	Discounted cash flow	Credit spread (bps)	169	1,070
				Recovery rate	40 %	76 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	2,647[2]	154[3]	Discounted cash flow	IRR	7 %	13 %
				Repo rate (bps)	120	595
Total non-derivative financial instruments held at fair value	17,396	3,275				

[1] Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position

[2] Other financial assets include € 104 million of other trading assets, € 2.4 billion of other non-trading financial assets mandatory at fair value, and € 117 million other financial assets at fair value through other comprehensive income

[3] Other financial liabilities include € 154 million of securities sold under repurchase agreements designated at fair value

						Dec 31, 2023
	Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)		Range
Financial instruments held at fair value:						
Market values from derivative financial instruments:						
Interest rate derivatives	4,997	4,070	Discounted cash flow	Swap rate (bps)	(3,932)	4,150
				Inflation swap rate	1 %	15 %
				Constant default rate	0 %	18 %
				Constant prepayment rate	0 %	26 %
			Option pricing model	Inflation volatility	0 %	7 %
				Interest rate volatility	0 %	43 %
				IR - IR correlation	(10) %	96 %
				Hybrid correlation	(90) %	65 %
Credit derivatives	501	503	Discounted cash flow	Credit spread (bps)	2	7,535
				Recovery rate	8 %	40 %
			Correlation pricing model	Credit correlation	26 %	59 %
Equity derivatives	339	1,027	Option pricing model	Stock volatility	0 %	84 %
				Index volatility	7 %	23 %
				Index - index correlation	0 %	0 %
				Stock - stock correlation	0 %	0 %
				Stock Forwards	0 %	3 %
				Index Forwards	0 %	6 %
FX derivatives	1,765	1,850	Option pricing model	Volatility	(6) %	39 %
				Quoted Vol	0 %	0 %
			Discounted cash flow	Swap rate (bps)	(7)	50
Other derivatives	601	130[1]	Discounted cash flow	Credit spread (bps)	234	610
			Option pricing model	Index volatility	0 %	129 %
				Price	73 %	77 %
				Commodity correlation	0 %	85 %
Total market values from derivative financial instruments	8,203	7,581				

[1] Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated

Unrealized gains or losses on Level 3 instruments held or in issue at the reporting date

The unrealized gains or losses on Level 3 instruments are not solely due to unobservable parameters. Many of the parameter inputs to the valuation of instruments in this level of the hierarchy are observable and the gain or loss is partly due to movements in these observable parameters over the period. Many of the positions in this level of the hierarchy are economically hedged by instruments which are categorized in other levels of the fair value hierarchy. The offsetting gains and losses that have been recorded on all such hedges are not included in the table below, which only shows the gains and losses related to the Level 3 classified instruments themselves held at the reporting date in accordance with IFRS 13. The unrealized gains and losses on Level 3 instruments are included in both net interest income and net gains on financial assets/liabilities at fair value through profit or loss in the consolidated income statement.

in € m.	Dec 31, 2024	Dec 31, 2023
Financial assets held at fair value:		
Trading securities	113	29
Positive market values from derivative financial instruments	1,535	1,347
Other trading assets	(54)	59
Non-trading financial assets mandatory at fair value through profit or loss	57	(47)
Financial assets designated at fair value through profit or loss	0	0
Financial assets at fair value through other comprehensive income	(4)	(2)
Other financial assets at fair value	(3)	(0)
Total financial assets held at fair value	**1,645**	1,385
Financial liabilities held at fair value:		
Trading securities	0	4
Negative market values from derivative financial instruments	(1,930)	(1,287)
Other trading liabilities	0	0
Financial liabilities designated at fair value through profit or loss	(104)	(53)
Other financial liabilities at fair value	(102)	(268)
Total financial liabilities held at fair value	**(2,135)**	(1,604)
Total	**(490)**	(219)

Recognition of trade date profit

If there are significant unobservable inputs used in a valuation technique on initial recognition, the financial instrument is recognized at the transaction price and any trade date profit is deferred. The table below presents the movement during the year of the trade date profits deferred due to significant unobservable parameters for financial instruments classified at fair value through profit or loss. The balance is predominantly related to derivative instruments.

in € m.	2024	2023
Balance, beginning of year	**577**	550
New trades during the period	343	295
Amortization	(141)	(144)
Matured trades	(53)	(69)
Subsequent move to observability[1]	(36)[2]	(53)
Exchange rate changes	1	(1)
Balance, end of year	**691**	577

[1] This includes situations where an input remains unobservable but has become insignificant in relation to the deferred trade date profit in periods subsequent to the trade date

[2] During the second quarter of 2024, the Group refined its methodology for the significance test of unobservable inputs subsequent to the trade date. This resulted in release of € 15 million in the second quarter of 2024

14 – Fair Value of Financial Instruments not carried at Fair Value

Financial instruments not carried at fair value are not managed on a fair value basis. For these instruments fair values are calculated for disclosure purposes only and do not impact the Group balance sheet or income statement. Additionally, since the instruments generally do not trade, there is significant management judgment required to determine these fair values. Differences between the carrying value and the fair value correspond to the movements in interest rates during the period.

For the following financial instruments which are predominantly short-term, the carrying value represents a reasonable estimate of the fair value:

Assets	Liabilities
Cash and central bank balances	Deposits
Interbank balances (w/o central banks)	Central bank funds purchased, and securities sold under repurchase agreements
Central bank funds sold, and securities purchased under resale agreements	Securities loaned
Securities borrowed	Other short-term borrowings
Other financial assets	Other financial liabilities

For all other financial instruments carried at amortized cost, the following valuation techniques are applied:
- Retail lending portfolios with a large number of homogenous loans (e.g., residential mortgages) calculate the fair value for each product type by discounting the portfolio's contractual cash flows using the Group's new loan rates, for lending to borrowers of similar credit quality, which includes the impact of the macroeconomic environment. Key inputs for retail mortgages are the difference between historic and current product margins and the estimated prepayment rates. Capitalized broker fees included in the carrying value are also considered to be at fair value.
- The fair value of the corporate lending portfolio is estimated predominantly by discounting the loan until it's maturity, based on the loan specific credit spreads and Deutsche Bank's funding costs.
- For long-term debt and trust preferred securities, fair value is determined from quoted market prices, where available. Where quoted market prices are not available, fair value is estimated using a valuation technique that discounts the remaining contractual cash flows at a rate at which an instrument with similar characteristics is quoted in the market.
- A discounted cash flow model is generally used for determining the fair value of long-term deposits since market data is usually not available. In addition to the yield curve, Deutsche Bank's own credit spread is also considered. Credit spreads of the respective counterparties are not used in the measurement of fair value on financial liabilities at amortized cost.

For these financial instruments carried at amortized costs, the disclosed fair value is categorized under the IFRS fair value hierarchy (i.e., Level 1, Level 2, and Level 3) as outlined in Note 13 - "Financial Instruments carried at Fair Value". In general, Level 1 includes Cash and Central bank balances; Level 2 includes Interbank balances (w/o central banks), Central bank funds sold, and securities purchased under resale agreements, Securities borrowed, Other financial assets, Deposits, Central bank funds purchased, and securities sold under repurchase agreements, Securities loaned, Other short-term borrowings, Other financial liabilities, Long- term debt and Trust preferred securities; and Level 3 includes Loans.

Estimated fair value of financial instruments not carried at fair value on the balance sheet[1]

					Dec 31, 2024
in € m.	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets:					
Cash and central bank balances	147,494	147,494	147,494	0	0
Interbank balances (w/o central banks)	6,160	6,160	(0)	6,160	0
Central bank funds sold and securities purchased under resale agreements	40,803	40,923	0	40,923	0
Securities borrowed	44	44	0	44	0
Loans	483,897	470,058	0	13,338	456,720
Other financial assets	92,572	91,214	12,063	78,482	669
Financial liabilities:					
Deposits	667,700	667,609	2	667,607	0
Central bank funds purchased and securities sold under repurchase agreements	3,740	3,727	0	3,727	0
Securities loaned	2	2	0	2	0
Other short-term borrowings	9,895	9,903	0	9,903	0
Other financial liabilities	79,371	79,371	2,237	77,134	0
Long-term debt	114,899	114,496	0	112,033	2,463
Trust preferred securities	287	273	0	273	0

					Dec 31, 2023
in € m.	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets:					
Cash and central bank balances	178,416	178,416	178,416	0	0
Interbank balances (w/o central banks)	6,140	6,140	0	6,140	0
Central bank funds sold and securities purchased under resale agreements	14,725	14,778	0	14,034	744
Securities borrowed	39	39	0	39	0
Loans	479,353	454,972	0	11,519	443,453
Other financial assets	106,617	105,132	13,304	90,973	855
Financial liabilities:					
Deposits	625,486	624,731	2	624,729	0
Central bank funds purchased and securities sold under repurchase agreements	3,038	3,031	0	3,031	0
Securities loaned	3	3	0	3	0
Other short-term borrowings	9,620	9,628	0	9,628	0
Other financial liabilities	99,272	99,272	1,961	97,311	0
Long-term debt	119,390	117,510	0	113,723	3,787
Trust preferred securities	289	264	0	264	0

[1] Amounts generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments as described in Note 1 "Material Accounting Policies and Critical Accounting Estimates"

As of December 31, 2024, the difference between the fair value and the carrying value of loans is primarily driven by the current interest rates on long-dated retail mortgages in Germany compared to the contractual rate. For long-term debt and trust preferred securities, the difference between fair value and carrying value is due to the change in interest rates at which the Group could issue debt with similar maturity and subordination at the balance sheet date compared to the rate the instrument was issued at. The carrying values included in the table do not include any impacts from economic hedges.

15 – Financial assets at fair value through other comprehensive income

in € m.	Dec 31, 2024	Dec 31, 2023
Securities purchased under resale agreement	**2,786**	1,805
Debt securities:		
German government	2,006	1,566
U.S. Treasury and U.S. government agencies	10,640	9,232
U.S. local (municipal) governments	719	446
Other foreign governments	18,661	15,672
Corporates	189	686
Other asset-backed securities	0	0
Mortgage-backed securities, including obligations of U.S. federal agencies	414	442
Other debt securities	1,607	831
Total debt securities	**34,236**	28,874
Loans	**5,068**	4,867
Total financial assets at fair value through other comprehensive income	**42,090**	35,546

16 – Equity Method Investments

Investments in associates and jointly controlled entities are accounted for using the equity method of accounting.

The Group holds interests in 49 associates and 8 jointly controlled entities as of December 31, 2024 (54 and 6, respectively, as of December 31, 2023). None of the investments are considered to be material to the Group, based on the carrying value of the investment or the Group’s income from the investee.

The investment in Huarong Rongde Asset Management Company Limited, Beijing, China and Harvest Fund Management Company Limited, Shanghai, China were previously reported as material equity method investments, but are no longer considered to be material to the Group as of December 31, 2024 and are included in the aggregated financial information in the table below. Prior year’s comparatives have been aligned to the presentation in the current year.

Aggregated financial information on the Group’s share in associates and joint ventures that are individually immaterial

in € m.	Dec 31, 2024	31-Dec-23
Carrying amount of all associates that are individually immaterial to the Group	**1,028**	1,013
Aggregated amount of the Group's share of profit (loss) from continuing operations[1]	(4)	(107)
Aggregated amount of the Group's share of post-tax profit (loss) from discontinued operations	0	0
Aggregated amount of the Group's share of other comprehensive income	(1)	(16)
Aggregated amount of the Group's share of total comprehensive income	**(5)**	(123)

[1] Includes share of net loss from Huarong Rongde Asset Management Company Limited, for € 32 million and € 129 million, respectively, as of December 31,2024 and December 31,2023.

17 – Offsetting Financial Assets and Financial Liabilities

The Group is eligible to present certain financial assets and financial liabilities on a net basis on the balance sheet pursuant to criteria described in Note 1 “Material Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments”.

The following tables provide information on the impact of offsetting on the consolidated balance sheet, as well as the financial impact of netting for instruments subject to an enforceable master netting arrangement or similar agreement as well as available cash and financial instrument collateral.

Assets

							Dec 31, 2024
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
Central bank funds sold and securities purchased under resale agreements (enforceable)	54,483	(14,429)	40,053	0	0	(39,831)	223
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	749	0	749	0	0	(749)	0
Securities borrowed (enforceable)	32	0	32	0	0	(32)	0
Securities borrowed (non-enforceable)	11	0	11	0	0	0	11
Financial assets at fair value through profit or loss (enforceable)	615,693	(232,705)	382,988	(231,243)	(33,729)	(108,134)	9,882
Of which: Positive market values from derivative financial instruments (enforceable)	298,563	(16,164)	282,399	(229,605)	(33,689)	(9,392)	9,713
Financial assets at fair value through profit or loss (non-enforceable)	162,908	0	162,908	0	(1,303)	(6,993)	154,611
Of which: Positive market values from derivative financial instruments (non-enforceable)	9,400	0	9,400	0	(1,188)	(1,344)	6,868
Total financial assets at fair value through profit or loss	778,601	(232,705)	545,895	(231,243)	(35,032)	(115,127)	164,494
Loans at amortized cost	483,897	0	483,897	0	(10,836)	(72,983)	400,078
Other assets	105,704	(4,526)	101,178	(24,750)	(52)	(30)	76,346
Of which: Positive market values from derivatives qualifying for hedge accounting (enforceable)	362	(25)	337	(210)	(52)	(30)	45
Remaining assets subject to netting	2,786	0	2,786	0	0	0	2,786
Remaining assets not subject to netting	216,430	0	216,430	0	(623)	(4,438)	211,369
Total assets	1,642,694	(251,661)	1,391,033	(255,993)	(46,543)	(233,190)	855,307

[1] Excludes real estate and other non-financial instrument collateral.

Liabilities

							Dec 31, 2024
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
Deposits	667,700	0	667,700	0	0	0	667,700
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	16,819	(14,429)	2,390	0	0	(2,390)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	1,350	0	1,350	0	0	(123)	1,227
Securities loaned (enforceable)	1	0	1	0	0	(1)	0
Securities loaned (non-enforceable)	1	0	1	0	0	(1)	0
Financial liabilities at fair value through profit or loss (enforceable)	609,711	(232,683)	377,028	(230,472)	(23,677)	(66,495)	56,383
Of which: Negative market values from derivative financial instruments (enforceable)	284,351	(16,613)	267,738	(228,718)	(23,677)	(2,458)	12,884
Financial liabilities at fair value through profit or loss (non-enforceable)	35,382	0	35,382	0	(607)	(3,332)	31,442
Of which: Negative market values from derivative financial instruments (non-enforceable)	8,672	0	8,672	0	(607)	(142)	7,923
Total financial liabilities at fair value through profit or loss	645,092	(232,683)	412,409	(230,472)	(24,285)	(69,828)	87,825
Other liabilities	100,165	(4,549)	95,616	(37,086)	(91)	(101)	58,338
Of which: Negative market values from derivatives qualifying for hedge accounting (enforceable)	1,699	(24)	1,676	(1,098)	(91)	(101)	386
Remaining liabilities not subject to netting	129,700	0	129,700	0	(6)	0	129,694
Total liabilities	1,560,829	(251,661)	1,309,168	(267,559)	(24,382)	(72,444)	944,784

Assets

							Dec 31, 2023
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
Central bank funds sold and securities purchased under resale agreements (enforceable)	21,574	(9,999)	11,574	0	0	(11,491)	84
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	3,151	0	3,151	0	0	(2,270)	881
Securities borrowed (enforceable)	33	0	33	0	0	(33)	0
Securities borrowed (non-enforceable)	6	0	6	0	0	0	6
Financial assets at fair value through profit or loss (enforceable)	513,839	(199,135)	314,704	(197,447)	(32,109)	(74,885)	10,263
Of which: Positive market values from derivative financial instruments (enforceable)	259,177	(15,657)	243,520	(195,517)	(32,092)	(5,766)	10,145
Financial assets at fair value through profit or loss (non-enforceable)	150,569	0	150,569	0	(1,227)	(10,167)	139,174
Of which: Positive market values from derivative financial instruments (non-enforceable)	8,357	0	8,357	0	(1,101)	(1,077)	6,178
Total financial assets at fair value through profit or loss	664,408	(199,135)	465,273	(197,447)	(33,337)	(85,052)	149,437
Loans at amortized cost	479,353	0	479,353	0	(11,317)	(69,594)	398,442
Other assets	123,694	(8,997)	114,697	(24,019)	(79)	(13)	90,587
Of which: Positive market values from derivatives qualifying for hedge accounting (enforceable)	911	(42)	869	(644)	(79)	(13)	133
Remaining assets subject to netting	1,805	0	1,805	0	0	0	1,805
Remaining assets not subject to netting	241,373	0	241,373	0	(73)	(3,533)	237,767
Total assets	1,535,397	(218,131)	1,317,266	(221,466)	(44,805)	(171,985)	879,010

[1] Excludes real estate and other non-financial instrument collateral.

Liabilities

							Dec 31, 2023
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
Deposits	625,486	0	625,486	0	0	0	625,486
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	11,890	(9,999)	1,891	0	0	(1,891)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	1,147	0	1,147	0	0	(51)	1,096
Securities loaned (enforceable)	3	0	3	0	0	(3)	0
Securities loaned (non-enforceable)	0	0	0	0	0	0	0
Financial liabilities at fair value through profit or loss (enforceable)	540,811	(199,160)	341,651	(197,940)	(21,990)	(68,806)	52,915
Of which: Negative market values from derivative financial instruments (enforceable)	245,627	(16,140)	229,487	(195,978)	(21,990)	(2,608)	8,910
Financial liabilities at fair value through profit or loss (non-enforceable)	24,843	0	24,843	0	(785)	(4,485)	19,572
Of which: Negative market values from derivative financial instruments (non-enforceable)	8,792	0	8,792	0	(723)	(191)	7,878
Total financial liabilities at fair value through profit or loss	565,654	(199,160)	366,494	(197,940)	(22,776)	(73,292)	72,487
Other liabilities	121,990	(8,972)	113,018	(33,574)	(23)	(1)	79,419
Of which: Negative market values from derivatives qualifying for hedge accounting (enforceable)	254	(20)	233	(182)	(23)	(1)	26
Remaining liabilities not subject to netting	132,896	0	132,896	0	0	0	132,896
Total liabilities	1,459,066	(218,131)	1,240,935	(231,514)	(22,799)	(75,239)	911,384

The column ‘Gross amounts set off on the balance sheet’ discloses the amounts offset in accordance with all the criteria described in Note 1 “Material Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments”.

The column ‘Impact of Master Netting Agreements’ discloses the amounts that are subject to master netting agreements but were not offset because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only. The amounts presented for other assets and other liabilities include cash margin receivables and payables respectively.

The columns ‘Cash collateral’ and ‘Financial instrument collateral’ disclose the cash and financial instrument collateral amounts received or pledged in relation to the total amounts of assets and liabilities, including those that were not offset.

Non-enforceable master netting agreements or similar agreements refer to contracts executed in jurisdictions where the rights of set off may not be upheld under the local bankruptcy laws.

The cash collateral received against the positive market values of derivatives and the cash collateral pledged towards the negative mark-to-market values of derivatives are booked within the ‘Other liabilities’ and ‘Other assets’ balances respectively.

The Cash and Financial instrument collateral amounts disclosed reflect their fair values. The rights of set off relating to the cash and financial instrument collateral are conditional upon the default of the counterparty.

18 – Loans

The entire loan book presented includes loans classified at amortized cost, loans at fair value through other comprehensive income and loans at fair value through profit and loss.

The below table gives an overview of the Group's loan exposure by industry, and is based on the NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) code of the counterparty. NACE is a standard European industry classification system.

Loans by industry classification

in € m.	Dec 31, 2024	Dec 31, 2023
Agriculture, forestry and fishing	336	386
Mining and quarrying	4,342	3,130
Manufacturing	28,359	30,564
Electricity, gas, steam and air conditioning supply	5,017	4,734
Water supply, sewerage, waste management and remediation activities	598	486
Construction	4,604	4,494
Wholesale and retail trade, repair of motor vehicles and motorcycles	22,481	22,127
Transport and storage	5,347	5,617
Accommodation and food service activities	2,749	1,865
Information and communication	9,940	8,082
Financial and insurance activities	133,350	116,298
Real estate activities	51,535	50,793
Professional, scientific and technical activities	6,623	6,958
Administrative and support service activities	9,496	9,385
Public administration and defense, compulsory social security	6,235	6,131
Education	313	281
Human health services and social work activities	4,170	4,432
Arts, entertainment and recreation	840	1,072
Other service activities	7,341	5,624
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	204,282	216,056
Activities of extraterritorial organizations and bodies	22	0
Gross loans	**507,981**	498,516
(Deferred expense)/unearned income	1,352	1,675
Loans less (deferred expense)/unearned income	**506,629**	496,841
Less: Allowance for loan losses	5,697	5,208
Total loans	**500,932**	491,632

19 – Allowance for Credit Losses

The allowance for credit losses consists of allowance for financial assets at amortized cost, financial assets at fair value through OCI and off-balance sheet lending commitments and guarantee business.

Development of allowance for credit losses for financial assets at amortized cost

					Dec 31, 2024
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI[4]	Total
Balance, beginning of year	447	680	3,960	198	5,285
Movements in financial assets including new business and credit extensions	(150)	194	1,814	3	1,861
Transfers due to changes in creditworthiness	128	(128)	0	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	(2)	(7)	0	0	(9)
Financial assets that have been derecognized during the period[3]	0	0	(1,229)	0	(1,229)
Recovery of written off amounts	0	0	157	0	157
Foreign exchange and other changes	15	(3)	(290)	11	(267)
Balance, end of reporting period	438	736	4,412	213	5,799
Provision for Credit Losses excluding country risk[1]	(24)	59	1,814	3	1,852

[1] Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk

[2] Allowance for credit losses does not include allowance for country risk amounting to € 14 million as of December 31, 2024

[3] This position includes charge offs of allowance for credit losses

[4] The total amount of undiscounted expected credit losses at initial recognition on financial assets that are purchased or originated credit-impaired initially recognized during the reporting period was € 0 million in 2024 and € 0 million in 2023

					Dec 31, 2023
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI[4]	Total
Balance, beginning of year	533	626	3,656	180	4,995
Movements in financial assets including new business and credit extensions	(195)	294	1,647	32	1,778
Transfers due to changes in creditworthiness	170	(150)	(20)	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	(57)	(53)	0	0	(110)
Financial assets that have been derecognized during the period[3]	0	0	(1,145)	(52)	(1,197)
Recovery of written off amounts	0	0	93	0	93
Foreign exchange and other changes	(3)	(38)	(271)	38	(273)
Balance, end of reporting period	447	680	3,960	198	5,285
Provision for Credit Losses excluding country risk[1]	(83)	92	1,627	32	1,668

[1] Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk

[2] Allowance for credit losses does not include allowance for country risk amounting to € 4 million as of December 31, 2023

[3] This position includes charge offs of allowance for credit losses

[4] The total amount of undiscounted expected credit losses at initial recognition on financial assets that are purchased or originated credit-impaired initially recognized during the reporting period was € 0 million in 2023 and € 46 million in 2022

					Dec 31, 2022
					Allowance for Credit Losses[2]
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI[4]	Total
Balance, beginning of year	440	532	3,740	182	4,895
Movements in financial assets including new business and credit extensions	(32)	204	887	22	1,081
Transfers due to changes in creditworthiness	122	(121)	(0)		0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	0	0	0	0	0
Financial assets that have been derecognized during the period[3]	0	0	(1,014)	(28)	(1,043)
Recovery of written off amounts	0	0	68	3	71
Foreign exchange and other changes	2	12	(25)	1	(10)
Balance, end of reporting period	533	626	3,656	180	4,995
Provision for Credit Losses excluding country risk[1]	90	82	886	22	1,081

[1] Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk

[2] Allowance for credit losses does not include allowance for country risk amounting to € 14 million as of December 31, 2022

[3] This position includes charge offs of allowance for credit losses

[4] The total amount of undiscounted expected credit losses at initial recognition on financial assets that are purchased or originated credit-impaired initially recognized during the reporting period was € 46 million in 2022 and € 0 million in 2021

Allowance for credit losses for financial assets at fair value through OCI[1]

	Dec 31, 2024				
	Allowance for Credit Losses				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Fair Value through OCI	12	16	10	0	38

[1] Allowance for credit losses against financial assets at fair value through OCI remained at very low levels (€ 48 million at December 31, 2023 and € 38 million as of December 31, 2024). Due to immateriality, we do not provide any details on the year-over-year development.

	Dec 31, 2023				
	Allowance for Credit Losses				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Fair Value through OCI	13	13	22	0	48

[1] Allowance for credit losses against financial assets at fair value through OCI were almost unchanged at very low levels (€ 69 million at December 31, 2022 and € 48 million as of December 31, 2023). Due to immateriality, we do not provide any details on the year-over-year development.

	Dec 31, 2022				
	Allowance for Credit Losses				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Fair Value through OCI	14	12	43	0	69

[1] Allowance for credit losses against financial assets at fair value through OCI were almost unchanged at very low levels (€ 41 million at December, 31, 2021 and € 69 million as of December 31, 2022, respectively). Due to immateriality, we do not provide any details on the year-over-year development.

Development of allowance for credit losses for off-balance sheet positions

	Dec 31, 2024				
	Allowance for Credit Losses[2]				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	**117**	**88**	**187**	**0**	**393**
Movements including new business	(22)	3	(19)	0	(38)
Transfers due to changes in creditworthiness	10	(9)	(0)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	1	(1)	5	0	6
Balance, end of reporting period	**106**	**82**	**173**	**0**	**361**
of which: Financial guarantees	67	49	99	0	214
Provision for Credit Losses excluding country risk[1]	(13)	(6)	(20)	0	(38)

[1] The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models

[2] Allowance for credit losses does not include allowance for country risk amounting to € 2 million as of December 31, 2024

	Dec 31, 2023				
	Allowance for Credit Losses[2]				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	**144**	**97**	**310**	**0**	**551**
Movements including new business	(39)	(3)	(118)	0	(160)
Transfers due to changes in creditworthiness	11	(4)	(7)	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	1	(2)	3	0	2
Balance, end of reporting period	**117**	**88**	**187**	**0**	**393**
of which: Financial guarantees	84	37	113	0	233
Provision for Credit Losses excluding country risk[1]	(28)	(7)	(125)	0	(160)

[1] The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models

[2] Allowance for credit losses does not include allowance for country risk amounting to € 9 million as of December 31, 2023

	Dec 31, 2022				
	Allowance for Credit Losses[2]				
in € m.	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	108	111	225	0	443
Movements including new business	21	(1)	78	0	99
Transfers due to changes in creditworthiness	12	(15)	3	0	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	4	3	3	0	9
Balance, end of reporting period	144	97	310	0	551
of which: Financial guarantees	95	56	226	0	378
Provision for Credit Losses excluding country risk[1]	33	(16)	82	0	99

[1] The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models

[2] Allowance for credit losses does not include allowance for country risk amounting to € 9 million as of December 31, 2022

20 – Transfer of Financial Assets, Assets Pledged and Received as Collateral

The Group enters into transactions in which it transfers financial assets held on the balance sheet and as a result may either be eligible to derecognize the transferred asset in its entirety or must continue to recognize the transferred asset to the extent of any continuing involvement, depending on certain criteria. These criteria are discussed in Note 1 “Material Accounting Policies and Critical Accounting Estimates”.

Where financial assets are not eligible to be derecognized, the transfers are viewed as secured financing transactions, with any consideration received resulting in a corresponding liability. The Group is not entitled to use these financial assets for any other purposes. The most common transactions of this nature entered into by the Group are repurchase agreements, securities lending agreements and total return swaps, in which the Group retains substantially all of the associated credit, equity price, interest rate and foreign exchange risks and rewards associated with the assets as well as the associated income streams.

Information on asset types and associated transactions that did not qualify for derecognition

in € m.	Dec 31, 2024	Dec 31, 2023
Carrying amount of transferred assets		
Trading securities not derecognized due to the following transactions:		
Repurchase agreements	40,438	45,106
Securities lending agreements	8,313	10,155
Total return swaps	14,013	4,483
Other	2,523	5,060
Total trading securities	**65,288**	64,804
Other trading assets	51	138
Non-trading financial assets mandatory at fair value through profit or loss	107	203
Financial assets at fair value through other comprehensive income	5,134	7,080
Loans at amortized cost[1]	17	26
Others	4,335	8,674
Total	**74,931**	80,924
Carrying amount of associated liabilities	**66,654**	70,706

[1] Other traded loans where the associated liability is recourse only to the transferred assets had carrying value and fair value of € 0 million and € 20 million as at December 31, 2024 and December 31, 2023 respectively. The associated liabilities had the same carrying value and fair value which resulted in a net position of € 0 million and € 0 million as at December 31, 2024 and December 31, 2023 respectively

Carrying value of assets transferred to the Group has continuing involvement

in € m.	Dec 31, 2024	Dec 31, 2023
Carrying amount of the original assets transferred		
Trading securities	1,073	1,043
Non-trading financial assets mandatory at fair value through profit or loss	0	317
Carrying amount of the assets continued to be recognized		
Trading securities	26	28
Non-trading financial assets mandatory at fair value through profit or loss	0	16
Carrying amount of associated liabilities	**52**	78

The Group could retain some exposure to the future performance of a transferred asset either through new or existing contractual rights and obligations and still be eligible to derecognize the asset. This ongoing involvement will be recognized as a new instrument which may be different from the original financial asset that was transferred. Typical transactions include retaining senior notes of non-consolidated securitizations to which originated loans have been transferred; financing arrangements with structured entities to which the Group has sold a portfolio of assets; or sales of assets with credit-contingent swaps. The Group’s exposure to such transactions is not considered to be significant as any substantial retention of risks associated with the transferred asset will commonly result in an initial failure to derecognize. Transactions not considered to result in an ongoing involvement include normal warranties on fraudulent activities that could invalidate a transfer in the event of legal action, qualifying pass-through arrangements and standard trustee or administrative fees that are not linked to performance.

The impact on the Group's Balance Sheet of on-going involvement associated with transferred assets derecognized in full

	Dec 31,2024			Dec 31,2023		
in € m.	Carrying value	Fair value	Maximum Exposure to Loss[1]	Carrying value	Fair value	Maximum Exposure to Loss[1]
Loans at amortized cost						
Securitization notes	441	397	397	389	344	344
Other	0	0	0	0	0	0
Total loans at amortized cost	**441**	**397**	**397**	389	344	344
Financial assets held at fair value through profit or loss						
Securitization notes	0	0	0	23	23	23
Non-standard Interest Rate, cross-currency or inflation-linked swap	0	0	0	0	0	0
Total financial assets held at fair value through profit or loss	**0**	**0**	**0**	23	23	23
Financial assets at fair value through other comprehensive income:						
Securitization notes	669	560	560	706	592	592
Other	0	0	0	0	0	0
Total financial assets at fair value through other comprehensive income	**669**	**560**	**560**	706	592	592
Total financial assets representing on-going involvement	**1,110**	**957**	**957**	1,118	959	959
Financial liabilities held at fair value through profit or loss						
Non-standard Interest Rate, cross-currency or inflation-linked swap	(0)	(0)	0	0	0	0
Total financial liabilities representing on-going involvement	**(0)**	**(0)**	**0**	0	0	0

[1] The maximum exposure to loss is defined as the carrying value plus the notional value of any undrawn loan commitments not recognized as liabilities

The impact on the Group's Statement of Income of on-going involvement associated with transferred assets derecognized in full

	Dec 31,2024			Dec 31,2023		
in € m.	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal
Securitization notes	50	220	25	48	164	7
Non-standard Interest Rate, cross-currency or inflation-linked swap	(0)	(0)	0	0	0	0
Net gains/(losses) recognized from on-going involvement in derecognized assets	**50**	**220**	**25**	48	164	7

The Group pledges assets primarily as collateral against secured funding and for repurchase agreements, securities borrowing agreements as well as other borrowing arrangements and for margining purposes on OTC derivative liabilities. Pledges are generally conducted under terms that are usual and customary for standard securitized borrowing contracts and other transactions described. As at December 31, 2024 the bank had securitized loans of € 11 billion and the secured own bonds were pledged as collateral into various market standard securities financing transactions. The encumbered loans below include these balances.

Carrying value of the Group's assets pledged as collateral for liabilities or contingent liabilities[1]

in € m.	Dec 31, 2024	Dec 31, 2023
Financial assets at fair value through profit or loss	58,749	55,166
Financial assets at fair value through other comprehensive income	5,263	7,222
Loans	41,758	54,148
Other	4,462	9,610
Total	**110,231**	126,146

[1] Excludes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities

Total assets pledged to creditors available for sale or repledge[1]

in € m.	Dec 31, 2024	Dec 31, 2023
Financial assets at fair value through profit or loss	55,310	57,143
Financial assets at fair value through other comprehensive income	5,013	7,073
Loans	4,618	5,428
Other	2,904	7,815
Total	**67,845**	77,459

[1] Includes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities

The Group receives collateral primarily in reverse repurchase agreements, securities lending agreements, derivatives transactions, customer margin loans and other transactions. These transactions are generally conducted under terms that are usual and customary for standard secured lending activities and the other transactions described. The Group, as the secured party, has the right to sell or re-pledge such collateral, subject to the Group returning equivalent securities upon completion of the transaction. This right is used primarily to cover short sales, securities loaned and securities sold under repurchase agreements.

Fair Value of collateral received

in € m.	Dec 31, 2024	Dec 31, 2023
Securities and other financial assets accepted as collateral	479,022	379,573
Of which:		
Collateral sold or repledged	366,245	324,757

21 – Property and Equipment

in € m.	Owner occupied properties	Furniture and equipment	Leasehold improvements	Construction-in-progress	Property and equipment owned (IAS 16)	Right-of-use for leased assets (IFRS 16)	Total
Cost of acquisition:							
Balance as of January 1, 2023	503	2,434	3,523	216	6,676	6,187	**12,863**
Changes in the group of consolidated companies	0	(8)	7	0	(1)	34	34
Additions	0	84	40	297	422	263	685
Transfers	0	23	193	(50)	167	251	419
Reclassifications (to)/from “held for sale”	(22)	0	0	0	(22)	0	(22)
Disposals	41	113	643	0	798	152	950
Exchange rate changes	1	(27)	(43)	(2)	(71)	(77)	(148)
Balance as of December 31, 2023	441	2,393	3,078	461	6,374	6,507	**12,881**
Changes in the group of consolidated companies	0	(1)	(0)	0	(1)	(0)	(1)
Additions	1	128	107	293	528	145	673
Transfers	106	77	334	(394)	122	237	360
Reclassifications (to)/from “held for sale”	0	0	0	0	0	0	0
Disposals	0	199	281	1	482	156	638
Exchange rate changes	(1)	33	59	1	93	115	208
Balance as of December 31, 2024	547	2,431	3,298	360	6,636	6,848	**13,484**
Accumulated depreciation and impairment:							
Balance as of January 1, 2023	286	2,022	2,304	1	4,613	2,147	**6,760**
Changes in the group of consolidated companies	0	(10)	(0)	0	(11)	(0)	(11)
Depreciation	9	127	199	0	335	543	878
Impairment losses	7	8	5	0	21	23	43
Reversals of impairment losses	0	0	0	0	0	8	8
Transfers	(0)	17	54	0	71	(41)	29
Reclassifications (to)/from “held for sale”	(19)	0	0	0	(19)	0	(19)
Disposals	20	108	638	0	766	141	907
Exchange rate changes	0	(22)	(25)	(0)	(46)	(24)	(70)
Balance as of December 31, 2023	264	2,033	1,900	1	4,198	2,498	**6,696**
Changes in the group of consolidated companies	0	(1)	(0)	0	(1)	0	(1)
Depreciation	5	126	266	0	397	548	945
Impairment losses	14	1	19	0	34	34	67
Reversals of impairment losses	0	0	0	0	0	2	2
Transfers	104	20	1	1	126	(0)	126
Reclassifications (to)/from “held for sale”	0	0	0	0	0	0	0
Disposals	0	196	278	1	475	153	628
Exchange rate changes	(0)	29	29	0	57	30	87
Balance as of December 31, 2024	386	2,014	1,936	1	4,337	2,954	**7,291**
Carrying amount:							
Balance as of December 31, 2023	177	360	1,179	460	2,176	4,009	**6,185**
Balance as of December 31, 2024	161	417	1,361	360	2,299	3,894	**6,193**

Depreciation expenses, impairment losses and reversal of impairment losses on property and equipment are recorded within general and administrative expenses for the income statement.

The carrying value of items of property and equipment on which there is a restriction on sale was € 1 million and € 24 million as of December 31, 2024 and December 31, 2023, respectively.

Commitments for the acquisition of property and equipment were € 24 million at year-end 2024 and € 96 million at year-end 2023.

The Group leases many assets including land and buildings, vehicles and IT equipment for which it records right-of-use assets. During 2024, additions to right-of-use assets amounted to € 145 million and largely reflected new real estate leases. Depreciation charges of € 548 million recognized in 2024 mainly resulted from planned consumption of right-of-use assets for property leases over their contractual terms. The carrying amount of right-of-use assets of € 3.9 billion included in Total Property and equipment as of December 31, 2024 predominantly represented leased properties of € 3.9 billion and vehicle leases of € 19 million. For more information on the Group´s leased properties and related disclosures required under IFRS 16, please refer to Note 22 “Leases”.

22 – Leases

The Group's disclosures are as a lessee under lease arrangements covering property and equipment. The Group has applied judgement in presenting related information pursuant to IFRS 16 in a manner that it considers to be most relevant to an understanding of its financial performance and position.

The Group leases many assets including land and buildings, vehicles and IT equipment. The Group is a lessee for the majority of its offices and branches under long-term rental agreements. Most of the lease contracts are made under usual terms and conditions, which means they include options to extend the lease by a defined amount of time, price adjustment clauses and escalation clauses in line with general office rental market conditions. However, the lease agreements do not include any clauses that impose any restriction on the Group's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

As of December 31, 2024 (December 31, 2023), the Group recorded right-of-use assets on its balance sheet with a carrying amount of € 3.9 billion (€ 4.0 billion), which are included in Property and equipment. The right-of-use assets predominantly represented leased properties of € 3.9 billion (€ 4.0 billion) and vehicle leases of € 19 million (€ 13 million). For more information on the year-to-date development of right-of-use assets, please refer to Note 21 “Property and Equipment”.

Corresponding to the recognition of the right-of-use assets, as of December 31, 2024 (December 31, 2023), the Group recorded lease liabilities on its balance sheet with a carrying amount of € 4.5 billion (€ 4.5 billion), which are included in Other liabilities. As of December 31, 2024, the lease liabilities included the discounted value of future lease payments of € 440 million for the Group headquarters in Frankfurt am Main that was sold and leased back on December 1, 2011. The lease has a fixed term through to the end of 2036, with options to extend the lease for two additional five-year periods to the end of 2046.

During 2024 and 2023, interest expenses recorded from the compounding of the lease liabilities amounted to € 127 million and € 113 million, respectively. The contractual maturities for the undiscounted cash flows from these liabilities are shown in Note 31 “Maturity Analysis of the earliest contractual undiscounted cash flows of Financial Liabilities”.

Expenses recognized in 2024 (2023) relating to short-term leases and leases of low-value assets, for which the Group decided to apply the recognition exemption under IFRS 16 (and thus not to record right-of-use assets and corresponding lease liabilities on the balance sheet), amounted to € 2 million (€ 1 million) and € 0 million (€ 0 million), respectively.

Income recorded in 2024 (2023) from the subletting of right-of-use assets totaled € 24 million (€ 29 million).

The total cash outflow for leases for 2024 (2023) was € 678 million (€ 645 million) and represented mainly expenditures made for real estate rentals over € 669 million (€ 638 million). Of the total cash outflow amount, payments of € 552 million (€ 534 million) were made for the principal portion of lease liabilities, payments of € 126 million (€ 111 million) were made for the interest portion.

Total future cash outflows to which the Group as a lessee is potentially exposed, that are not reflected in the measurement of the lease liabilities, mainly include potential payment exposures arising from extension options (2024: € 4.7 billion) and future payments for leases not yet commenced, but to which the Group is committed (2024: € 68 million). Their expected maturities are shown in the table below.

Future cash outflows to which the Group is potentially exposed that are not reflected in the measurement of lease liabilities

in € m.	Dec 31, 2024	Dec 31, 2023
Future cash outflows not reflected in lease liabilities:		
Not later than one year	30	14
Later than one year and not later than five years	470	590
Later than five years	4,230	4,318
Future cash outflows not reflected in lease liabilities	**4,731**	**4,922**

23 – Goodwill and Other Intangible Assets

Goodwill

Changes in Goodwill

The changes in the carrying amount of goodwill, as well as gross amounts and accumulated impairment losses of goodwill, for the years ended December 31, 2024, and December 31, 2023, are shown below by cash-generating units.

The Group's business operations are organized under the following divisional structure: Corporate Bank, Investment Bank, Private Bank and Asset Management. The corporate divisions are considered CGUs.

Goodwill allocated to cash-generating units

in € m.	Investment Bank	Corporate Bank	Asset Management	Private Bank	Total
Balance as of January 1, 2023	0	0	2,919	0	**2,919**
Goodwill acquired during the year	235	0	0	0	235
Purchase accounting adjustments	0	0	0	0	0
Transfers	0	0	0	0	0
Reclassification from (to) "held for sale"	0	0	(7)	0	(7)
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	0	0
Impairment losses[1]	(233)	0	0	0	(233)
Exchange rate changes/other	(2)	0	(63)	0	(65)
Balance as of December 31, 2023	0	0	2,849	0	**2,849**
Gross amount of goodwill	4,175	615	3,336	3,723	**11,848**
Accumulated impairment losses	(4,175)	(615)	(487)	(3,723)	**(9,000)**
Balance as of January 1, 2024	0	0	2,849	0	**2,849**
Goodwill acquired during the year	0	0	0	0	0
Purchase accounting adjustments	0	0	0	0	0
Transfers	0	0	0	0	0
Reclassification from (to) "held for sale"	0	0	0	0	0
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	0	0
Impairment losses[1]	0	0	0	0	0
Exchange rate changes/other	0	0	114	0	114
Balance as of December 31, 2024	0	0	2,963	0	**2,963**
Gross amount of goodwill	4,418	643	3,477	3,737	**12,275**
Accumulated impairment losses	(4,418)	(643)	(515)	(3,737)	**(9,313)**

[1] Impairment losses of goodwill are recorded as impairment of goodwill and other intangible assets in the income statement

Changes in goodwill in 2024 only included foreign exchange rate movements of Asset Management goodwill held in non-Group currencies.

Following the acquisition of Numis Corporation Plc on October 13, 2023 (see Note 3), the purchase price allocation for the business combination resulted in the recognition of goodwill for € 235 million which was allocated to the Investment Bank CGU. Given the valuation of the Investment Bank CGU with a continued shortfall of its recoverable amount versus its carrying amount, the goodwill was considered impaired and fully written off in the fourth quarter 2023.

Goodwill Impairment Test

For the purposes of impairment testing, goodwill acquired in a business combination is allocated to the appropriate CGU on the basis as described in Note 1 "Material Accounting Policies and Critical Accounting Estimates". The Group's primary CGUs are as outlined above. Asset Management's goodwill is tested for impairment annually in the fourth quarter by comparing the recoverable amount of the CGU with its carrying amount. In addition, the Group tests goodwill whenever a triggering event is identified. The recoverable amount is the higher of a CGU's fair value less costs of disposal and its value in use. The Asset Management CGU was the only goodwill carrying CGU to be tested for annual impairment in 2023 and 2024. The impairment tests conducted on Asset Management in these periods did not result in an impairment loss as the recoverable amounts of the Asset Management CGU were higher than the respective carrying amounts.

A review of the Group's strategy or certain political or global risks for the banking industry, uncertainties regarding the implementation of already adopted regulation and the introduction of legislation that is already under discussion could result in an impairment of goodwill in the future.

Carrying Amount

The carrying amount of a primary CGU is derived using a capital allocation model based on the Shareholders' Equity Allocation Framework of the Group (please refer to Note 4, "Business Segments and Related Information" for more details). The allocation uses the Group's total equity at the date of valuation, including Additional Tier 1 Notes (AT1 Notes), which constitute unsecured and subordinated notes of Deutsche Bank and which are classified as additional equity components in accordance with IFRS. Total equity is adjusted for an add-on adjustment for goodwill attributable to noncontrolling interests.

Recoverable Amount

The Group determines the recoverable amounts of its primary CGUs on the basis of the higher of value in use and fair value less costs of disposal (Level 3 of the fair value hierarchy). It employs a discounted cash flow (DCF) model, which reflects the specifics of the banking business and its regulatory environment. The model calculates the present value of the estimated future earnings that are distributable to shareholders after fulfilling the respective regulatory capital requirements. The recoverable amounts also include the fair value of the AT1 Notes, which are allocated to the primary CGUs.

The DCF model uses earnings projections and respective capitalization assumptions based on five-year financial plans as well as longer term expectations on the impact of regulatory developments, which are discounted to their present value. Estimating future earnings and capital requirements involves judgment and the consideration of past and current performances as well as expected developments in the respective markets, and in the overall macroeconomic and regulatory environments. Earnings projections beyond the initial five-year period are, where applicable, adjusted to derive a sustainable level. In case of a going concern, the cash flow to equity is assumed to increase by or converge towards a constant long-term growth rate for the Asset Management CGU of up to 3.3% (2023: up to 3.0%). This is based on projected revenue forecasts of the CGU as well as expectations for the development of gross domestic product and inflation and is captured in the terminal value.

Key Assumptions and Sensitivities

Key Assumptions: The DCF value of a CGU is sensitive to the earnings projections, to the discount rate (cost of equity) applied and, to a lesser extent, to the long-term growth rate. The discount rates applied have been determined based on the capital asset pricing model and comprise a risk-free interest rate, a market risk premium and a factor covering the systematic market risk (beta factor). The values for the risk-free interest rate, the market risk premium and the beta factors are determined using external sources of information. CGU-specific beta factors are determined based on a respective group of peer companies. Variations in all of these components might impact the discount rates. For the Asset Management CGU, the discount rates (after tax) applied for 2024 and 2023 were 10.4% and 10.9%, respectively.

Management determined the values for the key assumptions in the following table based on a combination of internal and external analysis. Estimates for efficiency and the cost reduction program are based on progress made to date and scheduled future projects and initiatives.

Key management assumptions are:

Primary goodwill-carrying cash-generating unit	Description of key assumptions	Uncertainty associated with key assumptions and potential events/circumstances that could have a negative effect
Asset Management	– Strong organic growth: Build out Xtrackers and Alternatives offering, maintain robust performance in Active and further building out client channels and partnerships – Future of Finance: Emerge as a winner from disruption in the Asset Management space caused by digital distribution channels – Gateway to Europe: Leverage global franchise and roots in Europe to become the first point of contact for global investors targeting Europe	– Challenging and continued uncertainty around the market environment and volatility unfavourable to its investment strategies – Unfavorable margin development and adverse competition levels in key markets and products beyond expected levels – Business/execution risks, e.g., underachievement of net flow targets from market uncertainty, loss of high-quality client facing employees, unfavorable investment performance, lower than expected efficiency gains – Uncertainty around regulation and its potential implications not yet anticipated

Sensitivities: In order to test the resilience of the recoverable amount, key assumptions used in the DCF model (for example, the discount rate and the earnings projections) are sensitized. Currently, in Asset Management the recoverable amount exceeds the carrying amount by 24 % / € 1.7 billion.

Change in certain key assumptions to cause the recoverable amount to equal the carrying amount

Change in Key Assumptions	Asset Management
Discount rate (post tax) increase	
from	10.4 %
to	12.3 %
Change in projected future earnings in each period by	(16.9) %
Long term growth rate	
from	3.3 %
to	N/M

N/M – Not meaningful, as a rate of 0% would still lead to a recoverable amount in excess of the carrying amount

Other Intangible Assets

Changes of other intangible assets by asset classes for the years ended December 31, 2024 and December 31, 2023

							Purchased intangible assets	Internally generated intangible assets	Total other intangible assets
			Unamortized				Amortized	Amortized	
in € m.	Retail investment managemen t agreements	Other	Total unamortized purchased intangible assets	Customer-related intangible assets	Contract-based intangible assets	Software and other	Total amortized purchased intangible assets	Software	
Cost of acquisition/ manufacture:									
Balance as of January 1, 2023	1,083	441	1,524	1,421	70	792	2,283	10,116	13,923
Additions	0	0	0	56	0	66	122	1,314	1,436
Changes in the group of consolidated companies	0	0	0	0	0	0	0	0	0
Disposals	0	0	0	0	0	0	0	71	72
Reclassifications from (to) “held for sale”	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	(4)	(4)	0	(4)
Exchange rate changes	(37)	0	(37)	(21)	0	0	(21)	(72)	(130)
Balance as of December 31, 2023	1,046	440	1,486	1,456	70	854	2,380	11,288	15,154
Additions	0	0	0	2	0	8	10	1,407	1,417
Changes in the group of consolidated companies	0	0	0	(49)	(1)	(1)	(51)	0	(51)
Disposals	0	0	0	0	0	31	31	121	152
Reclassifications from (to) “held for sale”	0	0	0	0	0	0	0	0	0
Transfers	0	23	23	(40)	(35)	(28)	(103)	(3)	(83)
Exchange rate changes	71	0	71	42	0	2	44	171	286
Balance as of December 31, 2024	1,117	463	1,580	1,411	35	803	2,249	12,742	16,571
Accumulated amortization and impairment:									
Balance as of January 1, 2023	342	439	781	1,417	70	659	2,146	6,824	9,750
Amortization for the year	0	0	0	3	0	35	38	1,027	1,064[1]
Changes in the group of consolidated companies	0	0	0	0	0	0	0	0	0
Disposals	0	0	0	0	0	0	0	71	72
Reclassifications from (to) “held for sale”	0	0	0	0	0	0	0	0	0
Impairment losses	0	0	0	0	0	0	0	24	24[2]
Reversals of impairment losses	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	(3)	(3)	0	(3)
Exchange rate changes	(12)	0	(12)	(20)	0	(1)	(21)	(54)	(87)
Balance as of December 31, 2023	330	439	769	1,399	70	690	2,159	7,749	10,676
Amortization for the year	0	0	0	5	0	36	41	1,130	1,171[3]
Changes in the group of consolidated companies	0	0	0	(49)	(1)	(1)	(51)	0	(51)
Disposals	0	0	0	0	0	31	31	121	152
Reclassifications from (to) “held for sale”	0	0	0	0	0	0	0	0	0
Impairment losses	0	0	0	0	0	0	0	29	29[4]
Reversals of impairment losses	0	0	0	0	0	0	0	0	0
Transfers	0	23	23	(40)	(34)	(29)	(103)	(1)	(80)
Exchange rate changes	22	0	22	40	0	0	40	130	192
Balance as of December 31, 2024	353	461	814	1,356	35	664	2,055	8,917	11,785
Carrying amount:									
As of December 31, 2023	716	1	717	57	0	164	221	3,539	4,478
As of December 31, 2024	764	2	766	55	0	139	194	3,825	4,786

[1] € 1.1 billion were included in general and administrative expenses.
[2] € 24 million were impairment losses on self-developed software recorded in general and administrative expenses.
[3] € 1.2 billion were included in general and administrative expenses.
[4] € 29 million were impairment losses on self-developed software recorded in general and administrative expenses.

Amortizing Intangible Assets

In 2024, amortizing intangible assets increased by € 261 million. This included amortization expenses of € 1.2 billion, mostly for the scheduled consumption of capitalized software (€ 1.2 billion) and the impairment of current platform software as well as software under construction (€ 29 million). Additions to internally generated intangible assets of € 1.4 billion resulting from the capitalization of expenses incurred in conjunction with the Group's development of own-used software overcompensated the negative impact from amortization and impairment charges on net book value. A weaker euro exchange rate against major currencies accounted for net positive exchange rate changes of € 47 million.

In 2023, amortizing intangible assets increased by € 330 million. This included amortization expenses of € 1.1 billion, mostly for the scheduled consumption of capitalized software (€ 1.1 billion) and the impairment of current platform software as well as software under construction (€ 24 million). Additions to internally generated intangible assets of € 1.3 billion resulting from the capitalization of expenses incurred in conjunction with the Group's development of own-used software overcompensated the negative impact from amortization and impairment charges on net book value. A stronger euro exchange rate against major currencies accounted for net negative exchange rate changes of € (19) million.

In 2022, amortizing intangible assets increased by € 173 million. This included amortization expenses of € 1.0 billion, mostly for the scheduled consumption of capitalized software (€ 1.0 billion) and the impairment of current platform software as well as software under construction (€ 30 million). Additions to internally generated intangible assets of € 1.1 billion resulting from the capitalization of expenses incurred in conjunction with the Group's development of own-used software overcompensated the negative impact from amortization and impairment charges on net book value. A weaker euro exchange rate against major currencies accounted for net positive exchange rate changes of € 50 million.

Other intangible assets with finite useful lives are generally amortized over their useful lives based on the straight-line method.

Useful lives of other amortized intangible assets by asset class

	Useful lives in years
Internally generated intangible assets:	
Software	up to 10
Purchased intangible assets:	
Customer-related intangible assets	up to 15
Other	up to 20

Unamortized Intangible Assets

Within this asset class, the Group recognizes certain contract-based and marketing-related intangible assets, which are deemed to have an indefinite useful life.

In particular, the asset class comprises the below detailed investment management agreements related to retail mutual funds and certain trademarks. Due to the specific nature of these intangible assets, market prices are ordinarily not observable and, therefore, the Group values such assets based on the income approach, using a post-tax DCF-methodology.

Retail investment management agreements: These assets, amounting to € 764 million, relate to the Group's U.S. retail mutual fund business and are allocated to the Asset Management CGU. Retail investment management agreements are contracts that give Asset Management the exclusive right to manage a variety of mutual funds for a specified period. Since these contracts are easily renewable at minimal cost, these agreements are not expected to have a foreseeable limit on the contract period. Therefore, the rights to manage the associated assets under management are expected to generate cash flows for an indefinite period of time. This intangible asset was recorded at fair value based upon a valuation provided by a third party at the date of acquisition of Zurich Scudder Investments, Inc. in 2002.

The recoverable amount was calculated as fair value less costs of disposal using the multi-period excess earnings method applying a five-year plan and the fair value measurement was categorized as Level 3 in the fair value hierarchy. The key assumptions in determining the fair value less costs of disposal include the asset mix, the flows forecast, the effective fee rate and discount rate as well as the terminal value growth rate. The discount rate (cost of equity) applied in the annual impairment test was 10.2 % in 2024 (10.9 % in 2023). The terminal value growth rate applied for 2024 was 3.7 % (for 2023 3.4 %).

As of December 31, 2024 and December 31, 2023, the respective impairment analyses did not result in an impairment loss or reversal of an impairment loss. As of December 31, 2022, an impairment loss of € 68 million was recognized in the Group's income statement within impairment of goodwill and other intangible assets, due to net outflows and change in discount rate to 10.9 % in the fourth quarter 2022.

24 – Non-Current Assets and Disposal Groups Held for Sale

Within the balance sheet, non-current assets and disposal groups held for sale are included in other assets and other liabilities.

in € m.	Dec 31, 2024	Dec 31, 2023
Other assets	31	0
Total assets classified as held for sale	**31**	0
Total liabilities classified as held for sale	**0**	0

As of December 31, 2024, and December 31, 2023, no unrealized gains (losses) relating to non-current assets classified as held for sale were recognized directly in accumulated other comprehensive income (loss) (net of tax).

2024

Within the Investment Bank division, a portfolio of real state assets owned through foreclosure have been classified as non-current assets held for sale. The portfolio is valued at the lower of its carrying amount and fair value less costs to sell and is expected to be sold within one year following their reclassification.

2023

At December 31, 2023, no non-current assets or disposal groups were classified as held for sale.

25 – Other Assets and Other Liabilities

in € m.	Dec 31, 2024	Dec 31, 2023
Brokerage and securities related receivables		
Cash/margin receivables	42,179	40,157
Receivables from prime brokerage	5	5
Pending securities transactions past settlement date	979	1,801
Receivables from unsettled regular way trades	17,527	30,603
Total brokerage and securities related receivables	60,690	72,566
Debt Securities held to collect	21,643	21,853
Accrued interest receivable	4,575	4,158
Assets held for sale	31	0
Assets related to insurance business	133	92
Other	14,106	16,028
Total other assets	**101,178**	114,698

in € m.	Dec 31, 2024	Dec 31, 2023
Brokerage and securities related payables		
Cash/margin payables	49,133	49,516
Payables from prime brokerage	13	18
Pending securities transactions past settlement date	1,207	2,641
Payables from unsettled regular way trades	13,401	29,365
Total brokerage and securities related payables	63,755	81,539
Accrued interest payable	5,113	4,785
Liabilities held for sale	0	0
Lease liabilities	4,488	4,493
Liabilities related to insurance business	121	87
Other	22,138	22,114
Total other liabilities	**95,616**	113,018

For further details on the assets and liabilities held for sale, please refer to Note 24 “Non-Current Assets and Disposal Groups Held for Sale”.

26 – Deposits

in € m.	Dec 31, 2024	Dec 31, 2023
Noninterest-bearing demand deposits	177,915	187,078
Interest-bearing deposits		
Demand deposits	197,340	162,444
Time deposits	203,756	188,468
Savings deposits	88,689	87,496
Total interest-bearing deposits	489,786	438,408
Total deposits	**667,700**	625,486

27 – Provisions

Movements by Class of Provisions

in € m.	Operational Risk	Civil Litigation	Regulatory Enforcement	Re-structuring	Other	Total[1]
Balance as of January 1, 2023	45	627	570	248	398	**1,888**
Changes in the group of consolidated companies	(1)	(2)	(0)	(2)	4	(1)
New provisions	8	881	109	287	709	1,993
Amounts used	4	328	196	132	604	1,264
Unused amounts reversed	8	73	339	69	82	570
Effects from exchange rate fluctuations/Unwind of discount	0	18	(13)	0	1	6
Transfers	(1)	1	(1)	0	(5)	(6)
Balance as of December 31, 2023	40	1,124	129	333	421	**2,047**
Changes in the group of consolidated companies	0	0	0	0	(0)	(0)
New provisions	6	2,201	84	149	312	2,751
Amounts used	2	954	8	55	67	1,086
Unused amounts reversed	4	509	41	153	66	773
Effects from exchange rate fluctuations/Unwind of discount	0	3	2	0	1	5
Transfers	(0)	30	(0)	0	(16)	13
Balance as of December 31, 2024	40	1,895	166	273	584	**2,958**

[1] For the remaining portion of provisions as disclosed on the consolidated balance sheet, please see Note 19 “Allowance for Credit Losses”, in which allowances for credit related off-balance sheet positions are disclosed

Classes of Provisions

Operational Risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The definition used for the purposes of determining operational provisions differs from the risk management definition, as it excludes risk of loss resulting from civil litigation and regulatory enforcement matters. For risk management purposes, operational risk includes legal risk, as payments to customers, counterparties and regulatory bodies in civil litigations or regulatory enforcement matters constitute loss events for operational shortcomings, but excludes business and reputational risk.

Civil Litigation provisions arise out of current or potential claims or proceedings alleging non-compliance with contractual or other legal or regulatory responsibilities, which have resulted or may result in demands from customers, counterparties or other parties in civil litigations.

Regulatory Enforcement provisions arise out of current or potential claims or proceedings alleging non-compliance with legal or regulatory responsibilities, which have resulted or may result in an assessment of fines or penalties by governmental regulatory agencies, self-regulatory organizations or other enforcement authorities.

Restructuring provisions arise out of restructuring activities. The Group aims to enhance its long-term competitiveness through major reductions in costs, duplication and complexity in the years ahead. For details see Note 10 “Restructuring”.

Other provisions include several specific items arising from a variety of different circumstances, including the provision for the reimbursement of loan processing fees, deferred sales commissions, provisions for bank levies and mortgage repurchase demands.

Provisions and Contingent Liabilities

The Group recognizes a provision for potential loss only when there is a present obligation arising from a past event that is probable to result in an economic outflow that can be reliably estimated. Where a reliable estimate cannot be made for such an obligation, no provision is recognized and the obligation is deemed a contingent liability. Contingent liabilities also include possible obligations for which the possibility of future economic outflow is more than remote but less than probable. Where a provision has been taken for a particular claim, no contingent liability is recorded; for matters or sets of matters consisting of more than one claim, however, provisions may be recorded for some claims, and contingent liabilities (or neither a provision nor a contingent liability) may be recorded for others.

The Group operates in a legal and regulatory environment that exposes it to significant litigation risks. As a result, the Group is involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. In recent years, regulation and supervision in a number of areas have increased, and regulators, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations and enforcement actions which are often followed by civil litigation.

In determining for which of the claims the possibility of a loss is probable, or less than probable but more than remote, and then estimating the possible loss for those claims, the Group takes into consideration a number of factors, including but not limited to the nature of the claim and its underlying facts, the procedural posture and litigation history of each case, rulings by the courts or tribunals, the Group's experience and the experience of others in similar cases (to the extent this is known to the Group), prior settlement discussions, settlements by others in similar cases (to the extent this is known to the Group), available indemnities and the opinions and views of legal counsel and other experts.

The provisions the Group has recognized for civil litigation and regulatory enforcement matters as of December 31, 2024 and December 31, 2023 are set forth in the table above. For some matters where the Group believes an outflow of funds is probable, but the Group could not reliably estimate the amount of the potential outflow, no provision was recognized.

For the matters for which a reliable estimate can be made, but the probability of a future loss or outflow of resources is more than remote but less than probable, the Group currently estimates that, as of December 31, 2024, these contingent liabilities are approximately € 0.6 billion for civil litigation matters (December 31, 2023: € 1.9 billion) and € 0.1 billion for regulatory enforcement matters (December 31, 2023: € 0.2 billion). These figures include matters where the Group's potential liability is joint and several and where the Group expects any such liability to be paid by a third party. If the Group's best estimate is within a range, the amount at the top of the range is included in the amount of contingent liabilities.

For other significant civil litigation and regulatory enforcement matters where the Group believes the possibility of an outflow of funds is more than remote but less than probable, but the amount is not reliably estimable, such matters are not included in the contingent liability estimates. In addition, where the Group believes the possibility of an outflow of funds is remote, the Group has neither recognized a provision nor included the matters in the contingent liability estimates.

This estimated possible loss, as well as any provisions taken, is based upon currently available information and is subject to significant judgment and a variety of assumptions, variables and known and unknown uncertainties. These uncertainties may include inaccuracies in or incompleteness of the information available to the Group, particularly at the preliminary stages of matters, and assumptions by the Group as to future rulings of courts or other tribunals or the likely actions or positions taken by regulators or adversaries may prove incorrect. Moreover, estimates of possible loss for these matters are often not amenable to the use of statistical or other quantitative analytical tools frequently used in making judgments and estimates, and are subject to even greater degrees of uncertainty than in many other areas where the Group must exercise judgment and make estimates. The estimated possible loss, as well as any provisions taken, can be and often are substantially less than the amount initially requested by regulators or adversaries or the maximum potential loss that could be incurred were the matters to result in a final adjudication adverse to the Group. Moreover, in several regions in which the Group operates, an adversary often is not required to set forth the amount it is seeking, and where it is, the amount may not be subject to the same requirements that generally apply to pleading factual allegations or legal claims.

The matters for which the Group determines that the possibility of a future loss is more than remote will change from time to time, as will the matters as to which a reliable estimate can be made and the estimated possible loss for such matters. Actual results may prove to be significantly higher or lower than the estimate of possible loss in those matters where such an estimate was made. In addition, loss may be incurred in matters with respect to which the Group believed the likelihood of loss was remote. In particular, the estimated aggregate possible loss does not represent the Group's potential maximum loss exposure for those matters.

The Group may settle litigation or regulatory proceedings or investigations prior to a final judgment or determination of liability. It may do so to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when the Group believes it has a valid defense against liability. It may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, the Group may, for similar reasons, reimburse counterparties for their losses even in situations where it does not believe that it is legally compelled to do so.

Current Individual Proceedings

Set forth below are descriptions of civil litigation and regulatory enforcement matters or groups of matters for which the Group has taken material provisions, or for which there are material contingent liabilities, or for which there is the possibility of material business or reputational risk, as well as other significant matters. In addition, similar matters are grouped together and some matters consist of a number of proceedings or claims. The disclosed matters also include matters for which the possibility of a loss is more than remote but for which the Group cannot reliably estimate the possible loss. Matters are presented below in English-language alphabetical order based on the titles the Group has used for them.

Consent Order and Written Agreement with the Federal Reserve. On July 19, 2023, Deutsche Bank, Deutsche Bank AG New York Branch, DB USA Corporation, Deutsche Bank Trust Company Americas (DBTCA) and DWS USA Corporation entered into a Consent Order and Written Agreement with the Federal Reserve resolving previously disclosed regulatory discussions concerning adherence to prior orders and settlements related to sanctions and embargoes and AML compliance, and remedial agreements and obligations related to risk management issues. The Consent Order alleges insufficient and tardy implementation of the post-settlement sanctions and embargoes and AML control enhancement undertakings required by prior Consent Orders the bank entered into with the Federal Reserve in 2015 and 2017. The Written Agreement alleges various deficiencies in governance, risk management, and internal controls across the bank's U.S. operations, and finds that the bank must continue to implement additional improvements. The Consent Order requires Deutsche Bank to pay a civil monetary penalty of U.S. $ 186 million, including U.S. $ 140 million for the violations alleged with respect to the post-settlement sanctions and embargoes and AML control enhancement undertakings, as well as a separate penalty of U.S. $ 46 million for unsafe or unsound practices stemming from the bank's handling of its legacy correspondent banking relationship with Danske Bank Estonia, which was terminated in October 2015. The Written Agreement does not include a civil monetary penalty. Both the Consent Order and Written Agreement include certain post-settlement remediation and reporting undertakings.

Cum-ex Investigations and Litigations. Deutsche Bank has received inquiries from law enforcement authorities, including requests for information and documents, in relation to cum-ex transactions of clients. "Cum-ex" refers to trading activities in German shares around dividend record dates (trade date before and settlement date after dividend record date) for the purpose of obtaining German tax credits or refunds in relation to withholding tax levied on dividend payments, including transaction structures that have resulted in more than one market participant claiming such credit or refund with respect to the same dividend payment. Cum-ex transactions are regarded as criminal tax evasion by German courts. Deutsche Bank is cooperating with the law enforcement authorities in these matters.

The Public Prosecutor in Cologne (*Staatsanwaltschaft Köln*, "CPP") has been conducting a criminal investigation since August 2017 concerning two former employees of Deutsche Bank in relation to cum-ex transactions of certain former clients of the bank. In October 2022, the CPP conducted a search at Deutsche Bank's offices in Frankfurt and Eschborn. Based on the search warrant the CPP expanded the scope of the investigation. Current and former Deutsche Bank employees and seven former Management Board members are included in the investigation. The investigation is still at an early stage and the scope of the investigation may be further broadened. Deutsche Bank is a potential secondary participant pursuant to Section 30 of the German Law on Administrative Offences in this proceeding. This proceeding could result in a disgorgement of profits and fines. Deutsche Bank is cooperating with the CPP.

In May 2021, Deutsche Bank learned through an information request received by Deutsche Oppenheim Family Office AG (DOAG) as legal successor of Sal. Oppenheim jr. & Cie. AG & Co. KGaA (Sal. Oppenheim) that the CPP in 2021 opened a criminal investigation proceeding in relation to cum-ex transactions against unknown former personnel of Sal. Oppenheim. DOAG provided the requested information.

On July 12, 2023, Deutsche Bank as legal successor of Deutsche Postbank AG was informed by the CPP that the CPP has opened a new separate criminal cum-ex investigation against unnamed personnel of former Deutsche Postbank AG.

Deutsche Bank acted as participant in and filed withholding tax refund claims through the electronic refund procedure (*elektronisches Datenträgerverfahren*) on behalf of, inter alia, two former custody clients in connection with their cum-ex transactions. In February 2018, Deutsche Bank received from the German Federal Tax Office (*Bundeszentralamt für Steuern*, "FTO") a demand of approximately € 49.0 million for tax refunds paid to a former custody client. Deutsche Bank expects to receive a formal notice for the same amount. In December 2019, Deutsche Bank received a liability notice from the FTO requesting payment of € 2.1 million in connection with tax refund claims Deutsche Bank had submitted on behalf of another former custody client, which Deutsche Bank paid in early 2020. In July 2022, Deutsche Bank filed an action against this payment with the Fiscal Court of Cologne (*Finanzgericht Köln*).

In 2018, The Bank of New York Mellon SA/NV (BNY) informed Deutsche Bank of its intention to seek indemnification for potential cum-ex related tax liabilities incurred by BHF Asset Servicing GmbH (BAS) and/or Frankfurter Service Kapitalanlage-GmbH ("Service KAG", now named BNY Mellon Service Kapitalanlage-Gesellschaft mbH). Deutsche Bank had acquired BAS and Service KAG as part of the acquisition of Sal. Oppenheim in 2010 and sold them to BNY later that year. BNY estimated the potential tax liability to be up to € 120.0 million (excluding interest of 6 % p.a.). In late 2020, counsel to BNY informed Deutsche Bank that BNY and/or Service KAG (among others) have received notices from tax authorities in the estimated amount with respect to cum-ex related trades by certain investment funds in 2009 and 2010. BNY has filed objections against the notices. Following receipt of payment orders from tax authorities in the amount of € 118.3 million in relation to the investment funds and after consultation with Deutsche Bank, BNY paid € 53.6 million to tax authorities. A further € 50.9 million were originally paid by third parties. In addition, BNY received from the Frankfurt Tax Office regarding one of the investment funds a notice and payment request regarding penalty interest (*Hinterziehungszinsen*) in the amount of € 11.6 million. BNY, after consultation with Deutsche Bank, applied for a suspension of enforcement (*Aussetzung der Vollziehung*) regarding the payment request which was granted by the Fiscal Court of Hesse (*Hessisches Finanzgericht*) in October 2024. In 2025, BNY informed Deutsche Bank that it has received a repayment of € 2.5 million due to a payment in 2024 by a further third party in relation to one of the investment funds.

In December 2023 and April 2024, Deutsche Bank received hearing letters from the FTO regarding three third party investment funds that engaged in cum-ex trades in 2009. Deutsche Bank had provided services and financing to investors in the funds. The funds received an aggregate of € 147 million in cum-ex withholding tax refunds in 2009. In February 2024, Deutsche Bank responded to the first two hearing letters. In June and July 2024, Deutsche Bank received two tax liability notices (*Haftungsbescheide*) from the FTO in an aggregate amount of € 85 million regarding two of the funds. Deutsche Bank filed objections (*Einsprüche*) and applied for a suspension of enforcement (*Aussetzung der Vollziehung*) regarding the notices. The suspension of enforcement was granted in July 2024.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

FX Derivatives Products Investigations and Litigation. Following an internal investigation into the historical sales of certain FX derivatives products, Deutsche Bank is providing information to and otherwise cooperating with its regulators. In December 2023, the Spanish National Securities Market Commission (CNMV) announced it will initiate proceedings against Deutsche Bank, S.A.E. for advisory services provided to Spanish clients in relation to FX derivative products. In January 2025, the CNMV concluded those proceedings and issued a fine of € 10 million against DB S.A.E. and a one year suspension of advisory services by DB S.A.E. relating to complex OTC derivative transactions with embedded complex FX structures. DB S.A.E. has filed an appeal with the Spanish courts. Separately, in September 2021, Deutsche Bank was served with a claim that was filed in the High Court of England and Wales by four companies within the Palladium Hotels Group (PHG). PHG claimed restitution or damages for alleged losses estimated at € 500 million in respect of FX derivatives trades entered into with Deutsche Bank between 2013 and 2019. They alleged that the trades were mis-sold by Deutsche Bank and that one of the four PHG claimants lacked legal capacity to enter into some of the trades. Deutsche Bank filed a defense disputing the claim. In January 2024, PHG filed amended pleadings to include additional allegations of fraudulent misrepresentation. Deutsche Bank filed an amended defense in February 2024 which disputed the new allegations. Deutsche Bank and PHG agreed a full and final settlement of the claim on confidential terms and the High Court proceedings were dismissed in July 2024.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

FX Investigations and Litigations. Deutsche Bank has received requests for information from certain regulatory and law enforcement agencies globally who investigated trading in, and various other aspects of, the foreign exchange market.

Deutsche Bank has been named as a defendant in an amended and consolidated class action filed in Israel. This action alleges a conspiracy among traders at 16 banks to manipulate FX benchmark rates and to widen FX currency pair spreads in the period 2003 to 2013 and seeks damages pursuant to Israeli antitrust law as well as other causes of action. This action is in preliminary stages.

In May 2021, Deutsche Bank S.A. – Banco Alemao was named in a civil antitrust action brought in the São Paulo Civil Court of Central Jurisdiction by the Association of Brazilian Exporters (AEB) against certain FX dealers and affiliated financial institutions in Brazil. This action asserts factual allegations based on conduct investigated by the Brazilian competition authority, CADE, and seeks damages pursuant to Brazilian antitrust law. In February 2022, the presiding judge dismissed the action on the basis that the action was not appropriate for a class proceeding. AEB has appealed the decision. Deutsche Bank has not yet been served.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Interbank and Dealer Offered Rates Matters. *Regulatory and Law Enforcement Matters.* Deutsche Bank has responded to requests for information from, and cooperated with, various regulatory and law enforcement agencies, in connection with industry-wide investigations concerning the setting of the London Interbank Offered Rate (LIBOR), Euro Interbank Offered Rate (EURIBOR), Tokyo Interbank Offered Rate (TIBOR) and other interbank and/or dealer offered rates.

From 2013 through 2017, Deutsche Bank entered into settlements with the European Commission, the U.S. Department of Justice (DOJ), the U.S. Commodity Futures Trading Commission (CFTC), the UK Financial Conduct Authority (FCA), the New York State Department of Financial Services (DFS) and other regulators with respect to interbank and dealer offered rates matters. Other investigations of Deutsche Bank concerning the setting of various interbank and/or dealer offered rates remain ongoing.

The Group has not disclosed whether it has established a provision or contingent liability with respect to the remaining investigations because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Civil Litigations. Deutsche Bank is party to three U.S. civil actions concerning alleged manipulation relating to the setting of U.S. dollar LIBOR, as well as actions pending in the UK, Argentina and Spain. The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

The U.S. civil actions were filed against Deutsche Bank and numerous other defendants on behalf of parties who allege losses as a result of manipulation relating to the setting of U.S. dollar LIBOR. Claims for damages for all three of the U.S. civil actions discussed have been asserted under various legal theories, including violations of federal and state antitrust and other laws.

Two of the three U.S. civil actions concerning U.S. dollar LIBOR are being coordinated as part of a multidistrict litigation (the “U.S. dollar LIBOR MDL”) in the U.S. District Court for the Southern District of New York (SDNY). Following a series of decisions in the U.S. dollar LIBOR MDL between March 2013 and March 2019 narrowing their claims, plaintiffs in the U.S. Dollar LIBOR MDL are currently asserting antitrust claims, claims under the U.S. Commodity Exchange Act and U.S. Securities Exchange Act and state law fraud, contract, unjust enrichment and other tort claims. The court has also issued decisions dismissing certain plaintiffs’ claims for lack of personal jurisdiction and on statute of limitations grounds.

In 2016, the district court issued a ruling dismissing certain antitrust claims while allowing others to proceed. Multiple plaintiffs filed appeals of that ruling. In December 2021, the Second Circuit affirmed the district court’s decision on antitrust standing grounds but reversed the court’s decision on personal jurisdiction grounds, and it remanded the cases to the district court for further proceedings. In March 2022, defendants (including Deutsche Bank) filed a petition for a writ of certiorari to the U.S. Supreme Court to review the Court of Appeals’ decision. The U.S. Supreme Court denied defendants’ petition in June 2022.

On October 4, 2024, defendants, including Deutsche Bank, filed a motion for summary judgment in the U.S. dollar LIBOR MDL. The motion is now fully briefed and awaiting decision.

In August 2020, plaintiffs filed a non-class action in the U.S. District Court for the Northern District of California against several financial institutions, alleging that U.S. dollar LIBOR has been suppressed through the present. In September 2022, the court granted the defendants’ motion to dismiss, but granted plaintiffs leave to amend. Later in 2022, the plaintiffs filed an amended complaint, and the defendants filed a motion to dismiss the amended complaint, which the court granted in October 2023. Plaintiffs filed a notice of appeal to the United States Court of Appeals for the Ninth Circuit and an amended notice of appeal in November 2023. Plaintiffs filed their appeal brief on January 25, 2024, and defendants filed their appeal brief on March 25, 2024. The Court affirmed the district court’s decision dismissing the complaint on December 9, 2024. On December 23, 2024, plaintiffs filed a petition for rehearing. On January 22, 2025, the Court denied plaintiffs’ petition for rehearing.

There is a further UK civil action regarding U.S. dollar LIBOR brought by the U.S. Federal Deposit Insurance Corporation (FDIC) acting as receiver for 19 failed financial institutions headquartered in the U.S., in which a claim for damages has been asserted pursuant to EU, UK and U.S. state laws. In February 2022, following a ruling issued by the U.S. Court of Appeals for the Second Circuit in relation to USD LIBOR antitrust claims, the UK LIBOR proceedings were stayed until July 2022, to allow for clarification of the position in relation to the parallel proceedings brought by the FDIC against Deutsche Bank in the U.S. The FDIC filed an application to reinstate proceedings in the United States in July 2022. Following the expiration of the UK stay, at a case management conference that took place in December 2022, the UK court ordered a trial of a sample of three of the failed financial institutions. This ‘sample bank’ trial has been listed for a 19-week trial in February 2026. In December 2022, the SDNY granted the FDIC’s application to reinstate certain of its claims against Deutsche Bank (and the other foreign defendants) in the U.S. to the extent these claims survived a motion to dismiss on the merits and subject to defendants’ reservation of rights to dispute the claims in the future.

A further class action regarding LIBOR has been filed in Argentina seeking damages for losses allegedly suffered by holders of Argentine bonds with interest rates based on LIBOR. On August 16, 2024, the court accepted the plaintiff's withdrawal of its claims against Deutsche Bank and certain other defendants, but the action remains pending against one defendant.

Jeffrey Epstein Matters. In December 2018, Deutsche Bank began the process to terminate its client relationship with Jeffrey Epstein, which began in August 2013. Since Epstein's arrest in July 2019, Deutsche Bank provided information to and cooperated with various regulatory and law enforcement agencies concerning the bank's former client relationship with Epstein (individually, and through related parties and entities) and entered into settlements to resolve certain regulatory and litigation matters. In addition, as noted below, a more recent Epstein matter against Deutsche Bank was discontinued with prejudice.

On November 23, 2023, Deutsche Bank AG, Deutsche Bank AG New York Branch, and DBTCA were named as defendants in a complaint filed in New York State Supreme Court by an alleged victim of Epstein. The complaint, amended on December 31, 2023, contained the same Trafficking Victims Protection Act and New York law claims that had been asserted against the bank in a recently settled class action complaint in the U.S. District Court for the SDNY. On April 8, 2024, the plaintiff discontinued all claims against Deutsche Bank with prejudice.

Monte Dei Paschi. In November 2019, the Court of First Instance of Milan convicted five former Deutsche Bank employees and one then-current employee of aiding and abetting false accounting and market manipulation in relation to repo transactions that Deutsche Bank had entered into with Banca Monte dei Paschi di Siena (MPS) and a subsidiary of MPS in 2008. The individuals were given sentences of either 3 years and 6 months or 4 years and 8 months. Deutsche Bank was found liable under Italian Legislative Decree n. 231/2001 and the Court ordered the seizure of alleged profits of € 64.9 million and a fine of € 3 million. The Court also found Deutsche Bank had civil vicarious liability for damages (to be quantified) as an employer of the employees who were convicted. The sentences and fines were not due until the conclusion of any appeal process. Following appeals filed by Deutsche Bank and the six Deutsche Bank individuals, in 2022, the Milan Court of Appeal acquitted all the Deutsche Bank defendants from all charges. The Public Prosecutor filed an appeal against the Milan Court of Appeal verdicts before the Supreme Court in November 2022. In October 2023, the Supreme Court declared the Public Prosecutor's appeal inadmissible and confirmed the acquittal decisions of the Milan Court of Appeal, which are now therefore final.

In May 2018, CONSOB, the authority responsible for regulating the Italian financial markets, issued fines of € 100,000 each against the six Deutsche Bank individuals who were defendants in the criminal proceedings. The six individuals were also banned from performing management functions in Italy and for Italian based institutions for three to six months each. No separate fine or sanction was imposed on Deutsche Bank, but it is jointly and severally liable for the six Deutsche Bank individuals' fines. In June 2018, Deutsche Bank and the six individuals filed an appeal in the Milan Court of Appeal challenging CONSOB's decision. In December 2020, the Milan Court of Appeal allowed the appeals filed by Deutsche Bank and the six individuals and annulled the resolution sanctioning them. In June 2021, CONSOB filed an appeal to the Supreme Court against the Court of Appeal's decision but withdrew its appeal in November 2024 following the full acquittal of the six individuals from criminal charges brought against them. As a result, the decision of the Milan Court of Appeal is now final and binding.

Finally, in the second quarter of 2024, a former Deutsche Bank employee filed and served a claim against it in the German Courts, seeking approximately € 152 million in damages for alleged harm caused to his career by the Italian criminal proceedings and conviction at first instance. The five other Deutsche Bank individuals from the criminal proceedings have also threatened to bring their own such claims in the English Courts. Deutsche Bank considers all such claims to be entirely without merit and will defend itself against them robustly, including disputing inflated, unrealistic alleged losses such as the figure claimed in Germany.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Mortgage-Related and Asset-Backed Securities – Issuer and Underwriter Civil Litigation. Deutsche Bank has been named as defendant in numerous civil litigations brought by private parties in connection with its various roles, including issuer or underwriter, in offerings of residential mortgage-backed securities (RMBS) and other asset-backed securities. These cases, described below, allege that the offering documents contained material misrepresentations and omissions, including with regard to the underwriting standards pursuant to which the underlying mortgage loans were issued, or assert that various representations or warranties relating to the loans were breached at the time of origination. The Group has recorded provisions with respect to several of these civil cases, but has not recorded provisions with respect to all of these matters. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to prejudice seriously the resolution of these matters.

Deutsche Bank is a defendant in an action related to RMBS offerings brought by the FDIC as receiver for Citizens National Bank and Strategic Capital Bank (alleging an unspecified amount in damages against all defendants). In this action, the appellate court reinstated claims previously dismissed on statute of limitations grounds, and petitions for rehearing and certiorari to the U.S. Supreme Court were denied. In May 2022, the FDIC voluntarily dismissed its claim with respect to one of the RMBS offerings and Deutsche Bank filed a motion for summary judgment seeking dismissal of the remaining claim. Deutsche Bank's motion has been fully briefed as of July 2022. Discovery is stayed pending resolution of Deutsche Bank's motion.

Deutsche Bank is a defendant in cases concerning two RMBS trusts that were brought initially by RMBS investors and subsequently by HSBC, as trustee, in New York state court. The cases allege breaches of Deutsche Bank's purported duty to notify the trustee of breaches of loan-level representations and warranties in the ACE Securities Corp. 2006-FM1 and ACE Securities Corp. 2007-ASAP1 RMBS offerings, respectively. The cases originally asserted claims against Deutsche Bank for breaches of representations and warranties, but those claims were dismissed as untimely, and the appellate court affirmed in April 2019. Discovery is ongoing.

In October 2019, plaintiffs filed two complaints (one by HSBC as trustee and one by certificate holders) seeking to revive, under Section 205(a) of the New York Civil Practice Law and Rules, the untimely breach of representations and warranties claims as to which dismissal was affirmed in the case concerning ACE Securities Corp. 2006-FM1. The trial court dismissed the certificate holder action, and the First Department affirmed in 2022. The certificate holders filed a motion for leave to appeal to the Court of Appeals, which was denied on February 20, 2024. The trial court also dismissed the trustee revival action filed by HSBC. In November 2022, HSBC filed an appeal, which it ultimately withdrew on March 18, 2024.

In the actions against Deutsche Bank solely as an underwriter of other issuers' RMBS offerings, Deutsche Bank has contractual rights to indemnification from the issuers, but those indemnity rights may in whole or in part prove effectively unenforceable where the issuers are now or may in the future be in bankruptcy or otherwise defunct.

Mortgage-Related and Asset-Backed Securities – Trustee Civil Litigation. Deutsche Bank's U.S. subsidiaries Deutsche Bank National Trust Company (DBNTC) and DBTCA (collectively, the "Trustees") are defendants in two separate civil lawsuits, and DBNTC is a defendant in a third civil lawsuit, brought by investors concerning the Trustees' role as trustees of certain RMBS trusts. The actions generally allege claims for breach of contract, breach of fiduciary duty, breach of the duty to avoid conflicts of interest, negligence and/or violations of the U.S. Trust Indenture Act of 1939, based on the Trustees' alleged failure to perform adequately certain obligations and/or duties as trustee for the trusts.

The three lawsuits include actions by (a) the National Credit Union Administration Board (NCUA), as an investor in 18 trusts that allegedly suffered total realized collateral losses of more than U.S. $ 3.7 billion; (b) Commerzbank AG, as an investor in 50 RMBS trusts, alleging hundreds of millions of dollars in losses; and (c) IKB International, S.A. in liquidation and IKB Deutsche Industriebank A.G. (collectively, "IKB"), as an investor in 12 RMBS trusts, originally seeking more than U.S. $ 268 million of damages before IKB voluntarily discontinued its claims as to certain RMBS certificates. In the NCUA case, DBNTC's motion to dismiss the amended complaint was granted in part and denied in part, dismissing NCUA's tort claims but preserving its breach-of-contract claims. Both parties filed motions for partial summary judgment, and those motions are fully briefed and pending before the court. In February 2022, the court in the Commerzbank case granted in part and denied in part DBNTC's and DBTCA's motion for summary judgment, dismissing all of the tort claims and dismissing the breach of contract claims relating to certain of the trusts, and denied Commerzbank's motion for summary judgment in its entirety. A second round of summary judgment briefing was completed on January 23, 2025. In January 2021, the court in the IKB case granted in part and denied in part the Trustees' motion to dismiss, dismissing certain of IKB's claims but allowing certain of its breach of contract and tort claims to go forward; the Trustees appealed certain aspects of that order, and IKB cross-appealed with respect to other aspects. In August 2022, the New York Supreme Court, Appellate Division, First Department, affirmed in part and reversed in part the trial court's order on the motion to dismiss. DBNTC and DBTCA appealed certain aspects of the First Department's decision. In June 2023, the New York Court of Appeals modified the First Department's decision in part, dismissing certain additional contract claims and IKB's remaining tort claims. The operative scheduling order contemplates that summary judgment briefing will be completed by March 20, 2025.

The Group has established contingent liabilities with respect to certain of these matters, but the Group has not disclosed the amounts because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these matters.

Polish Mortgage Matters. Starting in 2016, certain clients of Deutsche Bank Polska S.A. have reached out to Deutsche Bank Polska S.A. alleging that their mortgage loan agreements in foreign currency include unfair clauses and are invalid. These clients have demanded reimbursement of the alleged overpayments under such agreements totaling over € 864 million with over 6,645 civil claims having been commenced in Polish courts as of December 31, 2024. These cases are an industry-wide issue in Poland and other banks are facing similar claims. Deutsche Bank Polska S.A. has and will take necessary legal actions to defend itself and challenge such claims in courts.

During 2023, there was a deterioration in the risk profile with respect to the Polish FX mortgage portfolio, especially following an adverse decision by the European Court of Justice on June 15, 2023, which affected the broader Polish banking sector. In addition, the bank refined its model for estimating the provision in the third quarter of 2023 for the expected development of court verdicts and other market parameters.

During the fourth quarter of 2024, as part of the annual model review and quarterly provisioning review, the Bank refined the model-based estimate with additional data points (e.g., latest claim information, loss ratio, court settlements as well as expected number of claims), which resulted in an increase in the provision of € 317 million in the fourth quarter of 2024. For the year ended December 31, 2024, the provision increased by € 475 million, resulting in a total portfolio provision for CHF and EUR mortgage cases of € 895 million as of December 31, 2024 compared to € 534 million as of December 31, 2023.

Postbank Voluntary Public Takeover Offer. In September 2010, Deutsche Bank announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG ("Postbank"). On October 7, 2010, Deutsche Bank published its official takeover offer and offered Postbank shareholders a consideration of € 25 for each Postbank share. This offer was accepted for a total of approximately 48.2 million Postbank shares.

Several former shareholders of Postbank who had accepted the takeover offer brought claims against Deutsche Bank alleging that the offer price was too low. The plaintiffs allege that Deutsche Bank had been obliged to make a mandatory takeover offer for all shares in Postbank, at the latest, in 2009. Based thereon, the plaintiffs allege that the consideration offered by Deutsche Bank for the shares in Postbank needed to be raised to € 57.25 or even € 64.25 per share.

The claims for payment against Deutsche Bank in relation to these matters originally amounted to almost € 700 million (excluding interest, which would be significant due to the long duration of the proceedings).

At the end of April 2024, the Higher Regional Court of Cologne indicated in a hearing that it may find these claims valid in a later ruling. As a consequence, Deutsche Bank recognized a provision of € 1.3 billion in the second quarter of 2024 to provide for the amount of all pending claims and cumulative interest.

In the third quarter of 2024, Deutsche Bank reached settlement agreements as regards more than 60 % of the plaintiff claims by value in the litigation (calculated based on the asserted shareholdings) which resulted in a partial release of the original provision. As of December 31, 2024 a provision of € 550 million remains in place for the outstanding plaintiff claims as of December 31, 2024.

On October 23, 2024, the Higher Regional Court of Cologne handed down its judgment in the remaining lead case and fully granted the plaintiffs' claims. The court did not grant a further leave to appeal to the Federal Court of Justice (BGH). On November 19, 2024, Deutsche Bank filed a complaint against the denial of leave to appeal with the BGH.

The legal question of whether Deutsche Bank had been obliged to make a mandatory takeover offer for all Postbank shares prior to its 2010 voluntary takeover may impact two pending appraisal proceedings *(Spruchverfahren)*. These proceedings were initiated by former Postbank shareholders with the aim to increase the cash compensation of € 35.05 paid in connection with the squeeze-out of Postbank shareholders in 2015 and the cash compensation of € 25.18 offered and annual compensation of € 1.66 paid in connection with the execution of a domination and profit and loss transfer agreement *(Beherrschungs- und Gewinnabführungsvertrag)* between DB Finanz-Holding AG (now DB Beteiligungs-Holding GmbH) and Postbank in 2012. The compensation of € 25.18 in connection with the domination and profit and loss transfer agreement was accepted for approximately 0.5 million Postbank shares. The compensation of € 35.05 paid in connection with the squeeze-out in 2015 was relevant for approximately 7 million Postbank shares.

The applicants in the appraisal proceedings claim that a potential obligation of Deutsche Bank to make a mandatory takeover offer for Postbank at an offer price of at least € 57.25 should be decisive when determining the adequate cash compensation in the appraisal proceedings. The Regional Court Cologne had originally followed this legal view of the applicants in two resolutions. In a decision dated June 2019, the Regional Court Cologne expressly gave up this legal view in the appraisal proceedings in connection with the execution of a domination and profit and loss transfer agreement. According to this decision, the question whether Deutsche Bank was obliged to make a mandatory offer for all Postbank shares prior to its voluntary takeover offer in 2010 shall not be relevant for determining the appropriate cash compensation. It is likely that the Regional Court Cologne will take the same legal position in the appraisal proceedings in connection with the squeeze-out.

On October 1, 2020, the Regional Court Cologne handed down a decision in the appraisal proceeding concerning the domination and profit and loss transfer agreement (dated December 5, 2012) according to which the annual compensation pursuant to Sec. 304 of the German Stock Corporation Act *(jährliche Ausgleichszahlung)* shall be increased by € 0.12 to € 1.78 per Postbank share and the settlement amount pursuant to Sec. 305 of the German Stock Corporation Act *(Abfindungsbetrag)* shall be increased by € 4.56 to € 29.74 per Postbank share. The increase of the settlement amount is of relevance for approximately 0.5 million former Postbank shares whereas the increase of the annual compensation is of relevance for approximately 7 million former Postbank shares. Deutsche Bank as well as the applicants have lodged an appeal against this decision.

The Group has not disclosed whether it has established a provision or contingent liability with respect to the appraisal proceedings because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

RusChemAlliance Litigation. In June 2023, RusChemAlliance LLC ("RCA"), a Russian joint venture of Gazprom PJSC and RusGasDobycha JSC, filed a claim against Deutsche Bank before a commercial state court in Saint Petersburg seeking payment of approximately € 238 million plus interest under an advance payment guarantee ("APG") issued by Deutsche Bank in 2021 at the request of one of its clients. RCA’s payment demand under the APG was rejected by Deutsche Bank due to the imposition of EU sanctions against Russia. At the end of May 2024, the Russian court fully granted RCA's payment claim and RCA's motion for interim measures by which a corresponding amount in Deutsche Bank's Russian subsidiary was frozen as the Russian courts do not recognize the applicability of the EU sanctions. Deutsche Bank’s appeals against this decision were dismissed in September 2024 and January 2025, respectively.

On October 23, 2024, upon application by RCA, the Russian court granted an anti-suit injunction (“ASI”) order against Deutsche Bank prohibiting Deutsche Bank from continuing any court proceedings outside of Russia related to this issue or enforcing any judgments or orders granted by a court outside of Russia under a threat of a court penalty of € 240 million in case of non-compliance with the ASI. Deutsche Bank complied with the ASI order in November 2024. Deutsche Bank’s appeal against the ASI order was dismissed in January 2025.

Deutsche Bank initially recognized a provision in the amount of € 260 million and a corresponding reimbursement asset under an indemnification agreement in 2023. The expense from the recognition of the provision was offset by the income from the initial recognition of the reimbursement asset. On November 15, 2024, RCA enforced its payment claim in an amount of € 244 million including interest payable against assets of Deutsche Bank maintained in Russia. After enforcement by RCA, which was covered by the provision, subsequent developments led to a de-recognition of the indemnification asset as receipt of payment can no longer be viewed as virtually certain. Deutsche Bank is of the opinion that it is in possession of a valid indemnification claim and will defend its position in court.

Sovereign, Supranational and Agency Bonds (SSA) Investigations and Litigations. Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to SSA bond trading. Deutsche Bank is cooperating with these investigations.

On May 24, 2023, the UK Competition and Markets Authority (CMA) sent a statement of objections to Deutsche Bank regarding a potential breach of United Kingdom antitrust rules in relation to the sale, secondary market trading and buy-back auctions of United Kingdom government bonds, which includes Gilts and Gilt asset swaps, between 2009 and 2013. Deutsche Bank proactively cooperated with the CMA in this matter and as a result was granted full provisional immunity. On February 21, 2025, the CMA issued its final decisions against Deutsche Bank and four other banks in relation to this investigation, finding breaches of UK antitrust rules on specific dates in the period 2009 to 2013. No fine was imposed on Deutsche Bank as the CMA confirmed it had full immunity as it has alerted the CMA to this matter.

On November 22, 2023, the European Commission announced its decision that Deutsche Bank and one other bank in the past breached EU antitrust rules in relation to secondary market trading of Euro-denominated SSA bonds, and to a very limited extent government guaranteed bonds. Deutsche Bank has proactively cooperated with the European Commission in this matter and, as a result, has been granted full immunity. In accordance with the European Commission’s guidelines, no financial penalty was imposed on Deutsche Bank. The timeframe of the alleged infringement ended in 2016.

Deutsche Bank is a defendant in a putative class action filed on June 16, 2023 in the U.S. District Court for the SDNY by alleged direct market participants claiming a violation of antitrust law related to alleged manipulation of the secondary trading market for United Kingdom government bonds. The complaint seeks treble damages and attorneys’ fees. On September 13, 2024, the Court granted Deutsche Bank’s motion to dismiss the complaint for failure to state a claim. The plaintiff must seek leave of the Court to amend the complaint or the case will be dismissed with prejudice.

Deutsche Bank was named as a defendant in a putative class action filed in December 2022 in the U.S. District Court for the SDNY by alleged direct market participants claiming a violation of antitrust law related to alleged manipulation of the secondary trading market for Euro-denominated Sovereign bonds. On August 26, 2024, the Court granted Deutsche Bank's motion to dismiss the complaint for failure to state a claim. On September 11, 2024, the Court entered an order dismissing the case with prejudice.

Deutsche Bank is also a defendant in putative class actions filed in 2017 in the Ontario Superior Court of Justice and Federal Court of Canada, respectively, claiming violations of antitrust law and the common law relating to alleged manipulation of secondary trading of SSA bonds. The complaints seek compensatory and punitive damages. On July 20, 2022, Deutsche Bank entered into a national settlement agreement that would resolve the Canadian Federal SSA claim against all Deutsche Bank defendants. The Federal Court of Canada approved the settlement on November 15, 2024.

Deutsche Bank was named as a defendant in a consolidated putative class action filed in the U.S. District Court for the SDNY alleging violations of U.S. antitrust law and a claim for unjust enrichment relating to Mexican government bond trading. Defendants' motion to dismiss plaintiffs' consolidated amended complaint was granted without prejudice. Plaintiffs filed a second amended complaint naming only Mexico-based defendants, which was also dismissed without prejudice. Plaintiffs appealed to the Second Circuit, and on February 9, 2024, the dismissal of the complaint was reversed. Plaintiffs filed a further amended complaint on June 12, 2024. Defendants filed a motion to dismiss on July 29, 2024, and plaintiffs filed their opposition on September 13, 2024. On January 15, 2025, the Court denied Defendants' motion to dismiss. The case will now proceed to discovery.

Other than as noted above, the Group has not disclosed whether it has established provisions or contingent liabilities with respect to the matters referred to above because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

U.S. Treasury Securities Investigations. Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to U.S. Treasuries auctions, trading, and related market activity. Deutsche Bank has cooperated with these investigations.

Deutsche Bank Securities Inc., the bank's primary U.S. broker-dealer subsidiary (DBSI), was a defendant in several putative class actions alleging violations of U.S. antitrust law, the U.S. Commodity Exchange Act and common law related to the alleged manipulation of the U.S. Treasury securities market. These cases have been consolidated in the SDNY. In 2017, the court dismissed DBSI from the class action without prejudice. Defendants filed a motion to dismiss a second amended complaint, which was granted. On April 28, 2022, Plaintiffs filed a notice of appeal. On February 1, 2024, the Second Circuit issued a decision affirming the district court's judgment dismissing the second amended complaint.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

U.S. Treasury Spoofing Litigation. Five separate putative class actions have been filed in the Northern District of Illinois against Deutsche Bank AG and DBSI. The cases allege that Deutsche Bank and other unnamed entities participated in a scheme from January to December 2013 to spoof the market for Treasuries futures and options contracts and Eurodollar futures and options contracts. Following briefing on a motion to dismiss, the judge ordered supplemental briefing on the issues of standing and jurisdictional discovery, which has now been substantially completed. Plaintiffs filed an amended complaint and then a further, second amended complaint. Deutsche Bank AG and DBSI filed a motion to dismiss on September 12, 2023 and a reply on December 13, 2023. On September 30, 2024, the court requested additional briefing on standing under Article III of the U.S. Constitution, which was completed on October 21, 2024.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

28 – Credit related commitments and contingent liabilities

Irrevocable lending commitments and lending related contingent liabilities

In the normal course of business the Group regularly enters into irrevocable lending commitments, including fronting commitments as well as contingent liabilities consisting of financial and performance guarantees, standby letters of credit and indemnity agreements on behalf of its customers. Under these contracts the Group is required to perform under an obligation agreement or to make payments to the beneficiary based on third party's failure to meet its obligations. For these instruments it is not known to the Group in detail if, when and to what extent claims will be made. In the event that the Group has to pay out cash in respect of its fronting commitments, the Group would immediately seek reimbursement from the other syndicate lenders. The Group considers all the above instruments in monitoring the credit exposure and may require collateral to mitigate inherent credit risk. If credit risk management provides sufficient evidence about an expected loss from a claim, a provision is established and recorded on the balance sheet.

The following table shows the Group's revocable lending commitments, irrevocable lending commitments and lending related contingent liabilities without considering collateral or provisions. The amounts are the maximum potential utilization required by the Group in case all these liabilities entered into must be funded. The table therefore does not show the expected future cash flows required for these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

Irrevocable lending commitments and lending related contingent liabilities

in € m.	Dec 31, 2024	Dec 31, 2023
Irrevocable lending commitments	219,767	206,084
Revocable lending commitments	49,932	49,325
Contingent liabilities	73,468	65,131
Total	**343,167**	320,540

Other commitments and other contingent liabilities

The Group's other irrevocable commitments and other contingent liabilities without considering collateral or provisions were € 77.0 million as of December 31, 2024, and € 74.2 million as of December 31, 2023. The number considers the maximum potential utilization of the Group in case all these liabilities entered into must be funded. The amounts therefore do not contain the expected future cash flows from these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

Government assistance

In the course of its business, the Group regularly applies for and receives government support by means of Export Credit Agency ("ECA") guarantees covering transfer and default risks for the financing of exports and investments into Emerging Markets and to a lesser extent, developed markets for Structured Trade & Export Finance and short- and medium-term Trade Finance business. Almost all export-oriented states have established such ECAs to support their domestic exporters. The ECAs act in the name and on behalf of the government of their respective country and are either constituted directly as governmental departments or organized as private companies vested with the official mandate of the government to act on its behalf. Terms and conditions of such ECA guarantees are broadly similar due to the fact that most of the ECAs act within the scope of the Organization for Economic Cooperation and Development ("OECD") consensus rules. The OECD consensus rules, an intergovernmental agreement of the OECD member states, define benchmarks intended to ensure that a fair competition between different exporting nations will take place.

In some countries dedicated funding programs with governmental support are offered for ECA-covered financings. The Group makes use of such programs to assist its clients in the financing of exported goods and services. In certain financings, the Group also receives government guarantees from national and international governmental institutions as collateral to support financings in the interest of the respective governments. The majority of such ECA guarantees received by the Group were issued either by the Euler-Hermes S.A. acting on behalf of the Federal Republic of Germany, by the Atradius Credito y Caucion S.A. de Seguros y Reaseguros acting on behalf of the Kingdom of Spain or by the Korea Trade Insurance Corporation acting on behalf of the Republic of Korea.

Irrevocable payment commitments with regard to levies and deposit protection

Certain entities of the Group are required to make contributions to national resolution authorities or deposit protection schemes such as the European Single Resolution Fund (SRF) of the Single Resolution Board . Part of such contributions may be provided in the form of irrevocable payment commitments (IPCs) backed by cash and securities collateral.

IPCs related to the bank levy according to the Bank Recovery and Resolution Directive (BRRD), the SRF and the deposit protection provided by the German deposit protection fund amounted to € 1.5 billion as of December 31, 2024 (December 31, 2023: € 1.4 billion). Thereof € 1.0 billion of IPCs related to the SRF (December 31, 2023: € 1.0 billion) and € 0.5 billion to the German deposit protection fund (December 31, 2023: € 0.5 billion).

As of December 31, 2024, the total collateral provided for IPC consisted of€ 1.0 billion of cash collateral and € 481 million of securities collateral (December 31, 2023: € 1.4 billion and € 81 million, respectively). Thereof € 1.0 billion of cash collateral related to the SRF (December 31, 2023: € 1.0 billion).

The Group accounts for IPCs as contingent liabilities as it is not deemed probable that IPCs will be called. Also, the Group remains the economic owner of the collateral provided.

In October 2023, in a matter unrelated to the Group, the General Court of the EU handed down a judgement which supported the SRB in its view that in case an entity that no longer falls within the scope of the Single Resolution Mechanism, its IPCs are cancelled and collateral backing these commitments is only returned if the entity pays a cash contribution to the SRF at the same amount. The plaintiff filed an appeal against this judgement to the Court of Justice of the EU in January 2024. The Group is of the view that its accounting analysis for IPCs with regard to the SRF and deposit protection remains unaffected as of December 31, 2024, and continues to monitor the legal developments and their potential accounting impact.

29 – Other Short-Term Borrowings

in € m.	Dec 31, 2024	Dec 31, 2023
Other short-term borrowings:		
Commercial paper	5,954	5,497
Other	3,940	4,123
Total other short-term borrowings	**9,895**	9,620

30 – Long-Term Debt and Trust Preferred Securities

Long-Term Debt by Earliest Contractual Maturity

in € m.	Due in 2025	Due in 2026	Due in 2027	Due in 2028	Due in 2029	Due after 2029	Total Dec 31, 2024	Total Dec 31, 2023
Senior debt:								
Bonds and notes:								
Fixed rate	14,134	13,514	12,286	9,531	10,493	11,456	71,414	72,656
Floating rate	2,058	1,442	2,768	823	494	3,611	11,196	9,028
Other	1,554	1,545	881	1,469	939	14,190	20,578	26,394
Subordinated debt:								
Bonds and notes:								
Fixed rate	2,883	2,000	2,436	0	0	4,307	11,626	11,163
Floating rate	0	0	0	0	0	0	0	0
Other	0	42	20	0	0	22	85	149
Total long-term debt	20,628	18,543	18,391	11,823	11,926	33,587	114,899	119,390

The Group did not have any defaults of principal, interest or other breaches with respect to its liabilities in 2024 and 2023.

Trust Preferred Securities[1]

in € m.	Dec 31, 2024	Dec 31, 2023
Fixed rate	0	0
Floating rate	287	289
Total trust preferred securities	**287**	289

[1] Perpetual instruments, redeemable at specific future dates at the Group's option.

31 – Maturity Analysis of the earliest contractual undiscounted cash flows of Financial Liabilities

Dec 31, 2024

in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	177,915	0	0	0	0
Interest bearing deposits	198,045	159,292	112,543	16,012	10,422
Trading liabilities[1]	43,498	0	0	0	0
Negative market values from derivative financial instruments[1]	276,410	0	0	0	0
Financial liabilities designated at fair value through profit or loss	30,224	35,024	5,943	13,767	8,373
Investment contract liabilities[2]	0	0	454	0	0
Negative market values from derivative financial instruments qualifying for hedge accounting[3]	0	978	614	27	57
Central bank funds purchased	1,227	0	0	0	0
Securities sold under repurchase agreements	407	1,143	182	1,089	25
Securities loaned	2	0	0	0	0
Other short-term borrowings	1,487	5,767	2,862	0	0
Long-term debt	0	7,119	18,030	70,602	36,195
Trust preferred securities	0	0	302	0	0
Lease liabilities	3	157	454	1,933	3,116
Other financial liabilities	72,780	1,076	1,059	1,829	87
Off-balance sheet loan commitments	212,990	0	0	0	0
Financial guarantees	32,368	0	0	0	0
Total[4]	1,047,356	210,557	142,443	105,258	58,275

[1] Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within "on demand" which Group's management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods

[2] These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value

[3] Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate

[4] The balances in the table do not agree to the numbers in the Group's balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote

Dec 31, 2023

in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	187,078	0	0	0	0
Interest bearing deposits	162,650	150,427	107,907	13,432	10,627
Trading liabilities[1]	44,005	0	0	0	0
Negative market values from derivative financial instruments[1]	238,278	0	0	0	0
Financial liabilities designated at fair value through profit or loss	26,521	41,868	4,862	7,438	5,064
Investment contract liabilities[2]	0	0	484	0	0
Negative market values from derivative financial instruments qualifying for hedge accounting[3]	0	132	24	18	60
Central bank funds purchased	1,057	1	0	0	0
Securities sold under repurchase agreements	373	659	317	790	48
Securities loaned	3	0	0	0	0
Other short-term borrowings	1,566	5,338	2,910	0	0
Long-term debt	26	17,475	18,342	69,773	30,692
Trust preferred securities	0	0	307	0	0
Lease liabilities	16	230	589	1,816	3,331
Other financial liabilities	90,041	1,342	1,954	509	62
Off-balance sheet loan commitments	197,337	0	0	0	0
Financial guarantees	29,113	0	0	0	0
Total[4]	978,064	217,470	137,696	93,775	49,883

[1] Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within "on demand" which Group's management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods

[2] These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value

[3] Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate

[4] The balances in the table do not agree to the numbers in the Group's balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote

Additional Notes

32 – Common Shares

Common Shares

Deutsche Bank's share capital consists of common shares issued in registered form without par value. Under German law, each share represents an equal stake in the subscribed capital. Therefore, each share has a nominal value of € 2.56, derived by dividing the total amount of share capital by the number of shares.

Number of shares	Issued and fully paid	Treasury shares	Outstanding
Common shares, January 1, 2023	2,066,773,131	(28,931,618)	2,037,841,513
Shares issued under share-based compensation plans	0	0	0
Capital increase	0	0	0
Common shares cancelled	(26,530,172)	26,530,172	0
Shares purchased for treasury	0	(81,868,366)	(81,868,366)
Shares sold or distributed from treasury	0	36,074,703	36,074,703
Common shares, December 31, 2023	2,040,242,959	(48,195,109)	1,992,047,850
Shares issued under share-based compensation plans	0	0	0
Capital increase	0	0	0
Common shares cancelled	(45,541,366)	45,541,366	0
Shares purchased for treasury	0	(86,796,707)	(86,796,707)
Shares sold or distributed from treasury	0	39,874,612	39,874,612
Common shares, December 31, 2024	1,994,701,593	(49,575,838)	1,945,125,755

There are no issued ordinary shares that have not been fully paid.

The Group has bought back shares pursuant to share buyback authorizations by the Annual General Meetings. All such transactions were recorded in shareholders' equity and no revenues and expenses were recorded in connection with these activities. Treasury stock held as of year-end will mainly be used for cancellation with the purpose of distributing capital to shareholders as well as for future share-based compensation.

Authorized Capital

The Management Board is authorized to increase the share capital by issuing new shares for cash consideration. As of December 31, 2024, Deutsche Bank AG had authorized but unissued capital of € 2,560,000,000 which may be issued in whole or in part until April 30, 2026. Further details are governed by Section 4 of the Articles of Association.

Authorized capital	Consideration	Pre-emptive rights	Expiration date
€ 512,000,000	Cash	May be excluded pursuant to Section 186 (3) sentence 4 of the Stock Corporation Act and may be excluded in so far as it is necessary to grant pre-emptive rights to the holders of option rights, convertible bonds, and convertible participatory rights	April 30, 2026
€ 2,048,000,000	Cash	May be excluded in so far as it is necessary to grant pre-emptive rights to the holders of option rights, convertible bonds, and convertible participatory rights.	April 30, 2026

Conditional Capital

Deutsche Bank has no outstanding conditional capital as of December 31, 2024.

Dividends

The following table presents the amount of dividends proposed or declared for the years ended December 31, 2024, 2023 and 2022, respectively.

	2024 (proposed)	2023	2022
Cash dividends declared (in €)	1,312,959,884	882,615,288	609,934,751
Cash dividends declared per common share (in €)	0.68	0.45	0.30

No dividends have been declared since the balance sheet date.

33 – Employee Benefits

Share-Based Compensation Plans

The Group made grants of share-based compensation under the Deutsche Bank Equity Plan. This plan represents a contingent right to receive Deutsche Bank common shares after a specified period of time. The award recipient is not entitled to receive dividends during the vesting period of the award.

The share awards granted under the terms and conditions of the Deutsche Bank Equity Plan may be forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period (or release period for Upfront Awards). Vesting usually continues after termination of employment in cases such as redundancy or retirement. Deferred share awards are subject to forfeiture provisions and performance conditions until release.

In countries where legal or other restrictions hinder the delivery of shares, a cash plan variant of the Deutsche Bank Equity Plan was used for granting awards, and for employees of certain legal entities, deferred equity is replaced with restricted shares due to local regulatory requirements.

Please note that this table does not cover awards granted to the Management Board. For awards granted under the DWS Equity Plan, please refer to the DWS Share-Based Compensation Plans section.

The following table sets forth the basic terms of these share plans:

Grant year(s)	Deutsche Bank Equity Plan	Vesting schedule	Eligibility
2022-2024[4]	Annual Award	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation (CB/IB/CRU and InstVV MRTs)[2]
	Annual Award	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-CB/IB/CRU)[2]
	Annual Award	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Select employees as annual performance-based compensation (Senior Management)
	Retention/New Hire	Individual specification	Select employees to attract and retain the best talent
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
	Annual Award – Upfront	Vesting immediately at grant[3]	Selected employees
2019-2021[4]	Annual Award	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation (CB/IB/CRU and InstVV MRTs in an Material Business Unit)[2]
	Annual Award	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-CB/IB/CRU)[2]
	Annual Award	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Select employees as annual performance-based compensation (Senior Management)
	Retention/New Hire/Off-Cycle [5]	Individual specification	Select employees to attract and retain the best talent
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
	Annual Award – Upfront	Vesting immediately at grant[3]	Regulated employees
2017-2018[4]	Annual Award	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation
		Or cliff vesting after 54 months[1]	Members of Senior Leadership Cadre
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
	Retention/New Hire/Off-Cycle	Individual specification	Select employees to attract and retain the best talent

[1] For InstVV-regulated employees (and Senior Management) a further retention period of twelve months applies (six months for awards granted from 2017-2018)
[2] For grant year 2019 divisions were called CIB, for grant years 2020 and 2021 CIB is split into CB/IB/CRU
[3] Share delivery takes place after a further retention period of twelve months
[4] Annual and Retention/New Hire awards include grants made under the Restricted Share Plan from 2018-2024
[5] Off-Cycle awards granted up to 2020.

Furthermore, the Group offers a broad-based employee share ownership plan entitled Global Share Purchase Plan. The Global Share Purchase Plan offers employees in specific countries the opportunity to purchase Deutsche Bank shares in monthly installments over one year. At the end of the purchase cycle, the Group matches the acquired stock in a ratio of one to one up to a maximum of ten free shares, provided that the employee remains at Deutsche Bank Group for another year. In total, 10,978 staff from 20 countries enrolled in the cycle that began in November 2024.

The Group has other local share-based compensation plans, none of which, individually or in the aggregate, are material to the consolidated financial statements.

The following table sets out the movements in share award units, including grants under the cash plan variant of the Deutsche Bank Equity Plan.

Share units (in thousands)	2024	2023
Balance outstanding as of January 01	**128,627**	127,528
Granted	41,167	50,930
Released	(50,015)	(44,963)
Forfeited	(3,491)	(4,565)
Other movements	300	(302)
Balance outstanding as of December 31	**116,588**	128,627

The following table sets out key information regarding awards granted, released and remaining in the year.

	2024			2023		
	Weighted average fair value per award granted in year	Weighted average share price at release in year	Weighted average remaining contractual life in years	Weighted average fair value per award granted in the year	Weighted average share price at release in year	Weighted average remaining contractual life in years
DB Equity Plan	€ 10.30	€ 12.92	1.4	€ 9.85	€ 11.51	1.5

Share-based payment transactions resulting in a cash payment give rise to a liability, which amounted to approximately € 14 million and € 12 million for the years ended December 31, 2024 and 2023, respectively.

The grant volume of outstanding share awards was approximately € 1.0 billion and € 1.1 billion as of December 31, 2024 and 2023, respectively. Thereof, approximately € 0.8 billion and € 0.8 billion had been recognized as compensation expense in the reporting year or prior to that. Hence, compensation expense for deferred share-based compensation not yet recognized amounted to approximately € 0.2 billion and € 0.3 billion as of December 31, 2024 and 2023, respectively.

DWS Share-Based Compensation Plans

The DWS Group made grants of share-based compensation under the DWS Equity Plan. This plan represents a contingent right to receive a cash payment by referencing to the value of DWS shares during a specified time period.

In September 2018 one-off IPO related awards under the DWS Stock Appreciation Rights (SAR) Plan were granted to all DWS employees. A limited number of DWS senior managers were granted a one-off IPO-related Performance Share Unit under the DWS Equity Plan instead. For members of the Executive Board, one-off IPO-related awards under the DWS Equity Plan were granted in January 2019.

The DWS Stock Appreciation Rights Plan represents a contingent right to receive a cash payment equal to any appreciation (or gain) in the value of a set number of notional DWS shares over a fixed period of time. This award does not provide any entitlement to receive DWS shares, voting rights or associated dividends.

The DWS Equity Plan is a phantom share plan representing a contingent right to receive a cash payment by referencing to the value of DWS shares during a specified period of time.

The award recipient for any share-based compensation plan is not entitled to receive dividends during the vesting period of the award.

The share awards granted under the terms and conditions of any share-based compensation plan are forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period (or the end of the retention period for Upfront Awards). Vesting usually continues after termination of employment in cases such as redundancy or retirement.

The following table sets forth the basic terms of the DWS share-based plans:

Grant year(s)	Award Type	Vesting schedule	Eligibility
2023 - 2024	Annual Awards	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation (InstVV MRTs)
	Annual Awards	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-InstVV MRTs)
	Annual Awards (Senior Management)	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Members of the Executive Board
	Annual Award - Upfront	Vesting immediately at grant[1]	Regulated employees
	Retention/New Hire[4]	Individual specification	Select employees to attract and retain the best talent
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
2022	Annual Awards	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation (InstVV MRTs)
	Annual Awards	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-InstVV MRTs)
	Annual Awards (Senior Management)	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Members of the Executive Board
	Retention/New Hire[4]	Individual specification	Select employees to attract and retain the best talent
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
2021	Annual Awards	1/4: 12 months[1] 1/4: 24 months[1] 1/4: 36 months[1] 1/4: 48 months[1]	Select employees as annual performance-based compensation (InstVV MRTs)
	Annual Awards	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-InstVV MRTs)
	Annual Awards (Senior Management)	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Members of the Executive Board
	Retention/New Hire/Off-Cycle [4]	Individual specification	Select employees to attract and retain the best talent
2020	Annual Awards	1/3: 12 months[1] 1/3: 24 months[1] 1/3: 36 months[1]	Select employees as annual performance-based compensation (non-InstVV MRTs)
	Annual Awards (Senior Management)	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Members of the Executive Board
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
2019	Annual Awards (Senior Management)	1/5: 12 months[1] 1/5: 24 months[1] 1/5: 36 months[1] 1/5: 48 months[1] 1/5: 60 months[1]	Members of the Executive Board
	Performance Share Unit Award (one-off IPO related award granted in 2019)	1/3: March 2022[1] 1/3: March 2023[1] 1/3: March 2024[1]	Members of the Executive Board
2018	Performance Share Unit Award (one-off IPO related award)[1]	1/3: March 2022[1] 1/3: March 2023[1] 1/3: March 2024[1]	Select Senior Managers
	SAR Award (one-off IPO related award)	For non-MRTs: 1 June 2021[3] For MRTs: 1 March 2023[1,3]	all DWS employees [2]

[1] Depending on their individual regulatory status, a six month retention period (AIFMD/UCITS MRTs) or a twelve month retention period (InstVV, or IFD MRTs starting from 2023) applies after vesting
[2] Unless the employee received Performance Share Unit Award
[3] For outstanding awards, a 4-year exercise period applies following vesting/retention period
[4] Off-Cycle awards to non-InstVV regulated employees only

The following table sets out the movements in share award units.

	DWS Equity Plan		DWS SAR Plan			
	2024	2023	2024		2023	
Share units (in thousands)	Number of Awards	Number of Awards	Number of Awards	Weighted-average exercise price	Number of Awards	Weighted-average exercise price
Outstanding at beginning of year	2,377	2,329	735	€ 24.65	887	€ 24.65
Granted	938	1,213	35	€ 22.33	0	-
Issued or Exercised	(1,342)	(1,101)	(369)	€ 24.35	(122)	€ 24.65
Forfeited	(41)	(86)	0	-	(10)	€ 24.65
Expired	0	0	(18)	€ 23.40	(18)	€ 24.65
Other Movements	86	22	(16)	€ 22.33	(1)	€ 24.65
Outstanding at end of year	2,017	2,377	367	€ 22.33	735	€ 24.65
Of which, exercisable	0	0	367	€ 22.33	695	€ 24.65

The following table sets out key information regarding awards granted, released and remaining in the year.

	2024			2023		
	Weighted average fair value per award granted in year	Weighted average share price at release/ exercise in year	Weighted average remaining contractual life in years	Weighted average fair value per award granted in the year	Weighted average share price at release/ exercise in year	Weighted average remaining contractual life in years
DWS Equity Plan	€ 31.59	€ 35.79	1.4	€ 25.40	€ 31.33	1.4
DWS SAR Plan	€ 13.40	€ 38.78	0.8	n/a	€ 31.64	1.9

The fair value of outstanding share-based awards was approximately € 74 million and € 72 million as of December 31, 2024 and 2023, respectively. Of the awards, approximately € 63 million and € 62 million has been recognized in the income statement up to the period ending 2024 and 2023 respectively, of which € 40 million and € 42 million as of December 31, 2024 and 2023 relate to fully vested awards. Total unrecognized expense related to share-based plans was approximately € 12 million and € 9 million as of December 31, 2024 and 2023 respectively, dependent on future share price development.

The fair value of the DWS Stock Appreciation Rights Plan awards have been measured using the generalized Black-Scholes model. The liabilities incurred are re-measured at the end of each reporting period until settlement. The principal inputs being the market value on reporting date, discounted for any dividends foregone over the holding periods of the award, and adjustment for expected and actual levels of vesting which includes estimating the number of eligible employees leaving the Group and number of employees eligible for early retirement. The inputs used in the measurement of the fair values at grant date and measurement date were as follows.

	Measurement date Dec 31, 2024	Measurement date Dec 31, 2023
Units (in thousands)	367	735
Fair value	€ 17.72	€ 10.81
Share price	€ 39.80	€ 34.80
Exercise price	€ 22.33	€ 24.65
Expected volatility (weighted-average)	33%	32%
Expected life (weighted-average) in years	0.8	1.9
Expected dividends (% of income)	65%	88%

Given there is no liquid market for implied volatility of DWS shares, the calculation of DWS share price volatility is based on 5-year historical data for DWS and a comparable peer group.

Post-employment Benefit Plans

Nature of Plans

The Group sponsors a number of post-employment benefit plans on behalf of its employees, both defined contribution plans and defined benefit plans. The Group's plans are accounted for based on the nature and substance of the plan. Generally, for defined benefit plans the value of a participant's accrued benefit is based on each employee's remuneration and length of service; contributions to defined contribution plans are typically based on a percentage of each employee's remuneration. The rest of this note focuses predominantly on the Group's defined benefit plans.

The Group's defined benefit plans are primarily described on a geographical basis, reflecting differences in the nature and risks of benefits, as well as in the respective regulatory environments. In particular, the requirements set by local regulators can vary significantly and determine the design and financing of the benefit plans to a certain extent. Key information is also shown based on participant status, which provides a broad indication of the maturity of the Group's obligations.

					Dec 31, 2024
in € m.	Germany	UK	U.S.	Other	Total
Defined benefit obligation related to					
Active plan participants	3,084	272	229	715	4,300
Participants in deferred status	1,805	1,321	526	84	3,736
Participants in payment status	5,075	1,210	461	229	6,975
Total defined benefit obligation	9,964	2,803	1,216	1,028	15,011
Fair value of plan assets	10,237	3,678	1,050	1,141	16,106
Funding ratio (in %)	103 %	131 %	86 %[1]	111 %	107 %

[1] US Total defined benefit obligation is inclusive of the unfunded US Medicare Plan (€ 120 million) in addition to defined benefit pension plans. The US defined benefit pension funding ratio excluding Medicare is 96 %

					Dec 31, 2023
in € m.	Germany	UK	U.S.	Other	Total
Defined benefit obligation related to					
Active plan participants	3,301	300	215	661	4,477
Participants in deferred status	1,926	1,450	509	87	3,972
Participants in payment status	5,277	1,276	448	231	7,232
Total defined benefit obligation	10,504	3,026	1,172	979	15,681
Fair value of plan assets	10,532	3,912	1,003	1,071	16,518
Funding ratio (in %)	100 %	129 %	86 %[1]	109 %	105 %

[1] US Total defined benefit obligation is inclusive of the unfunded US Medicare Plan (€ 119 million) in addition to defined benefit pension plans. The US defined benefit pension funding ratio excluding Medicare is 95 %

The majority of the Group's defined benefit plan obligations relate to Germany, the United Kingdom and the United States. Within the other countries, the largest obligation relates to Switzerland. In Germany and some continental European countries, post-employment benefits are usually agreed on a collective basis with respective employee workers councils, unions or their equivalent. The Group's main pension plans are governed by boards of trustees, fiduciaries or their equivalent.

Post-employment benefits can form an important part of an employee's total remuneration. The Group's approach is that their design shall be attractive to employees in the respective market, but sustainable for the Group to provide over the longer term. At the same time, the Group tries to limit its risks related to provision of such benefits. Consequently, the Group has moved to offer defined contribution plans in many locations over recent years.

In the past the Group typically offered pension plans based on final pay prior to retirement. These types of benefits still form a significant part of the pension obligations for participants in deferred and payment status. Currently, in Germany and the United States, the main defined benefit pension plans for active staff are cash account type plans where the Group credits an annual amount to individual accounts based on an employee's current compensation. Dependent on the plan rules, the accounts increase either at a fixed interest rate or participate in market movements of certain underlying investments to limit the investment risk for the Group. Sometimes, in particular in Germany, there is a guaranteed benefit amount within the plan rules, e.g. payment of at least the amounts contributed. Upon retirement, beneficiaries may usually opt for a lump sum, a fixed number of annual instalments or for conversion of the accumulated account balance into a life annuity. This conversion is often based on market conditions and mortality assumptions at retirement.

The Group also sponsors retirement and termination indemnity plans in several countries, as well as some post-employment medical plans for a number of current and retired employees, mainly in the United States. The post-employment medical plans typically pay fixed percentages of medical expenses of eligible retirees after a set deductible has been met. In the United States, once a retiree is eligible for Medicare, the Group contributes to a Health Reimbursement Account and the retiree is no longer eligible for the Group's medical program. The Group's total defined benefit obligation for post-employment medical plans was € 142 million and € 145 million on December 31, 2024 and December 31, 2023, respectively. In combination with the benefit structure, these plans represent limited risk for the Group, given the nature and size of the post-retirement medical plan liabilities versus the size of the Group's balance sheet at year end 2024.

The following amounts of expected benefit payments from the Group's defined benefit plans include benefits attributable to employees' past and estimated future service and include both amounts paid from the Group's external pension trusts and paid directly by the Group in respect of unfunded plans.

in € m.	Germany	UK	U.S.	Other	Total
Actual benefit payments 2024	539	113	85	62	799
Benefits expected to be paid 2025	565	128	89	76	858
Benefits expected to be paid 2026	568	135	92	67	862
Benefits expected to be paid 2027	587	146	91	70	894
Benefits expected to be paid 2028	600	156	96	73	925
Benefits expected to be paid 2029	615	168	95	72	950
Benefits expected to be paid 2030 – 2034	3,211	911	460	377	4,959
Weighted average duration of defined benefit obligation (in years)	11	15	9	9	11

Multi-employer Plans

In Germany, the Group is a member of the BVV Versicherungsverein des Bankgewerbes a.G. (BVV) together with other financial institutions. The BVV offers retirement benefits to eligible employees in Germany as a complement to post-employment benefit promises of the Group. Both employers and employees contribute on a regular basis to the BVV. The BVV provides annuities of a fixed amount to individuals on retirement and increases these fixed amounts if surplus assets arise within the plan. According to legislation in Germany, the employer is ultimately liable for providing the benefits to its employees. An increase in benefits may also arise due to additional obligations to retirees for the effects of inflation. BVV is a multi-employer defined benefit plan. However, in line with industry practice, the Group accounts for it as a defined contribution plan since insufficient information is available to identify assets and liabilities relating to the Group's current and former employees, primarily because the BVV does not fully allocate plan assets to beneficiaries nor to member companies.

Governance and Risk

The Group maintains a Pensions Committee to oversee its pension and related risks on a global basis. This Committee meets at least quarterly and reports directly to the Senior Executive Compensation Committee.

Within this context, the Group develops and maintains guidelines for governance and risk management, including funding, asset allocation and actuarial assumption setting.

During and after acquisitions or changes in the external environment (e.g., legislation, taxation), topics such as the general plan design or potential plan amendments are considered. Any plan changes follow a process requiring approval by Group Human Resources and, above a certain threshold, also of the Pensions Committee.

Pension risk management is embedded in the Group's risk management organization, with strong focus on market risks given importance of capital market developments (e.g., interest rate, credit spread, price inflation) for the value of plan assets and liabilities, hence IFRS and regulatory capital. Risk management thereby encompasses regular measurement, monitoring and reporting of risks via specific metrics, as well as a risk control framework, e.g. via the establishment of risk limits or thresholds as applicable. Risk management activities also include the consideration, review and measurement of other financial risks, e.g. risks from demographic and other actuarial assumptions (e.g., longevity risk) but also the assessment of model, valuation and other non-financial risks.

In the Group's key pension countries, the Group's largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation and longevity, that are partially mitigated through the investment strategy adopted. To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk.

Overall, the Group seeks to minimize the impact of pensions on the Group's financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements.

Funding

The Group maintains various external pension trusts to fund the majority of its defined benefit plan obligations. The Group's funding principle is to maintain funding of the defined benefit obligation by plan assets within a range of 90 % to 100 % of the obligation, subject to meeting any local statutory requirements. The Group has also determined that certain plans should remain unfunded, although their funding approach is subject to periodic review, e.g. when local regulations or practices change. Obligations for the Group's unfunded plans are accrued on the balance sheet.

For many of the externally funded defined benefit plans there are local minimum funding requirements. The Group can decide on any additional plan contributions, with reference to the Group's funding principle. There are some locations, e.g. the United Kingdom, where the trustees and the Group jointly agree contribution levels. In most countries the Group expects to receive an economic benefit from any plan surpluses of plan assets compared to defined benefit obligations, typically by way of reduced future contributions. Given the relatively high funding level and the investment strategy adopted in the Group's key funded defined benefit plans, any minimum funding requirements that may apply are not expected to place the Group under any material adverse cash strain in the short term. With reference to the Group's funding principle, the Group considers not re-claiming benefits paid from the Group's assets as an equivalent to making cash contributions into the external pension trusts during the year.

In order to limit the extent to which the Group breached the upper end of its target funding ratio within Germany, the Group has claimed around € 520 million and € 490 million from the trust in 2024 and 2023, respectively, from the plan assets which represents the benefits paid from the Bank's assets on behalf of the trust.

For post-retirement medical plans, the Group accrues for obligations over the period of employment and pays the benefits from Group assets when the benefits become due.

Actuarial Methodology and Assumptions

December 31 is the measurement date for all plans. All plans are valued by independent qualified actuaries using the projected unit credit method. A Group policy provides guidance to ensure consistency globally on setting actuarial assumptions which are finally determined by the Group's Pensions Committee. Senior management of the Group is regularly informed of movements and changes in key actuarial assumptions.

The key actuarial assumptions applied in determining the defined benefit obligations on December 31 are presented below in the form of weighted averages.

	Dec 31, 2024				Dec 31, 2023			
	Germany	UK	U.S.[1]	Other	Germany	UK	U.S.[1]	Other
Discount rate (in %)	3.52 %	5.48 %	5.51 %	3.20 %	3.33 %	4.50 %	5.01 %	3.33 %
Rate of price inflation (in %)	2.06 %	3.46 %	2.20 %	1.60 %	2.30 %	3.42 %	2.20 %	1.84 %
Rate of nominal increase in future compensation levels (in %)	2.25 %	3.46 %	2.30 %	2.96 %	2.48 %	3.42 %	2.30 %	2.83 %
Rate of nominal increase for pensions in payment (in %)	2.06 %	3.18 %	2.20 %	0.59 %	2.77 %	3.15 %	2.20 %	0.69 %
Assumed life expectancy at age 65								
For a male aged 65 at measurement date	21.5	23.2	22.1	22.0	21.4	23.2	22.0	22.0
For a female aged 65 at measurement date	23.7	25.1	23.5	24.1	23.6	25.0	23.5	24.1
For a male aged 45 at measurement date	22.8	24.4	23.5	23.6	22.7	24.4	23.4	23.5
For a female aged 45 at measurement date	24.8	26.4	24.9	25.6	24.7	26.3	24.8	25.6
Mortality tables applied	Modified Richttafeln Heubeck 2018G	SAPS (S3) Light/ Very Light with CMI 2023 projections	PRI-2012 with MP-2021 projection	Country specific tables	Modified Richttafeln Heubeck 2018G	SAPS (S3) Light\ Very Light with CMI 2022 projections	PRI-2012 with MP-2021 projection	Country specific tables

[1] Cash balance interest crediting rate in line with the 30-year US government bond yield

For the Group's most significant pension plans in the key countries, the discount rate used at each measurement date is set based on a high quality corporate bond yield curve, which is derived using a bond universe sourced from reputable third-party market data providers, and reflects the timing, amount and currency of the future expected benefit payments for the respective plan.

In 2023, a refinement was made to the Eurozone discount curve methodology in order to better align to long term market data resulting in a benefit recognized in Other Comprehensive Income of € 70 million.

The price inflation assumptions in the Eurozone and the United Kingdom are set with reference to market measures of inflation based on inflation swap rates in those markets at each measurement date. For other countries, the price inflation assumptions are typically based on long term forecasts by Consensus Economics Inc.

The assumptions for the increases in future compensation levels and for increases to pensions in payment are developed separately for each plan, where relevant. Each is set based on the price inflation assumption and reflecting the Group's reward structure or policies in each market, as well as relevant local statutory and plan-specific requirements. In 2024, the Group introduced a refinement to the methodology for estimating increases to pensions in payment for its main German pension plan to better reflect the effects of recent short-term inflation, which resulted in a benefit recognized in Other Comprehensive Income of € 100 million.

Among other assumptions, mortality assumptions can be significant in measuring the Group's obligations under its defined benefit plans. These assumptions have been set in accordance with current best estimate in the respective countries. Future potential improvements in longevity have been considered and included where appropriate.

Reconciliation in Movement of Liabilities and Assets – Impact on Financial Statements

					2024
in € m.	Germany	UK	U.S.	Other	Total
Change in the present value of the defined benefit obligation:					
Balance, beginning of year	10,504	3,026	1,172	979	15,681
Defined benefit cost recognized in Profit & Loss					
Current service cost	119	8	7	37	171
Interest cost	343	137	58	32	570
Past service cost and gain or loss arising from settlements	14	1	0	0	15
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	(549)	(398)	(13)	13	(947)
Actuarial gain or loss arising from changes in demographic assumptions	0	10	0	3	13
Actuarial gain or loss arising from experience	71	(12)	(1)	11	69
Cash flow and other changes					
Contributions by plan participants	1	0	0	16	17
Benefits paid	(539)	(113)	(85)	(62)	(799)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	142	78	(1)	219
Other	0	2	0	0	2
Balance, end of year	9,964	2,803	1,216	1,028	15,011
thereof:					
Unfunded	0	10	139	68	217
Funded	9,964	2,793	1,077	960	14,794
Change in fair value of plan assets:					
Balance, beginning of year	10,532	3,912	1,003	1,071	16,518
Defined benefit cost recognized in Profit & Loss					
Interest income	350	177	50	34	611
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	(148)	(479)	4	34	(589)
Cash flow and other changes					
Contributions by plan participants	1	0	0	16	17
Contributions by the employer	41	0	0	36	77
Benefits paid[1]	(539)	(112)	(71)	(54)	(776)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	185	67	4	256
Other	0	0	0	1	1
Plan administration costs	0	(5)	(3)	(1)	(9)
Balance, end of year	10,237	3,678	1,050	1,141	16,106
Funded status, end of year	273	875	(166)	113	1,095
Change in irrecoverable surplus (asset ceiling)					
Balance, beginning of year	0	0	0	(102)	(102)
Interest cost	0	0	0	(1)	(1)
Changes in irrecoverable surplus	0	0	0	(9)	(9)
Exchange rate changes	0	0	0	1	1
Balance, end of year	0	0	0	(111)	(111)
Net asset (liability) recognized	273	875	(166)	2	984[2]
Fair value of reimbursement rights	0	0	0	3	3

[1] For funded plans only
[2] Thereof € 1.3 billion recognized in Other assets and € 317 million in Other liabilities

					2023
in € m.	Germany	UK	U.S.	Other	Total
Change in the present value of the defined benefit obligation:					
Balance, beginning of year	10,037	2,876	1,202	884	14,999
Defined benefit cost recognized in Profit & Loss					
Current service cost	115	9	7	33	164
Interest cost	373	137	61	35	606
Past service cost and gain or loss arising from settlements	8	2	0	(1)	9
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	387	55	39	36	517
Actuarial gain or loss arising from changes in demographic assumptions	36	(59)	0	(1)	(24)
Actuarial gain or loss arising from experience	45	55	(7)	9	102
Cash flow and other changes					
Contributions by plan participants	1	0	0	16	17
Benefits paid	(498)	(109)	(89)	(50)	(746)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	60	(41)	18	37
Other	0	0	0	0	0
Balance, end of year	10,504	3,026	1,172	979	15,681
thereof:					
Unfunded	0	9	138	72	219
Funded	10,504	3,017	1,034	907	15,462
Change in fair value of plan assets:					
Balance, beginning of year	10,351	3,768	996	962	16,077
Defined benefit cost recognized in Profit & Loss					
Interest income	387	180	50	37	654
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	247	(5)	28	28	298
Cash flow and other changes					
Contributions by plan participants	1	0	0	16	17
Contributions by the employer	44	0	40	41	125
Benefits paid[1]	(498)	(108)	(74)	(41)	(721)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	83	(35)	29	77
Other	0	0	0	0	0
Plan administration costs	0	(6)	(2)	(1)	(9)
Balance, end of year	10,532	3,912	1,003	1,071	16,518
Funded status, end of year	28	886	(169)	92	837
Change in irrecoverable surplus (asset ceiling)					
Balance, beginning of year	0	0	0	(107)	(107)
Interest cost	0	0	0	(2)	(2)
Changes in irrecoverable surplus	0	0	0	13	13
Exchange rate changes	0	0	0	(6)	(6)
Balance, end of year	0	0	0	(102)	(102)
Net asset (liability) recognized	28	886	(169)	(10)	735[2]
Fair value of reimbursement rights	0	0	0	3	3

[1] For funded plans only
[2] Thereof € 1.1 billion recognized in Other assets and € 353 million in Other liabilities

Investment Strategy

The Group's investment objective is to protect the Group from adverse impacts of its defined benefit pension plans on key financial metrics. The primary focus is to protect the plans' IFRS funded status in the case of adverse market scenarios. Investment managers manage pension assets in line with investment mandates or guidelines as agreed with the pension plans' trustees and investment committees.

For key defined benefit plans for which the Group aims to protect the IFRS funded status, the Group applies a liability driven investment approach. Risks from mismatches between fluctuations in the present value of the defined benefit obligations and plan assets due to capital market movements are minimized, subject to balancing relevant trade-offs. This is achieved by allocating plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation. Thereby, plan assets broadly reflect the underlying risk profile and currency of the pension obligations.

Where the desired hedging level for market risks cannot be achieved with physical instruments (i.e., corporate and government bonds), derivatives are employed. Derivative overlays mainly include interest rate, inflation swaps and credit default swaps. Other instruments are also used, such as interest rate futures and options. In practice, a completely hedged approach is impractical, for instance because of insufficient market depth for ultra-long-term corporate bonds, as well as liquidity and cost considerations. Therefore, plan assets contain further return-seeking asset categories such as equity, real estate, high yield bonds or emerging markets bonds to create long-term value and achieve diversification benefits. Furthermore, this shift in the investment strategy allows for actively taken market risk exposures from interest rates and credit spreads within defined limits governed by the Pensions Committee. As a result, the market risk from plan assets has been reduced.

In 2024, the Group entered into a buy-in transaction with a third party insurer to de-risk € 1.1 billion of exposure to the UK defined benefit pension schemes funded from existing assets, with no additional employer contribution required. The recognition of the insurance policy as a qualifying plan asset negatively impacted Other Comprehensive Income in the Group's financial statement by approximately € 120 million. A similar buy-in transaction to de-risk € 515 million of exposure occurred in 2023 which negatively impacted Other Comprehensive Income in the Group's financial statement by approximately € 33 million. In total, the Group has entered into five buy-in transactions in the UK with third-party insurers protecting the Group from movements in defined benefit obligations of around € 2.8 billion as at 31 December, 2024.

Plan asset allocation to key asset classes

The following table shows the asset allocation of the Group's funded defined benefit plans to key asset classes, i.e. exposures include physical securities in discretely managed portfolios and underlying asset allocations of any commingled funds used to invest plan assets.

Asset amounts in the following table include both "quoted" (i.e., Level 1 assets in accordance with IFRS 13 – amounts invested in markets where the fair value can be determined directly from prices which are quoted in active, liquid markets) and "other" (i.e., Level 2 and 3 assets in accordance with IFRS 13) assets.

	Dec 31, 2024					Dec 31, 2023				
in € m.	Germany	UK	U.S.	Other	Total	Germany	UK	U.S.	Other	Total
Cash and cash equivalents	305	163	3	66	537	179	92	53	71	395
Equity instruments[1]	1,060	0	111	256	1,427	1,213	0	109	215	1,537
Investment-grade bonds[2]										
Government	1,814	77	277	214	2,382	1,882	919	366	189	3,356
Non-government bonds	4,090	531	474	358	5,453	4,081	915	369	347	5,712
Non-investment-grade bonds										
Government	86	0	4	4	94	103	1	1	4	109
Non-government bonds	380	17	19	25	441	325	73	16	21	435
Securitized and other Debt Investments	37	21	85	16	159	47	99	78	10	234
Insurance	0	2,756	0	16	2,772	0	1,807	0	15	1,822
Alternatives										
Real estate	719	0	0	99	818	727	0	0	97	824
Commodities	54	0	0	2	56	39	0	0	4	43
Private equity	0	0	0	4	4	0	0	0	3	3
Other[3]	989	0	0	60	1,049	1,022	0	0	60	1,082
Derivatives (Market Value)										
Interest rate	730	113	(49)	13	807	909	171	(3)	17	1,094
Credit	(18)	0	57	0	39	(18)	(1)	16	0	(3)
Inflation	0	0	0	14	14	0	(5)	0	13	8
Foreign exchange	(17)	0	0	(6)	(23)	21	0	0	5	26
Other	8	0	69	0	77	2	(159)	(2)	0	(159)
Total fair value of plan assets	**10,237**	**3,678**	**1,050**	**1,141**	**16,106**	10,532	3,912	1,003	1,071	16,518

[1] Allocation of equity exposure is broadly in line with the typical index in the respective market, e.g. the equity portfolio's benchmark of the UK retirement benefit plans is the MSCI All Countries World Index
[2] Investment-grade means BBB and above. Average credit rating exposure for the Group's main plans is around A
[3] This position contains commingled funds which could not be segregated into the other asset categories

The following table sets out the Group's funded defined benefit plan assets only invested in "quoted" assets, i.e. Level 1 assets in accordance with IFRS 13.

	Dec 31, 2024					Dec 31, 2023				
in € m.	Germany	UK	U.S.	Other	Total	Germany	UK	U.S.	Other	Total
Cash and cash equivalents	(118)	(56)	3	12	(159)	29	92	50	19	190
Equity instruments[1]	757	0	110	45	912	933	0	109	39	1,081
Investment-grade bonds[2]										
Government	599	77	256	52	984	601	919	360	41	1,921
Non-government bonds	0	0	0	0	0	0	0	0	0	0
Non-investment-grade bonds										
Government	2	0	1	0	3	1	1	0	0	2
Non-government bonds	0	0	0	0	0	0	0	0	0	0
Securitized and other Debt Investments	0	0	0	0	0	0	98	0	0	98
Insurance	0	0	0	0	0	0	0	0	0	0
Alternatives										
Real estate	0	0	0	0	0	0	0	0	0	0
Commodities	0	0	0	0	0	0	0	0	0	0
Private equity	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Derivatives (Market Value)										
Interest rate	0	0	(57)	0	(57)	0	0	(16)	0	(16)
Credit	0	0	0	0	0	0	0	0	0	0
Inflation	0	0	0	0	0	0	0	0	0	0
Foreign exchange	0	0	0	0	0	0	0	0	0	0
Other	8	0	0	0	8	2	0	0	0	2
Total fair value of quoted plan assets	**1,248**	**21**	**313**	**109**	**1,691**	1,566	1,110	503	99	3,278

[1] Allocation of equity exposure is broadly in line with the typical index in the respective market, e.g. the equity portfolio's benchmark of the UK retirement benefit plans is the MSCI All Countries World Index
[2] Investment-grade means BBB and above. Average credit rating exposure for the Group's main plans is around A

The following tables show the asset allocation of the “quoted” and “other” defined benefit plan assets by key geography in which they are invested.

							Dec 31, 2024
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	(20)	172	30	311	20	24	537
Equity instruments	29	30	818	345	150	55	1,427
Government bonds (investment-grade and above)	376	77	300	980	207	442	2,382
Government bonds (non-investment-grade)	2	0	1	0	0	91	94
Non-government bonds (investment-grade and above)	500	632	1,843	2,021	392	65	5,453
Non-government bonds (non-investment-grade)	26	27	22	359	3	4	441
Securitized and other Debt Investments	23	21	83	15	17	0	159
Subtotal	936	959	3,097	4,031	789	681	10,493
Share (in %)	9%	9%	30%	38%	8%	6%	100%
Other asset categories							5,613
Fair value of plan assets							16,106

							Dec 31, 2023
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	(20)	98	67	195	29	26	395
Equity instruments	21	52	921	325	179	40	1,538
Government bonds (investment-grade and above)	420	919	419	910	191	497	3,356
Government bonds (non-investment-grade)	0	1	0	2	0	106	109
Non-government bonds (investment-grade and above)	503	693	1,909	2,099	449	60	5,713
Non-government bonds (non-investment-grade)	5	67	29	330	3	1	435
Securitized and other Debt Investments	32	98	77	14	10	1	232
Subtotal	961	1,928	3,422	3,875	861	731	11,778
Share (in %)	8%	16%	29%	33%	7%	6%	100%
Other asset categories							4,740
Fair value of plan assets							16,518

Plan assets include derivative transactions with Group entities with an overall positive market value of around € 810 million at December 31, 2024 and € 930 million December 31, 2023, respectively. There is neither a material amount of securities issued by the Group nor other claims on Group assets included in the fair value of plan assets. The plan assets do not include any real estate which is used by the Group.

Key Risk Sensitivities

The Group's defined benefit obligations are sensitive to changes in capital market conditions and actuarial assumptions. Sensitivities to capital market movements and key assumption changes are presented in the following table. Each market risk factor or assumption is changed in isolation. Sensitivities of the defined benefit obligations are approximated using geometric extrapolation methods based on plan durations for the respective assumption. Duration is a risk measure that indicates the broad sensitivity of the obligations to a change in an underlying assumption and provides a reasonable approximation for small to moderate changes in those assumptions.

For example, the interest rate duration is derived from the change in the defined benefit obligation to a change in the interest rate based on information provided by the local actuaries of the respective plans. The resulting duration is used to estimate the remeasurement liability loss or gain from changes in the interest rate. For other assumptions, a similar approach is used to derive the respective sensitivity results.

For defined benefit pension plans, changes in capital market conditions will impact the plan obligations via actuarial assumptions (e.g. via the discount rate and price inflation rate) as well as the plan assets' fair value. Where the Group applies a liability driven investment approach or has insured part of the obligations as in the UK, the Group's overall risk exposure to such changes is reduced. To help readers gain a better understanding of the Group's risk exposures to key capital market movements, the net impact of the change in the defined benefit obligations and plan assets due to a change of the related market risk factor or underlying actuarial assumption is shown. Where changes in actuarial assumptions do not affect plan assets, only the impact on the defined benefit obligations is reported.

Asset-related sensitivities are derived for the Group's major plans by using risk sensitivity factors determined by the Group's Market Risk Management function. These sensitivities are calculated based on information provided by the plans' investment managers and extrapolated linearly to reflect the approximate change of the plan assets' market value in case of a change in the underlying risk factor.

The sensitivities illustrate plausible variations over time in capital market movements and key actuarial assumptions. The Group is not in a position to provide a view on the likelihood of these capital market or assumption changes. While these sensitivities illustrate the overall impact on the funded status of the changes shown, the significance of the impact and the range of reasonable possible alternative assumptions may differ between the different plans that comprise the aggregated results. Even though plan assets and plan obligations are sensitive to similar risk factors, actual changes in plan assets and obligations may not fully offset each other due to imperfect correlations between market risk factors and actuarial assumptions. Caution should be used when extrapolating these sensitivities due to non-linear effects that changes in capital market conditions and key actuarial assumptions may have on the overall funded status. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in these sensitivities.

				Dec 31, 2024				Dec 31, 2023
in € m.	Germany	UK	U.S.	Other	Germany	UK	U.S.	Other
Interest rate (–50 bp):								
(Increase) in DBO	(525)	(210)	(25)	(45)	(575)	(230)	(25)	(40)
Expected increase in plan assets[1]	465	225	20	15	355	150	20	15
Expected net impact on funded status (de-) increase	**(60)**	**15**	**(5)**	**(30)**	(220)	(80)	(5)	(25)
Interest rate (+50 bp):								
Decrease in DBO	500	195	25	40	545	215	25	40
Expected (decrease) in plan assets[1]	(465)	(205)	(20)	(15)	(355)	(150)	(20)	(15)
Expected net impact on funded status (de-) increase	**35**	**(10)**	**5**	**25**	190	65	5	25
Credit spread (–50 bp):								
(Increase) in DBO	(525)	(210)	(55)	(50)	(575)	(230)	(50)	(45)
Expected increase in plan assets[1]	305	220	35	10	320	65	15	10
Expected net impact on funded status (de-) increase	**(220)**	**10**	**(20)**	**(40)**	(255)	(165)	(35)	(35)
Credit spread (+50 bp):								
Decrease in DBO	500	195	50	45	545	215	50	45
Expected (decrease) in plan assets[1]	(305)	(200)	(35)	(10)	(320)	(65)	(15)	(10)
Expected net impact on funded status (de-) increase	**195**	**(5)**	**15**	**35**	225	150	35	35
Rate of price inflation (–50 bp):[2]								
Decrease in DBO	165	150	5	10	300	150	10	10
Expected (decrease) in plan assets[1]	(260)	(150)	0	(5)	(275)	(95)	0	(5)
Expected net impact on funded status (de-) increase	**(95)**	**0**	**5**	**5**	25	55	10	5
Rate of price inflation (+50 bp):[2]								
(Increase) in DBO	(280)	(160)	(5)	(10)	(310)	(160)	(5)	(10)
Expected increase in plan assets[1]	260	160	0	5	275	95	0	5
Expected net impact on funded status (de-) increase	**(20)**	**0**	**(5)**	**(5)**	(35)	(65)	(5)	(5)
Rate of real increase in future compensation levels (–50 bp):								
Decrease in DBO, net impact on funded status	25	5	0	10	30	5	0	10
Rate of real increase in future compensation levels (+50 bp):								
(Increase) in DBO, net impact on funded status	(25)	(5)	0	(10)	(30)	(5)	0	(10)
Longevity improvements by 10 %:[3]								
(Increase) in DBO	(205)	(60)	(20)	(10)	(225)	(60)	(20)	(10)
Expected increase in plan assets	0	55	0	0	0	40	0	0
Expected net impact on funded status (de-) increase	(205)	(5)	(20)	(10)	(225)	(20)	(20)	(10)

[1] Expected changes in the fair value of plan assets contain the simulated impact from the biggest plans in Germany, the UK, the U.S., Channel Islands, Switzerland and Belgium which cover over 99 % of the total fair value of plan assets. The fair value of plan assets for other plans is assumed to be unchanged for this presentation

[2] Incorporates sensitivity to changes in pension benefits to the extent linked to the price inflation assumption

[3] Estimated to be equivalent to an increase of around 1 year in overall life expectancy

Expected cash flows

The following table shows expected cash flows for post-employment benefits in 2025, including contributions to the Group’s external pension trusts in respect of funded plans, direct payment to beneficiaries in respect of unfunded plans, as well as contributions to defined contribution plans.

	2025
in € m.	Total
Expected contributions to	
Defined benefit plan assets	85
BVV	60
Other defined contribution plans	280
Expected benefit payments for unfunded defined benefit plans	30
Expected total cash flow related to post-employment benefits	455

Expense of employee benefits

The following table presents a breakdown of specific expenses according to the requirements of IAS 19 and IFRS 2.

in € m.	2024	2023	2022
Expenses for defined benefit plans:			
Service cost[1]	171	164	229
Net interest cost (income)	(40)	(45)	(10)
Total expenses defined benefit plans	**131**	119	219
Expenses for defined contribution plans:			
BVV	61	55	57
Other defined contribution plans	282	265	258
Total expenses for defined contribution plans	**343**	320	315
Total expenses for post-employment benefit plans	**474**	439	534
Employer contributions to state-mandated pension plans			
Pensions related payments social security in Germany	**232**	218	214
Contributions to pension fund for Postbank´s postal civil servants	**51**	57	58
Further pension related state-mandated benefit plans	**258**	248	216
Total employer contributions to state-mandated benefit plans	**542**	523	488
Expenses for share-based payments:			
Expenses for share-based payments, equity settled[2]	426	436	405
Expenses for share-based payments, cash settled[2]	64	43	29
Expenses for cash retention plans[2]	471	448	418
Expenses for severance payments[3]	487	293	82

[1] Severance related items under Service Costs are reclassified to Expenses for Severance payments
[2] Including expenses for new hire awards and the acceleration of expenses not yet amortized due to the discontinuation of employment including those amounts which are recognized as part of the Group’s restructuring expenses
[3] Excluding the acceleration of expenses for deferred compensation awards not yet amortized. Severance related items under Service Costs were reclassified to Expense for Severance payments

34 – Income Taxes

Income tax expense/(benefit)

in € m.	2024	2023	2022
Current tax expense (benefit):			
Tax expense (benefit) for current year	1,330	1,284	919
Adjustments for prior years	(16)	56	(132)
Total current tax expense (benefit)	**1,314**	1,340	787
Deferred tax expense (benefit):			
Origination and reversal of temporary differences, unused tax losses and tax credits	900	1,158	381
Effect of changes in tax law and/or tax rate	23	7	(19)
Adjustments for prior years	(13)	(1,002)	(1,256)
Total deferred tax expense (benefit)	**909**	163	(894)
Total income tax expense (benefit)	**2,223**	1,503	(107)

Total deferred tax expense/(benefit) includes benefits from previously unrecognized tax losses (tax credits/deductible temporary differences) and the reversal of previous write-downs and expenses arising from write-downs of deferred tax assets. The deferred tax expense/(benefit) was positively impacted by € 16 million in 2024, by € 1.1 billion in 2023 and by € 1.4 billion in 2022.

The Global Minimum Taxation Rules or Pillar 2 rules became applicable to Deutsche Bank starting in 2024, with Deutsche Bank AG as the ultimate parent. The bank is required to annually determine the global minimum tax or Pillar 2 liability for group entities in close to 60 jurisdictions. Temporary relief from detailed Pillar 2 calculations, which is determined on a jurisdiction-by-jurisdiction basis, may be available under transitional safe harbor provisions. These safe harbor provisions, which are applicable in tax years 2024-2026, are based on the bank's country-by-country reports filed annually with the German tax authorities and certain other financial data. Uncertainties remain regarding the application of the Pillar 2 rules, further legislative developments and interpretative guidance in many countries are expected over time, and implementation efforts are ongoing. The bank has estimated the potential impact on its financial position for 2024 on a best effort basis and recognized a Pillar 2 related current tax expense of € 3 million. The assessment considered a number of qualitative and quantitative factors applicable to 2024: (1) the bank's blended statutory tax rate across all applicable jurisdictions amounted to 28 % , which is significantly higher than the minimum tax rate of 15 %; (2) only 6 countries applied a statutory tax rate of less than 15 % to the bank's operations; and (3) based on an analysis of the most recently available country-by-country data, the bank is estimated to qualify for relief under the transitional safe harbor provisions in most of the jurisdictions it operates in.

Difference between applying German statutory (domestic) income tax rate and actual income tax expense/(benefit)

in € m.	2024	2023	2022
Expected tax expense (benefit) at domestic income tax rate of 31.3% (31.3% for 2023 and 31.3% for 2022)	**2,098**	2,490	1,705
Foreign rate differential	(192)	(85)	(115)
Tax-exempt gains on securities and other income	(246)	(319)	(217)
Loss (income) on equity method investments	(6)	0	(12)
Nondeductible expenses	520	392	429
Impairments of goodwill	0	55	(0)
Changes in recognition and measurement of deferred tax assets[1]	(59)	(1,238)	(1,891)
Effect of changes in tax law and/or tax rate	23	7	(19)
Effect related to share-based payments	(1)	0	(5)
Other[1]	85	201	18
Actual income tax expense (benefit)	**2,223**	1,503	(107)

[1] Current and deferred tax expense/(benefit) relating to prior years are mainly reflected in the line items "Changes in recognition and measurement of deferred tax assets" and "Other".

The domestic income tax rate, including corporate tax, solidarity surcharge, and trade tax, used for calculating deferred tax assets and liabilities was 31.3 % for 2024, 20223 and 2022.

Changes in recognition and measurement of deferred tax assets in 2023 mainly included the effect of the recognition of previously unrecognized deferred tax assets in the U.K. and in 2022 mainly in the U.S. In determining the amount of deferred tax assets, the Group uses historical tax capacity and profitability information and, if relevant, forecasted operating results based upon approved business plans, including a review of the eligible carry-forward periods, available tax planning opportunities and other relevant considerations.

The Group is under continuous examinations by tax authorities in various jurisdictions. "Other" in the preceding table includes the effects of these examinations by the tax authorities.

Income taxes credited or charged to equity (other comprehensive income/additional paid in capital)

in € m.	2024	2023	2022
Actuarial gains (losses) related to defined benefit plans	**(115)**	137	(642)
Net fair value gains (losses) attributable to credit risk related to financial liabilities designated as at fair value through profit or loss	**54**	18	(25)
Financial assets mandatory at fair value through other comprehensive income:			
Unrealized net gains (losses) arising during the period	113	59	312
Realized net gains (losses) arising during the period (reclassified to profit or loss)	13	1	(61)
Derivatives hedging variability of cash flows:			
Unrealized net gains (losses) arising during the period	73	(132)	229
Net gains (losses) reclassified to profit or loss	(64)	(110)	(18)
Other equity movement:			
Unrealized net gains (losses) arising during the period	141	151	192
Net gains (losses) reclassified to profit or loss	6	0	0
Income taxes credited (charged) to other comprehensive income	**221**	124	(13)
Other income taxes credited (charged) to equity	**104**	50	25

Major components of the Group’s gross deferred tax assets and liabilities

in € m.	Dec 31, 2024	Dec 31, 2023
Deferred tax assets:		
Unused tax losses	3,966	4,747
Unused tax credits	172	23
Deductible temporary differences:		
Trading activities, including derivatives	3,634	2,927
Employee benefits, including equity settled share based payments	1,755	1,828
Accrued interest expense	1,477	999
Loans and borrowings, including allowance for loans	846	949
Leases	857	855
Intangible Assets	52	80
Fair value OCI (IFRS 9)	496	332
Other assets	525	485
Other provisions	237	88
Other liabilities	6	6
Total deferred tax assets pre offsetting	**14,023**	13,319
Deferred tax liabilities:		
Taxable temporary differences:		
Trading activities, including derivatives	4,874	3,970
Employee benefits, including equity settled share based payments	324	291
Loans and borrowings, including allowance for loans	538	617
Leases	762	758
Intangible Assets	752	717
Fair value OCI (IFRS 9)	45	43
Other assets	270	272
Other provisions	292	89
Other liabilities	38	40
Total deferred tax liabilities pre offsetting	**7,895**	6,797

Deferred tax assets on unused tax credits included € 151 million and € 10 million as of December 31, 2024 and December 31, 2023 related to the corporate alternative minimum tax in the U.S.

Deferred tax assets and liabilities, after offsetting

in € m.	Dec 31, 2024	Dec 31, 2023
Presented as deferred tax assets	6,702	7,039
Presented as deferred tax liabilities	574	517
Net deferred tax assets	**6,128**	6,522

The change in the balance of deferred tax assets and deferred tax liabilities might not equal the deferred tax expense/(benefit). In general, this is due to (1) deferred taxes that are booked directly to equity, (2) the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than euro, (3) the acquisition and disposal of entities as part of ordinary activities and (4) the reclassification of deferred tax assets and liabilities which are presented otherwise on the face of the balance sheet as components of other assets and liabilities.

Items for which no deferred tax assets were recognized

in € m.	Dec 31, 2024[1]	Dec 31, 2023[1]
Deductible temporary differences	**(39)**	(36)
Not expiring	(4,945)	(5,119)
Expiring in subsequent period	(2)	(28)
Expiring after subsequent period	(77)	(55)
Unused tax losses	**(5,024)**	(5,202)
Expiring after subsequent period	0	0
Unused tax credits	**(1)**	(1)

[1] Amounts in the table refer to deductible temporary differences, unused tax losses and tax credits for federal income tax purposes.

Deferred tax assets were not recognized on these items because it is not probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized.

As of December 31, 2024 and December 31, 2023, the Group recognized deferred tax assets of € 4.0 billion and € 5.3 billion, respectively, that exceeded deferred tax liabilities in entities which have suffered a tax loss in either the current or preceding period. This is based on management's assessment that it is probable that the respective entities will have taxable profits against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized. In determining the amounts of deferred tax assets to be recognized, management uses historical profitability information and, if relevant, forecasted operating results, based upon approved business plans, including a review of the eligible carry-forward periods, tax planning opportunities and other relevant considerations.

As of December 31, 2024 and December 31, 2023, the Group had temporary differences associated with the Group's parent company's investments in subsidiaries, branches and associates and interests in joint ventures of € 286 million and € 349 million respectively, in respect of which no deferred tax liabilities were recognized.

35 – Derivatives

Derivative financial instruments and hedging activities

Derivative contracts used by the Group include swaps, futures, forwards, options and other similar types of contracts. In the normal course of business, the Group enters into a variety of derivative transactions for sales, market-making and risk management purposes. The Group's objectives in using derivative instruments are to meet customers' risk management needs and to manage the Group's exposure to risks.

In accordance with the Group's accounting policy relating to derivatives and hedge accounting as described in Note 1 "Material Accounting Policies and Critical Accounting Estimates", all derivatives are carried at fair value in the balance sheet regardless of whether they are held for trading or non-trading purposes.

Derivatives held for sales and market-making purposes

Sales and market-making

The majority of the Group's derivatives transactions relate to sales and market-making activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Market-making involves quoting bid and offer prices to other market participants, enabling revenue to be generated based on spreads and volume.

Risk management

The Group uses derivatives in order to reduce its exposure to market risks as part of its asset and liability management. This is achieved by entering into derivatives that hedge specific portfolios of fixed rate financial instruments and forecast transactions as well as strategic hedging against overall balance sheet exposures. The Group actively manages interest rate risk through, among other things, the use of derivative contracts. Utilization of derivative financial instruments is modified from time to time within prescribed limits in response to changing market conditions, as well as to changes in the characteristics and mix of the related assets and liabilities.

Derivatives qualifying for hedge accounting

The Group applies hedge accounting if derivatives meet the specific criteria described in Note 1 "Material Accounting Policies and Critical Accounting Estimates".

In fair value hedge relationship, the Group uses primarily interest rate swaps and options, in order to protect itself against movements in the fair value of fixed-rate financial instruments due to movements in market interest rates. In a cash flow hedge relationship, the Group uses interest rate swaps in order to protect itself against exposure to variability in interest rates. The Group enters into foreign exchange forwards and swaps for hedges of translation adjustments resulting from translating the financial statements of net investments in foreign operations into the reporting currency of the parent at period end spot rates.

Interest rate risk

The Group uses interest rate swaps and options to manage its exposure to interest rate risk by modifying the re-pricing characteristics of existing and/or forecasted assets and liabilities, including funding and investment activities. The interest rate swaps and options are designated in either a fair value hedge or a cash flow hedge. For fair value hedges, the Group uses interest rate swaps and options contracts to manage the fair value movements of fixed rate financial instruments due to changes in benchmark interest. For cash flow hedges, we use interest rate swaps to manage the exposure to cash flow variability of our variable rate instruments as a result of changes in benchmark interest rates.

The Group manages its interest rate risk exposure on a portfolio basis with frequent changes in the portfolio due to the origination of new loans and bonds, repayments of existing loans and bonds, issuance of new funding liabilities and repayment of existing funding liabilities. Accordingly, a dynamic hedging accounting approach is adopted for the portfolio, in which individual hedge relationships are designated and de-designated on a more frequent basis (e.g. on a monthly basis).

The Group assesses and measures hedge effectiveness of a hedging relationship based on the change in the fair value or cash flows of the derivative hedging instrument relative to the change in the fair value or cash flows of the hedged item attributable to the hedged risk. Potential sources of ineffectiveness can be attributed to differences between hedging instruments and hedged items:

- Mismatches in the terms of hedged items and hedging instruments, for example the frequency and timing of when interest rates are reset, frequency of payment and callable features.
- Difference in the discounting rate applied to the hedged item and the hedging instrument, taking into consideration differences in the reset frequency of the hedged item and hedging instrument.
- Derivatives used as hedging instrument with a non-zero fair value at inception date of the hedging relationship, resulting in mismatch in terms with the hedged item. This is particularly pertinent in periods proceeding high interest rate moves.

Foreign exchange risk

The Group manages its foreign currency risk (including U.S. dollar and British pound) from investments in foreign operation through net investment hedges using rolling foreign exchange forward strategy. In addition, the Group applies cash flow hedge accounting for specific foreign denominated highly probable cash flows using foreign exchange forward instruments as hedging instruments.

As the investments in foreign operations are only hedged to the extent of the notional amount of the hedging derivative instrument the Group generally does not expect to incur significant ineffectiveness on hedges of net investments in foreign operations. Potential sources of ineffectiveness are limited to situations where derivatives with a non-zero fair value at inception date of the hedging relationship are used as hedging instrument, or where the spot foreign currency risk has been designated as hedged risk, resulting in mismatch in terms with the hedged item. Similarly, for cash flow hedge accounting applications the foreign exchange forward instruments generally match the terms of the underlying highly probable transactions such that the Group does not expect to incur significant ineffectiveness in such hedge relationships.

In addition to net investment hedges, the Group also applies cash flow hedge accounting (FX CFH) for USD denominated Treasury bonds (HTC classified) held in EUR functional entities, utilizing foreign exchange forward contracts as hedging instruments.

The hedged risk is the cash flow variability of highly probable HTC coupons driven by movements in spot FX. The Group does not expect to incur ineffectiveness, as the notional amount of the hedging instrument should be equivalent to the cash flow exposure on HTC bonds. The hedge is re-balanced monthly to reflect cash flow decay on HTC bonds, and FX forward point risk is not a component of the designated risk therefore a highly effective hedge is observed.

Fair value hedge accounting

Derivatives held as fair value hedges

			Dec 31, 2024	2024			Dec 31, 2023	2023
in € m.	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness
Derivatives held as fair value hedges	2,546	6,282	108,170	671	2,246	6,386	99,106	1,917

	2024	2023
in € m.	Hedge ineffectiveness	Hedge ineffectiveness
Result of fair value hedges	454	140

Financial instruments designated as fair value hedges

	Dec 31, 2024						2024
	Carrying amount of Financial instruments designated as fair value hedges		Accumulated amount of fair value hedge adjustments - Total		Accumulated amount of fair value hedge adjustments - Terminated hedge relationships		Fair Value changes used for hedge effectiveness
in € m.	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Financial assets at fair value through other comprehensive income	17,305	0	(1,284)	0	1	0	(93)
Bonds at amortized cost	1,949	0	(21)	0	(1)	0	(10)
Long-term debt	0	73,946	0	(3,816)	0	(101)	(194)
Deposits	0	1,072	0	(162)	0	0	79
Loans at amortized cost	0	0	0	0	(1)	0	0

	Dec 31, 2023						2023
	Carrying amount of Financial instruments designated as fair value hedges		Accumulated amount of fair value hedge adjustments - Total		Accumulated amount of fair value hedge adjustments - Terminated hedge relationships		Fair Value changes used for hedge effectiveness
in € m.	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Financial assets at fair value through other comprehensive income	13,468	0	(1,277)	0	49	0	486
Bonds at amortized cost	361	0	(12)	0	(23)	0	25
Long-term debt	0	71,769	0	(3,936)	0	(184)	(2,274)
Deposits	0	289	0	(93)	0	0	(14)
Loans at amortized cost	0	0	(1)	0	0	0	0

Cash flow hedge accounting

Derivatives held as cash flow hedges

	Dec 31, 2024			2024	Dec 31, 2023			2023
in € m.	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness
Derivatives held as cash flow hedges	58	183	109,671	(229)	416	228	111,462	537

Cash flow hedge balances

in € m.	Dec 31, 2024	Dec 31, 2023	Dec 31, 2022
Reported in Equity[1]	36	44	(790)
thereof relates to terminated programs	0	0	0
Gains (losses) posted to equity for the year ended	(242)	436	(819)
Gains (losses) removed from equity for the year ended	234	398	71
thereof relates to terminated programs	0	0	0
Changes of hedged item's value used for hedge effectiveness	(212)	434	(899)
Ineffectiveness recorded within P&L	13	101	16

[1] Reported in equity refers to accumulated other comprehensive income as presented in the Consolidated Balance Sheet.

In accordance with IAS 39.96 the gains and losses posted to equity in a cash flow hedge relationship is the lesser of cumulative gain or loss on the hedging instrument from the inception of the hedge and the cumulative change in fair value of the expected future cash flows on the hedged item from inception of the hedge. As a result, changes of the hedged item's value used for hedge effectiveness are not fully recorded in equity if it exceeds the hedging instrument's fair value changes used for hedge effectiveness. Consequently, hedge ineffectiveness recorded within P&L does not always reconcile to the difference between the changes of the hedged item's value used for hedge effectiveness and the hedging instrument's fair value changes used for hedge effectiveness.

During the current period, increases in the designated benchmark interest rates resulted in negative fair value changes on the associated hedging instruments, mainly related to cash flow hedge relationship on USD denominated financial asset. In addition, the carrying value of these hedging derivatives changed into a net financial liability which therefore aligns to the fair value change shown in the table above.

In the FX CFH, ineffectiveness is not expected considering FX forward point risk is not a component of the designated risk. The change in both the hypothetical and hedging instrument fair value used for effectiveness testing is driven by FX spot risk only, and is expected to offset (subject to a positive capacity test result).

As of December 31, 2024 the longest term cash flow hedge matures in 2036.

As of December 31, 2024 the longest FX CFH matures in 2032.

The financial instruments designated as cash flow hedges are recognized as Loans at amortized cost in the Group's Consolidated Balance Sheet.

Financial instruments designated in the FX CFH are recognized as Debt Securities HTC at amortized cost in the Groups Consolidated Balance Sheet.

Net investment hedge accounting

Derivatives held as net investment hedges

			Dec 31, 2024	2024			Dec 31, 2023	2023
in € m.	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness	Assets	Liabilities	Nominal amount	Fair Value changes used for hedge effectiveness
Derivatives held as net investment hedges	189	1,595	45,517	(2,442)	736	157	42,751	317

	2024		2023	
in € m.	Fair value changes recognized in Equity[1]	Hedge ineffectiveness	Fair value changes recognized in Equity[1]	Hedge ineffectiveness
Result of net investment hedges	(2,384)	(81)	(169)	(138)

[1] Reported in equity refers to accumulated other comprehensive income as presented in the Consolidated Balance Sheet.

Profile of derivatives held as net investment hedges

in € m.	Within 1 year	1–3 years	3–5 years	Over 5 years
As of December 31, 2024				
Nominal amount Foreign exchange forwards	36,976	318	3	0
Nominal amount Foreign exchange swaps	7,990	230	0	0
Total	44,966	548	3	0
As of December 31, 2023				
Nominal amount Foreign exchange forwards	33,347	85	18	0
Nominal amount Foreign exchange swaps	8,683	579	39	0
Total	42,030	664	57	0

The Group uses a foreign exchange forward strategy. As indicated in the above table, the vast majority of forward contracts mature within the year. The Group did not calculate an average foreign currency rate because the amount of contracts that mature after 1 year are not material.

36 – Related Party Transactions

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. The Group's related parties include:

- Key management personnel including close family members and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members
- Subsidiaries, joint ventures and associates and their respective subsidiaries
- Post-employment benefit plans for the benefit of Deutsche Bank employees

Transactions with Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of Deutsche Bank, directly or indirectly. The Group considers the members of the Management Board and of the Supervisory Board of the parent company to constitute key management personnel for purposes of IAS 24.

Compensation expense of key management personnel

in € m.	2024	2023	2022
Short-term employee benefits	47	37	37
Post-employment benefits	4	7	5
Other long-term benefits	35	17	15
Termination benefits	0	0	2
Share-based payment	15	18	17
Total	**101**	79	76

The above table does not contain compensation that employee representatives and former board members on the Supervisory Board have received. The aggregated compensation paid to such members for their services as employees of Deutsche Bank or status as former employees (retirement, pension and deferred compensation) amounted to € 1 million as of December 31, 2024, € 1 million as of December 31, 2023 and € 1 million as of December 31, 2022.

Among the Group's transactions with key management personnel as of December 31, 2024, were loans and commitments of € 2 million and deposits of € 17 million. As of December 31, 2023, the Group's transactions with key management personnel were loans and commitments of € 1 million and deposits of € 16 million.

In addition, the Group provides banking services, such as payment and account services as well as investment advice, to key management personnel.

Transactions with Subsidiaries, Joint Ventures and Associates

Transactions between Deutsche Bank AG and its subsidiaries meet the definition of related party transactions. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Group and its associated companies and joint ventures and their respective subsidiaries also qualify as related party transactions.

Transactions for subsidiaries, joint ventures and associates are presented combined in below table as these are not material individually.

Loans

in € m.	2024	2023
Loans outstanding, beginning of year	**44**	119
Net movement in loans during the period	70	(98)
Changes in the group of consolidated companies	0	0
Exchange rate changes/other	(41)	23
Loans outstanding, end of year[1]	**73**	44
Other credit risk related transactions:		
Allowance for loan losses	0	1
Provision for loan losses	1	0
Guarantees and commitments	3	1

[1] Loans past due were € 0 million as of December 31, 2024 and € 0 million as of December 31, 2023. For the total loans the Group held collateral of € 0 million and € 0 million as of December 31, 2024 and December 31, 2023, respectively

Deposits

in € m.	2024	2023
Deposits outstanding, beginning of year	**33**	31
Net movement in deposits during the period	(4)	2
Changes in the group of consolidated companies	0	0
Exchange rate changes/other	0	0
Deposits outstanding, end of year	**29**	33

Other Transactions

Includes bonds issued by associated companies which the Group acquired and classified as trading assets. These trading assets amounted to € 27 million as of December 31, 2024, and € 11 million as of December 31, 2023.

Other assets related to transactions with associated companies amounted to € 2 million as of December 31, 2024, and € 2 million as of December 31, 2023. Other liabilities related to transactions with associated companies were € 0 million as of December 31, 2024, and € 7 million as of December 31, 2023.

Transactions with Pension Plans

Under IFRS, post-employment benefit plans are considered related parties. The Group has business relationships with a number of its pension plans pursuant to which it provides financial services to these plans, including investment management services.

Transactions with related party pension plans

in € m.	2024	2023
Equity shares issued by the Group held in plan assets	0	0
Other assets	2	1
Fees paid from plan assets to asset managers of the Group	16	21
Market value of derivatives with a counterparty of the Group	679	698
Notional amount of derivatives with a counterparty of the Group	9,730	8,146

37 – Information on Subsidiaries

Composition of the Group

Deutsche Bank AG is the direct or indirect holding company for the Group's subsidiaries.

The Group consists of 521 (2023: 520) consolidated entities, thereof 229 (2023: 212) consolidated structured entities. 328 (2023: 346) of the entities controlled by the Group are directly or indirectly held by the Group at 100 % of the ownership interests (share of capital). Third parties also hold ownership interests in 193 (2023: 174) of the consolidated entities (noncontrolling interests). As of December 31, 2024, and 2023, one subsidiary has material noncontrolling interests. Noncontrolling interests for all other subsidiaries are neither individually nor cumulatively material to the Group.

Subsidiaries with material noncontrolling interests

	Dec 31, 2024	Dec 31, 2023
DWS Group GmbH & Co. KGaA		
Proportion of ownership interests and voting rights held by noncontrolling interests	20.51 %	20.51 %
Place of business	Global	Global

in € m	Dec 31, 2024	Dec 31, 2023
Net income attributable to noncontrolling interests	133	117
Accumulated noncontrolling interests of the subsidiary	1,546	1,620
Dividends paid to noncontrolling interests	250	84
Summarized financial information:		
Total assets	11,871	11,683
Total liabilities	4,379	3,852
Total net revenues	2,765	2,614
Net income (loss)	652	567
Total comprehensive income (loss), net of tax	904	424

Significant restrictions to access or use the Group's assets

Statutory, contractual or regulatory requirements as well as protective rights of noncontrolling interests might restrict the ability of the Group to access and transfer assets freely to or from other entities within the Group and to settle liabilities of the Group.

The following contractual restrictions impact the Group's ability to use assets and the table below reflects the volume of those restricted assets:

– The Group has pledged assets to collateralize its obligations under repurchase agreements, securities financing transactions, collateralized loan obligations and for margining purposes for OTC derivative liabilities
– The assets of consolidated structured entities are held for the benefit of the parties that have bought the notes issued by these entities

Restricted assets

	Dec 31, 2024		Dec 31, 2023	
in € m.	Total assets	Restricted assets	Total assets	Restricted assets
Interest-earning deposits with banks	132,741	31	163,454	108
Financial assets at fair value through profit or loss	545,895	62,615	465,273	58,270
Financial assets at fair value through other comprehensive income	42,090	5,969	35,546	7,618
Loans at amortized cost	483,897	41,942	479,353	54,343
Other	186,409	3,206	173,641	7,920
Total	**1,391,033**	**113,762**	1,317,266	128,259

In addition to the above and in line with the regulation on Liquidity Coverage Ratio (Commission Delegated Regulation (EU) 2015/61), the Group identifies if assets held in third country are subject to restrictions to their free transferability. The Group identifies the volume of High-Quality Liquid Assets in excess of net cash outflows held in the third countries which are not freely transferable and excludes them from the HQLA. The aggregated amount of such HQLA that are held at entities in third countries and considered restricted is € 20.5 billion as of December 31, 2024 (€ 13.3 billion as of December 31, 2023).

38 – Structured entities

Nature, purpose and extent of the Group's interests in structured entities

The Group engages in various business activities with structured entities which are designed to achieve a specific business purpose. A structured entity is one that has been set up so that any voting rights or similar rights are not the dominant factor in deciding who controls the entity. An example is when voting rights relate only to administrative tasks and the relevant activities are directed by contractual arrangements.

A structured entity often has some or all of the following features or attributes:

- Restricted activities
- A narrow and well-defined objective
- Insufficient equity to permit the structured entity to finance its activities without subordinated financial support
- Financing in the form of multiple contractually linked instruments to investors that create concentrations of credit or other risks (tranches)

The principal uses of structured entities are to provide clients with access to specific portfolios of assets and to provide market liquidity for clients through securitizing financial assets. Structured entities may be established as corporations, trusts or partnerships. Structured entities generally finance the purchase of assets by issuing debt and equity securities that are collateralized by and/or indexed to the assets held by the structured entities. The debt and equity securities issued by structured entities may include tranches with varying levels of subordination.

Structured entities are consolidated when the substance of the relationship between the Group and the structured entities indicate that the structured entities are controlled by the Group, as discussed in Note 1 "Material Accounting Policies and Critical Accounting Estimates".

Consolidated structured entities

The Group has contractual arrangements which may require it to provide financial support to the following types of consolidated structured entities.

Securitization vehicles

The Group uses securitization vehicles for funding purchase of diversified pool of assets. The Group provides financial support to these entities in the form of liquidity facility. As of December 31, 2024, and December 31, 2023, there were no outstanding loan commitments to these entities.

Funds

The Group may provide funding and liquidity facility or guarantees to funds consolidated by the Group. As of December 31, 2024, and December 31, 2023, the notional value of the liquidity facilities and guarantees provided by the Group to such funds was € 1.5 billion and € 1.1 billion, respectively.

Deutsche Bank did not provide non-contractual support during the year to consolidated structured entities.

Unconsolidated structured entities

These are entities which are not consolidated because the Group does not control them through voting rights, contract, funding agreements, or other means. The extent of the Group's interests to unconsolidated structured entities will vary depending on the type of structured entities.

Below is a description of the Group's involvements in unconsolidated structured entities by type.

Repackaging and investment entities

Repackaging and investment entities are established to meet clients' investment needs through the combination of securities and derivatives. These entities are not consolidated by the Group because the Group does not have power to influence the returns obtained from the entities. These entities are usually set up to provide a certain investment return pre-agreed with the investor, and the Group is not able to change the investment strategy or return during the life of the transaction.

Third party funding entities

The Group provides funding to structured entities that hold a variety of assets. These entities may take the form of funding entities, trusts and private investment companies. The funding is collateralized by the asset in the structured entities. The Group's involvement involves predominantly both lending and loan commitments.

The vehicles used in these transactions are controlled by the borrowers where the borrowers have the ability to decide whether to post additional margin or collateral in respect of the financing. In such cases, where borrowers can decide to continue or terminate the financing, the borrowers will consolidate the vehicle.

Securitization Vehicles

The Group establishes securitization vehicles which purchase diversified pools of assets, including fixed income securities, corporate loans, and asset-backed securities (predominantly commercial and residential mortgage-backed securities and credit card receivables). The vehicles fund these purchases by issuing multiple tranches of debt and equity securities, the repayment of which is linked to the performance of the assets in the vehicles.

The Group may transfer assets to these securitization vehicles and provides financial support to these entities in the form of liquidity facilities. The Group also invests and provides liquidity facilities to third party sponsored securitization vehicles. The securitization vehicles that are not consolidated into the Group are those where the Group does not hold the power or ability to unilaterally remove the servicer or special servicer who has been delegated power over the activities of the entity.

Funds

The Group establishes structured entities to accommodate client requirements to hold investments in specific assets. The Group also invests in funds that are sponsored by third parties or the bank may act as fund manager, custodian or some other capacity and provide funding and liquidity facilities to both bank sponsored and third party funds. The funding provided is collateralized by the underlying assets held by the fund.

The Group does not consolidate funds when Deutsche Bank is deemed agent or when another third party investor has the ability to direct the activities of the fund.

Other

These are Deutsche Bank sponsored or third party structured entities that do not fall into any criteria above. These entities are not consolidated by the Group when the bank does not hold power over the decision making of these entities.

Income derived from involvement with structured entities

The Group earns management fees and, occasionally, performance-based fees for its investment management service in relation to funds. Interest income is recognized on the funding provided to structured entities. Any trading revenue as a result of derivatives with structured entities and from the movements in the value of notes held in these entities is recognized in 'Net gains/losses on financial assets/liabilities held at fair value through profit and loss.

Interests in unconsolidated structured entities

The Group's interests in unconsolidated structured entities refer to contractual and non-contractual involvement that exposes the bank to variability of returns from the performance of the structured entities. Examples of interests in unconsolidated structured entities include debt or equity investments, liquidity facilities, guarantees and certain derivative instruments in which the Group is absorbing variability of returns from the structured entities.

Interests in unconsolidated structured entities exclude instruments which introduce variability of returns into the structured entities. For example, when the bank purchases credit protection from an unconsolidated structured entity whose purpose and design is to pass through credit risk to investors, the bank is providing the variability of returns to the entity rather than absorbing variability. The purchased credit protection is therefore not considered as an interest for the purpose of the table below.

Maximum exposure to unconsolidated structured entities

The maximum exposure to loss is determined by considering the nature of the interest in the unconsolidated structured entity. The maximum exposure for loans and trading instruments is reflected by their carrying amounts in the consolidated balance sheet. The maximum exposure for derivatives and off-balance sheet commitments such as guarantees, liquidity facilities and loan commitments under IFRS 12, as interpreted by Deutsche Bank, is reflected by the notional amounts. Such amounts or its development do not reflect the economic risks faced by the Group because it does not take into account the effects of collateral or hedges, nor the probability of such losses being incurred. At December 31, 2024, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were € 220 billion, € 746 billion and € 29 billion respectively. At December 31, 2023, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were € 117 billion, € 315 billion and € 26 billion, respectively.

Size of structured entities

The Group provides a different measure for size of structured entities depending on their type. The following measures have been considered as appropriate indicators for evaluating the size of structured entities:

- Funds – Net asset value or assets under management where the bank holds fund units and notional of derivatives when the bank's interest comprises of derivatives
- Securitizations – notional of notes in issue (excluding interest only and excess notes where applicable) when the Group derives its interests through notes its holds and notional of derivatives when the bank's interests is in the form of derivatives
- Third party funding entities –Total assets in entities
- Repackaging and investment entities – Fair value of notes in issue

For third party funding entities, size information is not publicly available, therefore the Group has disclosed the greater of the collateral received/pledged or the notional of the exposure the bank has to the entity.

Based on the above definitions, the total size of structured entities is € 3,156 billion, of which the majority of € 1,828 billion is from Funds. In 2023, it was € 2,329 billion and € 1,223 billion, respectively.

The following table shows, by type of structured entity, the carrying amounts of the Group's interests recognized in the consolidated statement of financial position as well as the maximum exposure to loss resulting from these interests. The carrying amounts presented below do not reflect the true variability of returns faced by the Group because they do not take into account the effects of collateral or hedges.

Carrying amounts and size relating to Deutsche Bank's interests

					Dec 31, 2024
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
Assets					
Cash and central bank balances	0	0	0	0	0
Interbank balances (w/o central banks)	1	0	0	2	3
Central bank funds sold and securities purchased under resale agreements	0	1,009	382	4,532	5,923
Securities Borrowed	0	0	0	0	0
Total financial assets at fair value through profit or loss	321	4,314	4,652	71,818	81,105
Trading assets	152	2,489	3,773	4,075	10,490
Positive market values (derivative financial instruments)	169	386	38	6,044	6,636
Non-trading financial assets mandatory at fair value through profit or loss	0	1,439	841	61,699	63,978
Financial assets designated at fair value through profit or loss	0	0	0	0	0
Financial assets at fair value through other comprehensive income	0	1,212	479	194	1,885
Loans at amortized cost	188	63,015	34,260	21,540	119,003
Other assets	1	735	4,361	7,774	12,871
Total assets	**510**	**70,285**	**44,134**	**105,858**	**220,788**
Liabilities					
Total financial liabilities at fair value through profit or loss	1	45	138	6,549	6,733
Negative market values (derivative financial instruments)	1	45	138	6,549	6,733
Other short-term borrowings	0	0	0	0	0
Other liabilities	0	0	0	0	0
Total liabilities	**1**	**45**	**138**	**6,549**	**6,733**
Off-balance sheet exposure	0	8,085	12,915	8,089	29,089
Total	**509**	**78,325**	**56,912**	**107,398**	**243,144**

					Dec 31, 2023
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
Assets					
Cash and central bank balances	0	0	0	0	0
Interbank balances (w/o central banks)	1	0	0	9	11
Central bank funds sold and securities purchased under resale agreements	0	373	209	3,482	4,064
Securities Borrowed	0	0	0	0	0
Total financial assets at fair value through profit or loss	237	4,137	3,372	53,909	61,654
Trading assets	193	2,663	2,750	3,302	8,908
Positive market values (derivative financial instruments)	44	450	6	3,272	3,772
Non-trading financial assets mandatory at fair value through profit or loss	0	1,024	615	47,335	48,974
Financial assets designated at fair value through profit or loss	0	0	0	0	0
Financial assets at fair value through other comprehensive income	0	893	330	264	1,487
Loans at amortized cost	233	66,033	31,002	19,433	116,701
Other assets	1	677	3,406	10,581	14,665
Total assets	**472**	**72,112**	**38,319**	**87,679**	**198,582**
Liabilities					
Total financial liabilities at fair value through profit or loss	43	51	71	5,098	5,264
Negative market values (derivative financial instruments)	43	51	71	5,098	5,264
Other short-term borrowings	0	0	0	0	0
Other liabilities	0	0	0	0	0
Total liabilities	**43**	**51**	**71**	**5,098**	**5,264**
Off-balance sheet exposure	0	8,737	10,720	6,386	25,843
Total	**429**	**80,798**	**48,967**	**88,967**	**219,162**

Total trading assets as of December 31, 2024, and December 31, 2023, of € 10.5 billion and € 8.9 billion are comprised primarily of € 3.8 billion and € 2.8 billion in securitizations and € 4.1 billion and € 3.3 billion in funds structured entities, respectively. The Group's interests in securitizations are collateralized by the assets contained in these entities. Where the Group holds fund units these are typically in regard to market making in funds or otherwise serve as hedges for notes issued to clients. Moreover, the credit risk arising from loans made to third party funding structured entities is mitigated by the collateral received.

Non-trading financial assets mandatory at fair value through profit or loss includes reverse repurchase agreements to funds which comprise the majority of the interests in this category and are collateralized by the underlying securities.

Loans as of December 31, 2024, and December 31, 2023, consist of € 119.0 billion and € 116.7 billion investment in securitization tranches and financing to third party funding entities. The Group's financing to third party funding entities is collateralized by the assets in those structured entities.

Other assets as of December 31, 2024, and December 31, 2023, of € 12.9 billion and € 14.7 billion, respectively, consist primarily of cash margin balances.

Pending Receivable balances are not included in this disclosure note due to the fact that these balances arise from typical customer supplier relationships out of e.g., brokerage type activities and their inherent volatility would not provide users of the financial statements with effective information about Deutsche Bank's exposures to structured entities.

Financial support

Deutsche Bank did not provide non-contractual support during the year to unconsolidated structured entities.

Sponsored unconsolidated structured entities where the Group has no interest as of December 31, 2024, and December 31, 2023

As a sponsor, Deutsche Bank is involved in the legal set up and marketing of the entity and supports the entity in different ways, namely:

- Transferring assets to the entities
- Providing seed capital to the entities
- Providing operational support to ensure the entity's continued operation
- Providing guarantees of performance to the structured entities.

The bank is also deemed a sponsor for a structured entity if market participants would reasonably associate the entity with Deutsche Bank. Additionally, the use of the Deutsche Bank name for the structured entity indicates that the bank has acted as a sponsor.

The gross revenues from sponsored entities where the bank did not hold an interest as of December 31, 2024, and December 31, 2023, were € 581 million and € 38 million, respectively. Instances where the bank does not hold an interest in an unconsolidated sponsored structured entity include cases where any seed capital or funding to the structured entity has already been repaid in full to the Group during the year. This amount does not take into account the impacts of hedges and is recognized in Net gains/losses on financial assets/liabilities at fair value through profit and loss. The aggregated carrying amounts of assets transferred to sponsored unconsolidated structured entities in 2024 were € 3.7 billion for securitization and € 2.3 billion for repackaging and investment entities. In 2023, they were € 1.7 billion for securitization and € 1.9 billion for repackaging and investment entities.

39 – Current and non-current assets and liabilities

Asset and liability line items by amounts recovered or settled within or after one year

Asset items as of December 31, 2024

	Amounts to be recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2024
Cash and central bank balances	147,494	0	147,494
Interbank balances (w/o central banks)	6,154	6	6,160
Central bank funds sold and securities purchased under resale agreements	32,061	8,742	40,803
Securities borrowed	32	11	44
Financial assets at fair value through profit or loss	538,650	7,246	545,895
Financial assets at fair value through other comprehensive income	10,539	31,551	42,090
Equity method investments	0	1,028	1,028
Loans at amortized cost	131,164	352,733	483,897
Property and equipment	0	6,193	6,193
Goodwill and other intangible assets	0	7,749	7,749
Other assets	77,235	23,943	101,178
Assets for current tax	1,287	514	1,801
Total assets before deferred tax assets	944,616	439,715	1,384,331
Deferred tax assets			6,702
Total assets			1,391,033

Liability items as of December 31, 2024

	Amounts to be recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2024
Deposits	642,421	25,279	667,701
Central bank funds purchased and securities sold under repurchase agreements	2,710	1,030	3,740
Securities loaned	2	0	2
Financial liabilities at fair value through profit or loss	393,378	19,032	412,409
Other short-term borrowings	9,895	0	9,895
Other liabilities	88,347	7,269	95,616
Provisions	3,326	0	3,326
Liabilities for current tax	492	228	720
Long-term debt	20,628	94,270	114,899
Trust preferred securities	287	0	287
Total liabilities before deferred tax liabilities	1,161,486	147,109	1,308,594
Deferred tax liabilities			574
Total liabilities			1,309,168

Asset items as of December 31, 2023

	Amounts to be recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2023
Cash and central bank balances	178,416	0	178,416
Interbank balances (w/o central banks)	5,535	606	6,140
Central bank funds sold and securities purchased under resale agreements	8,263	6,462	14,725
Securities borrowed	32	6	39
Financial assets at fair value through profit or loss	459,625	5,648	465,273
Financial assets at fair value through other comprehensive income	7,393	28,152	35,546
Equity method investments	0	1,013	1,013
Loans at amortized cost	133,131	346,222	479,353
Property and equipment	0	6,185	6,185
Goodwill and other intangible assets	0	7,327	7,327
Other assets	93,111	21,587	114,698
Assets for current tax	1,084	429	1,513
Total assets before deferred tax assets	886,590	423,637	1,310,227
Deferred tax assets			7,039
Total assets			1,317,266

Liability items as of December 31, 2023

	Amounts to be recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2023
Deposits	602,392	23,095	625,486
Central bank funds purchased and securities sold under repurchase agreements	2,215	823	3,038
Securities loaned	3	0	3
Financial liabilities at fair value through profit or loss	356,973	9,521	366,494
Other short-term borrowings	9,620	0	9,620
Other liabilities	107,337	5,681	113,018
Provisions	2,448	0	2,448
Liabilities for current tax	369	262	631
Long-term debt	30,942	88,448	119,390
Trust preferred securities	289	0	289
Total liabilities before deferred tax liabilities	1,112,588	127,830	1,240,418
Deferred tax liabilities			517
Total liabilities			1,240,935

40 – Events after the reporting period

After the reporting date no material events occurred which had a significant impact on the bank’s results of operations, financial position and net assets.

41 – Regulatory capital information

General definitions

The calculation of Deutsche Bank's own funds incorporates the capital requirements following the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions" (CRR) and the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions" (CRD), which have been further amended with subsequent Regulations and Directives. The CRD has been implemented into German law. The information in this section as well as in the section "Development of risk-weighted assets" is based on the regulatory principles of consolidation.

This section refers to the capital adequacy of the group of entities consolidated for banking regulatory purposes pursuant to the CRR and the German Banking Act ("Kreditwesengesetz" or "KWG"), which does not include insurance companies and companies outside the finance sector.

The total own funds pursuant to the effective regulations as of year-end 2024 comprises Tier 1 and Tier 2 capital. Tier 1 capital is subdivided into Common Equity Tier 1 capital and Additional Tier 1 capital.

CET 1 capital consists primarily of common share capital (net of own holdings) including related share premium accounts, retained earnings (including losses for the financial year, if any) and accumulated other comprehensive income, subject to prudential filters and regulatory adjustments as well as minority interests qualifying for inclusion in consolidated CET 1 capital. Prudential filters for CET 1 capital, according to Articles 32 to 35 CRR, include securitization gains on sale, cash flow hedges and changes in the value of own liabilities, and additional value adjustments. CET 1 capital regulatory adjustments for instance includes intangible assets (exceeding their prudential value), adoption of the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR which applies until year-end 2025, deferred tax assets that rely on future profitability, negative amounts resulting from the calculation of expected loss amounts, net defined benefit pension fund assets, reciprocal cross holdings in the capital of financial sector entities and, significant and non-significant investments in the capital (CET 1, AT1, Tier 2) of financial sector entities above certain thresholds. All items which are not deducted (i.e., amounts below the threshold) are subject to risk-weighting.

Additional Tier 1 capital consists of AT1 capital instruments and related share premium accounts as well as noncontrolling interests qualifying for inclusion in consolidated AT1 capital. To qualify as AT1 capital under CRR/CRD, instruments must have principal loss absorption through a conversion to common shares or a write-down mechanism allocating losses at a trigger point and must also meet further requirements such as perpetual with no incentive to redeem and institution must have full dividend/coupon discretion at all times.

Tier 2 capital comprises eligible capital instruments, the related share premium accounts and subordinated long-term debt, certain loan loss provisions and noncontrolling interests that qualify for inclusion in consolidated Tier 2 capital. To qualify as Tier 2 capital, capital instruments or subordinated debt must have an original maturity of at least five years. Moreover, eligible capital instruments may inter alia not contain an incentive to redeem, a right of investors to accelerate repayment, or a credit sensitive dividend feature.

Capital instruments

The Management Board was authorized by the 2023 Annual General Meeting to buy, on or before April 30, 2028, shares of up to 10 % of the share capital at the time this resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. As at the 2023 Annual General Meeting, this corresponded to a volume of up to 204.0 million shares. Thereof, a volume of up to 5 % of the total share capital or 102.0 million shares can be purchased by using derivatives, including derivatives with a volume of up to 2 % of the total share capital with a maturity exceeding 18 months. During the period from the 2023 Annual General Meeting until the 2024 Annual General Meeting, 40.3 million shares were purchased for equity compensation purposes in the same period or upcoming periods. Thereof, 22.9 million shares were purchased by exercising call options. In addition, 16.1 million new call options were purchased for equity compensation purposes in upcoming periods. Furthermore, 71.1 million shares were purchased for cancellation with the purpose of distributing capital to shareholders in the same period. Thereof, 45.5 million shares that were acquired as part of the share buyback program of € 450 million in 2023 were cancelled at the beginning of the year 2024. The number of shares held in Treasury, after delivery of shares for equity compensation and share cancellations, amounted to 31.6 million as of the 2024 Annual General Meeting. Thereof, 25.6 million shares relate to shares bought back for cancellation as part of the € 675 million share buyback program in 2024. The remaining volume of 6.0 million shares relates to shares to be used for equity compensation purposes in upcoming periods.

The Annual General Meeting on May 16, 2024, granted the Management Board the approval to buy, on or before April 30, 2029, shares of up to 10 % of the share capital at the time of this resolution was taken or, if lower, of the share capital at the respective time the authorization was exercised. As at the 2024 Annual General Meeting, this corresponded to 199.5 million shares. Thereof, a volume of up to 5% of the total share capital or 99.7 million shares can be purchased by using derivatives, including derivatives with a volume of up to 2% of the total share capital with a maturity exceeding 18 months. These authorizations replaced the authorizations of the previous year. During the period from the 2024 Annual General Meeting until December 31, 2024, 20.9 million shares were purchased for cancellation with the purpose of distributing capital to shareholders. The number of shares held in Treasury from buybacks amounted to 49.6 million as of December 31, 2024. Thereof 46.4 million shares relate to shares bought back for cancellation as part of the € 675 million share buyback program in 2024. The remaining volume of 3.1 million shares relates to shares to be used for equity compensation purposes in upcoming periods.

Since the 2017 Annual General Meeting, renewed at the 2021 Annual General Meeting, and as of December 31, 2024, authorized capital available to the Management Board is € 2,560 million (1,000 million shares).

Since the 2022 Annual General Meeting, the Management Board is authorized to issue participatory notes and other hybrid debt securities that fulfill the regulatory requirements to qualify as Additional Tier 1 capital with an equivalent value of € 9.0 billion on or before April 30, 2027. Deutsche Bank issued € 4.25 billion new AT1 notes under this authorization, thereof € 3.0 billion new AT1 notes were issued in 2024.

The current CRR as applicable since June 27, 2019, provides further grandfathering rules for AT1 and Tier 2 instruments issued prior to June 27, 2019. AT1 and Tier 2 instruments issued through special purpose entities were grandfathered until December 31, 2021. In 2024, transitional arrangements only exist for AT1 and Tier 2 instruments which continue to qualify until June 26, 2025, even if they do not meet certain new requirements that apply since June 27, 2019. Deutsche Bank had an immaterial number of instruments that qualified during 2024.

Based on the current CRR, the amount recognized as regulatory AT1 capital amounted to € 11.4 billion. The corresponding nominal amount of outstanding AT1 instruments was € 11.6 billion as of December 2024. In 2024, the bank issued new AT1 notes with a nominal amount of € 3.0 billion.

As of December 31, 2024, the amount recognized as regulatory Tier 2 amounted capital to € 7.7 billion. The corresponding nominal amount of outstanding Tier 2 instruments was € 11.8 billion as of December 2024. In 2024, Tier 2 instruments with a nominal value of € 104.4 million matured. There were no new issuances of Tier 2 instruments in 2024.

Minimum capital requirements and additional capital buffers

Failure to meet minimum capital requirements can result in supervisory measures such as restrictions of profit distributions or limitations on certain businesses such as lending. Deutsche Bank complied with the minimum regulatory capital adequacy requirements in 2024.

Details on regulatory capital

Own Funds Template (incl. RWA and capital ratios)

in € m.	Dec 31, 2024 CRR/CRD	Dec 31, 2023 CRR/CRD
Common Equity Tier 1 (CET 1) capital: instruments and reserves		
Capital instruments, related share premium accounts and other reserves	44,130	44,908
Retained earnings	19,978	16,509
Accumulated other comprehensive income (loss), net of tax	(1,229)	(1,760)
Independently reviewed interim profits net of any foreseeable charge or dividend[1]	801	3,493
Other	1,020	973
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	**64,700**	64,124
Common Equity Tier 1 (CET 1) capital: regulatory adjustments		
Additional value adjustments (negative amount)	(1,680)	(1,727)
Other prudential filters (other than additional value adjustments)	95	(126)
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,277)	(5,014)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (negative amount)	(3,463)	(4,207)
Negative amounts resulting from the calculation of expected loss amounts	(3,037)	(2,386)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,173)	(920)
Direct, indirect and synthetic holdings by an institution of own CET 1 instruments (negative amount)	0	(0)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10 % / 15 % thresholds and net of eligible short positions) (negative amount)	0	0
Deferred tax assets arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (amount above the 10 % / 15 % thresholds) (negative amount)	0	0
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 468 CRR	1,012	0
Other regulatory adjustments[2]	(1,721)	(1,679)
Total regulatory adjustments to Common Equity Tier 1 (CET 1) capital	**(15,244)**	(16,058)
Common Equity Tier 1 (CET 1) capital	**49,457**	48,066
Additional Tier 1 (AT1) capital: instruments		
Capital instruments and the related share premium accounts	11,508	8,578
Amount of qualifying items referred to in Art. 484 (4) CRR and the related share premium accounts subject to phase out from AT1	0	0
Additional Tier 1 (AT1) capital before regulatory adjustments	**11,508**	8,578
Additional Tier 1 (AT1) capital: regulatory adjustments		
Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(130)	(250)
Residual amounts deducted from AT1 capital with regard to deduction from CET 1 capital during the transitional period pursuant to Art. 472 CRR		
Other regulatory adjustments	0	0
Total regulatory adjustments to Additional Tier 1 (AT1) capital	**(130)**	(250)
Additional Tier 1 (AT1) capital	**11,378**	8,328
Tier 1 capital (T1 = CET 1 + AT1)	**60,835**	56,395
Tier 2 (T2) capital	**7,676**	8,610
Total capital (TC = T1 + T2)	**68,511**	65,005
Total risk-weighted assets	**357,427**	349,742
Capital ratios		
Common Equity Tier 1 capital ratio (as a percentage of risk-weighted assets)	13.8	13.7
Tier 1 capital ratio (as a percentage of risk-weighted assets)	17.0	16.1
Total capital ratio (as a percentage of risk-weighted assets)	19.2	18.6

[1] Full year profit is recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4); current year profits of € 3.4 billion reduced by deductions for AT1 coupons of € 475 million and deductions for announced distribution to shareholders in relation to FY 2024 of € 2.1 billion, which includes an intended dividend of € 1.3 billion (68 Cents per share) and the ECB approved share buyback of € 750 million

[2] Includes capital deductions of € 1.4 billion (December 2023: € 1.4 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.3 billion (December 2023: € 0.3 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures

Reconciliation of shareholders' equity to Own Funds

		CRR/CRD
in € m.	Dec 31, 2024	Dec 31, 2023
Total shareholders' equity per accounting balance sheet (IASB IFRS)	**68,709**	65,999
Difference between equity per IASB IFRS / EU IFRS[3]	(2,433)	(1,513)
Total shareholders' equity per accounting balance sheet (EU IFRS)	**66,276**	64,486
Deconsolidation/Consolidation of entities	(24)	(35)
Of which:		
Additional paid-in capital	0	0
Retained earnings	(24)	(35)
Accumulated other comprehensive income (loss), net of tax	0	0
Total shareholders' equity per regulatory balance sheet	**66,252**	64,451
Minority Interests (amount allowed in consolidated CET 1)	1,020	973
AT1 coupon and shareholder distribution deduction[1]	(2,565)	(1,279)
Capital instruments not eligible under CET 1 as per CRR 28(1)	(7)	(21)
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	**64,700**	64,124
Prudential filters	**(1,585)**	(1,853)
Of which:		
Additional value adjustments	(1,680)	(1,727)
Any increase in equity that results from securitized assets	0	(0)
Fair value reserves related to gains or losses on cash flow hedges and gains or losses on liabilities designated at fair value resulting from changes in own credit standing	95	(126)
Regulatory adjustments	(13,659)	(14,205)
Of which:		
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,277)	(5,014)
Deferred tax assets that rely on future profitability	(3,463)	(4,207)
Negative amounts resulting from the calculation of expected loss amounts	(3,037)	(2,386)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,173)	(920)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	0
Securitization positions not included in risk-weighted assets	0	0
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 468 CRR	1,012	0
Others[2]	(1,721)	(1,679)
Common Equity Tier 1 capital	**49,457**	48,066

[1] Full year profit is recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4); current year deductions include deductions for AT1 coupons of € 475 million and deductions for announced distribution to shareholders in relation to FY 2024 of € 2.1 billion, which includes an intended dividend of € 1.3 billion (68 Cents per share) and the ECB approved share buyback of € 750 million

[2] Negative amounts from expected loss shortfall has been disclosed separately in the current year which was shown as part of 'Other Regulatory Adjustments' for the previous year and includes capital deductions of € 1.4 billion (December 2023: € 1.4 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.3 billion (December 2023: € 0.3 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures

[3] Differences in "equity per balance sheet" result entirely from deviations in profit (loss) after taxes due to the application of EU carve-out rules as set forth in the chapter " Material Accounting Policies and Critical Accounting Estimates". These rules were initially applied in the first quarter 2020.

Capital management

Deutsche Bank's Treasury function manages solvency, capital adequacy, leverage, and bail-in capacity ratios at Group level and locally in each region, as applicable. Treasury implements Deutsche Bank's capital strategy, which itself is developed by the Group Risk Committee and approved by the Management Board. Treasury, directly or through the Group Asset and Liability Committee, manages, among other things, issuance and repurchase of shares and capital instruments, hedging of capital ratios against foreign exchange swings, setting capacities for key financial resources, the design of shareholders' equity allocation, and regional capital planning. The bank is fully committed to maintaining Deutsche Bank's sound capitalization both from an economic and regulatory perspective considering both book equity based on IFRS accounting standards, regulatory and economic capital as well as specific capital requirements from rating agencies. The bank continuously monitors and adjusts Deutsche Bank's overall capital demand and supply to always achieve an appropriate balance.

Treasury manages the issuance and repurchase of capital instruments, namely Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments as well as TLAC/MREL eligible debt instruments. Treasury constantly monitors the market for liability management trades. Such trades represent a countercyclical opportunity to create Common Equity Tier 1 capital by buying back Deutsche Bank's issuances below par.

Treasury manages the sensitivity of Deutsche Bank's CET 1 ratio and capital towards swings in foreign currency exchange rates against the euro. For this purpose, Treasury develops and executes suitable hedging strategies within the constraints of a Management Board approved Risk Appetite. Capital invested into Deutsche Bank's foreign subsidiaries and branches is either not hedged, partially hedged or fully hedged. Thereby, Treasury aims to balance effects from foreign exchange rate movements on capital, capital deduction items and risk weighted assets in foreign currency. In addition, Treasury also accounts for associated hedge cost and implications on market risk weighted assets.

Resource limit setting

Usage of key financial resources is influenced through the following governance processes and incentives.

Target resource capacities are reviewed in Deutsche Bank's annual strategic plan in line with Deutsche Bank's CET 1 and Leverage Ratio ambitions. As a part of Deutsche Bank's quarterly process, the Group Asset and Liability Committee approves divisional resource limits for total capital demand (defined as the sum of RWA and certain RWA equivalents of Capital Deduction Items and certain RWA equivalents of Capital Buffer Requirements items) and leverage exposure that are based on the strategic plan but adjusted for market conditions and the short-term outlook. Limits are enforced through a close monitoring process and an excess charging mechanism.

Overall regulatory capital requirements are principally driven by either Deutsche Bank's CET 1 ratio (solvency) or leverage ratio (leverage) requirements, whichever is the more binding constraint. For the internal capital allocation, the combined contribution of each segment to the Group's Common Equity Tier 1 ratio, the Group's Leverage ratio and the Group's Capital Loss under Stress are weighted to reflect their relative importance and level of constraint to the Group. Contributions to the Common Equity Tier 1 ratio and the Leverage ratio are measured through RWA and Leverage Ratio Exposure (LRE). The Group's Capital Loss under Stress is a measure of the Group's overall economic risk exposure under a defined stress scenario. Goodwill, other intangible assets, and business-related regulatory capital deduction items included in total capital demand are directly allocated to the respective segments, supporting the calculation of the allocated tangible shareholders equity and the respective rate of return.

Most of Deutsche Bank's subsidiaries and several of Deutsche Bank's branches are subject to legal and regulatory capital requirements. In developing, implementing, and testing Deutsche Bank's capital and liquidity position, the bank fully takes such legal and regulatory requirements into account. Any material capital requests of Deutsche Bank's branches and subsidiaries across the globe are presented to and approved by the Group Investment Committee prior to execution.

Further, Treasury is a member of Deutsche Bank's Pensions Committee and represented in relevant Investment Committees overseeing the management of the assets of the largest Deutsche Bank pension funds in Germany. These investment committees set the investment strategy for these funds in line with the bank's investment objective to protect the capital base and distribution capacity of the bank.

42 – Condensed Deutsche Bank AG (parent company only) financial information

Condensed statement of income

in € m.	2024	2023	2022
Interest income, excluding dividends from subsidiaries	42,684	38,205	20,682
Dividends received from subsidiaries:			
Bank subsidiaries	446	516	395
Nonbank subsidiaries	1,677	2,255	1,117
Interest expense	32,068	26,260	9,909
Net interest and dividend income	**12,740**	14,715	12,284
Provision for credit losses	1,359	1,158	829
Net interest and dividend income after provision for credit losses	**11,380**	13,557	11,455
Noninterest income:			
Commissions and fee income	5,114	4,513	4,383
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	4,736	4,681	1,824
Other income (loss)[1]	1,939	(412)	3,541
Total noninterest income	**11,789**	8,782	9,747
Noninterest expenses:			
Compensation and benefits	6,271	5,896	5,679
General and administrative expenses	7,461	6,540	6,273
Services provided by (to) affiliates, net	2,486	2,540	2,165
Impairment of goodwill and other intangible assets	0	0	0
Total noninterest expenses	**16,218**	14,975	14,118
Income (loss) before income taxes	**6,951**	7,363	7,084
Income tax expense (benefit)	1,307	906	(1,189)
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	**5,644**	6,457	8,273

[1] Includes net gains (losses) on financial assets mandatory at fair value through other comprehensive income as well as impairments and write-ups on investments in subsidiaries.

Condensed statement of comprehensive income

in € m.	2024	2023	2022
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	5,644	6,457	8,273
Other comprehensive income (loss), net of tax	197	(143)	(1,006)
Total comprehensive income (loss), net of tax	**5,841**	6,314	7,267

Condensed balance sheet

in € m.	Dec 31, 2024	Dec 31, 2023
Assets:		
Cash and central bank balances:	117,769	149,493
Interbank balances (w/o central banks):		
Bank subsidiaries	24,335	10,787
Other	5,298	4,869
Central bank funds sold, securities purchased under resale agreements, securities borrowed:		
Bank subsidiaries	0	0
Nonbank subsidiaries	9,340	10,783
Other	40,835	14,758
Financial assets at fair value through profit or loss:		
Bank subsidiaries	2,049	2,972
Nonbank subsidiaries	2,203	968
Other	480,479	409,623
Financial assets at fair value through other comprehensive income	68,423	54,038
Investments in associates	285	291
Investment in subsidiaries:		
Bank subsidiaries	6,830	5,569
Nonbank subsidiaries	26,311	24,989
Loans:		
Bank subsidiaries	45,569	56,042
Nonbank subsidiaries	36,467	33,581
Other	353,037	350,411
Other assets:		
Bank subsidiaries	2,727	2,679
Nonbank subsidiaries	10,947	11,372
Other	100,273	104,272
Total assets	**1,333,178**	1,247,496
Liabilities and equity:		
Deposits:		
Bank subsidiaries	28,657	30,781
Nonbank subsidiaries	14,197	13,453
Other	568,530	530,991
Central bank funds purchased, securities sold under repurchase agreements and securities loaned:		
Bank subsidiaries	1,298	563
Nonbank subsidiaries	28,881	38,260
Other	3,718	3,025
Financial liabilities at fair value through profit or loss:		
Bank subsidiaries	3,038	3,613
Nonbank subsidiaries	1,329	1,261
Other	359,961	314,707
Other short-term borrowings:		
Bank subsidiaries	586	127
Nonbank subsidiaries	684	814
Other	9,681	9,283
Other liabilities:		
Bank subsidiaries	1,624	1,660
Nonbank subsidiaries	6,282	8,541
Other	82,547	85,416
Long-term debt	154,437	143,919
Total liabilities	**1,265,448**	1,186,414
Total shareholders' equity	56,179	52,513
Additional equity components	11,550	8,569
Total equity	**67,729**	61,082
Total liabilities and equity	**1,333,178**	1,247,496

Condensed statement of cash flows

in € m.	2024	2023	2022
Net cash provided by (used in) operating activities	**(29,917)**	5,231	5,522
Cash flows from investing activities:			
Proceeds from:			
Sale of financial assets at fair value through other comprehensive income	17,261	14,245	13,307
Maturities of financial assets at fair value through other comprehensive income	14,788	13,769	15,847
Sale of debt securities held to collect at amortized cost	20	0	0
Maturities of debt securities held to collect at amortized cost	6,435	6,702	5,585
Sale of equity method investments	0	20	117
Sale of property and equipment	17	28	7
Purchase of:			
Financial assets at fair value through other comprehensive income	(35,559)	(32,017)	(34,484)
Debt Securities held to collect at amortized cost	(5,110)	(3,920)	(15,780)
Investments in associates	(57)	(60)	(97)
Property and equipment	(377)	(327)	(237)
Net change in investments in subsidiaries	(495)	(35)	622
Other, net	(1,303)	(1,199)	(1,066)
Net cash provided by (used in) investing activities	**(4,379)**	(2,794)	(16,180)
Cash flows from financing activities:			
Issuances of subordinated long-term debt	3	1,396	2,672
Repayments and extinguishments of subordinated long-term debt	(114)	(1,407)	(42)
Issuances of trust preferred securities	0	0	0
Repayments and extinguishments of trust preferred securities	0	0	0
Principal portion of lease payments	(413)	(395)	(445)
Common shares issued	0	0	0
Purchases of treasury shares	(1,126)	(857)	(695)
Sale of treasury shares	0	395	0
Additional Equity Components (AT1) issued	3,000	0	2,000
Additional Equity Components (AT1) repaid	0	0	(1,750)
Purchases of Additional Equity Components (AT1)	(3,341)	(356)	(759)
Sale of Additional Equity Components (AT1)	3,316	415	785
Coupon on additional equity components, pre tax	(574)	(498)	(479)
Cash dividends paid to Deutsche Bank shareholders	(883)	(610)	(406)
Net cash provided by (used in) financing activities	**(131)**	(1,918)	879
Net effect of exchange rate changes on cash and cash equivalents	**1,967**	(791)	2,378
Net increase (decrease) in cash and cash equivalents	(32,460)	(273)	(7,400)
Cash and cash equivalents at beginning of period	137,068	137,341	144,741
Cash and cash equivalents at end of period	104,608	137,068	137,341
Net cash provided by (used in) operating activities include			
Income taxes paid (received), net	738	196	464
Interest paid	31,629	24,360	8,736
Interest received	41,863	38,161	19,415
Dividends received	2,754	2,053	1,391
Cash and cash equivalents comprise			
Cash and central bank balances (not included Interest-earning time deposits with central banks)	98,417	132,547	131,763
Interbank balances (w/o central banks)	6,191	4,521	5,578
Total	**104,608**	137,068	137,341

Parent company's long-term debt by earliest contractual maturity

in € m.	Due in 2025	Due in 2026	Due in 2027	Due in 2028	Due in 2029	Due after 2029	Total Dec 31, 2024	Total Dec 31, 2023
Senior debt:								
Bonds and notes:								
Fixed rate	13,652	13,011	12,286	9,536	10,493	11,503	70,482	70,735
Floating rate	2,058	1,442	2,768	823	494	3,611	11,196	9,026
Other	1,787	1,772	1,206	1,688	1,148	52,338	59,940	51,793
Subordinated debt								
Bonds and notes:								
Fixed rate	3,484	2,000	2,436	0	0	4,315	12,234	11,749
Floating rate	0	0	0	0	0	500	500	468
Other	0	42	20	0	0	22	85	149
Total long-term debt	20,981	18,268	18,716	12,048	12,135	72,289	**154,437**	143,919

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Supervisory Board of Deutsche Bank Aktiengesellschaft:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Deutsche Bank Aktiengesellschaft ("the Company") as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2024, the related notes and the specific disclosures described in Note 1 to the consolidated financial statements as being part of the financial statements (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 10, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Valuation of level 3 financial instruments and related inputs not quoted in active markets

Description of the Matter

Management uses valuation techniques to establish the fair value of level 3 financial instruments and related inputs not quoted in active markets. The Group held level 3 financial assets and financial liabilities measured at fair value of EUR 26,281 million and EUR 13,382 million respectively as of December 31, 2024. The relevant financial instruments are reported within financial assets and liabilities at fair value through profit or loss, and financial assets at fair value through other comprehensive income. Information on the valuation techniques, models and methodologies used in the measurement of fair value is provided in notes 1 and 13 of the notes to the consolidated financial statements.

Financial instruments and related inputs that are not quoted in active markets include structured derivatives valued using complex models; more-complex or illiquid OTC derivatives; distressed debt; highly-structured bonds; illiquid loans, including those relating to commercial real estate; credit spreads used to determine valuation adjustments; and other inputs which cannot be observed for financial instruments with longer-dated maturities.

Auditing the valuation of level 3 financial instruments and related inputs not quoted in active markets was complex due to the valuation techniques and models being utilized and the unobservability of the significant inputs used.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over management's processes to determine fair value of financial instruments and determination of significant unobservable inputs therein. This includes controls relating to independent price verification; independent validation of valuation models, including assessment of model limitations; monitoring valuation model usage; and calculation of fair value adjustments.

We evaluated the valuation techniques, models and methodologies, and tested the inputs used in those models. We performed an independent revaluation of a sample of derivatives and other financial instruments at fair value that are not quoted in active markets, using independent models and inputs. We also independently assessed the reasonableness of a sample of proxy inputs used by comparing them to market data sources and evaluated their relevance to the related financial instruments.

In addition, we evaluated the methodology and inputs used by management in determining fair value adjustments against the requirements of IFRS 13 and performed recalculations for a sample of these valuation adjustments using our own independent data and methodology.

We involved our financial instruments valuation specialists in the procedures related to valuation models, independent revaluation and fair value adjustments.

Inclusion of forward-looking information in the model-based calculation of expected credit losses

Description of the Matter

As of December 31, 2024, the Group recognized an allowance for credit losses of EUR 6,198 million, with EUR 1,390 million relating to stage 1 and stage 2 allowances. Information on the inclusion of forward-looking information into the model-based calculation of expected credit losses and their adjustments for stages 1 and 2 is provided in notes 1 and 19 of the notes to the consolidated financial statements.

The estimated probabilities of default (PD) used in the model-based calculation of expected credit losses on non-defaulted financial instruments (IFRS 9 stage 1 and stage 2) are based on historical information, combined with current economic developments and forward-looking macroeconomic forecasts (e.g., gross domestic product and unemployment rates). Statistical techniques are used to transform the base scenario for future macroeconomic developments into multiple scenarios. These scenarios are the basis for deriving multi-year PD curves for different rating and counterparty classes, which are used in the calculation of expected credit losses.

Given the economic uncertainties regarding pronounced movements in interest rates, current geopolitical conflicts and other sources of volatility impacting macroeconomic variables, the estimation of forward-looking information requires significant judgment. To reflect these uncertainties, management must assess whether to make adjustments to its standard process for inclusion of macroeconomic variables into the expected credit loss model and forecasting methods, either by adjusting the macroeconomic variables or through the inclusion of management overlays..

Auditing the forward-looking information, included in the model-based calculation of expected credit losses, and any adjustment thereof, was complex due to the economic uncertainty and significant use of judgment.

How We Addressed the Matter in Our Audit

We obtained an understanding of the processes implemented by management, assessed the design of the controls over the selection, determination, monitoring and validation of forward-looking information in respect of the requirements under IFRS 9, and tested their operating effectiveness.

We evaluated management's review of its expected credit loss model and forecasting methods conducted through the model validation process. Furthermore, we evaluated the methods used to include the selected variables in the baseline scenario and the derivation of the multiple scenarios.

We assessed the baseline macroeconomic forecasts by comparing them with macroeconomic forecasts published by external sources.

We also evaluated the methodology applied by management to determine whether to adjust its standard process for inclusion of macroeconomic variables or to adjust the model results through management overlays. In doing so, we assessed the results of management's sensitivity analysis and compared the macroeconomic variables used to our own benchmark analysis. We also assessed that the adjustments were included in the calculation of expected credit losses according to management's methodology.

To assess the inclusion of forward-looking information in the model-based calculation of expected credit losses, we involved internal credit risk modelling specialists.

Expected credit losses for defaulted commercial real estate loans

Description of the Matter

As of December 31, 2024, the Group recognized loan exposures of EUR 36,463 million relating to the non-recourse commercial real estate loans business with corresponding allowances of EUR 795 million. Information on the Group’s commercial real estate loans business is included in Note 19 of the notes to the consolidated financial statements as well as the section titled “Commercial Real Estate” within the “ chapter “Credit Risk Exposure” (Focus Areas 2024) of the Risk Report (combined management report), which is an integral part of the Consolidated Financial Statements.

Identifying and calculating the expected credit losses for defaulted loan exposures involves various assumptions and estimation of inputs, particularly regarding the solvency of the borrower, expectations of future cash flows, observable market prices and expected proceeds from the realization of collateral.

Auditing expected credit losses (ECL) for defaulted commercial real estate loans was complex due to the economic uncertainty and significant use of judgment.

How We Addressed the Matter in Our Audit

We obtained an understanding of the processes for identifying and calculating expected credit losses for borrowers in the commercial real estate loans business. We assessed the design and tested the operating effectiveness of controls related to credit risk rating, the application of default criteria and transfer to stage 3 in accordance with IFRS 9 and the calculation of the expected credit loss.

We evaluated the criteria used by management to determine defaulted loans in accordance with IFRS 9.

For a sample of commercial real estate loans, we analyzed the application of default criteria used for ECL-staging. For loans classified as stage 3 we assessed the significant assumptions concerning the estimated future cash flows from the loan exposures by assessing the collateral value, the solvency of the borrower and the publicly available market and industry forecasts. We searched for and evaluated information that corroborates or contradicts management’s forecasted assumptions. We also tested the arithmetical accuracy of the expected credit loss calculated for defaulted exposures.

We involved internal specialists to assess the valuation of commercial real estate collateral on a sample basis.

Measurement of goodwill for the Asset Management cash-generating unit

Description of the Matter

As of December 31, 2024, the Group reported goodwill of EUR 2,963 million that was exclusively allocated to its Asset Management cash-generating unit (CGU). Information on the measurement of goodwill is provided in notes 1 and 23 of the notes to the consolidated financial statements.

For purposes of the impairment test, the recoverable amount of the Asset Management CGU is calculated using the discounted cash flow model. In this context, significant assumptions are made regarding the earnings projections and the input parameters of the Capital Asset Pricing Model from which the discount rate is derived.

Auditing the measurement of goodwill for the Asset Management CGU involved a high degree of judgment due to the earnings projections and discount rate contained in the discounted cash flow model.

How We Addressed the Matter in Our Audit

We obtained an understanding of the process for preparing the earnings projections and calculating the recoverable amount of the Asset Management CGU. In this respect, we also obtained an understanding of management’s controls regarding the earnings projections and the discount rate, assessed the design of such controls and tested their operating effectiveness.

We analyzed the significant assumptions described above with a focus on significant changes compared with the prior year. In this regard, we assessed the consistency and reasonableness of the significant assumptions used in the discounted cash flow model by comparing them with external market expectations.

In analyzing the expected future cash flows of the Asset Management CGU, we compared the earnings projections with the prior fiscal year’s projections and the actual results achieved and evaluated any significant deviations, also with their impact for cash flows. Furthermore, we assessed the discount rate by comparing it to a range of externally available data.

To assess the above assumptions made in the recoverability the Asset Management CGU, we involved internal business valuation specialists.

Recognition and measurement of deferred tax assets

Description of the Matter

As of December 31, 2024, the Group reported net deferred tax assets of EUR 6,128 million. Information on the recognition and measurement of deferred tax assets is provided in notes 1 and 34 of the notes to the consolidated financial statements.

The recognition and measurement of deferred tax assets is based on the estimation of the ability to utilize unused tax losses and deductible temporary differences against potential future taxable income. This estimate is based, among others, on assumptions regarding forecasted operating results based upon the approved business plan.

Auditing the deferred tax assets was complex because of the use of judgment in estimation of future taxable income and the ability to use tax losses.

How We Addressed the Matter in Our Audit

We obtained an understanding of the process to determine whether deductible temporary differences and unused tax losses are identified in different jurisdictions and measured in accordance with the provisions of tax law and rules for accounting for deferred taxes under IAS 12, evaluated the design and tested the operating effectiveness of the related controls.

We tested the assumptions used to develop and allocate elements of the approved business plan as a basis for estimating the future taxable income of the relevant group companies and tax groups.

Furthermore, we evaluated the recognition of deferred tax assets by analyzing the key assumptions made in estimating future taxable income. We assessed the estimates made in the forecasted operating results by comparing the underlying key assumptions with historical and prospective data available externally. We compared the historical forecasts with the actual results. In addition, we assessed the estimated tax adjustments and we performed sensitivity analyses on the utilization periods of the respective deferred tax assets.

To assess the assumptions used in the recoverability of the deferred taxes, we involved our tax professionals and internal business valuation specialists.

Provisions and contingent liabilities for civil litigation and regulatory enforcement

Description of the Matter

As of December 31, 2024, the Group's provisions for civil litigation and regulatory enforcement were EUR 2.1 billion and contingent liabilities were EUR 0.7 billion. Information on Provisions for civil litigation and regulatory enforcement is provided in notes 1 and 27 of the notes to the consolidated financial statements.

The Group operates in a legal and regulatory environment that exposes it to significant litigation risks. The estimates for recognition and measurement of provisions or disclosure of contingent liabilities are based upon currently available information and a variety of assumptions and variables.

Significant judgment is required in assessing probability and estimating the amount of an outflow of economic resources given the inherent uncertainties that exist in civil litigation and regulatory enforcement matters.

Auditing the provisions and contingent liabilities for selected civil litigation and regulatory enforcement matters was complex due to the significant subjectivity involved in management's estimate of the probability and amount of outflow of economic resources.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of management's controls over the process for recognizing and measuring provisions and disclosing contingent liabilities for civil litigation and regulatory enforcement.

For a sample of relevant matters, we evaluated management's assessment of the probability and amount of economic outflow, including the assumptions and variables considered for each respective matter. These procedures included inspecting internal and external legal analyses detailing the judgmental aspects subject to legal interpretations. We also read minutes of key management committee meetings (including the Management Board) as well as related correspondence, such as court proceedings, settlement agreements, regulatory inquiries and investigation reports. We obtained correspondence directly from external legal counsel to assess the information provided by management and performed inquiries with external counsel as necessary..

We involved internal valuation specialists to assess the methodology of relevant matters on which the provision amounts were determined as well as internal legal specialists to assess for applicable matters the probability of an outflow and the amount of provision recognized.

/s/ EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft

We have served as the Company's auditor since 2020.

Eschborn/Frankfurt am Main, Germany

March 10, 2025

3-Compensation Report

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Introduction

The Compensation Report for the year 2024 provides detailed information on compensation in Deutsche Bank Group.

Compensation Report for the Management Board and the Supervisory Board

The Compensation Report for the 2024 financial year was prepared jointly by the Management Board and the Supervisory Board of Deutsche Bank Aktiengesellschaft (hereinafter: Deutsche Bank AG or the bank).

The Compensation Report fulfills the current legal and regulatory requirements, in particular of Section 162 of the German Stock Corporation Act and the Remuneration Ordinance for Institutions (*Institutsvergütungsverordnung*) and takes into account the recommendations set out in the German Corporate Governance Code. It is also in compliance with the applicable requirements of the accounting rules for capital market-oriented companies (German Commercial Code), International Financial Reporting Standards as well as the guidelines issued by the working group “Guidelines for Sustainable Management Board Remuneration Systems”.

Employee Compensation Report

This part of the compensation report discloses information with regard to the compensation system and structure that applies to the employees in Deutsche Bank Group. The report provides details on the Group Compensation Framework, and it outlines the decisions on variable compensation for 2024. Furthermore, this part contains quantitative disclosures specific to employees identified as Material Risk Takers (`MRT´s) in accordance with the Remuneration Ordinance for Institutions.

Compensation of the Management Board

Executive Summary

Over the past five and a half years, Deutsche Bank has made further progress on its transformation into a robust, resilient, and profitable institution with a clear strategy focused on delivering the best outcomes for its clients. Since July 2019, progress has been made to fundamentally reshape the bank. In 2024, Deutsche Bank advanced its Global Hausbank strategy, achieving revenue growth, operational as well as capital efficiency. The bank continued to expand its business while controlling adjusted costs and investing in its platform. It also resolved key legacy litigation matters and put exceptional items behind it.

Net revenues grew to € 31.5 billion in 2024, up from € 31.2 billion, or 1% versus 2023, in line with the bank's guidance of around € 30 billion for 2024. Compound annual revenue growth since 2021 was 7.2% through the end of 2024, compared to 10.5% in 2023, in line with the bank's target range of 5.5% to 6.5%. In 2025, Deutsche Bank expects continued growth across all business areas, driven by net interest and non-interest income. The bank maintains its revenue goal of approximately € 32 billion, with potential upside from currency translation effects.

Noninterest expenses in 2024 were € 23.0 billion, up 6% from the prior year, including € 2.6 billion in nonoperating costs for litigation, restructuring and severance. Adjusted costs declined to € 20.4 billion from € 20.6 billion in 2023. In terms of operational efficiency, Deutsche Bank made further progress on its € 2.5 billion operational efficiency program during 2024. Measures included the optimization of the bank's platform in Germany, workforce reductions, notably in non-client-facing roles, IT and infrastructure optimization along with a continued automation of front-to-back processes. The bank expects the large majority of these measures to positively impact the adjusted cost run-rate in 2025. However, as investments continue, the overall adjusted costs in 2025 are expected to remain essentially flat compared to the previous year. The bank anticipates a cost/income ratio of below 65% by the end of 2025, reset from below 62.5%. Nevertheless, maintaining cost discipline remains a top priority.

The capital efficiency program reduced risk-weighted assets by € 24 billion, close to the € 25-30 billion target by 2025. The Common Equity Tier 1 capital ratio stood at 13.8%, which includes the € 750 million share repurchases authorized for 2025. The bank plans to maintain progress on capital efficiencies in 2025.

Deutsche Bank announced € 2.1 billion in shareholder distributions for 2025, including € 750 million in share buybacks and € 1.3 billion in dividends (€0.68 per share), up 50% from € 0.45 per share for 2023. Total shareholder distributions since 2022 reached € 5.4 billion, exceeding the € 5 billion goal in the bank's transformation program launched in 2019. The bank aims to surpass € 8 billion in total distributions for 2021-2025, paid out in the years 2022 to 2026, and to also maintain a 50% payout ratio beyond 2025.

Deutsche Bank's financial and regulatory targets are based on the financial results prepared in accordance with IFRS as issued by the IASB and endorsed by the EU. For further details, please refer to "Note 01 – Material Accounting Policies and Critical Accounting Estimates – EU carve-out" to the consolidated financial statements.

Compensation Report 2023

The Compensation Report 2023 for members of the Management Board and Supervisory Board of Deutsche Bank as published on March 14, 2024, was submitted to the General Meeting on May 16, 2024, for approval in accordance with Section 120a (4) of the German Stock Corporation Act. The General Meeting approved the Compensation Report with a majority of 86.81%.

Changes on the Management Board and Compensation Decisions in 2024

With effect from July 2024, the Management Board consisted of 10 members. The role of a Chief Compliance and Anti-Financial Crime (AFC) Officer created by the Supervisory Board is expected to further strengthen the bank's control environment and place an even greater focus on remediation activities to combat financial crime. With the appointment of Laura Padovani to this role on the Management Board, the proportion of women has increased to 20%.

Starting from 2024 with a simplified Management Board compensation system, the Supervisory Board considers Management Board members' compensation more individually than in the past, based on an external benchmarking for the respective role and scope of responsibility, with the aim of bringing target compensation amounts into line with responsibilities. This approach consequently reflects its pay-for-performance philosophy.

All compensation decisions are subject to the boundaries of multiple regulatory requirements. In this regard, Management Board compensation and the pay-out schedules of variable compensation components are limited in several ways. Due to the requirements of Section 25a (5) of the German Banking Act and in accordance with the decision of the General Meeting in May 2014, the ratio of fixed to variable compensation is generally limited to 1:2 (cap rule). In order to be in the position to offer competitive compensation in banking and to be successful in attracting and retaining the best leaders for the bank, the fixed compensation of Deutsche Bank Management Board members therefore tends to be higher relative to other DAX companies that are not subject to banking-specific regulation and that have variable compensation that can be a higher multiple of fixed pay.

The Supervisory Board reviews the compensation levels of the members of the Management Board annually and regularly engages external compensation advisors to support the review and obtain information on market practice, while assuring that these advisors are independent from the Management Board and Deutsche Bank. The Supervisory Board considers the international environment in which Deutsche Bank's Management Board members need to operate as crucial. Therefore, universal and investment banks are seen as the most relevant peer group. Thus, target compensation levels need to be aligned with top performers in this market in order to find suitable candidates.

When making compensation decisions, the Supervisory Board considers stakeholders' views very carefully. Extraordinary aspects need to be taken into account in this, such as the need to ensure the retention of existing Management Board members, the complex profiles with dual or even multiple responsibilities that are seen as necessary for Deutsche Bank's continued business success (market access, experience, etc.) as well as the fact that due to regulatory requirements the fixed base salary at Deutsche Bank needs to be comparatively higher than at global bank´s since the Bank's variable compensation has a higher risk profile driven by the long-term horizon, due to a strict link to share price performance and multi-year payout scheme. Also, only few international banks have explicit target compensation structures, therefore market benchmarks are based on actual compensation levels. These are only comparable to a limited extent. Taking all these aspects into account the Supervisory Board made the following compensation decisions in 2024:

A benchmarking study commissioned by the Supervisory Board revealed that the compensation level differentiation between ordinary Management Board members and the Chief Executive Officer (CEO) is lower at Deutsche Bank than at peers. In order to maintain an appropriate distance from the compensation level of ordinary Management Board members as well as employees at the level below the Management Board and taking into account **Christian Sewing's** successful stewardship during his term of office since 2015, the Supervisory Board decided to increase his total target compensation to an overall target compensation of € 9.8 million p.a. This represents an increase of 5.37% (increase of fixed pay by 5.55%) with effect from April 1, 2024.

The Supervisory Board also reviewed the compensation of the other members of the Management Board. As a result, the compensation of **Claudio de Sanctis** was adjusted with effect from January 1, 2024, taking into account his responsibilities and thorough insights into relevant market dynamics and client dynamics. Since his appointment he has consequently steered the Private Bank's transformation to position the business for future success. The Supervisory Board decided on an appropriate increase, within an internationally comparable range, to an overall target compensation of € 8.4 million p.a., which represents an increase of 6.32% (increase of fixed pay by 6.66%).

Over the last years, Deutsche Bank has invested substantially in strengthening its control environment and remediation activities. To further improve the resilience of the bank's controls and to start further alignment of first, second and third lines of defense to foster better ownership, processes and efficiency, the Supervisory Board created a new role at the Management Board level.

Laura Padovani was appointed to the Management Board as Chief Compliance and Anti-Financial Crime (AFC) Officer with effect from July 1, 2024. The overall target compensation for Laura Padovani was determined by the Supervisory Board after conducting a benchmarking with the support of an independent, external compensation advisor. The analysis took into account compensation levels for this specific role at comparable companies (global and European banks as well as DAX-40 companies). On the basis of the results of this analysis, Laura Padovani's compensation was determined in line with market practices and reflects the Supervisory Board's approach to set compensation levels more individually, considering the scope of the role and responsibility. A target compensation of € 2.975 million p.a. was considered appropriate, comprising base salary (€1.750 million p.a.) and target variable compensation (€ 1.225 million p.a.). The Supervisory Board will review the compensation decision in due course.

New Compensation System 2024

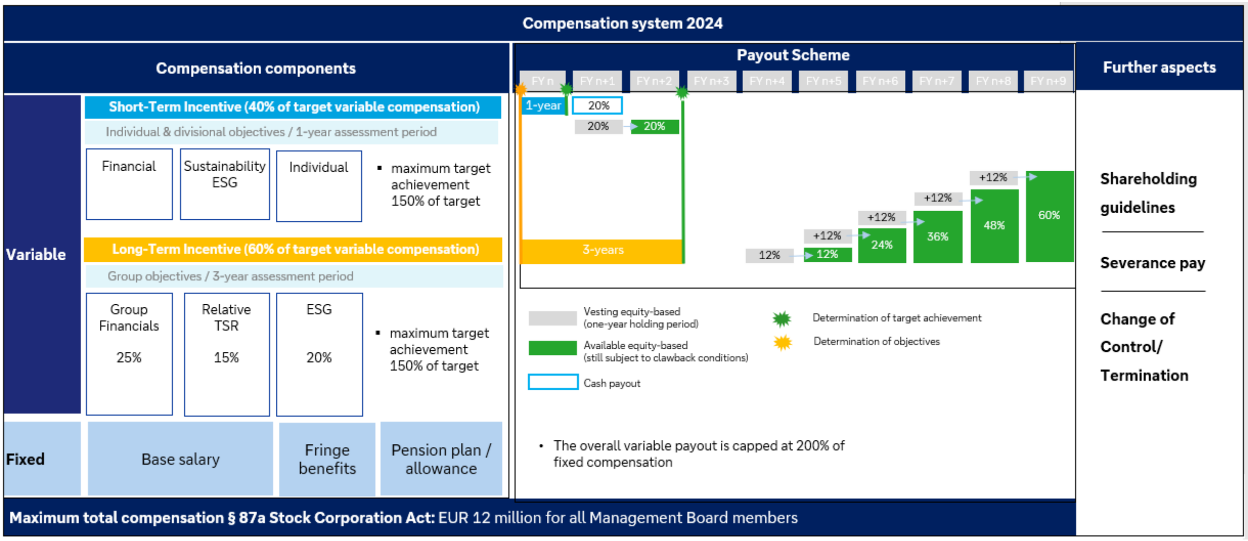
The new compensation system for members of the Management Board was amended by the Supervisory Board with effect from January 1, 2024. It was submitted to the General Meeting on May 16, 2024, for approval in accordance with Section 120a (1) of the German Stock Corporation Act. The General Meeting approved the compensation system with a majority of 97.32%.

Following the approval of the new compensation system by the General Meeting, the Supervisory Board implemented it accordingly in the new service contracts for all currently appointed members of the Management Board. The new contracts apply with effect from January 1, 2024, or upon joining the Management Board.

The new system features a simplified structure and increased transparency and ensures a stronger alignment of Management Board incentives to the performance versus financial targets. The main improvements compared to the previous compensation system are:

- Lean compensation structure leading to appropriate outcomes and providing transparency.
- Significant reduction of the number of objectives from up to 70 to approximately 8 Key Performance Indicators.
- A three-year forward-looking assessment period for the performance measurement of the Long-Term Incentive (LTI) instead of consideration of past performance.
- Strengthening the pay-for-performance alignment of Deutsche Bank's compensation due to a more ambitious achievement curve for one of the Long-Term Incentive (LTI) objectives, the Relative Total Shareholder Return: Deutsche Bank must outperform 50% of the companies in the peer group to allow for a payout.
- Reduced complexity of the deferral and holding periods scheme.
- Increased market alignment and function-related compensation practice as well as harmonization of further contractual agreements of the newly appointed Management Board member's compensation, e.g., pension plan, shareholding guidelines and severance benefits.

The following chart gives an overview of the new compensation system, displaying the Short-Term Incentive (STI) and Long-Term Incentive (LTI) metrics with their respective weightings as well as the payout scheme and additional provisions:



Compensation system 2024

Compensation components

Variable

Short-Term Incentive (40% of target variable compensation)

Individual & divisional objectives / 1-year assessment period

Financial | Sustainability ESG | Individual

- maximum target achievement 150% of target

Long-Term Incentive (60% of target variable compensation)

Group objectives / 3-year assessment period

Group Financials 25% | Relative TSR 15% | ESG 20%

- maximum target achievement 150% of target

Fixed

Base salary | Fringe benefits | Pension plan / allowance

Payout Scheme

⬜ Vesting equity-based (one-year holding period)

🟩 Available equity-based (still subject to clawback conditions)

□ Cash payout

✸ Determination of target achievement

✸ Determination of objectives

- The overall variable payout is capped at 200% of fixed compensation

Further aspects

Shareholding guidelines

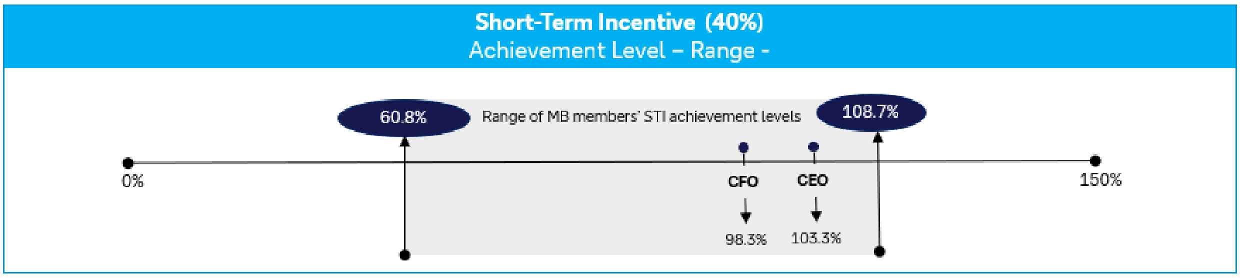
Severance pay

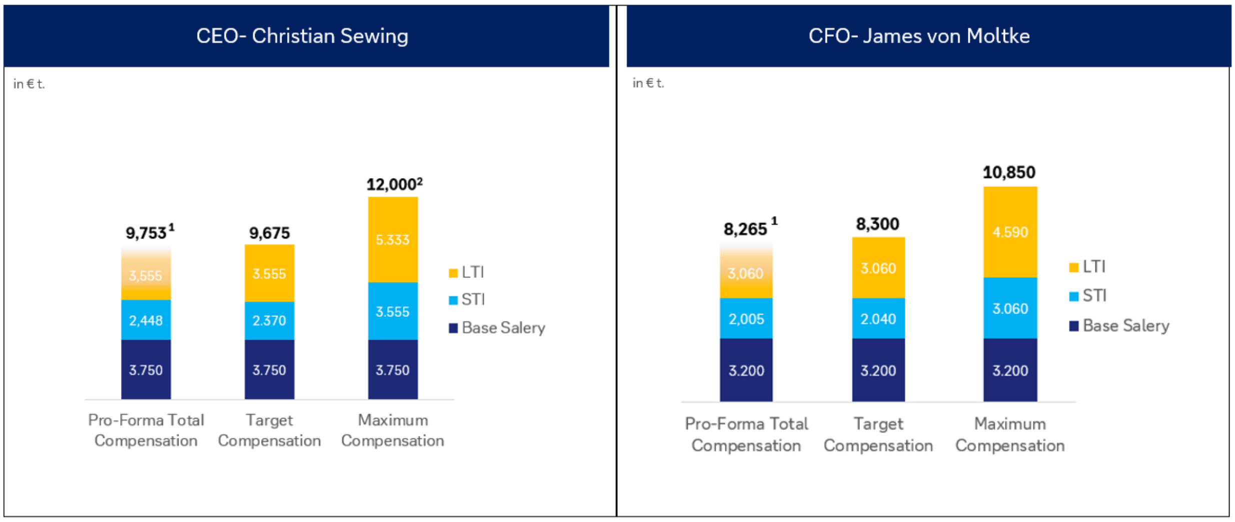
Change of Control/ Termination

Maximum total compensation § 87a Stock Corporation Act: EUR 12 million for all Management Board members

Overview Compensation Year 2024

The new compensation system stipulates that the Short-Term Incentive is determined after one year, while the Long-Term Incentive is only determined after an assessment period of three years. As this is the first year after introduction, it is only possible to report the achievement levels for the short-term objectives. The chart below shows an overview of the range of Management Board members' achievements, highlighting the results of the Chief Executive Officer (CEO) and Chief Financial Officer (CFO).





[1] The determination of the final achievement level for the LTI Plan 2024-2026 will take place after the end of the 3-year performance period in 2027.

[2] Maximum upper limit according to Section 87a (1) sentence 2 No. 1 of the German Stock Corporation Act would leads to a cap of total compensation at € 12 million.

Principles governing the determination of compensation

Responsibility and procedures for setting and reviewing Management Board compensation

The Supervisory Board is responsible for the decisions on the design of the compensation system as well as for setting the individual compensation amounts and procedures for awarding the compensation. The Compensation Control Committee supports the Supervisory Board in its tasks and prepares proposals for resolutions by the Supervisory Board.

On the basis of the approved compensation system, the Supervisory Board sets the target total compensation for each Management Board member for the respective financial year, while taking into account the scope and complexity of the respective Management Board member's functional responsibilities, the length of service of the Management Board member on the Management Board as well as the company's financial situation. In the process, the Supervisory Board also considers the customary market compensation, also based on both horizontal and vertical comparisons, and sets the upper limit for total compensation (maximum compensation).

Horizontal appropriateness of Management Board compensation

Through the horizontal comparison, the Supervisory Board ensures that the total target compensation is appropriate in relation to the tasks and achievements of the Management Board as well as the company's situation. The horizontal appropriateness is reviewed annually by the Supervisory Board which regularly engages external compensation advisors for this review, while assuring itself that these advisors are independent from the Management Board and Deutsche Bank. The Supervisory Board takes the results of the review into consideration when setting the target compensation for the Management Board members. In this context, the compensation amount level and structure, in particular, are examined at comparable companies (peer groups). Suitable companies in consideration of Deutsche Bank's market position (in particular with regard to business sector, size and country) are used as the basis for this comparison. The assessment of horizontal appropriateness takes place in comparison with the following three peer groups:

Peer group 1 - 10 Global Banks	**Peer group 2 - 15 European Banks**	**Peer group 3 - DAX**
Institutions with a comparable business model and a comparable size (measured by balance sheet total, number of employees and market capitalization		Companies listed in the German Stock Index DAX 40
▪ Banco Santander ▪ Bank of America ▪ Barclays ▪ BNP Paribas ▪ Citigroup ▪ HSBC ▪ JP Morgan Chase ▪ Société Générale ▪ UBS Group ▪ UniCredit	▪ Banco Bilbao Vizcaya Argentaria ▪ Banco Santander ▪ Barclays ▪ BNP Paribas ▪ BPCE ▪ Rabobank ▪ Crédit Agricole ▪ Crédit Mutuel ▪ HSBC ▪ ING Bank ▪ Intesa Sanpaolo ▪ Nordea Bank ▪ Société Générale ▪ UBS Group ▪ UniCredit	39 companies listed in the German Stock Index DAX 40

Vertical appropriateness

The Supervisory Board also considers a vertical comparison, which compares the compensation of the Management Board and the compensation of the workforce. Within the vertical comparison, the Supervisory Board considers in particular, in accordance with the German Corporate Governance Code, the development of compensation over time. This involves a comparison of the Management Board compensation and the compensation of two groups of employees. Taken into account are, on the one hand, the compensation of the senior management, which comprises the first management level below the Management Board and members of the top executive committees of the divisions as well as the management board members of significant institutions within Deutsche Bank Group and their corresponding first management level positions with management responsibility. The Management Board compensation is also compared to, on the other hand, the compensation of all other employees of Deutsche Bank Group worldwide (tariff and non-tariff employees).

Guiding principle: Alignment of Management Board compensation to corporate strategy

Deutsche Bank is dedicated to its clients’ lasting success and financial security at home and abroad. The bank offers its clients solutions and provides an active contribution to foster the creation of value. Deutsche Bank is committed to a corporate culture that appropriately aligns risks and returns.

In the interests of the shareholders, the Management Board compensation system is aligned to the business strategy as well as the sustainable and long-term development of Deutsche Bank and provides suitable incentives for a consistent achievement of the set targets. Through the composition of total compensation comprising fixed and variable compensation components, through the assessment of performance over short-term and long-term periods and through the consideration of relevant, challenging performance parameters, the implementation of the Group strategy and the alignment with the sustainable and long-term performance of the Group are rewarded in a clear and understandable manner. The structure of the targets and objectives therefore comprises a balanced mix of both financial and non-financial parameters and indicators.

In late January 2025, Deutsche Bank confirmed its strategic goals for the Group in 2025. The organization aims to prove itself and lay the foundation for becoming the European Champion. With a clear vision, a strong model as Global Hausbank, and a highly skilled team, Deutsche Bank is well-positioned to achieve long-term success. A key factor in this journey is the alignment of the Management Boards compensation to the company´s strategic priorities.

By aligning Management Board compensation with these strategic priorities, the organization reinforces its commitment to sustainable growth, operational excellence, and long-term stakeholder value.

Through the structuring of the compensation system, the variable compensation of the members of the Management Board is closely aligned with the targets and objectives linked to Deutsche Bank’s strategy and priorities, when working individually and as a team continually towards the long-term positive development of Deutsche Bank without taking on disproportionately high risks. The Supervisory Board thus ensures there is always a strong link between compensation and performance in line with shareholder interests (“pay for performance”).

Structure of the Management Board compensation system aligned with compensation principles

The compensation system consists of fixed and variable compensation components. The fixed compensation and variable compensation together form the total compensation for a Management Board member. The Supervisory Board defines target and maximum amounts (caps) for all compensation components.

Component	Principle	Implementation
Fixed Compensation		
Base salary	The base salary rewards the Management Board member for performing the respective role and responsibilities. This fixed compensation component is intended to ensure a fair and market-oriented income and to ensure that undue risks are avoided.	Monthly payment; annual base salary of between € 1.75 million and € 3.8 million
Fringe benefits	Management Board members can be granted fringe benefits according to the Management Board Fringe Benefits Guideline resolved by the Supervisory Board.	Company car and driver services as well, if applicable, moving expenses, housing allowance, insurance premiums and reimbursement of business representation expenses.
Pension / pension allowance	Management Board members receive contributions to their company pension scheme in accordance with the regulations laid down in the Management Board members service contracts.	-Defined contribution system: annual contribution of € 650,000 p.a.; interest accrues at an average rate of 2% p.a., 4% p.a. for legacy entitlements -New Management Board members: pension allowance in cash; CEO €650,000 p.a. and other Management Board members €450,000 p.a.
Variable Compensation		
Short-Term Incentive (STI)	The Short-Term Incentive (STI) rewards the individual value contribution of each member of the Management Board to achieving short- and medium-term objectives in accordance with the corporate strategy. The STI objectives are tailored to the role and responsibilities of the respective Management Board member and the level of achievement can be individually influenced by the Management Board member.	-Short-Term Incentive (STI) assessed after one year -Target achievement based on annual performance assessment of a maximum of 5 objectives with balanced weightings between financial, sustainability and individual objectives. Maximum achievement level: 150% -Payout: 50% in cash after the 1-year assessment period and 50% equity-based, this portion is also paid out in cash after an additional holding period of 1 year
Long-Term Incentive (LTI)	The Long-Term Incentive (LTI) is largely based on a sustainable increase in the value of the bank. The Relative Total Shareholder Return (RTSR) builds a constant metric within the framework that promotes the linking of shareholder interests with those of the Management Board members. Other stakeholder aspects are taken into account by defining strategically material financial Key Performance Indicators (KPIs) as well as material sustainability targets. Their achievement forms the basis for the final review at the end of the 3-year performance period. The Supervisory Board placed the primary focus on the deferred compensation component by setting the LTI at 60% of the total variable target compensation. In order to appropriately reflect the importance of long-term corporate development in the Management Board's compensation, 100% of the LTI is shared-based.	-Long-Term Incentive (LTI) assessed after 3 years -Target achievement based on performance assessment of 4 LTI objectives with flexible weightings: Group financials (e.g., Return on Tangible Equity (RoTE), growth in Tangible Book Value Per Share (TBVPS)), Relative Total Shareholder Return (RTSR) and Environmental, Social and Governance (ESG) objectives over a forward-looking assessment period of 3 years. Maximum achievement level: 150% -Initially allocated as a target cash amount -Conversion into equity-based instruments (virtual shares) after first year of performance period -Final determination of number of equity-based units at the end of three-year performance period -Full disposal of LTI after 9 years: delivered in five equal, consecutive installments, starting one year after the assessment period and each with an additional holding period of one year
Further aspects		
Compensation caps	In accordance with Section 87a German Stock Corporation Act, the Supervisory Board sets an upper limit for the amount of compensation. If the compensation for a financial year exceeds this amount, compliance with the maximum limit is ensured by a corresponding reduction in the payment of the variable compensation.	-Maximum compensation of € 12 million according to Section 87a German Stock Corporation Act for each Management Board member - Maximum ratio of fixed to variable compensation: 1:2
Backtesting, malus and clawback	To ensure the sustainable development of the bank and to avoid taking inappropriate risks, the payment of variable compensation may be restricted or cancelled. The Supervisory Board has the option of withholding (malus) or reclaiming (clawback) all or part of the short-term and long-term variable compensation in the event of gross misconduct or misrepresentation in financial reporting.	-Regular review if results achieved in the past are sustainable (backtesting) -Variable compensation in deferral period may be (partially) forfeited in the event of negative Group results, in the event specific solvency or liquidity conditions are not met, individual misconduct, dismissal for cause or negative individual contributions to performance (malus) -Variable compensation already paid might be reclaimed in accordance with Sections 18 (5) and 20 (6) of the Remuneration Ordinance for Institutions

Component	Principle	Implementation
Shareholding guideline	The members of the Management Board are obliged to build up a holding of Deutsche Bank shares within 4 years. The shares must be held for the entire duration of the appointment. If the base salary is increased, the obligation to hold shares increases accordingly.	-Build-up period of 4 years -CEO – 200% of annual gross base salary and other Management Board members 100% of annual gross base salary -Shares to be held for the duration of the appointment

Detailed information on the compensation system for members of the Management Board of Deutsche Bank AG is available on the company's website: https://agm.db.com/files/documents/2024/AGM-2024-Compensation-system.pdf.

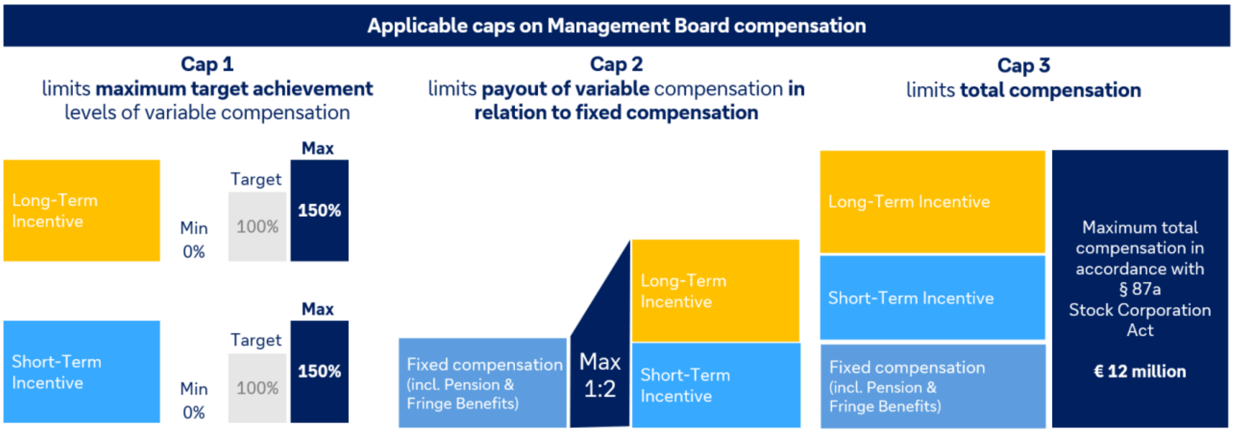
Compensation components and structure

The Supervisory Board sets a target compensation for each Management Board member. In accordance with the recommendation of the German Corporate Governance Code, the Supervisory Board also determines the ratio of fixed compensation to variable compensation as well as the ratio of short to long-term variable compensation. In this way, the Supervisory Board ensures that performance-based compensation, which is linked to achieving long-term targets, exceeds the portion of short-term targets.

Compensation caps

The compensation of the Management Board members is limited (capped) in several ways:

– Cap 1 – the maximum possible achievement levels for the Short-Term Incentive objectives and Long-Term Incentive objectives are limited to 150% of the respective target values
– Cap 2 – based on the Capital Requirements Directive 4 and as approved by the General Meeting in May 2014, the maximum ratio of fixed to variable compensation is limited to 1:2
– Cap 3 – in accordance with Section 87a (1) sentence 2 No. 1 of the Stock Corporation Act, the Supervisory Board sets a maximum limit (maximum compensation) amounting to €12 million uniformly for all Management Board members. This cap comprises not only the base salary, Short-Term Incentive (STI) and Long-Term Incentive (LTI), but also the pension service costs for the company pension plan or pension allowances and fringe benefits.

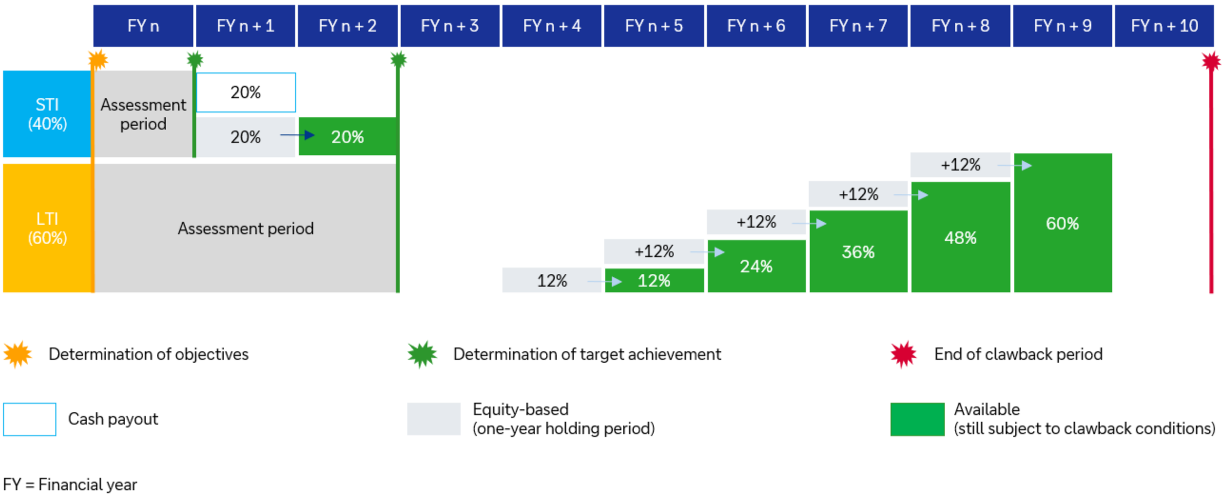

Applicable caps on Management Board compensation
Cap 1
limits maximum target achievement levels of variable compensation
Cap 2
limits payout of variable compensation in relation to fixed compensation
Cap 3
limits total compensation
Long-Term Incentive
Min 0%
Target 100%
Max 150%
Short-Term Incentive
Min 0%
Target 100%
Max 150%
Fixed compensation (incl. Pension & Fringe Benefits)
Max 1:2
Long-Term Incentive
Short-Term Incentive
Long-Term Incentive
Short-Term Incentive
Fixed compensation (incl. Pension & Fringe Benefits)
Maximum total compensation in accordance with § 87a Stock Corporation Act
€ 12 million

Deferrals and holding periods

The Remuneration Ordinance for Institutions generally stipulates a three-year assessment period for the determination of the variable compensation for management board members. The bank complies with this requirement by assessing each of the objectives of the Long-Term Incentive (LTI) over a three-year period. In addition, variable compensation is granted predominantly as equity-based instruments to achieve an even stronger alignment of the Management Board members' compensation to the bank's performance and its share price. After vesting, the equity-based instruments are also subject to an additional holding period of one year. Accordingly, the Management Board members are not permitted to fully dispose of the equity-based instruments until the respective holding period has ended. During the deferral and holding periods, the value of the equity-based instruments is linked to the performance of Deutsche Bank shares and is therefore tied to the sustained performance of the bank.

Half of the Short-Term Incentive (STI) is paid out directly after the one-year assessment period in cash, and the other half is granted as equity-based instruments with an additional holding period of one year, after which it is also paid out in cash.

The Long-Term Incentive (LTI) is entirely granted in the form of equity-based instruments that are distributed, starting one year after the three-year assessment period, through five equal, consecutive installments, each with an additional holding period of one year. In total, the full LTI payout amount is available for disposal after nine years, but still subject to clawback conditions for an additional period of one year. The chart below illustrates the assessment and deferral periods up to the end of the clawback period.



Holders of specific functions at certain Deutsche Bank U.S. entities are required by applicable regulation to be compensated under different plans. Restricted compensation for these persons consists of restricted share awards and restricted cash awards. The recipient becomes the beneficial owner of the awards as of the Award Date and the awards are held on the recipient's behalf. These awards are restricted for a period of time (subject to the applicable plan rules and award statements, including performance conditions and forfeiture provisions). The restriction period is aligned to the holding periods applicable to Deutsche Bank's usual deferred awards. With regard to the Management Board, these rules only apply to Stefan Simon due to his role as CEO of Deutsche Bank USA Corp.

If a member of the Management Board is identified as a "Senior Management Function" (SMF) holder by the Prudential Regulation Authority in the UK, specific deferral provisions under UK regulations, in principle, apply. Fabrizio Campelli was identified as a SMF holder for variable compensation purposes due to his oversight responsibility for the UK region. It was agreed with the PRA that the proportion of the variable compensation which corresponds to the time spent for this regional oversight responsibility is subject to the deferral provisions under UK regulation. Therefore, 10% of his variable compensation for 2024 Short-Term Incentive (STI) is deferred in line with the UK regulation, i.e., 4% of the STI is granted in cash and 6% is granted in Restricted Equity Awards (REAs) and vests in 5 equal tranches in year 3, 4, 5, 6 and 7 following the grant date. After vesting, each tranche is subject to an additional holding period of one year.

In its meeting on July 25, 2024, the Supervisory Board decided to grant an amount corresponding to the dividend distributed to shareholders of € 0.45 per share to Management Board members with equity-based deferred compensation awards that were in the holding period at the time of the General Meeting 2024. Dividend equivalents are payments that mirror dividend payments to shareholders and are often granted under share-based compensation programs. The granted dividend awards are calculated based on the dividend paid per Deutsche Bank share multiplied by the number of Deutsche Bank share units subject to the holding requirement (a fixed EUR value) and subject to the same provisions as the underlying award, including but not limited to suspension, forfeiture or clawback.

The decision to grant a dividend equivalent was made by the Supervisory Board against the backdrop that the deferred compensation components are already to be attributed to the Management Board members economically after the end of the five-year deferral period (vesting). The Management Board members are the economic owners of the share-based compensation with effect from the vesting. However, the vested share-based compensation is subject to an additional holding period of one year as required by the European Banking Authority (EBA) guidelines (EBA Guidelines on Sound Remuneration Policies) applicable to financial institutions. The Bank is allowed to transfer shares to the Management Board members already after the vesting but decided to wait until the end of the additional holding period as they are still subject to suspension and forfeiture provisions. As this procedure leads to an economic disadvantage for the Management Board members, the plan rules for share-based compensation and the service contracts provide the possibility of an equivalent payment per share if a dividend is paid on Deutsche Bank shares during their holding period. This practice is in line with all regulatory requirements and market practice. Under the EBA Guidelines specified above, these dividend equivalents are not considered to be variable compensation as the value is determined by reference to the shares which are fully vested and economically attributable to the Management Board members. Therefore, no approval by the General Meeting is required for their granting.

Application of the compensation system in the financial year

Target and maximum amounts of base salary and variable compensation

				2024	2023
in €	Base salary	Short-Term Incentive	Long-Term Incentive	Total compensation[2]	Total compensation[3]
Chief Executive Officer[1]					
Target value	3,800,000	2,400,000	3,600,000	9,800,000	9,300,000
Maximum value				12,000,000	9,850,000
President, CFO and responsible for Asset Management					
Target value	3,200,000	2,040,000	3,060,000	8,300,000	8,300,000
Maximum value				10,850,000	9,850,000
Head of Corporate Bank and Investment Bank					
Target value	3,400,000	2,160,000	3,240,000	8,800,000	8,800,000
Maximum value				11,500,000	9,850,000
Head of Private Bank[1]					
Target value	3,200,000	2,080,000	3,120,000	8,400,000	7,900,000
Maximum value				11,000,000	9,850,000
Chief Technology, Data and Innovation Officer					
Target value	2,400,000	1,640,000	2,460,000	6,500,000	6,500,000
Maximum				8,550,000	8,550,000
CEO Asia-Pacific, Europe, Middle East & Africa and Germany					
Target value	2,400,000	1,640,000	2,460,000	6,500,000	6,500,000
Maximum				8,550,000	8,550,000
Chief Compliance and Anti-Financial Crime Officer[1]					
Target value	1,750,000	490,000	735,000	2,975,000	–
Maximum value				3,500,000	–
Chief Operating Officer					
Target value	2,400,000	1,640,000	2,460,000	6,500,000	6,500,000
Maximum				8,550,000	8,550,000
Chief Executive Officer Americas and Chief Legal Officer					
Target value	2,400,000	1,640,000	2,460,000	6,500,000	6,500,000
Maximum				8,550,000	8,550,000
Chief Risk Officer					
Target value	2,400,000	1,640,000	2,460,000	6,500,000	6,500,000
Maximum				8,550,000	8,550,000

[1] For further details on compensation decision, please refer to the “Executive Summary” of this report.
[2] Maximum upper limit in accordance with Section 87a (1) sentence 2 No. 1 of the German Stock Corporation Act.
[3] Limit equivalent to the upper limit set by the Supervisory Board for the maximum total amount of base salary and variable compensation.

Short-Term Incentive (STI) 2024

The Supervisory Board sets short-term individual and business division-related objectives for each member of the Management Board at the beginning of the year. The weightings of each of these objectives as well as relevant quantitatively or qualitatively measurable performance criteria for their assessment are defined as well. The objectives were chosen so that they are challenging, ambitious and sufficiently concrete to ensure there is an appropriate alignment of performance and compensation and that the “pay-for-performance” principle is considered. For each quantitative objective the Supervisory Board defined a minimum threshold, a target and a maximum performance level. If the minimum threshold is not achieved, the achievement level corresponds to 0%.

For each qualitative objective and behaviour objective, the Supervisory Board specified individual measurement criteria that will be evaluated overall.

For one of the banks central focus goals, i.e., the remediation of regulatory findings and control improvements, which each Management Board member received as an objective aligned to their individual responsibilities, target achievement was measured by the extent to which the issues within the area of responsibility were prioritized and the necessary resources were made available. Quantitatively measurable successes in this context were also taken into account, such as the percentage reduction in regulatory findings compared to the previous year.

Another goal of high and therefore universal importance for all Management Board members in 2024 was the introduction of the framework "This is Deutsche Bank" connecting the purpose, vision, strategy, culture and claim of Deutsche Bank. The measurement criterion for determining the individual achievement of sub-objectives in this core objective was the extent to which there were visible and therefore measurable activation efforts on the part of the respective Management Board member (number of workshops, town halls, meetings, etc.) and thus the role model function for the new culture of aspiration was proactively brought to life by the Management Board member. In addition, the results of regularly conducted employee surveys in the individual Management Board divisions, which reflect the performance and acceptance of the new culture "This is Deutsche Bank" over time, were an important indicator of the degree of target achievement.

The following overview shows the objectives as well as the achievement levels as determined by the Supervisory Board for each Management Board member.

Management Board Member	Weighting (in %)	Short-Term Incentive	Achievement Level (in %)
Christian Sewing	25.0%	Group adjusted costs	103.30%
	25.0%	Group revenues	
	15.0%	Further evolve and deliver on Group strategy	
	15.0%	Drive regulatory remediation and control enhancements	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
James von Moltke	25.0%	Group adjusted costs	98.30%
	25.0%	Group revenues	
	15.0%	Drive key measures underpinning further Group-level strategic evolvement with particular focus on capital-related topics as well as equity story / anchor investors; support DWS's strategic priorities	
	15.0%	Drive regulatory remediation and transformation	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Fabrizio Campelli	25.0%	Corporate Bank (CB) / Investment Bank (IB) revenues	108.70%
	10.0%	Group adjusted costs	
	15.0%	Divisional adjusted costs	
	15.0%	Deliver on CB / IB strategy execution and client leadership; drive key measures underpinning further group-level strategic evolvement	
	15.0%	Further improve controls and demonstrate effectiveness to regulators	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Claudio de Sanctis	25.0%	Private Bank revenues	98.90%
	10.0%	Group adjusted costs Private Bank ACB	
	15.0%	Divisional adjusted cost	
	15.0%	Deliver on Privat Bank strategy execution, operating model and client leadership	
	15.0%	Deliver on regulatory remediation, especially driving remaining Private Bank Germany client remediation	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Bernd Leukert	10.0%	Group adjusted costs	90.80%
	10.0%	Divisional adjusted costs	
	20.0%	Align TDI operating model to group-wide capabilities shared between business and IT driving mid/long-term required cost efficiencies, while running Deutsche Bank systems safely on a daily basis	
	20.0%	Deliver on Deutsche Bank's Technology and Innovation Book of Work	
	20.0%	Deliver on Deutsche Bank's regulatory requirements (especially regarding data & payments)	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Alexander von zur Mühlen	20.0%	Revenues across Germany, EMEA and APAC	93.80%
	20.0%	Group adjusted costs	
	20.0%	Evolve and execute on regional strategies across Germany, EMEA and APAC, and strengthen client focus	
	20.0%	Deliver on regulatory remediation, especially driving remaining Private Bank Germany client remediation	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	

Management Board Member	Weighting (in %)	Short-Term Incentive	Achievement Level (in %)
Laura Padovani (Member since July 1, 2024)	10.0%	Group adjusted costs	96.50%
	10.0%	Divisional adjusted costs	
	30.0%	Deliver on regulatory remediation	
	30.0%	Further evolve Compliance & Anti-Financial-Crime Operating Model to mitigate risk, meet regulatory requirements and generate efficiencies	
	20.0%	Lead roll-out of "„This is Deutsche Bank" framework	
Rebecca Short	15.0%	Group adjusted costs	98.00%
	15.0%	Divisional adjusted costs	
	15.0%	Embed new Target Operating Model	
	20.0%	Deliver HR and procurement excellence	
	20.0%	Drive remediation and control enhancements	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Professor Dr. Stefan Simon	20.0%	Group adjusted costs	60.80%
	20.0%	Deliver on regulatory remediation and drive down litigation portfolio	
	20.0%	Franchise leadership Americas	
	20.0%	Further evolve CAO Operating Model and reduce governance complexity	
	20.0%	Lead roll-out of "This is Deutsche Bank" framework	
Olivier Vigneron	10.0%	Group adjusted costs	77.90%
	10.0%	Divisional adjusted costs	
	20.0%	Safeguard macro-cycle downside risks; proactively manage the risk profile, prioritizing earnings stability	
	20.0%	Uplift core Risk organization and frameworks	
	20.0%	Deliver on regulatory remediation	
	20.0%	Lead roll-out of "This is Deutsche Bank"	

Pay-for-performance summary for CEO and CFO for the Short-Term Incentive

Management Board member	Achievement Grade (in %)	Short-Term Incentive	Pay-for-Performance Summary
Quantitative Objectives Christian Sewing/ James von Moltke	79.0%	Group adjusted cost	The direct adjusted costs KPI focuses on the operating cost development of Deutsche Bank Group which is essential to position the bank for sustainable performance in 2025 and beyond. “Adjusted costs” means that litigation, severance and restructuring and impairment costs are excluded in line with the external reporting. In 2024, the direct adjusted cost base was €20.4 billion, representing 79% target achievement.
	100.0%	Group revenues	The revenue excl. V&T KPI incentives business momentum and sustainable business growth. It measures revenues growth excluding valuation and timing differences (V&T) that arise on derivatives used to hedge the Group’s balance sheet. These are accounting impacts, and valuation losses that are expected to be recovered over time as the underlying instruments approach maturity. In 2024, revenues excluding valuation and timing differences were €29.5 billion, representing 100% target achievement.
Qualitative Objectives Christian Sewing	120.0%	Further evolve and deliver on Group strategy	• In a challenging environment, the Group delivered on its transformation agenda under Christian Sewing leadership • The businesses have clear momentum, which is visible through the revenue delivery of € 30.1 billion (as per IFRS as issued by the IASB and endorsed by the EU), disciplined cost management and enhanced capital efficiency. • A clear strategic path beyond 2025 was developed, which is based on further developing our Global Hausbank service offering and sustainably increasing returns in 2025 and in the years thereafter. • Key stakeholder relationships, particularly with regulators, investors and policymakers were further strengthened through Christian Sewing’s focused engagement.
	70.0%	Drive regulatory remediation and control enhancements	• A strong focus during this period was on driving regulatory remediation and enhancing controls. To achieve this, Christian Sewing established a clear prioritization of regulatory remediation for the entire Management Board, coupled with strong personal engagement with regulators and critical regulatory topics. • Structural and personnel adjustments were implemented to accelerate remediation efforts. • Additionally, the approach included a strong commitment to resolving longstanding regulatory issues in 2024 by transitioning from tactical fixes to strategic solutions. This comprehensive effort underscores the dedication to regulatory excellence and the creation of a sustainable compliance framework. • Despite the significant progress in 2024 and positive signals from regulators, the SB also took into consideration the long-standing nature of some remediation topics in the evaluation of the MB’s performance.
	150.0%	Lead roll-out of “This is Deutsche Bank” framework	• Christian Sewing clearly shaped and successfully drove the global roll-out of the “This is Deutsche Bank” framework, connecting purpose, vision, strategy, culture and claim. • Strong engagement with the Management Board and senior leaders set the tone for emphasizing “This is Deutsche Bank” in executive committees and ambassador events, encouraging leadership by example. • Leadership in the roll-out was further demonstrated through extensive employee engagements, such as ambassador events, cross-divisional all-staff calls / “ask me anything” sessions, divisional executive committee meetings and townhalls, international “This is Deutsche Bank” gatherings, and cross-divisional leadership initiatives. • Laid the foundation for a continued focus on people and culture across all hierarchy levels, driving the organization’s evolution into a purpose-led organization with clients at the center of what Deutsche Bank is doing.

Management Board member	Achievement Grade (in %)	Short-Term Incentive	Pay-for-Performance Summary
Qualitative Objectives James von Moltke	115.0%	Drive key measures underpinning further Group-level strategic evolution with a particular focus on capital-related topics and equity story / anchor investors; support DWS's strategic priorities	• James von Moltke successfully drove key measures, including supporting the Group's strategic evolution, with a specific focus on capital-related topics delivering € 22 billion in cumulative capital optimization actions, positioning the firm for successful 2025 capital distributions. • Continued refinement of Deutsche Bank's equity story and focused investor engagement successfully attracting long-term investors which benefited the share registry. • After many years of prework, successful roll-out of the Shareholder Value-Added framework with further potential to improve strategic planning, resource allocation, and financial performance yet to come. • Created reporting tools and established processes to enhance the dialogue across the firm on the use of Shareholder Value-Added. • Supported the 2024 strategic priorities of DWS by assessing and advising on several strategic objectives for DWS. This included the delivery against financial targets, notably exceeding plan on Profit before Tax (PBT), increasing the focus on findings remediation and closure, including the U.S regulatory priorities, onboarding the new Chairman and contributing to an enhanced dialogue with the DWS Supervisory Board.
	75.0%	Drive regulatory remediation and transformation	• Key regulatory milestones included the closing of significant findings related to European Central Bank requirements for risk governance, addressing liquidity aspects, and mitigating regulatory capital headwinds. • Significantly reduced open findings, achieving a notable reduction in severe (F4) findings and overdue findings. • Finance transformation initiatives drove substantial improvements, with a focus on process reengineering to enhance control and cost efficiencies. This included detailed analyses of granular service processes, piloting innovative tools and contributing to major technology projects, e.g., SAP4/Hana implementation and cloud migration. • Although important milestones of remediation programs were achieved the Supervisory Board took into consideration that continued focus on this issue is required to gradually transition from remediation to a sustainable "business as usual" risk management.
	125.0%	Lead roll-out of "This is Deutsche Bank" framework	• Emphasized cultural leadership through continuous engagement in the rollout of the "This is Deutsche Bank" framework. • Fostered engagement programs to align behaviors with the aspirational culture across Finance, with Finance leadership actively participating in initiatives and engagement programs to align behaviors with the aspirational culture. • Encouraged DB employees' engagement and supported actionable ideas for improvement through innovative efforts such as the #MyOneThing app and the CFO Shark Tank initiative.

Overall achievement of the Short-Term Incentive

For the 2024 financial year, the following overall levels of achievement were determined by the Supervisory Board for the members of the Management Board based on the levels of achievement of the individual objectives determined for the Short-Term Incentive:

Short-Term Incentive overall achievement

Member of the Management Board	Target Amount (in €)	Achievement level (in %)	Overall Amount STI (in €)
Christian Sewing	2,370,000	103.30	2,448,210
James von Moltke	2,040,000	98.30	2,005,320
Fabrizio Campelli	2,160,000	108.70	2,347,920
Claudio de Sanctis	2,080,000	98.90	2,057,120
Bernd Leukert	1,640,000	90.80	1,489,120
Alexander von zur Mühlen	1,640,000	93.80	1,538,320
Laura Padovani[1]	245,000	96.50	236,425
Rebecca Short	1,640,000	98.00	1,607,200
Professor Dr. Stefan Simon	1,640,000	60.80	997,120
Olivier Vigneron	1,640,000	77.90	1,277,560

[1] Member since July 1, 2024

60.8%-108.7% Range of achievement levels of the Short-Term Incentive objectives for the Management Board Members in 2024

Member of the Management Board	STI cash payout in 2025 (in €)	STI equity-based grant in 2025 (in €)	Number of equity-based instruments[1]
Christian Sewing[2]	1,200,642	1,200,642	59,999
James von Moltke	1,002,660	1,002,660	50,105
Fabrizio Campelli[3]	1,150,481	1,056,564	52,799
Claudio de Sanctis	1,028,560	1,028,560	51,400
Bernd Leukert	744,560	744,560	37,208
Alexander von zur Mühlen	769,160	769,160	38,437
Laura Padovani[4]	118,213	118,213	5,907
Rebecca Short	803,600	803,600	40,158
Professor Dr. Stefan Simon	498,560	498,560	24,914
Olivier Vigneron	638,780	638,780	31,921

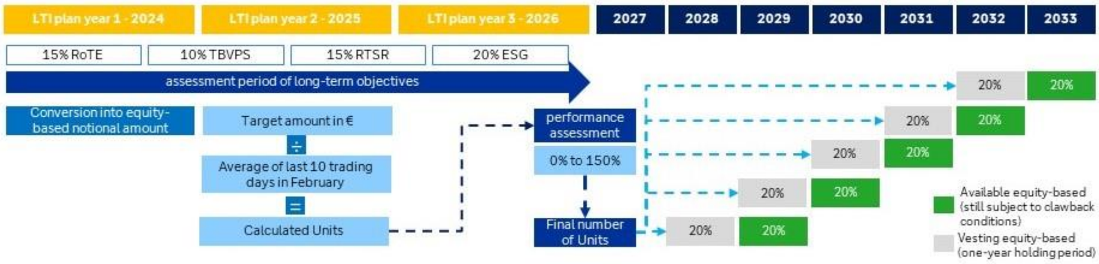
[1] The calculation of the number of equity-based instruments is based on the average Xetra closing price of the Deutsche Bank share during the last ten trading days in February 2025 (€ 20.011).
[2] A portion of the STI with an amount of € 46,926 (2,345 units) were granted as Restricted Equity Awards to meet the regulatory requirements.
[3] A portion of the STI with an amount of € 140.875 (7,040 units) were granted as Restricted Equity Awards to meet the UK regulatory requirements. For further information, please refer to chapter “Deferrals and holding periods”.
[4] Member since July 1, 2024

Long-Term Incentive (LTI) 2024 to 2026

When determining the variable compensation, the focus is set on the achievement of long-term objectives linked to the bank’s strategy. For the Long-Term Incentive (LTI), the Supervisory Board specifies collective long-term objectives for the Management Board members, each assessed over a period of three years.

At the beginning of 2024, the LTI was initially allocated as a target cash amount to the individual Management Board members. As the three-year assessment period for the LTI represents a change from a retrospective to a forward-looking period, the granting of the equity-based compensation takes place two years later compared to the previous compensation system. In order to align the Management Board compensation with the share performance of the Deutsche Bank share and therefore with the shareholders’ interests, the Supervisory Board made use of the possibility that was already provides for in the new compensation system to convert the target euro amount for the LTI into virtual share units after the first performance assessment year (not constituting a grant of compensation at this stage). After the three-year performance assessment period, the number of virtual share units will then be increased or reduced according to the achievement level determined for the LTI.

This approach further strengthens the sustainability aspect of the long-term variable compensation, as it is additionally linked to the performance of the bank and the share price during the assessment period. The conversion was based on the average share price during the last 10 trading days in February 2025 of € 20.011. The number of virtual shares that will be granted by the end of the assessment period will depend on the results of the performance assessment and thus will vary between 0% and 150% of the number initially allocated. After the vesting and holding periods, 20% of the virtual shares will become available annually but will still be subject to clawback conditions.


LTI plan year 1 - 2024
LTI plan year 2 - 2025
LTI plan year 3 - 2026
2027
2028
2029
2030
2031
2032
2033
15% RoTE
10% TBVPS
15% RTSR
20% ESG
assessment period of long-term objectives
Conversion into equity-based notional amount
Target amount in €
÷
Average of last 10 trading days in February
=
Calculated Units
performance assessment
0% to 150%
Final number of Units
20%
20%
Available equity-based (still subject to clawback conditions)
Vesting equity-based (one-year holding period)

Equity-based instruments (virtual shares)

Members of the Management Board	LTI Target allocation in €	Average share price before conversion in €[2]	Number of equity-based units
Christian Sewing	3,555,000	20.010	177652
James von Moltke	3,060,000	0.000	152916
Fabrizio Campelli	3,240,000	0.000	161911
Claudio de Sanctis	3,120,000	0.000	155914
Bernd Leukert	2,460,000	0.000	122932
Alexander von zur Mühlen	2,460,000	0.000	122932
Laura Padovani[1]	367,500	0.000	18365
Rebecca Short	2,460,000	0.000	122932
Professor Dr. Stefan Simon	2,460,000	0.000	122932
Olivier Vigneron	2,460,000	0.000	122932

[1] Member since July 1, 2024
[2] Average Xetra closing price of the Deutsche Bank share during the last ten trading days in February 2025.

For the Long-Term Incentive (LTI) plan allocated at the beginning of 2024 (2024 – 2026 LTI) the defined and published long-term objectives focus on Group financial objectives, Return on Total Shareholder Return and sustainability (Environmental, Social and Governance (ESG)) objectives as outlined further below. These objectives are key measures for assessing the overall financial success and performance of Deutsche Bank and serve as clear performance indicators that reflect Deutsche Bank's business objectives and strategies and are aligned with shareholder interest. Through these objectives an incentive is created to act in a manner that maximizes value for shareholders and supports the long-term growth and stability of the business.

Group financial objectives

- **Return on Tangible Equity (RoTE)** measures the profit (or loss) attributable to Deutsche Bank shareholders as a percentage of average tangible shareholders' equity and incentivizes the efficient use of equity. The tangible shareholder equity is determined by deducting goodwill and other intangible assets from shareholders' equity.
- The growth in **Tangible Book Value Per Share (TBVPS)** complements RoTE by considering equity changes apart from net income which are equally relevant for capital distributions. The TBVPS represents the Bank's total shareholders' equity less goodwill and other intangible assets divided by period-end basic shares outstanding. It measures the growth (in %) of the equity of the company per share.

Relative Total Shareholder Return (RTSR) reflects the shareholder value creation in the form of share price growth and dividends generated. Deutsche Bank wants to be an attractive investment for its investors and therefore incentivizes the outperformance of relevant financial institutions. In addition, the RTSR objective serves to align the interests of the Management Board and shareholders more closely.

Environmental, Social and Governance (ESG) objectives

Deutsche Bank strives to make a contribution to an environmentally friendly, socially inclusive and well-governed corporate landscape as well as to support its clients in their green transformation. Not only the advisory services and products but also the working environment and culture at Deutsche Bank should build on this commitment. Deutsche Bank's policies and procedures are aligned with the laws and regulations in all of the markets in which it operates, including anti-discrimination laws such as the 2. German Gender Quota Law (Zweites Führungspositionen-Gesetz - FüPoG II).

For the 2024-2026 LTI plan the Supervisory Board focuses on ESG objectives:

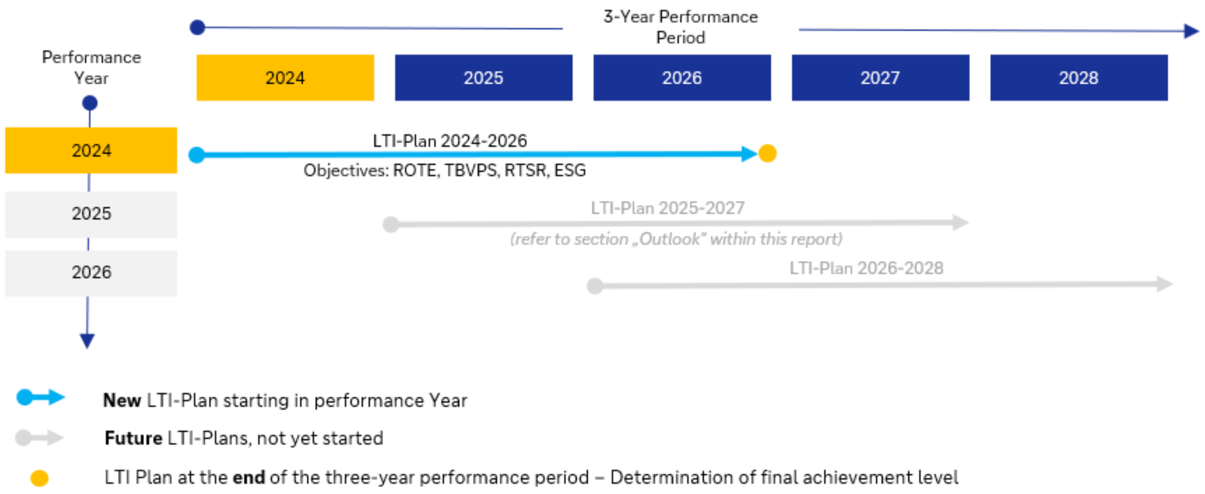
- **Environmental target:** The objective of driving climate risk-management is linked to the disclosed carbon reduction targets for defined carbon intensive sectors that were published when setting of CO2 reduction target pathways for key industries. This metrics measures performance against the published pathway plus an allowed deviation (risk appetite).
- **Social target:** The objective of increasing gender diversity in accordance with the 2. German Gender Quota Law (Zweites Führungspositionen-Gesetz – FüPoG II) focuses on female representation on the two levels below the Management Board (MB-1) and Management Board (MB-2) positions, which combats discrimination within the Management Board succession pipeline as well as to promote equal opportunity.
- **Governance:** The corporate governance objective consists of the Control Risk Management Grade (CRMG) and progress made in the Anti-Money-Laundering / Know-Your-Client remediation activities. The CRMG measures the control environment based on the performance of the individual divisions, including critical and overdue findings, but also cultural issues such as self-identified risk acceptance. Overall, the objective underlines the importance for Deutsche Bank to combat economic crime and prevent money laundering activities, as well as staying compliant with regulatory requirements and to foster a healthy corporate culture.

The objectives will be assessed at the end of the assessment period in 2026:

Long-Term Incentive KPI*	Weighting	Lower Limit (0%)	Target (100%)	Upper Limit (150%)
Group Financials	*25%*			
RoTE	15%	< 9 % At 9%: 33% achievement	11%	12%
TBVPS	10%	≤ 6.5%	8.5%	9.5%
RTSR	*15%*			
RTSR	15%	< median At median: 50% achievement	70th percentile	90th percentile
ESG	*20%*			
Environmental - Driving climate risk-management	8%	≤ 50%	70%	85%
		of pre-defined data points of set reduction targets for carbon intense industry sectors meet threshold		
Social - Gender Diversity	4%	≤ 30%	32,5%	35%
Governance – Control-Risk-Management-Grade and the Anti-Money-Laundering / Know-Your-Client Remediation activities	8%	≤ 1.5	3	5
		0%	100%	150%

* Calculation between Lower Limit and Target as well as Target and Upper Limit is linear

Overview of Long-Term Incentive (LTI) - Plans


3-Year Performance Period
Performance Year
2024
2025
2026
2027
2028
2024
2025
2026
LTI-Plan 2024-2026
Objectives: ROTE, TBVPS, RTSR, ESG
LTI-Plan 2025-2027
(refer to section „Outlook" within this report)
LTI-Plan 2026-2028
New LTI-Plan starting in performance Year
Future LTI-Plans, not yet started
LTI Plan at the end of the three-year performance period – Determination of final achievement level

Backtesting and application of malus and clawback in 2024

The Supervisory Board regularly reviews in due time before the respective release dates the possibility of a full or partial forfeiture (malus) or reclaiming (clawback) of the Management Board members' variable compensation components. There was no forfeiture or clawback of awards in 2024.

Outstanding share awards for Management Board members

The following table shows the number of outstanding share awards of the incumbent Management Board members as of February 9, 2024, and February 7, 2025, as well as the number of share awards newly granted, delivered or forfeited in this period.

Members of the Management Board	Balance as of Feb 9, 2024	Granted	Delivered	Forfeited	Balance as of Feb 7, 2025
Christian Sewing	1,121,379	214,469	–	–	1,335,848
James von Moltke	894,440	187,779	52,134	–	1,030,086
Fabrizio Campelli	557,589	194,514	29,705	–	722,397
Claudio de Sanctis	465,211	184,267	176,900	–	472,579
Bernd Leukert	458,204	156,324	3,037	–	611,491
Alexander von zur Mühlen	431,888	156,324	32,784	–	555,428
Laura Padovani[1]	–	–	–	–	16,436
Rebecca Short	310,690	156,324	14,273	–	452,741
Professor Dr. Stefan Simon	418,338	156,324[2]	86,280[3]	–	488,383[4]
Olivier Vigneron	206,890	156,114	28,957	–	334,048

[1] Member since July 1, 2024

According to the Shareholding Guidelines that apply to the members of the Management Board have an obligation to build up a holding of Deutsche Bank shares within four years. The CEO is obliged to hold an equivalent of 200% of his annual gross base salary in shares and other Management Board members are required to hold shares that equal 100% of their annual gross base salary in order to fulfill the Shareholding Guidelines. The shares must be held for the entire duration of the appointment. If the base salary is increased, the obligation to hold shares increases accordingly. Compliance with the shareholding obligation is reviewed every six months. Depending on the level of achievement and share price performance, additional shares must either be bought or can be sold if the obligation is exceeded.

All Management Board members fulfilled the shareholding obligations in 2024 or are currently in the build-up phase.

The following table shows the total number of Deutsche Bank shares held by the incumbent Management Board members as of February 9, 2024, and February 7, 2025, as well as the number of share-based awards and the fulfillment level for the shareholding obligation.

		as of February 7, 2025						
Members of the Management Board	Number of Deutsche Bank shares (in units) as of Feb 9,2024	Number of Deutsche Bank shares (in units)	Restricted Equity Award(s)/ Outstanding Equity Units (deferred with additional retention period) (in units)	thereof 75% of Restricted Equity Award(s)/ Outstanding Equity Units chargeable to share obligation (deferred with additional retention period) (in units)	Total value of Deutsche Bank shares and Restricted Equity Award(s)/ Outstanding Equity Units chargeable to share obligation (in units)	Share retention obligation must be fulfilled Yes / No[1]	Level of required shareholding obligation (in units)[2]	Fulfillment ratio (in %)
Christian Sewing	222,171	222,171	1,335,848	1,001,886	1,224,057	Yes	408,778	299%
James von Moltke	74,753	102,272	1,030,086	772,564	874,836	Yes	172,117	508%
Fabrizio Campelli	185,509	201,291	722,397	541,798	743,089	Yes	182,874	406%
Claudio de Sanctis	105,665	262,244	472,579	354,434	616,678	No	172,117	358%
Bernd Leukert	10,007	12,667	611,491	458,618	471,285	Yes	129,088	365%
Alexander von zur Mühlen	447,485	476,944	555,428	416,571	893,515	Yes	129,088	692%
Laura Padovani [3]	0	0	16,436	12,327	12,327	No	94,127	13%
Rebecca Short	69,168	73,637	452,741	339,556	413,193	No	129,088	320%
Prof. Dr. Stefan Simon	0	0	488,383	366,287	366,287	Yes	129,088	284%
Olivier Vigneron	21,841	37,139	334,048	250,536	287,675	No	129,088	223%
Total	**1,136,599**	**1,388,365**	**6,019,437**	**4,514,577**	**5,902,942**		**1,675,453**	

[1] The shareholding obligation must be fulfilled within four years after the first appointment as Management Board member and must be held until the end of the appointment.
[2] The calculation of the total value of the Deutsche Bank shares and share awards / outstanding shares eligible for the shareholding requirement is based on the share price 18.592 (Xetra closing price on February 7, 2025)
[3] Member since July 1, 2024

Benefits upon regular contract termination

The following table shows the annual contributions, the interest credits, the account balances and the annual service costs for the years 2024 and 2023 as well as the corresponding defined benefit obligations for each member of the Management Board in office in 2024 as of December 31, 2023, and December 31, 2024. The different balances are attributable to the different lengths of service on the Management Board, the respective age-related factors, and the different contribution rates.

Members of the Management Board	Annual contribution, in the year		Interest credited, in the year		Account balance, end of year		Service cost (IFRS), in the year		Present value of the defined benefit obligation (IFRS), end of year	
in €	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Christian Sewing	728,000	747,500	0	0	8,752,000	8,024,000	574,078	564,889	7,132,345	6,457,344
James von Moltke	715,000	812,500	0	0	6,519,500	5,846,750	577,371	667,237	5,561,609	4,948,283
Fabrizio Campelli	773,500	786,500	0	0	4,741,754	3,968,254	542,981	525,920	3,486,558	2,909,388
Claudio de Sanctis	760,500	386,750	0	0	1,147,250	386,750	542,293	272,499	823,356	278,217
Bernd Leukert	689,000	702,000	0	0	4,125,334	3,436,334	596,463	573,019	3,742,460	3,077,074
Alexander von zur Mühlen[1]	0	0	0	0	0	0	0	0	0	0
Laura Padovani[1,2]	0	0	0	0	0	0	0	0	0	0
Rebecca Short	786,500	806,000	0	0	2,966,168	2,179,668	522,769	519,350	1,983,351	1,448,786
Prof. Dr. Stefan Simon[1]	0	473,959	0	0	3,483,460	3,483,460	0	373,627	2,944,486	2,896,341
Olivier Vigneron	747,500	760,500	0	0	2,152,584	1,405,084	548,749	543,072	1,633,309	1,053,069

[1] The Management Board member receives a pension allowance, which is shown in the section "Compensation granted and owed (inflow table)".
[2] Member since July 1, 2024

Deviations from the compensation system

There were no deviations from the compensation system in the 2024 financial year.

Management Board compensation 2024

Current Management Board members

Total compensation 2024

The Supervisory Board determined the following compensation on an individual basis. Due to the new compensation system already described, there was a significant structural change in 2024 in comparison to 2023. The first Long-Term Incentive (LTI) Plan based on the new system was set up for the performance period 2024-2026; after the end of the 3-year performance period the Supervisory Board determines the achievement level based on the pre-defined Key Performance Indicators (KPIs). Due to a change from a backward-looking to a forward-looking three-year performance period, the first two years after the implementation of the new system (2024 and 2025) are years of transitional ("transitional phase"). The first Long-Term Incentive -Plan (LTI-Plan 2024-2026) will first be granted in early 2027. During the "transitional phase", the LTI will be shown with the target amount for calculation and comparison purposes. For better comparability with the previous year's figures, the table below includes a column entitled Pro Forma Total Compensation which shows the sum of base salary, actual STI and a target value for the LTI.

This approach is reflected accordingly in the following below.

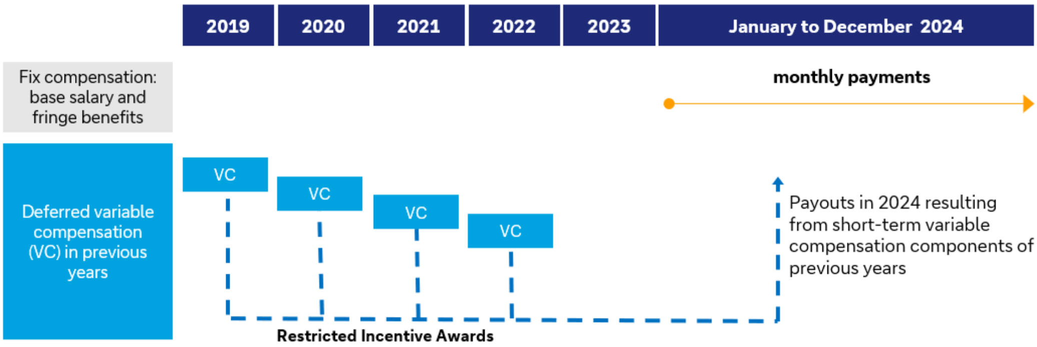
				2024	2023
in €	Base salary[1]	Actual Short-Term Incentive	Target Long-Term Incentive[2]	Pro-Forma Total compensation	Total compensation
Christian Sewing	3,750,000	2,448,210	3,555,000	9,753,210	8,745,497
James von Moltke	3,200,000	2,005,320	3,060,000	8,265,320	7,605,057
Fabrizio Campelli	3,400,000	2,347,920	3,240,000	8,987,920	7,996,596
Claudio de Sanctis[3]	3,200,000	2,057,120	3,120,000	8,377,120	3,712,322
Bernd Leukert	2,400,000	1,489,120	2,460,000	6,349,120	6,012,121
Alexander von zur Mühlen	2,400,000	1,538,320	2,460,000	6,398,320	6,090,841
Laura Padovani[4]	875,000	236,425	367,500	1,478,925	–
Rebecca Short	2,400,000	1,607,200	2,460,000	6,467,200	6,115,108
Professor Dr. Stefan Simon	2,400,000	997,120	2,460,000	5,857,120	6,080,591
Olivier Vigneron	2,400,000	1,277,560	2,460,000	6,137,560	5,952,363
Total	**26,425,000**	**16,004,315**	**25,642,500**	**68,071,815**	58,310,496

[1] In the column "Base salary", the target values set by the Supervisory Board are shown in EUR for reasons of comparability. The actual inflow differs from this target value for Management Board members Alexander von zur Mühlen and Professor Dr. Stefan Simon due to currency fluctuations and for Bernd Leukert due to the offsetting of compensation from mandates. The inflows are shown in the section "Compensation granted and owed (inflow table)".
[2] The determination of the final achievement level for the LTI Plan 2024-2026 will take place after the end of the 3-year performance period in 2027
[3] Member since July 1, 2023
[4] Member since July 1, 2024

Compensation granted and owed (inflow table)

The following table shows the compensation paid and owed in the 2024 and 2023 financial years to incumbent members of the Management Board in the 2024 financial year pursuant to Section 162 (1) sentence 1 of the German Stock Corporation Act. This involves the compensation components that were either actually paid or delivered to the individual Management Board members within the reporting period ("paid") or were already legally due during the reporting period but not yet delivered ("owed").

Accordingly, except for base salary and fringe benefits, the table illustrates deferral cash compensation (Restricted Incentive Awards (RIA)) that resulted from Short-Term Award grants based on the former compensation system as implemented in previous years. Correspondingly, variable compensation based on the new compensation system will not be illustrated until next year, i.e., the Short-Term Incentive cash payout for the performance in the 2024 financial year will be paid and thus considered and disclosed as an inflow for the 2025 financial year.


2019
2020
2021
2022
2023
January to December 2024
Fix compensation: base salary and fringe benefits
monthly payments
Deferred variable compensation (VC) in previous years
VC
VC
VC
VC
Payouts in 2024 resulting from short-term variable compensation components of previous years
Restricted Incentive Awards

Compensation granted and owed per Management Board member

	Christian Sewing				James von Moltke			
	2024		2023		2024		2023	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Fixed compensation components:								
Base salary	3,750[1]	77%	3,600	72%	3,200	68%	3,150	77%
Pension allowance	0	0%	0	0%	0	0%	0	0%
Fringe benefits	113	2%	255	5%	107	2%	72	2%
Total fixed compensation	**3,863**	**79%**	3,855	77%	**3,307**	**70%**	3,222	79%
Variable compensation components:								
Deferred variable compensation								
thereof Restricted Incentive Awards:								
2019 Restricted Incentive Award for 2018	0	0%	232	5%	0	0%	169	4%
2020 Restricted Incentive Award for 2019	43	1%	43	1%	43	1%	43	1%
2021 Restricted Incentive Award for 2020	304	6%	304	6%	213	4%	213	5%
2022 Restricted Incentive Award for 2021	0	0%	577	12%	0	0%	419	10%
2023 Restricted Incentive Award for 2022	667	14%	0	0%	522	11%	0	0%
thereof Equity Awards:								
Fringe benefits	0	0%	0	0%	0	0%	0	0%
Total variable compensation	**1,013**	**21%**	1,155	23%	**1,433**	**30%**	843	21%
Total compensation	**4,876**	**100%**	5,010	100%	**4,740**	**100%**	4,065	100%

[1] For further details on compensation decision, please refer to chapter "Executive Summary" in this report

	Fabrizio Campelli				Claudio de Sanctis[1]			
	2024		2023		2024		2023	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Fixed compensation components:								
Base salary	3,400	82%	3,250	83%	3,200[2]	99%	1,500	99%
Pension allowance	0	0%	0	0%	0	0%	0	0%
Fringe benefits	6	0%	33	1%	20	1%	9	1%
Total fixed compensation	**3,406**	**82%**	3,283	84%	**3,220**	**100%**	1,509	100%
Variable compensation components:								
Deferred variable compensation								
thereof Restricted Incentive Awards:								
2019 Restricted Incentive Award for 2018	0	0%	0	0%	0	0%	0	0%
2020 Restricted Incentive Award for 2019	7	0%	7	0%	0	0%	0	0%
2021 Restricted Incentive Award for 2020	213	5%	213	5%	0	0%	0	0%
2022 Restricted Incentive Award for 2021	0	0%	406	10%	0	0%	0	0%
2023 Restricted Incentive Award for 2022	502	12%	0	0%	0	0%	0	0%
thereof Equity Awards:	0	0%	0	0%	0	0%	0	0%
Fringe benefits	0	0%	0	0%	0	0%	0	0%
Total variable compensation	**722**	**17%**	626	16%	**0**	**0%**	0	0%
Total compensation	**4,129**	**100%**	3,909	100%	**3,220**	**100%**	1,509	100%

[1] Member since July 1, 2023
[2] For further details on compensation decision, please refer to chapter "Executive Summary" in this report

	Bernd Leukert				Alexander von zur Mühlen			
	2024		2023		2024		2023	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Fixed compensation components:								
Base salary	2,391[1]	78%	2,397[1]	80%	2,576[2]	62%	2,559[2]	68%
Pension allowance	0	0%	0	0%	650	16%	650	17%
Fringe benefits	9	0%	6	0%	136	3%	88	2%
Total fixed compensation	**2,400**	**78%**	2,403	80%	**3,362**	**81%**	3,297	88%
Variable compensation components:								
Deferred variable compensation								
thereof Restricted Incentive Awards:								
2019 Restricted Incentive Award for 2018	0	0%	0	0%	0	0%	0	0%
2020 Restricted Incentive Award for 2019	0	0%	0	0%	0	0%	0	0%
2021 Restricted Incentive Award for 2020	188	6%	188	6%	74	2%	74	2%
2022 Restricted Incentive Award for 2021	0	0%	399	13%	0	0%	395	10%
2023 Restricted Incentive Award for 2022	477	16%	0	0%	473	11%	0	0%
thereof Equity Awards:	0	0%	0	0%	0	0%	0	0%
Fringe benefits	0	0%	0	0%	219[3]	5%	0	0%
Total variable compensation	**666**	**22%**	587	20%	**766**	**19%**	470	12%
Total compensation	**3,065**	**100%**	2,990	100%	**4,128**	**100%**	3,767	100%

[1] The fixed compensation shown includes the crediting of compensation from mandates
[2] As the fixed compensation is granted in local currency, it is subject to foreign exchange-rate changes
[3] The variable fringe benefits represent a housing allowance.

	Laura Padovani (member since July 1, 2024)				Rebecca Short			
	2024		2023		2024		2023	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Fixed compensation components:								
Base salary	875	79%	–	–	2,400	81%	2,400	90%
Pension allowance	225	20%	–	–	0	0%	0	0%
Fringe benefits	12	1%	–	–	56	2%	33	1%
Total fixed compensation	**1,112**	**100%**	–	–	**2,456**	**83%**	2,433	91%
Variable compensation components:								
Deferred variable compensation								
thereof Restricted Incentive Awards:								
2019 Restricted Incentive Award for 2018	0	0%	–	–	0	0%	0	0%
2020 Restricted Incentive Award for 2019	0	0%	–	–	0	0%	0	0%
2021 Restricted Incentive Award for 2020	0	0%	–	–	0	0%	0	0%
2022 Restricted Incentive Award for 2021	0	0%	–	–	0	0%	241	9%
2023 Restricted Incentive Award for 2022	0	0%	–	–	491	17%	0	0%
thereof Equity Awards:	0	0%	–	–	0	0%	0	0%
Fringe benefits	0	0%	–	–	0	0%	0	0%
Total variable compensation	**0**	**0%**	–	–	**491**	**17%**	241	9%
Total compensation	**1,112**	**100%**	–	–	**2,946**	**100%**	2,674	100%

	Professor Dr. Stefan Simon				Olivier Vigneron			
	2024		2023		2024		2023	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Fixed compensation components:								
Base salary	2,468[1]	59%	2,429[1]	73%	2,400	90%	2,400	99%
Pension allowance	650	16%	271	8%	0	0%	0	0%
Fringe benefits	117	3%	55	2%	13	0%	33	1%
Total fixed compensation	**3,235**	**78%**	2,755	83%	**2,413**	**90%**	2,433	100%
Variable compensation components:								
Deferred variable compensation								
thereof Restricted Incentive Awards:								
2019 Restricted Incentive Award for 2018	0	0%	0	0%	0	0%	0	0%
2020 Restricted Incentive Award for 2019	0	0%	0	0%	0	0%	0	0%
2021 Restricted Incentive Award for 2020	78	2%	78	2%	0	0%	0	0%
2022 Restricted Incentive Award for 2021	0	0%	396	12%	0	0%	0	0%
2023 Restricted Incentive Award for 2022	475	11%	0	0%	266	10%	0	0%
thereof Equity Awards:	0	0%	0	0%	0	0%	0	0%
Fringe benefits	363[2]	9%	91	3%	0	0%	0	0%
Total variable compensation	**916**	**22%**	564	17%	**266**	**10%**	0	0%
Total compensation	**4,151**	**100%**	3,319	100%	**2,679**	**100%**	2,433	100%

[1] As the fixed compensation is granted in local currency, it is subject to foreign exchange-rate changes
[2] The variable fringe benefits mainly represents a housing allowance.

With respect to the deferred compensation components of previous years approved in the reporting year, the Supervisory Board confirmed that the respective performance conditions were met.

Former members of the Management Board

Compensation granted and owed (inflow table)

The following table shows the compensation paid and owed to the former members of the Management Board in the 2024 financial year pursuant to Section 162 (1) sentence 1 of the German Stock Corporation Act. This involves the compensation components that were either actually delivered to the former Management Board members within the reporting period ("paid") or were already legally due during the reporting period but not yet delivered ("owed"). Pursuant to Section 162 (5) of the German Stock Corporation Act, no personal data is provided on former members of the Management Board who ended their work for the Management Board prior to the end of the financial year 2014. Multi-year deferred compensation components are not paid out early upon termination of the mandate.

	Karl von Rohr member until October 31, 2023		Christiana Riley member until May 17, 2023		Stuart Lewis member until May 19, 2022		Frank Kuhnke member until April 30, 2021	
		2024		2024		2024		2024
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Non-Compete payment	1,625	67%	0	0%	0	0%	0	0%
Deferred variable compensation								
Restricted Incentive Awards	800	33%	0	0%	388	100%	200	100%
Equity Awards	0	0%	0	0%	0	0%	0	0%
Fringe benefits	0	0%	2	100%	0	0%	0	0%
Pension benefits	0	0%	0	0%	0	0%	0	0%
Total compensation	**2,425**	**100%**	**2**	**100%**	**388**	**100%**	**200**	**100%**

	Werner Steinmüller member until July 31, 2020		Sylvie Matherat member until July 31, 2019		Garth Ritchie member until July 31, 2019		Frank Strauß[1] member until July 31, 2019	
		2024		2024		2024		2024
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Deferred variable compensation								
Restricted Incentive Awards	134	100%	2,333[2]	100%	1,790[2]	100%	2,668[2]	100%
Equity Awards	0	0%	0	0%	0	0%	0	0%
Fringe benefits	0	0%	0	0%	0	0%	0	0%
Pension benefits	0	0%	0	0%	0	0%	0	0%
Total compensation	**134**	**100%**	**2,333**	**100%**	**1,790**	**100%**	**2,668**	**100%**

[1] Frank Strauß passed away in 2024, therefore there will be no disclosure within the table "Compensation granted and owed (inflow table)" from the Compensation Report 2025 and onwards

[2] Including Inflows from Termination Benefits

	Nicolas Moreau member until Dec 31, 2018				John Cryan member until April 8, 2018	
				2024		2024
	DB AG	DWS Management GmbH	Overall			
	in € t.	in € t.	in € t.	in %	in € t.	in € t.
Deferred variable compensation						
Restricted Incentive Awards	404	2,190[1]	2,594	95%	0	0%
Equity Awards	0	142[2]	142	5%	4,382	100%
Fringe benefits	0	0	0	0%	0	0%
Pension benefits	0	0	0	0%	0	0%
Total compensation	**404**	**2,332**	**2,736**	**100%**	**4,382**	**100%**

[1] Including Inflows from Termination Benefits

[2] The equity awards shown are share-based instruments granted by DWS Management GmbH. Details of these instruments can be found in the DWS Annual Report

Outlook for the 2025 financial year

Total target compensation and maximum compensation

The total target compensation for 2025 will in principle remain unchanged compared to the total target compensation in force or adjusted in 2024.

The limits on compensation for the members of the Management Board remain unchanged versus the 2024 financial year. This means that the maximum possible achievement level for variable compensation amounts to 150%. In accordance with Section 87a (1) sentence 2 No. 1 of the German Stock Corporation Act (AktG), the limit set for total compensation is maintained unchanged at a maximum of € 12 million uniformly for all members of the Management board as the maximum cap based on the financial year.

2025 objective structure and targets

The compensation system implemented in 2024 works well and produces appropriate results. Therefore, the objective structure will continue to be in line with the compensation system approved by the General Meeting in 2024.

Short-Term Incentive (STI)

Generally unchanged from 2024, the amount of the Short-Term Incentive (STI) for the 2025 financial year will continue to be 40% of the total target variable compensation and is based on the individual achievement level of short and medium-term individual and divisional objectives.

The specific individual objectives of the Short-Term Incentive (STI) for 2025 will be disclosed retrospectively in the 2025 Compensation Report.

Long-Term Incentive (LTI)

The Long-Term Incentive (LTI) will continue to be 60% of the total target variable compensation and consists of collective long-term objectives linked to the Bank´s strategy.

For the three-year performance period 2025 - 2027, the Long-Term Incentive Plan consists of four compensation components that are unchanged to the preceding and still running performance period 2024 – 2026 of four compensation components. The components “RoTE” (Return on tangible equity), “TBVPS” (growth in Tangible Book Value Per Share) and “RTSR” (Relative Total Shareholder Return) remain the same with unchanged weightings. Going forward, the RoTE measure is underpinned by the Common Equity Tier 1 (CET1) capital ratio to ensure a balanced approach to profitability, capital adequacy, and risk management. If the CET1 capital ratio at the end of the performance period is below the CET 1 red threshold level set in the risk appetite statement, then the measure is assessed to be nil. This also applies to the RoTE objectives for the STI.

The “ESG” component will in general also remain unchanged especially with regard to the Environmental and the Social objectives. Deutsche Bank’s policies and procedures are aligned with the laws and regulations in all of the markets in which it operates, including anti-discrimination laws such as the 2. German Gender Quota Law (Zweites Führungspositionen-Gesetz - FüPoG II).

With regard to the Governance objective, the assessment criteria were amended in order to reflect not only an internal evaluation, but also external stakeholders’ assessment of Deutsche Bank´s regulatory development and improvements, making it a holistic measurement criterion. Along with the previously considered Control Risk Management Grade (CRMG), two additional aspects will be taken into consideration:

The European Central Bank (ECB) on a yearly basis conducts a Supervisory Review and Evaluation Process (SREP) in which it evaluates the business models, internal governance, risks to capital and risks to liquidity of all significant institutions under its direct supervision. The result, together with results from the FED Annual Assessment of the US central bank Federal Reserve, is reflected in the overall Regulatory Ratings & Enforcement objective.

Furthermore, Enforcement Actions imposed by regulators against a bank when regulatory requirements are not met will be considered. Enforcement Actions can take various forms, e.g. fines, restrictions on business operations, or binding measures to remedy deficiencies. The closure of still open Enforcement Actions is the third element of the LTI Governance objective.

The objectives for the LTI plan 2025 – 2027 are shown in the following:

Long-Term Incentive KPI	Definition	Weighting	Lower Limit (0%)	Target (100%)	Upper Limit (150%)
Group Financials		*25%*	Calculation Approach: Linear unless indicated differently		
			= 0% Achievement	= 100% Achievement	= 150% Achievement
RoTE	Return on Tangible Equity by end of 2027	15%	< 10% At 10%: 33% Achievement	12%	13%
TBVPS	Tangible Book Value Per Share – average annual growth (excl. foreign exchange) 2025-2027	10%	≤ 6.5%	8.5%	9.5%
RTSR		*15%*			
RTSR	Ranking of Deutsche Bank vs. Peer Group by end of 2027	15%	< median At median: 50% Achievement	70th percentile	90th percentile
ESG		*20%*			
Environmental	Driving climate risk management – measures MB against agreed KPIs linked to reduction targets for disclosed carbon intensive sectors in line with published pathways to net zero Achievement is calculated as ‘Average of 2025-2027	8%	≤ 50%	70%	85%
			of pre-defined data points of set reduction targets for carbon intense industry sectors meet threshold		
Social	Gender Diversity (MB -1, MB -2) by end of 2027	4%	≤ 30%	32,5%	35%
Governance	Regulatory Ratings & Enforcement Actions	8%	0%	100%	150%

Compensation of Supervisory Board members

Supervisory Board compensation is regulated in Section 14 of the Articles of Association and was last amended by resolution of the General Meeting on May 17, 2023.

The members of the Supervisory Board receive a fixed annual compensation ("Supervisory Board Compensation"). The amount of the annual base compensation for each Supervisory Board member is €300,000, for the Supervisory Board Chairman €950,000, and for each Deputy Chairperson €475,000.

Chairs of the committees of the Supervisory Board are paid additional fixed annual compensation amounts as follows:

Committee chair in €	
Audit Committee	150,000
Risk Committee	150,000
Technology, Data and Innovation Committee	150,000
Chairman's Committee	100,000
Nomination Committee	100,000
Compensation Control Committee	100,000
Regulatory Oversight Committee	100,000
Strategy and Sustainability Committee	100,000
Mediation Committee	0

If a Supervisory Board member is chair of more than one committee, compensation is only paid for the committee entitled to the highest amount. The Chairman of the Supervisory Board does not receive any additional compensation for chairing of the committees. Members of the committees also do not receive additional compensation.

The compensation determined will be paid to the respective member of the Supervisory Board by, at the latest, two months after submitting invoices and as a rule within the first three months of the following year. In case of a change in Supervisory Board membership during the year, compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months.

The company reimburses the Supervisory Board members for the cash expenses they incur in the performance of their office, including, to the extent applicable, value added tax (VAT) on their compensation and reimbursements of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their Supervisory Board work is paid for each Supervisory Board member affected. Finally, the Supervisory Board Chairman is reimbursed appropriately for travel expenses incurred in performing representative tasks due to his function and reimbursed for costs for the security measures required based on his function.

In the interest of the company, the members of the Supervisory Board are included in an appropriate amount in any financial liability insurance policy held by the company. The premiums for this are paid by the company. A deductible does not have to be specified for the members of the Supervisory Board.

With the effectiveness of the compensation system for the Supervisory Board on May 17, 2023, the Supervisory Board recommends that its members undertake a voluntary self-commitment to invest a total of at least 10% of the gross annual compensation paid out to them in shares of Deutsche Bank AG and to hold these shares for the duration of their ongoing term of office. The previous provision in the Articles of Association for share-based compensation for the Supervisory Board members was cancelled.

The Supervisory Board is in agreement that any transfer obligations to labor unions will be taken into account in the personal decision on the self-imposed personal investment. Supervisory Board members who already hold, as of the day the voluntary self-commitment is made, a number of Deutsche Bank shares with a countervalue of at least 10% of the Supervisory Board compensation payable to them for the duration of their current term of office do not have to acquire any further shares.

All shareholder representatives on the Supervisory Board and the member representing senior executives on the Supervisory Board submitted the voluntary self-commitment to the Supervisory Board or held, at the time of submitting the voluntary self-commitment, shares of Deutsche Bank with a countervalue equivalent to at least 10% of the Supervisory Board compensation payable to them for the duration of their current term of office.

The individual shareholdings of the members of the Supervisory Board are disclosed in the Corporate Governance Statement / Report.

In connection with the new regulation of Supervisory Board Compensation, the General Meeting resolved to approve the following transitional regulations with effect from May 17, 2023:

- If the amount of the Supervisory Board Compensation does not exceed the Supervisory Board Compensation previously paid in the individual case (calculated compensation for the 2023 financial year based on the previous regulation in the Articles of Association), a member of the Supervisory Board whose current term of office began before May 17, 2023, will receive a compensating payment in the form of a cash payment in the amount of the difference between the previously granted Supervisory Board Compensation and the Supervisory Board Compensation pursuant to paragraphs 1 and 2 of Section 14 of the Articles of Association. In the event of a re-election as member of the Supervisory Board, the provisions of the Articles of Association in the version adopted on May 17, 2023, apply.
- Members of the Supervisory Board whose current term of office began before May 17, 2023, will receive the virtual shares cumulatively earned during the current term of office paid out in February 2024 on the basis of the average closing price during the last ten trading days of the Frankfurt Stock Exchange (Xetra or successor system) of the preceding January.

Supervisory Board Compensation for the 2024 and 2023 financial years

Individual members of the Supervisory Board received the following compensation for the 2024 and 2023 financial years (excluding value added tax). The table shows the compensation paid and owed to the members of the Supervisory Board in the 2024 and 2023 financial years pursuant to Section 162 (1) sentence 1 of the German Stock Corporation Act (AktG). In each case the calculation is rounded up / down to full months.

	Compensation for the financial year 2024				
Members of the Supervisory Board	Base compensation		Compensation for chairing of the committees		Total
	in €	in %	in €	in %	in €
Alexander Wynaendts	950,000	100%	0	0%	950,000
Frank Schulze	475,000	100%	0	0%	475,000
Prof. Dr. Norbert Winkeljohann	475,000	83%	100,000	17%	575,000
Susanne Bleidt	300,000	100%	0	0%	300,000
Mayree Clark	300,000	67%	150,000	33%	450,000
Jan Duscheck	300,000	100%	0	0%	300,000
Manja Eifert	300,000	100%	0	0%	300,000
Claudia Fieber	300,000	100%	0	0%	300,000
Sigmar Gabriel	300,000	100%	0	0%	300,000
Florian Haggenmiller[1]	275,000	100%	0	0%	275,000
Timo Heider	300,000	100%	0	0%	300,000
Birgit Laumen[2]	0	0%	0	0%	0
Gerlinde M. Siebert	300,000	100%	0	0%	300,000
Yngve Slyngstad	300,000	100%	0	0%	300,000
Stephan Szukalski	300,000	100%	0	0%	300,000
John Alexander Thain	300,000	75%	100,000	25%	400,000
Jürgen Tögel	300,000	100%	0	0%	300,000
Michele Trogni	300,000	67%	150,000	33%	450,000
Dr. Dagmar Valcárcel[3]	300,000	67%	150,000	33%	450,000
Dr. Theodor Weimer	300,000	100%	0	0%	300,000
Frank Witter	300,000	67%	150,000	33%	450,000
Total	6,975,000	90%	800,000	10%	7,775,000

[1] Member of the Supervisory Board since January 16, 2024.
[2] Member of the Supervisory Board until January 12, 2024.
[3] Committee compensation including cash payment pursuant to Section § 14 (3) paragraph 1 of the Articles of Association.

All employee representatives on the Supervisory Board, with the exception of Jan Duscheck, Florian Haggenmiller (member since January 16, 2024), Birgit Laumen (member until January 12, 2024) and Stephan Szukalski are or were employed by Deutsche Bank Group. In the 2024 financial year, we paid such members a total amount of €1.27 million (in the form of salary, retirement and pension payments) in addition to their Supervisory Board compensation.

We do not provide members of the Supervisory Board with any benefits after they have left the Supervisory Board, although members who are or were employed by us are entitled to the benefits associated with the end of such employment (i.e., not on the basis of their Supervisory Board work). During 2024, we set aside €0.12 million for pension, retirement or similar benefits for the members of the Supervisory Board who are or were employed by us.

	Compensation for the financial year 2023				
Members of the Supervisory Board	Base compensation		Committee compensation and/or compensation for charing of the committees		Total
	in €	in %	in €	in %	in €
Alexander Wynaendts	637,500	69%	291,667	31%	929,167
Detlef Polaschek[1]	62,500	33%	125,000	67%	187,500
Frank Schulze[2]	277,083	100%	0	0%	277,083
Prof. Dr. Norbert Winkeljohann	339,583	60%	225,000	40%	564,583
Ludwig Blomeyer-Bartenstein[1]	41,667	33%	83,333	67%	125,000
Susanne Bleidt[2]	175,000	100%	0	0%	175,000
Mayree Clark	216,667	50%	212,500	50%	429,167
Jan Duscheck	216,667	72%	83,333	28%	300,000
Manja Eifert	216,667	84%	41,667	16%	258,334
Claudia Fieber[2]	175,000	100%	0	0%	175,000
Sigmar Gabriel	216,667	84%	41,667	16%	258,334
Timo Heider	216,667	78%	62,500	22%	279,167
Martina Klee[1]	41,667	50%	41,667	50%	83,334
Birgit Laumen[2]	175,000	100%	0	0%	175,000
Gabriele Platscher[1]	41,667	33%	83,333	67%	125,000
Bernd Rose[1]	41,667	29%	104,167	71%	145,834
Gerlinde M. Siebert[2]	175,000	100%	0	0%	175,000
Yngve Slyngstad	216,667	84%	41,667	16%	258,334
Stephan Szukalski[2]	175,000	100%	0	0%	175,000
John Alexander Thain	216,667	68%	100,000	32%	316,667
Jürgen Tögel[2]	175,000	100%	0	0%	175,000
Michele Trogni	216,667	48%	233,333	52%	450,000
Dr. Dagmar Valcárcel[3]	216,667	48%	233,333	52%	450,000
Stefan Viertel[1]	41,667	29%	104,167	71%	145,834
Dr. Theodor Weimer	216,667	84%	41,667	16%	258,334
Frank Werneke[1]	41,667	33%	83,333	67%	125,000
Frank Witter	216,667	56%	170,833	44%	387,500
Total	5,000,005	68%	2,404,167	32%	7,404,172

[1] Member of the Supervisory Board until May 17, 2023.
[2] Member of the Supervisory Board since May 17, 2023.
[3] Provision on the transition pursuant to Section § 14 (3) paragraph 1 of the Articles of Association.

The following table shows the virtual share units paid out on this basis pursuant to Section 14 (3) paragraph 2:

	Payment of the virtual share units	
Members of the Supervisory Board	Virtual share units accrued during the term of office until May 17, 2023	Amount paid out in February 2024 in €[1]
Alexander Wynaendts	10,287.340	123,534
Detlef Polaschek	54,246.220	651,410
Ludwig Blomeyer-Bartenstein	36,164.150	434,274
Mayree Clark	48,753.550	585,452
Jan Duscheck	31,622.390	379,734
Manja Eifert	2,420.550	29,067
Sigmar Gabriel	13,123.540	157,593
Timo Heider	32,243.510	387,193
Martina Klee	19,567.670	234,976
Gabriele Platscher	36,164.150	434,274
Bernd Rose	34,436.160	413,523
Yngve Slyngstad	2,074.760	24,915
John Alexander Thain	24,109.430	289,516
Michele Trogni	43,315.860	520,154
Dr. Dagmar Valcárcel	36,257.850	435,399
Stefan Viertel	11,855.880	142,370
Dr. Theodor Weimer	11,488.660	137,960
Frank Werneke	6,403.560	76,897
Prof. Dr. Norbert Winkeljohann	49,368.980	592,842
Frank Witter	9,272.180	111,344
Total	**513,176.390**	**6,162,427**

[1] At a value of € 12.008 based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of January 2024

Until the new provisions became effective as of May 17, 2023, the following provisions applied for the compensation of the Supervisory Board:

The members of the Supervisory Board received a fixed annual compensation ("Supervisory Board Compensation"). The annual base compensation amounted to € 100,000 for each Supervisory Board member. The Supervisory Board Chairman received twice that amount and the Deputy Chairpersons one and a half times that amount.

Members and chairs of the committees of the Supervisory Board were paid additional fixed annual compensation as follows:

	until May 17, 2023	
Committee in €	Chair	Member
Audit Committee	200,000	100,000
Risk Committee	200,000	100,000
Nomination Committee	100,000	50,000
Mediation Committee	0	0
Regulatory Oversight Committee	200,000	100,000
Chairman's Committee	100,000	50,000
Compensation Control Committee	100,000	50,000
Strategy and Sustainability Committee	100,000	50,000
Technology, Data and Innovation Committee	200,000	100,000

75% of the compensation determined was disbursed to each Supervisory Board member after submitting invoices within the first three months of the following year. The other 25% was converted by the company at the same time into company shares based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, calculated to three digits after the decimal point. The share value of this number of shares was paid to the respective Supervisory Board member in February of the year following his departure from the Supervisory Board or the expiration of his term of office, based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, provided that the member did not leave the Supervisory Board due to important cause which would have justified dismissal (forfeiture regulation).

In case of a change in Supervisory Board membership during the year, compensation for the financial year was paid on a pro rata basis, rounded up/down to full months. For the year of departure, the entire compensation was paid in cash; a forfeiture regulation applied to 25% of the compensation for that financial year.

The company reimbursed the Supervisory Board members for the cash expenses incurred in the performance of their office, including any value added tax (VAT) on their compensation and reimbursements of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their Supervisory Board work was paid for each Supervisory Board member affected. Finally, the Supervisory Board Chairman was reimbursed appropriately for travel expenses incurred in performing representative tasks due to his function and reimbursed for costs for the security measures required based on his function.

In the interest of the company, the members of the Supervisory Board were included in an appropriate amount in a financial liability insurance policy held by the company. The premiums for this were paid by the company.

Comparative presentation of compensation and earnings trends

The following table shows the comparative presentation of the change from year to year in the compensation, in the earnings of the company and the Group as well as in the average compensation of employees on a full-time equivalent basis. The information provided pursuant to Section 162 (1) sentence 2 No. 2 of the German Stock Corporation Act will be successively expanded with the change from one financial year to the prior year until a reporting period of five years is reached. Starting with the 2025 financial year, the year-to-year changes will be shown for each of the past five years.

The information on the compensation of the current and former members of the Management Board and Supervisory Board reflects the individualized statement in the Compensation Report of the paid or owed compensation pursuant to Section 162 (1) sentence 2 No. 1 of the German Stock Corporation Act. The presentation of the development of the company's earnings is to reflect, according to the legal requirements, those of the stand-alone listed company, i.e. Deutsche Bank AG. Accordingly, the net income (net loss) of Deutsche Bank AG is used to present earnings within the meaning of Section 162 (1) sentence 2 No. 2 of the German Stock Corporation Act. As the Management Board compensation is measured on the basis of Group figures, the earnings figures for the Group are additionally shown for the comparative presentation. These Group earnings figures are net income (net loss), cost/income ratio and Return on Tangible Equity (RoTE). For the group of employees for the comparison, the data relevant for Deutsche Bank Group were used in light of Deutsche Bank's global workforce. The group of employees for the comparison comprises all of the employees worldwide of Deutsche Bank Group.

	2024	2023	2022	2021	2020	Annual change from 2024 to 2023 in %	Annual change from 2023 to 2022 in %	Annual change from 2022 to 2021 in %	Annual change from 2021 to 2020 in %
1. Company profit development									
Net income (net loss) of Deutsche Bank AG (in € m)	2,883	4,999	5,506	1,919	(1,769)	(42)	(9)	187	N/M
Net income (net loss) of Deutsche Bank Group (in € m)	3,366	4,772	5,525	2,365	495	(29)	(14)	134	N/M
Cost/income ratio of Deutsche Bank Group (in %)	76.3%	75.1%	74.9%	84.6%	88.3%	2	0	(11)	(4)
Return on Tangible Equity (RoTE) of Deutsche Bank	4.7%	7.4%	9.4%	3.8%	0.2%	(36)	(21)	147	N/M
2. Average compensation employees									
World-wide on a full-time equivalent basis	122,985	116,713	125,301	120,336	113,350	5	(7)	4	6
3. Management Board compensation (in € t.)									
Current Management Board members									
Christian Sewing (member since January 1, 2015)	4,876	5,010	4,394	3,867	3,352	(3)	14	14	15
James von Moltke (member since July 1, 2017)	4,740	4,065	3,783	4,009	3,635	17	7	(6)	10
Fabrizio Campelli (member since November 1, 2019)	4,129	3,909	2,744	2,420	2,222	6	42	13	9
Claudio de Sanctis (member since July 1, 2023)	3,220	1,509	-	-	-	113	N/M	N/M	N/M
Bernd Leukert (member since January 1, 2020)	3,065	2,990	2,593	2,419	2,222	3	15	7	9
Alexander von zur Mühlen (member since August 1, 2020)	4,133	3,767	3,412	3,157	1,282	10	10	8	146
Laura Padovani (member since July 1, 2024)	1,112	-	-	-	-	N/M	N/M	N/M	N/M
Rebecca Short (member since May 1, 2021)	2,946	2,674	2,436	1,606	-	10	10	52	N/M
Prof. Dr. Stefan Simon (member since August 1, 2020)	4,118	3,319	2,488	2,446	1,007	24	33	2	143
Olivier Vigneron (member since May 20, 2022)	2,679	2,433	1,508	-	-	10	61	N/M	N/M

	2024	2023	2022	2021	2020	Annual change from 2024 to 2023 in %	Annual change from 2023 to 2022 in %	Annual change from 2022 to 2021 in %	Annual change from 2021 to 2020 in %
Members who left the Management Board before the financial year									
Karl von Rohr (member until October 31, 2023	2,425[1]	3,727	3,444	3,235	2,930	(35)	8	6	10
Christiana Riley (member until May 17, 2023)	2	2,673	3,653	3,079	3,034	(100)	(27)	19	1
Stuart Lewis (member until May 19, 2023)	388	1,363	2,648	3,079	2,912	(72)	(49)	(14)	6
Frank Kuhnke (member until 30 April 2021)	200	348	1,626[1]	2,264[1]	2,207	(43)	(79)	(28)	3
Werner Steinmüller (member until July 31, 2020)	134	283	283	3,117	2,436	(53)	N/M	(91)	28
Sylvie Matherat (member until July 31, 2019)	2,335[1]	132	134	211	2,719 [1]	N/M	(1)	(36)	(92)
Garth Ritchie (member until July 31, 2019)	1,790[1]	268	268	2,071	4,185 [1]	N/M	N/M	(87)	(51)
Frank Strauß (member until July 31, 2019)	2,668[1]	326	326	326	2,168 [1]	N/M	N/M	N/M	(85)
Nicolas Moreau (member until Dec 31, 2018)	2,736[1]	286	317	299	1,826	N/M	(10)	6	(84)
Dr. Marcus Schenck (member until May 24, 2018)	-	65	65	65	65	N/M	N/M	N/M	N/M
John Cryan (member until April 8, 2018)	4,382[1]	3,312[1]	47	47	47	32	N/M	N/M	N/M
4. Supervisory Board compensation (in € t.)									
Current Supervisory Board members									
Alexander Wynaendts (member since May 19, 2022)	950	929	496	-	-	2	87	N/M	N/M
Frank Schulze (member since May 17, 2023)	475	277	-	-	-	71	N/M	N/M	N/M
Prof. Dr. Norbert Winkeljohann (member since August 1, 2018)	575	565	521	496	450	2	8	5	10
Susanne Bleidt (member since May 17, 2023)	300	175	-	-	-	71	N/M	N/M	N/M
Mayree Clark (member since May 24, 2018)	450	429	429	450	425	5	N/M	(5)	6
Jan Duscheck (member since August 2, 2016)	300	300	300	271	250	N/M	N/M	11	8
Manja Eifert (member since April 7, 2022)	300	258	117	-	-	16	121	N/M	N/M
Claudia Fieber (member since May 17, 2023)	300	175	-	-	-	71	N/M	N/M	N/M
Sigmar Gabriel (member since March 11, 2020)	300	258	200	200	167	16	29	N/M	20
Florian Haggenmiller (member since January 16, 2024)	275	-	-	-	-	N/M	N/M	N/M	N/M
Timo Heider (member since May 23, 2013)	300	279	308	292	250	8	(9)	5	17
Gerlinde Siebert (member since May 17, 2023)	300	175	-	-	-	71	N/M	N/M	N/M
Yngve Slyngstad (member since May 19, 2022)	300	258	100	-	-	16	158	N/M	N/M
Stephan Szukalski (member until December 31, 2020; member since May 17, 2023)	300	175	-	-	200	71	N/M	N/M	N/M
John Alexander Thain (member since May 24, 2018)	400	317	200	200	200	26	59	N/M	N/M
Jürgen Tögel (member since May 17, 2023)	300	175	-	-	-	71	N/M	N/M	N/M
Michele Trogni (member since May 24, 2018)	450	450	450	392	350	N/M	N/M	15	12
Dr. Dagmar Valcárcel (member since August 1, 2019)	450	450	450	450	425	N/M	N/M	N/M	6

	2024	2023	2022	2021	2020	Annual change from 2024 to 2023 in %	Annual change from 2023 to 2022 in %	Annual change from 2022 to 2021 in %	Annual change from 2021 to 2020 in %
Dr. Theodor Weimer (member since May 20, 2020)	300	258	200	200	108	16	29	N/M	85
Frank Witter (member since May 27, 2021)	450	388	300	142	-	16	29	111	N/M
Former Supervisory Board members									
Ludwig Blomeyer-Bartenstein (member until May 17, 2023)	-	125	300	300	300	N/M	(58)	N/M	N/M
Detlef Polaschek (member until May 17, 2023)	-	188	450	450	450	N/M	(58)	N/M	N/M
Martina Klee (member until May 17, 2023)	-	83	200	171	150	N/M	(59)	17	14
Birgit Laumen (member until January 12, 2024)	-	175	-	-	-	N/M	N/M	N/M	N/M
Gabriele Platscher (member until May 17, 2023)	-	125	300	300	300	N/M	(58)	N/M	N/M
Bernd Rose (member until May 17, 2023)	-	146	350	321	275	N/M	(58)	9	17
Stefan Viertel (member until May 17, 2023)	-	146	321	242	-	N/M	(55)	33	N/M
Frank Werneke (member until May 17, 2023)	-	125	300	8	-	N/M	(58)	N/M	N/M
Dr. Paul Achleitner (member until May 19, 2022)	-	-	375	871	802	N/M	N/M	(57)	9
Dr. Gerhard Eschelbeck (member until May 19, 2022)	-	-	104	217	150	N/M	N/M	(52)	45
Henriette Mark (member until March 31, 2022)	-	-	63	250	250	N/M	N/M	(75)	N/M
Frank Bsirske (member until October 27, 2021)	-	-	-	250	300	N/M	N/M	N/M	(17)
Gerd Alexander Schütz (member until May 27, 2021)	-	-	-	50	175	N/M	N/M	N/M	(71)
Katherine Garrett-Cox (member until May 20, 2020)	-	-	-	-	100	N/M	N/M	N/M	N/M

[1] Including Termination Benefits

Compensation of the employees (unaudited)

The content of the 2024 Employee Compensation Report is based on the qualitative and quantitative remuneration disclosure requirements outlined in Article 450 No. 1 (a) to (j) Capital Requirements Regulation (CRR) in conjunction with Section 16 of the Remuneration Ordinance for Institutions (Institutsvergütungsverordnung – InstVV).

This Compensation Report takes a group-wide view and covers all consolidated entities of the Deutsche Bank Group. In accordance with regulatory requirements, equivalent reports for 2024 are prepared for BHW Bausparkasse AG classified as Significant Institution in the meaning of the German Banking Act as well as for other subsidiaries within Deutsche Bank Group in accordance with local regulatory requirements.

Regulatory environment

Ensuring compliance with regulatory requirements is an overarching consideration in the bank's Group Compensation Strategy. The bank strives to be at the forefront of implementing regulatory requirements with respect to compensation and will continue to maintain a close exchange with its prudential supervisor, the European Central Bank (ECB), to be in compliance with all existing and new requirements.

As an EU-headquartered institution, Deutsche Bank is subject to the Capital Requirements Regulation/Directive (CRR/CRD) globally, as transposed into German national law in the German Banking Act and InstVV. These rules are applied to all of Deutsche Bank subsidiaries and branches world-wide to the extent required in accordance with Section 27 InstVV. As a Significant Institution within the meaning of the German Banking Act, Deutsche Bank identifies all employees whose work is deemed to have a material impact on the overall risk profile (Material Risk Takers or MRTs) in accordance with the criteria stipulated in the German Banking Act and in the Commission Delegated Regulation 2021/923. MRT identification is performed for Deutsche Bank Group as well as for institutions in the EU at institutional level.

Taking into account more specific sectorial legislation and in accordance with InstVV, some of Deutsche Bank's subsidiaries (in particular within the DWS Group) fall under sector specific remuneration rules, such as the Alternative Investments Fund Managers Directive (AIFMD), the Undertakings for Collective Investments in Transferable Securities Directive (UCITS) and the Investment Firm Directive (IFD) including the applicable local transpositions. MRTs are also identified in these subsidiaries. Identified employees are subject to the remuneration provisions outlined in the applicable Guidelines on sound remuneration policies published by the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA).

Deutsche Bank takes into account the regulations targeted at employees who engage directly or indirectly with the bank's clients, for instance as per the local transpositions of the Markets in Financial Instruments Directive II – MiFID II. Accordingly, specific provisions for employees deemed to be Relevant Persons are implemented with a view to ensuring that they act in the best interest of the bank's clients.

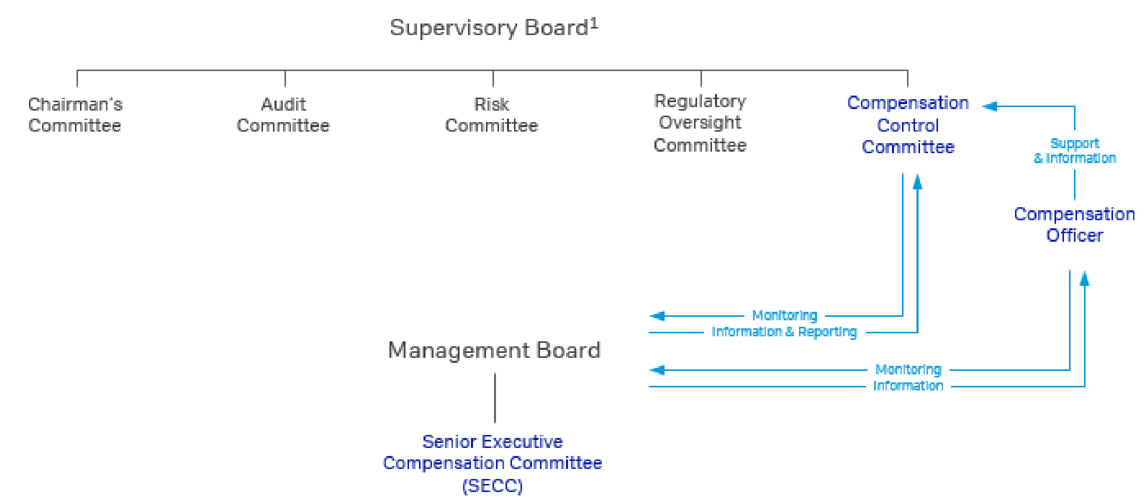
Where applicable, Deutsche Bank is also subject to specific rules and regulations implemented by local regulators. Many of these requirements are aligned with the InstVV. However, where variations are apparent, proactive and open discussions with regulators have enabled the bank to follow the local regulations whilst ensuring that any impacted employees or locations remain within the bank's overall Group Compensation Framework. This includes, amongst others, the compensation structures applied to Covered Employees in the United States under the requirements of the Federal Reserve Board as well as the requirements related to compensation recovery for executive officers in the event of an accounting restatement as required by the U.S. Securities and Exchange Commission. In any case, the InstVV requirements are applied as minimum standards globally.

Compensation governance

Deutsche Bank has a robust governance structure enabling it to operate within the clear parameters of its Compensation Strategy and Policy. In accordance with the German two-tier board structure, the Supervisory Board governs the compensation of the Management Board members while the Management Board oversees compensation matters for all other employees in the Group. Both the Supervisory Board and the Management Board are supported by specific committees and functions, in particular the Compensation Control Committee (CCC), the Compensation Officer, and the Senior Executive Compensation Committee (SECC).

In line with their responsibilities, the bank's control functions as per InstVV are involved in the design and application of the bank's remuneration systems, in the identification of MRTs and in determining the total amount of Variable Compensation. This includes assessing the impact of employees' behavior and the business-related risks, performance criteria, granting of remuneration and severances as well as ex-post risk adjustments.

Reward governance structure


Supervisory Board[1]
Chairman's Committee
Audit Committee
Risk Committee
Regulatory Oversight Committee
Compensation Control Committee
Support & Information
Compensation Officer
Monitoring
Information & Reporting
Monitoring
Information
Management Board
Senior Executive Compensation Committee (SECC)

[1] Does not comprise a complete list of Supervisory Board Committees

Compensation Control Committee (CCC)

The Supervisory Board has set up the CCC to support in establishing and monitoring the structure of the compensation system for the Management Board Members of Deutsche Bank AG. Furthermore, the CCC monitors the appropriateness of the compensation systems for the employees of Deutsche Bank Group, as established by the Management Board and the SECC. The CCC reviews whether the total amount of variable compensation is affordable and set in accordance with the risk, capital and liquidity situation as well as in alignment with the business and risk strategies. Furthermore, the CCC supports the Supervisory Board in monitoring the bank's MRT identification process.

Further details, including the composition and the number of meetings held, can be found in the Report of the Supervisory Board within this Annual Report.

Compensation Officer

The Management Board, in cooperation with the CCC, has appointed a Group Compensation Officer to support the Supervisory Boards of Deutsche Bank AG and of the bank's Significant Institutions in Germany in performing their compensation related duties. The Compensation Officer is involved in the conceptual review, development, monitoring and application of the employees' compensation systems, the MRT identification and remuneration disclosures on an ongoing basis. The Compensation Officer performs all relevant monitoring obligations independently, provides an assessment on the appropriateness of the design and strategy of the compensation systems for employees at least annually and regularly supports and advises the CCC.

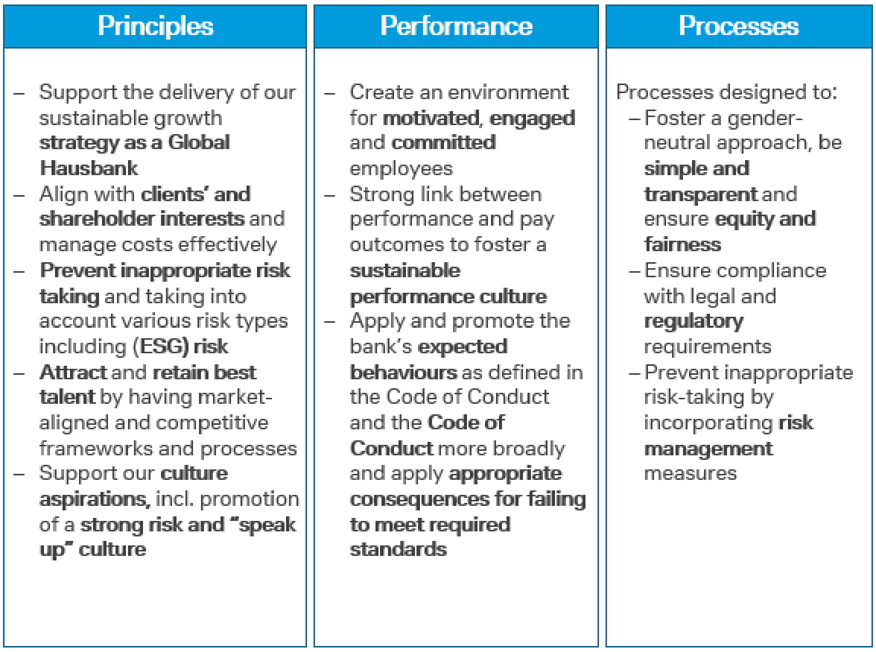
Senior Executive Compensation Committee (SECC)

The SECC is a delegated committee established by the Management Board which has the mandate to develop sustainable compensation principles, to prepare recommendations on Total Compensation levels and to ensure appropriate compensation governance and oversight. The SECC establishes the Compensation and Benefits Strategy, Policy and corresponding guiding principles. Moreover, using quantitative and qualitative factors, the SECC assesses Group and divisional performance as a basis for compensation decisions and makes recommendations to the Management Board regarding the total amount of annual variable compensation and its allocation across business divisions and infrastructure functions.

In order to maintain its independence, only representatives from infrastructure and control functions who are not aligned to any of the business divisions are members of the SECC. In 2024, the SECC's membership comprised of the DB AG Management Board member responsible for Human Resources and the Chief Financial Officer as Co-Chairpersons, the Head of Compliance, the Head of Human Resources and the Head of Performance & Reward as well as an additional representative from both Finance and Risk as voting members. The Compensation Officer and an additional representative from Finance participated as non-voting members. The SECC generally meets on a monthly basis but with more frequent meetings during the compensation determination process. It held 19 meetings in total with regard to the compensation process for the performance year 2024.

Compensation and Benefits Strategy

Deutsche Bank recognizes that its compensation framework plays a vital role in supporting its strategic objectives. It enables the bank to attract and retain the individuals required to achieve the bank's objectives. The Compensation and Benefits Strategy is built on three core pillars (Principles, Performance and Processes as outlined below) that support the bank's global, client-centric business and risk strategy, reinforced by safe and sound compensation practices that operate within the bank's profitability, solvency and liquidity position.



Principles	Performance	Processes
– Support the delivery of our sustainable growth **strategy as a Global Hausbank** – Align with **clients' and shareholder interests** and manage costs effectively – **Prevent inappropriate risk taking** and taking into account various risk types including **(ESG) risk** – **Attract** and **retain best talent** by having market-aligned and competitive frameworks and processes – Support our **culture aspirations,** incl. promotion of a **strong risk and "speak up" culture**	– Create an environment for **motivated, engaged** and **committed** employees – Strong link between performance and pay outcomes to foster a **sustainable performance culture** – Apply and promote the bank's **expected behaviours** as defined in the Code of Conduct and the **Code of Conduct** more broadly and apply **appropriate consequences for failing to meet required standards**	Processes designed to: – Foster a gender-neutral approach, be **simple and transparent** and ensure **equity and fairness** – Ensure compliance with legal and **regulatory** requirements – Prevent inappropriate risk-taking by incorporating **risk management** measures

Group Compensation Framework

The compensation framework, generally applicable globally across all regions and business lines, emphasizes an appropriate balance between Fixed Pay (FP) and Variable Compensation (VC) – together forming Total Compensation (TC). It aligns incentives for sustainable performance at all levels of Deutsche Bank whilst ensuring the transparency of compensation decisions and their impact on shareholders and employees. The underlying principles of Deutsche Bank's Compensation Framework are applied to all employees equally and are supported by the key principle 'equal pay for equal work or work of equal value' and the necessity for equal opportunities, irrespective of differences in, e.g., tenure, gender or ethnicity.

Pursuant to CRD and the requirements subsequently adopted in the German Banking Act, Deutsche Bank is subject to a maximum ratio of 1:1 with regard to fixed-to-variable remuneration components, which was increased to 1:2 for a limited population with shareholder approval on May 22, 2014 with an approval rate of 95.27%, based on valid votes by 27.68% of the share capital represented at the Annual General Meeting. Control Functions as defined by InstVV, comprising Risk, Compliance and Anti-Financial Crime, Group Audit and the Group Compensation Officer and his Deputy, are subject to a maximum ratio of 2:1. Employees in certain infrastructure functions should continue to be subject to a maximum ratio of 1:1.

With effect from 2024 the bank amended and simplified its compensation framework by ensuring all employees are eligible for individual VC, by incorporating the former Group VC Component into the overall VC pool determination, and by removing both Reference Total Compensation and Recognition Awards. To maintain an appropriate balance between FP and VC, the bank implemented a more standardized VC orientation concept with orientation values based on division, profession and seniority that indicate the average expected VC as a percentage value of FP.

Fixed Pay is the key and primary compensation element for most employees globally. It is a fixed regular payment based on transparent and predetermined conditions. It is delivered either in the form of base salary and where applicable local specific fixed pay allowances. Fixed Pay reflects the value of the individual role and function within the organization, regional and divisional specifics and rewards the factors an employee brings to the organization such as qualification, skills and experience required for the role in line with remuneration levels in the specific geographic location and level of responsibility.

Variable Compensation is a discretionary compensation component that reflects Group, Divisional risk-adjusted financial and non-financial performance as well as individual contributions. It acknowledges that employees contribute towards the success of their Division and the Group as a whole. At the same time, VC allows the bank to differentiate individual contributions and to drive behavior and conduct through an incentive system that can positively influence culture and the achievement of the bank's strategic objectives and to apply consequences for falling below the standards of delivery, behavior and conduct by reducing the VC.

In the context of InstVV, severance payments are considered variable compensation. The bank's severance framework ensures full alignment with the respective InstVV requirements.

Employee benefits are considered FP from a regulatory perspective, as they have no direct link to performance or discretion. They are granted in accordance with applicable local market practices and requirements. Pension expenses represent the main element of the bank's benefits portfolio globally.

Total Compensation (TC) is made up of defined Fixed Pay, Variable Compensation and is supplemented by benefits.

Employee groups with specific compensation structures

For some areas of the bank, compensation structures deviate in some aspects from the Group Compensation Framework outlined above, but within regulatory boundaries.

Postbank units

While executive staff of former Postbank generally follow the remuneration structure of Deutsche Bank, the compensation for any other staff in Postbank units is based on specific frameworks agreed with trade unions or with the respective workers' councils. Where no collective agreements exist, compensation is subject to individual contracts. In general, non-executive and tariff staff in Postbank units receive VC, but the structure and portion of VC can differ between legal entities.

DWS

DWS asset management entities and employees fall under AIFMD, UCITS or IFD regulation, with only a very limited number of employees remain in scope of the bank's Group InstVV requirements. DWS has established its own compensation governance, policy, and structures, as well as Risk Taker identification process in line with its regulatory requirements. These structures and processes are aligned with InstVV where required but tailored towards the Asset Management business. Pursuant to the ESMA/EBA Guidelines, DWS's compensation strategy is designed to ensure an appropriate ratio between fixed and variable compensation.

Generally, DWS applies remuneration rules that are equivalent to the Deutsche Bank Group approach, but use DWS Group-related parameters, where possible. Notable deviations from the Group Compensation Framework include the use of share-based instruments linked to DWS shares and fund-linked instruments. These serve to improve the alignment of employee compensation with DWS' shareholders' and investors' interests.

Tariff staff

Tariff staff are either subject to a collective agreement (*Tarifvertrag für das private Bankgewerbe und die öffentlichen Banken*), as negotiated between trade unions and employer associations, or subject to agreements as negotiated with the respective trade unions directly. The remuneration of tariff staff is included in the quantitative disclosures in this Report.

Determination of performance-based variable compensation

The bank puts a strong focus on its governance related to compensation decision-making processes. A robust set of rule-based principles for compensation decisions with close links to the performance of both businesses and individuals were applied.

The total amount of VC for any given performance year is derived from an assessment of the bank's profitability, solvency, and liquidity position (affordability assessment), Group performance and the performance of divisions and infrastructure functions in support of achieving the bank's strategic objectives.

In a first step, Deutsche Bank assesses the bank's affordability as well as other limitations (such as cost constraints) to determine what the bank "can" award in line with regulatory and internal requirements. In the next step, the bank assesses divisional risk-adjusted performance, i.e. what the bank "should" award in order to provide an appropriate compensation for contributions to the bank's success. The proportion of the VC pools related to Group performance, which has a weighting of 25%, is determined based on the performance of a selected number of Group's Key Performance Indicators (KPIs), including Common Equity Tier 1 (CET 1) Capital Ratio, Cost/Income Ratio (CIR), Post-Tax Return on Tangible Equity (RoTE), ESG: Environmental - Sustainable Financing and ESG Investments, Social - Gender Diversity and Governance - Audit Control Risk Management Grade.

When assessing divisional performance, a range of considerations are referenced. Performance is assessed in the context of financial and – based on Balanced Scorecards – non-financial targets. To ensure that performance is reviewed in its entirety and that consideration is also given to criteria that are difficult to evaluate with a solely formulaic approach, the SECC additionally conducts a qualitative review. Following the quantitative calculation of the combined performance assessed VC pools, the SECC will review a set of pre-defined qualitative criteria related to both financial and non-financial performance and may decide to apply a maximum 10 percentage points up or down overlay on the divisional performance assessment. The financial targets for front-office divisions are subject to appropriate risk-adjustment, in particular by referencing the degree of future potential risks to which Deutsche Bank may be exposed, and the amount of capital required to absorb severe unexpected losses arising from these risks. For the infrastructure functions, the financial performance assessment is mainly based on the achievement of cost targets. While the allocation of VC to infrastructure functions, and in particular to control functions, depends on both Deutsche Bank's overall and their own performance, it is not dependent on the performance of the division(s) that these functions oversee.

At the level of the individual employee, the VC Guiding Principles are established, which detail the factors and metrics that managers need to take into account when making VC decisions. In doing so, they must fully appreciate the risk-taking activities of individuals to ensure that VC allocations are balanced and risk-taking is not inappropriately incentivized. The factors and metrics to be considered include, but are not limited to, (i) business delivery ("What"), i.e. quantitative and qualitative financial, risk-adjusted and non-financial performance metrics, and (ii) behavior ("How"), i.e. culture, conduct and control considerations such as qualitative inputs from control functions or disciplinary sanctions. VC setting recommendations help managers to translate individual performance ("What" and "How") into appropriate pay outcomes. Generally, performance is assessed based on a one-year period. However, for Management Board members of all Significant Institutions, a performance period of three years is taken into account.

Variable compensation structure

The compensation structures are designed to provide a mechanism that promotes and supports long-term performance of employees and the bank. Whilst a portion of VC is paid upfront, these structures require that an appropriate portion is deferred to ensure alignment to the sustainable performance of the Group. For both parts of VC, Deutsche Bank shares are used as instruments and as an effective way to align compensation with Deutsche Bank's sustainable performance and the interests of shareholders.

The bank continues to go beyond regulatory requirements with the scope as well as the amount of VC that is deferred and the minimum deferral periods for certain employee groups. The deferral rate and period are determined based on the risk categorization of the employee as well as the business unit. Where applicable, the bank starts to defer parts of variable compensation for MRTs where VC is set at or above € 50,000 or where VC exceeds 1/3 of TC. For non-MRTs, deferrals start at higher levels of VC. MRTs are on average subject to deferral rates in excess of the minimum 40% (60% for Senior Management) as required by InstVV. For MRTs in Material Business Units (MBU) the bank applies a deferral rate of at least 50%. The VC threshold for MRTs requiring at least 60% deferral is set at € 500,000. Moreover, for all employees whose FP exceeds the amount of € 500,000, the full amount of the VC is deferred.

As detailed in the table below, deferral periods range from three to five years, dependent on employee groups.

Overview of 2024 award types (excluding DWS Group)

Award Type	Description	Beneficiaries	Deferral Period	Retention Period	Portion
Upfront: Cash VC	Upfront cash	All eligible employees	N/A	N/A	100% of VC, except employees with deferred awards
Upfront: Equity Upfront Award (EUA)	Upfront equity (linked to Deutsche Bank's share price over the retention period)	MRTs with VC ≥ € 50,000 or where VC exceeds 1/3 of TC Non-MRTs with deferred awards where 2024 TC > € 500,000	N/A	12 months	50% of upfront VC
Deferred: Restricted Incentive Award (RIA)	Deferred cash	All employees with deferred VC	Equal tranche vesting: MRTs: 4 years Senior Mgmt.[1]: 5 years Non-MRTs: 3 years	N/A	50% of deferred VC
Deferred: Restricted Equity Award (REA)	Deferred equity (linked to Deutsche Bank's share price over the vesting and retention period)	All employees with deferred VC	Equal tranche vesting: MRTs: 4 years Senior Mgmt.[1]: 5 years Non-MRTs: 3 years	12 months for MRTs	50% of deferred VC

N/A – Not applicable

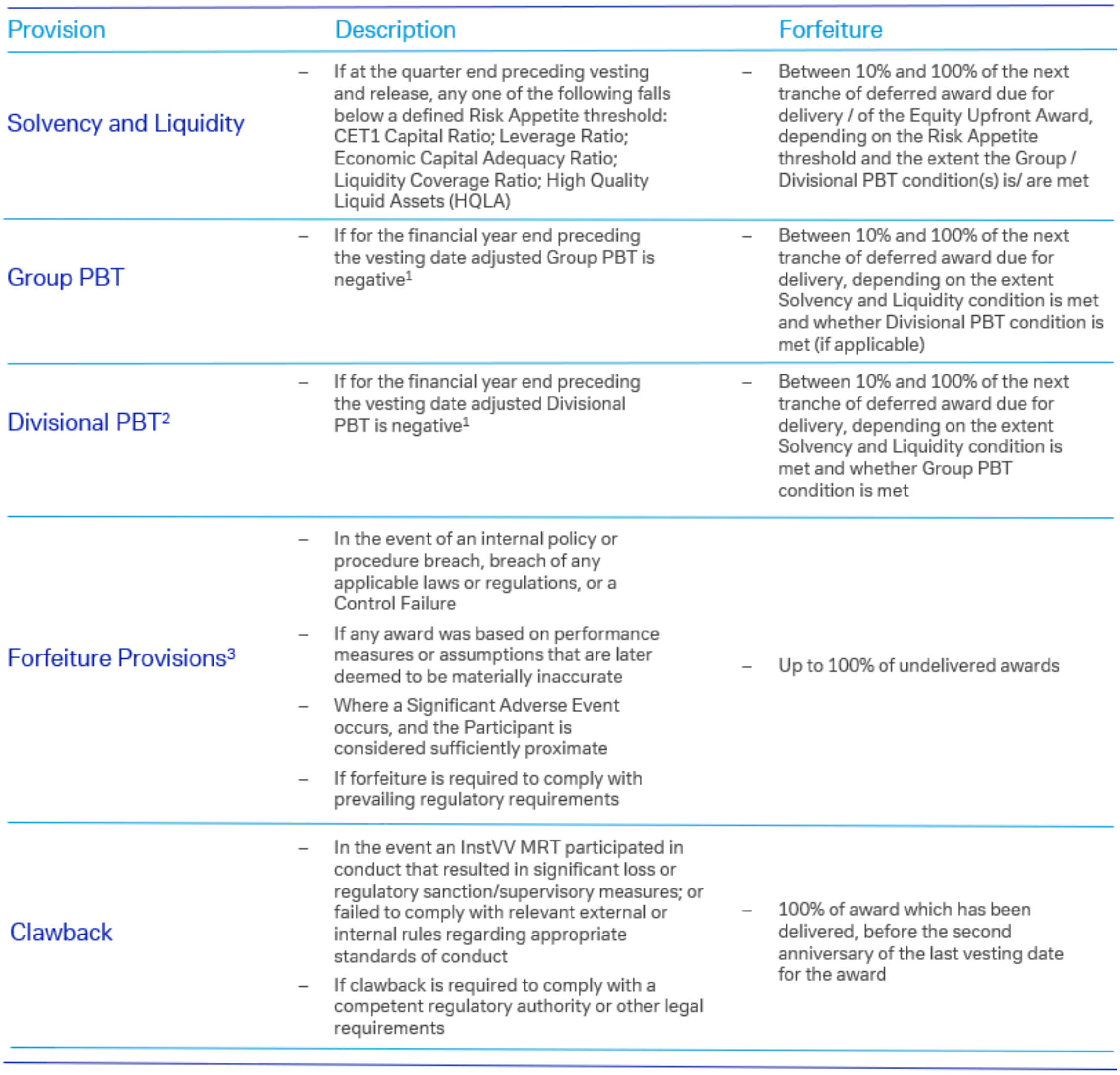
[1] For the purpose of Performance Year 2024 annual awards, Senior Management is defined DB AG MB-1 positions; incumbents of MB-2 positions in IB and CB reporting to Head of CB and Co-Heads of IB; further individuals with significant business responsibilities; MB members of Significant Institutions in the meaning of the German Banking Act; respective MB-1 positions with managerial responsibility; for the specific deferral rules for the Management Board of Deutsche Bank AG refer to the Compensation Report for the Management Board

Employees are not allowed to sell, pledge, transfer or assign a deferred award or any rights in respect to the award. They may not enter into any transaction having an economic effect of hedging any variable compensation, for example offsetting the risk of price movement with respect to the equity-based award. The Human Resources and Compliance functions, overseen by the Compensation Officer, work together to monitor employee trading activity and to ensure that all employees comply with this requirement.

Ex-post risk adjustment of variable compensation

In line with regulatory requirements relating to ex-post risk adjustment of variable compensation, the bank believes that a long-term view on conduct and performance of its employees is a key element of deferred VC. As a result, under the Management Board's oversight, all deferred awards are subject to performance conditions and forfeiture provisions as detailed below.

Overview on Deutsche Bank Group performance conditions and forfeiture provisions of variable compensation granted for Performance Year 2024



Provision	Description	Forfeiture
Solvency and Liquidity	– If at the quarter end preceding vesting and release, any one of the following falls below a defined Risk Appetite threshold: CET1 Capital Ratio; Leverage Ratio; Economic Capital Adequacy Ratio; Liquidity Coverage Ratio; High Quality Liquid Assets (HQLA)	– Between 10% and 100% of the next tranche of deferred award due for delivery / of the Equity Upfront Award, depending on the Risk Appetite threshold and the extent the Group / Divisional PBT condition(s) is/ are met
Group PBT	– If for the financial year end preceding the vesting date adjusted Group PBT is negative[1]	– Between 10% and 100% of the next tranche of deferred award due for delivery, depending on the extent Solvency and Liquidity condition is met and whether Divisional PBT condition is met (if applicable)
Divisional PBT[2]	– If for the financial year end preceding the vesting date adjusted Divisional PBT is negative[1]	– Between 10% and 100% of the next tranche of deferred award due for delivery, depending on the extent Solvency and Liquidity condition is met and whether Group PBT condition is met
Forfeiture Provisions[3]	– In the event of an internal policy or procedure breach, breach of any applicable laws or regulations, or a Control Failure – If any award was based on performance measures or assumptions that are later deemed to be materially inaccurate – Where a Significant Adverse Event occurs, and the Participant is considered sufficiently proximate – If forfeiture is required to comply with prevailing regulatory requirements	– Up to 100% of undelivered awards
Clawback	– In the event an InstVV MRT participated in conduct that resulted in significant loss or regulatory sanction/supervisory measures; or failed to comply with relevant external or internal rules regarding appropriate standards of conduct – If clawback is required to comply with a competent regulatory authority or other legal requirements	– 100% of award which has been delivered, before the second anniversary of the last vesting date for the award

[1] Considering clearly defined and governed adjustments for relevant Profit and Loss items (e.g., business restructurings; impairments of goodwill or intangibles)
[2] Only applicable to InstVV MRTs in front office divisions
[3] Other provisions may apply as outlined in the respective plan rules

Compensation decisions for 2024

Year-end considerations and decisions for 2024

All compensation decisions are made within the boundaries of regulatory requirements. These requirements form the overarching framework for determining compensation at Deutsche Bank. In particular, management must ensure that compensation decisions are not detrimental to maintaining the bank's sound capital base and liquidity reserves.

In 2024, Deutsche Bank successfully navigated an environment marked by persistent geopolitical uncertainties and macroeconomic challenges. The bank demonstrated its operating strength by delivering a pre-tax profit of € 5.3 billion while simultaneously absorbing nonoperating costs of € 2.6 billion consisting primarily of litigation charges relating largely to longstanding matters, thereby reducing the risk profile of the bank. The bank's resilient operating performance reflects the successful execution of its *Global Hausbank* business model.

The bank's employees delivered sustained business growth, with revenues exceeding € 30 billion, together with volume growth and market share gains in key business segments, while assets under management rose to record levels. This, combined with operating cost discipline, enabled Deutsche Bank to maintain strong capital levels while simultaneously increasing capital distributions to shareholders, including a 50% rise in the dividend proposed for 2024. Deutsche Bank's 2024 compensation decisions reflect its commitment to recognize appropriately the contributions of its employees and set fair and competitive compensation levels while also maintaining cost discipline, investing further in business growth and controls, sustaining capital and balance sheet strength, and enabling continued growth in returns to shareholders. The SECC continuously monitored potential VC awards with due consideration to these priorities throughout the year.

With due consideration for all these factors, the Management Board determined that the bank is in a position to award variable compensation, including a year-end performance-based VC pool, of € 2.514 billion for 2024 (2023: € 1.996 billion). The increase of Year-end performance-based VC as well as the decrease of Other VC is due to a combination of factors. The replacement of Recognition Awards by individual VC for a significant number of employees of lower seniority levels, as part of the new compensation framework, accounts for a portion; the strong performance of the Investment Bank also contributes to the increase of Year-end performance-based VC.

The VC for the Management Board of Deutsche Bank AG was determined, as always, by the Supervisory Board in a separate process, but is included in the tables and charts below.

Compensation awards for 2024 – all employees

									2024	2023
in € m. (unless stated otherwise)[1]	Supervisory Board[2]	Management Board[3]	CB[3]	IB[3]	PB[3]	AM[3]	Control Functions[3]	Corporate Functions[3]	Group Total	Group Total
Number of employees (full-time equivalent)	21	10	16,032	7,998	24,879	4,575	7,052	29,208	89,753	90,130
Total compensation	8	75	1,410	2,611	2,462	794	865	2,838	11,056	10,324
Base salary and allowances	8	27	1,031	1,320	1,876	486	689	2,177	7,606	7,421
Pension expenses	0	5	71	71	91	37	52	146	474	440
Fixed Pay according to § 2 InstVV	8	33	1,102	1,391	1,968	523	741	2,323	8,081	7,861
Year-end performance-based VC[4]	**0**	**42**	**261**	**1,181**	**314**	**235**	**92**	**390**	**2,514**	1,996
Other VC[4]	0	1	1	7	25	17	1	4	55	133
Severance payments	0	0	47	32	156	19	31	121	405	334
Variable Pay according to § 2 InstVV	0	42	308	1,219	495	271	124	516	2,975	2,463

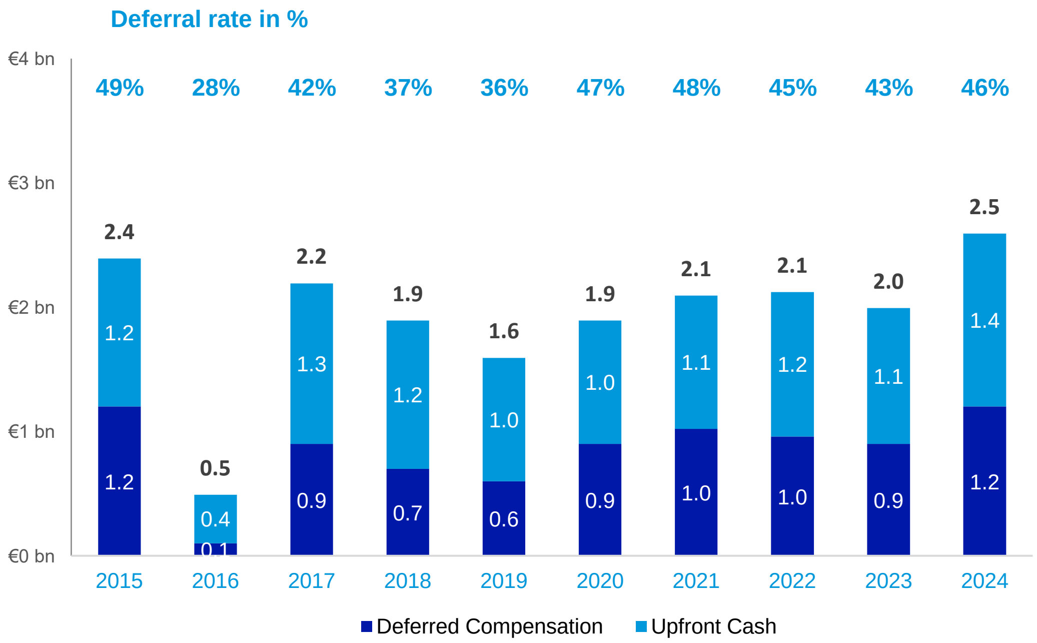
[1] The table may contain marginal rounding differences; FTE (full-time equivalent) as of December 31, 2024; shows remuneration awarded to all employees (including 2024 leavers)

[2] Supervisory Board represents the Supervisory Board Members of Deutsche Bank AG (they are not considered for the Group Total number of employees); employee representatives are considered with their compensation for the Supervisory Board role only (their employee compensation is included in the relevant divisional column); the remuneration for members of the Deutsche Bank AG Supervisory Board is not reflected in the Group Total

[3] Management Board represents the Management Board Members of Deutsche Bank AG; IB = Investment Bank; CB = Corporate Bank; PB = Private Bank; AM = Asset Management (DWS); Control Functions include Chief Risk Office, Group Audit, Compliance and Anti-Financial Crime; Corporate Functions include any Infrastructure function which is neither captured as a Control Function nor part of any division

[4] Year-end performance-based VC considers the newly introduced LTI Plan for Management Board members of Deutsche Bank AG set up for the performance period 2024-2026, which during the "transition phase" is shown with the target amount; other VC includes other contractual VC commitments such as sign-on awards, retention awards and specific VC elements for tariff staff and civil servants; it also includes fringe benefits awarded to Management Board Members of Deutsche Bank AG which are to be classified as variable remuneration; the table does not include new hire replacement awards for lost entitlements from previous employers (buyouts)

Reported year-end performance-based variable compensation and deferral rates year over year – all employees



Due to rounding, numbers presented may not add up precisely to the totals.

Deutsche Bank continues to apply deferral structures that go beyond the regulatory minimum, resulting in an overall deferral rate (all employees including non-MRT population) of 46% in 2024 (compared to 43% in 2023). For the MRT population only, the deferral rate amounts to 92% (compared to 91% in 2023).

Material Risk Taker compensation disclosure

On a global basis, 1,451 employees were identified as MRTs according to CRD/InstVV for financial year 2024, compared to 1,477 employees for 2023. The number of 2024 Group MRTs amounts to 1,213 individuals. Moreover, 292 individuals were identified at an institutional level (thereof 54 Group MRTs). The remuneration elements for all those MRTs on a consolidated basis are detailed in the tables below in accordance with Article 450 CRR. Where applicable, the EU REM tables display the prescribed business lines as per Annex XXXIII of Regulation No 575/2013.

With regard to deferral arrangements and pay-out instruments, 86 MRTs, whose total remuneration amounts to € 16.8 million (thereof € 5.7 million variable remuneration including severance payments) benefit from a derogation laid down in Article 94(3) CRD point (a) and 63 MRTs, whose total remuneration amounts to € 15.3 million (thereof € 5.5 million variable remuneration including severance payments) benefit from a derogation laid down in Article 94(3) CRD point (b).

Remuneration for 2024 - Material Risk Takers (REM 1)

						2024
	in € m. (unless stated otherwise)[1]	Supervisory Board[2]	Management Board[3]	Senior Management[4]	Other Material Risk Takers	Group Total
Fixed Pay	Number of MRTs[5]	21	10	224	1,020	1,275
	Total Fixed Pay	8	33	166	653	860
	of which: cash-based	8	29	160	621	818
	of which: shares or equivalent ownership interests	0	0	0	0	0
	of which: share-linked instruments or equivalent non-cash instruments	0	0	0	0	0
	of which: other instruments	0	0	0	0	0
	of which: other forms	0	4	6	32	42
Variable Pay	Number of MRTs[5]	0	10	223	984	1,217
	Total Variable Pay[6]	0	42	171	667	881
	of which: cash-based	0	9	92	351	451
	of which: deferred	0	0	75	269	344
	of which: shares or equivalent ownership interests	0	34	75	316	426
	of which: deferred	0	26	73	269	368
	of which: share-linked instruments or equivalent non-cash instruments	0	0	4	0	4
	of which: deferred	0	0	3	0	3
	of which: other instruments	0	0	1	0	1
	of which: deferred	0	0	1	0	1
	of which: other forms	0	0	0	0	0
	of which: deferred	0	0	0	0	0
	Total Pay	**8**	**75**	**338**	**1,321**	**1,741**

[1] The table may contain marginal rounding differences

[2] Supervisory Board represents the Supervisory Board Members of Deutsche Bank AG

[3] Management Board represents the Management Board Members of Deutsche Bank AG

[4] Senior Management is defined as Deutsche Bank AG MB-1 positions; incumbents of MB-2 positions in IB and CB reporting to Head of CB and Co-Heads of IB; further individuals with significant business responsibilities; MB members of institutions required to identify MRTs at a solo institutional level and respective MB-1 positions with managerial responsibility

[5] Beneficiaries only as of December 31, 2024 (HC reported for Supervisory Board and Management Board, FTE reported for the remaining part); therefore, the totals do not add up to the 1,451 individuals identified as MRTs; shows remuneration awarded to all MRTs (including 2024 leavers)

[6] Variable Pay includes Deutsche Bank´s Year-end performance-based VC for 2024, other VC and severance payments; it also includes fringe benefits awarded to Management Board Members of Deutsche Bank AG which are to be classified as variable remuneration, and considers the newly introduced LTI Plan for Management Board members of Deutsche Bank AG set up for the performance period 2024-2026, which during the “transition phase” is shown with the target amount; the table does not include new hire replacement awards for lost entitlements from previous employers (buyouts)

Guaranteed variable remuneration and severance payments - Material Risk Takers (REM 2)

					2024
in € m. (unless stated otherwise)[1]	Supervisory Board[2]	Management Board[3]	Senior Management[4]	Other Material Risk Takers	Group Total
Guaranteed variable remuneration awards					
Number of MRTs[5]	0	0	4	2	6
Total amount	0	0	6	9	15
of which: paid during financial year, not taken into account in bonus cap	0	0	3	8	10
Severance payments awarded in previous periods, paid out during financial year					
Number of MRTs[5]	0	0	0	0	0
Total amount	0	0	0	0	0
Severance payments awarded during financial year					
Number of MRTs[5]	0	0	8	69	77
Total amount[6]	0	0	8	34	42
of which: paid during financial year	0	0	8	32	40
of which: deferred	0	0	0	2	2
of which: paid during financial year, not taken into account in bonus cap	0	0	8	32	40
of which: highest payment that has been awarded to a single person	0	0	2	3	3

[1] The table may contain marginal rounding differences
[2] Supervisory Board represents the Supervisory Board Members of Deutsche Bank AG
[3] Management Board represents the Management Board Members of Deutsche Bank AG
[4] Senior Management is defined as Deutsche Bank AG MB-1 positions; incumbents of MB-2 positions in IB and CB reporting to Head of CB and Co-Heads of IB; further individuals with significant business responsibilities; MB members of institutions required to identify MRTs at a solo institutional level and respective MB-1 positions with managerial responsibility
[5] Beneficiaries only (HC reported for all categories)

Deferred remuneration - Material Risk Takers (REM 3)

								2024
in € m. (unless stated otherwise)[1]	Total amount of deferred remuneration awarded for previous performance periods	Of which due to vest in the financial year	Of which vesting in subsequent financial years	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years	Total amount of adjustment during the financial year due to ex post implicit adjustments[5]	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year[6]	Total of amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods
Supervisory Board[2]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Cash-based	0	0	0	0	0	0	0	0
Shares or equivalent ownership interests	0	0	0	0	0	0	0	0
Share-linked instruments or equivalent non-cash instruments	0	0	0	0	0	0	0	0
Other instruments	0	0	0	0	0	0	0	0
Other forms	0	0	0	0	0	0	0	0
Management Board[3]	**124**	**18**	**106**	**0**	**0**	**26**	**18**	**11**
Cash-based	55	7	48	0	0	0	7	0
Shares or equivalent ownership interests	69	11	58	0	0	26	11	11
Share-linked instruments or equivalent non-cash instruments	0	0	0	0	0	0	0	0
Other instruments	0	0	0	0	0	0	0	0
Other forms	0	0	0	0	0	0	0	0
Senior management[4]	**374**	**77**	**297**	**0**	**0**	**69**	**77**	**38**
Cash-based	183	38	145	0	0	0	38	0
Shares or equivalent ownership interests	183	38	144	0	0	68	38	37
Share-linked instruments or equivalent non-cash instruments	6	1	5	0	0	1	1	1
Other instruments	2	0	2	0	0	0	0	0
Other forms	0	0	0	0	0	0	0	0
Other Material Risk Takers	**1,472**	**369**	**1,102**	**0**	**1**	**256**	**366**	**141**
Cash-based	725	180	545	0	1	0	179	0
Shares or equivalent ownership interests	746	189	557	0	1	256	187	141
Share-linked instruments or equivalent non-cash instruments	1	0	0	0	0	0	0	0
Other instruments	0	0	0	0	0	0	0	0
Other forms	0	0	0	0	0	0	0	0
Total amount	**1,970**	**465**	**1,505**	**0**	**1**	**351**	**461**	**190**

[1] The table may contain marginal rounding differences
[2] Supervisory Board represents the Supervisory Board Members of Deutsche Bank AG
[3] Management Board represents the Management Board Members of Deutsche Bank AG
[4] Senior Management is defined as Deutsche Bank AG MB-1 positions; incumbents of MB-2 positions in IB and CB reporting to Head of CB and Co-Heads of IB; further individuals with significant business responsibilities; MB members of institutions required to identify MRTs at a solo institutional level and respective MB-1 positions with managerial responsibility
[5] Changes of value of deferred remuneration due to the changes of prices of instruments
[6] Defined as remuneration awarded before the financial year which vested in the financial year (including where subject to a retention period)

Remuneration of high earners – Material Risk Takers (REM 4)

	2024	2023
in €	Number of individuals	Number of individuals
Total Pay[1]		
1,000,000 to 1,499,999	331	290
1,500,000 to 1,999,999	125	88
2,000,000 to 2,499,999	59	53
2,500,000 to 2,999,999	48	16
3,000,000 to 3,499,999	25	8
3,500,000 to 3,999,999	14	14
4.000,000 to 4,499,999	6	11
4,500,000 to 4,999,999	5	1
5,000,000 to 5,999,999	9	4
6,000,000 to 6,999,999	3	8
7,000,000 to 7,999,999	12	5
8,000,000 to 8,999,999	3	4
9,000,000 to 9,999,999	3	2
10,000,000 to 10,999,999	3	0
14,000,000 to 14,999,999	0	1
17,000,000 to 17,999,999	1	0
Total	**647**	505

[1] Includes all components of FP and VC (including severances); buyouts are not included

In total, 647 MRTs received a Total Pay of € 1 million or more for 2024. This increase is mainly driven by the greater allocation of the variable compensation pool to the Investment Bank in recognition of its strong performance.

Compensation awards 2024 – Material Risk Takers (REM 5)

	Management Body Remuneration						Business Areas		
in € m. (unless stated otherwise)[1]	Supervisory Board[2]	Management Board[2]	Total Management Body	Investment Banking[2]	Retail Banking[2]	Asset Management[2]	Corporate Functions[2]	Control Functions[2]	Total
Total number of Material Risk Takers[3]									**1,275**
of which: Management Body	21	10	31	N/A	N/A	N/A	N/A	N/A	N/A
of which: Senior Management[4]	N/A	N/A	N/A	27	76	5	79	38	224
of which: Other Material Risk Takers	N/A	N/A	N/A	582	224	0	130	84	1,020
Total Pay of Material Risk Takers	**8**	**75**	**83**	**1,095**	**295**	**15**	**177**	**77**	**1,741**
of which: variable pay[5]	0	42	42	588	143	7	76	23	881
of which: fixed pay	8	33	40	507	152	7	100	54	860

[1] The table may contain marginal rounding differences
[2] Supervisory Board represents the Supervisory Board Members of Deutsche Bank AG, Management Board represents the Management Board Members of Deutsche Bank AG; Investment Banking = Investment Bank; Retail Banking = Private Bank and Corporate Bank; Asset Management = Asset Management (DWS); Control Functions include Chief Risk Office, Group Audit, Compliance and Anti-Financial Crime; Corporate Functions include any Infrastructure function which is neither captured as a Control Function nor part of any division
[3] HC as of December 31, 2024 reported for Supervisory Board and Management Board, FTE as of December 31, 2024 reported for the remaining part; therefore, the totals do not add up to the 1,451 individuals identified as MRTs; shows remuneration awarded to all MRTs (including 2024 leavers)
[4] Senior Management is defined as Deutsche Bank AG MB-1 positions; incumbents of MB-2 positions in IB and CB reporting to Head of CB and Co-Heads of IB; further individuals with significant business responsibilities; MB members of institutions required to identify MRTs at a solo institutional level and respective MB-1 positions with managerial responsibility
[5] Variable Pay includes Deutsche Bank´s Year-end performance-based VC for 2024, other VC and severance payments; it also includes fringe benefits awarded to Management Board Members of Deutsche Bank AG which are to be classified as variable remuneration, and considers the newly introduced LTI Plan for Management Board members of Deutsche Bank AG set up for the performance period 2024-2026, which during the “transition phase” is shown with the target amount; the table does not include new hire replacement awards for lost entitlements from previous employers (buyouts)

4-Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code

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All information presented in this Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code is as of February 7, 2025.

Management Board

Procedures of the Management Board

Pursuant to its legal form as a German stock corporation, Management Board, Supervisory Board and Shareholders' Meeting are the corporate bodies of Deutsche Bank Aktiengesellschaft. Information on the composition of the Supervisory Board is provided in the section "Objectives for the composition of the Supervisory Board, Profile of Requirements, diversity concept and status of implementation". The Shareholders' Meeting elects the shareholder representatives on the Supervisory Board. The Supervisory Board appoints the members of the Management Board and supervises the management.

Deutsche Bank's Management Board is responsible for the management of the company in accordance with the law, its Articles of Association and the Terms of Reference for the Management Board with the objective of creating sustainable value in the interests of the company. It considers the interests of shareholders, employees, and other company-related stakeholders. The members of the Management Board are collectively responsible for managing the bank's business including Environmental, Social and Governance (ESG) aspects. The Management Board, as the Group Management Board, manages Deutsche Bank Group in accordance with uniform guidelines; it exercises general control over all Group companies.

The Management Board decides on all matters prescribed by law and the Articles of Association and ensures compliance with the legal requirements and internal guidelines (compliance). It also takes the necessary measures to ensure that adequate internal guidelines are developed and implemented. The Management Board's responsibilities include, in particular, the bank's strategic management and direction, the allocation of resources, financial accounting and reporting, control and risk management, the proper functioning of the business organization, the systematic identification and assessment of the environmental and social impacts of the company's operations as well as corporate control. The Management Board decides on the appointments to the senior management level below the Management Board and, in particular, on the appointment of Global Key Function Holders. In appointing people to management functions in the Group, the Management Board takes diversity into account and strives, in particular, to achieve an appropriate representation of women. The Management Board works closely together with the Supervisory Board in a cooperative relationship of trust and for the benefit of the company. The Management Board reports to the Supervisory Board at a minimum within the scope prescribed by law or administrative guidelines, in particular on all issues with relevance for the Group concerning strategy, the intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance.

A comprehensive presentation of the duties, responsibilities and procedures of our Management Board is specified in its Terms of Reference, the current version of which is available on our website (www.db.com/ir/en/documents.htm).

Sustainability

The Management Board exercises oversight of the double materiality assessment process to identify material topics and manage material impacts, risks, and opportunities in accordance with Commission Delegated Regulation (EU) 2023/2772 of July 31, 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards to the European Sustainability Reporting Standards (ESRS). To ensure adequate oversight of the results of the double materiality assessment, Deutsche Bank has implemented a comprehensive sign-off process involving senior managers and established governance bodies. Initially, Senior Certifying Officers formally signed off on the evaluation results for material topics within their remit. Subsequently, the bank's Group Sustainability Committee, which serves as the primary governance and decision-making body for sustainability-related matters, approved the final set of material topics. Finally, the results of the double materiality assessment were presented to the Management Board for approval.

The results of the double materiality assessment were also presented to the Audit Committee of the Supervisory Board.

Business allocation plan

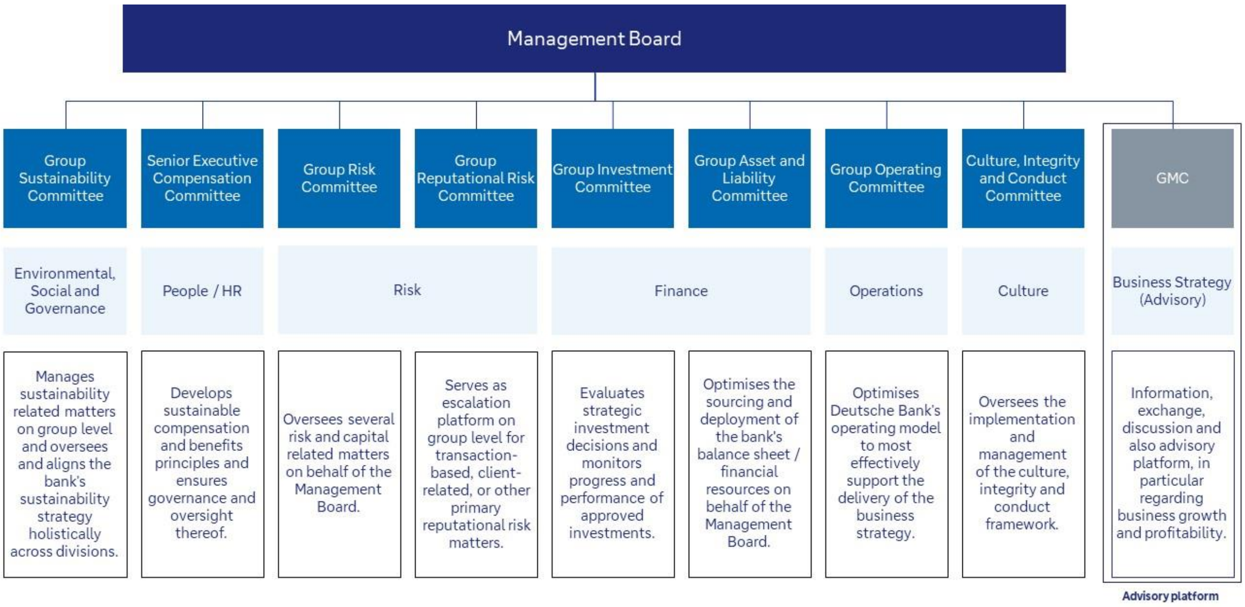
Notwithstanding the principle of collective responsibility, the Management Board's Business Allocation Plan has allocated individual members responsibility for specific functional area(s) and thus ensures a segregation of duties within the whole organization up to the Management Board. Management Board members are responsible for delegating their duties to subordinate levels of hierarchy and for clearly assigning responsibilities within their own area(a) of functional responsibility. Such delegation is necessary for the proper functioning of the business organization and does not impact the responsibility of Management Board members to adequately oversee delegated duties and tasks. Each individual with delegated responsibilities is responsible for providing adequate information up to the Management Board to enable it to execute its collective responsibilities.

Training of the Management Board

In order to fulfil the requirements for professional suitability, an ongoing system of Management Board training takes place regularly throughout the year. This also covers Environmental, Social and Governance issues, along with numerous topic areas in connection with law, compliance, anti-financial crime, data management, risk management and human resources.

Management Board committees

The Management Board prefers to rely on individually accountable senior managers rather than committees where possible and therefore it generally only establishes committees for issues that require joint decision-making. For certain overarching topics the Management Board has established the following committees and has delegated certain decision-making authority to them for each of the following topics:



Management Board

Group Sustainability Committee	Senior Executive Compensation Committee	Group Risk Committee	Group Reputational Risk Committee	Group Investment Committee	Group Asset and Liability Committee	Group Operating Committee	Culture, Integrity and Conduct Committee	GMC
Environmental, Social and Governance	People / HR	Risk		Finance		Operations	Culture	Business Strategy (Advisory)
Manages sustainability related matters on group level and oversees and aligns the bank's sustainability strategy holistically across divisions.	Develops sustainable compensation and benefits principles and ensures governance and oversight thereof.	Oversees several risk and capital related matters on behalf of the Management Board.	Serves as escalation platform on group level for transaction-based, client-related, or other primary reputational risk matters.	Evaluates strategic investment decisions and monitors progress and performance of approved investments.	Optimises the sourcing and deployment of the bank's balance sheet / financial resources on behalf of the Management Board.	Optimises Deutsche Bank's operating model to most effectively support the delivery of the business strategy.	Oversees the implementation and management of the culture, integrity and conduct framework.	Information, exchange, discussion and also advisory platform, in particular regarding business growth and profitability.

Advisory platform

Personnel changes to the Management Board and the current members of the Management Board

The Management Board of Deutsche Bank AG is made up of ten ‘Executives’. All Management Board members have a contract of service (Dienstvertrag) with Deutsche Bank AG.

The following members of the Management Board were appointed for a three-year period:

- Laura Padovani with effect from July 1, 2024.
- Marcus Chromik with effect from May 1, 2025.

The following information is provided on the current members of the Management Board on the year in which they were born, year in which they were first appointed and year in which their term expires as well as their current positions and area of responsibility according to the current Business Allocation Plan for the Management Board. Also specified are their other board mandates or directorships outside of Deutsche Bank Group as well as all memberships in legally prescribed supervisory boards or other comparable domestic or foreign supervisory bodies of commercial enterprises. Listed companies are marked with an “*”. The Terms of Reference for the Management Board specify that the members of our Management Board generally should not accept the chair of supervisory boards of companies outside Deutsche Bank Group.

Christian Sewing

Year of birth: 1970
First appointed: 2015
Term expires: 2026

Christian Sewing became a member of the Management Board on January 1, 2015, and Chief Executive Officer on April 8, 2018. He is responsible on the Management Board for Corporate Affairs & Strategy as well as Sustainability, Research and Group Audit.

Prior to assuming his role on the Management Board, Mr. Sewing was Global Head of Group Audit and held a number of positions before that in Risk, including Deputy Chief Risk Officer (from 2012 to 2013) and Chief Credit Officer (from 2010 to 2012) of Deutsche Bank.

From 2005 until 2007, Mr. Sewing was a member of the Management Board of Deutsche Genossenschafts-Hypothekenbank.

Before graduating with a diploma from the Bankakademie Bielefeld and Hamburg, Mr. Sewing completed a bank apprenticeship at Deutsche Bank in 1989.

Mr. Sewing does not have any external directorships subject to disclosure.

James von Moltke

Year of birth: 1969
First appointed: 2017
Term expires: 2026

James von Moltke became a member of the Management Board on July 1, 2017, and President as of March 25, 2022. He is Chief Financial Officer and in this function he is responsible for Finance, Group Tax, Treasury and Investor Relations. In July 2023, he took on responsibility for Asset Management (DWS).

Before Mr. von Moltke joined Deutsche Bank, he served as Treasurer of Citigroup. He started his career at the investment bank Credit Suisse First Boston in London in 1992. In 1995, he joined J.P. Morgan, working at the bank for 10 years in New York and Hong Kong. He then worked at Morgan Stanley in New York for four years, where he led the Financial Technology Advisory team globally. Mr. von Moltke joined Citigroup as Head of Corporate Mergers and Acquisitions (M&A) in 2009 and three years later became the Global Head of Financial Planning.

He holds a Bachelor of Arts degree from New College, University of Oxford.

Mr. von Moltke does not have any external directorships subject to disclosure.

Fabrizio Campelli

Year of birth: 1973
First appointed: 2019
Term expires: 2025

Fabrizio Campelli became a member of the Management Board on November 1, 2019. He is responsible for the Corporate Bank and the Investment Bank and also for the bank's UK & Ireland region.

From November 2019 to April 2021, he was the Management Board member responsible for transformation, as Chief Transformation Officer, and for Human Resources. He previously spent four years as the Global Head of Deutsche Bank Wealth Management. Before that, he was Head of Strategy & Organizational Development as well as Deputy Chief Operating Officer for Deutsche Bank Group.

He joined Deutsche Bank in 2004 after working at McKinsey & Company in the firm's London and Milan offices, focusing on strategic assignments mainly for global financial institutions.

He holds an MBA from MIT Sloan School of Management and a Business Administration degree from Bocconi University in Milan.

Mr. Campelli was a member of the following Supervisory Boards: BVV Versicherungsverein des Bankgewerbes a.G. and BVV Versorgungskasse des Bankgewerbes e.V. until June 2024.

Bernd Leukert

Year of birth: 1967
First appointed: 2020
Term expires: 2025

Bernd Leukert became a member of the Management Board on January 1, 2020. He is Chief Technology, Data and Innovation Officer and is responsible for the Chief Information Office for the Infrastructure areas and the business divisions, as well as for the Chief Technology Office, the Chief Security Office and Chief Innovation Office. He is also responsible for Data Governance as well as for Cloud Transformation.

He joined Deutsche Bank on September 1, 2019. He previously worked for many years at SAP SE, the global software company. He joined SAP in 1994 and held various management positions. From 2014 to 2019, he was responsible for product development and innovations as well as the Digital Business Services division on the Executive Board.

Mr. Leukert studied Industrial Engineering and Management at the University of Karlsruhe and at Trinity College Dublin, graduating in 1994 with a Master's Degree in Business Administration.

He is member of the Supervisory Board of Bertelsmann SE & Co. KGaA.

He was a member of the Supervisory Board of DWS Group GmbH & Co. KGaA* until June 2024.

Alexander von zur Mühlen

Year of birth: 1975
First appointed: 2020
Term expires: 2026

Alexander von zur Mühlen became a member of the Management Board on August 1, 2020. Since July 2023 he is the CEO for Asia-Pacific, Europe, the Middle East and Africa (EMEA) and Germany.

Mr. von zur Mühlen joined Deutsche Bank in 1998 and over the years has held a range of management roles in London and Frankfurt across infrastructure and business divisions. From 2018 to 2020 he was responsible for the Group's strategic development and was the advisor to the Chief Executive Officer (CEO). Before that, he served as Co-Head of Global Capital Markets, with a regional focus on Asia-Pacific and Europe, the Middle East and Africa (EMEA). From 2009 to 2017, he was Group Treasurer.

Alexander von zur Mühlen holds a Diploma in Business Administration from the Berlin School of Economics and Law in Berlin.

Mr. von zur Mühlen does not have any external directorships subject to disclosure.

Laura Padovani

Year of birth: 1966
First appointed: 2024
Term expires:2027

Laura Padovani became a member of the Management Board on July 1, 2024. She is Chief Compliance and Anti-Financial Crime Officer.

Ms. Padovani joined Deutsche Bank in April 2023 as Group Chief Compliance Officer and Head of Compliance. Prior to joining the bank, Ms. Padovani was Group Chief Compliance Officer at Barclays and previously spent 20 years at American Express. She has extensive international experience and proven leadership of global, regional, and business Compliance functions.

Laura Padovani holds a Masters in Law from the London School of Economics and Political Science and a Law Degree from University of Buenos Aires.

Ms. Padovani does not have any external directorships subject to disclosure.

Claudio de Sanctis

Year of birth: 1972
First appointed: 2023
Term expires: 2026

Claudio de Sanctis became a member of the Management Board on July 1, 2023. He is Head of Private Bank.

Mr. de Sanctis was responsible for the International Private Bank since June 2020 and at the same time he was also Chief Executive Officer (CEO) of Europe, the Middle East and Africa (EMEA). He had previously been Global Head of Deutsche Bank Wealth Management since November 2019 after joining Deutsche Bank in December 2018 as Head of Deutsche Bank Wealth Management Europe. In addition, he was also the Chief Executive Officer (CEO) of Deutsche Bank (Switzerland) Ltd from February to December 2019.

Before joining Deutsche Bank, he was Head of Private Banking, Europe, at Credit Suisse, where he started in 2013 as Market Area Head Southeast Asia for Private Banking. Before then, he spent seven years at UBS Wealth Management Europe, where he was Market Head Iberia and Nordics.

Earlier in his career he was at Barclays as Head of Key Clients Unit Europe in Private Banking focusing on UHNW clients. He also worked at Merrill Lynch Private Wealth Management in Europe, the Middle East and Africa (EMEA).

He holds a BA degree in Philosophy at La Sapienza University of Rome.

Mr. de Sanctis does not have any external directorships subject to disclosure.

Rebecca Short

Year of birth: 1974
First appointed: 2021
Term expires: 2027

Rebecca Short became a member of the Management Board on May 1, 2021, and Chief Operating Officer on June 1, 2023. Her responsibilities include Human Resources as well as the Bank's transformation. Until May 2023, she was Chief Transformation Officer.

She previously spent almost six years within Finance as Head of Group Planning & Performance Management.

She joined Deutsche Bank through its graduate program in Auckland in 1998. She moved to London in 2000 with Credit Risk Management, where she worked for 12 years and advanced to, become European Head of Corporates. She then set up a new Risk-wide team, Strategic Risk Analysis & Reporting in 2012 before moving to a senior central management role in Group Audit in 2013, where she spent two years.

She has a Bachelor of Commerce (Honours) degree in Finance & Accounting from the University of Otago, Dunedin, New Zealand.

Ms. Short does not have any external directorships subject to disclosure.

Professor Dr. Stefan Simon

Year of birth: 1969
First appointed: 2020
Term expires: 2026

Professor Dr. Stefan Simon became a member of the Management Board on August 1, 2020. He is responsible for the Americas region as well as for Legal and Governance. Until June 30,2024 he was Chief Administrative Officer (CAO) and was responsible for Government and Regulatory Affairs as well as for Legal and Governance. He was also responsible for Compliance, Anti-Financial-Crime (AFC) and the Business Selection and Conflicts Office, as well as for Controls Testing & Assurance until June 30, 2024. He assumed responsibility for the Americas region in May 2023.

Professor Dr. Simon joined Deutsche Bank on August 1, 2019. He was a member of the Supervisory Board from August 2016 until July 2019 and was Chairman of its Integrity Committee. He is a lawyer and tax consultant and between 1997 and 2016 worked at the law firm Flick Gocke Schaumburg, where he became a partner in 2002. Since 2008 he has also been an Honorary Professor of the University of Cologne.

He studied law at the University of Cologne, where he graduated with a doctorate in 1998.

Professor Dr. Simon is a member of the Supervisory Board of The Clearing House Payments Company LLC and Chairman of the Advisory Council of Leop. Krawinkel GmbH & Co. KG.

Olivier Vigneron

Year of birth: 1971
First appointed: 2022
Term expires: 2025

Olivier Vigneron became a member of the Management Board on May 20, 2022. He is Chief Risk Officer responsible for the functions managing Credit Risk, Market Risk, Liquidity Risk and Non-Financial Risk.

Mr. Vigneron re-joined Deutsche Bank on March 1, 2022. From January 2020 until re-joining Deutsche Bank in 2022, Olivier Vigneron was Chief Risk Officer of Natixis, where he also served on the Senior Management Committee. From 2008 to 2020, he worked at J.P. Morgan, where he served as Chief Risk Officer for Europe, the Middle East and Africa (EMEA) and Firmwide Risk Executive for Market Risk. Prior to this, he worked for BNP Paribas, UniCredit, and Goldman Sachs. Between 2002 and 2005 he worked in Structured Credit Trading for Deutsche Bank in London.

He has also served on the Supervisory Board of J.P. Morgan Germany and on the board of Natixis Assurances.

Olivier Vigneron studied at the Lycée Louis-le-Grand in Paris and holds a Diplôme d'Ingénieur (degree in Engineering) from France's École Polytechnique. He also holds a PhD in Economics from the University of Chicago.

Mr. Vigneron does not have any external directorships subject to disclosure.

Share ownership of Management Board members

The information on the share ownership of the Management Board can be found in the Compensation Report of the Annual Report 2024.

Supervisory Board

The Supervisory Board of Deutsche Bank AG consists of 20 members – 10 Supervisory Board members are shareholder representatives elected by the General Meeting, and 10 Supervisory Board members are employee representatives elected by the delegates of employees in Germany entitled to elect them. All Supervisory Board members have the same obligation to act in the interests of the company and perform their Supervisory Board mandate in the interests of Deutsche Bank AG. The internal organization of the Supervisory Board and its committees as well as the requirements for its members are subject not only to the regulations of the German Banking Act (*Kreditwesengesetz* (KWG)) and the recommendations of the German Corporate Governance Code, but also to specific supervisory requirements. Such requirements are founded on, among other things, the German Banking Act (KWG), the Remuneration Ordinance for Institutions (*Institutsvergütungsverordnung* (InstitutsVergV)), the guidelines of the European Banking Authority (EBA) and European Securities and Markets Authority (ESMA) and the administrative practices of the European Central Bank as our prudential supervisory authority. In individual cases, the regulatory requirements may diverge from the recommendations of the German Corporate Governance Code (see Section “Inapplicable Code recommendations due to the precedence of statutory provisions”).

The Supervisory Board appoints and dismisses the members of the Management Board, supervises and advises the Management Board and is directly involved in decisions of fundamental importance to the bank. Supervision and advice also include, in particular, sustainability issues. Pursuant to the requirements of the German Banking Act (KWG), the Supervisory Board oversees the Management Board, also with regard to its adherence to the applicable prudential supervisory requirements. The Supervisory Board works together closely with the Management Board in a cooperative relationship of trust and for the benefit of the company. Measures to be performed by the management may not be transferred to the Supervisory Board.

The types of business that require the approval of the Supervisory Board to be transacted are specified in Section 13 (1) of the Articles of Association of Deutsche Bank AG. These include the granting of general powers of attorney, the acquisition or disposal of real estate (if the object value exceeds € 500 million) as well as the granting of loans, including the acquisition of participations in other companies for which approval of a credit institution’s supervisory body is required under the German Banking Act (KWG) or other participations (if the object value exceeds € 1 billion). Furthermore, the Supervisory Board may specify additional transactions that require its approval. Within statutory limits, the Supervisory Board may also delegate decisions on issuing its approval to a committee, in order to increase efficiency.

Procedures of the Supervisory Board and its committees

The working procedures of the Supervisory Board of Deutsche Bank AG are supported by the expertise of its members, as well as an efficient distribution of tasks and coordination.

From among its members and in accordance with regulatory requirements for banks, the Supervisory Board has established nine standing committees: the Chairman's Committee; Nomination Committee; Audit Committee; Risk Committee; Compensation Control Committee; Regulatory Oversight Committee; Strategy and Sustainability Committee; Technology, Data and Innovation Committee; and Mediation Committee. The responsibilities, tasks and procedures of the Supervisory Board committees are set out in their respective terms of reference and briefly summarized here:

Chairman's Committee: The Chairman's Committee handles, in particular, the preparations for the Supervisory Board meetings, Management Board and Supervisory Board matters, as well as topics relating to corporate governance. It also supports the Supervisory Board in the preparation of decisions by the Supervisory Board on the appointment and dismissal of members of the Management Board, including long-term succession planning for the Management Board, while taking into account the recommendations of the Nomination Committee.

Nomination Committee: The Nomination Committee supports the Supervisory Board, in particular, in identifying candidates to fill a position on the Management Board and Supervisory Board and in the assessment to be performed regularly of the structure, size, composition and performance of the Management Board and of the Supervisory Board. It supports the promotion of talent development and diversity with a special focus on succession planning for the Management Board and draws up an objective to promote the under-represented gender on the Supervisory Board as well as a strategy for achieving this.

Audit Committee: The Audit Committee supports the Supervisory Board, in particular, in monitoring the financial reporting process, the effectiveness of the risk management system (internal control system and internal audit), the auditing of the financial statements, including the auditor's independence and the additional services provided by the auditor, as well as the monitoring of other audit-relevant matters. It also supports the Supervisory Board in monitoring the Management Board's prompt remediation, through suitable measures, of deficiencies identified by internal and external auditors.

Risk Committee: The Risk Committee advises the Supervisory Board in all matters relating to the current and future overall risk appetite and strategy and supports the Supervisory Board in monitoring the implementation of this strategy by the senior management level. The Risk Committee monitors whether the conditions in the client business are in line with the company's business model and risk structure. It reviews whether the incentives set by the compensation system take into consideration the bank's risk, capital and liquidity structure as well as the likelihood and maturity of earnings, taking into account retention risk.

Compensation Control Committee: The Compensation Control Committee handles compensation topics. It supports the Supervisory Board, in particular, in the appropriate structuring of the compensation systems for the Management Board and monitors the appropriate structuring of the compensation systems for employees. It prepares the Supervisory Board's resolutions on the compensation of the Management Board members and reviews the use and effectiveness of measures available in the compensation system for dealing with breaches of legal regulations as well as internal and external rules, policies and procedures.

Regulatory Oversight Committee: The Regulatory Oversight Committee supports the Supervisory Board, in particular, in monitoring the Management Board's measures to ensure the company's compliance with legal requirements, authorities' regulations and the bank's own in-house policies and in monitoring litigation cases with the highest risks. It monitors the Management Board's contacts with the regulatory authorities with a significant relevance for the bank (special audits, substantial complaints).

Strategy and Sustainability Committee: The Strategy and Sustainability Committee supports the Supervisory Board in fulfilling its monitoring function relating to the bank's strategy, including the Environmental, Social and Governance (ESG) strategy and sustainability issues. It advises and monitors the Management Board with regard to the definition of the bank's business strategies aligned to the sustainable development of the bank and the establishment of processes for planning, implementing, assessing and adjusting these strategies.

Technology, Data and Innovation Committee: The Technology, Data and Innovation Committee supports the Supervisory Board in fulfilling its oversight responsibilities relating to the bank's technology, data and innovation environment. It advises and monitors the Management Board with regard to the adequate technical and organizational resources and the definition of an adequate plan for the bank's IT systems, IT strategy, information security management, cyber and IT risks, as well as the data strategy and governance.

Mediation Committee: The Mediation Committee submits proposals to the Supervisory Board on the appointment or dismissal of members of the Management Board in cases where the Supervisory Board is unable to reach a two-thirds majority decision. The Mediation Committee only meets if necessary.

All terms of reference are reviewed and updated by the Supervisory Board on an ad hoc basis (for example, upon changes in laws or regulatory requirements), but at least once annually. They are published on the website of Deutsche Bank AG (www.db.com/ir/en/ documents.htm) in their currently applicable versions.

The number of meetings and their execution are specified along with details on the work of the Supervisory Board and its committees in the Report of the Supervisory Board, which is part of the Annual Report.

In accordance with regulatory requirements, the Supervisory Board produced and adopted position descriptions with candidate profiles for the roles as member of the Supervisory Board and as Chairman of the Supervisory Board and the chairpersons of its committees. It also issued – in accordance with regulatory requirements – a Suitability Guideline, which sets out the principles for the selection, succession planning and re-appointment/re-election of the members of the management bodies as well as the criteria and the procedure for assessing individual and collective suitability. Induction, training and diversity guidelines are component parts of the Suitability Guideline in accordance with regulatory requirements. Furthermore, the Supervisory Board issued a Profile of Requirements (see Section: Objectives for the composition of the Supervisory Board, Profile of Requirements, diversity concept and status of implementation / Profile of Requirements for the Supervisory Board). In addition, the Supervisory Board has Guidelines for the Assessment of the Independence of its members and a Guidelines for Handling Conflicts of Interests. These documents are also reviewed and updated by the Supervisory Board on an ad hoc basis, but at least once annually.

The Supervisory Board receives reports from the Management Board within the scope prescribed by law or administrative guidelines, in particular on all issues of relevance for the Group concerning strategy, intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance. Furthermore, Group Audit informs the Audit Committee of any deficiencies identified regularly and – in the case of severe deficiencies – without undue delay. In addition, the Chairman of the Supervisory Board is informed of serious findings relating to the members of the Management Board. The Supervisory Board and Management Board adopted an Information Regime, a general engagement (interaction) protocol and another engagement (interaction) protocol specifically for regulatory topics. These regulate not only the reporting to the Supervisory Board, but also, among other things, the Supervisory Board's enquiries and requests for information from employees of the company as well as the exchange of information in connection with preparations for the meetings and between the meetings.

The Supervisory Board meets regularly also without the Management Board. This also applies to its committees. In addition, the representatives of the employees and the representatives of the shareholders regularly conduct preliminary discussions separately.

The Chairman of the Supervisory Board plays a crucial role in the proper functioning of the Supervisory Board and has a leadership role in this. He can issue internal guidelines and principles concerning the Supervisory Board's internal organization and communications, the coordination of the work within the Supervisory Board and the Supervisory Board's interaction with the Management Board. The Chairman of the Supervisory Board engages in investor discussions on Supervisory Board-related topics when necessary and regularly informs the Supervisory Board of the substance of such discussions. These also cover Environmental, Social and Governance (ESG) topics.

Between meetings, the Chairman of the Supervisory Board and, to the extent expedient, the chairpersons of the Supervisory Board committees maintain regular contact with the members of the Management Board, especially with the Chairman of the Management Board, and deliberate with them, among other things, on issues of Deutsche Bank Group's strategy, planning, the development of its business, risk situation, risk management, risk controlling, governance, compliance, compensation systems, IT, data and digitalization, sustainability as well as material litigation cases. The Chairman of the Supervisory Board and – within their respective functional responsibility – the chairpersons of the Supervisory Board committees are informed without delay by the Chairman of the Management Board or by the respectively responsible Management Board member about important events of material significance for the assessment of the situation, development and management of Deutsche Bank Group. The Chairman of the Audit Committee also conducts regular discussions with the auditor outside the meetings.

Furthermore, the Chairman of the Supervisory Board and some of the chairpersons of the Supervisory Board committees engage in discussions with regulators.

Induction and training events

For each newly elected or appointed Supervisory Board member, individualized induction and training sessions are organized based on their knowledge and skills, while taking into consideration possible recommendations of the Nomination Committee, in order to help them get started in the new position. The induction events also serve as an introduction to the bank, its Management Board, selected senior managers, the auditor and Group Audit. Through customized training sessions, the new member's individual knowledge is expanded and enriched. The Nomination Committee regularly receives reports on the progress and participation in these training sessions.

In addition, regular training sessions are conducted for the entire Supervisory Board on current topics. Details on this are provided in the Report of the Supervisory Board.

Succession planning and diversity

Pursuant to the German Banking Act (KWG) the members of the Management Board must be professionally suitable and reliable and devote sufficient time to their role. The Supervisory Board assess the qualification of the individuals as well as the qualification of the Management Board as a whole (collective suitability). In this connection diversity of backgrounds and mindsets plays an important role as well as gender, nationality and age. The Nomination Committee supports the Supervisory Board in identifying suitable internal and external candidates to fill a position on the bank's Management Board while taking into account the applicable statutory and regulatory requirements. For this, the Committee has developed a position description with a candidate profile and a statement of the related time commitment for a Management Board member as well as questionnaires for the assessment of the knowledge, reliability and time availability. The Nomination Committee and Supervisory Board regularly receive reports from the Management Board on internal candidates for succession planning ("talent pipeline") and the process from the perspective of the Management Board. The members of the Supervisory Board have opportunities to meet selected senior managers at the meetings of the Supervisory Board and its committees as well as bank-internal events. With a view to a sustainable, ideally diverse succession planning while also taking gender diversity into consideration, the Supervisory Board also works together with external service providers.

For the selection of suitable candidates, external and internal, the Nomination Committee takes into account the strategic objectives of the bank, the area of functional responsibility on the Management Board, the qualifications, reliability and time availability of the candidates as well as the balance and diversity of the knowledge, skills and experience of all members of the Management Board, while also considering diversity principles. The appointment to a Management Board position is always made in the interests of the company. Building on the recommendation of the Nomination Committee, the Chairman's Committee submits a recommendation for the Supervisory Board's resolution. Based on this, the Supervisory Board decides on the appointment of the Management Board members. The first appointment period is for a maximum of three years. Management Board members can be reappointed for one or several terms of office, which may be for a maximum of five years pursuant to the law, whereby at Deutsche Bank such reappointments should generally also be for a maximum of three years.

For each newly appointed Management Board member, individualized induction and training sessions are organized based on their knowledge and skills, while taking into consideration possible recommendations of the Nomination Committee. The Nomination Committee regularly receives reports on the progress and participation in these training sessions.

The Stock Corporation Act (AktG) requires that a company that is listed on a stock exchange and has three or more members of the Management Board, such as Deutsche Bank, must have at least one woman and one man as member of its Management Board, failing which renders the appointment void. In addition, promoting diversity on the Management Board is very important to the Supervisory Board, and it is actively working on Management Board diversity, e.g., in terms of gender, nationality and age, as well as different backgrounds and mindsets. The Supervisory Board takes into account the legally required minimum gender participation on the Management Board pursuant to Section 76 (3a) of the German Stock Corporation Act (AktG) and strives to sustainably and continually increase the percentage of women on the Management Board. With the appointment of Laura Padovani, an internal candidate, to the Management Board with effect from July 1, 2024, the Supervisory Board expanded the Management Board to ten members and increased the percentage of women to 20%. To further increase the number of suitable internal female candidates, the Supervisory Board set a corresponding objective for the Management Board for the preceding financial year for appointing women to senior management positions directly below the Management Board and embedded this objective within the long-term performance metrics of the new compensation system for the Management Board. To reach a full achievement level in this category, the percentage of women represented at the two levels below the Management Board has to be at least 32.5% by 2026. The Supervisory Board regularly discusses the measures and ongoing progress with the Management Board.

Based on proposals of the Compensation Control Committee, the Supervisory Board determines the total compensation of the individual members of the Management Board and also regularly reviews and resolves on the compensation system for the Management Board. Details on this are provided in the Compensation Report and the Report of the Supervisory Board.

Self-assessment

The Nomination Committee and Supervisory Board regularly address the assessment of the Supervisory Board and Management Board as well as their work, which is to be conducted at least annually as prescribed by law pursuant to Section 25d of the German Banking Act (KWG). This is also the self-assessment of the Supervisory Board pursuant to the recommendation under Section D.12 of the German Corporate Governance Code (GCGC).

At its meeting on July 23, 2024, the Nomination Committee addressed the framework and schedule for the assessment. It resolved that the assessment of the 2024 reporting period would be performed with external assistance. The Nomination Committee reported regularly to the Supervisory Board on the work-in-progress on the assessment. The external advisor engaged for this conducted a workshop for the Supervisory Board, which took place on October 23, 2024. The assessment was performed essentially on the basis of extensive questionnaires regarding the work of the Supervisory Board, of the Supervisory Board committees and of the Management Board as well as interviews with the individual members of the Management Board and Supervisory Board. The final discussion and approval of the results of the assessment took place at the Supervisory Board meeting in plenum on March 13, 2025, and the results were set out in a written final report. The Supervisory Board continues to hold the opinion that the Supervisory Board and Management Board have achieved a high standard and that there are no reservations, in particular, regarding the professional qualifications, personal reliability and time availability of the members of the Management Board and of the Supervisory Board.

Members of the Supervisory Board and its committees

In accordance with the Articles of Association, the members of the Supervisory Board are elected for the period until the conclusion of the General Meeting which adopts the resolutions concerning the ratification of the acts of management for the fourth financial year following the beginning of the term of office. For the election of shareholder representatives, the General Meeting may establish that the terms of office of the members may begin or end on differing dates. In accordance with the Terms of Reference for the Supervisory Board since July 2020, shareholder representatives are proposed to the General Meeting for election for a maximum of approximately four years, i.e. until the conclusion of the General Meeting which adopts the resolutions concerning the ratification of the acts of management for the third financial year following the beginning of the term of office, whereby the financial year in which the term of office begins is not taken into account.

The following table provides detailed information on the members of the Supervisory Board (as of February 7, 2025).

Name	Principal occupation	Supervisory board memberships and other directorships
Alexander Wynaendts Year of birth: 1960 First elected: May 19, 2022 Term expires: 2026	Chairman of the Supervisory Board, Deutsche Bank AG	Air France-KLM Group S.A.[2] (Member of the Board of Directors); Uber Technologies, Inc.[2] (Member of the Board of Directors); Uber Payments B.V. (Non-Executive Director, Chairman); Puissance Holding B.V. (Non-Executive Director, Chairman)
Susanne Bleidt[1] Year of birth: 1967 First elected: May 17, 2023 Term expires: 2028	Staff Council Member	Postbank Filialvertrieb AG[3]; Postbeamtenkrankenkasse (Member of the Advisory Board)
Mayree Clark Year of birth: 1957 First elected: May 24, 2018 Term expires: 2027	Supervisory Board member	Ally Financial, Inc.[2] (Member of the Board of Directors), Allvue Systems Holdings, Inc. (Member of the Board of Directors)
Jan Duscheck[1] Year of birth: 1984 Appointed by the court: August 2, 2016 First elected: May 24, 2018 Term expires: 2028	Head of National Working Group: Banking, ver.di (Vereinte Dienstleistungsgewerkschaft (United Services Union))	No memberships or directorships subject to disclosure
Manja Eifert[1] Year of birth: 1971 Appointed by the court: April 7, 2022 First elected: May 17, 2023 Term expires: 2028	Staff Council Member	No memberships or directorships subject to disclosure
Claudia Fieber[1] Year of birth: 1966 First elected: May 17, 2023 Term expires: 2028	Staff Council Member	No memberships or directorships subject to disclosure
Sigmar Gabriel Year of birth: 1959 Appointed by the court: March 11, 2020 First elected: May 20, 2020 Term expires: 2025	Former German Federal Government Minister	Heristo AG; Siemens Energy AG[2]; Siemens Energy Management GmbH; ThyssenKrupp Steel Europe AG (Chairman) (until September 15, 2024)
Florian Haggenmiller[1] Year of birth: 1982 Appointed by the court: January 16, 2024 Term expires: 2028	Head of National Working Group: Information and Communications Technology, ver.di (Vereinte Dienstleistungsgewerkschaft (United Services Union))	IBM Deutschland GmbH; IBM Central Holding GmbH
Timo Heider[1] Year of birth: 1975 First elected: May 23, 2013 Term expires: 2028	Staff Council Member	BHW Bausparkasse AG[3] (Deputy Chairman); PCC Services GmbH der Deutschen Bank[3] (Deputy Chairman); Pensionskasse der BHW Bausparkasse VVaG[3] (Deputy Chairman)
Frank Schulze[1] Year of birth: 1968 First elected: May 17, 2023 Term expires: 2028	Deputy Chairman of the Supervisory Board, Deutsche Bank AG; Staff Council Member	No memberships or directorships subject to disclosure

Name	Principal occupation	Supervisory board memberships and other directorships
Gerlinde M. Siebert[1] Year of birth: 1967 First elected: May 17, 2023 Term expires: 2028	Global Head of Governance, Deutsche Bank AG	No memberships or directorships subject to disclosure
Yngve Slyngstad Year of birth: 1962 First elected: May 19, 2022 Term expires: 2026	Chief Executive Officer Aker Asset Management AS	No memberships or directorships subject to disclosure
Stephan Szukalski[1] Year of birth: 1967 First elected: May 17, 2023[4] Term expires: 2028	Federal Chairman, Deutscher Bankangestellten-Verband e.V. (DBV) (German Association of Bank Employees) – Gewerkschaft der Finanzdienstleister (Financial Services Providers Union)	PCC Services GmbH der Deutschen Bank[3] (until August 30, 2024)
John Alexander Thain Year of birth: 1955 First elected: May 24, 2018 Term expires: 2027	Supervisory Board member	Uber Technologies, Inc.[2] (Member of the Board of Directors); Aperture Investors LLC (Member of the Board of Directors); Pine Island Capital Partners LLC (Chairman)
Jürgen Tögel[1] Year of birth: 1968 First elected: May 17, 2023 Term expires: 2028	Staff Council Member	BVV Versicherungsverein des Bankgewerbes a.G.; BVV Versorgungskasse des Bankgewerbes e.V.; BKK Deutsche Bank AG[3] (Member of the Advisory Board)
Michele Trogni Year of birth: 1965 First elected: May 24, 2018 Term expires: 2027	Chief Executive Officer, Zinnia Corporate Holdings, LLC; Operating Partner, Eldridge (until March 31, 2024)	Everly Life, LLC (Member of the Non-Executive Board); Zinnia Corporate Holdings, LLC (CEO and Chairperson of the Board of Directors)
Dr. Dagmar Valcárcel Year of birth: 1966 Appointed by the court: August 1, 2019 First elected: May 20, 2020 Term expires: 2025	Supervisory Board member	amedes Holding GmbH; Antin Infrastructure Partners S.A.[2] (Member of the Board of Directors)
Dr. Theodor Weimer Year of birth: 1959 First elected: May 20, 2020 Term expires: 2025	Supervisory Board member; Chairman of the Executive Board (until September 30, 2024), Co-Chairman of the Executive Board (October 1, 2024 until December 31, 2024), Deutsche Börse AG[2]	Knorr Bremse AG[2]
Professor Dr. Norbert Winkeljohann Year of birth: 1957 First elected: August 1, 2018 Term expires: 2027	Deputy Chairman of the Supervisory Board of Deutsche Bank AG; Self-Employed Corporate Consultant, Norbert Winkeljohann Advisory & Investments	Bayer AG[2] (Chairman); Georgsmarienhütte Holding GmbH; Sievert SE (Chairman); Bohnenkamp AG (Chairman)
Frank Witter Year of birth: 1959 First elected: May 27, 2021 Term expires: 2025	Supervisory Board member	Traton SE[2]; VfL Wolfsburg-Fußball GmbH (Chairman) (until July 31, 2024); CGI Inc.[2] (Member of the Board of Directors)

[1] Employee representative
[2] Listed company
[3] Group-internal mandate
[4] Mr. Szukalski already was a member of the Supervisory Board from May 2013 to November 2015 and from May 2018 to December 2020.

The following overview provides more detailed information on the memberships in the different committees:

Chairman’s Committee: Alexander Wynaendts, Chairman, Timo Heider, Frank Schulze, Professor Dr. Norbert Winkeljohann

Nomination Committee: Alexander Wynaendts, Chairman, Mayree Clark, Timo Heider, Frank Schulze, Professor Dr. Norbert Winkeljohann

Audit Committee: Frank Witter, Chairman, Susanne Bleidt, Manja Eifert, Claudia Fieber (since January 31, 2024), Birgit Laumen (until January 12, 2024), Gerlinde M. Siebert, Dr. Dagmar Valcárcel, Dr. Theodor Weimer, Professor Dr. Norbert Winkeljohann

Risk Committee: Mayree Clark, Chairperson, Jan Duscheck, Gerlinde M. Siebert, Stephan Szukalski, Michele Trogni, Professor Dr. Norbert Winkeljohann, Alexander Wynaendts

Compensation Control Committee: Professor Dr. Norbert Winkeljohann, Chairman, Jan Duscheck, Timo Heider, Jürgen Tögel, Dr. Dagmar Valcárcel, Alexander Wynaendts

Regulatory Oversight Committee: Dr. Dagmar Valcárcel, Chairperson, Jan Duscheck, Sigmar Gabriel, Timo Heider, Stephan Szukalski, Alexander Wynaendts

Strategy and Sustainability Committee: John Alexander Thain, Chairman, Mayree Clark, Claudia Fieber, Florian Haggenmiller (since January 31, 2024), Birgit Laumen (until January 12, 2024), Frank Schulze, Jürgen Tögel, Michele Trogni, Alexander Wynaendts

Technology, Data and Innovation Committee: Michele Trogni, Chairperson, Susanne Bleidt, Manja Eifert, Claudia Fieber (until January 31, 2024), Florian Haggenmiller (since January 31, 2024), Yngve Slyngstad, Alexander Wynaendts

Mediation Committee: Alexander Wynaendts, Chairman, Timo Heider, Frank Schulze, Professor Dr. Norbert Winkeljohann

Objectives for the composition of the Supervisory Board, profile of requirements

The composition of the Supervisory Board should ensure the effective and qualified control of and advice for the Management Board of an internationally operating, broadly positioned bank. The suitability of each individual member is assessed, determined and continuously monitored both internally by the Nomination Committee and the Supervisory Board and externally by the regulatory authorities. This suitability assessment covers the expertise, reliability and time available of each individual member (individual suitability). In addition, there is an assessment of the entire Supervisory Board's knowledge, skills and experience that are necessary for the performance of its tasks (collective suitability). Passing the suitability assessment of the European Central Bank (ECB) after the mandate is accepted and the continual suitability of the Supervisory Board member during the entire mandate with Deutsche Bank AG are mandatory regulatory prerequisites for the performance of the tasks as a member of the Supervisory Board.

To increase the effectiveness of the Supervisory Board's work and the transparency for stakeholders and regulators, the Supervisory Board adopted a Profile of Requirements in 2022. It is reviewed annually and updated if necessary. The Profile of Requirements sets out the general and expanded files of expertise of the Supervisory Board that are required for the monitoring and advising of the Management Board of Deutsche Bank AG. The Profile of Requirements is regularly taken into account when developing the proposals to the General Meeting for the election of shareholder representatives and when determining the individual and collective need for the training of the Supervisory Board and its members.

Profile of requirements for the Supervisory Board

The Supervisory Board specified general fields of expertise and expanded fields of expertise in its Profile of Requirements.

General fields of expertise

Ideally, every member of the Supervisory Board possesses these individual qualifications.

- Understanding of commercial business issues
- Analytical and strategic mindset
- Understanding of the German corporate governance system, and – as a result – an understanding of a Supervisory Board member's responsibilities
- Understanding of the business model and the structure of Deutsche Bank AG
- Basic understanding of the financial services sector, e.g. (i) knowledge in the areas of banking, financial services, financial markets, financial industry, including the bank's home market and the bank's key markets outside Europe, and (ii) knowledge of the relevant clients for the bank, the market's expectations and the operational environment.

The fulfillment of these fields of expertise is reported on in summary in the qualifications matrix in the line "General fields of expertise".

Expanded fields of expertise

These fields of expertise refer to the Supervisory Board in its entirety (collective suitability). The Supervisory Board, as a whole, must have an understanding of the specified fields of expertise that is appropriate for the size and complexity of Deutsche Bank AG. They are derived from the bank's business model and from specific laws and regulations that apply to the bank. The fields of expertise are:

Accounting, including sustainability reporting

- Accounting (International Financial Reporting Standards (IFRS) and German Commercial Code (HGB)) and auditing of annual financial statements
- Taxation

Regulatory framework and legal requirements

- Understanding of the key legal framework conditions in the countries in which the company has its main operations
- Understanding of the key relevant legal systems for the bank
- Experience in the executive management / supervisory board of large enterprises
- Regulatory framework and legal requirements, in particular, knowledge of the legal systems relevant for the bank
- Knowledge of the social, political and regulatory expectations in the home market

Human capital, compensation and corporate culture

- Human resources and staff management
- Compensation and compensation systems
- Selection procedure for management body members and assessment of their suitability
- Corporate culture

Risk management

- Risk management (investigation, assessment, mitigation, management and control of financial and non-financial risks, capital and liquidity management, shareholdings)
- Combating money laundering and prevention of financial crime and the financing of terrorism

Information technology, data and digitalization

- Digitalization, including digital banking
- Data, including data governance
- Information technology (IT), IT systems and IT security, including cyber risks

Strategy, transformation and Environmental, Social and Governance (ESG) issues

- Strategic planning of business models and risk strategies as well as their implementation
- Climate and other environmental aspects
- Knowledge of social and political expectations (in particular in the home market) and their impacts on corporate social responsibility
- Company’s purpose

Organizational structure and control of a financial institution

- Governance
- Management of a large, international, regulated company
- Internal organization of the bank
- Internal audit
- Compliance and internal controls

In order to adequately reflect the bank’s business model, the Supervisory Board shall demonstrate not only these professional qualifications but also qualifications and experience in the various client segments and different sales markets.

Client segments

- Private Banking and Wealth Management
- Corporate Banking
- Investment Banking
- Asset Management

Regional expertise

- Germany
- Europe
- Americas
- Asia-Pacific (APAC)

The Supervisory Board believes that it complies with the specified concrete objectives regarding its composition and the Profile of Requirements – as shown in the following qualifications matrix. The members of the Supervisory Board as a whole possess the knowledge, abilities and expert experience to properly complete their tasks.

Composition and expertise

		Alexander Wynaendts	Susanne Bleidt	Mayree Clark	Jan Duscheck	Manja Eifert	Claudia Fieber	Sigmar Gabriel	Florian Haggenmiller	Timo Heider	Frank Schulze	Gerlinde Siebert	Yngve Slyngstad	Stephan Szukalski	John Thain	Jürgen Tögel	Michele Trogni	Dr. Dagmar Valcárcel	Dr. Theodor Weimer	Prof. Dr. Norbert Winkeljohann	Frank Witter
Member-ship	No Overboarding*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Independent **	✓	ER	✓	ER	ER	ER	✓	ER	ER	ER	ER	✓	ER	✓	ER	✓	✓	✓	✓	✓
Professional expertise	General fields of expertise	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Accounting and reporting, incl. sustainability reporting	✓	✓	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Audit Committee Financial Experts ***																	◆	◆	◆	◆
	Expertise in the area of accounting ***																	◆	◆	◆	◆
	Expertise in the area of auditing ***																	◆	◆	◆	◆
	Regulatory framework and Legal requirements	✓		✓				✓		✓	✓	✓		✓	✓	✓		✓	✓	✓	✓
	Human Capital, Compensation and Corporate Culture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Compensation Control Committee Compensation Experts***	◆																◆		◆	
	Risk Management	✓		✓	✓		✓	✓				✓	✓	✓	✓		✓	✓	✓	✓	✓
	Information technology, data and digitalization	✓	✓	✓	✓				✓		✓	✓	✓		✓		✓		✓		
	Strategy, Transformation and ESG	✓		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Organizational structure and control of a financial institution	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Client/ business expertise	Private Banking and Wealth Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	Corporate Banking	✓				✓	✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	Investment Banking	✓		✓								✓	✓		✓		✓	✓	✓		✓
	Asset Management	✓		✓									✓		✓			✓	✓		
Regional Expertise	Germany		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓	✓	✓
	Europe	✓		✓				✓	✓			✓	✓		✓		✓	✓	✓	✓	✓
	Americas	✓		✓				✓				✓			✓		✓	✓		✓	✓
	APAC	✓		✓				✓				✓	✓		✓		✓	✓		✓	✓

✓ Profound and professional knowledge / expert
◆ Regulatory expert / expertise required by law and/or supervisory regulation
ER Employee Representative

* Definition of no overboarding: All Supervisory Board members hold an admissible number of board directorships in various companies in addition to Deutsche Bank AG. Overboarding, i.e. holding an inadmissible number of board directorships in different companies, is determined on the basis of the statutory regulation in Section 25d (3) of the German Banking Act (KWG).

** Definition of independence: A Supervisory Board member elected or to be elected by the shareholders is to be considered independent when there are no present or former (i) business, (ii) personal or (iii) other relations or affiliations with Deutsche Bank AG, its management bodies, a shareholder or a Deutsche Bank Group company that constitute a personal interest of the Supervisory Board member or a third-party interest he represents that might influence his actions in performing his mandate to the detriment of Deutsche Bank AG. Section C.6 (1) first half-sentence of the German Corporate Governance Code, according to which the members of the Supervisory Board representing shareholders shall comprise what they consider to be an appropriate number of independent members, is adhered to as a result. The bank has no controlling shareholder at present.

*** Definition of experts given in the “Supervisory Board committee experts” section of this report.

There is a regular maximum age limit of 70. In well-founded, individual cases, a Supervisory Board member may be elected or appointed for a period that extends at the latest until the end of the fourth ordinary General Meeting that takes place after he or she has reached the age of 70. This age limit was taken into account in the election proposals to the General Meeting and shall also be taken into account for the next Supervisory Board elections or subsequent appointments for Supervisory Board positions that become vacant.

For shareholder representatives on the Supervisory Board, the length of Supervisory Board membership shall not, as a rule, exceed 12 years.

The Supervisory Board respects diversity when proposing its members for appointment. In light of the international operations of Deutsche Bank AG, care should be taken that the Supervisory Board has an appropriate number of members with long-term international experience. Currently, the professional careers or private lives of six members of the Supervisory Board are centered outside Germany. Furthermore, all of the shareholder representatives on the Supervisory Board have many years of international experience from their current or former activities, for example, as management board member or chief executive officer or in a comparable executive function of corporations or organizations with international operations. The Supervisory Board believes that in these two ways the international activities of the company are sufficiently taken into account. The objective is to retain the currently existing international profile.

Special importance has already been attached to an appropriate consideration of women in the selection process since the Supervisory Board elections in 2008. For the election proposals to the General Meeting, the Supervisory Board takes into account the recommendations of the Nomination Committee and the legal requirements according to which the Supervisory Board shall be composed of at least 30% women and at least 30% men. In reviewing potential candidates for a new election or subsequent appointments to Supervisory Board positions that have become vacant, qualified women are included in the selection process and appropriately considered in the election proposals. At the end of the financial year, four women and six men were members of the Supervisory Board on the employee representatives' side and three women and seven men on the shareholder representatives' side. The statutory minimum quota of 30% has thus been fulfilled for many years now.

The average age of the Supervisory Board members was 58.3. The age structure is diverse, ranging from 40 to 69 years of age and spanning three generations, according to the general definition of the term.

The length of membership on the Supervisory Board of Deutsche Bank AG ranged from under one year to around 12 years at the end of the financial year. The average length of membership on the Supervisory Board as of December 31, 2024, was 4.17 years.

The diverse range of the members' educational and professional backgrounds includes banking, business administration, economics, auditing, law, German studies, political science, electrical engineering, information systems and healthcare. The resumes of the members of the Supervisory Board are published on the website of Deutsche Bank AG (www.db.com/ir/en/supervisory-board.htm).

The members of the Supervisory Board do not exercise functions on a management body of or perform advisory duties at major competitors. Material conflicts of interest involving a member of the Supervisory Board that are not merely temporary shall result in the termination of that member's Supervisory Board mandate. The Supervisory Board has issued corresponding guidelines for the identification, handling, mitigation and documentation of potential conflicts of interest.

Members of the Supervisory Board may not, according to Section 25d of the German Banking Act (KWG), and shall not, according to the recommendations under C.4 and C.5 of the German Corporate Governance Code (GCGC), hold more than the allowed number of supervisory board mandates or mandates in supervisory bodies of companies which have similar requirements. A Supervisory Board member of Deutsche Bank AG may concurrently be a member of the supervisory body of a maximum of five companies (including Deutsche Bank AG). If a Supervisory Board member is also an executive director of a company, this Supervisory Board member may concurrently be a member of the supervisory body of a maximum of three companies (including Deutsche Bank AG). The decisive factors for determining if this is the case are the supervisory authority's regulatory requirements in consideration of the local laws. Compliance with this statutory regulation is continually monitored by the regulatory authorities. In the event of directorship overboarding, the supervisory authorities may require that Deutsche Bank AG revoke a Supervisory Board member's appointment and prohibit this Supervisory Board member from performing his or her work. In the preceding financial year, the requirements on the admissible number of concurrently performed supervisory board mandates were met.

With regard to the disclosure requirements under European Sustainability Reporting Standards (ESRS) 2 GOV-1 21. (e) and the definition specified therein for "independent board members", 100% of the Supervisory Board members are independent within the meaning of the ESRS. In the preceding financial year, there were no former members of the Management Board on the Supervisory Board.

Some members of the Supervisory Board are, or were last year, in high-ranking positions at other companies that Deutsche Bank AG has business relations with. Business transactions of Deutsche Bank AG with these companies were conducted under the same conditions as those between unrelated third parties. In the opinion of the Management Board and the Supervisory Board, these transactions did not affect the independence of the Supervisory Board members involved.

Supervisory Board Committee experts

Audit Committee Financial experts

The Supervisory Board determined that the following members of the Audit Committee are “Audit Committee Financial Experts” as such term is defined by the implementation rules of the U.S. Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002: Dr. Dagmar Valcárcel, Dr. Theodor Weimer, Professor Dr. Norbert Winkeljohann and Frank Witter. These Audit Committee Financial Experts are “independent” of the bank, as defined in Rule 10A-3 under the U.S. Securities Exchange Act of 1934.

Furthermore, the Supervisory Board determined in accordance with Sections 107 (4) and 100 (5) of the Stock Corporation Act (AktG) and Section 25d (9) of the German Banking Act (KWG) that Dr. Dagmar Valcárcel, Dr. Theodor Weimer, Professor Dr. Norbert Winkeljohann and Frank Witter have expert knowledge in financial accounting and the auditing of financial statements.

Dr. Dagmar Valcárcel has expertise in the areas of accounting and auditing through her many years of experience as Chair of the Management Board of Andbank Asset Management Luxembourg S.A. and Barclays Vida y Pensiones, S.A.U. and through her current work as member of the Board of Directors of Antin Infrastructure Partners S.A. Dr. Theodor Weimer has expertise in the areas of accounting and auditing through his many years of experience as Chief Executive Officer of HypoVereinsbank / UniCredit AG and as a former member of the Audit Committee of ERGO Gruppe AG as well as through his work as Chairman of the Executive Board of Deutsche Börse AG. Professor Dr. Norbert Winkeljohann has expertise in the areas of accounting and auditing through his education and training as an auditor and his many years of experience as an auditor at various auditing firms and as Chairman of the Management Board of PwC Europe SE. Frank Witter has expertise in the areas of accounting and auditing through his many years of experience as Chief Financial Officer of Volkswagen AG and as Chairman of the Board of Management of Volkswagen Financial Services AG.

Compensation Control Committee Compensation experts

Pursuant to Section 25d (12) of the German Banking Act (KWG), at least one member of the Compensation Control Committee must have sufficient expertise and professional experience in the field of risk management and risk controlling, in particular, with regard to the mechanisms to align compensation systems to the company’s overall risk appetite and strategy and the bank’s capital base. Based on the recommendation of the Compensation Control Committee, the Supervisory Board resolved to specify by name Dr. Dagmar Valcárcel, Alexander Wynaendts and Professor Dr. Norbert Winkeljohann as Compensation Control Committee Compensation Experts. All of them have expertise and professional experience in the field of risk management and risk controlling, in particular with regard to mechanisms to align the compensation systems to the company’s overall risk appetite and strategy and its capital base. They therefore fulfill the requirements of Section 25d (12) of the German Banking Act (KWG). Dr. Valcárcel has comprehensive legal experience with compensation frameworks, including reputational risks, from her time as, among other things, Head of the Legal Department of Barclays PLC for Western Europe. Based on their years of experience as Management Board Chairman and/or Chief Executive Officer, Alexander Wynaendts and Professor Dr. Norbert Winkeljohann have sufficient expertise and professional experience in the area of risk management and risk controlling.

Share ownership of Supervisory Board members

The individual members of the Supervisory Board held the following numbers of shares (and share awards under employee share plans):

Members of the Supervisory Board	Number of shares	Number of share awards
Alexander Wynaendts	6,866	0
Susanne Bleidt	0	0
Mayree Clark	109,444	0
Jan Duscheck	0	0
Manja Eifert	208	10
Claudia Fieber	401	10
Sigmar Gabriel	1,373	0
Florian Haggenmiller	0	0
Timo Heider	0	0
Frank Schulze	587	0
Gerlinde M. Siebert	5,478	7,097
Yngve Slyngstad	1,200	0
Stephan Szukalski	0	0
John Alexander Thain	100,000	0
Jürgen Tögel	1,161	10
Michele Trogni	15,000	0
Dr. Dagmar Valcárcel	1,602	0
Dr. Theodor Weimer	108,000	0
Professor Dr. Norbert Winkeljohann	4,150	0
Frank Witter	1,853	0
Total	357,323	7,127

[1] Ms. Siebert has an entitlement to 7,097 shares as part of her deferred variable compensation as an employee. These share awards will be due for delivery in the years 2025 to 2027.

As of February 7, 2025, the members of the Supervisory Board held 357,323 shares, which is less than 0.02% of the shares issued as of that day.

The “Number of share awards” column in the table lists share awards granted under the Global Share Purchase Plan to Supervisory Board members who are employees of Deutsche Bank (“Matching Awards”), which are scheduled to be delivered to them on November 1, 2025, as well as Restricted Equity Awards (deferred share awards), which are granted to employees with deferred variable compensation. The Restricted Equity Awards are indicated with a footnote in the table, and further details on them as a compensation instrument are provided in the “Employee compensation report”.

The Compensation Report on the preceding financial year and the auditor’s report pursuant to Section 162 of the German Stock Corporation Act (AktG), the currently applicable compensation system pursuant to Section 87a (1) and (2) sentence 1 AktG as well as the last resolution on compensation pursuant to Section 113 (3) AktG are available from the website: www.db.com (under the Investor Relations headings “Reports and Events”, “Annual Reports”).

Standing Committees

The Supervisory Board has established the following nine standing committees: Chairman’s Committee, Nomination Committee, Audit Committee, Risk Committee, Regulatory Oversight Committee, Compensation Control Committee, Strategy and Sustainability Committee, Technology, Data and Innovation Committee and Mediation Committee. To the extent required, the committees coordinate their work and consult each other on an ad hoc basis. The committee chairpersons report regularly to the Supervisory Board on the work of the committees. The Report of the Supervisory Board provides information on the concrete work of the committees over the preceding year. Please see below details relating to Deutsche Bank’s Audit Committee and Compensation Control Committee, including the names of committee members and a summary of the terms of reference under which the committee operates.

Audit Committee: It supports the Supervisory Board in particular in monitoring the financial reporting process, and it can submit recommendations or suggestions to the Supervisory Board on ensuring the integrity of the financial reporting process. Furthermore, the Audit Committee supports the Supervisory Board in monitoring the effectiveness of the risk management system, particularly of the internal control system including sustainability-related issues and the internal audit system, the auditing of the financial statements, especially with regard to the auditor's independence and the additional services provided by the auditor, and the Management Board's prompt remediation – through suitable measures – of the deficiencies identified by the auditor and bank-internal control functions based on internal and external audits, in particular relating to weaknesses in risk controls, as well as non-compliance with policies, laws and regulatory requirements. The Committee is entitled to inspect all business documentation of the bank, including the business information stored on data carriers and sustainability-related data. The Audit Committee pre-reviews the annual and consolidated financial statements and management reports as well as the separate non-financial report and the separate consolidated non-financial reports. The chairperson of the Audit Committee regularly discusses the progress of the audit with the auditor and report on this to the Committee. It discusses the audit reports with the auditor and prepares the decisions of the Supervisory Board on establishing the annual financial statements and the approval of the consolidated financial statements as well as the resolution proposal on the appropriation of distributable profit. The Audit Committee submits corresponding recommendations to the Supervisory Board. It also provides support to the Supervisory Board with regard to engaging any external assurances for the non-financial statement and the consolidated non-financial statement or for the separate non-financial report and separate consolidated non-financial report. It discusses important changes to the audit and accounting methods. The Audit Committee also discusses the half-year interim and each of the quarterly earnings reports and the reports on the limited review of the financial statements with the Management Board and the auditor prior to their publication. Furthermore, the Audit Committee submits proposals to the Supervisory Board for the appointment of the auditor and prepares the proposal of the Supervisory Board to the General Meeting for the election of the auditor. The Audit Committee advises the Supervisory Board on issuing the audit mandate to the auditor elected by the General Meeting, submits proposals to the Supervisory Board for the auditor's remuneration and can specify areas of focus for the audit. It supports the Supervisory Board in monitoring the independence, qualifications and efficiency of the auditor as well as the rotation of the members of the audit team. The Audit Committee discusses with the auditor the audit risk assessment, the audit strategy and audit planning, as well as the results. It monitors and assesses the quality of the audit. Mandates for non-audit-related services given to the auditor or to companies to which the auditor is related in legal, economic or personnel terms need the prior consent of the Audit Committee (in this context, see also the Principal Accountant Fees and Services section in this Corporate Governance Statement/Corporate Governance Report). The Audit Committee issues guidelines for the employment of staff – including former staff – of the auditor by the company. It also consults with the auditor on a regular basis with-out the Management Board. It arranges to be informed regularly about the work done by Group Audit, the effectiveness of the internal audit system and in particular about its annual audit plan the focal areas of its auditing activity and on the results of its audits. The Audit Committee is responsible, in particular, for receiving and handling the quarterly, annual and ad hoc reports of Group Audit. The Management Board informs the Audit Committee about special audits, substantial complaints and other exceptional measures on the part of German and foreign bank regulatory authorities relating to the annual audit. The Committee regularly obtains reports on the receipt and handling of complaints from employees of the bank and its subsidiaries, from shareholders of Deutsche Bank AG and from third parties. In particular complaints concerning accounting, internal accounting controls, auditing and other financial reporting matters must be submitted to the Committee without undue delay. Reports concerning compliance matters and the prevention of money laundering are presented at the meetings of the Committee on a regular basis. The Chairman of the Audit Committee is entitled, in addition to the Chairman of the Supervisory Board, to obtain information directly from the Head of Compliance and the Anti-Money Laundering Officer. The Audit Committee is responsible for taking receipt of and handling the report by the Head of Compliance in accordance with Article 22 (2) c) of the Delegated Regulation (EU) 2017/565 in conjunction with section BT 1.2.2 of the Minimum Requirements for the Compliance Function (MaComp) as well as section AT 4.4.2 No 7 of the Minimum Requirements for Risk Management (MaRisk) (Compliance Reports) as well as the report by the Anti-Money Laundering Officer. These reports are usually issued every quarter, but at least once a year. Furthermore the committee is responsible for acknowledging communications about significant reductions in the budgets of Group Audit as well as the Compliance and Anti-Financial Crime infrastructure areas. Furthermore, every member of the Committee is entitled to obtain, through its Chairperson, information directly from the heads of the bank's departments that are responsible for the tasks that involve the Audit Committee. The Management Board must be informed without undue delay when information is obtained. With the prior consent of the Management Board, the Committee may obtain information in connection with its tasks from other senior executives of the bank who report directly to the Management Board. The Committee Chairperson is to inform all Committee members of the information obtained.

The current members of the Audit Committee are Frank Witter (Chairman), Susanne Bleidt, Manja Eifert, Claudia Fieber, Gerlinde Siebert, Dr. Dagmar Valcárcel, Dr. Theodor Weimer and Professor Dr. Norbert Winkeljohann.

Compensation Control Committee: It supports the Supervisory Board in the appropriate structuring of the compensation systems for the members of the Management Board. It also monitors the appropriate structure of the compensation systems for the Management Board members and employees and, in particular, the appropriate structure of the compensation for the Head of the compliance function, for the Anti-Money Laundering Officer and for the employees who have a material influence on the bank's overall risk profile. Furthermore it reviews at least once a year the use and effectiveness of measures specifically available in the compensation system in connection with breaches of authorities' regulations and the company's own in-house policies (consequence management). The Compensation Control Committee supports the Supervisory Board in monitoring the process to identify Group risk takers in accordance with Section 27 (2) sentence 1 of the Remuneration Ordinance for Institutions (InstitutsVergV) as well as the appropriate structure of the compensation systems for the company's employees. It monitors if the compensation systems of employees in control functions are in accordance with the Remuneration Ordinance for Institutions (InstitutsVergV) requirements. The Committee assesses the effects of the compensation systems on risk, capital and liquidity management, while ensuring that the compensation systems are aligned to the business strategy focused on the banks sustainable development, to the risk strategies derived from this and to the compensation strategies at the company and Group levels. It prepares the Supervisory Board's resolutions on the compensation of the Management Board, considering, in particular, the effects of the resolutions on the company's risks and risk management. The long-term interests of shareholders, investors and other stakeholders as well as the public interest are also taken into account. It also prepares the Supervisory Board's resolutions on setting the total amount of variable compensation for the members of the Management Board in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Remuneration Ordinance for Institutions (InstitutsVergV) and on setting the appropriate compensation parameters, targets for contributions to performance, payment and deferral periods as well as the conditions for a full forfeiture or partial reduction of variable compensation. It also checks regularly, at least annually, whether the adopted specifications are still appropriate. A remediation plan shall be developed promptly for any identified deficiencies. Furthermore, it checks, as part of its support to the Supervisory Board in monitoring the appropriate structure of the compensation systems for employees, regularly, but at least annually, in particular, whether the total amount of variable compensation has been set in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Remuneration Ordinance for Institutions (InstitutsVergV) and whether the specified principles to assess the compensation parameters, contributions to performance as well as the payment and deferral periods, including the conditions for a full forfeiture or partial reduction of the variable compensation, are appropriate. In addition, it supports the Supervisory Board in monitoring whether the internal controls and other relevant areas are properly involved in the structuring of the compensation systems. The Committee is authorized to obtain, via its Chairperson, information relating to the Committee tasks from the Head of Group Audit and from the heads of the organizational units responsible for structuring the compensation systems. Furthermore the committee supports the Supervisory Board in producing the proposals for resolutions on the structuring of variable and fixed compensation in accordance with section 25a (5) sentence 6 of the German Banking Act (KWG).

The current members of the Compensation Control Committee are Professor Dr. Norbert Winkeljohann (Chairman), Jan Duscheck, Timo Heider, Jürgen Tögel, Dr. Dagmar Valcárcel, and Alexander Wynaendts.

Please see section "Supervisory Board: Members of the Supervisory Board and its committees" for current members of the remaining seven committees. The tasks and further details of all standing committees are regulated in separate Terms of Reference. The current versions are available on the Deutsche Bank website (www.db.com/ir/en/documents.htm).

Share Plans

For information on the employee share programs, please refer to the additional Note 33 "Employee Benefits" to the Consolidated Financial Statements.

Related Party Transactions

For information on related party transactions please refer to Note 36 "Related party transactions".

Value and leadership principles of Deutsche Bank AG and Deutsche Bank Group

Deutsche Bank Group Code of Conduct and Code of Ethics for Senior Financial Officers

Deutsche Bank Group’s Code of Conduct sets out Deutsche Banks’s purpose, values and beliefs and minimum standards of conduct that the bank expects all members of the Management Board and employees to follow. These values and standards govern employee interactions with the bank’s clients, competitors, business partners, government and regulatory authorities, and shareholders, as well as with other employees. In addition, the Code forms the cornerstone of the bank’s policies, which provide guidance on compliance with applicable laws and regulations.

In accordance with Section 406 of the Sarbanes-Oxley Act of 2002, the bank adopted a Code of Ethics for Senior Financial Officers of Deutsche Bank AG and Deutsche Bank Group with special obligations that apply to the “Senior Financial Officers”, which currently consist of Deutsche Bank’s Chairman of the Management Board and the Chief Financial Officer as well as certain other Senior Financial Officers. There were no amendments or waivers to this Code of Ethics in 2024.

The current versions of the Code of Conduct as well as the Code of Ethics for Senior Financial Officers of Deutsche Bank AG and Deutsche Bank Group are available from Deutsche Bank’s website: www.db.com/ir/en/documents.htm.

Corporate Governance at Deutsche Bank AG and Deutsche Bank Group

Deutsche Bank established a Group Governance function to define, implement and monitor the corporate governance framework of Deutsche Bank AG and Deutsche Bank Group and to perform this governance function throughout the Group. Group Governance addresses corporate governance issues in Deutsche Bank AG and Deutsche Bank Group, while focusing closely on clear organizational structures aligned to the key elements of good corporate governance.

Deutsche Bank AG and Deutsche Bank Group are committed to ensuring a corporate governance framework in accordance with international standards and statutory provisions. In support of this objective, Deutsche Bank AG and Deutsche Bank Group have instituted clear corporate governance principles.

Further details on corporate governance are published on Deutsche Bank’s website (www.db.com/ir/en/corporate-governance.htm).

Principal accountant fees and services

In accordance with German law, Deutsche Bank's principal accountant is appointed at the Annual General Meeting based on a recommendation of Deutsche Bank's Supervisory Board. The Audit Committee of the Supervisory Board prepares such a recommendation. Subsequent to the principal accountant's appointment, the Audit Committee awards the contract and in its sole authority approves the terms and scope of the audit and all audit engagement fees as well as monitors the principal accountant's independence. EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft (EY) was the bank's principal accountant for the 2023 and 2024 fiscal years, respectively.

The tables set forth below contain the aggregate fees billed for each of the last two fiscal years by EY in each of the following categories: (1) Audit fees include fees for professional services for the audit of Deutsche Bank's annual financial statements and consolidated financial statements and do not include audit fees for DWS and its subsidiaries that are not audited by EY, (2) Audit-related fees include fees for other assurance services required by law or regulations, in particular for financial service specific attestation, for quarterly reviews, for mergers and acquisition audits, as well as fees for voluntary assurance services, like voluntary audits for internal management purposes and the issuance of comfort letters, (3) Tax-related fees include fees for services relating to the preparation and review of tax returns and related compliance assistance and advice, tax consultation and advice relating to tax planning initiatives and assistance with assessing compliance with tax regulations, and (4) All other fees, which are fees for products and services other than Audit fees, Audit-related fees and Tax-related fees. These amounts include expenses and exclude Value Added Tax (VAT).

Fees billed by EY

Fee category in € m.	2024	2023
Audit fees	69	66
Audit-related fees	10	12
Tax-related fees	0	0
All other fees	1	0
Total fees [1]	**80**	78

Under SEC regulations, the principal accountant fees are required to be presented as follows: audit fees were € 72 million in 2024 compared to € 68 million in 2023, audit-related fees were € 7 million in 2024 compared to € 10 million in 2023, tax-related fees were € 0 in 2024 and 2023, and all other fees were € 1 million in 2024 compared to € 0 million in 2023.

United States law and regulations generally require that all engagements of Deutsche Bank's principal accountant be pre-approved by the Audit Committee of the Bank's Supervisory Board or pursuant to policies and procedures adopted by it. The Audit Committee has designated a list of pre-approved audit, audit-related and tax services that it has authorized the Finance Chief Accounting Office to engage Deutsche Bank's principal accountant to perform if the estimated costs are less than or equal to € 1 million. The Audit Committee has also designated a list of pre-approved audit services that it has authorized the Finance Chief Accounting Office to engage Deutsche Bank's principal accountant to perform with estimated costs in excess of € 1 million. All engagement requests for audit, audit-related and tax services that are not on the pre-approved list of specified services must be approved by the Audit Committee. The Finance Chief Accounting Office periodically reports the engagements approved by it to the Audit Committee. In addition, to facilitate the consideration of engagement requests between its meetings, the Audit Committee has delegated approval authority to several of its members who are "independent" as defined by the Securities and Exchange Commission and the New York Stock Exchange. Such members are required to report any approvals made by them to the Audit Committee at its next meeting.

Additionally, United States law and regulations permit the pre-approval requirement to be waived with respect to engagements for non-audit services aggregating to no more than five percent of the total amount of revenues the bank paid to the principal accountant, if such engagements were not recognized by the bank at the time of engagement and were promptly brought to the attention of the bank's Audit Committee or a designated member thereof and approved prior to the completion of the audit. In 2023 and 2024, the percentage of the total amount of revenues Deutsche Bank paid to its principal accountant for non-audit services that was subject to such a waiver was less than 5 % for each year.

5-Supplementary Information (Unaudited)

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Non-GAAP financial measures

This document and other documents the Group has published or may publish contain Non-GAAP financial measures. Non-GAAP financial measures are measures of the Group’s historical or future performance, financial position or cash flows that contain adjustments that exclude or include amounts that are included or excluded, as the case may be, from the most directly comparable measure calculated and presented in accordance with IFRS in the Group’s financial statements.

Return on Equity Ratios

The Group reports a post-tax return on average shareholders’ equity and a post-tax return on average tangible shareholders’ equity, each of which is a Non-GAAP financial measure.

The post-tax returns on average shareholders’ equity and average tangible shareholders' equity are calculated as profit (loss) attributable to Deutsche Bank shareholders after profit (loss) attributable to additional equity components (AT1 coupon) as a percentage of average shareholders’ equity and average tangible shareholders' equity, respectively.

Profit (loss) attributable to Deutsche Bank shareholders after profit (loss) attributable to additional equity components (AT1 coupon) for the segments is a Non-GAAP financial measure and is defined as profit (loss) excluding post-tax profit (loss) attributable to noncontrolling interests and after profit (loss) attributable to additional equity components (AT1 coupon), which are allocated to segments based on their allocated average tangible shareholders’ equity. For the Group, it reflects the reported effective tax rate, which was 33% for the full year 2024, 19% for 2023 and (2)% for 2022. For the segments, the applied tax rate was 28% for all reported periods in 2024, 2023 and 2022.

At the Group level, tangible shareholders' equity is shareholders’ equity as reported in the Consolidated Balance Sheet excluding goodwill and other intangible assets. Tangible shareholders’ equity for the segments is calculated by deducting goodwill and other intangible assets from shareholders’ equity as allocated to the segments. Shareholders’ equity and tangible shareholders’ equity are presented on an average basis.

The Group believes that a presentation of average tangible shareholders’ equity makes comparisons to its competitors easier and refers to this measure in the return on equity ratios presented by the Group. However, average tangible shareholders’ equity is not a measure provided for in IFRS, and the Group’s ratios based on this measure should not be compared to other companies’ ratios without considering differences in the calculations.

The reconciliation of the aforementioned ratios is set forth in the table below:

						2024
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total
Profit (loss) before tax	2,075	3,343	1,231	632	(577)	6,703
Profit (loss)	1,494	2,407	886	455	(761)	4,481
Profit (loss) attributable to noncontrolling interests	0	0	0	0	139	139
Profit (loss) attributable to DB shareholders and additional equity components	**1,494**	**2,407**	**886**	**455**	**(900)**	**4,342**
Profit (loss) attributable to additional equity components	125	264	159	27	93	668
Profit (loss) attributable to Deutsche Bank shareholders	1,369	2,143	727	428	(993)	3,674
Average allocated shareholders' equity[1]	11,682	23,672	13,990	5,329	11,679	66,353
Deduct: Average allocated goodwill and other intangible assets[1,2]	776	804	101	2,957	2,112	6,750
Average allocated tangible shareholders' equity[1]	**10,906**	**22,868**	**13,889**	**2,372**	**9,568**	**59,603**
Post-tax return on average shareholders’ equity[1]	11.7 %	9.1 %	5.2 %	8.0 %	N/M	5.5 %
Post-tax return on average tangible shareholders’ equity[1]	12.6 %	9.4 %	5.2 %	18.0 %	N/M	6.2 %

N/M – Not meaningful
[1] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information please refer to section “Note 4 - Business segments and related information” of this report
[2] Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	2023 Total
Profit (loss) before tax	2,804	1,879	1,058	396	1,817	7,955
Profit (loss)	2,019	1,353	761	285	2,033	6,452
Profit (loss) attributable to noncontrolling interests	0	0	0	0	119	119
Profit (loss) attributable to DB shareholders and additional equity components	**2,019**	**1,353**	**761**	**285**	**1,913**	**6,332**
Profit (loss) attributable to additional equity components	107	226	123	22	83	560
Profit (loss) attributable to Deutsche Bank shareholders	1,912	1,127	639	264	1,831	5,772
Average allocated shareholders' equity[1]	11,547	23,544	13,219	5,157	9,681	63,149
Deduct: Average allocated goodwill and other intangible assets[1,2]	812	736	826	2,959	1,101	6,434
Average allocated tangible shareholders' equity[1]	**10,735**	**22,808**	**12,393**	**2,199**	**8,581**	**56,716**
Post-tax return on average shareholders' equity[1]	16.6 %	4.8 %	4.8 %	5.1 %	N/M	9.1 %
Post-tax return on average tangible shareholders' equity[1]	17.8 %	4.9 %	5.2 %	12.0 %	N/M	10.2 %

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information please refer to section "Note 4 - Business segments and related information" of this report
[2] Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	2022 Total
Profit (loss) before tax	1,816	3,228	1,705	585	(1,886)	5,447
Profit (loss)	1,307	2,324	1,228	421	274	5,554
Profit (loss) attributable to noncontrolling interests	0	0	0	0	134	134
Profit (loss) attributable to DB shareholders and additional equity components	**1,307**	**2,324**	**1,228**	**421**	**140**	**5,420**
Profit (loss) attributable to additional equity components	104	234	115	22	26	500
Profit (loss) attributable to Deutsche Bank shareholders	1,203	2,090	1,112	399	114	4,919
Average allocated shareholders' equity[1]	11,668	22,478	12,945	5,437	7,580	60,109
Deduct: Average allocated goodwill and other intangible assets[1,2]	779	681	850	3,093	925	6,328
Average allocated tangible shareholders' equity[1]	**10,889**	**21,797**	**12,095**	**2,344**	**6,655**	**53,780**
Post-tax return on average shareholders' equity[1]	10.3 %	9.3 %	8.6 %	7.3 %	N/M	8.2 %
Post-tax return on average tangible shareholders' equity[1]	11.1 %	9.6 %	9.2 %	17.0 %	N/M	9.1 %

N/M – Not meaningful
Prior year's comparatives aligned to presentation in the current year
[1] Starting from the first quarter of 2024, the equity allocation framework has been updated. For more information please refer to section "Note 4 - Business segments and related information" of this report
[2] Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

Revenues excluding specific items

Revenues excluding specific items is a performance indicator that is a Non-GAAP financial measure most directly comparable to the IFRS financial measure net revenues. Revenues excluding specific items is calculated by adjusting net revenues under IFRS for specific revenue items which generally fall outside the usual nature or scope of the business and are likely to distort an accurate assessment of the divisional operating performance. Excluded items are Debt Valuation Adjustment (DVA) and material transactions or events that are either one-off in nature or belong to a portfolio of connected transactions or events where the P&L impact is limited to a specific period of time. The Group believes that a presentation of net revenues excluding the impact of these items provides a more meaningful depiction of the revenues associated with the business.

						2024
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Revenues	7,506	10,558	9,386	2,649	1,406	31,504
DVA	0	30	0	0	6	37
Sal. Oppenheim workout - International Private Bank	0	0	0	0	0	0
Gain on sale Financial Advisors business Italy – International Private Bank	0	0	0	0	0	0
Total Specific revenue items	0	30	0	0	6	37
Revenues excluding specific items	7,506	10,588	9,386	2,649	1,412	31,541

						2023
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Revenues	7,718	9,160	9,571	2,383	2,324	31,155
DVA	0	47	0	0	(5)	42
Sal. Oppenheim workout - International Private Bank	0	0	0	0	0	0
Gain on sale Financial Advisors business Italy – International Private Bank	0	0	0	0	0	0
Total Specific revenue items	0	47	0	0	(5)	42
Revenues excluding specific items	7,718	9,207	9,571	2,383	2,319	31,198

Prior year's comparatives aligned to presentation in the current year

						2022
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Revenues	6,337	10,016	9,152	2,608	(1,050)	27,063
DVA	0	(49)	0	0	6	(43)
Sal. Oppenheim workout - International Private Bank	0	0	(125)	0	0	(125)
Gain on sale Financial Advisors business Italy – International Private Bank[1]	0	0	(305)	0	0	(305)
Total Specific revenue items	0	(49)	(430)	0	6	(473)
Revenues excluding specific items	6,337	9,968	8,721	2,608	(1,044)	26,590

Prior year's comparatives aligned to presentation in the current year

[1] Gain on sale of € 312 million, net of transaction-related fees of € 6 million

Net interest income in the key banking book segments

Net interest income in the key banking book segments is a Non-GAAP financial measure for which the most directly comparable IFRS financial measure is net interest income. Key banking book segments are defined as the Group's business segments for which net interest income from banking book activities represent a material part of the overall revenue. Net interest income in the key banking book segments is calculated as the Group's total net interest income excluding other funding effects (e.g., centrally held funding costs) and impacts driven by accounting asymmetry in the recognition of the Group's trading book and related hedging activities. The Group believes that a presentation of net interest income in the key banking book segments provides a more meaningful depiction of the net interest income associated with the Group's operating businesses.

The following table provides a reconciliation of the Group's net interest income to the net interest income in the key banking book segments.

in € m. (unless stated otherwise)	2024	2023	2022
Group			
Net interest income	**15,161**	**16,122**	**13,983**
Key banking book segments and other funding effects[1]	**13,255**	13,138	10,962
Key banking book segments	13,471	**13,875**	**11,455**
Other funding effects[1]	(216)	(737)	(493)
Accounting asymmetry driven[2]	**1,905**	2,984	3,021
Average interest earning assets[3] (in € bn)	1,002	978	987
Net interest margin[4]	1.5 %	1.6 %	1.4 %
Key banking book segments			
Corporate Bank			
Net interest income	4,960	5,115	3,628
Average interest earning assets[3] (in € bn)	126	125	131
Net interest margin[4]	3.9 %	4.1 %	2.8 %
Investment Bank Fixed Income and Currencies: Financing			
Net interest income	2,724	2,604	2,606
Average interest earning assets[3] (in € bn)	96	93	96
Net interest margin[4]	2.8 %	2.8 %	2.7 %
Private Bank			
Net interest income	5,786	6,156	5,222
Average interest earning assets[3] (in € bn)	262	265	268
Net interest margin[4]	2.2 %	2.3 %	2.0 %
Total Key banking book segments			
Net interest income	**13,471**	**13,875**	**11,455**
Average interest earning assets[3] (in € bn)	484	483	494
Net interest margin[4]	2.8 %	2.9 %	2.3 %

[1] Other funding effects represents banking book net interest income arising primarily from Treasury funding activities that are not allocated to the key banking book segments but are allocated to other segments or held centrally in Corporate & Other

[2] Accounting asymmetry in the recognition of the Group's trading book and related hedging activities primarily arises from funding costs associated with trading book positions where the funding cost is reported in net interest income but is offset by revenues on the underlying positions recorded in noninterest income. Conversely, it can also arise from the use of fair valued instruments to hedge key banking book segments positions where the cost or income of the underlying position is recorded as interest income, but the hedge impact is recorded as a noninterest income. These effects from trading book and related hedge activities primarily occur in the Investment Bank (ex FIC Financing), Asset Management and Corporate & Other including Treasury other than held in the key banking book segments

[3] Interest earning assets are financial instruments or investments that generate interest income in the form of interest payments. Interest earnings assets are averaged on a monthly basis and across quarters and for the full year

[4] For the Group and the segments, net interest income (before provision for credit losses) as a percentage of average total interest earnings assets. Net interest margins per segment are based on their contribution to the Group results

Adjusted costs/nonoperating costs

Adjusted costs is one of the Group's key performance indicators and is a Non-GAAP financial measure for which the most directly comparable IFRS financial measure is noninterest expenses. Adjusted costs is calculated by deducting (i) impairment of goodwill and other intangible assets, (ii) net litigation charges and (iii) restructuring and severance (in total referred to as nonoperating costs) from noninterest expenses under IFRS. The Group believes that a presentation of noninterest expenses excluding the impact of these items provides a more meaningful depiction of the costs associated with the operating businesses.

						2024
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Noninterest expenses	5,084	6,661	7,304	1,823	2,099	22,971
Nonoperating costs:						
Impairment of goodwill and other intangible assets	0	0	0	0	0	0
Litigation charges, net	376	126	28	13	1,491	2,035
Restructuring and severance	103	101	301	24	1	529
Total nonoperating costs	479	227	330	37	1,491	2,564
Adjusted costs	4,605	6,434	6,974	1,786	608	20,407

						2023
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Noninterest expenses	4,648	6,847	7,730	1,825	646	21,695
Nonoperating costs:						
Impairment of goodwill and other intangible assets	0	233	0	0	0	233
Litigation charges, net	53	147	123	26	(37)	311
Restructuring and severance	76	87	346	34	23	566
Total nonoperating costs	129	468	468	59	(14)	1,110
Adjusted costs	4,519	6,379	7,261	1,765	661	20,585

Prior year's comparatives aligned to presentation in the current year

						2022
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Corporate & Other	Total consolidated
Noninterest expenses	4,187	6,455	6,863	1,850	1,035	20,390
Nonoperating costs:						
Impairment of goodwill and other intangible assets	0	0	0	68	0	68
Litigation charges, net	23	166	(60)	24	261	413
Restructuring and severance	(7)	43	(87)	37	6	(8)
Total nonoperating costs	16	209	(147)	129	267	474
Adjusted costs	4,170	6,246	7,011	1,722	767	19,916

Prior year's comparatives aligned to presentation in the current year

Revenues and costs on a currency adjusted basis

Revenues and costs on a currency-adjusted basis are calculated by translating prior-period revenues or costs that were generated or incurred in non-euro currencies into euros at the foreign exchange rates that prevailed during the current year period. These adjusted figures, and period-to-period percentage changes based thereon, are intended to provide information on the development of underlying business volumes and costs.

Net assets (adjusted)

Net assets (adjusted) are defined as IFRS Total assets adjusted to reflect the recognition of legal netting agreements, offsetting of cash collateral received and paid and offsetting pending settlements balances. The Group believes that a presentation of net assets (adjusted) makes comparisons to its competitors easier.

in € b. (unless stated otherwise)	2024	2023	2022
Total assets	**1,391**	1,317	1,344
Deduct: Derivatives (incl. hedging derivatives) credit line netting	230	196	228
Deduct: Derivatives cash collateral received / paid	59	56	70
Deduct: Securities Financing Transactions credit line netting	2	2	2
Deduct: Pending settlements netting	13	29	17
Net assets (adjusted)	**1,087**	1,034	1,026

Book Value and Tangible Book Value per Basic Share Outstanding

Book value per basic share outstanding and tangible book value per basic share outstanding are Non-GAAP financial measures that are used and relied upon by investors and industry analysts as capital adequacy metrics. Book value per basic share outstanding represents the Bank’s total shareholders’ equity divided by the number of basic shares outstanding at period-end. Tangible book value represents the Bank’s total shareholders’ equity less goodwill and other intangible assets. Tangible book value per basic share outstanding is computed by dividing tangible book value by period-end basic shares outstanding.

Tangible Book Value

in € m.				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
(unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Total shareholders’ equity (Book value)	**68,709**	65,999	61,772	2,711	4	4,227	7
Goodwill and other intangible assets[1]	(6,962)	(6,573)	(6,327)	(389)	6	(246)	4
Tangible shareholders’ equity (Tangible book value)	**61,747**	59,426	55,445	2,321	4	3,981	7

[1] Excludes Goodwill and other intangible assets attributable to partial sale of DWS

Basic Shares Outstanding

in € m.				2024 increase (decrease) from 2023		2023 increase (decrease) from 2022	
(unless stated otherwise)	2024	2023	2022	in € m.	in %	in € m.	in %
Number of shares	**1,994.7**	2,040.2	2,066.8	(45.5)	(2.2)	(26.5)	(1.3)
Shares outstanding:							
Treasury shares	(49.6)	(48.2)	(28.9)	(1.4)	2.9	(19.3)	66.6
Vested share awards	38.5	46.3	45.6	(7.8)	(16.9)	0.8	1.7
Basic shares outstanding	**1,983.6**	2,038.4	2,083.4	(54.8)	(2.7)	(45.0)	(2.2)
Book value per basic share outstanding in €	**34.64**	32.38	29.65	2.26	7.0	2.73	9.2
Tangible book value per basic share outstanding in €	**31.13**	29.15	26.61	1.98	6.8	2.54	9.5

CRR/CRD Regulatory measures

The Group’s regulatory assets, exposures, risk-weighted assets, capital and ratios are calculated for regulatory purposes and are set forth throughout this document under the CRR/CRD as currently applicable.

For the comparative periods until year end 2021 certain figures are based on the CRR definition of own fund instruments (applicable for Additional Tier 1 (AT1) capital and Tier 2 capital and figures based thereon, including Tier 1, Total Capital and Leverage Ratio) are presented on a “fully loaded” basis. Such fully loaded figures are calculated excluding the transitional arrangements for own fund instruments as provided in the currently applicable CRR/CRD. Deutsche Bank had immaterial amounts of such instruments outstanding at year end 2022 and 2023. Measures calculated pursuant to the Group’s fully loaded methodology are non-GAAP financial measures.

Starting with the third quarter 2024, Deutsche Bank adopted the transitional arrangements in relation to the temporary treatment of unrealized gains and losses measured at fair value through OCI in accordance with Article 468 CRR. As per CRR the transitional rule as per Article 468 CRR applies until year-end 2025. The impact of this implementation is presented in section “Key risk metrics”.

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Supplemental Financial Information (Unaudited)

Information required by subpart 1400 of SEC Regulation S-K

Amounts for 2024, 2023 and 2022 are prepared in accordance with IFRS, which is consistent with the Group's Financial Statements.

Financial condition

Average balance sheet based upon month-end balances

Average balance sheet and interest and similar income

			2024			2023			2022
in € m. (unless stated otherwise)	Average balance	Interest and similar income	Average yield/rate	Average balance	Interest and similar income	Average yield/rate	Average balance	Interest and similar income	Average yield/rate
Assets:[1]									
Interest-earning deposits with banks:[2,4]									
In German offices	58,807	2,725	4.63 %	76,885	2,723	3.54 %	85,923	251	0.29 %
In Non-German offices	85,074	4,964	5.83 %	87,356	4,915	5.63 %	86,204	1,852	2.15 %
Total interest-earning deposits with banks	**143,880**	**7,689**	**5.34 %**	164,241	7,638	4.65 %	172,127	2,104	1.22 %
Central bank funds sold:[5]									
In German offices	0	0	N/M	0	0	N/M	0	0	N/M
In Non-German offices	0	1	N/M	0	1	N/M	0	1	N/M
Total central bank funds sold	**0**	**1**	**N/M**	0	1	N/M	0	1	N/M
Securities purchased under resale agreements:[4,5]									
In German offices	14,462	895	6.19 %	5,212	389	7.46 %	3,116	112	3.59 %
In Non-German offices	10,976	1,040	9.48 %	6,864	679	9.90 %	6,239	392	6.28 %
Total securities purchased under resale agreements	**25,438**	**1,935**	**7.61 %**	12,076	1,068	8.85 %	9,355	504	5.38 %
Securities borrowed:[4]									
In German offices	32	3	8.22 %	73	2	3.04 %	119	2	1.99 %
In Non-German offices	16	0	N/M	2	3	N/M	0	48	N/M
Total securities borrowed	**49**	**3**	**5.44 %**	75	5	6.98 %	119	51	42.33 %
Interest-earning financial assets at fair value through profit or loss:[4]									
In German offices	65,667	2,003	3.05 %	61,225	1,475	2.41 %	58,722	477	0.81 %
In Non-German offices	186,580	10,402	5.58 %	155,018	8,005	5.16 %	146,147	3,852	2.64 %
Total interest-earning financial assets at fair value through profit or loss	**252,247**	**12,405**	**4.92 %**	216,243	9,480	4.38 %	204,869	4,328	2.11 %
Financial assets at fair value through OCI:[4]									
In German offices	3,866	81	2.10 %	3,754	73	1.94 %	3,043	38	1.25 %
In Non-German offices	35,778	1,359	3.80 %	27,568	1,027	3.72 %	29,781	761	2.56 %
Total financial assets at fair value through OCI	**39,644**	**1,440**	**3.63 %**	31,322	1,100	3.51 %	32,825	799	2.43 %
Loans at amortized cost:[3,4]									
In German offices	255,185	7,757	3.04 %	262,486	7,271	2.77 %	260,928	5,446	2.09 %
In Non-German offices	229,014	15,573	6.80 %	227,552	14,760	6.49 %	232,658	8,793	3.78 %
Total loans	**484,199**	**23,330**	**4.80 %**	490,038	22,032	4.50 %	493,587	14,239	2.88 %
Total other interest-earning assets[4]	56,237	2,127	3.78 %	63,629	2,066	3.25 %	74,242	1,005	1.35 %
Total interest-earning assets	**1,001,695**	**48,928**	**4.88 %**	977,624	43,389	4.44 %	987,124	23,030	2.33 %
Cash and due from banks	20,526			17,188			18,515		
Noninterest-earning financial assets at fair value through profit or loss:									
In German offices	114,121			131,000			153,294		
In Non-German offices	133,943			139,411			170,096		
All other assets	105,303			92,682			88,383		
Allowance for credit losses	(5,544)			(5,170)			(5,029)		
Total assets	**1,370,042**			1,352,734			1,412,384		
% of assets attributable to Non-German offices	45 %			44 %			49 %		

Average balance sheet and interest expense			2024			2023			2022
in € m. (unless stated otherwise)	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate
Liabilities and equity:[1]									
Interest-bearing deposits:[4]									
In German offices:									
Time deposits	112,564	4,393	3.90 %	105,401	3,717	3.53 %	80,142	995	1.24 %
Savings deposits	87,437	1,175	1.34 %	81,730	624	0.76 %	85,360	254	0.30 %
Demand deposits	96,261	2,635	2.74 %	68,340	1,604	2.35 %	70,200	(83)	(0.12) %
Total in German offices	296,261	8,203	2.77 %	255,472	5,945	2.33 %	235,702	1,165	0.49 %
In Non-German offices:									
Time deposits	89,683	4,009	4.47 %	66,861	3,156	4.72 %	55,530	1,488	2.68 %
Savings deposits	1,330	104	7.82 %	1,475	86	5.85 %	1,823	49	2.70 %
Demand deposits	82,735	2,091	2.53 %	78,820	1,445	1.83 %	91,542	619	0.68 %
Total in Non-German offices	173,748	6,204	3.57 %	147,156	4,688	3.19 %	148,895	2,157	1.45 %
Total interest-bearing deposits	**470,010**	**14,407**	**3.07 %**	402,628	10,632	2.64 %	384,598	3,322	0.86 %
Central bank funds purchased:[5]									
In German offices	0	0	0.00 %	0	0	0.00 %	0	0	0.00 %
In Non-German offices	303	40	13.06 %	578	39	6.71 %	0	12	0.00 %
Total central bank funds purchased	**303**	**40**	**13.06 %**	578	39	6.71 %	0	12	0.00 %
Securities sold under repurchase agreements:[4,5]									
In German offices	2,236	424	18.95 %	998	169	16.98 %	274	97	35.24 %
In Non-German offices	466	245	52.56 %	340	180	52.84 %	808	195	24.14 %
Total securities sold under repurchase agreements	**2,702**	**669**	**24.74 %**	1,338	349	26.10 %	1,082	292	26.95 %
Securities loaned:[4]									
In German offices	0	0	N/M	3	0	N/M	1	0	(4.76) %
In Non-German offices	5	5	N/M	6	13	N/M	16	14	87.36 %
Total securities loaned	**5**	**5**	**N/M**	10	13	N/M	17	14	82.39 %
Interest-bearing financial liabilities at fair value through profit or loss:[4]									
In German offices	47,341	1,723	3.64 %	40,832	1,004	2.46 %	39,620	529	1.34 %
In Non-German offices	99,360	6,726	6.77 %	99,399	5,937	5.97 %	87,295	1,939	2.22 %
Total interest-bearing financial liabilities at fair value through profit or loss	**146,702**	**8,449**	**5.76 %**	140,231	6,941	4.95 %	126,914	2,468	1.94 %
Commercial paper:[5]									
In German offices	1,369	62	4.57 %	1,870	83	4.42 %	1,286	8	0.64 %
In Non-German offices	2,776	128	4.61 %	1,236	61	4.96 %	531	6	1.15 %
Total commercial paper	**4,145**	**191**	**4.60 %**	3,106	144	4.63 %	1,817	14	0.79 %
Other short-term borrowings:[4]									
In German offices	1,449	72	4.99 %	1,073	30	2.79 %	713	13	1.83 %
In Non-German offices	3,673	127	3.46 %	2,817	136	4.82 %	2,398	83	3.48 %
Total other short-term borrowings	**5,122**	**199**	**3.89 %**	3,890	166	4.26 %	3,111	97	3.10 %
Long-term debt and trust preferred securities:[4]									
In German offices	86,734	4,593	5.30 %	89,391	3,885	4.35 %	104,507	1,213	1.16 %
In Non-German offices	27,937	2,189	7.83 %	35,405	2,280	6.44 %	39,427	876	2.22 %
Total long-term debt and trust preferred securities	**114,671**	**6,781**	**5.91 %**	124,796	6,165	4.94 %	143,934	2,090	1.45 %
Total other interest-bearing liabilities[4]	**53,525**	**3,028**	**5.66 %**	59,379	2,819	4.75 %	65,793	739	1.12 %
Total interest-bearing liabilities	**797,184**	**33,768**	**4.24 %**	735,956	27,267	3.71 %	727,265	9,047	1.24 %

Average balance sheet and interest expense			2024			2023			2022
in € m. (unless stated otherwise)	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate
Noninterest-bearing deposits:									
In German offices	152,658			188,312			205,775		
In Non-German offices	21,590			23,859			32,361		
Noninterest-bearing financial liabilities at fair value through profit or loss:									
In German offices	98,482			112,497			135,751		
In Non-German offices	135,405			142,339			171,287		
All other noninterest-bearing liabilities	87,082			76,282			70,097		
Total shareholders' equity	**66,353**			63,149			60,109		
Additional equity components	**9,603**			8,563			7,944		
Noncontrolling interests	**1,684**			1,778			1,795		
Total equity	**77,641**			73,490			69,848		
Total liabilities and equity	**1,370,042**			1,352,734			1,412,384		
% of liabilities attributable to Non-German offices	42 %			41 %			42 %		
Rate spread	0.65 %			0.73 %			1.09 %		
Net interest margin (Net interest income to total interest-earning assets):									
In German offices	(0.39) %			0.21 %			0.85 %		
In Non-German offices	2.90 %			2.81 %			1.87 %		
Total	**1.51 %**			1.65 %			1.42 %		

N/M – Not meaningful

[1] The allocation of the assets and liabilities between German and Non-German offices are based on the location of the entity which carries the respective asset or liability.

[2] Interest-earning deposits with banks include interest earning deposit with central bank and interest earning deposit with bank w/o central bank.

[3] Loans include impaired loans.

[4] Figures in interest revenue and expense positions are based on net effect of negative interest revenue and expenses. However, negative interest revenue and expenses are reported in ''others'' in interest and similar income and interest expenses, respectively, in Note 5 to the consolidated financial statement.

[5] As per the Securities Exchange Commission's revised guidance, Central bank funds sold, Securities purchased under resale agreements, Central bank funds purchase, Securities sold under repurchase agreements and Commercial paper have been disclosed separately along with prior year's figure.

Analysis of changes in interest and similar income and interest expense

	2024 over 2023 due to changes in[1]			2023 over 2022 due to changes in[1]		
in € m.	Net change	Volume	Rate	Net change	Volume	Rate
Interest and similar income:						
Interest-earning deposits with banks:						
German offices	2	(726)	727	2,472	(29)	2,501
Non-German offices	49	(130)	179	3,062	25	3,037
Total interest-earning deposits with banks	51	(856)	907	5,534	(4)	5,538
Central bank funds sold:						
German offices	0	0	0	0	0	0
Non-German offices	0	0	0	0	0	0
Total central bank funds sold	0	0	0	0	0	0
Securities purchased under resale agreements:						
German offices	506	583	(77)	277	106	170
Non-German offices	361	391	(30)	288	43	245
Total securities purchased under resale agreements	867	973	(107)	565	149	416
Securities borrowed:						
German offices	0	(2)	2	0	(1)	1
Non-German offices	(3)	3	(6)	(45)	48	(93)
Total securities borrowed	(3)	1	(3)	(45)	46	(92)
Financial assets at fair value through profit or loss:						
German offices	528	113	415	998	21	977
Non-German offices	2,397	1,723	674	4,153	247	3,906
Total financial assets at fair value through profit or loss	2,926	1,836	1,089	5,151	268	4,883
Financial assets at fair value through OCI:						
German offices	8	2	6	35	10	25
Non-German offices	332	311	21	266	(60)	326
Total financial assets at fair value through OCI	341	314	27	301	(50)	350
Loans at amortized cost:						
German offices	485	(207)	692	1,825	33	1,793
Non-German offices	813	95	717	5,968	(197)	6,165
Total loans	1,298	(111)	1,409	7,793	(164)	7,957
Other interest-earning assets	60	(268)	329	1,061	(138)	1,199
Total interest and similar income	5,539	1,889	3,650	20,360	107	20,252
Interest expense:						
Interest-bearing deposits:						
German offices	2,258	1,031	1,227	4,779	106	4,674
Non-German offices	1,516	908	608	2,531	(25)	2,557
Total interest-bearing deposits	3,775	1,940	1,835	7,310	80	7,230
Central bank funds purchased:						
German offices	0	0	0	0	0	0
Non-German offices	1	(24)	25	26	0	26
Total central bank funds purchased agreements	1	(24)	25	26	0	26
Securities sold under repurchase agreements:						
German offices	254	233	22	73	145	(72)
Non-German offices	65	66	(1)	(15)	(157)	142
Total securities sold under repurchase agreements	319	299	21	58	(12)	70
Securities loaned:						
German offices	0	0	0	0	0	0
Non-German offices	(8)	(2)	(6)	(1)	(11)	10
Total securities loaned	(8)	(2)	(6)	(1)	(11)	10
Financial liabilities at fair value through profit or loss:						
German offices	719	179	540	475	17	458
Non-German offices	789	(2)	791	3,998	303	3,694
Total financial liabilities at fair value through profit or loss	1,508	177	1,331	4,473	320	4,153
Commercial paper:						
German offices	(20)	(23)	3	74	5	69
Non-German offices	67	71	(5)	55	16	39
Total commercial paper	47	49	(2)	130	21	108
Other short-term borrowings:						
German offices	42	13	29	17	8	9
Non-German offices	(9)	35	(44)	52	16	36
Total other short-term borrowings	34	48	(15)	69	25	45
Long-term debt and trust preferred securities:						
German offices	708	(119)	826	2,672	(200)	2,871
Non-German offices	(91)	(532)	441	1,404	(98)	1,502
Total long-term debt and trust preferred securities	616	(651)	1,267	4,076	(298)	4,373
Other interest-bearing liabilities	209	(296)	505	2,080	(86)	2,166

	2024 over 2023 due to changes in[1]			2023 over 2022 due to changes in[1]		
Total interest expense	**6,500**	**1,540**	**4,961**	18,220	39	18,182
Net change in net interest income	**(961)**	**349**	**(1,310)**	2,139	69	2,071

[1] Changes due to combination of volume and rate are allocated proportionally.

Investment portfolio

The Group’s total investment portfolio as of December 31, 2024, was € 55.9 billion (debt securities at fair value through other comprehensive income € 34.2 billion and debt securities at amortized cost € 21.6 billion).

The following table presents the approximate weighted-average yields (based on amortized cost) by maturity distribution of the Group’s investment portfolio as of December 31, 2024:

	Up to one year		More than one year and up to five years		More than five years and up to ten years		More than ten years		Total	
in € m.	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
German government	193	5.0 %	132	1.8 %	1,156	1.3 %	774	2.7 %	2,256	2.1 %
U.S. Treasury and U.S. government agencies	590	1.3 %	4,230	1.4 %	10,672	2.2 %	714	2.7 %	16,206	2.0 %
U.S. local (municipal) governments	8	6.6 %	94	6.6 %	0	0.0 %	753	5.9 %	855	5.9 %
Other foreign governments	4,831	4.0 %	7,413	3.9 %	13,887	2.2 %	1,554	2.7 %	27,684	2.9 %
Corporates	320	3.5 %	1,002	5.5 %	154	1.6 %	7	3.6 %	1,483	4.6 %
Other asset-backed securities	0	0.0 %	0	0.0 %	152	4.8 %	0	0.0 %	152	4.8 %
Mortgage-backed securities, including obligations of U.S. federal agencies	2,207	6.2 %	468	4.7 %	554	5.0 %	483	4.8 %	3,712	5.6 %
Other debt securities	735	1.1 %	1,048	5.7 %	144	2.6 %	1,599	4.3 %	3,526	4.0 %

Loan Portfolio

Analysis of maturities of the Group’s loan portfolio (excluding lease financing)

Dec 31, 2024 in € m.	Within 1 year	After 1 but within 5 years	After 5 but within 15 years	After 15 years	Total
German:					
Agriculture, forestry and fishing	31	26	86	45	188
Mining and quarrying	7	12	13	1	32
Manufacturing	4,874	2,813	985	232	8,904
Electricity, gas, steam and air conditioning supply	313	140	430	134	1,017
Water supply, sewerage, waste management and remediation activities	89	69	120	35	312
Construction	341	190	430	316	1,277
Wholesale and retail trade, repair of motor vehicles and motorcycles	4,426	1,075	702	385	6,587
Transport and storage	396	269	356	58	1,078
Accommodation and food service activities	58	233	339	126	755
Information and communication	389	428	101	143	1,061
Financial and insurance activities	2,352	5,719	2,004	975	11,050
Real estate activities	1,240	1,679	2,942	4,009	9,869
Professional, scientific and technical activities	611	745	1,358	1,490	4,204
Administrative and support service activities	467	467	354	461	1,750
Public administration and defense, compulsory social security	290	87	152	16	544
Education	12	22	29	39	103
Human health services and social work activities	205	353	1,173	610	2,341
Arts, entertainment and recreation	409	33	74	99	615
Other service activities	893	1,063	1,087	143	3,186
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	9,983	19,824	52,980	84,328	167,116
Activities of extraterritorial organizations and bodies	0	0	0	0	0
Total German	27,384	35,247	65,714	93,644	221,989
Non-German:					
Agriculture, forestry and fishing	70	49	23	5	148
Mining and quarrying	3,199	1,009	99	2	4,309
Manufacturing	12,653	5,406	1,270	54	19,383
Electricity, gas, steam and air conditioning supply	1,434	1,621	826	119	3,999
Water supply, sewerage, waste management and remediation activities	68	189	24	3	284
Construction	1,319	1,407	413	185	3,323
Wholesale and retail trade, repair of motor vehicles and motorcycles	12,128	2,358	795	582	15,863
Transport and storage	1,703	1,850	648	32	4,234
Accommodation and food service activities	730	887	339	36	1,993
Information and communication	3,548	4,909	383	38	8,878
Financial and insurance activities	51,550	59,865	9,018	1,864	122,297
Real estate activities	16,899	21,054	3,421	292	41,665
Professional, scientific and technical activities	1,174	678	369	197	2,418
Administrative and support service activities	1,811	5,255	632	33	7,732
Public administration and defense, compulsory social security	1,455	1,190	3,014	33	5,691
Education	50	124	22	14	210
Human health services and social work activities	370	1,164	138	157	1,828
Arts, entertainment and recreation	75	110	25	14	224
Other service activities	1,734	1,380	837	202	4,153
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	8,503	9,945	9,966	8,752	37,167
Activities of extraterritorial organizations and bodies	17	5	0	0	22
Total Non-German	120,492	120,454	32,261	12,614	285,822
Gross loans	147,876	155,702	97,975	106,258	507,810
(Deferred expense)/unearned income	73	278	764	237	1,352
Loans less (deferred expense)/unearned income	147,803	155,424	97,211	106,021	506,459

Volumes of loans in loan portfolio (excluding lease financing) with residual maturities of more than one year from that date

Dec 31,2024 in € m.	Within 1 years	After one but within 5 years	After 5 but within 15 years	After 15 years	Total
Fixed rate loans	44,349	45,670	79,275	96,017	265,311
Floating or adjustable rate loans	103,527	110,032	18,701	10,241	242,500
Total	147,876	155,702	97,975	106,258	507,810

Allowances for Credit Losses

In accordance with updated SEC disclosure requirements as of September 2020, we below show Loans at amortized cost, Allowance for loan losses, net charge offs and two credit ratios by NACE code. Numbers for exposures and allowances differ from those disclosed in the Asset Quality section of this report, where we apply a broader scope (all Financial assets at amortized cost rather than just loans) in line with IFRS 9 requirements.

Loans at amortized Cost by Industry type

					Dec 31, 2024
in € m.	Loans at amortized cost (Gross carrying Amount)	Allowance for credit losses	Net Charge Offs	Allowance for credit losses to total loans at amortized cost at end of period (%) [1]	Net charge-offs during the period to average loans at amortized cost outstanding during the period (%)
Agriculture, forestry and fishing	336	6	0	1.77%	0.04%
Mining and quarrying	1,885	11	(0)	0.57%	(0.00%)
Manufacturing	26,634	596	49	2.24%	0.18%
Electricity, gas, steam and air conditioning supply	4,346	92	(0)	2.11%	(0.00%)
Water supply, sewerage, waste management and remediation activities	595	4	0	0.69%	0.06%
Construction	4,330	105	(59)	2.43%	(1.37%)
Wholesale and retail trade, repair of motor vehicles and motorcycles	21,405	375	86	1.75%	0.45%
Transport and storage	4,766	52	9	1.09%	0.18%
Accommodation and food service activities	2,665	32	5	1.22%	0.26%
Information and communication	8,930	79	128	0.89%	1.56%
Financial and insurance activities	126,640	853	29	0.67%	0.03%
Real estate activities	49,859	664	168	1.33%	0.36%
Professional, scientific and technical activities	6,276	104	20	1.66%	0.31%
Administrative and support service activities	8,921	61	41	0.68%	0.48%
Public administration and defense, compulsory social security	5,740	39	(0)	0.68%	(0.01%)
Education	295	3	0	0.91%	0.10%
Human health services and social work activities	4,130	29	0	0.70%	0.01%
Arts, entertainment and recreation	820	6	0	0.74%	0.04%
Other service activities	6,213	101	50	1.63%	0.26%
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	204,788	2,457	495	1.20%	0.24%
Activities of extraterritorial organizations and bodies	5	0	(0)	2.70%	(0.04%)
Total	489,579	5,668	1,072	1.16%	0.22%

[1] Credit ratio defined as allowance for credit losses to total loans at amortized cost at the end of period in this table excludes collateral. Considering collateral, credit ratio is materially higher.

Loan at Amortized Cost exposure increased by € 5 billion or 1 % in 2024 compared to 2023 driven by Investment Bank partly offset by Private Bank.

Loan loss allowance increased by € 498 million or 10 % in 2024, which was mainly driven by stage 3 due to additional charges in the CRE portfolio and in Corporate Bank as well as new defaults in Private Bank, almost overcompensated by non-performing loans sales.

Net charge-offs declined by € 32 million or 3 % in 2024 due to the increase of recoveries in Construction.

					Dec 31, 2023
in € m.	Loans at amortized cost (Gross carrying Amount)	Allowance for credit losses	Net Charge Offs	Allowance for credit losses to total loans at amortized cost at end of period (%) [1]	Net charge-offs during the period to average loans at amortized cost outstanding during the period (%)
Agriculture, forestry and fishing	384	5	2	1.41%	0.52%
Mining and quarrying	2,774	8	25	0.31%	1.03%
Manufacturing	28,397	531	179	1.87%	0.61%
Electricity, gas, steam and air conditioning supply	4,081	23	31	0.55%	0.67%
Water supply, sewerage, waste management and remediation activities	486	5	1	0.98%	0.16%
Construction	4,257	107	126	2.51%	3.00%
Wholesale and retail trade, repair of motor vehicles and motorcycles	21,030	400	120	1.90%	0.59%
Transport and storage	4,924	44	36	0.90%	0.69%
Accommodation and food service activities	1,862	31	3	1.67%	0.14%
Information and communication	7,589	49	88	0.64%	1.23%
Financial and insurance activities	110,901	753	100	0.68%	0.09%
Real estate activities	49,267	460	50	0.93%	0.10%
Professional, scientific and technical activities	6,889	91	36	1.32%	0.52%
Administrative and support service activities	8,911	140	4	1.57%	0.05%
Public administration and defense, compulsory social security	5,731	37	2	0.65%	0.04%
Education	279	3	(0)	1.10%	(0.03%)
Human health services and social work activities	4,390	25	0	0.58%	0.00%
Arts, entertainment and recreation	1,017	10	27	0.95%	2.62%
Other service activities	4,727	59	65	1.25%	1.61%
Activities of households as employers, undifferentiated goods- and services- producing activities of households for own use	216,630	2,387	208	1.10%	0.09%
Activities of extraterritorial organizations and bodies	0	0	0	0.80%	9.38%
Total	484,527	5,170	1,104	1.07%	0.23%

[1] Credit ratio defined as allowance for credit losses to total loans at amortized cost at the end of period in this table excludes collateral. Considering collateral, credit ratio is materially higher.

Loan at Amortized Cost exposure declined by € 4 billion or 1 % in 2023 compared to 2022 across business divisions.

Loan loss allowance increased by € 379 million or 8 % in 2023, which was mainly driven by higher bookings and the release of the existing overlay in stage 3 in Private Bank (which at first application led to a decrease of Allowance for Credit Losses), as explained earlier.

Net charge-offs increased by € 132 million or 14 % in 2023, which was mainly due to Corporate Bank.

					Dec 31, 2022
in € m.	Loans at amortized cost (Gross carrying Amount)	Allowance for credit losses	Net Charge Offs	Allowance for credit losses to total loans at amortized cost at end of period (%) [1]	Net charge-offs during the period to average loans at amortized cost outstanding during the period (%)
Agriculture, forestry and fishing	524	10	1	1.84%	0.18%
Mining and quarrying	2,392	32	24	1.32%	0.87%
Manufacturing	30,534	618	62	2.02%	0.19%
Electricity, gas, steam and air conditioning supply	4,893	42	0	0.85%	0.00%
Water supply, sewerage, waste management and remediation activities	725	8	0	1.06%	0.02%
Construction	4,239	114	103	2.70%	2.25%
Wholesale and retail trade, repair of motor vehicles and motorcycles	21,535	436	18	2.02%	0.08%
Transport and storage	5,547	52	8	0.93%	0.15%
Accommodation and food service activities	1,965	66	4	3.37%	0.16%
Information and communication	7,002	120	5	1.72%	0.08%
Financial and insurance activities	116,190	711	27	0.61%	0.02%
Real estate activities	48,380	236	66	0.49%	0.15%
Professional, scientific and technical activities	7,013	87	23	1.25%	0.33%
Administrative and support service activities	7,429	121	38	1.62%	0.45%
Public administration and defense, compulsory social security	5,287	13	0	0.24%	0.00%
Education	249	3	0	1.11%	0.15%
Human health services and social work activities	4,523	26	5	0.57%	0.12%
Arts, entertainment and recreation	1,128	9	0	0.82%	0.02%
Other service activities	4,152	83	24	1.99%	0.50%
Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use	214,795	2,005	562	0.93%	0.26%
Activities of extraterritorial organizations and bodies	1	0	0	0.70%	22.98%
Total	488,504	4,790	971	0.98%	0.20%

[1] Credit ratio defined as allowance for credit losses to total loans at amortized cost at the end of period in this table excludes collateral. Considering collateral, credit ratio is materially higher.

Loan at Amortized Cost exposure went up by € 12 billion or 3 % in 2022 compared to 2021, which was driven by Private Bank as well as Investment Bank.

Loan loss allowance slightly increased by € 36 million or 1 % in 2022.

Net charge-offs increased by € 484 million or 99 % in 2022 due to the non-performing portfolio sales in Private Bank.

Foreign outstandings

The following tables list only those countries for which the cross-border outstandings exceeded 0.75 % of the Group's total assets as of December 31, 2024, 2023 and 2022. Offsetting of local country claims is done for third party liabilities of the respective foreign offices that represent legal obligations of the foreign offices and for which no payment is guaranteed at locations outside of the country of the office. As of December 31, 2024, there were no outstandings that exceeded 0.75 % of total assets in any country currently facing debt restructuring or liquidity problems that the Group expects would materially impact the country's ability to service its obligations.

							Dec 31, 2024
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other[1]	Commit-ments	Net local country claim	Total	in %
USA	3,520	49,908	102,191	9,330	134,481	299,430	21.59
Great Britain	3,195	35,061	39,181	12,018	10,313	99,768	7.19
Italy	8,667	28,245	21,084	2,552	22,283	82,831	5.97
France	3,513	20,531	22,023	8,554	–	54,621	3.94
Luxembourg	5,370	5,283	15,354	4,858	4,222	35,087	2.53
Spain	5,261	12,724	10,439	2,166	–	30,590	2.21
Belgium	1,105	10,187	9,018	2,074	–	22,384	1.61
Switzerland	3,253	3,883	6,482	7,103	994	21,715	1.57
Ireland	106	2,987	12,218	4,148	–	19,459	1.40
Netherlands	2,186	3,234	8,328	5,617	–	19,365	1.40

[1] Other includes commercial and industrial, insurance and other loans.

							Dec 31, 2023
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other[1]	Commit-ments	Net local country claim	Total	in %
USA	1,869	50,159	95,781	6,568	123,772	278,149	21.20
Great Britain	1,991	28,112	18,924	10,914	20,107	80,048	6.10
Italy	4,150	31,097	18,373	2,493	23,176	79,289	6.04
France	2,142	15,926	18,279	7,675	2,892	46,914	3.57
Luxembourg	6,658	4,148	14,899	5,166	6,871	37,743	2.88
Spain	2,692	10,823	13,992	2,647	–	30,154	2.30
Switzerland	1,458	4,650	7,536	9,335	1,529	24,509	1.87
Netherlands	1,868	3,952	9,190	5,876	–	20,886	1.59
Ireland	236	3,286	10,250	3,565	–	17,337	1.32
Belgium	741	7,472	5,856	1,038	–	15,107	1.15
China	3,121	5,514	1,519	403	–	10,557	0.80

[1] Other includes commercial and industrial, insurance and other loans.

							Dec 31, 2022
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other[1]	Commit-ments	Net local country claim	Total	in %
USA	5,083	48,556	88,193	6,739	139,166	287,737	21.52
Italy	4,289	25,442	12,564	1,690	24,764	68,749	5.14
Great Britain	3,326	23,051	19,479	9,275	12,546	67,677	5.06
Luxembourg	8,364	4,031	28,642	3,977	5,982	50,997	3.81
France	2,480	12,338	17,181	7,559	2,673	42,231	3.16
Spain	2,209	10,205	8,496	1,954	–	22,864	1.71
Ireland	343	3,415	14,257	2,452	–	20,467	1.53
Switzerland	1,020	3,828	7,325	5,698	1,146	19,017	1.42
Netherlands	1,109	2,829	6,091	5,436	–	15,465	1.16
Belgium	1,034	5,362	2,888	1,101	–	10,385	0.78

[1] Other includes commercial and industrial, insurance and other loans.

Deposits

Information regarding average deposits balances and average interest rates on deposits is outlined in the table of Financial Condition above.

For purposes of the disclosure of uninsured time deposits, the residual amount of total time deposits vs insured time deposits has been considered. Insured time deposits have been identified considering both statutory and voluntary deposit protection schemes in each relevant jurisdiction. Below is an overview of the deposit protection schemes applicable for Deutsche Bank in its home country Germany:

Statutory depositor protection is stipulated by European directives in the European Union. These directives have been transformed into national law by the Deposit Guarantee Act (Einlagensicherungsgesetz, or EinSiG) in Germany. The statutory guarantee scheme ensures entitlement to compensation amounting up to €100k per depositor across all types of deposits – demand, time, and savings deposits – from selected depositors such as private individuals, partnerships, and corporations outside the financial industry.

The statutory deposit guarantee scheme is supplemented by a voluntary deposit guarantee fund established by the Federal Association of German Banks (BdB). This additional scheme protects deposits from private individuals, partnerships, and corporations outside the financial industry, covering current, time, and savings deposits, to the extent these are not already covered by the statutory compensation scheme, up to a coverage level per depositor of 15 % of the bank's own funds.

For this disclosure, across all domestic and foreign branches of Deutsche Bank AG, deposits from banks were considered 100 % uninsured, deposits from retail clients 100 % insured. For deposits from other depositors, a fixed percentage based on the proportion of time deposits to total deposits covered under the German statutory deposit guarantee scheme has been applied to estimate non-insured time deposits for this client group. All remaining entities of the Deutsche Bank group have determined the amount of uninsured time deposits following local requirements. As of year-end 2024, the group did not have any time deposits under FDIC insurance coverage on its books.

in € m.	Dec 31, 2024
U.S. time deposits in excess of FDIC insurance limit or similar state deposit insurance regimes	0
Time deposits that are otherwise uninsured, by maturity	
3 months or less	58,236
over 3 months to 6 months	24,330
over 6 months to 12 months	17,758
over 12 months	19,104
Total Time deposits that are otherwise uninsured	119,429
Total Uninsured time deposits	**119,429**

Total deposits by foreign depositors in German offices were € 61.5 billion, € 62.6 billion and € 51.8 billion as of December 31, 2024, 2023 and 2022, respectively.

Imprint

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Exhibit 2.2

DESCRIPTION OF SECURITIES

REGISTERED UNDER SECTION 12 OF THE EXCHANGE ACT

The description of securities below is being provided for information and reference purposes only and is not intended to be, and must not be, taken as the basis for any investment decision. This description of securities does not constitute an offer to sell or a solicitation of an offer to buy any securities.

As of December 31, 2024, Deutsche Bank AG ("Deutsche Bank", or "the bank") had three classes of securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934 (the "Act"): Ordinary Shares, Subordinated Notes and Series A Global Notes.

A. Description of Ordinary Shares

Terms defined within this subsection entitled "Description of Ordinary Shares" are defined only with respect to this subsection. Certain terms, unless otherwise defined herein, have the meaning given to them in the bank's Annual Report on Form 20-F for the year ended December 31, 2024.

General

Deutsche Bank's share capital consists of ordinary shares (the "Ordinary Shares") issued in registered form without par value. Under German law, shares without par value are deemed to have a "nominal" value equal to the total amount of share capital divided by the number of shares. The Ordinary Shares have a nominal value in this sense of € 2.56 per share. As of December 31, 2024, there were 1,994,701,593 Ordinary Shares issued, of which 1,945,125,755 were outstanding. On January 3, 2025, Deutsche Bank cancelled 46,448,708 Ordinary Shares owned by the bank. Following this cancellation, there were 1,948,252,885 Ordinary Shares issued.

The principal trading market for the Ordinary Shares is the Frankfurt Stock Exchange, where they trade under the symbol "DBK". The Ordinary Shares are also traded on the other six German stock exchanges (Berlin, Düsseldorf, Hamburg, Hanover, Munich and Stuttgart, trading on each exchange under the symbol "DBK"), on the Eurex and the New York Stock Exchange, where they trade under the symbol "DB".

Deutsche Bank maintains a share register in Frankfurt am Main and, for the purposes of trading shares on the New York Stock Exchange, a share register in New York.

All shares on German stock exchanges trade in euros, and all shares on the New York Stock Exchange trade in U.S. dollars.

Pre-emptive Rights of Deutsche Bank Shareholders

Authorized Capital

The bank's share capital may be increased by issuing new shares out of authorized capital against cash payments. The bank's authorized but unissued capital as of December 31, 2024 amounted to € 2,560,000,000, divided as follows:

- By resolution of the bank's annual shareholders' meeting dated May 27, 2021, the Management Board was authorized to increase the bank's share capital on or before April 30, 2026, once or more than once, by up to a total of € 512,000,000 through the issue of new shares against cash payments. Shareholders are to be granted pre-emptive rights. However, the Management Board is authorized to except broken amounts from shareholders' pre-emptive rights and to exclude pre-emptive rights insofar as is necessary to grant to the holders of option rights, convertible bonds and convertible participatory rights issued by the bank or its affiliates pre-emptive rights to new shares to the extent that they would be entitled to such rights after exercising their option or conversion rights. The Management Board is also authorized to exclude the pre-emptive rights in full if the issue price of the new shares is not significantly lower than the quoted price of the shares already listed at the time of the final determination of the issue price and the shares issued in accordance with Section 186(3) sentence 4 of the German Stock Corporation Act (Aktiengesetz) do not exceed in total 10 % of the share capital at the time the authorization becomes effective or — if the value is lower — at the time the authorization is utilized. Management Board resolutions to utilize authorized capital and to exclude pre-emptive rights require the Supervisory Board's approval. The new shares may also be taken up by banks specified by the Management Board with the obligation to offer them to shareholders (indirect pre-emptive right).

- By resolution of the bank's annual shareholders' meeting dated May 27, 2021, the Management Board is authorized to increase the bank's share capital on or before April 30, 2026, once or more than once, by up to a total of € 2,048,000,000 through the issue of new shares against cash payments. Shareholders are to be granted pre-emptive rights. However, the Management Board is authorized to except fractional amounts from shareholders' pre-emptive rights and to exclude pre-emptive rights insofar as is necessary to grant to the holders of option rights, convertible bonds and convertible participatory rights issued by the bank and its affiliates pre-emptive rights to new shares to the extent that they would be entitled to such rights after exercising their option or conversion rights. Management Board resolutions to utilize authorized capital and to exclude pre-emptive rights require the Supervisory Board's approval. The new shares may also be taken up by banks specified by the Management Board with the obligation to offer them to shareholders (indirect pre-emptive right).

Shareholders are generally permitted to transfer their preemptive rights. Preemptive rights may be traded on one or more German stock exchanges for a limited number of days prior to the final day the preemptive rights can be exercised.

Conditional Capital

The bank may issue participatory notes that are linked with conversion rights or option rights and/or convertible bonds and/or bonds with warrants. The participatory notes, convertible bonds or bonds with warrants may also be issued by affiliated companies of Deutsche Bank AG. For this purpose, share capital would be increased conditionally upon exercise of these conversion and/or exchange rights or upon mandatory conversion. As of December 31, 2024, the bank did not have any authorized conditional capital.

Form and Transfer

According to the Articles of Association, Deutsche Bank's shares are issued in the form of registered shares. For purposes of registration in the share register, all shareholders are required to notify the bank of the number of shares they hold and, in the case of natural persons, provide their surname, first name, address (physical and electronic) and date of birth and, in the case of legal persons, provide their registered name, business address (physical and electronic) and registered. Being registered in the bank's share register and timely registration for attendance of the General Meeting are prerequisites for any shareholder's attendance and exercise of voting rights at the General Meeting.

The form that shares and dividend and renewal coupons are to take will be determined by the bank's Management Board in agreement with the bank's Supervisory Board. Global certificates may be issued. The claim of shareholders to have their shares and any dividend and renewal coupons issued in individual certificate form is excluded unless such issue is required by the rules in force at a stock exchange where the shares are listed.

The transferability of the bank's Ordinary Shares is not restricted by law or the bank's Articles of Association.

Dividends

Dividend Policy

Deutsche Bank plans to sustainably grow cash dividends and, over time, return to shareholders through share buybacks excess capital over and above the requirements to support profitable growth and upcoming regulatory changes.

For the financial year 2024, the Management Board intends to propose to the Annual General Meeting a dividend of € 0.68 per share, after having paid a dividend of € 0.45 per share for 2023 and € 0.30 per share for 2022.

For the financial year 2025 and subsequent years, the bank targets a payout ratio of 50% of net income attributable to Deutsche Bank shareholders, delivered through a combination of cash dividends and share buybacks. These distributions to shareholders are subject to shareholder authorization and German corporate law requirements, and in the case of share buybacks, regulatory approval. The bank has received supervisory approval for a share repurchase of € 750 million, which it aims to materially complete by the third quarter of 2025, having completed € 675 million in share repurchases in 2024 and € 450 million in 2023, and it plans to propose a dividend in respect of the 2024 financial year of € 0.68 per share, or approximately € 1.3 billion, up from € 0.45 per share for 2023, at the bank's Annual General Meeting in May 2025. For the financial year 2025, Deutsche Bank aims for cash dividends of € 1.00 per share, subject to a 50% payout ratio limitation relative to net income attributable to Deutsche Bank shareholders. Deutsche Bank will continue to target a payout ratio of 50% after 2025 through share buybacks and cash dividends, with cash dividends growing more moderately compared to increases seen in recent years. The bank has set a capital distribution goal of € 8 billion in respect of the financial years 2021-2025, to be paid in 2022-2026, and believes that it is positioned to exceed this objective if it achieves its financial targets.

However, Deutsche Bank cannot assure investors that it will pay dividends or conduct share buybacks as it did in previous years, nor at any other level, or at all, in any future period. If Deutsche Bank AG is not profitable enough, it may not pay dividends or conduct share buybacks at all. Furthermore, if Deutsche Bank AG fails to meet the regulatory capital adequacy requirements under CRR/CRD (including individually imposed capital requirements ("Pillar 2" requirements) and the combined buffer requirement), it may be prohibited from making, and the ECB or the BaFin may suspend or limit, the payment of dividends or execution of share buybacks. In particular, a credit institution, such as Deutsche Bank, will be considered as failing to meet the combined buffer requirement when it does not have sufficient own funds in an amount and of the quality needed to meet at the same time (i) its minimum capital requirements under the CRR, (ii) certain Pillar 2 capital requirements, and (iii) the sum of the capital buffers applicable to the relevant credit institution. In calculating the respective amounts that may be distributed ("Maximum Distributable Amount" or "MDA"), the bank will have to take into account certain Pillar 2 capital requirements. Since January 2022, the Group has also been subject to MDA restrictions, including a Pillar 2 capital requirement for the leverage ratio, in instances of non-compliance with its leverage ratio buffer introduced in the CRR. In addition, Deutsche Bank is subject to additional restrictions on distributions if it breaches the harmonized minimum TLAC requirement under the CRR or its institution-specific minimum requirement for own funds and eligible liabilities (MREL) set by the Single Resolution Board.

In addition, the ECB expects banks to meet Pillar 2 guidance. If Deutsche Bank AG operates or expects to operate below Pillar 2 guidance, the ECB will review the reasons why the bank's capital level has fallen or is expected to fall and may take appropriate and proportionate measures in connection with such shortfall. Any such measures might have an impact on Deutsche Bank AG's willingness or ability to pay dividends or conduct share buybacks. For further information on regulatory capital adequacy requirements and the powers of Deutsche Bank AG's regulators to suspend dividend payments or share buybacks, see "Item 4: Information on the Company – Regulation and Supervision – Capital Adequacy Requirements" and "— Investigative and Enforcement Powers."

In order to meet the German corporate law requirements, Deutsche Bank AG's dividends and capacity to conduct share buybacks are based on the unconsolidated results of Deutsche Bank AG as prepared in accordance with the German Commercial Code (HGB). Deutsche Bank AG's Management Board, which prepares the annual financial statements of Deutsche Bank AG on an unconsolidated basis, and its Supervisory Board, which reviews the financial statements, first allocate part of Deutsche Bank AG's annual surplus (if any) to Deutsche Bank AG's statutory reserves and to any losses carried forward, in accordance with applicable legal requirements. Deutsche Bank then allocates the remainder of any surplus to other revenue reserves (or retained earnings) and balance sheet profit. Deutsche Bank may allocate up to one-half of this remainder to other revenue reserves and must allocate at least one-half to balance sheet profit. A profit distribution from the balance sheet profit is only permitted to the extent that the balance sheet profit plus distributable earnings exceed potential dividend blocking items, which consist primarily of deferred tax assets, self-developed software and unrealized gains on plan assets, all net of respective deferred tax liabilities.

Deutsche Bank AG may then distribute as dividend a portion of or all the amount of the balance sheet profit not subject to dividend blocking of Deutsche Bank AG if the Annual General Meeting so resolves. The Annual General Meeting may resolve a non-cash distribution instead of, or in addition to, a cash dividend. However, Deutsche Bank AG is not legally required to distribute its balance sheet profit to its shareholders to the extent that it has issued participatory rights (Genussrechte) or granted a silent participation (stille Beteiligung) that accord their holders the right to a portion of Deutsche Bank AG's distributable profit.

Deutsche Bank AG declares dividends by resolution of the Annual General Meeting and pays them (if any) once a year. Dividends approved at a General Meeting are payable on the third business day after that meeting, unless a later date has been determined at that meeting or by the Articles of Association. In accordance with the German Stock Corporation Act, the record date for determining which holders of Deutsche Bank AG's ordinary shares are entitled to the payment of dividends, if any, or other distributions whether cash, stock or property, is the date of the General Meeting at which such dividends or other distributions are declared.

Deutsche Bank's financial and regulatory targets are based on the financial results prepared in accordance with IFRS as issued by the IASB and endorsed by the EU. For further details, please refer to "Note 01 – Material accounting policies and critical accounting estimates – EU carve-out" to the consolidated financial statements.

Dividend Payment and Distribution

Shareholders registered with the bank's New York transfer agent are entitled to elect whether to receive dividend payments in euros or U.S. dollars. For those shareholders, unless instructed otherwise, the bank will convert all cash dividends and other cash distributions with respect to ordinary shares into U.S. dollars prior to payment to the shareholder. The amount distributed will be reduced by any amounts the bank or its New York transfer agent are required to withhold for taxes or other governmental charges. If the bank's New York transfer agent determines, following consultation with the bank, that in its judgment any foreign currency it receives is not convertible or distributable, the bank's New York transfer agent may distribute the foreign currency (or a document evidencing the right to receive such currency) or, in its discretion, hold the foreign currency for the account of the shareholder to receive the same.

If any of the bank's distributions consists of a dividend of the bank's shares, Link Market Services GmbH and the bank's New York transfer agent (with respect to shares individually certificated) or the custodian bank with which shareholders have deposited their shares (with respect to shares in global form) will distribute the shares to the shareholders in proportion to their existing shareholdings. Rather than distribute fractional shares, Link Market Services GmbH, the bank's New York transfer agent or the custodian bank will sell all such fractional shares and distribute the net proceeds to shareholders.

Link Market Services GmbH and the bank's New York transfer agent (with respect to shares individually certificated) or the custodian bank with which shareholders have deposited their shares (with respect to shares in global form) will also distribute all distributions (other than cash and the bank's shares or rights) to shareholders in proportion to their shareholdings. In the event that Link Market Services GmbH, the bank's New York transfer agent or the custodian bank determine that the distribution cannot be made proportionately among shareholders or that it is impossible to make the distribution, they may adopt any method that they consider fair and practicable to effect the distribution. Such methods may include the public or private sale of all or a portion of the securities or property and the distribution of the proceeds. Link Market Services GmbH, the bank's New York transfer agent or the custodian bank must consult with the bank before adopting any alternative method of distribution.

Depending on whether shares are individually certificated or in global form, we, Link Market Services GmbH, the bank's New York transfer agent or the custodian bank with which shareholders have deposited their shares will determine whether or not any distribution (including cash, shares, rights or property) is subject to tax or governmental charges. In the case of a cash distribution, the bank may use all or part of the cash to pay any such tax or governmental charge. In the case of other distributions, the bank, Link Market Services GmbH, the bank's New York transfer agent or the custodian bank may dispose of all or part of the property to be distributed by public or private sale, in order to pay the tax or governmental charge. In all cases, shareholders will receive any net proceeds of any sale or the balance of the cash or property after the deduction for taxes or governmental charges in proportion to their shareholdings.

Voting Rights and Shareholder Meetings

Each of the bank's shares entitles its registered holder to one vote at Deutsche Bank's General Meeting. The Annual General Meeting takes place within the first eight months of the fiscal year. Pursuant to the Articles of Association, Deutsche Bank may hold the meeting in Frankfurt am Main, Düsseldorf or any other German city with over 250,000 inhabitants. Unless a shorter period is permitted by law, the Group must give the notice convening the General Meeting at least 30 days before the last day on which shareholders can register their attendance of the General Meeting (which is the sixth day immediately preceding that General Meeting). Shorter periods apply if the General Meeting is called to adopt a resolution on a capital increase in the context of early intervention measures pursuant to the Act on the Recovery and Resolution of Institutions and Financial Groups (Gesetz zur Sanierung und Abwicklung von Instituten und Finanzgruppen).

The Management Board or the Supervisory Board may also call an extraordinary General Meeting. Shareholders holding in the aggregate at least 5% of the nominal value of Deutsche Bank's share capital may also request that such a meeting be called.

According to the Articles of Association, Deutsche Bank's shares are issued in the form of registered shares. For purposes of registration in the share register, all shareholders are required to notify the bank of the number of shares they hold and, in the case of natural persons, of their surname, first name, address and date of birth and, in the case of legal persons, of their registered name, business address and registered domicile, and in both cases should add an electronic address. Both being registered in the bank's share register and the timely registration for attendance of the General Meeting constitute prerequisite conditions for any shareholder's attendance and exercise of voting rights at the General Meeting. Shareholders may register their attendance of a General Meeting with the Management Board (or as otherwise designated in the invitation) by written notice or electronically, no later than the sixth day immediately preceding the date of that General Meeting. Any shareholders who have failed to comply with certain notification requirements summarized under "Notification Requirements" below are precluded from exercising any rights attached to their shares, including voting rights.

Under German law, upon the bank's request a registered shareholder must inform the bank whether that shareholder owns the shares registered in its name or whether that shareholder holds the shares for any other person as a nominee shareholder. Both the nominee shareholder and the person for whom the shares are held have an obligation to provide the same personal data as required for registration in the share register with respect to the person for whom the shares are held.

Shareholders may appoint proxies to represent them at General Meetings. As a matter of German law, a proxy relating to voting rights granted by shares may be revoked at any time.

As a foreign private issuer, Deutsche Bank is not required to file a proxy statement under U.S. securities law. The proxy voting process for the bank's shareholders in the United States is substantially similar to the process for publicly held companies incorporated in the United States.

The Annual General Meeting normally adopts resolutions on the following matters:

- Appropriation of distributable balance sheet profits (Bilanzgewinn) from the preceding fiscal year;
- Formal ratification of the acts (Entlastung) of the members of the Management Board and the members of the Supervisory Board in the preceding fiscal year; and
- Appointment of independent auditors for the current fiscal year.

A simple majority of votes cast is generally sufficient to approve a measure, except in cases where a greater majority is otherwise required by the bank's Articles of Association or by law. Under the German Stock Corporation Act and the German Transformation Act (Umwandlungsgesetz), certain resolutions of fundamental importance require a majority of at least 75% of the share capital represented at the General Meeting adopting the resolution, in addition to a majority of the votes cast. Such resolutions include the following matters, among others:

- Amendments to the Articles of Association changing the Group's business objectives
- Capital increases that exclude subscription rights
- Capital reductions
- Creation of authorized or conditional capital
- Deutsche Bank's dissolution
- "Transformations" under the German Transformation Act such as mergers, spin-offs and changes in the bank's legal form
- Transfer of all the bank's assets and
- Intercompany agreements (in particular, domination and profit-transfer agreements).

Under certain circumstances, such as when a resolution violates the Articles of Association or the German Stock Corporation Act, shareholders may file a shareholder action with the appropriate Regional Court (Landgericht) in Germany to set aside resolutions adopted at the General Meeting.

Under German law, the rights of shareholders as a group can be changed by amendment of the company's articles of association. Any amendment of the Articles of Association requires a resolution of the General Meeting. The authority to amend the Articles of Association, insofar as such amendments merely relate to the wording, such as changes of the share capital as a result of the issuance of shares from authorized capital, has been assigned to the Supervisory Board by the Articles of Association. Pursuant to the Articles of Association, the resolutions of the General Meeting are taken by a simple majority of votes and, insofar as a majority of capital stock is required, by a simple majority of capital stock, except where law or the Articles of Association determine otherwise. The rights of individual shareholders can only be changed with their consent. Amendments to the Articles of Association become effective upon their registration in the Commercial Register.

Liquidation Rights

The German Stock Corporation Act requires that if the bank is liquidated, any liquidation proceeds remaining after the payment of all the bank's liabilities will be distributed to the bank's shareholders in proportion to their shareholdings.

Changes to the Rights of Shareholders

Under German law, the rights of shareholders as a group can be changed by amendment of the company's Articles of Association. Any amendment of the bank's Articles of Association requires a resolution of the General Meeting. The authority to amend the bank's Articles of Association, insofar as such amendments merely relate to the wording, such as changes of the share capital as a result of the issuance of shares from authorized capital, has been assigned to the bank's Supervisory Board by the bank's Articles of Association. Pursuant to the bank's Articles of Association, the resolutions of the General Meeting are taken by a simple majority of votes and, insofar as a majority of capital stock is required, by a simple majority of capital stock, except where law or the bank's Articles of Association determine otherwise. The rights of individual shareholders can only be changed with their consent. Amendments to the Articles of Association become effective upon their registration in the Commercial Register.

Tradable Subscription Rights

Deutsche Bank may determine that the statutory subscription rights to subscribe for its Ordinary Shares that its shareholders receive when the bank conducts a capital increase for which these rights are not excluded will be traded on a stock exchange. For example, on March 20, 2017, the bank's shareholders received one tradable right per ordinary share, pursuant to a prospectus supplement dated March 20, 2017. The period within which these rights could be exercised expired on April 6, 2017.

The applicable prospectus supplement will describe the specific terms of any such subscription rights offering, including, as applicable:

- the title of the subscription rights;
- the exercise price for the subscription rights;
- the aggregate number of subscription rights issued;
- a discussion of the material U.S. federal, German or other income tax considerations, as well as considerations under the U.S. Employee Retirement Income Security Act of 1974, or "ERISA," applicable to the issuance of ordinary shares together with statutory subscription rights or exercise of the subscription rights;
- any other terms of the subscription rights, including terms, procedures and limitations relating to the exercise of the subscription rights;
- the terms of the ordinary shares corresponding to the subscription rights;
- information regarding the trading of subscription rights, including the stock exchanges, if any, on which the subscription rights will be tradeable;
- the record date, if any, to determine who is entitled to the subscription rights and the ex-rights date;
- the date on which the rights to exercise the subscription rights will commence, and the date on which the rights will expire;
- the extent to which the offering includes a contractual over-subscription privilege with respect to unsubscribed securities; and
- the material terms of any standby underwriting arrangement the bank enters into in connection with the offering.

Each subscription right will entitle its holder to subscribe for a number of the bank's Ordinary Shares at an exercise price described in the applicable prospectus supplement. Subscription rights may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement. After the close of business on the expiration date, all unexercised subscription rights will become void. Upon receipt of payment and, if applicable, the subscription form properly completed and executed at the subscription rights agent's office or another office indicated in the prospectus supplement, the bank will, as soon as practicable, forward Ordinary Shares that can be subscribed for with that exercise. The prospectus supplement may offer more details on how to exercise the subscription rights.

If the bank determines to make appropriate arrangements for rights trading, persons other than the bank's shareholders can acquire rights as described in the prospectus supplement. In the event subscription rights are offered only to the bank's shareholders and their rights remain unexercised, the bank may determine to offer the unsubscribed offered securities to persons other than the bank's shareholders. In addition, the bank may enter into a standby underwriting arrangement with one or more underwriters under which the underwriter or underwriters, as the case may be, will purchase any offered securities remaining unsubscribed for after the offering, as described in the prospectus supplement.

Notification Requirements

Disclosure of Interests in a Listed Stock Corporation

Disclosure Obligations under the German Securities Trading Act

Deutsche Bank AG, as a listed company, and its shareholders are subject to the shareholding disclosure obligations under the German Securities Trading Act (Wertpapierhandelsgesetz). Pursuant to the German Securities Trading Act, any shareholder whose voting interest in a listed company like Deutsche Bank AG, through acquisition, sale or by other means, reaches, exceeds or falls below a 3%, 5%, 10%, 15%, 20%, 25%, 30%, 50% or 75% threshold must notify the bank and the BaFin of its current aggregate voting interest in writing and without undue delay, but at the latest within four trading days. In connection with this requirement, the German Securities Trading Act contains various provisions regarding the attribution of voting rights to the person who actually controls the voting rights attached to the shares.

Furthermore, the voting rights attached to a third party's shares are attributed to a shareholder if the shareholder coordinates its conduct concerning the listed company with the third party (so-called "acting in concert") either through an agreement or other means. Acting in concert is deemed to exist if the parties coordinate their voting at the listed company's general meeting or, outside the general meeting, coordinate their actions with the goal of significantly and permanently modifying the listed company's corporate strategy. Each party's voting rights are attributed to each of the other parties acting in concert.

Shareholders failing to comply with their notification obligations are prevented from exercising any rights attached to their shares (including voting rights and the right to receive dividends) until they have complied with the notification requirements. If the failure to comply with the notification obligations specifically relates to the size of the voting interest in Deutsche Bank AG and is the result of willful or grossly negligent conduct, the suspension of shareholder rights is – subject to certain exceptions in case of an incorrect notification deviating no more than 10% from the actual percentage of voting rights – extended by a six-month period commencing upon the submission of the required notification.

Except for the 3% threshold, similar notification obligations exist for reaching, exceeding or falling below the thresholds described above when a person holds, directly or indirectly, certain instruments other than shares. This applies to instruments which grant upon maturity an unconditional right to acquire existing voting shares of Deutsche Bank AG, a discretionary right to acquire such shares, as well as to instruments that refer to such shares and have an economic effect similar to that of the aforementioned instruments, irrespective of whether such instruments are physically or cash-settled. These instruments include, for example, transferable securities, options, futures contracts and swaps. Voting rights to be attributed to a person based on any such instrument will generally be aggregated with the person's other voting rights deriving from shares or other instruments.

Notice must be given without undue delay, but within four trading days at the latest. The notice period commences as soon as the person obliged to notify knows, or, under the circumstances should know, that his or her voting rights reach, exceed or fall below any of the abovementioned relevant thresholds, but in any event no later than two trading days after reaching, exceeding or falling below the threshold. Only in case that the voting rights reach, exceed or fall below any of the thresholds as a result of an event affecting all voting rights, the notice period might commence at a later stage. Deutsche Bank AG must publish the foregoing notifications without undue delay, but no later than within three trading days after their receipt, and report such publication to the BaFin. Furthermore, Deutsche Bank AG must publish a notification in case of any increase or decrease of the total number of voting rights without undue delay, but within two trading days at the latest, and such notification must be reported to the BaFin and forwarded to the German Company Register (Unternehmensregister). An exception applies where the increase of the total number of voting rights is due to the issue of new shares from conditional capital. In this case, Deutsche Bank AG must publish the increase at the end of the month in which it occurred. However, such increase must also be notified without undue delay, but within two trading days at the latest, where any other increase or decrease of the total number of voting rights triggers the aforementioned notification requirement.

Non-compliance with the disclosure requirements regarding shareholdings and holdings of other instruments may result in a significant fine imposed by the BaFin. In addition, the BaFin publishes, on its website, sanctions imposed, and measures taken indicating the person or entity responsible and the nature of the breach (so-called “naming and shaming”).

Shareholders whose voting rights reach or exceed thresholds of 10% of the voting rights in a listed company, or higher thresholds, are obliged to inform the company within 20 trading days of the purpose of their investment and the origin of the funds used for such investment, unless the articles of association of the listed company provide otherwise. The bank’s Articles of Association do not contain such a provision.

Disclosure Obligations under the German Securities Acquisition and Takeover Act

Pursuant to the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz), any person whose voting interest reaches or exceeds 30% of the voting shares of a listed stock corporation must, within seven working days, publish this fact (including the percentage of its voting rights) on the Internet and by means of an electronically operated financial information dissemination system. In addition, the person must subsequently make a mandatory public tender offer within four weeks to all shareholders of the listed company unless an exemption has been granted. The German Securities Acquisition and Takeover Act contains a number of provisions intended to ensure that shareholdings are attributed to those persons who actually control the voting rights attached to the shares. The provisions regarding coordinated conduct as part of the German Securities Acquisition and Takeover Act (so-called “acting in concert”) and the rules on the attribution of voting rights attached to shares of third parties are the same as the statutory securities trading provisions described above under “Disclosure Obligations under the German Securities Trading Act” except with respect to voting rights of shares underlying instruments whose holders are vested with the right to unilaterally acquire existing voting shares of the listed company or voting rights which may be acquired on the basis of instruments with similar economic effect. If a shareholder fails to provide notice on reaching or exceeding the 30% threshold, or fails to make a public tender offer, the shareholder will be precluded from exercising any rights associated with its shares (including voting and dividend rights) until it has complied with the requirements under the German Securities Acquisition and Takeover Act. In addition, non-compliance with the disclosure requirement may result in a fine.

Disclosure of Participations in a Credit Institution

The German Banking Act (Kreditwesengesetz) requires any person intending to acquire, alone or acting in concert with another person, directly or indirectly, a qualifying holding (bedeutende Beteiligung) in a credit or financial services institution to notify the BaFin and the Bundesbank without undue delay and in writing of the intended acquisition. A qualifying holding is a direct or indirect holding in an undertaking which represents 10% or more of the capital or voting rights or which makes it possible to exercise a significant influence over the management of such undertaking. The required notice must contain information demonstrating, among other things, the reliability of the person or, in the case of a corporation or other legal entity, the reliability of its directors and officers.

A person holding a qualifying holding shall also notify the BaFin and the Bundesbank without undue delay and in writing if he intends to increase the amount of the qualifying holding up to or beyond the thresholds of 20%, 30% or 50% of the voting rights or capital or in such way that the institution comes under such person's control or if such person intends to reduce the participation below 10% or below one of the other thresholds described above.

The BaFin will have to confirm the receipt of a complete notification within two working days in writing to the proposed acquirer. Within a period of 60 working days from the BaFin's written confirmation that a complete notification has been received (assessment period), the BaFin will review and, in accordance with Council Regulation (EU) No 1024/2013 of October 15, 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, forward the notification and a proposal for a decision whether or not to object to the acquisition to the ECB. The ECB will decide whether or not to object to the acquisition on the basis of the applicable assessment criteria. Within the assessment period the ECB may prohibit the intended acquisition in particular if there appears to be reason to assume that the acquirer or its directors and officers are not reliable or that the acquirer is not financially sound, that the participation would impair the effective supervision of the relevant credit institution, that a prospective managing director (Geschäftsleiter) is not reliable or not qualified, that money laundering or financing of terrorism has occurred or been attempted in connection with the intended acquisition, or that there would be an increased risk of such illegal acts as a result of the intended acquisition. During the assessment period the BaFin may request further information necessary for its or the ECB's assessment. Generally, such a request delays the expiration of the assessment period by up to 30 business days. If the information submitted is incomplete or incorrect the ECB may prohibit the intended acquisition.

If a person acquires a qualifying holding despite such prohibition or without making the required notification, the competent authority may prohibit the person from exercising the voting rights attached to the shares. In addition, non-compliance with the disclosure requirement may result in the imposition of a fine in accordance with statutory provisions. Moreover, the competent authority may order that any disposition of the shares requires its approval and may ultimately appoint a trustee to exercise the voting rights attached to the shares or to sell the shares to the extent they constitute a qualifying holding.

Disclosure of Participations in Regulated Subsidiaries

The acquisition of shares in Deutsche Bank AG may trigger an obligation to notify certain national competent authorities in charge of the supervision of regulated subsidiaries of Deutsche Bank AG, provided that such acquisition of shares is treated as an indirect acquisition of a stake in the relevant subsidiaries and the applicable threshold under local law is reached or exceeded. This applies in particular to subsidiaries in a member state of the European Economic Area for which the CRR sets forth a threshold of 10%. Other jurisdictions may apply lower thresholds. For example, because the bank controls Deutsche Bank (Malaysia) Berhad, Section 87(1) of the Malaysian Financial Services Act 2013 requires approval of Bank Negara Malaysia (the Malaysian central bank) of any acquisition of 5% or more of the bank's ordinary shares. Also, because Deutsche Bank controls bank subsidiaries in the United States, including Deutsche Bank Trust Company Americas, and has securities registered under the U.S. Securities Exchange Act of 1934, the U.S. Change in Bank Control Act requires that any person or any persons acting in concert may acquire control of 10% or more of the bank's ordinary shares only subject to the approval of the Federal Reserve Board and other U.S. regulators.

Review by the German Federal Ministry of Economic Affairs and Climate Action of Acquisition of 10% of voting rights or more

Pursuant to the German Foreign Trade Act (Außenwirtschaftsgesetz) and the German Foreign Trade Regulation (Außenwirtschaftsverordnung), acquisitions may be reviewed by the German Federal Ministry of Economic Affairs and Climate Action (the "Ministry") where the initial direct or indirect acquisition of voting rights in a German company by investors from outside the European Union (EU) and the European Free Trade Association (Iceland, Lichtenstein, Norway and Switzerland) exceed 10%, 20% or 25%, or where voting rights in a German company by investors outside the EU or European Free Trade Association exceed 20%, 25%, 40%, 50% or 75% through direct or indirect subsequent acquisitions. Both the thresholds for the applicable initial voting rights (10%, 20% or 25%) and whether a filing obligation exists or not, depend on the industry sector the target company is active in. The Ministry must be notified in writing regarding the conclusion of a contract where the direct or indirect acquisition by an investor from outside the European Union and the European Free Trade Association is 10% or 20% (or where the direct or indirect subsequent acquisitions exceeding 20%, 25%, 40%, 50% or 75% of the voting rights) of the voting rights in a German company which operates certain critical infrastructure (including inter alia certain services in the financial sector) or operates in other certain sensitive sectors (including inter alia certain technologies, IT, telecommunication, healthcare or the media). The Ministry must also be notified in writing regarding the conclusion of a contract where there is a direct or indirect acquisition by an investor from outside Germany of 10% or more of the voting rights in a German company operating in the defense or cryptology sectors (or where the direct or indirect subsequent acquisitions exceeds 20%, 25%, 40%, 50% or 75% of the voting rights). If Deutsche Bank is considered to be a company which operates in any such critical infrastructure or sensitive sector, the Ministry would need to be notified of an acquisition of voting rights in Deutsche Bank that meets the abovementioned thresholds. Pending clearance by the Ministry, an acquisition subject to this notification requirement must not be consummated without clearance and its implementation would be legally void, unless the acquisition is made via a stock exchange in which case the acquisition of voting rights becomes legally effective but the voting rights must not be exercised pending clearance.

Consummating such an acquisition without clearance may also result in administrative fines of up to € 500,000 (acting negligently) or up to five years imprisonment or monetary fines (acting willfully). The acquirer may seek voluntary pre-clearance of a proposed acquisition from the Ministry that is not subject to a mandatory filing. The Ministry may impose conditions on the acquisition, prohibit the acquisition, or require that it is unwound, if the Ministry determines that the acquisition will likely affect the public order or public security of Germany or another EU member state, or in relation to certain projects or programs of interest for the European Union pursuant to the EU-Screening regulation, or likely affects the essential security interests of Germany. The Ministry's decision to review an acquisition must be made within two months following the Ministry's knowledge of the conclusion of the acquisition contract, of the publication of the decision to launch a take-over bid or of the publication of the acquisition of control. The review must be completed within four months following receipt of the complete set of acquisition documents and any additional information requested by the Ministry. The Ministry can extend its review period up to an additional four months. A review is precluded if more than five years have passed since the acquisition.

B. 4.50% Fixed Rate Subordinated Tier 2 Notes Due 2025

Terms defined within this subsection entitled "4.50% Fixed Rate Subordinated Tier 2 Notes Due 2025" are defined only with respect to this subsection. Certain terms, unless otherwise defined herein, have the meaning given to them in the relevant indenture and/or supplemental indenture (as applicable).

General

On April 1, 2015 (the "Issue Date"), Deutsche Bank issued $1,500,000,000 aggregate principal amount of 4.50% fixed rate subordinated Tier 2 notes (the "Subordinated Notes") due April 1, 2025 (the "Maturity Date").

The Subordinated Notes were issued pursuant to a prospectus supplement dated March 27, 2015 and a prospectus dated September 28, 2012. The Subordinated Notes constitute a separate series of subordinated debt securities issued under a subordinated indenture (the "Subordinated Indenture") comprising a base subordinated indenture (the "Base Indenture") entered into on May 21, 2013, as supplemented by a second supplemental subordinated indenture (the "Supplemental Subordinated Indenture") entered into on April 1, 2015, among the bank, Wilmington Trust, National Association, as trustee and Deutsche Bank Trust Company Americas, as initial principal paying agent, transfer agent and registrar and authenticating agent.

The Subordinated Notes and the Subordinated Indenture are governed by and construed in accordance with the laws of the State of New York, except for the subordination provisions of each of the Subordinated Notes and the Subordinated Indenture, which are governed by and construed in accordance with German law.

The Subordinated Notes are admitted to trade on the New York Stock Exchange under the trading symbol "DB 25".

Trustee and Paying Agent Information

Wilmington Trust, National Association (the "Trustee"), acts as the trustee for the Subordinated Notes. The Trustee's contact information is as follows: 116 Mercer Street, Suite 2 R, New York, New York 10012.

Deutsche Bank Trust Company Americas ("DBTCA" or the "Agent") acts as initial principal paying agent, transfer agent and registrar for the Subordinated Notes. DBTCA is a wholly owned subsidiary of Deutsche Bank. DBTCA's contact information is as follows: Deutsche Bank Trust Company Americas, Global Securities Services, Global Transaction Banking, 1 Columbus Circle, 17th Floor, Mail Stop: NYC01-1701, New York, New York 10019-8735.

Interest Payments on the Subordinated Notes

Subject to the imposition of any Resolution Measure (as defined below) or any redemption prior to the Maturity Date in the limited circumstances described in this section, the Subordinated Notes will bear interest from (and including) the Issue Date to (but excluding) the Maturity Date at a rate of 4.50% per year. Interest will be payable semi-annually in arrears on April 1 and October 1 of each year, commencing on October 1, 2015 (an "Interest Payment Date"). Interest on the Subordinated Notes will be computed on the basis of a 360-day year of twelve 30-day months. The regular record dates for the Subordinated Notes will be the Business Day immediately preceding the relevant Interest Payment Date.

If any scheduled Interest Payment Date is not a Business Day, the bank will pay interest on the next Business Day, but interest on that payment will not accrue during the period from and after the scheduled Interest Payment Date. If the scheduled Maturity Date or date of redemption or repayment is not a Business Day, the bank may pay interest and principal on the next succeeding Business Day, but interest on that payment will not accrue during the period from and after the scheduled Maturity Date or date of redemption or repayment.

"Business Day" means a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in New York City and London.

Payment of principal of, interest on and other amounts owing under the Subordinated Notes, so long as the Subordinated Notes are represented by global securities, will be made to the account of the Depositary, as holder of the global notes, by wire transfer of immediately available funds. The bank expects that the Depositary, upon receipt of any payment, will immediately credit its participants' accounts in amounts proportionate to their respective beneficial interests in the global notes as shown on the records of the Depositary. The bank also expects that payments by the Depositary's participants to owners of beneficial interests in the global notes will be governed by standing customer instructions and customary practices and will be the responsibility of those participants.

Resolution Measures

References to "holders" in this subsection "—Resolution Measures" means the holders of the Subordinated Notes (including the beneficial owners). "Beneficial owner" means (i) if any Subordinated Notes are in global form, the beneficial owners of such Subordinated Notes (and any interest therein) and (ii) if any securities are in definitive form, the holders in whose name such Subordinated Notes are registered in the security register, and any beneficial owners holding an interest in such Subordinated Notes in definitive form.

By acquiring any Subordinated Notes, holders are bound by and are deemed to have consented to the imposition of any Resolution Measure (as defined below) by the bank's competent resolution authority.

Under the relevant resolution laws and regulations as applicable to the bank from time to time, the Subordinated Notes may be subject to the powers exercised by the bank's competent resolution authority to:

- write down, including write down to zero, the claims for payment of the principal amount, the interest amount or any other amount in respect of the Subordinated Notes;
- convert the Subordinated Notes into ordinary shares of (A) the bank, (B) any entity of the bank's group or (C) any bridge bank, or other instruments qualifying as common equity tier 1 capital (and the issue to or conferral on the holders (including the beneficial owners) of the Subordinated Notes of such ordinary shares or instruments); and/or
- apply any other resolution measure, including, but not limited to, (i) any transfer of the Subordinated Notes to another entity, (ii) the amendment, modification or variation of the terms and conditions of the Subordinated Notes or (iii) the cancellation of the Subordinated Notes.

Each of these measures is referred to as a "Resolution Measure." Resolution Measures include, among others, the measures generally referred to within the meaning of the "bail-in tool" under the Bank Recovery and Resolution Directive as implemented by the Resolution Act. For the avoidance of doubt, any non-payment by the bank arising out of any such Resolution Measure will not constitute a failure by the bank under the terms of the Subordinated Notes or the Subordinated Indenture to make a payment of principal of, interest on, or other amounts owing under the Subordinated Notes.

The term "competent resolution authority" means any authority with the ability to exercise a Resolution Measure.

The terms and conditions of the Subordinated Notes will continue to apply in relation to the residual principal amount of, or outstanding amount payable in respect of, the Subordinated Notes, subject to any modification of any amount of interest payable to reflect the reduction of the principal amount, and any further modification of the terms that the bank's competent resolution authority may decide in accordance with applicable laws and regulations relating to the resolution of banks, banking group companies, credit institutions and/or investment firms incorporated in the Federal Republic of Germany.

No repayment of any then-current principal amount of the Subordinated Notes or payment of interest or any other amount thereon (to the extent of the portion thereof affected by the imposition of a Resolution Measure) shall become due and payable after the imposition of any Resolution Measure by the bank's competent resolution authority, unless such repayment or payment would be permitted to be made by the bank under the laws and regulations of the Federal Republic of Germany then applicable to the bank.

Upon the imposition of a Resolution Measure by the bank's competent resolution authority with respect to the Subordinated Notes, the bank will provide a written notice directly to the holders in accordance with the Subordinated Indenture as soon as practicable regarding such imposition of a Resolution Measure by a competent resolution authority for purposes of notifying holders of such occurrence. The bank will also deliver a copy of such notice to the Trustee and the agents for information purposes, and the Trustee and the agents will be entitled to rely, and will not be liable for relying, on the bank's competent resolution authority and the Resolution Measure identified in such notice. Any delay or failure by the bank to give notice will not affect the validity or enforceability of any Resolution Measure nor the effects thereof on the Subordinated Notes.

If the bank has elected to redeem any Subordinated Notes but the bank's competent resolution authority has imposed a Resolution Measure with respect to the Subordinated Notes prior to the payment of the redemption amount for the Subordinated Notes, the relevant redemption notice shall be automatically rescinded and shall be of no force and effect, and no payment of the redemption amount will be due and payable.

Upon the imposition of any Resolution Measure by the bank's competent resolution authority, the Trustee will not be required to take any further directions from holders of the Subordinated Notes under Section 5.09 of the Base Indenture, which section authorizes holders of a majority in aggregate principal amount of the Subordinated Notes at the time outstanding to direct certain actions relating to the Subordinated Notes, and if any such direction was previously given under Section 5.09 of the Base Indenture to the Trustee by the holders, it will automatically cease to be effective, be null and void and have no further effect.

The Subordinated Indenture shall impose no duties, obligations or liabilities upon the Trustee or the agents whatsoever with respect to the imposition of any Resolution Measure by the bank's competent resolution authority, and the Trustee and the agents will be fully protected in acting or refraining from acting in accordance with a Resolution Measure. Notwithstanding the foregoing, if, following the completion of the imposition of a Resolution Measure by the bank's competent resolution authority, the Subordinated Notes remain outstanding (for example, if the imposition of a Resolution Measure results in only a partial write-down of the principal of the Subordinated Notes), then the Trustee's and the agents' duties under the Subordinated Indenture will remain applicable with respect to the Subordinated Notes following such completion to the extent that the bank, the Trustee and agents agree pursuant to a supplemental indenture, unless the bank, the Trustee and the agents agree that a supplemental indenture is not necessary.

If the bank's competent resolution authority imposes a Resolution Measure with respect to less than the total outstanding principal amount of the Subordinated Notes, unless the Trustee or the agents are otherwise instructed by the bank or the bank's competent resolution authority, any cancellation, write-off or conversion into equity made in respect of the Subordinated Notes pursuant to the Resolution Measure will be made on a substantially pro rata basis among the Subordinated Notes.

Deemed Agreement to Resolution Measures

By an investor's acquisition of the Subordinated Notes, it is deemed irrevocably to have agreed, and it agrees:

- to be bound by any Resolution Measure;

- that it will have no claim or other right against the bank arising out of any Resolution Measure; and

- that the imposition of any Resolution Measure will not constitute a default or an event of default (i) under the Subordinated Notes, (ii) under the Subordinated Indenture or (iii) for the purpose of the Trust Indenture Act (including, without limitation, Section 315(b) (Notice of Default) and Section 315(c) (Duties of the Trustee in Case of Default) of the Trust Indenture Act).

By an investor's acquisition of the Subordinated Notes, it has waived, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the Trustee and the agents for, has agreed not to initiate a suit against the Trustee or the agents in respect of, and has agreed that the Trustee and agents will not be liable for, any action that the Trustee or any of the agents takes, or abstains from taking, in either case in accordance with the imposition of a Resolution Measure by the bank's competent resolution authority with respect to the Subordinated Notes.

By an investor's acquisition of the Subordinated Notes, it is deemed irrevocably to have (i) consented to the imposition of any Resolution Measure as it may be imposed without any prior notice by the bank's competent resolution authority of its decision to exercise such power with respect to the Subordinated Notes and (ii) authorized, directed and requested the Depositary and any direct participant in the Depositary or other intermediary through which the investor hold such Subordinated Notes to take any and all necessary action, if required, to implement the imposition of any Resolution Measure with respect to the Subordinated Notes as it may be imposed, without any further action or direction on the investor's part or on the part of the Trustee or the agents.

Payment of Additional Amounts

All amounts payable in respect of the Subordinated Notes will be made without deduction or withholding for or on account of any present or future taxes, duties or governmental charges of any nature whatsoever imposed or levied by way of deduction or withholding by or on behalf of the Federal Republic of Germany or any political subdivision or any authority thereof or therein having power to tax ("Withholding Taxes"), unless such deduction or withholding is required by law.

In such event, the bank will, to the fullest extent permitted by law, pay such additional amounts of principal and interest (referred to as "Additional Amounts") as will be necessary in order that the net amounts received by the holders, after such withholding or deduction, will equal the respective amounts which would otherwise have been receivable in the absence of such withholding or deduction; except that no such Additional Amounts shall be payable on account of any taxes, duties or governmental charges which:

- are payable by any person acting as custodian bank or collecting agent on the holder's behalf, or otherwise in any manner which does not constitute a deduction or withholding by the bank from payments of principal or interest made by the bank; or

- are payable by reason of the holder having, or having had, some personal or business connection with the Federal Republic of Germany and not merely by reason of the fact that payments in respect of the Subordinated Notes are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, the Federal Republic of Germany; or

- are deducted or withheld pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty or understanding relating to such taxation and to which the Federal Republic of Germany or the European Union is a party; or

- any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty or understanding; or

- are presented for payment more than 30 days after the Relevant Date (as defined below) except to the extent that the holder would have been entitled to additional amounts on presenting the same for payment on the last day of the period of 30 days assuming that day to have been a Business Day; or

- are withheld or deducted in relation to a Subordinated Note that is presented for payment by or on the holder's behalf if the holder would have been able to avoid such withholding or deduction by presenting the relevant Subordinated Note to another paying agent in a member state of the European Union; or

- are deducted or withheld by a paying agent from a payment if the payment could have been made by another paying agent without such deduction or withholding; or

- would not be payable if the Subordinated Notes had been kept in safe custody with, and the payments had been collected by, a banking institution; or

- are payable by reason of a change in law or practice that becomes effective more than 30 days after the relevant payment of principal or interest becomes due, or is duly provided for and notice thereof is given in accordance with the Notices section below, whichever occurs later.

"Relevant Date" means the date on which the payment first becomes due but, if the full amount payable has not been received by the paying agent on or before the due date, it means the date on which, the full amount having been so received.

Moreover, all amounts payable in respect of the Subordinated Notes will be made subject to compliance with Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986 (the "Code", commonly referred to as the "Foreign Account Tax Compliance Act" or "FATCA") and any applicable agreement described in Section 1471(b) of the Code. The bank will have no obligation to pay additional amounts or otherwise indemnify a holder in connection with any such compliance with the Code.

Redemption

Unless previously redeemed or purchased and cancelled, the Subordinated Notes will be redeemed on the Maturity Date at 100% of their principal amount together with any accrued and unpaid interest to (but excluding) the Maturity Date.

Tax Redemption

Subject to the prior consent of the bank's competent supervisory authority, the bank may redeem all, but not some, of the Subordinated Notes, at any time at the bank's option, at 100% of their principal amount together with any accrued and unpaid interest to (but excluding) the date set for redemption if, as a result of any change in, or amendment to, the laws or regulations prevailing in the Federal Republic of Germany or the United States, which becomes effective on or after the Issue Date, or as a result of any application or official interpretation of such laws or regulations not generally known before the Issue Date, Withholding Taxes are or there is a substantial probability that they will be leviable on payments of principal or interest in respect of the Subordinated Notes, and such Withholding Taxes would be payable by the bank as a result of the bank's obligation to pay Additional Amounts, as described above. The bank may exercise such redemption right on giving not less than 30 days' notice to the holders of the Subordinated Notes. No such notice of redemption will be given earlier than 90 days prior to the earliest date on which the bank would be obligated to withhold or pay Withholding Taxes, were a payment in respect of the Subordinated Notes then made.

Redemption for Regulatory Reasons

Subject to the prior consent of the bank's competent supervisory authority, the bank may redeem all, but not some, of the Subordinated Notes, at any time at the bank's option, at 100% of their principal amount together with any accrued and unpaid interest to (but excluding) the date set for redemption if the bank determines, in its own discretion, that (i) the bank may not treat the Subordinated Notes in their full aggregate principal amount as Tier 2 capital for the purposes of the bank's own funds in accordance with applicable law, other than for reasons of an amortization in accordance with Article 64 of the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRR), or (ii) the bank is subject to any other form of a less advantageous regulatory own funds treatment with respect to the Subordinated Notes than was the case as of the Issue Date. Notice of such redemption will be given to the holders of the Subordinated Notes upon not less than 30 and not more than 60 days prior to the date of redemption. Any such notice will be given in accordance with the section "—Notices" below, only after the bank having received the consent of the bank's competent supervisory authority. Subject to the provisions described in the section "—Resolutions Measure", notice will be irrevocable and shall state the date set for redemption and the reason for redemption.

Repurchase

Any redemption or repurchase of the Subordinated Notes prior to their scheduled maturity will require the prior consent of the bank's competent supervisory authority. If the Subordinated Notes are redeemed or repurchased by the bank otherwise than in the circumstances described in "—Redemption", then the amounts redeemed or paid must be returned to the bank irrespective of any agreement to the contrary unless the bank's competent supervisory authority has given its consent to such early redemption or repurchase.

Subject to the limits described above and only if, when and to the extent that any such purchase is not prohibited by applicable capital regulations, the bank may at any time purchase Subordinated Notes in the open market or otherwise and at any price. Subordinated Notes purchased by the bank may, at the bank's option, be held, resold or surrendered to the agents for cancellation.

Ranking and Status

The Subordinated Notes constitute the bank's direct, unconditional, unsecured and subordinated obligations and are subordinate to the claims of the bank's unsubordinated creditors (including claims against the bank under the bank's unsubordinated non-preferred debt instruments within the meaning of Section 46f(6) sentence 1 of the German Banking Act (Kreditwesengesetz) (including the bank's obligations under any such debt instruments that the bank issued before July 21, 2018 and that are subject to Section 46f(9) sentence 2 of the German Banking Act) or any successor provision thereof). They rank at least on parity with the claims of the holders of all the bank's other subordinated indebtedness, except as otherwise provided by applicable law or the terms of any such other indebtedness, and in particular, they rank in priority to the claims of the holders of any of the bank's subordinated indebtedness that by its express terms or by operation of law is stated to rank junior to the Subordinated Notes. Any right to set off any claims for interest, repayment and any other claims under the Subordinated Notes (referred to as "Payment Claims"), against claims of the bank will be excluded. No collateral or guarantee will be given to secure Payment Claims. The Payment Claims will be subordinated in the event of the bank's insolvency or liquidation to the claims of all other creditors which are not also subordinated (including claims against the bank under the bank's unsubordinated non-preferred debt instruments within the meaning of Section 46f(6) sentence 1 of the German Banking Act (Kreditwesengesetz) (including the bank's obligations under any such debt instruments that the bank issued before July 21, 2018 and that are subject to Section 46f(9) sentence 2 of the German Banking Act) or any successor provision thereof) and will, in any such event, only be satisfied after all such claims against the bank which are not subordinated have been satisfied in full. No subsequent agreement may limit the subordination pursuant to the provisions set out in this paragraph or shorten the term of the Subordinated Notes or any applicable notice period.

Further Issuances

The bank may, from time to time, without the consent of the holders of the Subordinated Notes, issue additional notes under the Subordinated Indenture having the same ranking and same interest rate, maturity date, redemption terms and other terms as the Subordinated Notes except for the price to the public and issue date. Any such additional notes, together with the Subordinated Notes, may constitute a single series of securities under the Subordinated Indenture, provided that if such additional notes have the same CUSIP, ISIN or other identifying number as the outstanding Subordinated Notes, such additional notes must either (i) be issued with no more than a de minimis amount of original issue discount for U.S. federal income tax purposes or (ii) be otherwise issued in a qualified reopening for U.S. federal income tax purposes. There is no limitation on the amount of notes or other debt securities that the bank may issue under the Subordinated Indenture.

Event of Default

An "Event of Default" with respect to the Subordinated Notes means the opening of insolvency proceedings against the bank by a German court having jurisdiction over the bank.

There are no other events of default under the Subordinated Notes. In particular, neither non-viability (as defined under the laws governing the supervision of financial institutions, as applicable in the Federal Republic of Germany) nor the imposition of a Resolution Measure will constitute an Event of Default with respect to the Subordinated Indenture or the Subordinated Notes.

If an Event of Default occurs or is continuing, the Trustee or the holder or holders of not less than 33 1/3% in aggregate principal amount of all outstanding subordinated debt securities issued under the Base Indenture, voting as one class, by notice in writing to the bank, may declare the principal amount of the Subordinated Notes and interest accrued thereon to be due and payable immediately in accordance with the terms of the Subordinated Indenture.

If the bank does not make payments of principal of, interest on, or other amounts owing under the Subordinated Notes when due for reasons other than (i) pursuant to the subordination provisions of the Subordinated Notes or (ii) due to a Resolution Measure, the bank will be in default on the bank's obligations under the Subordinated Indenture. In such case, the Trustee and the holders of the Subordinated Notes may take action against the bank, but they may not accelerate the maturity of the Subordinated Notes. If the bank fails to make any payments of principal of, interest on or other amounts owing under the Subordinated Notes when due (i) pursuant to the subordination provisions of the Subordinated Notes or (ii) due to a Resolution Measure, the Trustee and the holders of the Subordinated Notes will not be permitted to take such action. Moreover, in the event of a Resolution Measure, an investor may permanently lose the right to the affected amounts, and an investor (including Beneficial Holders) will, by acquiring any Notes, be bound, and will be deemed to have consented. Furthermore, if the bank becomes subject to German insolvency proceedings, the Trustee and holders of the Subordinated Notes will have no right to file a claim against the bank unless the competent insolvency court allows the filing of subordinated claims.

Upon the occurrence of any Event of Default or any default in the payment of principal of, interest on, or other amounts owing under the Subordinated Notes, the bank will give prompt written notice to the Trustee. In accordance with the Subordinated Indenture, the Trustee may proceed to protect and enforce its rights and the rights of the holders of the Subordinated Notes whether in connection with any breach by the bank of the bank's obligations under the Subordinated Notes, the Subordinated Indenture or otherwise, by such judicial proceedings as the Trustee will deem most effective, provided that the bank will not, as a result of the bringing of such judicial proceedings, be required to pay any amount representing or measured by reference to principal or interest on the Subordinated Notes prior to any date on which the principal of, or any interest on, the Subordinated Notes would have otherwise been payable.

Other than the limited remedies specified above, no remedy against the bank will be available to the Trustee or the holders of the Subordinated Notes whether for the recovery of amounts owing in respect of such Subordinated Notes or under the Subordinated Indenture or in respect of any breach by the bank of the bank's obligations under the Subordinated Indenture or in respect of the Subordinated Notes, except that the Trustee and the holders will have such rights and powers as they are required to have under the Trust Indenture Act, and provided that any payments are subject to the subordination provisions of the Subordinated Notes and the Subordinated Indenture, and any Resolution Measure.

Trustee and Paying Agent Indemnification Provisions

The bank has agreed to pay to the Trustee and Agent from time to time, and the Trustee and Agent shall be entitled to, the compensation agreed in writing between the bank and the Trustee or Agent (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) and the bank covenanted and agreed to pay or reimburse the Trustee, Agent and each predecessor Trustee and Agent upon its request for all reasonable expenses, disbursements and advances incurred or made by or on behalf of it in accordance with any of the provisions of the Subordinated Indenture by pursuant to which the Subordinated Notes were issued (including the reasonable compensation and the expenses and disbursements of its counsel and of all agents and other Persons not regularly in its employ) except any such expense, disbursement or advance as may arise from its negligence or willful misconduct. The bank must also indemnify the Trustee, Agent and each predecessor Trustee and Agent and all of their respective officers, directors and employees, for and to hold it harmless against, any loss, liability or expense incurred without negligence or willful misconduct on its part, arising out of or in connection with the acceptance or administration of this Subordinated Indenture or the trusts hereunder and its duties hereunder, including the costs and expenses of defending itself against or investigating any claim of liability in the premises. The bank's obligations to compensate and indemnify the Trustee, Agent and each predecessor Trustee and Agent and to pay or reimburse the Trustee, Agent and each predecessor Trustee and Agent for expenses, disbursements and advances shall constitute additional indebtedness hereunder and will survive the satisfaction and discharge of this Subordinated Indenture.

Notices

Notices to be given to holders of Subordinated Notes represented by a global note will be given only to the Depositary, as the registered holder, in accordance with its applicable policies as in effect from time to time. The bank expects that any such notices will be passed on by the Depositary to the beneficial owners of interests in the Subordinated Notes in accordance with the standard rules and procedures of the Depositary and its direct and indirect participants, including Clearstream, Luxembourg and the Euroclear operator. Notices to be given in respect of Subordinated Notes held in street name will be given only to the bank, broker or other financial institution in whose name the Subordinated Notes are registered, and not the owner of any beneficial interests. Notices to be given to holders of certificated (i.e., definitive) Subordinated Notes will be sent by mail to the respective addresses of the holders as they appear in the note register, and will be deemed given when mailed.

Modification of the Terms of the Subordinated Notes or Rights of Holders

Modifications without Consent of the Holders

The bank and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental hereto for one or more of the following purposes:

a) to evidence the succession of another corporation to the bank, or successive successions, and the assumption by the successor corporation of the covenants, agreements and the bank's obligations pursuant to Article 9 of the Base Indenture;

b) to add to the bank's covenants such further covenants, restrictions, conditions or provisions as the bank and the Trustee shall consider to be for the protection of the Holders of subordinated Notes or Coupons;

c) to cure any ambiguity or to correct or supplement any provision contained in the Subordinated Indenture or in any supplemental indenture which may be defective or inconsistent with any other provision contained in the Subordinated Indenture or in any supplemental indenture, or to make any other provisions as the bank may deem necessary or desirable, provided that no such action shall adversely affect the interests of the Holders of the Subordinated Notes or Coupons;

d) to establish the forms or terms of Subordinated Notes of any series or of the Coupons appertaining to such Subordinated Notes as permitted by Sections 2.01 and 2.03 of the Base Indenture; and

e) to evidence and provide for the acceptance of appointment under the Subordinated Indenture by a successor trustee with respect to the Subordinated Notes of one or more series and to add to or change any of the provisions of the Base Indenture as shall be necessary to provide for or facilitate the administration of the trusts under the Subordinated Indenture by more than one trustee, pursuant to the requirements of Section 6.11 of the Base Indenture.

The Trustee is authorized to join with the bank in the execution of any such supplemental indenture, to make any further appropriate agreements and stipulations which may be therein contained, but the Trustee shall not be obligated to enter into any such supplemental indenture which affects the Trustee's own rights, duties, liabilities or immunities under the Base Indenture or otherwise.

Any supplemental indenture authorized by the foregoing provisions may be executed without the consent of the Holders of any of the Subordinated Notes at the time outstanding, notwithstanding any of the provisions of Section 8.02 of the Base Indenture.

Modifications with Consent of the Holders

With the consent (evidenced as provided in Article 7 of the Base Indenture) of the Holders of not less than a majority in aggregate principal amount of the Subordinated Notes at the time Outstanding of all series affected by such supplemental indenture (voting as one class), the bank, when authorized by a resolution of its Board (which resolution may provide general terms or parameters for such action and may provide that the specific terms of such action may be determined in accordance with or pursuant to an Issuer Order), and the Trustee may, from time to time and at any time, enter into an indenture or indentures supplemental to the Subordinated Indenture for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Base Indenture or of any supplemental indenture or of modifying in any manner the rights of the Holders of the Subordinated Notes of each such series or of the Coupons appertaining to such Subordinated Note; provided, that no such supplemental indenture shall (a) (i) change the final maturity of any Subordinated Note, (ii) reduce the principal amount thereof, (iii) reduce the rate or change the time of payment of interest thereon, (iv) reduce any amount payable on redemption thereof, (v) make the principal thereof (including any amount in respect of original issue discount), or interest thereon payable in any coin or currency other than that provided in the Subordinated Notes and Coupons or in accordance with the terms thereof, (vi) modify or amend any provisions for converting any currency into any other currency as provided in the Subordinated Notes or Coupons or in accordance with the terms thereof, (vii) reduce the amount of the principal of an Original Issue Discount Security that would be provable in bankruptcy pursuant to Section 5.02, (viii) modify or amend any provisions relating to the conversion or exchange of the Subordinated Notes or Coupons for securities of the bank or of other entities or other property (or the cash value thereof), including the determination of the amount of securities or other property (or cash) into which the Subordinated Notes shall be converted or exchanged, other than as provided in the antidilution provisions or other similar adjustment provisions of the Subordinated Notes or Coupons or otherwise in accordance with the terms thereof, (ix) alter the provisions of Section 11.11 or 11.13 of the Base Indenture or impair or affect the right of any Subordinated Note Holder to institute suit for the payment thereof or, if the Subordinated Notes provide therefor, any right of repayment at the option of the Subordinated Note Holder, (x) modify the provisions of the Base Indenture with respect to the subordination of the Subordinated Notes in a manner adverse to the Holders, in each case without the consent of the Holder of each Subordinated Note so affected; or (b) reduce the aforesaid percentage of Subordinated Notes of any series, the consent of the Holders of which is required for any such supplemental indenture, without the consent of each Subordinated Note Holder so affected.

Upon the bank’s request, and upon the filing with the Trustee of evidence of the consent of the Holders of the Subordinated Notes as aforesaid and other documents, if any, required by Section 7.01 of the Base Indenture, the Trustee shall join with the bank in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee’s own rights, duties, liabilities or immunities under the Base Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such supplemental indenture.

It shall not be necessary for the consent of the Holders of the Subordinated Notes under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof.

Notwithstanding the foregoing, any amendment made solely to conform the provisions of the Supplemental Subordinated Indenture to the description of the Subordinated Notes contained the bank’s prospectus supplement dated March 27, 2015 will not be deemed to adversely affect the interests of the Holders of the Subordinated Notes.

Form, Transfer, Beneficial Ownership and Denomination of the Subordinated Notes

The bank issued the Subordinated Notes in fully registered, global (i.e., book-entry) form. Book-entry interests in the Subordinated Notes were issued in minimum denominations of $200,000 and in integral multiples of $1,000 in excess thereof. The Subordinated Notes are represented by global securities in the name of Cede & Co., the nominee of the Depositary Trust Company (the "Depositary"). Beneficial interests in the Subordinated Notes are held through the Depositary and its participants.

Purchases of the Subordinated Notes under the Depositary's system must be made by or through its direct participants, which will receive a credit for the Subordinated Notes on the Depositary's records. The ownership interest of each actual purchaser of each Subordinated Note (the "beneficial owner") is in turn to be recorded on the records of direct and indirect participants. Beneficial owners will not receive written confirmation from the Depositary of their purchase, but beneficial owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the direct or indirect participants through which the beneficial owner entered into the transaction. Transfers of ownership interests in the Subordinated Notes are to be made by entries on the books of direct and indirect participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in Subordinated Notes, except in the event that use of the book-entry system for the Subordinated Notes is discontinued.

To facilitate subsequent transfers, all Subordinated Notes deposited with the Depositary are registered in the name of Cede & Co, or such other name as may be requested by the Depositary. The deposit of Subordinated Notes with the Depositary and their registration in the name of Cede & Co. or such other nominee of the Depositary do not effect any change in beneficial ownership. The Depositary has no knowledge of the actual beneficial owners of the Subordinated Notes; the Depositary's records reflect only the identity of the direct participants to whose accounts the Subordinated Notes are credited, which may or may not be the beneficial owners. The participants will remain responsible for keeping account of their holdings on behalf of their customers.

Waiver of Right to Set-Off

By accepting a Subordinated Note, each holder is deemed to have waived any right of set-off, counterclaim or combination of accounts with respect to such Subordinated Note or the Subordinated Indenture (or between the bank's obligations under or in respect of any Subordinated Note and any liability owed by a holder) that they might otherwise have against the bank, whether before or during the banks winding up or administration, and no holder may set off its claims arising under the Subordinated Notes against any of the bank's claims.

Replacement of Subordinated Notes

At the expense of the holder, the bank may, in its discretion, replace any Subordinated Notes that become mutilated, destroyed, lost or stolen or are apparently destroyed, lost or stolen. The mutilated Subordinated Notes must be delivered to the trustee, the paying agent and the registrar or satisfactory evidence of the destruction, loss or theft of the Subordinated Notes must be delivered to the bank, the paying agent, the registrar and the trustee. At the expense of the holder, an indemnity that is satisfactory to the bank, the principal paying agent, the registrar, in the case of registered Subordinated Notes, and the Trustee may be required before a replacement Subordinated Note will be issued.

C. Series A Global Notes – DB Gold Linked Exchange Traded Notes

Terms defined within this subsection entitled "Series A Global Notes – DB Gold Linked Exchange Traded Notes" are defined only with respect to this subsection. Certain terms, unless otherwise defined herein, have the meaning given to them in the relevant indenture and/or supplemental indenture (as applicable).

General

Deutsche Bank AG, London Branch ("Deutsche Bank", or "the bank") offered three separate Exchange Traded Notes (the "Debt Securities") pursuant to a pricing supplement dated February 27, 2008, a prospectus supplement dated November 13, 2006, and a prospectus dated October 10, 2006. The Debt Securities were issued pursuant to a senior indenture (the "Base Indenture"), dated as of November 22, 2006, as supplemented by a third supplemental indenture dated January 1, 2016 (the "Third Supplemental Senior Indenture"), and a fourth supplemental indenture dated as of March 15, 2016 (the "Fourth Supplemental Senior Indenture", together with the Base Indenture and the Third Supplemental Senior Indenture, the "Indenture") among Deutsche Bank Aktiengesellschaft, Law Debenture Trust Company of New York (succeeded by Delaware Trust Company on December 15, 2016), as trustee, and Deutsche Bank Trust Company Americas, as paying agent, issuing agent and registrar (the "Indenture"). The following Debt Securities are admitted to trade on the NYSE Arca:

- DB Gold Double Short Exchange Traded Notes due February 15, 2038 ("Gold Double Short ETNs") (Trading Symbol: "DZZ")

- DB Gold Double Long Exchange Traded Notes due February 15, 2038 ("Gold Double Long ETNs") (Trading Symbol: "DGP")

- DB Gold Short Exchange Traded Notes due February 15, 2038 ("Gold Short ETNs") (Trading Symbol: "DGZ")

- The Gold Double Short ETNs include additional securities of the same series offered in offerings made around November 10, 2010 and August 26, 2011. The Gold Double Long ETNs include additional securities of the same series offered in an offering made around October 9, 2008.

- The Debt Securities do not guarantee any return of principal at maturity and do not pay any interest during their term. Any payment at maturity or upon a repurchase at the investor's option is subject to the bank's ability to pay its obligations as they become due.

- For each Debt Security, investors will receive a cash payment at maturity or upon repurchase by the bank, if any, linked to the month-over-month performance of the Deutsche Bank Liquid Commodity Index – Optimum Yield Gold™ (the "Index"), less an investor fee. The return on the Index is derived by combining the returns on two component indices: the DB 3-Month T-Bill Index and the Deutsche Bank Liquid Commodity Index – Optimum Yield Gold™ Excess Return (the "gold index"). The Gold Double Short ETNs and Gold Short ETNs offer investors short, or inverse, exposure to the gold index, meaning the value of the Gold Double Short ETNs and the Gold Short ETNs will increase with monthly depreciations and decrease with monthly appreciations of the gold index. Gold Double Long ETNs offer investors long exposure to the gold index, meaning the value of the Gold Double Long ETNs will increase with monthly appreciations and decrease with monthly depreciations in the gold index. In addition, Gold Double Short ETNs and Gold Double Long ETNs are two-times leveraged with respect to the gold index and, as a result, will benefit from two times any beneficial monthly performance, but will be exposed to two times any adverse monthly performance, of the gold index. The TBill index and the gold index are each referred to as a "sub-index" and together as "sub-indices."

The Debt Securities and the Indenture are governed by, and construed in accordance with, the laws of the State of New York.

Trustee and Paying Agent Information

The trustee for the Debt Securities is Delaware Trust Company (the "trustee"). The contact information for the trustee is as follows: Delaware Trust Company, Attn: Corporate Trust Administration, Delaware Trust Company, 251 Little Falls Drive, Wilmington, DE 19808.

Deutsche Bank Trust Company Americas ("DBTCA") acts as paying agent, issuing agent and registrar for the Debt Securities. DBTCA is a wholly owned subsidiary of Deutsche Bank and its contact information is as follows: Deutsche Bank Trust Company Americas, Global Securities Services, Global Transaction Banking, 1 Columbus Circle, 17th Floor, Mail Stop: NYC01-1701, New York, New York 10019-8735.

Payment at Maturity

A Holder of the Debt Securities (a "Holder") who holds the Debt Securities to maturity, subject to the bank's credit, will receive a payment per security, if any, that will depend on the month-over-month performance of the Index as reflected in the current principal amount and index factor for the particular offering of Debt Securities, reduced by the investor fee.

If the repurchase value on any trading day equals zero for a particular offering of Debt Securities, those Debt Securities will be automatically accelerated on that day for an amount equal to the zero repurchase value and the Holders will not receive any payment in respect of their investment.

At maturity, the payment per security, if any, will be calculated as:

Current principal amount × applicable index factor on the final valuation date × fee factor on the final valuation date

where,

Current principal amount = For the initial calendar month, the current principal amount was equal to $25.00 per security. For each subsequent calendar month, the current principal amount will be reset as follows on the monthly reset date:

New current principal amount = Previous current principal amount x applicable index factor on the applicable monthly valuation date x fee factor on the applicable monthly valuation date

Index factor

Index factor for Gold Double Short ETNs:

= 1 + TBill index return – (2 × gold index return)

Index factor for Gold Double Long ETNs:

= 1 + TBill index return + (2 x gold index return)

Index factor for Gold Short ETNs:

= 1 + TBill index return – gold index return *where,*

Gold index return = (Gold index closing level – gold index monthly initial level) / Gold index monthly initial level

TBill index return = (TBill index closing level – TBill index monthly initial level) / TBill index monthly initial level

Fee factor = On any given day, the fee factor is calculated as follows:

1 – (investor fee x day count fraction)

where,

Investor fee = 0.75% per annum

Day count fraction = For each calendar month, the day count fraction will equal a fraction, the numerator of which is the number of days elapsed from and including the monthly reset date (or the inception date in the case of the initial calendar month) to and including the immediately following monthly valuation date (or the trading day, valuation date or final valuation date, as applicable) and the denominator of which is 365.

For the initial calendar month, the gold index monthly initial level was equal to 98.05, the gold index closing level on the inception date. For each subsequent calendar month, the gold index monthly initial level is equal to the gold index closing level as of the opening of trading on the monthly reset date for that calendar month.

The gold index closing level is equal the closing level of the gold index as reported on Bloomberg page "DGLDIX <Index>", subject to the occurrence of a market disruption event as described under "—Market Disruption Events"; provided that on any calendar day which is not a day on which the closing level of the gold index is published, the gold index closing level will equal such level on the immediately preceding trading day.

For the initial calendar month, the TBill index monthly initial level was equal to 233.8312, the TBill index closing level on the inception date. For each subsequent calendar month, the TBill index monthly initial level will equal the TBill index closing level as of the opening of trading on the monthly reset date for that calendar month.

The TBill index closing level will equal the closing level of the TBill index as reported on Bloomberg page "DBTRBL3M<Index>", subject to the occurrence of a market disruption event as described under "—Market Disruption Events".

The inception date is February 27, 2008.

The monthly reset date, for each calendar month, is the first calendar day of that month beginning on April 1, 2008 and ending on February 1, 2038.

The monthly valuation date, for each monthly reset date, is the last calendar day of the previous calendar month beginning on March 31, 2008 and ending on January 31, 2038.

The final valuation date is February 10, 2038.

The maturity date is February 15, 2038, subject to postponement in the event of a market disruption event as described under "—Market Disruption Events."

The record date for the payment at maturity will be the final valuation date, whether or not that day is a business day.

A trading day is a day on which (i) the values of the sub-indices are published by the bank, (ii) trading is generally conducted on NYSE Arca and (iii) trading is generally conducted on the markets on which the futures contracts underlying the gold index are traded, in each case as determined by the bank, as calculation agent, in its sole discretion.

A business day is a Monday, Tuesday, Wednesday, Thursday or Friday on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in New York City.

Payment Upon Repurchase

Prior to maturity, a Holder may, subject to certain restrictions, offer for repurchase by the bank a minimum of 200,000 Debt Securities (or an integral multiple of 50,000 Debt Securities in excess thereof) from a single offering, except that, on the 15th calendar day of each month (or, if such 15th calendar day is not a Trading Day, the Trading Day immediately thereafter) a Holder of the Debt Securities may offer a minimum of 100 Debt Securities (or an integral multiple of 100 Debt Securities in excess thereof), to the bank for repurchase. The minimum number of Debt Securities a Holder may offer to the bank for repurchase and the minimum number of Debt Securities in excess thereof are referred to herein as the "Minimum Repurchase Amount" and the "Minimum Increment," respectively. At any time, however, the bank shall have the sole discretion to reduce the then-current Minimum Repurchase Amount and Minimum Increment for any period of time. Any such reduction shall be applied on a consistent basis for all Holders of the Debt Securities at the time the reduction becomes effective. If a Holder complies with the repurchase procedures described below, the bank will be obligated to repurchase its Debt Securities, and on the applicable repurchase date, the Holder will receive in exchange for those Debt Securities it has selected for repurchase a cash payment per security equal to the repurchase value on the applicable trading day on which the Holder delivers an effective notice by 10 a.m. offering its Debt Securities for repurchase by the bank (a "valuation date").

On any trading day, the repurchase value will equal:

Current principal amount x applicable index factor on the trading day x fee factor on the trading day

In the event that the bank's payment upon repurchase is deferred beyond the original repurchase date, no interest or other amount will accrue or be payable with respect to that deferred payment.

The Debt Securities are not redeemable at the bank's option but may be accelerated if the repurchase value equals zero.

Acceleration

Acceleration Upon Zero Repurchase Value

If the repurchase value on any trading day equals zero for a particular offering of Debt Securities, those Debt Securities will be automatically accelerated on that day for an amount equal to the zero repurchase value and the Holders will not receive any payment in respect of their investment. On each trading day (as defined below), the repurchase value will be equal to Current principal amount x applicable index factor on the trading day x fee factor on the trading day.

Default Amount on Event of Default Acceleration

If an event of default occurs and the maturity of the Debt Securities is accelerated, the bank will pay the default amount in respect of each security at maturity.

For the purpose of determining whether the Holders of the Debt Securities are entitled to take any action under the Indenture, the bank will treat the initial principal amount of each security outstanding as the principal amount of that security.

Default Amount

If a Holder of a security accelerates the maturity of the security upon an event of default, the amount payable upon acceleration will be the repurchase value determined by the calculation agent on the next trading day.

Market Disruption Events

A disrupted day is any trading day on which a market disruption event occurs or is continuing.

If any monthly valuation date, valuation date or the final valuation date (each, a “reference date”) is a disrupted day with respect to a sub-index, the closing level of such sub-index on the next succeeding trading day that is not a disrupted day will be deemed to be the closing level of such sub-index for such reference date; provided that if the ten successive trading days immediately following such reference date are all disrupted days, the calculation agent will determine, in its sole discretion, the closing level of such sub-index for such reference date on the tenth trading day immediately following such reference date, notwithstanding that such tenth trading day is a disrupted day.

If any valuation date or the final valuation date is a disrupted day with respect to either or both sub-indices and the date as of which the calculation agent determines the closing levels of both sub-indices falls less than three business days prior to the scheduled repurchase date corresponding to such valuation date or the maturity date, as applicable, such scheduled repurchase date or the maturity date, as applicable, will be postponed to the third business day following the date as of which the calculation agent has determined the closing levels of both sub-indices for such valuation date or the final valuation date, as applicable.

Any of the following will be a market disruption event:

- a material limitation, suspension or disruption in the trading of the underlying gold futures contract which results in a failure by the trading facility on which the relevant contract is traded to report a daily contract reference price (the price of the relevant contract that is used as a reference or benchmark by market participants);

- the daily contract reference price for the underlying gold futures contract is a “limit price”, which means that the daily contract reference price for such contract has increased or decreased from the previous day’s daily contract reference price by the maximum amount permitted under the applicable rules or procedures of the relevant trading facility;

- failure by the index sponsor to publish the closing value of the gold index or of the applicable trading facility or other price source to announce or publish the daily contract reference price for the underlying gold futures contract;

- any other event, if the calculation agent determines in its sole discretion that the event materially interferes with the bank's ability or the ability of any of the bank's affiliates to unwind all or a material portion of a hedge with respect to the securities that the bank or its affiliates have effected or may effect.

The following events will not be market disruption events:

- a limitation on the hours or number of days of trading on a trading facility on which the underlying gold futures contract is traded, but only if the limitation results from an announced change in the regular business hours of the relevant market; or

- a decision by a trading facility to permanently discontinue trading in the underlying gold futures contract.

Discontinuance or Modification of the Index

If the index sponsor discontinues compilation or publication of a sub-index and the index sponsor or any other person or entity (including the bank) calculates and publishes an index that the calculation agent determines is comparable to such discontinued sub-index and approves as a successor index, then the calculation agent will determine the level of the Index on any relevant date and the amount payable at maturity or upon repurchase by the bank by reference to such successor sub-index for the period following the discontinuation of the sub-index.

If the calculation agent determines that the publication of a sub-index is discontinued and that there is no applicable successor index, or that the closing level of the sub-index is not available for any reason other than a market disruption event, on the date on which the level of the sub-index is required to be determined, or if for any other reason (excluding a market disruption event) the sub-index is not available to the bank or the calculation agent on the relevant date, the calculation agent will determine the amount payable by a computation methodology that the calculation agent determines will as closely as reasonably possible replicate such sub-index.

If the calculation agent determines that either or both sub-indices, the components underlying either or both sub-indices (the "index components") or the method of calculating either or both sub-indices has been changed at any time in any respect – including any addition, deletion or substitution and any reweighting or rebalancing of index components, and whether the change is made by the index sponsor under its existing policies or following a modification of those policies, is due to the publication of a successor index, is due to events affecting one or more of the index components, or is due to any other reason – then the calculation agent will be permitted (but not required) to make such adjustments to such sub-index or method of calculating such sub-index as it believes are appropriate to ensure that the level of such sub-index used to determine the amount payable on the maturity date or upon repurchase by the bank is equitable.

All determinations and adjustments to be made by the calculation agent with respect to the level of the sub-indices and the amount payable at maturity or upon repurchase by the bank or otherwise relating to the level of the sub-indices may be made in the calculation agent's sole discretion.

Further Issuances

The Indenture does not limit the amount of additional indebtedness that the bank may incur. The bank may, from time to time, without the Holder's consent, create and issue additional securities having the same terms and conditions as the Debt Securities. Such additional securities will be fungible with the outstanding Debt Securities.

However, the bank is under no obligation to sell additional securities at any time, and if the bank does sell additional securities, the bank may limit such sales and stop selling additional securities at any time. Furthermore, unless the bank indicates otherwise, if the bank suspends selling additional securities, the bank reserves the right to resume selling additional securities at any time.

Event of Default

The Indenture provides Holders with remedies if the bank fails to perform specific obligations, such as making payments on the debt securities, or if the bank becomes bankrupt. Holders should review these provisions and understand which of the bank's actions trigger an event of default and which actions do not. The Indenture permits the issuance of Debt Securities in one or more series, and, in many cases, whether an event of default has occurred is determined on a series-by-series basis.

An event of default is any one or more of the following events (each an "event of default") having occurred and be continuing:

- default is made in the payment of principal, interest or premium in respect of such series of Debt Securities for 30 days;

- the bank fails to perform or observe any of its other obligations under the Debt Securities and such failure has continued for the period of 60 days following the service on the bank of notice by the trustee or Holders of 33 1/3% of such series requiring the same to be remedied, except that the failure to file with the trustee certain information required to be filed with the trustee pursuant to the Trust Indenture Act of 1939, as amended, will not constitute an event of default (although the trustee may bring suit to enforce such filing obligation); or

- a court in Germany opens insolvency proceedings against the bank or the bank applies for or institute such proceedings or offer or make an arrangement for the benefit or its creditors generally.

Indemnification of Trustee for Actions Taken on the Holder's Behalf

The Indenture provides that the trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of Debt Securities issued under that Indenture relating to the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred upon the trustee. In addition, the Indenture contains a provision entitling the trustee, subject to the duty of the trustee to act with the required standard of care during a default, to be indemnified by the Holders of Debt Securities issued under that Indenture before proceeding to exercise any right or power at the request of Holders. Subject to these provisions and some other limitations, the Holders of a majority in aggregate principal amount of each affected series of outstanding Debt Securities, voting as one class, may direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee.

Limitation on Actions by the Holder as an Individual Holder

The Indenture provides that no individual Holder of Debt Securities may institute any action against the bank under the Indenture, except actions for payment of overdue principal and interest at maturity or upon acceleration, unless the following actions have occurred:

- the Holder must have previously given written notice to the trustee of the continuing default;

- the Holders of not less than a majority in aggregate principal amount of the outstanding Debt Securities of each affected series, treated as one class, must have (1) requested the trustee to institute that action and (2) offered the trustee reasonable indemnity;

- the trustee must have failed to institute that action within 60 days after receipt of the request referred to above; and

- the Holders of a majority in aggregate principal amount of the outstanding Debt Securities of each affected series, treated as one class, must not have given directions to the trustee inconsistent with those of the Holders referred to above.

The Indenture contains a covenant that the bank will file annually with the trustee a certificate of no default or a certificate specifying any default that exists.

Ranking and Status

The securities rank on a parity with all of the bank's other senior indebtedness and with all of the bank's other unsecured and unsubordinated indebtedness, except for debts required to be preferred by law.

Modification of the Terms of the Securities or Rights of Holders

Modification without Consent of Holders

The bank and the trustee may enter into supplemental indentures without the consent of the Holders of Debt Securities issued under the Indenture to:

- secure any senior debt securities;
- evidence the assumption by a successor corporation of the bank's obligations;
- add covenants for the protection of the Holders of debt securities;
- cure any ambiguity or correct any inconsistency or manifest error;
- establish the forms or terms of debt securities of any series; or
- evidence the acceptance of appointment by a successor trustee.

Modification Requiring Consent of Each Holder

The bank and the trustee may not make any of the following changes to any outstanding debt security without the consent of each Holder that would be affected by such change:

- change the final maturity of such security;
- reduce the principal amount;
- reduce the rate or change the time of payment of interest;
- reduce any amount payable on redemption;
- change the currency in which the principal, including any amount of original issue discount, premium, or interest thereon is payable;
- modify or amend the provisions for conversion of any currency into another currency;
- reduce the amount of any original issue discount security payable upon acceleration or provable in bankruptcy;
- alter the terms on which Holders of the Debt Securities may convert or exchange Debt Securities for other securities of the bank's or of other entities or for other property or the cash value of thereof, other than in accordance with the antidilution provisions or other similar adjustment provisions included in the terms of the Debt Securities;
- alter certain provisions of the applicable indenture relating to debt securities not denominated in U.S. dollars;
- impair the right of any Holder to institute suit for the enforcement of any payment on any debt security when due; or

- reduce the percentage of Debt Securities the consent of whose Holders is required for modification of the applicable indenture.

Modification with Consent of Holders of a Majority

The bank and the trustee may make any other change to the Indenture and to the rights of the Holders of the Debt Securities issued thereunder, if the bank obtains the consent of the Holders of not less than a majority in aggregate principal amount of all affected series of outstanding Debt Securities issued thereunder, voting as one class.

Form, Exchange and Transfer

The denomination and face amount of each security is $ 25. The Debt Securities have been and may be issued and sold over time at prices based on the indicative value of such Debt Securities at such times, which may be significantly higher or lower than the face amount.

Certificated (i.e., definitive) notes may be registered or transferred at the office of DBTCA, as the bank's current transfer agent for the transfer and exchange of the Debt Securities. Only the depositary will be entitled to transfer and exchange the note as described in this subsection, because it will be the only Holder of the Debt Security. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

Exhibit 4.6

Deutsche Bank
Human Resources

Deutsche Bank Equity Plan 2025
Plan Rules

1 Purpose

The Deutsche Bank Equity Plan is intended to motivate key employees by aligning the interests of employees of the DB Group with those of the shareholders and fostering a sense of employee ownership through awards linked directly to the Deutsche Bank share price.

Participants in the Plan are selected at the discretion of the Committee. Participation during one Plan year does not guarantee future participation.

2 Definitions

For the purposes of the Plan, the following terms shall have the meanings indicated:

"Acknowledgement" has the meaning given in Rule 4.11, and "Acknowledge" and "Acknowledged" shall be construed accordingly.

"Acquirer Entity" means the person, company or entity which, through acquisition, merger, spin-off, transfer, or other consolidation (or series thereof), shall be the legal successor to or owner (whether direct or indirect) of the DB business unit, Division or Subsidiary (or, if applicable, the part of the DB business unit or Division) in which the relevant Participant worked, or any of its Subsidiaries or Holding Companies or any Subsidiary of any such Holding Company.

"Agreed Termination" means a Participant ceasing to be a DB Employee following the resolution of an employment-related dispute, resolved by the execution of a settlement, separation or compromise agreement containing, among other things, a full release of claims against each DB Group Company by the Participant, and which is approved as an Agreed Termination by the Committee.

"Annual Award" means any Award referred to as an Annual Award in the Award Statement.

"Applicable DB Group Policy or Procedure" means any DB policy or procedure regarding: general accounting; application of accounting methodologies; approvals procedures; risk management; regulatory procedures or rules; any other financial or compliance matters; or conduct matters, including, but not limited to, Deutsche Bank's Code of Conduct as amended from time to time (in each case of which the Participant knew or it would be reasonable to expect the Participant to have known).

"Award" means a conditional right to receive DB Shares following the Release Date granted pursuant to this Plan which may be an Annual Award, New Hire Award, Retention Award or Upfront Award. An Award does not give a Participant a right to subscribe for unissued DB Shares.

"Award Date" means the effective date of an Award, as shown on the Award Statement.

"Award Letter" means a letter issued by a DB Group Company at or around the time of an Award Statement, which may set out Performance Conditions in relation to an Award as provided in Rule 4.5, and which may in some cases supplement an Award Statement.

"Award Statement" means the statement provided to a Participant under Rule 4.3.

"Career Retirement" means voluntary termination of employment as a DB Employee by a Participant who has complete years of age plus number of complete years of service as a DB Employee equalling 60 or more ("Rule of 60"), provided however that the Participant must have five or more complete years of consecutive service (the "Consecutive Service Requirement") as a DB Employee on or before the most recent date of termination of employment and provided the Participant has made a valid Election to Career Retire in connection with the relevant Award. If the Consecutive Service Requirement is satisfied, the number of complete years of service used to calculate the Rule of 60 may also include any period of employment as a DB Employee prior to a break in continuous service. Where a Participant became a DB Employee as a result of a DB Group Company acquiring or merging with a company or other entity which employed the Participant, or acquiring a business in which the Participant was employed, continuous employment with that company or other entity, or in that business, ending with the date of acquisition or merger shall be treated for the purposes of this definition as service as a DB Employee, provided that the Participant has remained a DB Employee since the acquisition or merger.

"Cause" means in respect of the termination of a Participant's employment by any DB Group Company: (i) any act or omission or series of acts or omissions that, when taken together or alone, constitute a material breach of the terms and conditions of employment; (ii) the conviction of the Participant by a competent court of law of any crime (other than minor offences that do not adversely affect the business or reputation of any DB Group Company, as determined by the Committee in its sole discretion); (iii) unlawful, unethical or illegal conduct, or any misconduct by the Participant in connection with the performance of the Participant's duties as a DB Employee or conduct by the Participant otherwise in violation of the terms of the applicable employee handbook or other local policy or contractual documentation; (iv) knowingly failing or refusing to carry out specific lawful instructions from a DB Group Company (or a duly authorised employee or officer of such a company) relating to material matters or duties within the scope of the Participant's responsibilities for a DB Group Company; (v) committing any act involving dishonesty, fraud, misrepresentation, or breach of trust; or (vi) the issuance of any order or enforcement action against the Participant or against any DB Group Company in connection with the Participant's actions or omissions by any regulatory body with authority over the conduct of business by that DB Group Company where the issuance of that order or enforcement action impairs a) the financial condition or business reputation of the DB Group or any DB Group Company or b) the Participant's ability to perform the Participant's assigned duties (or would have done so if the Participant were still a DB Employee).

"Change of Control" means a change in the control of Deutsche Bank AG which shall occur if, by one or a series of transactions or events, a third party or a group of third parties acting together (directly or indirectly) acquires more than 50 percent of the issued share capital of Deutsche Bank AG and/or becomes entitled to exercise more than 50 percent of voting rights attributable to the issued share capital of Deutsche Bank AG. The Committee (as constituted before the relevant event) will determine, in its sole discretion, whether or not a Change of Control has occurred in accordance with this definition.

"Closing Price" means the closing price of DB Shares in the Xetra system (currently under "DBK GY"), or the closing price on such other exchange as may be determined by the Committee from time to time.

"Committee" means the Senior Executive Compensation Committee but may alternatively be the Management Board or any committee or other entity or persons designated by the Senior Executive Compensation Committee, the Management Board or these Plan Rules to act as the decisional body under this Plan (and, for the avoidance of doubt, the provisions of Rule 9 shall apply to any such entity or person). To the extent that matters are determined in relation to Awards made or to be made to members of the Management Board, the Committee means the Supervisory Board of Deutsche Bank or a duly authorised committee of the same.

"Compliance Department" means any applicable compliance department of the DB Group.

"Control Failure" means:

(a) a failure to take adequate steps to promptly identify, assess, report, escalate or address misconduct or risk (including without limitation regulatory, client, reputational, market and/or other risk);

(b) a failure to address, manage or remedy any control weaknesses identified by the DB Group or any regulator of which the Participant was aware (or could have been reasonably expected to be aware);

(c) a failure to draft, adopt, approve or implement internal financial and operational policies or procedures of the DB Group (or any DB Group Company) which would have provided for (i) the reliability and integrity of information, (ii) compliance with laws and regulations, (iii) safeguarding and accountability of assets, and/or (iv) preventing or detecting error or fraud.

"DB Employee" means a person employed by any DB Group Company.

"DB Group" means Deutsche Bank and each of its Subsidiaries.

"DB Group Company" means any company or other corporation in the DB Group.

"DB Share" means a registered share of Deutsche Bank AG, as listed and traded on the Frankfurt Stock Exchange - Xetra or other authorised exchanges, or any other shares which may replace them from time to time (whether in a successor corporation or otherwise).

"Delivery" means DB Shares forming all or part of an Award becoming held by the Nominee (on trust absolutely for the Participant or the Participant's Representative) or, if earlier, being transferred into the Participant's (or the Participant's Representative's) custody or brokerage account, or other settlement of the Award in accordance with Rules 6.6, 7.1(b) or 7.1(c), or being treated as Delivered in accordance with Rule 7.4. "Delivery Date" and "Delivered" shall be construed accordingly.

"Deutsche Bank" means Deutsche Bank AG and any successor corporation or other corporation into which Deutsche Bank AG is merged or consolidated or to which Deutsche Bank AG transfers or sells all or substantially all of its assets.

"Dividend Equivalents" has the meaning given in Rule 4.7.

"Division(s)" means the primary operational business areas of the DB Group, which include the core revenue generating areas and infrastructure and support areas, as established or adjusted by Deutsche Bank, in its discretion, from time to time. Each Division is divided into smaller operating business units.

"Election" or "Election to Career Retire" shall have the meaning given to that term in Rule 4.6 or Rule 4.7, as applicable.

"Financial Services" includes (without limitation) any (or any combination) of the following:

(a) commercial or retail banking;

(b) brokerage;

(c) wealth management;

(d) insurance, pension or lending services;

(e) financial, business, investment or economic advisory services (including raising or preserving capital or transitioning ownership of any asset);

(f) asset management;

(g) issuing, trading or selling instruments or other investments; and

(h) advising on or investing in private equity or real estate,

and also includes any other activities engaged in by any DB Group Company that the Committee considers constitute financial services.

"Financial Services Firm" means a business enterprise whose sole or primary function is the provision of Financial Services (whether to individuals, institutions or any other person or entity).

"Holding Company" of a company or entity means a company or entity of which the first company or entity is a Subsidiary.

"InstitutsVergV" means the German Remuneration Ordinance (Institutsvergütungsverordnung), as amended from time to time.

"Management Board" means the Management Board of Deutsche Bank (the Vorstand).

"Material Risk Taker" means a material risk taker (as determined by the DB Group in its sole discretion) having regard to InstitutsVergV or any other applicable regulation.

"New Hire Award" means an Award referred to as a New Hire Award in the Award Statement, usually being "buy-out", "replacement" or "sign-on" awards granted or issued in connection with the commencement of a Participant's employment as a DB Employee.

"Nominee" means the party authorised to hold DB Shares on trust absolutely for a Participant upon Delivery, being DB Group Services (UK) Ltd or such other party as may be appointed by the Committee from time to time.

"Participant" means any person to whom an Award has been made under the terms and conditions of this Plan for so long as that person has any rights under this Plan.

"Performance Condition" means a condition or conditions stated in the Award Statement for an Award or a Tranche of an Award, and/or the Award Letter, which determines the extent to which that Award or Tranche will Vest and/or become capable of settlement.

"Performance Period" means the period of time as referred to in InstitutsVergV (or any other applicable legislation) during which a Participant's performance is assessed for the purposes of determining the grant of an Award under InstitutsVergV, and "Performance Period in relation to which an Award is made" and similar phrases shall be interpreted accordingly.

"Plan" means the Deutsche Bank Equity Plan as governed by these Plan Rules.

"Plan Administrator" means DB Group Services (UK) Limited or any other person or entity appointed by the Committee for the purpose of administering the Plan as referred to in Rule 9.1.

"Plan Rules" or "Rules" means this document, including all applicable Schedules, which sets out the binding terms and conditions of the Plan (as amended from time to time pursuant to Rule 10).

"Proof of Certification" means any information deemed necessary or desirable by the Plan Administrator (i) to confirm a Participant's compliance with the terms and provisions of an Award; (ii) to enable the Plan Administrator to apply the terms and provisions of an Award; or (iii) to enable the Plan Administrator (or any DB Group Company) to comply with its obligations in relation to an Award, including, but not limited to: copies of tax returns and employment or payroll-related documentation, or any confirmation or agreement by a Participant deemed necessary or desirable by the Plan Administrator to carry out any of the Plan Rules or any other rule or regulation, as determined by the Plan Administrator (including without limitation confirmation or agreement that the Participant is bound by the Plan Rules in relation to an Award).

"Proprietary Information" means any information which is not publicly available (other than as a result of the Participant's action), including, without limitation, all financial or product information, business plans, client lists, compensation details or other confidential information, copyright, patent and design rights in any invention, design, discovery or improvement, model, computer program, system, database, formula or documentation, including information conceived, discovered or created during or in consequence of the Participant's employment as a DB Employee.

"Public Service Employee" means a person employed or engaged exclusively (i) in a business, industry, organisation or entity (excluding banks, sovereign wealth funds and other financial institutions, other than central banks and regulatory bodies), that is wholly owned or controlled by the government, whether at a national or local level; or (ii) by an organisation whose primary objective is something other than the generation of profit, such as a bona fide charitable institution; or (iii) as a teacher at a bona fide educational establishment.

"Public Service Retirement" means voluntary termination of employment as a DB Employee by a Participant to work as a Public Service Employee.

"Release Date" means:

(a) in relation to an Award with no Retention Period, the Vesting Date;

(b) in relation to an Award with a Retention Period, the last day of the Retention Period as stated in the Award Statement (or any earlier date on which the Retention Period ceases to apply under Rule 8), or, if later, the Vesting Date,

or, in each case, any later date on which it is determined that any applicable Performance Conditions are satisfied and, in each case, subject to any delay in the Release Date pursuant to Rule 6.6.

"Relevant Individual" in relation to a Significant Adverse Event means a DB Employee or a contingent worker engaged by a DB Group Company whose conduct is the subject of an internal investigation by a DB Group Company in connection with that Significant Adverse Event which results in disciplinary measures or sanctions against the Relevant Individual, or would have resulted in such measures or sanctions (as determined by the Committee in its absolute discretion) if, in the case of a former DB Employee, the Relevant Individual had not ceased to be a DB Employee or, in the case of a contingent worker or former contingent worker, the Relevant Individual had been a DB Employee subject to disciplinary measures or sanctions by a DB Group Company.

"Representative" means, in the case of death or Total Disability, the Participant's duly appointed beneficiary, legal representative or administrator, as applicable.

“Restricted Services” means services that are substantially similar to any or all of the services provided by the Participant during the 12-month period prior to the Participant ceasing to be a DB Employee.

"Retention Award" means an Award referred to as a Retention Award in the Award Statement.

"Retention Award Event Date" means the date specified as such in the Award Letter.

"Retention Period" for certain Awards means the period commencing on the Vesting Date and ending on the Release Date (subject to the provisions of the Plan).

"Retirement" means retirement at pensionable age as determined in accordance with the pension plan arranged or provided by or in conjunction with a DB Group Company, of which the Participant is, or is eligible to be, a member, or where there is no such pension plan, retirement age as determined in accordance with the local policy of DB Group.

"Sales Price" means the price achieved (or that which would have been achieved if any DB Shares had been sold) for the sale of a DB Share on the relevant trading day for the purposes of Rule 7.4.

"Schedule" means any schedule to the Plan Rules approved by the Committee (as amended from time to time in accordance with Rule 10).

"Senior Executive Compensation Committee" means the committee delegated by the Management Board to govern this Plan.

"Significant Adverse Event" means an event (or series of events, in each case whether by any acts or omissions) that has resulted in any internal or external finding of misconduct or of risk (including without limitation regulatory, client, reputational, market and/or other risk), or financial loss (whether direct or indirect, and whether by way of a regulatory fine, sanction, action, or settlement, including any associated cost or otherwise), which, as determined by the Committee in its absolute discretion, is classified by the DB Group as being "Acute", "Severe" or "High" (or a similar level under any alternative categorisation in place from time to time) and which the Committee has determined in its absolute discretion has had or is likely to have an adverse effect on the DB Group, a DB Group Company, a Division or a business unit.

"Subsidiary" means a company or other entity in which a Holding Company has a direct or indirect controlling interest or equity or ownership interest which represents more than fifty percent (50%) of the aggregate equity or ownership interest in that company or entity.

"Sufficiently Proximate" to a Relevant Individual in relation to a Significant Adverse Event means a Participant who is:

(a) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a Relevant Individual who is a DB Employee (the "First Level Manager"), or a DB sponsor of a Relevant Individual who is a contingent worker engaged by a DB Group Company (the "First Level Sponsor");

(b) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a First Level Manager or First Level Sponsor of the Relevant Individual or the head of the business unit in which the Relevant Individual is employed or engaged;

(c) only in case of a Significant Adverse Event which is classified by the DB Group as being "Acute" (or a similar level under any alternative categorisation in place from time to time), the head of Division, the Chief Country Officer(s), the CEO or Chief Operating Officer(s) where the Relevant Individual works (or worked) or is engaged (or was engaged);

in each case, at the time when Significant Adverse Event(s) (or portion thereof), or the actions or omissions (in each case, or portions thereof) of the Relevant Individual contributing to the Significant Adverse Effect, occurred and regardless of whether the Participant was himself responsible for, or contributed to, the Significant Adverse Event, in any way other than being Sufficiently Proximate to a Relevant Individual.

"Supervisory Board of Deutsche Bank" means the board that oversees and advises the Management Board in its management of the business.

"Total Disability" means the Participant being prevented from engaging in any substantial gainful activity by physical or mental impairment that can be expected to either (i) result in death or (ii) last for a continuous period of not less than 12 months, as certified by the Committee, in its sole discretion.

"Tranche" means a portion of an Award as detailed on the Award Statement, which may be subject to different provisions related to Vesting and Retention Period (if applicable), and/or Performance Conditions, to other Tranches comprised within that Award.

"Upfront Award" means an Award referred to as an Upfront Award in the Award Statement which shall Vest at the Award Date but shall be subject to a Retention Period.

"Vest" means, in the context of an Award or a Tranche of an Award, to be no longer subject to the forfeiture provisions contained in these Plan Rules, except for those contained in Rules 4.9, 5.3(a), 5.3(g), 5.3(h), 5.3(i), 0, 6.3, 0, 6.5 (in relation to Upfront Awards only) and 6.7 as applicable. "Vesting" and "Vested" shall be construed accordingly. For the avoidance of doubt a Vested Award may continue to be subject to: (a) a Retention Period; and (b) lapse under Rule 4.5 where it has not yet been Delivered (in addition to forfeiture provisions not specifically mentioned in this definition).

"Vested Award" means an Award that has Vested.

"Vesting Date" means the date or dates set forth in the Award Statement upon which an Award or Tranche will Vest (subject to the satisfaction of any Performance Conditions to which Vesting is subject), provided that if Vesting has been accelerated or delayed under these Plan Rules, it shall mean the date of Vesting determined in accordance with the relevant Rule.

3 Interpretation

In this Plan, where the context permits:

(a) where an Award has been made in different Tranches, references to an Award shall be taken to refer to each Tranche separately; and

(b) words in the singular shall include the plural and vice versa.

The headings in the Rules are for the sake of convenience only and should be ignored when construing the Rules.

Each Award granted under the Plan is subject to the Plan Rules as modified by any Schedules which apply to that Award, in each case as amended from time to time in accordance with Rule 10.2.

4 Awards

4.1 Eligibility: Subject to the terms and conditions in these Plan Rules, the Committee may from time to time make Awards or permit Awards to be made by such other persons as it may determine to such DB Employees as the Committee shall select. In addition, in exceptional circumstances and to the extent permitted by law (and guidance from a regulator from time to time), the Committee may (but is not obliged to) make Awards, or permit Awards to be made by such other persons as it may determine, to a former DB Employee, where the reason for making the Awards relates to that former DB Employee's employment by a DB Group Company.

4.2 Terms of Awards: Subject to the terms and conditions in these Plan Rules, the Committee shall be entitled to determine the terms of Awards and the dates on which those Awards are made.

4.3 Award Statement: As soon as practicable after the Award Date, the Participant shall be issued an Award Statement in relation to the Award in such form as the Committee shall determine in its sole discretion. The Award Statement shall state (in relation to each Tranche of the Award where applicable):

(a) the Award Date;

(b) the number (or maximum number in the case of an Award subject to a Performance Condition) of DB Shares subject to the Award;

(c) the type of Award (Annual, New Hire, Retention or Upfront Award);

(d) the Vesting Date (assuming no acceleration or delay of the Vesting Date under these Plan Rules);

(e) the Retention Period, if the Award is subject to a Retention Period (assuming no early expiry of the Retention Period under Rule 8); and

(f) details of any Performance Conditions applicable to the Award (other than any such Performance Condition which is just detailed in the Award Letter).

4.4 Retention Period: If an Award is to be subject to a Retention Period, the Retention Period shall be determined by the Committee at the Award Date and will be stated on the Award Statement (subject to the application of these Rules). The Retention Period shall commence on the Vesting Date of the Award. If an Award is subject to a Retention Period, a Participant shall have no entitlement to receive DB Shares in respect of that Award before the end of the Retention Period.

4.5 Performance Conditions: Awards or Tranches of Awards may be made subject to Performance Conditions as approved by the Committee at the time the Award is made. Any such conditions will be detailed in the Award Statement and/or the Award Letter. The degree to which a Performance Condition is satisfied will determine the extent to which that Award or Tranche will Vest and/ or become capable of settlement, and the degree to which the Performance Condition is satisfied must be determined before the Award or relevant part of the Award Vests or becomes capable of settlement (as applicable). An Award shall lapse to the extent that it is determined that it is no longer capable of Vesting and/or settlement (as applicable) because the Performance Condition has not been satisfied in full. The Management Board may amend the Performance Conditions if circumstances exist such that the Management Board considers, in its sole discretion, that the existing Performance Conditions should be so amended to ensure that they remain appropriate or because of regulatory requirements including, without limitation, any regulatory or recovery intervention. Notwithstanding the foregoing, in relation to an Award held by a member of the Management Board, the Management Board's decision is not binding and the Supervisory Board will decide in its full discretion on the confirmation of or the deviation from the Management Board's decision for purposes of these Awards; the decision of the Supervisory Board shall be final and binding.

4.6 Career Retirement Election – Annual Awards or Upfront Awards: The termination treatment in relation to Career Retirement set out in Rule 5.1(e) shall only apply to an Annual Award or Upfront Award (as applicable) if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Award that the Participant intends to terminate employment as a DB Employee by reason of Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Career Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to an Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of an Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

4.7 Career Retirement Election – Retention Awards: The termination treatment in relation to Career Retirement set out in Rule 5.1(f) shall only apply to a Retention Award if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Retention Award that the Participant intends to terminate employment as a DB Employee (such termination to take effect on or after the Retention Award Event Date) by reason of Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Career Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to a Retention Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of a Retention Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

4.8 Dividend Equivalents: If a dividend is declared in relation to DB Shares during the Retention Period of an Award (or after the date an Award would have Vested but for a delay in the Vesting Date pursuant to Rule 6.6 and before the Release Date), the Committee may in its sole discretion determine that a Dividend Equivalent shall apply to that Award. A Dividend Equivalent is a right to receive a cash payment or an award of additional DB Shares on the Release Date. The value of the Dividend Equivalent is based on the amount of dividends that would have been paid during the Retention Period (or the period from the original Vesting Date before any delay to the Release Date, as applicable) on the number of Vested DB Shares that remain subject to the Award at the Release Date (as it may be deferred or delayed), and may be settled in either cash or further DB Shares. The terms of Dividend Equivalents shall be determined by the Committee, and, subject to this determination by the Committee, the Plan Administrator shall determine the manner of calculation of the Dividend Equivalents. Dividend Equivalents shall be subject to the same provisions in these Rules as the underlying Award, including but not limited to suspension, forfeiture, lapse and clawback.

4.9 Non-transferable Awards: A Participant may not at any time before settlement in accordance with Rule 7 (whether before or after the Vesting Date) (i) transfer, assign, sell, pledge or grant to any person or entity any rights in respect of any Award (including a Vested Award), other than in the event of the death or Total Disability of the Participant; or (ii) enter into any transactions having the economic effect of hedging or otherwise offsetting the risk of price movements, or attempt to do so, with respect to all or part of the DB Shares subject to the Award. Unless the Plan Administrator or the Committee decides otherwise, any breach of this Rule 4.9 will result in the forfeiture by the Participant of the Participant's Award without any claim for compensation by the Participant or any Representative.

4.10 Compliance: The making of any Award is subject to any approvals or consents required under any applicable laws or regulations or by any governmental authority, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department.

4.11 Acknowledgement of Award: The Participant must acknowledge the Award and agree to be bound by and comply with the provisions of the Plan and any other terms contained in the Award Statement in relation to the Award ("Acknowledgement"). The procedure for Acknowledgement (including the period for doing so) will be communicated or made available to the Participant in such manner as the Committee or Plan Administrator may determine. An Award shall not Vest and shall not be Delivered, and no DB Group Company shall have any obligation to the Participant in relation to an Award, before it has been duly Acknowledged. If the Participant has not Acknowledged the Award in accordance with the specified procedure by the end of the period provided in that procedure, the Committee may in its sole discretion notify the Participant that the Award has lapsed, and neither the Participant nor any Representative shall have any claim for compensation in relation to that lapse. Following such lapse, the Participant will no longer be able to Acknowledge the Award, and no DB Group Company shall have any obligation to the Participant in relation to it.

4.12 Surrender of Award: A Participant may surrender an Award, a part of an Award or a Tranche of an Award at any time prior to the Release Date, and any Award (or part or Tranche of an Award) so surrendered shall (to the extent possible) be deemed never to have been made.

5 Impact of termination of employment

5.1 Termination resulting in continued Vesting: An Award will not be forfeited by reason of the Participant ceasing to be a DB Employee and will, if not Vested, continue to Vest in accordance with the Award Statement (subject to these Rules, in particular the forfeiture provisions of Rule 6) and will remain subject to any applicable Retention Period or Performance Conditions, if the Participant ceases to be a DB Employee for one of the following reasons:

(a) termination by a DB Group Company without Cause;

(b) redundancy;

(c) Agreed Termination;

(d) the Participant ceases to be employed as a DB Employee due to the sale, merger, spin-off, transfer, or other consolidation (or series thereof) outside of the DB Group of the DB business unit, Division or Subsidiary (or, if applicable, the part of the DB business unit or Division) in which the Participant worked, but excluding a sale or transfer by which Deutsche Bank is merged or consolidated or transfers or sells substantially all of its assets;

(e) in relation to Annual Awards and Upfront Awards only, Retirement, Career Retirement (subject to Rule 5.4) or Public Service Retirement; or

(f) in relation to Retention Awards, Retirement, Career Retirement (subject to Rule 5.4) or Public Service Retirement, where the Participant ceases to be a DB Employee on or after the Retention Award Event Date.

5.2 Termination upon death or Total Disability: If a Participant ceases to be a DB Employee due to death or Total Disability (documented to the reasonable satisfaction of the Plan Administrator), an Award which is not subject to a Retention Period or a Performance Condition will, subject to Rule 6.6, Vest in full (to the extent not previously Vested) on the next administratively possible Vesting Date for other Awards granted pursuant to the Plan following receipt of such documentation as the Plan Administrator may require to establish the entitlement of the Participant or the Representative claiming on behalf of the Participant.

If a Participant who has ceased to be a DB Employee subsequently dies, and at the time of death holds any Awards which are not subject to a Retention Period or a Performance Condition, those Awards will, subject to Rule 6.6, Vest in full (to the extent not previously Vested) on the next administratively possible Vesting Date for other Awards granted pursuant to the Plan following receipt of such documentation as the Plan Administrator may require to establish the entitlement of the Participant or the Representative claiming on behalf of the Participant.

Where an Award is subject to a Retention Period or a Performance Condition it will continue to Vest in accordance with the Award Statement and subject to these Plan Rules (including, without limitation, the forfeiture provisions of Rule 6), and will remain subject to any applicable Retention Period and Performance Condition.

5.3 Termination resulting in forfeiture: A Participant shall automatically forfeit Awards without any claim for compensation by the Participant or any Representative in the following circumstances:

(a) Awards which have not been Delivered shall be automatically forfeited if, at any time prior to Delivery, the Participant ceases to be a DB Employee by reason of termination for Cause as decided by a DB Group Company, which shall have full discretion to make a Cause determination;

(b) save as otherwise provided in Rule 5.1, Awards that have not Vested shall be automatically forfeited if, at any time prior to the Vesting Date, the Participant ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason (and, for the avoidance of doubt, where a Participant remains a DB Employee as at the Vesting Date, this Rule 5.3(b) shall not apply, notwithstanding, for example, that the Participant may have provided notice before the Vesting Date to terminate the Participant's employment after the Vesting Date or the Participant has provided notice of an intention to resign after the Vesting Date);

(c) without prejudice to the generality of Rule 5.3(b), an Annual Award that has not Vested shall be automatically forfeited if, at any time prior to the Vesting Date, a Participant who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Career Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Annual Award and whose cessation of employment does not fall within the definition of Retirement, Public Service Retirement or Agreed Termination;

(d) without prejudice to the generality of Rule 5.3(b), a Retention Award that has not Vested shall be automatically forfeited if:

(i) at any time prior to the Retention Award Event Date, a Participant ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason (and regardless of whether or not the Participant meets the Rule of 60 or Consecutive Service Requirement) unless cessation of employment falls within the definition of Agreed Termination, or

(ii) at any time on or after the Retention Award Event Date and prior to the Vesting Date, a Participant who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Career Retire, or failed to respond to or follow the procedures outlined in Rule 4.7 or to submit an Election in accordance with those procedures in relation to such Retention Award and whose cessation of employment does not fall within the definition of Retirement, Public Service Retirement or Agreed Termination;

(e) Annual Awards that have not Vested shall be automatically forfeited if, following Public Service Retirement, the Participant ceases to be a Public Service Employee at any time prior to the Vesting Date for any reason other than death or Total Disability;

(f) Retention Awards that have not Vested shall be automatically forfeited if, following Public Service Retirement (which was on or after the Retention Award Event Date), the Participant ceases to be a Public Service Employee at any time prior to the Vesting Date for any reason other than death or Total Disability;

(g) save as otherwise provided in Rule 5.1, Upfront Awards shall be automatically forfeited if, at any time prior to the Release Date, the Participant ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason (and, for the avoidance of doubt, where a Participant remains a DB Employee as at the Release Date, this Rule 5.3(g) shall not apply, notwithstanding, for example, that the Participant may have provided notice before the Release Date to terminate the Participant's employment after the Release Date or the Participant has provided notice of an intention to resign after the Release Date);

(h) without prejudice to the generality of Rule 5.3(g), an Upfront Award shall be automatically forfeited if, at any time prior to the Release Date, a Participant who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Career Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Upfront Award and whose cessation of employment does not fall within the definition of Retirement, Public Service Retirement or Agreed Termination; or

(i) Upfront Awards shall be automatically forfeited if, following Public Service Retirement, the Participant ceases to be a Public Service Employee at any time prior to the Release Date for any reason other than death or Total Disability.

5.4 Cessation of Career Retirement: The Committee may determine, in its discretion, to remove Career Retirement from Rules 5.1(e) and 5.1(f) in respect of a Participant (or any group of Participants) who work or otherwise worked in any jurisdiction where there is a reasonable possibility or likelihood (as determined by the Committee) that the provisions in Rule 6.5 (in relation to Restricted Services following Career Retirement) are not enforceable or will cease to be enforceable. If the Committee exercises its powers under this Rule, any valid Election to Career Retire that has been duly made shall not be affected in connection with that relevant Award and prior to that Election expiring.

6 General forfeiture and clawback

6.1 Forfeiture of all unvested Awards: In addition to the other forfeiture provisions contained in the Plan Rules, a Participant shall automatically forfeit any Awards that have not Vested, without any claim for compensation by the Participant or any Representative, if any of the following events or activities occurs at any time prior to the Vesting Date for that Award, during or following employment as a DB Employee (including in connection with or following any form of termination identified in Rules 5.1 or 0):

(a) the Participant directly or indirectly solicits or entices away, or endeavours to solicit or entice away any individual person who is employed or engaged by any DB Group Company and, if following the termination of the Participant's employment as a DB Employee, with whom the Participant has had business dealings during the course of the Participant's employment in the 12 months immediately prior to the termination date;

(b) the Participant solicits, directly or indirectly, any company, entity or individual who was a customer or client of any DB Group Company and, if following the termination of the Participant's employment as a DB Employee, with whom the Participant has had business dealings during the course of the Participant's employment in the 12 months immediately prior to the termination date in order to provide Restricted Services to such company, entity or individual;

(c) the Participant directly or indirectly obtains, uses, discloses or disseminates Proprietary Information to any other company, individual or entity or otherwise employs Proprietary Information, except as specifically required in the proper performance of the Participant's duties for any DB Group Company;

(d) the Participant acts in a manner that is prejudicial to the reputation of the DB Group or any DB Group Company;

(e) the Participant or any Representative is responsible for any act or omission that breaches the terms of any agreement into which the Participant has entered with any DB Group Company, including any Election agreement, settlement or separation agreement or compromise agreement; or

(f) the Participant fails to provide, if asked, Proof of Certification, in accordance with Rule 7.6.

6.2 Forfeiture of all undelivered Awards: In addition to the other forfeiture provisions contained in the Plan Rules, the Committee may, in its sole discretion, determine that a Participant shall forfeit such proportion (up to and including 100%) of any Award which has not been Delivered as may be determined by the Committee in its sole discretion without any claim for compensation by the Participant or any Representative in the following circumstances:

(a) where a Participant engages in any conduct at any time prior to the Delivery Date, including prior to the Award Date, that:

(i) breaches any Applicable DB Group Policy or Procedure;

(ii) breaches any applicable laws or regulations imposed other than by the DB Group or any DB Group Company; or

(iii) constitutes a Control Failure, whether arising by act or omission (or series of acts or omissions), whether in whole or in part, directly or indirectly;

in each case, where that conduct is the subject of an internal investigation by a DB Group Company or of an investigation by a regulatory or law enforcement body and it results in disciplinary measures or sanctions against the Participant or a DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company) or would have resulted in such measures or sanctions if the Participant had not ceased to be a DB Employee (or ceased to be an employee of a specific DB Group Company whilst remaining a DB Employee);

(b) where:

(i) the grant or Vesting of that Award was based on a performance measure or measures or on assumptions that are later determined to be materially inaccurate (regardless of whether any relevant measures or assumptions were communicated to the Participant); or

(ii) the grant, vesting or settlement of any other award made to the Participant (whether under the Plan, other compensation plans or other bonus or incentive arrangements, and whether delivered or not) was based on a performance measure or measures or on assumptions that are later determined to be materially inaccurate (regardless of whether any relevant measures or assumptions were communicated to the Participant);

(c) where a Significant Adverse Event occurs, and the Committee considers the Participant to be Sufficiently Proximate to a Relevant Individual in relation to that Significant Adverse Event; or

(d) where the Committee determines, in its sole discretion, that forfeiture is required on the basis of prevailing regulatory requirements (which includes any legislation or guidance published by a regulator from time to time). For the avoidance of doubt, this includes (but is not limited to) having regard to sections 7 of InstitutsVergV and 45 para. 2 sentence 1 no. 5a, 6 of the German Banking Act (Kreditwesengesetz) (as may be amended, modified or replaced from time to time), including any order made by the German Federal Financial Supervisory Authority (BaFin) or any other competent regulatory authority including the US Securities and Exchange Commission (SEC) and applicable securities listing exchanges in relation to such regulatory requirements. Forfeiture may include awards that are permitted to be recovered in satisfaction of the compliance obligations of such rules or laws, if such recovery is the selected method of recovery that the Committee determines is appropriate, alone or in combination with other methods or means of recovery.

Forfeiture under this Rule 0 may occur either before or after the Participant ceases to be a DB Employee for any reason.

6.3 Forfeiture for behaviour amounting to Cause: A Participant shall automatically forfeit any Awards which have not been Delivered if:

(a) during the Participant's employment as a DB Employee, the Participant is responsible for an act or omission, or a series of acts or omissions, which amounted to behaviour listed in the definition of Cause in Rule 2, whether or not the employment is terminated as a result of those acts or omissions.

(b) after the termination of the Participant's employment as a DB Employee (for whatever reason), it is determined that the Participant was responsible for an act or omission, or a series of acts or omissions, while a DB Employee which gave rise to a right on the part of any DB Group Company to terminate the Participant's employment for Cause, even if that right was not exercised; or

(c) after the termination of the Participant's employment as a DB Employee, the Participant is responsible for an act or omission, or a series of acts or omissions, which would have given rise to a right on the part of any DB Group Company to terminate the Participant's employment for Cause had the Participant been a DB Employee at the time of the acts or omissions,

in each case whether or not any DB Group Company or any officer or employee of any DB Group Company knew at the time of the act or omission, or series of acts or omissions, that the relevant right had arisen or would arise. Neither the Participant nor any Representative shall have any claim for compensation in relation to any forfeiture under this Rule 6.3.

6.4 Failure to provide details of brokerage or custody account: If an Award is to be Delivered (or has been Delivered to the Nominee) in DB Shares or other securities, and, if required by the Plan Administrator, the Participant has not provided details of a valid brokerage or custody account in accordance with Rule 7.3, the Committee may in its sole discretion at any time before the transfer of the relevant shares or securities to such an account (whether before or after Delivery of the Award) forfeit that Award (and/or the shares or securities Delivered to the Nominee pursuant to it), and neither the Participant nor any Representative shall have any claim for compensation in relation to that forfeiture against any DB Group Company or the Nominee (as applicable). Following any such forfeiture of shares or securities which have been Delivered to the Nominee, the Participant shall no longer have any beneficial interest in those shares or securities.

6.5 Forfeiture following Retirement, Career Retirement or Public Service Retirement: Following Retirement, Career Retirement or Public Service Retirement, a Participant shall automatically forfeit without any claim for compensation by the Participant or any Representative any Awards that have not Vested and any Upfront Awards if the Participant is employed or engaged in any capacity by a Financial Services Firm (whether directly or via an intermediary and whether or not for remuneration) in connection with the provision of Restricted Services (before the Release Date in the case of Upfront Awards) or in addition, in respect of Public Service Retirement, a participant is employed in the approved Public Service role for less than 12 months, except where:

(a) the services are provided in the ordinary course of a business other than a Financial Services Firm which employs or engages the Participant in any capacity; and

(b) either:

(i) the majority of the clients to whom the Participant's services are provided are not Financial Services Firms; or

(ii) the services provided by the Participant taken as a whole are not Restricted Services.

6.6 Suspension:

(a) If the Committee considers that circumstances may be such that forfeiture may result under Rule 5.3(a), Rule 5.3(e), Rule 5.3(f), Rule 5.3(i), Rule 6.1(a) to (f), Rule 0, Rule 6.3, Rule 6.5 or Rule 6.7, the Vesting Date and/ or the Release Date and/or the Delivery Date for an Award may at the sole discretion of the Committee be delayed until after those circumstances have been investigated (including, but not limited to, pursuant to any investigation referred to in Rule 0) and a determination regarding forfeiture has been made.

(b) In addition, and without limitation to rule 6.2(d), the Committee may delay the Vesting Date and/or the Release Date and/or the Delivery Date of an Award in order to comply with, or to enable the compliance with, prevailing regulatory requirements (which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time and (without limitation) sections 7 of InstitutsVergV and 45 para. 2 sentence 1 no. 5a, 6 of the German Banking Act (Kreditwesengesetz) (in each case, as may be amended, modified or replaced from time to time)).

(c) Where the Delivery Date for an Award is delayed under this Rule 6.6 such that it is after a Change of Control, and the Award is to be settled, the Committee may make such arrangements as it considers fair and reasonable for settlement of the Award (or portion of an Award) (including settlement in cash) where Delivery in DB Shares would no longer be appropriate.

(d) Where the Vesting Date and/or Release Date and/ or the Delivery Date for an Award is delayed under Rule 6.6(a) and a determination has been made not to forfeit an Award (or portion of an Award), if:

(i) the Participant disposes of the DB Shares immediately following the transfer of the shares into the Participant's custody account; and

(ii) the Committee determines that the Participant has suffered a disadvantage as a result of the delay caused by the suspension due to changes in the value of a DB Share or changes in the relevant foreign exchange rates between the first date that DB Shares could have been sold by the Participant (taking account of any restrictions on the Participant's ability to sell DB Shares imposed by applicable laws or regulations, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department) following the date that Delivery was originally expected to occur (the "Earliest Sale Date") and the date of sale following the delayed Delivery Date,

the Committee may, but is not obliged to, make a discretionary payment of such sum as it considers appropriate to the Participant by way of compensation, provided that in no event may any such sum exceed the difference in the value of the relevant DB Shares Shares (determined by reference to the Closing Price, or such other price as the Committee may consider appropriate, at the relevant time) at the Earliest Sale Date and the value of those DB Shares on the date of sale.

(e) Where the Vesting Date and/or the Release Date is delayed under this provision, the Award or Tranche of any Award shall not be subject to forfeiture: (i) under Rule 5.3(b), (c) or (d) if the Participant ceases to be a DB Employee after the original Vesting Date of the Award for reasons described in those Rules; (ii) under Rule 5.3(e) or (f) if the Participant ceases to be a Public Service Employee after the original Vesting Date of the Award; (iii) under Rule 5.3(g) or (h) if the Participant ceases to be a DB Employee after the original Release Date of the Award for reasons described in those Rules; or (iv) under Rule 5.3(i) if the Participant ceases to be a Public Service Employee after the original Release Date of the Award.

6.7 Additional forfeiture provisions for Material Risk Takers: In addition to the other forfeiture provisions contained in the Plan Rules (and without prejudice to the operation of those provisions), if a Participant was a Material Risk Taker in any part of a Performance Period in relation to which an Award was made, and the Committee has determined that applicable laws or regulations require that a provision such as this Rule 6.7 apply to that Award, any part of that Award that has not been Delivered shall be forfeited, without any claim for compensation by the Participant or any Representative, if the Committee determines in its sole discretion that the Material Risk Taker has during that Performance Period:

(a) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or

(b) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or a similar provision in any other applicable regulation.

6.8 Clawback of Awards Delivered to Material Risk Takers or in relation to a competent regulatory authority:

(a) This Rule 6.8 applies in relation to an Award (or, where applicable, Tranches of an Award) Delivered to a Participant who was a Material Risk Taker in any part of the Performance Period in relation to which the Award is made, and the Committee has determined that applicable laws or regulations require that a provision such as this Rule 6.8 apply to that Award, if the Committee determines in its sole discretion that the Material Risk Taker has during that Performance Period:

(i) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or

(ii) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or the equivalent provision in any other applicable regulation; or

(iii) where the Committee determines, in its sole discretion, that clawback is required on the basis of prevailing regulatory requirements (which includes any legislation or guidance published by a regulator from time to time). For the avoidance of doubt, this includes any order made by the German Federal Financial Supervisory Authority (BaFin) or any other competent regulatory authority, including the US Securities and Exchange Commission (SEC) and applicable securities listing exchanges in relation to such regulatory or other legal requirements. Clawback required by such rules or laws, may also include awards delivered as well as made in the performance period, and, for the avoidance of doubt, may include awards that are permitted to be recovered in satisfaction of the compliance obligations of such rules or laws, if such recovery is the selected method of recovery that the Committee determines is appropriate, alone or in combination with other methods or means of recovery.

Clawback under this Rule 6.8 may occur either before or after the Participant ceases to be a DB Employee for any reason.

(b) Where the Committee determines that this Rule 6.8 applies in relation to an Award (or Tranche of an Award), the Participant shall be required to reimburse the Clawback Amount to the DB Group in accordance with the provisions of this Rule 6.8. The Committee shall notify the Participant in writing of the determination and of the Clawback Amount that is due from the Participant (a "Clawback Notice").

(c) For the purposes of this Rule 6.8, the "Clawback Amount" shall be either:

(i) the number of DB Shares Delivered pursuant to the Award (or Tranche of an Award) (the "Clawback Shares"); or

(ii) the market value at the Delivery Date of the DB Shares Delivered pursuant to the Award (or Tranche of an Award) (as determined by the Committee), which shall be the gross amount used by the DB Group to determine the total reported income for income tax and social security purposes (the "Clawback Cash").

(d) The Participant shall reimburse the DB Group for the Clawback Amount by either, at the election of the Participant, transferring the Clawback Shares to such person or entity designated by the Committee or paying the Clawback Cash to a DB Group Company designated by the Committee, as directed by the Committee, in each case as soon as possible after the Clawback Notice takes effect (as provided in Rule 12.2), and in any event within 30 days of that notice taking effect. If the Participant fails to reimburse the DB Group within 30 days of the notice taking effect, the DB Group reserves all of its rights to obtain reimbursement of the Clawback Amount (whether the Clawback Shares or the Clawback Cash, or any combination thereof, regardless of any election of the Participant) from the Participant in any way (or any combination of ways) it deems appropriate to the extent permitted by law. Without prejudice to the generality of the foregoing, any DB Group Company shall be entitled to:

(i) deduct the relevant sum or part of it from any amounts due to the Participant from that DB Group Company (including salary) to the extent permitted by applicable law; and/or

(ii) institute legal proceedings against the Participant for the recovery of the Clawback Amount or any part of it.

(e) If the Participant has paid or is liable to pay any taxation or social security contributions in relation to the Award or any DB Shares acquired pursuant to the Award and the Committee considers that such taxation or social security contributions may not be recovered from or repaid by the relevant tax authority, the Committee at its discretion, may, but is not required to, reduce the Clawback Amount to take account of this amount. Where the Clawback Amount is so reduced, the Participant shall make reasonable efforts to recover the amount of taxation and social security contributions which resulted in the reduction from the relevant tax authority, and if any such taxation or social security contributions are subsequently recovered by the Participant from the relevant tax authority, the Participant shall pay the amount of any such taxation or social security contributions recovered by the Participant to the DB Group. If the Clawback Amount is reduced as described in this Rule 6.8(e) and a DB Group Company recovers any amount of taxation or social security contributions associated with the reduction, the DB Group Company shall retain the amount so recovered.

(f) Neither the Participant nor any Representative shall have any claim for compensation as a result of the operation of this Rule 6.8.

(g) This Rule 6.8 shall not apply to an Award unless the Clawback Notice is delivered so as to take effect before the second anniversary of the Last Vesting Date for the Award. For these purposes, the "Last Vesting Date" is the date set forth in the Award Statement as the date upon which the Award Vests, or where the Award is granted in Tranches, the final date set forth in the Award Statement as the date upon which a Tranche of the Award Vests.

7 Award Settlement

7.1 Time and manner of settlement of an Award: Subject to this Rule 7 (and in particular Rule 0), Delivery of an Award may be spread over up to ten business days following the Release Date of that Award, or such other number of days as determined by the Committee in its sole discretion, from and including the Release Date, by way of (each a "distribution"):

(a) the transfer (whether by a DB Group Company or a third party entity) of the number of DB Shares subject to the Vested Award (taking account of any reduction in that number pursuant to the application of any Performance Condition and any DB Shares to be delivered pursuant to Dividend Equivalents) on or after the Release Date either to the Nominee to hold on trust absolutely for the Participant before onward transfer to an approved account established by the Participant or directly into such account (in both cases, subject to the withholding provisions in Rule 7.4);

(b) if the operation of the Plan means that a Participant would be entitled to receive a fraction of one DB Share, that fraction will be settled in the manner the Plan Administrator in its sole discretion sees fit, including, but not limited to: (i) making a cash payment to the Participant equal to the cash value of the fraction of one DB Share; or (ii) offsetting the cash value of the fraction of one DB Share against an obligation or liability of the Participant under this Plan; or

(c) in the case of any changes to legislation including exchange control or regulatory treatment of any DB Group Company or any present or future Participant arising in relation to any Award following the Award Date, or in the event that any approval or consent required to permit the settlement of an Award in DB Shares (or the acquisition of those shares by any DB Group Company for the purpose of settlement of an Award) is not in place at the requisite time, the Committee may decide that DB Shares will not be transferred in accordance with Rule 7.1(a), but instead a cash payment will be made to the Participant through local payroll (instead of receiving DB Shares), calculated as set out below.

For the purposes of Rule 7.1(c), the cash amount or value will be based on a price per share for each DB Share subject to the Award equal to either the average Sales Price or the average Closing Price per DB Share for the period over the applicable number of trading days of the month in which the Release Date occurs (or such other number of days as the Committee may determine in its sole discretion or as may be required in a particular location for regulatory or tax reasons) and converted using a foreign exchange rate reported at close over the same period as the period in which the average Sales Price or the average Closing Price per DB Share, as applicable, is determined, or such other DB Share price or foreign exchange rate that the Committee or Plan Administrator deems appropriate.

Where an Award is settled following death or Total Disability of a Participant, Delivery may be made to the Participant's Representative following the Representative evidencing the Representative's entitlement to so act to the satisfaction of the Committee.

7.2 Payment: Any cash payment made in connection with Rule 7.1 or pursuant to any Dividend Equivalents will be made within a reasonable number of days but, in any event, no longer than 70 days following the Release Date, subject to local payroll cycles and procedures. Any payment may be made and/or reported through the Participant's employer, regardless of any adverse tax consequences this may cause to the Participant.

7.3 Custody/brokerage account: If required by the Plan Administrator, the Participant or any Representative must provide to the Plan Administrator, before the Vesting Date or such other date as identified by the Plan Administrator, details of a valid DB Group brokerage or custody account, or other brokerage or custody account approved by the Plan Administrator for this purpose, to which any payment to the Participant in the form of DB Shares or other securities is to be made, in a form satisfactory to the Plan Administrator.

7.4 Tax and social security and other statutory withholding: The Plan Administrator or any DB Group Company may withhold such amount and make such arrangements as it considers necessary to meet any liability to taxation, social security contributions or any other statutory deduction in respect of Awards. Without limitation, a distribution into a Participant's custody or brokerage account may be made net of any applicable taxes, social security requirements and any other statutory deductions which a DB Group Company or former DB Group Company is required to withhold or account for, or the distribution may be reduced by a number of DB Shares or other assets with a value equal to the amount of such applicable tax, social security requirements and any other statutory deductions, and in each case the amount of the deduction or the reduced number of DB Shares shall be treated as Delivered. Depending on the Participant's individual circumstances, if a Participant changes locations between the Award Date and settlement, any distribution to that Participant may become subject to multiple withholding taxes or double taxation. The Plan Administrator or Nominee may sell an appropriate portion of the DB Shares or other assets otherwise distributable to the Participant (or the Participant's Representative or such other person to whom the distribution is made) and withhold sufficient sale proceeds to satisfy the withholding liability, and such portion of the DB Shares or other assets so sold shall be treated as Delivered.

The Participant (or the Participant's Representative, if applicable) is responsible for reporting the receipt of income or the proceeds of any sale as a result of the operation of this Rule 7.4 or otherwise to the appropriate tax authority (except where any DB Group Company is legally obliged to account for such reporting).

No DB Group Company takes any responsibility (except where legally required) as to the taxation, social security or other statutory deduction consequences of the Participant participating in the Plan and a Participant should therefore seek independent advice on tax, social security and any other statutory deductions.

7.5 Amounts owed by Participant to a DB Group Company: Subject to applicable law, the Plan Administrator or any DB Group Company may withhold such amount and make such arrangements as it considers necessary in relation to the settlement of an Award to recover any amounts owed for any reason by the Participant to any DB Group Company ("Owed Amounts"). Without limitation, a distribution into a Participant's custody or brokerage account may be made net of any Owed Amounts, or the distribution may be reduced by a number of DB Shares or other assets with a value equal to the Owed Amounts, and in each case the amount of the deduction or the reduced number of DB Shares shall be treated as Delivered. The Plan Administrator or Nominee may sell an appropriate portion of the DB Shares or other assets otherwise distributable to the Participant (or the Participant's Representative or such other person to whom the distribution is made) and withhold sufficient sale proceeds to satisfy the Owed Amounts, and such portion of the DB Shares or other assets so sold shall be treated as Delivered.

7.6 Proof of Certification: If the Plan Administrator requests any Proof of Certification, the Participant must provide such Proof of Certification in a form satisfactory to the Plan Administrator within 30 days of the request (including Proof of Certification sufficient to determine the circumstances in which the Participant ceases to be a DB Employee).

7.7 Notification of events: The Participant must notify the Plan Administrator of any events which may result in the forfeiture of the Award or any part of it prior to any Delivery Date. Furthermore, the Participant agrees that the Participant shall be deemed to warrant and undertake to the Plan Administrator and each DB Group Company on each Delivery Date that the Participant has not acted in any way giving rise to forfeiture pursuant to these Plan Rules at any time prior to the relevant Delivery Date.

If, contrary to Rule 6, the Participant derives any benefit, following the Release Date, to which the Participant is not entitled then the Plan Administrator (or any relevant DB Group Company) shall be entitled to a full recovery of all benefits derived by the Participant wrongly in breach of the warranty and undertaking and/or contrary to Rule 6. This shall be without prejudice to any other rights which any DB Group Company may have arising out of the act or omission giving rise to forfeiture.

7.8 Compliance: The settlement of any Award is subject to any approvals or consents required under any applicable laws or regulations or by any governmental authority, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department. Without prejudice to the generality of the foregoing, and without prejudice to the Committee's right to settle in cash under Rule 7.1(c), if any approval or consent required to permit the settlement of an Award in DB Shares (or the acquisition of those shares by any DB Group Company for the purpose of settlement of an Award) is not in place in time to facilitate the transfer of DB Shares on the Release Date, the first date on which the transfer of DB Shares referred to in Rule 7.1(a) shall take place shall be the first business day following the obtaining of the approval or consent on which DB Shares are delivered to a share account in the name of the Plan Administrator for the settlement of Awards. In such case, Delivery of an Award may be spread over up to ten business days following that later date (or such other number of days as determined by the Committee in its sole discretion) provided that the last of the days over which Delivery is spread shall not be later than 70 days following the Release Date.

8 Corporate events

8.1 Effect of Change of Control on Annual, New Hire and Retention Awards: Except as may otherwise be specified in a Participant's Award Statement, on or before the occurrence of a Change of Control, the Committee shall have the sole discretion to determine whether none, some or all of the outstanding Awards will Vest (and the extent to which any Performance Conditions applicable to those Awards shall be treated as satisfied) and/or be settled as a result of the Change of Control, to the extent not already Vested.

8.2 Effect of Change of Control on Vested Awards subject to a Retention Period: Except as may otherwise be specified in a Participant's Award Statement, on or before the occurrence of a Change of Control, the Committee shall have the sole discretion to determine as to whether any Retention Period to which a Vested Award (whether Vested pursuant to Rule 8.1 or otherwise) is subject shall be treated as ending before the Release Date specified in the Award Statement as a result of the Change of Control.

8.3 Corporate successors: The Plan shall not be automatically terminated by a transfer or sale of the whole or substantially the whole of the assets of Deutsche Bank AG, or by its merger or consolidation into or with any other corporation or other entity, but the Plan or an equivalent equity incentive plan shall be continued after such sale, merger or consolidation subject to the agreement of the transferee, purchaser or successor entity. In the event that the Plan is not continued by the transferee, purchaser or successor entity, the Plan shall terminate subject to the provisions of the Plan, including Rule 7 and Rule 10, and the Participant or any Representative shall have no further claim for compensation arising out of any such termination of the Plan.

8.4 Changes in capitalisation: If any change affects DB Shares on account of a merger, reorganisation, rights issue, extraordinary stock dividend, stock split or similar changes which the Committee reasonably determines justifies adjustments to Awards, the Plan Administrator shall make such appropriate adjustments as are determined by the Committee to be necessary or appropriate to prevent enlargement or dilution of rights.

9 Administration

9.1 Administration by the Plan Administrator: The Plan Administrator shall be responsible for the general operation and administration of the Plan in accordance with its terms and for carrying out the provisions of the Plan in accordance with such resolutions as may from time to time be adopted, or decisions made, by the Committee and shall have all powers necessary to carry out the provisions of the Plan.

9.2 Interpretation by the Committee: The Committee will have full discretionary power to interpret and enforce the provisions of this Plan and to adopt such regulations for administering the Plan as it decides are necessary or desirable. All decisions made by the Committee (including, for the avoidance of doubt, by the Plan Administrator, the DB Group or a DB Group Company, where designated in the Plan Rules as the body to make the decision) pursuant to the Plan are final, conclusive and binding on all persons, including the Participants and any DB Group Company.

9.3 Forfeiture and Vesting: The Committee shall have full discretion to determine whether or not any of the events or activities set forth in Rule 5 and/or Rule 6 has occurred.

10 Amendment or termination of the Plan

10.1 Termination of Plan: The Committee may terminate the Plan at any time in its sole discretion. Termination of the Plan (as opposed to amendment of the Plan) would be without prejudice to the subsisting rights of Participants.

10.2 Amendment of Plan: The Committee may at any time amend, alter or add to all or any of the provisions of the Plan (including, for the avoidance of doubt, the amendment of existing Schedules and the addition of new Schedules) or of any Award Statement or any Performance Condition in any respect in its sole discretion, provided that the Committee cannot materially adversely affect a Participant's existing Award except:

(a) with the Participant's prior consent; or

(b) where the amendment, alteration or addition is made in order to comply with applicable regulatory requirements which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time.

For the avoidance of doubt, no oral representation or statement made by any party, including any employee, officer, or director of any DB Group Company as to the interpretation, application or operation of this Plan or any Awards under it either generally or to any specific set of circumstances shall bind any DB Group Company unless it is confirmed in writing by the Plan Administrator or Senior Executive Compensation Committee.

10.3 Termination of Awards: The Committee may, in its sole discretion, decide at any time to replace an Award or a Tranche of an Award with an award of other assets (including cash or any combination of cash and other assets) or to take such other steps as necessary or appropriate to prevent enlargement or dilution of rights.

11 General

11.1 No guarantee of benefits or unintended rights:

(a) The granting of an Award is at the sole discretion of the Committee (or other persons the Committee permits to make Awards under Rule 4.1). The Committee is not obligated to make any Award, or permit any Award to be made, in the future or to allow DB Employees to participate in any future or other compensation plan even if an Award has been awarded in one or more previous years.

(b) Nothing in these Plan Rules shall be construed as an obligation or a guarantee by any DB Group Company, the Committee or the Plan Administrator with respect to the future value of an Award.

(c) Nothing contained in these Plan Rules shall constitute a guarantee by any DB Group Company that the assets of the DB Group will be sufficient to pay any benefit or obligation hereunder. No Participant or any Representative shall have any right to receive a benefit under the Plan except in accordance with the terms of these Plan Rules.

(d) An Award and resulting distribution shall not (except as may be required by taxation law or other applicable law) form part of the emoluments of individuals or count as wages or remuneration for pension or other purposes.

(e) If a Participant ceases to be a DB Employee for any reason, and, as a result, loses or suffers a diminution in value of an Award in accordance with the Plan Rules, that Participant shall not be entitled, and shall be deemed irrevocably to have waived any entitlement, to any compensation by way of damages or otherwise in connection with that loss or diminution in value in relation to the Award, except as specifically provided for in the Rules.

(f) Notwithstanding anything to the contrary in these Rules, the Participant shall not have, and waives any right to, bring a claim against any DB Group Company for any loss caused or alleged to have been caused by the manner in which any discretion referred to in these Rules has been exercised (or, as the case may be, not exercised).

11.2 No enlargement of Participant rights: The establishment of the Plan and the making of Awards under it is entirely at the sole discretion of the Committee, shall not be construed as an employment agreement and shall not give any Participant the right to be retained as a DB Employee or to otherwise impede the ability of any DB Group Company to terminate the Participant's employment. No communications concerning the Award shall be construed as forming part of a Participant's terms and conditions of employment or any employment agreement with any DB Group Company.

11.3 Severability: The invalidity or non-enforceability of any one or more provisions of these Rules shall not affect the validity or enforceability of any other provision of these Rules, which shall remain in full force and effect.

11.4 Limitations on liability: Notwithstanding anything to the contrary in these Rules, neither any DB Group Company, the Plan Administrator, nor any individual acting as an employee, agent or officer of any DB Group Company or the Plan Administrator, shall be liable to any Participant, former employee or any Representative for any claim, loss, liability or expense incurred in connection with the Plan.

11.5 Claims by Participants: Any claim or action of any kind by a Participant or Representative with respect to benefits under the Plan or these Plan Rules, including any arbitration or litigation filed in a court of law, must be brought within one year from the date that settlement of a Participant's Award was made or would have been made had such Award not been forfeited or lapsed pursuant to these Rules, save to the extent that this restriction would be unlawful under applicable law.

11.6 No trust or fund created: Neither the Plan nor any agreement made hereunder shall create or be construed as creating a trust or separate fund of any kind or a fiduciary relationship between any DB Group Company and the Participants or any Representative. To the extent that any Representative acquired a right to receive payments from any DB Group Company pursuant to a grant under the Plan, such right shall be no greater than the right of any unsecured general creditor of that DB Group Company.

11.7 No right to dividends: An Award does not give any right to the Participant to receive dividends in relation to any DB Shares prior to Delivery of those DB Shares to the Participant. For the avoidance of doubt, any amounts payable to the Participant in connection with Dividend Equivalents do not constitute dividends on DB Shares (notwithstanding that the amount of those payments is calculated by reference to the amount of dividends paid on DB Shares).

11.8 Dealing in DB Shares: Any dealing in DB Shares acquired by a Participant pursuant to the Plan shall remain subject to the requisite Compliance Department approval.

11.9 Participant confidentiality: Except where this provision is contrary to applicable law (including for the avoidance of doubt any applicable law of a jurisdiction other than England and Wales) the Participant shall maintain the Participant's participation in the Plan in confidence both within and outside the DB Group, and shall not disclose the provisions of the Plan or the amount of any Award made to the Participant under the Plan to any person or entity, except the Participant's spouse or partner or their legal, tax and/or financial adviser or to the extent legally required to do so, without the prior written authorisation of the Plan Administrator. For the avoidance of doubt, nothing in these Rules shall prohibit or restrict the Plan Administrator, any Participant or any Group Company from disclosing information to any securities exchange, tax or regulatory authority having jurisdiction over any Group Company or in order to take professional advice or as ordered by a court of competent jurisdiction. Additionally, neither the Plan Administrator, any Participant nor any Group Company is prevented by these Rules from reporting any wrongdoing to a statutory regulator in circumstances in which there is a duty to disclose that wrongdoing or from reporting a criminal offence to the police or other relevant criminal enforcement body.

11.10 Assignment: Except in accordance with Rule 4.9, an Award, including a Vested Award, is not transferable or assignable by the Participant. Notwithstanding this, any DB Group Company shall have the right to novate and/or assign its contractual rights and/or obligations under this Plan in full or in part to any other DB Group Company or an Acquirer Entity at its sole discretion without the express consent of the Participant.

11.11 Data protection: Any DB Group Company may collect and process various data that is personal to a Participant (including, for example, name and address, taxpayer and social security identification numbers, and employee number or other means of confirming employment and title or position with a DB Group Company) for the following purposes:

(a) administering the Plan and Awards;

(b) complying with any legal or regulatory requirements, including tax-related requirements; and

(c) preventing or investigating crimes and misconduct.

This data will be collected directly from the Participant or from the DB Group Company that employs the Participant. If a Participant chooses not to provide or update the data for the purposes described above, this may result in the DB Group being unable to administer the Plan and Awards in respect of the Participant.

In certain countries, there is a requirement to inform Participants of the legal bases permitting DB Group to collect and handle Participants' personal data. In such countries, the legal bases on which DB Group collects and uses a Participant's personal data are to enter into a contract of employment with the Participant, to comply with legal obligations, or because it is necessary in DB Group's legitimate interests.

A DB Group Company may disclose this data to its affiliates or service providers (including the Plan Administrator) in connection with the administration of the Plan and the Award. Some data processing may be done outside of the country in which the Participant is employed, where laws and practices relating to the protection of personal data may not be as stringent as those in the country in which the Participant is employed, including in the United States of America, but the relevant DB Group Company will take steps to ensure that a Participant's personal information is adequately protected in accordance with the local data protection legislation in the country in which the Participant is employed. Furthermore, in certain circumstances, a Participant's personal data may be disclosed for legal or regulatory purposes, within or outside of the country in which the Participant is employed, such as where a court, the police, or other law enforcement agency or regulatory body requests it.

Depending on the country in which the Participant is employed, the Participant may be entitled to exercise certain rights in respect of the Participant's personal data, such as the right to request correction of, or access to a copy of, the Participant's personal data held by the relevant DB Group Company. To find out more about how to exercise those rights, or in case of any questions about how personal data is used, a Participant should contact the Participant's local HR department, or the local Data Protection Officer of the DB Group Company that employs the Participant.

11.12 Entire agreement: These Plan Rules together with the Award Statement (and, if any Performance Condition is set out in an Award Letter, that Award Letter) set forth the entire understanding of the parties with respect to the Award described on the Award Statement. Any agreement, arrangement or communication, whether oral or written, pertaining to the Award described in the Award Statement is hereby superseded and the foregoing Award shall be subject to the provisions of these Plan Rules. To the extent that there is any inconsistency between these Rules and the Award Statement or other communications, these Plan Rules shall prevail.

12 Notices

12.1 Form of notices: All notices or other communications with respect to these Plan Rules shall be in writing and be delivered in person, by email, by facsimile transmission, by registered mail (return receipt requested, postage prepaid) or as may otherwise be indicated by the Plan Administrator (including via any online computer processes established by the Plan Administrator).

Notices or communications to the Plan Administrator or any DB Group Company shall be sent to the following address (or to such other address or in such other manner for the Plan Administrator or any DB Group Company as shall be notified to the Participant):

Plan Administrator (or DB Group Company)
HR Performance & Reward
c/o DB Group Services (UK) Limited
21 Moorfields

London EC2Y 9DB
United Kingdom

12.2 When notices take effect: Notices or other communications shall take effect:

(a) if delivered by hand, upon delivery;

(b) if posted, upon delivery, or, in relation to communications sent to a Participant by first class post, 10.00 a.m. (UK time) on the second day after posting if earlier;

(c) if sent by facsimile or email, when a complete and legible copy of the relevant communication, whether that sent by facsimile or email (as the case may be) or a hard copy sent by post or delivered by hand, has been received at the appropriate address; and

(d) if sent via any online computer processes established by the Plan Administrator, when that communication is registered by the system or acknowledged by the Participant, as the case may be.

12.3 Participants' contact details: It is each Participant's responsibility to keep the Plan Administrator updated with any change to address and other contact details for that Participant. By participating in the Plan, each Participant acknowledges and agrees that the Participant shall have no claim for compensation or otherwise for any loss suffered as a result of, or in connection with, a failure to keep contact details updated. Any notice or other communication given to a Participant by the Plan Administrator or any DB Group Company shall be validly given if sent to the last address validly notified to the Plan Administrator by the Participant (or in the absence of any such notification to the address that the Plan Administrator reasonably believes to be that Participant's address, or to be that Participant's address before any change of address which has not been validly notified to the Plan Administrator).

13 Applicable law and jurisdiction

Interpretation of these Plan Rules shall be governed by and construed in accordance with the laws of England and Wales to the exclusion of the rules on the conflict of laws. All disputes arising out of or in connection with this Award shall be subject to the exclusive jurisdiction of the courts of England and Wales.

The effective date of this document is March 1, 2025.

These Plan Rules (as may be amended from time to time) apply to all Awards granted on or after this Date and before Plan Rules are issued with a later effective date which will supersede and replace these Plan Rules in relation to future grants of Awards.

Deutsche Bank Equity Plan 2025
Schedule 1: Cash Plan

This schedule ("Schedule 1") contains the rules of the Deutsche Bank Cash Plan and is usually applicable to employees in Brazil, China, Czech Republic, Israel, Netherlands, Russia, South Africa, Turkey, Ukraine and Vietnam. The rules of the Deutsche Bank Equity Plan apply to Awards granted under the Deutsche Bank Cash Plan, and such rules are incorporated herein, except as amended by this Schedule 1.

If this Deutsche Bank Cash Plan is used to make an Award to a Participant who is subject to federal taxation in the United States of America, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 2. If this Deutsche Bank Cash Plan is used to make an Award to a Participant who is employed by a Russian employing company of the DB Group, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 4. If this Deutsche Bank Cash Plan is used to make an Award to a Participant who is subject to taxation in Canada, then the references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 5.

1 Definitions

The definition of "Award" in Rule 2 is replaced with the following definition:

"Award" means an award of a conditional right to receive an amount of cash following the Release Date calculated in accordance with this Plan by reference to the value of DB Shares, which may be an Annual Award, New Hire Award, Retention Award, or Upfront Award. An Award will not give a Participant any right to DB Shares.

The definition of "Delivery" in Rule 2 is replaced with the following definition:

"Delivery" means the payment of an amount of cash in settlement of an Award to a Participant or the Participant's Representative.

The definition of "Plan" in Rule 2 is replaced with the following definition:

"Plan" means the Deutsche Bank Cash Plan as governed by the Plan Rules, except as amended by this Schedule 1.

2 Awards

2.1 Rule 4.3(b) is replaced with the following:

b) the number (or maximum number in the case of an Award subject to a Performance Condition) of DB Shares by reference to which the amount of cash payable under the Award is calculated;

2.2 Rule 4.8 is replaced with the following:

4.8 Dividend Equivalents: If a dividend is declared in relation to DB Shares during the Retention Period of an Award (or after the date an Award would have Vested but for a delay in the Vesting Date pursuant to Rule 6.6 and before the Release Date), the Committee may in its sole discretion determine that a Dividend Equivalent shall apply to that Award. A Dividend Equivalent is a right to receive a cash payment on the Release Date. The payment is based on the dividends that would have been paid during the Retention Period (or the period from the original Vesting Date before any delay to the Release Date, as applicable) on the number of Vested DB Shares that remain subject to the Award at the Release Date (as it may be deferred or delayed). The terms of Dividend Equivalents shall be determined by the Committee, and, subject to this determination by the Committee, the Plan Administrator shall determine the manner of calculation of the Dividend Equivalents. Dividend Equivalents shall be subject to the same provisions in these Rules as to forfeiture as the underlying Award, including but not limited to suspension, forfeiture, lapse and clawback.

3 General forfeiture and clawback

3.1 Rule 6.4 is replaced with the following:

6.4 Failure to provide details of bank account: If the Participant has not provided details of a valid bank account in accordance with Rule 7.3 (if required by the Plan Administrator), the Committee may in its sole discretion at any time before Delivery of the Award forfeit that Award, and neither the Participant nor any Representative shall have any claim for compensation in relation to that forfeiture.

3.2 Rule 6.6 is replaced with the following:

6.6 Suspension:

(a) If the Committee considers that circumstances may be such that forfeiture may result under Rule 5.3(a), Rule 5.3(e), Rule 5.3(f), Rule 5.3(i), Rule 6.1(a) to (f), Rule 6.2, Rule 6.3, Rule 6.5 or Rule 6.7, the Vesting Date and/ or the Release Date and/or the Delivery Date for an Award may at the sole discretion of the Committee be delayed until after those circumstances have been investigated (including, but not limited to, pursuant to any investigation referred to in Rule 6.2) and a determination regarding forfeiture has been made.

(b) In addition, and without limitation to rule 6.2(d), the Committee may delay the Vesting Date and/or the Release Date and/or the Delivery Date of an Award in order to comply with, or to enable the compliance with, prevailing regulatory requirements (which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time and (without limitation) sections 7 of InstitutsVergV and 45 para. 2 sentence 1 no. 5a, 6 of the German Banking Act (Kreditwesengesetz) (in each case, as may be amended, modified or replaced from time to time)).

(c) Where the Vesting Date and/or Release Date and/ or the Delivery Date for an Award is delayed under Rule 6.6(a), a determination has been made not to forfeit an Award (or portion of an Award), and the Committee determines that the Participant has suffered a disadvantage as a result of the delay caused by the suspension due to changes in the value of a DB Share or changes in the relevant foreign exchange rates between the original Vesting Date or Release Date or Delivery Date (as applicable) and the delayed Vesting Date or Release Date or Delivery Date (as applicable), the relevant DB Group Company shall make a payment of an appropriate sum to the Participant by way of compensation calculated in accordance with the practice of the DB Group, provided that in no event may any such sum exceed the difference in the value of the relevant DB Shares at the original Vesting Date or Release Date or Delivery Date (as applicable) and the delayed Vesting Date or Release Date or Delivery Date (as applicable).

(d) Where the Vesting Date and/or the Release Date is delayed under this provision, the Award or Tranche of any Award shall not be subject to forfeiture: (i) under Rule 5.3(b), (c) or (d) if the Participant ceases to be a DB Employee after the original Vesting Date of the Award for reasons described in those Rules; (ii) under Rule 5.3(e) or (f) if the Participant ceases to be a Public Service Employee after the original Vesting Date of the Award; (iii) under Rule 5.3(g) or (h) if the Participant ceases to be a DB Employee after the original Release Date of the Award for reasons described in those Rules; or (iv) under Rule 5.3(i) if the Participant ceases to be a Public Service Employee after the original Release Date of the Award.

3.3 Rule 6.8 is replaced with the following:

6.8 Clawback of Awards Delivered to Material Risk Takers:

a) This Rule 6.8 applies in relation to an Award (or, where applicable, Tranches of an Award) Delivered to a Participant who was a Material Risk Taker in any part of the Performance Period in relation to which the Award is made, and the Committee has determined that applicable laws or regulations required that a provision such as this Rule 6.8 apply to that Award, if the Committee determines in its sole discretion that the Material Risk Taker has during that Performance Period:

(i) participated to a significant extent in or been responsible for conduct that has resulted in significant loss or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or

(ii) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or the equivalent provision in any other applicable regulation.

b) Where the Committee determines that this Rule 6.8 applies in relation to an Award (or Tranche of an Award), the Participant shall be required to reimburse the Clawback Amount to the DB Group in accordance with the provisions of this Rule 6.8. The Committee shall notify the Participant in writing of the determination and of the Clawback Amount that is due from the Participant (a "Clawback Notice").

c) For the purposes of this Rule 6.8, the "Clawback Amount" shall be the amount paid to the Participant on settlement of the Award (or Tranche of an Award) in accordance with Rule 7.1 before any deduction pursuant to Rule 7.4.

d) The Participant shall reimburse the DB Group for the Clawback Amount by paying the Clawback Amount to a DB Group Company designated by the Committee, as directed by the Committee, as soon as possible after the Clawback Notice takes effect (as provided in Rule 12.2), and in any event within 30 days of that notice taking effect. If the Participant fails to reimburse the DB Group within 30 days of the notice taking effect, the DB Group reserves all of its rights to obtain reimbursement of the Clawback Amount from the Participant in any way (or any combination of ways) it deems appropriate to the extent permitted by law. Without prejudice to the generality of the foregoing, any DB Group Company shall be entitled to:

(i) deduct the relevant sum or part of it from any amounts due to the Participant from that DB Group Company (including salary) to the extent permitted by applicable law; and/or

(ii) institute legal proceedings against the Participant for the recovery of the Clawback Amount or any part of it.

e) If the Participant has paid or is liable to pay any taxation or social security contributions in relation to the Award and the Committee considers that such taxation or social security contributions may not be recovered from or repaid by the relevant tax authority, the Committee at its discretion, may, but is not required to, reduce the Clawback Amount to take account of this amount. Where the Clawback Amount is so reduced, the Participant shall make reasonable efforts to recover the amount of taxation and social security contributions which resulted in the reduction from the relevant tax authority, and if any such taxation or social security contributions are subsequently recovered by the Participant from the relevant tax authority, the Participant shall pay the amount of any such taxation or social security contributions recovered by the Participant to the DB Group. If the Clawback Amount is reduced as described in this Rule 6.8(e) and a DB Group Company recovers any amount of taxation or social security contributions associated with the reduction, the DB Group Company shall retain the amount so recovered.

f) Neither the Participant nor any Representative shall have any claim for compensation as a result of the operation of this Rule 6.8.

g) This Rule 6.8 shall not apply to an Award unless the Clawback Notice is delivered so as to take effect before the second anniversary of the Last Vesting Date for the Award. For these purposes, the "Last Vesting Date" is the date set forth in the Award Statement as the date upon which the Award Vests, or where the Award is granted in Tranches, the final date set forth in the Award Statement as the date upon which a Tranche of the Award Vests.

4 Award Settlement

4.1 Rule 7.1 is replaced with the following

7.1 Time and manner of settlement of an Award: Subject to this Rule 7, as soon as administratively practicable following the Release Date but, in any event, no longer than 70 days after the Release Date, a Vested Award or Tranche shall be settled by way of a cash payment to the Participant via local payroll (a "distribution"), of an amount equal to the number of DB Shares subject to the Vested Award (taking account of any reduction in that number pursuant to the application of any Performance Condition) multiplied by a price per share for each DB Share equal to either the average Sales Price or the average Closing Price per DB Share for the period over the applicable number of trading days of the month in which the Release Date occurs (or such other number of days as the Committee may determine in its sole discretion or as may be required in a particular location for regulatory or tax reasons) and converted using a foreign exchange rate reported at close on the Release Date, or such other DB Share price or foreign exchange rate that the Committee or Plan Administrator deems appropriate, together with any amount payable pursuant to any Dividend Equivalent. Where the Award is settled after a Change of Control or other event as a result of which the above method of calculating the price per share for a DB Share is not available, the Committee may determine the relevant price per share in such manner as they determine to be appropriate.

Where an Award is settled following death or Total Disability of a Participant, Delivery may be made to the Participant's Representative following the Representative evidencing the Participant's entitlement to so act to the satisfaction of the Committee.

In relation only to a Participant who is subject to federal taxation in the United States of America, the following wording shall be added to the end of the above wording for Rule 7.1:

Where the application of Schedule 2 provides for payment, distribution or Delivery of Awards before the Release Date, the references to Release Date in Rule 7.1 shall be taken to be references to that earlier date of payment, distribution or Delivery.

4.2 Rule 7.2 is replaced with the following:

7.2 Payment: Any payment is subject to local payroll cycles and procedures and may be made and/or reported through the Participant's employer, regardless of any adverse tax consequences this may cause to the Participant. All cash payments will be made via payroll to the Participant's last known bank account (or such other bank account notified to the Plan Administrator by the Participant).

4.3 Rule 7.3 is replaced with the following:

7.3 Bank Account: If required by the Plan Administrator, the Participant or any Representative must provide to the Plan Administrator, before the Release Date or such other date as identified by the Plan Administrator, details of a valid bank account to which any payment to the Participant is to be made, in a form satisfactory to the Plan Administrator.

4.4 Rule 7.5 is replaced with the following:

7.5 Amounts owed by Participant to a DB Group Company: Subject to applicable law, the Plan Administrator or any DB Group Company may withhold such amount and make such arrangements as it considers necessary in relation to the settlement of an Award to recover any amounts owed for any reason by the Participant to any DB Group Company ("Owed Amounts"). Any amount deducted or otherwise recovered pursuant to this Rule 7.5 shall be treated as Delivered.

4.5 Rule 7.8 is replaced with the following:

7.8 Compliance: The settlement of any Award is subject to any approvals or consents required under any applicable laws or regulations or by any governmental authority, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department.

5 General

5.1 Rule 11.7 is replaced with the following:

11.7 No right to dividends: An Award does not give any right to dividends or payment in relation to dividends in relation to the DB Shares by reference to which the value of any cash payment is calculated. For the avoidance of doubt, any amounts payable to the Participant in connection with Dividend Equivalents do not constitute dividends on DB Shares (notwithstanding that the amount of those payments is calculated by reference to the amount of dividends paid on DB Shares).

5.2 Rule 11.8 is deleted.

Deutsche Bank Equity Plan 2025
Schedule 2: United States of America Taxpayers

This schedule ("Schedule 2") modifies the provisions of the Deutsche Bank Equity Plan, as amended from time to time (the "Plan") with respect to Awards (1) in relation to which the Participant may, in the absence of the provisions of this Schedule 2, be subject to federal taxation in the United States of America under the provisions of Section 409A, and (2) made to Participants who are, or are eligible to be a member of a pension plan in the United States of America arranged or provided by or in conjunction with a DB Group Company. The provisions of this Schedule 2 apply automatically to those Awards (whether applicable at the Award Date or not) and supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder in relation to the respective Participants.

Any capitalized terms contained but not defined in this Schedule 2 shall have the meaning provided in the Plan.

These modifications are made to the Plan with the intent that the Plan be compliant with Section 409A:

1 Definitions

The following definitions are added to Rule 2 of the Plan:

"Qualifying Plan Termination" means a termination of the Plan pursuant to which acceleration of the time and form of payment or distribution is permitted under Section 409A.

"Section 409A" means Section 409A of the U.S. Internal Revenue Code of 1986, as amended, and any regulations promulgated or U.S. Treasury Department or U.S. Internal Revenue Service guidance issued thereunder, as may be in effect from time to time.

The definition of "Retirement" in Rule 2 is replaced with the following provision:

"Retirement" means, for the purposes of the Plan, retirement by a Participant, on or after age 65, provided the Participant has made a valid Election to Retire in connection with the relevant Award.

The definition of "Total Disability" in Rule 2 is replaced with the following provision:

"Total Disability" means either (a) a medically determinable physical or mental impairment (i) that can be expected to either (1) result in death or (2) last for a continuous period of not less than 12 months and (ii) as a result of which the Participant either (1) becomes unable to engage in any substantial gainful activity or (2) receives income replacement benefits for a period of not less than 6 months under a long-term disability plan covering DB Employees (but in no case shall the receipt of workers' compensation benefits be considered to qualify as such benefits); or (b) the Participant is deemed Totally Disabled and eligible to receive disability benefits from the US Social Security Administration.

For Participants resident in California, and any other US State where the provisions in Rule 6.5 cease to be enforceable, the definitions 'Proof of Certification' and 'Restricted Services' do not apply.

2 Retirement and Career Retirement – Election to Retire

All references to "Election to Career Retire" shall be replaced with "Election to Retire".

Rules 4.6 and 4.7 shall be replaced with the following:

4.6 Retirement Election – Annual Awards or Upfront Awards: The termination treatment in relation to Retirement or Career Retirement set out in Rule 5.1(e) shall only apply to an Annual Award or Upfront Award (as applicable) if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Award that the Participant intends to terminate employment as a DB Employee by reason of Retirement or Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to an Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of an Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

4.7 Retirement Election – Retention Awards: The termination treatment in relation to Retirement or Career Retirement set out in Rule 5.1(f) shall only apply to a Retention Award if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Retention Award that the Participant intends to terminate employment as a DB Employee (such termination to take effect on or after the Retention Award Event Date) by reason of Retirement or Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to a Retention Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of a Retention Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

Rules 5.3(c) and (d) shall be replaced with the following:

(c) without prejudice to the generality of Rule 5.3(b), an Annual Award that has not Vested shall be automatically forfeited if, at any time prior to the Vesting Date, a Participant who has reached the age of 65 or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Annual Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

(d) without prejudice to the generality of Rule 5.3(b), a Retention Award that has not Vested shall be automatically forfeited if:

(i) at any time prior to the Retention Award Event Date, a Participant ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason (and regardless of whether or not the Participant has reached age 65 or meets the Rule of 60 or Consecutive Service Requirement) unless cessation of employment falls within the definition of Agreed Termination, or

(ii) at any time on or after the Retention Award Event Date and prior to the Vesting Date, a Participant who has reached age 65 or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.7 or to submit an Election in accordance with those procedures in relation to such Retention Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

Rule 5.3(h) shall be replaced with the following:

(h) without prejudice to the generality of Rule 5.3(g), an Upfront Award shall be automatically forfeited if, at any time prior to the Release Date, a Participant who has reached age 65 or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Upfront Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

3 Impact of termination of employment

3.1 Rule 5.2 is hereby replaced with the following:

5.2 Termination upon death or Total Disability: If a Participant ceases to be a DB Employee due to death or Total Disability (documented to the reasonable satisfaction of the Plan Administrator), an Award which is not subject to a Retention Period or a Performance Condition will, subject to Rule 6.6, Vest in full as soon as practicable after the date of Total Disability or death, to the extent not previously Vested.

Where an Award is subject to a Retention Period or a Performance Condition it will continue to Vest in accordance with the Award Statement and subject to these Plan Rules (including, without limitation, the forfeiture provisions of Rule 6), and will remain subject to any applicable Retention Period and Performance Condition.

Notwithstanding anything to the contrary in the Plan or any Award Statement, neither the Committee nor the Plan Administrator shall have the discretion to accelerate the distribution of an Award except as expressly provided in this Schedule 2 or otherwise in compliance with Section 409A.

4 General forfeiture and clawback

Rules 6.1a,6.1 b,6.1 f and 6.5 shall not apply to Participants who are resident in California and any other US State where the provisions cease to be enforceable.

5 Award Settlement

Rule 7.6 does not apply to Participants who are resident in California.

Add the following new Rule 7.9:

7.9 Distribution Deadline:

Notwithstanding anything to the contrary in this Schedule 2, the Plan or any Award Statement, any payment or distribution due hereunder or thereunder shall be made on a date no later than (i) the end of the calendar year in which the Release Date occurs or (ii) if later, the fifteenth day of the third calendar month following such Release Date.

6 Corporate events

Awards will Vest and be distributed as provided in the Plan; provided that, notwithstanding anything to the contrary in the Plan or any Award Statement:

The provisions of Rule 8.1, Rule 8.2 and Rule 8.3 will be replaced with the following:

8.1 Effect of Change of Control on Annual, New Hire and Retention Awards: Subject to Rule 8.3, in the event of a Change of Control prior to the Vesting Date, the Committee may determine in its sole discretion that all or a portion (including none) of the Participant's unvested Award shall Vest or shall Vest at any time thereafter (and the extent to which any Performance Conditions applicable to those Awards shall be treated as satisfied, provided that Rule 6 shall in any case continue to apply), and any such portion of the Award that shall have Vested shall be distributed on the date on which it would have been distributed if the Change of Control had not occurred.

8.2 Effect of Change of Control on Vested Awards subject to a Retention Period: In no event shall a Vested Award be settled any earlier than the Release Date as a result of a Change of Control.

8.3 Corporate successors: The Plan shall not be automatically terminated by a transfer or sale of the whole or substantially the whole of the assets of Deutsche Bank AG, or by its merger or consolidation into or with any other corporation or other entity, but the Plan or an equivalent equity incentive plan shall be continued after such sale, merger or consolidation subject to the agreement of the transferee, purchaser or successor entity. In the event that the Plan is not continued by the transferee, purchaser or successor entity, the Plan shall, subject to and in accordance with the requirements of Section 409A, terminate subject to the provisions of the Plan, including Rule 7 and Rule 10, and the Participant or any Representative shall have no further claim for compensation arising out of any such termination of the Plan.

7 Administration

The following paragraph is added to the end of Rule 9.1 of the Plan:

The Plan and any Award Statement are intended to comply with Section 409A and shall be interpreted, operated and administered accordingly; provided, that, for purposes of the foregoing, references to a term or event (including any authority or right of any DB Group Company or a Participant) being "permitted" under Section 409A shall mean that the term or event will not cause the Award to be subject to taxation under Section 409A.

Rule 9.3 will be replaced with the following:

9.3 Forfeiture and Vesting: Subject to the requirements of Section 409A, the Committee shall have full discretion to determine whether or not any of the events or activities set forth in Rule 5 and/or Rule 6 has occurred.

8 Amendment or Termination of the Plan

Awards will Vest and be distributed as provided in the Plan; provided, that notwithstanding anything to the contrary in the Plan or any Award Statement:

The provisions of Rule 10 will be replaced with the following:

10.1 Termination of Plan: The Committee may terminate the Plan at any time at its sole discretion. In the event of a Qualifying Plan Termination prior to the Vesting Date, any outstanding Awards shall become fully Vested (and the Committee shall determine the extent to which any Performance Conditions shall be treated as satisfied) and shall be distributed to the Participant within a reasonable time following the date of such Qualifying Plan Termination, subject to any applicable payment timing requirements or restrictions under Section 409A, and thereafter the Participant shall cease to have any rights under the Plan or with respect to any Award. In the event of a Plan termination other than a Qualifying Plan Termination prior to the Vesting Date, any outstanding Awards shall continue to Vest and be paid or distributed, if at all, on the date on which it would have otherwise Vested and been paid or distributed, if at all, if the Plan had not been terminated, and thereafter the Participant shall cease to have further rights under the Plan or with respect to any Award, provided, however, that such distribution may be accelerated by the Committee to the extent necessary to avoid adverse tax consequences under Section 409A.

10.2 Amendment of Plan: Subject to the requirements of Section 409A, the Committee may at any time amend, alter or add to all or any of the provisions of the Plan (including, for the avoidance of doubt, the amendment of existing Schedules and the addition of new Schedules) or of any Award Statement or any Performance Condition in any respect in its sole discretion, provided that the Committee cannot materially adversely affect a Participant's existing Award except:

(a) with the Participant's prior consent; or

(b) where the amendment, alteration or addition is made in order to comply with applicable regulatory requirements (which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time).

For the avoidance of doubt no oral representation or statement made by any party, including any manager, officer, or director of any DB Group Company as to the interpretation, application or operation of this Plan or any Awards under it either generally or to any specific set of circumstances shall bind any DB Group Company unless it is confirmed in writing by the Plan Administrator or Senior Executive Compensation Committee.

10.3 Termination of Awards: Subject to the requirements of Section 409A and the provisions of Rule 5.1, the Committee may, in its sole discretion, decide at any time to replace an Award or a Tranche of an Award with an award of other assets (including cash) or to take such other steps as necessary or appropriate to prevent enlargement or dilution of rights.

Deutsche Bank Equity Plan 2025
Schedule 3: Germany

Set forth below is a summary of the contents of the Schedule to the Deutsche Bank Equity Plan for employees in Germany.

The Germany Schedule consists of procedural descriptions regarding:

- Procedure of the Career Retirement Election
- Implementation of Clawback for Material Risk Takers (MRT)
- Deduction of Tax and Social Security Amounts
- Types of Information with regards to Deferred Awards and access to these Information

Collective agreements covering Deferred Awards have been signed respectively for both managerial and non-managerial staff in Germany. The collective agreements for managerial and non-managerial staff cover the Deferred Awards guiding principles and procedures in a legally binding form regarding:

- Principles of Deferred Awards (Performance Conditions, Retention Periods, Vesting, Release and Delivery)
- Prerequisites for the Delivery/ Payment of Deferred Awards
- Forfeiture of Deferred Awards
- Suspension of Deferred Awards
- Clawback for Material Risk Takers (MRT)

While the collective agreement is the leading document in Germany, the global Plan Rules, Schedules and Award Statements and their respective applicability are referred to complementarily; yet, a majority of the collective agreements' content is congruent to the Plan Rules and the Schedules for Germany.

Deutsche Bank Equity Plan 2025
Schedule 4: Russian Federation

This Schedule ("**Schedule 4**") modifies the provisions of the Deutsche Bank Equity Plan, as such may be amended from time to time (the "**Plan**"). The provisions of this Schedule 4 (i) apply with respect to Participants employed by a Russian employing company of the DB Group, and (ii) supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder.

Except as expressly modified herein, all terms and conditions of the Plan are incorporated into this Schedule 4 as if first set forth herein. Any capitalised terms contained but not defined in this Schedule 4 shall have the meaning provided in the Plan.

1 Definitions

The following definitions defined in Rule 2 of the Plan shall be modified as follows:

The definition of "Agreed Termination" in Rule 2 of the Plan shall be replaced with the following provision:

"Agreed Termination" means termination of a Participant's employment with a DB Group Company on the basis of agreement between the Participant and a DB Group Company following the resolution of an employment-related dispute, resolved by the execution of a settlement, separation or compromise agreement containing, among other things, a full release of claims against each DB Group Company by the Participant, and which is approved as an Agreed Termination by the Committee.

The definition of "Cause" in Rule 2 shall be replaced by the definition of "Misconduct" as follows:

"Misconduct" means in respect of the Participant: (i) any act or omission or series of acts or omissions that, when taken together or alone, constitute a material breach of the terms and conditions of employment; (ii) the conviction of the Participant by a competent court of law of any crime (other than minor offences that do not adversely affect the business or reputation of any DB Group Company, as determined by the Committee in its sole discretion); (iii) unlawful, unethical or illegal conduct, or any misconduct by the Participant in connection with the performance of the Participant's duties as a DB Employee or conduct by the Participant otherwise in violation of the terms of the applicable employee handbook or other local policy or contractual documentation; (iv) knowingly failing or refusing to carry out specific lawful instructions from a DB Group Company (or a duly authorised employee or officer of such a company) relating to material matters or duties within the scope of the Participant's responsibilities for a DB Group Company; (v) committing any act involving dishonesty, fraud, misrepresentation, or breach of trust; or (vi) the issuance of any order or enforcement action against the Participant or against any DB Group Company in connection with the Participant's actions or omissions by any regulatory body with authority over the conduct of business by that DB Group Company where the issuance of that order or enforcement action impairs a) the financial condition or business reputation of the DB Group or any DB Group Company or b) the Participant's ability to perform the Participant's assigned duties (or would have done so if the Participant were still a DB Employee).

The definition of "Retirement" in Rule 2 shall be replaced with the following provision:

"**Retirement**" means the actual date of the Participant's retirement in accordance with the applicable Russian Federation law.

The definition of “Career Retirement” in Rule 2 shall not apply to participants in Russia.

The definition of "Election to Career Retire" shall not apply to participants in Russia.

The definition of "Total Disability" in Rule 2 shall be replaced with the following provision:

"Total Disability" means the Participant being prevented from engaging in any substantial gainful activity by physical or mental impairment that can be expected to either (i) result in death or (ii) last for a continuous period of not less than 12 months as confirmed by the medical statement issued in accordance with effective Russian legislation and as certified by the Committee, at its sole discretion.

The following definitions are added to Rule 2 of the Plan:

"Cause" means a cause for termination of a Participant's employment as a DB Employee due to the Participant's fault as specified in Article 81 of the Russian Labour Code.

"Russian Labour Code" means the Labour Code of the Russian Federation dated 30 December 2001 No. 197-FZ.

2 Awards

Rule 4.6 and 4.7 shall not apply to participants in Russia

3 Impact of termination of employment

Rule 5.1 (e) and 5.1 (f) is replaced with the following:

(e) in relation to Annual Awards and Upfront Awards only, Retirement or Public Service Retirement; or

(f) in relation to Retention Awards, Retirement or Public Service Retirement, where the Participant ceases to be a DB Employee on or after the Retention Award Event Date.

Rule 5.3 (c) and 5.3 (d) and 5.3 (h) shall not apply to participants in Russia

Rule 5.4 shall not apply to participants in Russia

4 General forfeiture

The following Rule 6.1(g) is added to Rule 6.1

g) during or after employment as a DB Employee the Participant is responsible for acts or omissions which comprise Misconduct.

Rule 6.5 shall not apply to participants in Russia.

5 Amendment or termination of the Plan

Rule 10.2 is replaced with the following:

10.2 Amendment of Plan: The Committee may at any time amend, alter or add to all or any of the provisions of the Plan (including, for the avoidance of doubt, the amendment of existing Schedules and the addition of new Schedules) or of any Award Statement or any Performance Condition in any respect in its sole discretion. For the avoidance of doubt no oral representation or statement made by any party, including any employee, officer, or director of any DB Group Company as to the interpretation, application or operation of this Plan or any Awards under it either generally or to any specific set of circumstances shall bind any DB Group Company unless it is confirmed in writing by the Plan Administrator or Senior Executive Compensation Committee.

6 General

Rule 11.1(a) is replaced with the following:

a) The granting of an Award is at the sole discretion of the Committee (or other persons the Committee permits to make Awards under Rule 4.1), in particular it has the right not to grant an Award, to cancel an Award, or to indefinitely defer payment of an Award. The Committee is not obligated to make any Award, or permit any Award to be made, in the future or to allow DB Employees to participate in any future or other compensation plan even if an Award has been awarded in one or more previous years.

Rule 11.10 is replaced with the following:

11.10 Assignment: Except in accordance with Rule 4.8, an Award, including a Vested Award, is not transferable or assignable by the Participant.

Rule 11.11 is replaced with the following:

11.11 Data Protection: Subject to prior written consent of the Participant given in accordance with the effective Russian legislation, any DB Group Company may collect and process various data that is personal to Participants (including, for example, name and address, taxpayer and social security identification numbers, and employee number or other means of confirming employment and title or position with a DB Group Company) for the purposes of administering the Plan, compliance with any requirement of law or regulation, including tax-related requirements, and the prevention or investigation of crimes and malpractice. This data will be collected directly from the Participant or from the DB Group Company that employs the Participant. A failure or refusal on the part of the Participant to provide or update the data (or to agree to the uses of the Participant's personal data described above) may result in the DB Group being unable to administer the Plan in respect of the Participant. Subject to prior written consent of the Participant given in accordance with the effective Russian legislation, a DB Group Company may disclose this data to its affiliates or service providers (including the Plan Administrator) in connection with administration of the Plan. Subject to prior written consent of the Participant given in accordance with the effective Russian legislation, a DB Group Company may transfer personal data of the Participant for its processing outside Russia where laws and practices relating to the protection of personal data may be weaker than those within Russia, including in the United States of America, but wherever practicable the DB Group will take steps to ensure that Participants' personal information is adequately protected and complies, so far as possible, with the local data protection legislation in Russia. In certain circumstances courts, law enforcement agencies or regulatory agencies within or outside Russia may be entitled to access the data. Depending on the country in which the Participant is employed, the Participant may have the right to request access to, a copy of and correction of information held by the DB Group and may write to the local Data Protection Officers of the DB Group, at the contact details which will be provided from time to time, for these purposes and also to request that the DB Group specify or explain its policies and procedures in relation to data and the types of data held.

7 Applicable law and jurisdiction

Rule 13 is replaced with the following:

Interpretation of these Plan Rules shall be governed by and construed in accordance with the laws of England and Wales to the exclusion of the rules on the conflict of laws, except when Russian law must apply. All disputes arising out of or in connection with this Award shall be subject to the exclusive jurisdiction of the courts of England and Wales, except in cases of mandatory jurisdiction of Russian courts.

Deutsche Bank Equity Plan 2025
Schedule 5: Canada

[Note: There is no Schedule 5 for 2025, because there are no Canadian participants.]

Deutsche Bank Equity Plan 2025
Schedule 6: France

Addendum for Participants in France governing Qualified Free Share Awards.

2 Purpose

This schedule ("Schedule 6") modifies the terms of the Deutsche Bank Equity Plan (the "Plan") with respect to Awards which are intended to be Qualified Free Share Awards (as defined under paragraph 2 below) and are designated as such in the Award Statement. For the avoidance of doubt, an Upfront Award (as designated in the Award Statement) is not intended to be a Qualified Free Share Award (and will not be designated as such in the Award Statement).

The terms and conditions of this Schedule 6 are identical to the Plan except as provided below. They have to be read in conjunction with the Plan Rules. In the event of any conflict between the terms and conditions of this Schedule 6 and the Plan, the provisions of this Schedule 6 shall prevail for the grants made hereunder.

The purpose of this Schedule 6 is to ensure that Awards are in conformity with the applicable legislation, and notably French legislation in relation to qualified equity plans in France (see "Qualified Free Share Award" as defined in paragraph 2 below).

DB is committed to ensuring that Schedule 6 is compliant with the French corporate law governing performance shares as well as CRD IV requirements affecting variable compensation settled in shares to any eligible Participants.

The Committee duly appointed by the Management Board has approved the terms of the qualified equity plan, in accordance with the applicable German legislation, and has notably determined the conditions that are applicable in case of disability, and has proceeded to grant Qualified Free Share Awards.

For the avoidance of doubt, under this Plan, the Committee means the Senior Executive Compensation Committee in normal circumstances but may alternatively be the Management Board or any committee or other entity or person designated by the Management Board to act as the decisional body under this Plan.

3 Definitions

The following definitions are added to Rule 2 of the Plan:

"Qualified Free Share Award" means a qualified free share award, as authorised by the ad hoc body of Deutsche Bank AG, within the meaning of:

- Articles L.225-197-1 to L.225-197-6 of the French Commercial Code for legal purposes;
- Article 80 quaterdecies of the French General Tax Code for tax purposes;
- Articles L.242-1, L.137-13 and L.137-14 of the French Social Security Code for social security purposes; and
- French Tax Regulation (BOFIP) dated July 24, 2017 BOI-RSA-20-20-10-20-20170724.

The definition of "Award" in Rule 2 is replaced with the following provision:

"Award" means a conditional right to receive DB Shares (which are newly issued or existing DB Shares purchased by Deutsche Bank AG at no cost to the Participant) following the Release Date and which is designated as a Qualified Free Share Award in the Award Statement. An Award does not give a Participant a right to subscribe for unissued DB Shares.

The definition of "Subsidiary" in Rule 2 is replaced with the following provision:

"Subsidiary" means a company or other entity of which a Holding Company has a direct or indirect controlling interest or equity or ownership interest which represents more than fifty percent (50%) of the aggregate equity or ownership interest in that company or entity, and, in the case of a Subsidiary of Deutsche Bank:

- in which at least 10% of the voting rights and/or equity is held directly or indirectly by Deutsche Bank AG;
- which holds, directly or indirectly, at least 10% of the voting rights and/or equity in Deutsche Bank AG; or
- which at least 50% of the equity or voting rights are held, directly or indirectly, by a company which itself holds at least 50% of Deutsche Bank AG

The definition of "Total Disability" in Rule 2 is completed with the following provision:

Disabilities as defined in the second and third categories by Article L.341-4 of the French Social Security Code shall be understood as a part of Total Disability.

The definition of "Dividend Equivalents" in Rule 2 is deleted.

4 Interpretation

This Schedule 6 does not amend this Rule.

5 Awards

Rule 4 (Awards) of the Plan is amended as follows:

a) At the end of Rule 4.1 (Eligibility) of the Plan, the following wording is added:

Notwithstanding the above, DB Employees who are eligible to be granted Awards under Schedule 6 shall consist exclusively of employees performing their professional activity in France for the DB Group at some point between the Award Date and before the Vesting Date, or determined as such by the Committee, and with a valid employment contract such as defined at Articles L.225-197¬1 and L.225-197-2 of the French Commercial Code and/or corporate officers listed hereafter : “President du Conseil d’Administration”, “Directeur General”, “Directeurs Generaux delegues”, Members of the “Directoire”, “Gerant” of the “Societe par actions” of Deutsche Bank AG or of any parent or subsidiary of Deutsche Bank AG, “President” of the “Societe par Actions Simplifiees”.

An Award may not be granted to employees or corporate officers holding more than 10% of the issued share capital of Deutsche Bank AG or any holder who, after having received DB Shares under this Schedule 6, would hold more than 10% of the issued share capital in Deutsche Bank AG.

b) At the end of Rule 4.2 (Terms of Awards) of the Plan, the following wording is added:

Awards will be settled only by delivery of DB Shares to the Participant. DB Shares that may be delivered pursuant to Awards granted under this Schedule 6 shall not exceed 10% of the share capital of Deutsche Bank AG. Awards granted under this Schedule 6 are also subject to the terms and conditions set forth in this Schedule 6 and the terms of the Award Statement.

It is nevertheless expected that none of the Awards made in accordance with the Plan shall be part of a collective award of shares. For the avoidance of doubt, a collective award of shares means the allocation of DB share benefits to all the employees of the company.

Notwithstanding any other provision of the Plan to the contrary (other than Rule 5.2 and Rule 8), the transfer of Shares to the Participant must not be before the second (2nd) anniversary of the Award Date.

c) A new Rule 4.3(g) is inserted as follows:

g) that the Award is designated as a Qualified Free Share Award.

d) Rule 4.8 (Dividend Equivalents) is deleted.

e) At the end of Rule 4.9 (Non-transferable Awards) of the Plan the following wording is added:

Further, a Participant to whom an Award under this Schedule 6 is granted shall have no shareholder rights including the right to vote or to receive dividends, until the Award is duly settled and the ownership of the DB Shares is transferred to the Participant, after the Release Date. For the avoidance of doubt, for Awards subject to a Retention Period, the Participant shall not acquire shareholder’s rights earlier than the expiration of the applicable Retention Period.

DB Shares obtained by the Participant pursuant to Awards will be registered in the name of the Participant or be identifiable. They will be registered in the Company’s books in an individual account.

f) A new Rule 4.13 inserted as follows:

4.13 Restriction on sale of shares: Notwithstanding any provision of the Plan to the contrary, DB Shares acquired pursuant to an Award shall not be sold:

i. Within ten (10) trading days before and within three (3) days after the publication of Deutsche Bank AG’s annual consolidated accounts, and;

ii. Within a period starting with the date at which Deutsche Bank AG’s corporate officers have knowledge of information which, if it were made public, would have significant impact on the DB share’s value and ending ten (10) trading days after the information becomes public knowledge.

This Rule 4.13 shall not apply to the extent that the domestic legislation applicable to the Company provides similar restriction periods relating to sale of DB Shares and consequently, offers equivalent guarantees to those provisions of the French Commercial Code.

6 Impact of termination of employment

At the end of Rule 5.2 (Termination upon death or Total Disability) of the Plan the following sentence is added:

In case of Total Disability, the Committee has resolved that the provisions specified in this Rule 5.2 shall apply to French Qualified Free Share Awards.

Rule 5.3 (Termination resulting in forfeiture) of the Plan is amended by the addition of the following wording at the end:

Notwithstanding the above, where an Award not subject to a Retention Period then the forfeiture provisions under Rules 5.3(b), (c) and (e) will cease to apply for the first Tranche of that Award on the first anniversary of the Award Date.

7 General forfeiture

This Schedule 6 does not amend this Rule.

8 Award Settlement

Rule 7 (Award Settlement) of the Plan is amended as follows:

(a) The wording “and any DB Shares to be delivered pursuant to Dividend Equivalents” is deleted from Rule 7.1(a).

(b) At the end of Rule 7.1 (a) of the Plan, the following sentences are added:

An Award must be settled by the Plan Administrator only in accordance with this Rule 7.1(a). For the avoidance of doubt, the Plan Administrator will not have discretion as to the settlement of an Award made under this Schedule 6. Awards will be settled only by delivery of DB Shares to the Participant.

(c) Rules 7.1 (b) and 7.1 (c) and the penultimate paragraph of Rule 7.1 (“For the purposes of Rule 7.1(c)...”) of the Plan are deleted by this Schedule 6.

(d) Rules 7.2 “Payment” of the Plan is deleted by this Schedule 6.

(e) At the end of Rule 7.4 “Tax and social security and other statutory withholding” of the Plan, the following sentence is added:

If the Participant has exercised a professional activity in France prior to the Vesting Date, a withholding tax will be assessed on the portion of the vested gain related to the French source activity realized by the non-French tax resident Participant, in accordance with Article 182 A ter of the French tax code.

9 Corporate events

Rule 8 (Corporate events) of the Plan is amended as follows:

(a) Rule 8.2 (Effect of Change of Control on Vested Awards subject to a Retention Period) is amended to read as follows:

Except as may otherwise be specified in a Participant’s Award Statement, on or before the occurrence of a Change of Control, the Committee shall have the discretion to determine as to whether the Retention Period to which a Vested Award (whether Vested pursuant to Rule 8.1 or otherwise) is subject shall be treated as ending before the Release Date specified in the Award Statement as a result of the Change of Control.

As per Article L.225-197-1 III of the French Commercial Code, in the event of the exchange of DB Shares without cash payment resulting from a merger occurring before the Vesting Date or during the Retention Period and in the event of share exchange resulting from a public offer, the provisions relating to Vesting and the Retention Period shall remain applicable, unless the Committee decides otherwise pursuant to Rule 8 of the Plan

(b) At the end of Rule 8.4 (Changes in capitalisation), the following paragraphs are added:

Additional fractional shares or additional shares transferred as a result of this Rule will not be recognized as Qualified Free Share Awards.

If any capital operation restrictively listed under Article L. 225-181 of the French Commercial Code is realized by the company, the Board or the Committee may adjust the number of Qualified Awards granted to the French Participants.

10 Administration

This Schedule 6 does not amend this Rule.

11 Amendment or termination of the Plan

Rule 10 (Amendment or termination of the Plan) of the Plan is amended as follows:

(a) At the end of Rule 10.2 (Amendment of the Plan), the following paragraph is added:

This Schedule 6 has been drafted based on French legislation in force at the present time. The Committee shall have discretion to amend any provisions of this Schedule 6 in order to take into account any amendment or modification of French legislation (including subsequent official comments from the French tax authorities). The Committee reserves the right to adjust or cancel Awards and consider any replacement awards in cash or in shares in case new legislation affecting these awards would (i) contradict its compensation policy and notably DB Group governance rules adopted in conformity with CRD IV applicable legislation and (ii) change any tax and social security treatment for DB and/or the Participants when compared to the French legislation in force on the Award Date.

(b) Rule 10.3 (Termination of Awards) of the Plan is deleted.

12 General

Rule 11.7 (No right to dividends) of the Plan is hereby replaced with the following:

12.1 No shareholder rights: Notwithstanding any provisions to the contrary, an Award does not give any shareholder rights, including the right to vote or to receive dividends, until Delivery of the DB Shares after the Release Date.

13 Notices

This Schedule 6 does not amend this Rule.

14 Applicable law and jurisdiction

This Schedule 6 does not amend this Rule.

Deutsche Bank Equity Plan 2025
Schedule 7: New Hire

The rules of the Deutsche Bank Equity Plan apply to Awards granted under schedule ("Schedule 7"), and such rules are incorporated herein, except as amended by this Schedule 7.

If this Schedule 7 applies to an Award made under Schedule 1 to the Deutsche Bank Equity Plan (the Deutsche Bank Cash Plan), then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 1. If this Schedule 7 applies to an Award to a Participant who is subject to federal taxation in the United States of America, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 2. If this Schedule 7 applies to an Award to which Schedule 3 also applies, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 3. If this Schedule 7 applies to an Award to a Participant who is employed by a Russian employing company of the DB Group, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 4. If this Schedule 7 applies to an Award designated as a Qualified Free Share Award in accordance with Schedule 6, then the references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 6. If this Schedule 7 applies to an Award to which Schedule 10 also applies, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 10.

1 Definitions

The definition of "Career Retirement" in Rule 2 is replaced with the following:

"Career Retirement" means voluntary termination of employment as a DB Employee by a Participant who has complete years of age plus number of complete years of service as a DB Employee equalling 60 or more ("Rule of 60"), provided however that the Participant must have five or more complete years of consecutive service (the "Consecutive Service Requirement") as a DB Employee on or before the most recent date of termination of employment and provided the Participant has made a valid Election to Career Retire in connection with the relevant Award. If the Consecutive Service Requirement is satisfied, the number of complete years of service used to calculate the Rule of 60 may also include any period of employment as a DB Employee prior to a break in continuous service. Where a Participant evidences to the satisfaction of the Committee (in its absolute discretion) within 3 months of the date the Participant becomes a DB Employee (or such longer period as the Committee may permit) that, had the Participant remained employed by the employer who employed the Participant immediately before the Participant became a DB Employee (the "Previous Employer"), the Participant would have been entitled to retire at some point within five years of the time the Participant became a DB Employee and retain outstanding awards made to the Participant by the Previous Employer, under a provision which is broadly equivalent to the Career Retirement provisions of this Plan (and which takes account of the age of the Participant), then the Rule of 60 shall not apply for the purpose of this definition but the Consecutive Service Requirement and the requirement to make an Election shall still apply. Where such a Participant further so evidences that the Participant would, at the time of ceasing employment with the Previous Employer, have been entitled to retire and retain outstanding awards made to the Participant by the Previous Employer, under such a provision, then in addition to the Rule of 60 not applying, the Consecutive Service Requirement shall be reduced to three or more years of consecutive service (the "Reduced Consecutive Service Requirement").

2 Termination resulting in forfeiture

Rule 5.3(c) shall be replaced with the following:

"without prejudice to the generality of Rule 5.3(b), an Annual Award that has not Vested shall be automatically forfeited if, at any time prior to the Vesting Date, a Participant who meets the Rule of 60 (where that rule applies for the purposes of the definition of "Career Retirement") and Consecutive Service Requirement (or Reduced Consecutive Service Requirement, as applicable) ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Career Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Annual Award and whose cessation of employment does not fall within the definition of Retirement, Public Service Retirement or Agreed Termination;"

Rule 5.3(h) shall be replaced with the following:

"without prejudice to the generality of Rule 5.3(g), an Upfront Award shall be automatically forfeited if, at any time prior to the Release Date, a Participant who meets the Rule of 60 (where that rule applies for the purposes of the definition of "Career Retirement") and Consecutive Service Requirement (or Reduced Consecutive Service Requirement, as applicable) ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Career Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Upfront Award and whose cessation of employment does not fall within the definition of Retirement, Public Service Retirement or Agreed Termination;"

Deutsche Bank Equity Plan 2025
Schedule 8: Severance Awards

Schedule governing Severance Award

1 Purpose

This schedule ("Schedule 8") modifies the terms of the Deutsche Bank Equity Plan (the "Plan") with respect to Awards which are intended to be Severance Awards and are designated as such in the Award Statement.

Severance Awards are intended to be granted to DB Employees who are shortly to cease to be DB Employees or to former DB Employees (relating to their employment by a DB Group Company), in circumstances where the Committee has determined that such an Award would be appropriate, taking into account the applicable regulatory framework.

The purpose of Severance Awards is to seek to ensure that the interests of Participants continue to align with the interests of the DB Group following their ceasing to be DB Employees, notwithstanding Rule 1 of the Plan.

2 Application of Plan

The rules of the Plan, as amended by this Schedule 8, apply to Severance Awards granted under this Schedule 8.

3 Definitions

The following definition is added to Rule 2 of the Plan:

"Severance Award" means any Award referred to as a Severance Award in the Award Statement.

The definition of "Award" in Rule 2 is replaced with the following provision:

"Award" means a conditional right to receive DB Shares following the Release Date granted pursuant to this Plan which may be an Annual Award, New Hire Award, Retention Award, Severance Award or Upfront Award. An Award does not give a Participant a right to subscribe for unissued DB Shares.

4 Award Statement

Rule 4.3(c) shall be replaced with the following:

"c) the type of Award (Annual, New Hire, Retention, Severance or Upfront Award);"

5 Termination

A new Rule 5.1(g) shall be added as follows:

"g) in relation to Severance Awards only, ceasing to be a DB Employee as anticipated when the Severance Award was granted. "

6 Corporate Events

The heading of Rule 8.1 shall be changed to:

"8.1 Effect of Change of Control on Annual, New Hire, Retention and Severance Awards:"

Deutsche Bank Equity Plan 2025
Schedule 9: Italy

This schedule ("**Schedule 9**") modifies the provisions of the Deutsche Bank Equity Plan, as amended from time to time (the "**Plan**") with respect to Awards made to a Participant who is employed by Deutsche Bank S.p.A. or Deutsche Bank Mutui S.p.A. at the Award Date. The provisions of this Schedule 9 apply automatically to those Awards and supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder in relation to those Participants.

If this Schedule 9 applies to an Award to a Participant who is subject to federal taxation in the United States of America, then references above to the Deutsche Bank Equity Plan shall be to that plan as amended by Schedule 2.

1. Additional forfeiture provisions

Rule 6.7 (*Additional forfeiture provisions for Material Risk Takers*) is replaced with the following:

6.7 Additional forfeiture provisions: In addition to the other forfeiture provisions contained in the Plan Rules (and without prejudice to the operation of those provisions), any part of an Award that has not been Delivered shall be forfeited, without any claim for compensation by the Participant or any Representative, if the Committee determines in its sole discretion that the Participant has during the Performance Period in relation to which that Award was made:

a) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company) for any DB Group Company; or

b) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or a similar provision in any other applicable regulation.

2. Clawback of Awards

Rule 6.8(a) is replaced with the following:

a) This Rule 6.8 applies in relation to an Award (or, where applicable, Tranches of an Award) Delivered to a Participant if the Committee determines in its sole discretion that the Participant has during the Performance Period in relation to which the Award is made:

(i) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or

(ii) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or the equivalent provision in any other applicable regulation.

Deutsche Bank Equity Plan 2025
Schedule 10: United Kingdom

This schedule ("Schedule 10") modifies the provisions of the Deutsche Bank Equity Plan, as amended from time to time (the "Plan") with respect to Awards made to Participants who (1) are employed by a DB Group Company situated in the United Kingdom, and (2) are Material Risk Takers for the purposes of the Rulebook of any DB Group Company situated in the United Kingdom in any part of a Performance Period in relation to which an Award is made or, in respect of clause 3 below, were a material risk taker for the purposes of the Rulebook at their former employer(s). The provisions of this Schedule 10 supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder in relation to those Participants. Except as expressly modified herein, all terms and conditions of the Plan are incorporated into this Schedule 10 as is first set forth herein. Any capitalised terms contained but not defined in this Schedule 10 shall have the meaning provided in the Plan.

1 Definitions

The following definitions are added to Rule 2 of the Plan:

"Clawback Period" means (i) a period of 7 years from the Award Date; or (ii) in the case of a "higher paid" Material Risk Taker for the purposes of the Rulebook who performs a PRA senior management function, a period of 7 years from the Award Date or 10 years from the Award Date where a DB Group Company has commenced an investigation, or has been notified by any competent regulatory authority that an investigation has been commenced, into facts or events which the Committee considers could potentially lead to the application of clawback were it not for the expiry of the clawback period; (iii) in the case of a Material Risk Taker for the purposes of InstitutsVergV, if later, the period ending on the second anniversary of the Last Vesting Date for the Award.

"FCA" means the United Kingdom Financial Conduct Authority, and any successors from time to time.

"PRA" means the United Kingdom Prudential Regulation Authority, and any successors from time to time.

"Reduction Notice" has the meaning given to it in the Rulebook.

"Remuneration Code" means the Senior Management Arrangements, Systems and Controls 19D Dual regulated Firms Remuneration Code, as amended from time to time.

"Remuneration Statement" has the meaning given to it in the Rulebook.

"Rulebook" means the Remuneration Part of the PRA Rulebook, as amended from time to time.

The definition of "Retirement" in Rule 2 of the Plan is replaced with the following:

"Retirement" means retirement at pensionable age as determined in accordance with the pension plan arranged or provided by or in conjunction with a DB Group Company, of which the Participant is, or is eligible to be, a member, provided the Participant has made a valid Election to Retire in connection with the relevant Award.

2 General

For the avoidance of doubt, references to:

– "any other competent regulatory authority" in Rule 6.2(d) shall include the PRA and the FCA;

– "applicable laws or regulations" in Rule 6.7 shall include the Rulebook and the Remuneration Code; and

– "other applicable regulation" in Rules 6.7(b) and the definition of "Material Risk Taker" shall include the Rulebook and the Remuneration Code.

3 Retirement and Career Retirement – Election to Retire

All references to "Election to Career Retire" shall be replaced with "Election to Retire".

Rules 4.6 and 4.7 shall be replaced with the following:

4.6 Retirement Election – Annual Awards or Upfront Awards: The termination treatment in relation to Retirement or Career Retirement set out in Rule 5.1(e) shall only apply to an Annual Award or Upfront Award (as applicable) if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Award that the Participant intends to terminate employment as a DB Employee by reason of Retirement or Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to an Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of an Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

4.7 Retirement Election – Retention Awards: The termination treatment in relation to Retirement or Career Retirement set out in Rule 5.1(f) shall only apply to a Retention Award if the Participant has notified the Plan Administrator during any time period required by the Plan Administrator in relation to that Retention Award that the Participant intends to terminate employment as a DB Employee (such termination to take effect on or after the Retention Award Event Date) by reason of Retirement or Career Retirement in accordance with the procedures established by the Plan Administrator for those purposes (an "Election" or an "Election to Retire"). An Election shall constitute a binding agreement that may only be modified pursuant to the terms and conditions in the Election. The Plan Administrator may require, among other things, one or more Elections to be made in relation to a Retention Award and may set a time period after which an Election will expire. An Election shall not be treated as notice of termination of employment given by the Participant, however, a failure to make an Election may result in forfeiture of a Retention Award on termination in circumstances where there would have been no such forfeiture had an Election been made.

Rules 5.3(c) and (d) shall be replaced with the following:

(c) without prejudice to the generality of Rule 5.3(b), an Annual Award that has not Vested shall be automatically forfeited if, at any time prior to the Vesting Date, a Participant who has reached pensionable age (as referred to in the definition of "Retirement") or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Annual Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

(d) without prejudice to the generality of Rule 5.3(b), a Retention Award that has not Vested shall be automatically forfeited if:

(i) at any time prior to the Retention Award Event Date, a Participant ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason (and regardless of whether or not the Participant has reached pensionable age (as referred to in the definition of "Retirement") or meets the Rule of 60 or Consecutive Service Requirement) unless cessation of employment falls within the definition of Agreed Termination, or

(ii) at any time on or after the Retention Award Event Date and prior to the Vesting Date, a Participant who has reached pensionable age (as referred to in the definition of "Retirement") or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.7 or to submit an Election in accordance with those procedures in relation to such Retention Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

Rule 5.3(h) shall be replaced with the following:

(h) without prejudice to the generality of Rule 5.3(g), an Upfront Award shall be automatically forfeited if, at any time prior to the Release Date, a Participant who has reached pensionable age (as referred to in the definition of "Retirement") or who meets the Rule of 60 and Consecutive Service Requirement ceases to be a DB Employee as a result of the Participant resigning or the Participant terminating the Participant's employment with a DB Group Company for any reason in circumstances in which the Participant either failed to make an Election to Retire, or failed to respond to or follow the procedures outlined in Rule 4.6 or to submit an Election in accordance with those procedures in relation to such Upfront Award and whose cessation of employment does not fall within the definition of Public Service Retirement or Agreed Termination;

4 Buy-outs

A new Rule 4.12 is added as follows:

4.12 “buy-out” or “replacement”

Where a New Hire Award structured, or referred to, as a “buy-out” or “replacement” in the Award Statement, is proposed to be granted under the Plan in respect of an award that was (i) granted to the relevant DB Employee by their former employer(s) in respect of a period during which they were a material risk taker for the purposes of the Rulebook; and (ii) forfeited as a result of their accepting an offer of employment with the DB Group, the New Hire Award may only be made if the relevant DB Employee has provided a DB Group Company with a Remuneration Statement.

A new Rule 6.9 is added as follows:

6.9 Reduction Notice

In addition to the other forfeiture provisions contained in the Plan Rules (and without prejudice to the operation of those provisions), if a DB Group Company receives a Reduction Notice from a Participant’s former employer, any part of a New Hire Award that was granted in respect of a forfeited award listed in the Remuneration Statement provided by the Participant that has: a) not been Delivered shall be forfeited in the amount set out in the Reduction Notice; and b) been Delivered shall, where the Reduction Notice has been received during the Clawback Period, be reimbursed by the Participant to the DB Group in accordance with Rule 6.8 and references in Rule 6.8 to the “Clawback Amount” shall be to such amount as is set out in the Reduction Notice less any amounts recovered under Rule 6.9(a).

5 Clawback of Awards delivered to Material Risk Takers for the purposes of the Rulebook Rule 6.8(a) is hereby replaced with the following:

a) This Rule 6.8 applies in relation to an Award (or, where applicable, Tranches of an Award) Delivered to a Participant who was a Material Risk Taker for the purposes of the Rulebook in any part of the Performance Period (being from calendar year 2021 onwards for a DB UK Bank Ltd Material Risk Taker and from calendar year 2022 onwards for a DB AG London Branch Material Risk Taker) in relation to which the Award is made, and the Committee has determined that applicable laws or regulations require that a provision such as this Rule 6.8 apply to that Award, if the Committee determines in its sole discretion that:

i) the Participant’s actions or omissions have amounted to misbehaviour or material error; and /or

ii) Deutsche Bank or the relevant business unit has suffered a material failure of risk management.

In making its determination, the Committee shall take into account all factors that it reasonably considers to be relevant (including, whether the Participant (I) has participated to a significant extent in, or was responsible for, conduct which resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or (II) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) and, in respect of Rule 6.8(a)(ii), the Participant’s proximity to the applicable failure and their level of responsibility).

Rule 6.8(b) is hereby replaced with the following:

b) Where the Committee determines that either this Rule 6.8 or Rule 6.9 apply in relation to an Award (or Tranche of an Award), the Participant shall be required to reimburse the Clawback Amount to the DB Group in accordance with the provisions of this Rule 6.8. The Committee shall notify the Participant in writing of the determination and of the Clawback Amount that is due from the Participant (a “Clawback Notice”).

Rule 6.8(g) is hereby replaced with the following:

g) This Rule 6.8 shall not apply to an Award unless the Clawback Notice is delivered so as to take effect before the end of the relevant Clawback Period.

Exhibit 4.11

Deutsche Bank
Human Resources

Deutsche Bank
Restricted Share Plan 2025
Plan Rules

This document constitutes part of a prospectus covering securities that have been registered under the U.S. Securities Act of 1933

Effective date: March 1, 2025

1. Purpose

The Deutsche Bank Restricted Share Plan is intended to motivate key employees by aligning the interests of employees of the DB Group with those of the shareholders and fostering a sense of employee ownership through awards linked directly to the Deutsche Bank share price in a fashion that is consistent with safe and sound banking practices, particularly with respect to the applicable regulatory guidance and requirements governing incentive compensation practices.

Participants in the Plan are selected at the discretion of the Committee. Participation during one Plan year does not guarantee future participation.

2. Definitions

For the purposes of the Plan, the following terms shall have the meanings indicated:

"Acknowledgement" has the meaning given in Rule 4.7, and "Acknowledge" and "Acknowledged" shall be construed accordingly.

"Acquirer Entity" means the person, company or entity which, through acquisition, merger, spin-off, transfer, or other consolidation (or series thereof), shall be the legal successor to or owner (whether direct or indirect) of the DB business unit, Division or Subsidiary (or, if applicable, the part of the DB business unit or Division) in which the relevant Participant worked, or any of its Subsidiaries or Holding Companies or any Subsidiary of any such Holding Company.

“Annual Award” means any Award referred to as an Annual Award in the Award Statement.

“Applicable DB Group Policy or Procedure” means any DB policy or procedure regarding: general accounting; application of accounting methodologies; approvals procedures; risk management; regulatory procedures or rules; any other financial or compliance matters; or conduct matters, including, but not limited to, Deutsche Bank’s Code of Conduct as amended from time to time (in each case of which the Participant knew or it would be reasonable to expect the Participant to have known).

“Award” means an award of DB Shares subject to and in accordance with the Plan Rules where beneficial ownership of those shares is transferred to the Participant on the Award Date, and the DB Shares are subject to forfeiture in accordance with the Plan Rules until the Release Date. An Award may be an Annual Award, New Hire Award, or Upfront Award. An Award does not give a Participant a right to subscribe for unissued DB Shares.

“Award Date” means the effective date of an Award, as shown on the Award Statement.

“Award Letter” means a letter issued by a DB Group Company at or around the time of an Award Statement, which may set out Performance Conditions in relation to an Award as provided in Rule 4.4, and which may in some cases supplement an Award Statement.

“Award Statement” means the statement provided to a Participant under Rule 4.3.

“Award Shares” has the meaning given in Rule 4.3.

“Award Tax Shares” has the meaning given in Rule 4.8.

“Cause” means in respect of the termination of a Participant’s employment by any DB Group Company: (i) any act or omission or series of acts or omissions that, when taken together or alone, constitute a material breach of the terms and conditions of employment; (ii) the conviction of the Participant by a competent court of law of any crime (other than minor offences that do not adversely affect the business or reputation of any DB Group Company, as determined by the Committee in its sole discretion); (iii) unlawful, unethical or illegal conduct, or any misconduct by the Participant in connection with the performance of the Participant’s duties as a DB Employee or conduct by the Participant otherwise in violation of the terms of the applicable employee handbook or other local policy or contractual documentation; (iv) knowingly failing or refusing to carry out specific lawful instructions from a DB Group Company (or a duly authorised employee or officer of such a company) relating to material matters or duties within the scope of the Participant’s responsibilities for a DB Group Company; (v) committing any act involving dishonesty, fraud, misrepresentation, or breach of trust; or (vi) the issuance of any order or enforcement action against the Participant or against any DB Group Company in connection with the Participant’s actions or omissions by any regulatory body with authority over the conduct of business by that DB Group Company where the issuance of that order or enforcement action impairs a) the financial condition or business reputation of the DB Group or any DB Group Company or b) the Participant’s ability to perform the Participant’s assigned duties (or would have done so if the Participant were still a DB Employee).

“Change of Control” means a change in the control of Deutsche Bank AG which shall occur if, by one or a series of transactions or events, a third party or a group of third parties acting together (directly or indirectly) acquires more than 50 percent of the issued share capital of Deutsche Bank AG and/or becomes entitled to exercise more than 50 percent of voting rights attributable to the issued share capital of Deutsche Bank AG. The Committee (as constituted before the relevant event) will determine, in its sole discretion, whether or not a Change of Control has occurred in accordance with this definition.

"Closing Price" means the closing price of DB Shares in the Xetra system (currently under "DBK GY"), or the closing price on such other exchange as may be determined by the Committee from time to time.

“Committee” means the Senior Executive Compensation Committee but may alternatively be the Management Board or any committee or other entity or persons designated by the Senior Executive Compensation Committee, the Management Board or these Plan Rules to act as the decisional body under this Plan (and, for the avoidance of doubt, the provisions of Rule 9 shall apply to any such entity or person). To the extent that matters are determined in relation to Awards made or to be made to members of the Management Board, the Committee means the Supervisory Board of Deutsche Bank or a duly authorised committee of the same.

“Compliance Department” means any applicable compliance department of the DB Group.

“Control Failure” means:

a) a failure to take adequate steps to promptly identify, assess, report, escalate or address misconduct or risk (including without limitation regulatory, client, reputational, market and/or other risk);

b) a failure to address, manage or remedy any control weaknesses identified by the DB Group or any regulator of which the Participant was aware (or could have been reasonably expected to be aware);

c) a failure to draft, adopt, approve or implement internal financial and operational policies or procedures of the DB Group (or any DB Group Company) which would have provided for (i) the reliability and integrity of information, (ii) compliance with laws and regulations, (iii) safeguarding and accountability of assets, and/or (iv) preventing or detecting error or fraud.

“DB Employee” means a person employed by any DB Group Company.

“DB Group” means Deutsche Bank and each of its Subsidiaries.

“DB Group Company” means any company or other corporation in the DB Group.

“DB Share” means a registered share of Deutsche Bank AG, as listed and traded on the Frankfurt Stock Exchange - Xetra or other authorised exchanges, or any other shares which may replace them from time to time (whether in a successor corporation or otherwise).

“Deutsche Bank” means Deutsche Bank AG and any successor corporation or other corporation into which Deutsche Bank AG is merged or consolidated or to which Deutsche Bank AG transfers or sells all or substantially all of its assets.

“Division(s)” means the primary operational business areas of the DB Group, which include the core revenue generating areas and infrastructure and support areas, as established or adjusted by Deutsche Bank, in its discretion, from time to time. Each Division is divided into smaller operating business units.

“Financial Services” includes (without limitation) any (or any combination) of the following:

a) commercial or retail banking;

b) brokerage;

c) wealth management;

d) insurance, pension or lending services;

e) financial, business, investment or economic advisory services (including raising or preserving capital or transitioning ownership of any asset);

f) asset management;

g) issuing, trading or selling instruments or other investments; and

h) advising on or investing in private equity or real estate,

and also includes any other activities engaged in by any DB Group Company that the Committee considers constitute financial services.

“Financial Services Firm” means a business enterprise whose sole or primary function is the provision of Financial Services (whether to individuals, institutions or any other person or entity).

“Holding Company” of a company or entity means a company or entity of which the first company or entity is a Subsidiary.

“InstitutsVergV” means the German Remuneration Ordinance (Institutsvergütungs-verordnung), as amended from time to time.

“Management Board” means the Management Board of Deutsche Bank (the Vorstand).

“Material Risk Taker” means a material risk taker (as determined by the DB Group in its sole discretion) having regard to InstitutsVergV or any other applicable regulation.

“Net Award Shares” has the meaning given in Rule 4.8.

“New Hire Award” means an Award referred to as a New Hire Award in the Award Statement, usually being “buy-out”, “replacement” or “sign-on” awards granted or issued in connection with the commencement of a Participant’s employment as a DB Employee.

“Nominee” means the party which holds the Net Award Shares as nominee for a Participant during the Restricted Period in accordance with the Plan Rules, being DB Group Services (UK) Ltd or such other party as may be appointed by the Committee from time to time.

“Participant” means any person to whom an Award has been made under the terms and conditions of this Plan for so long as that person has any rights under this Plan.

“Performance Condition” means a condition or conditions stated in the Award Statement for an Award or a Tranche of an Award, and/or the Award Letter, which determines the extent to which that Award or Tranche will become capable of Release.

“Performance Period” means the period of time as referred to in InstitutsVergV (or any other applicable legislation) during which a Participant’s performance is assessed for the purposes of determining the grant of an Award under InstitutsVergV, and “Performance Period in relation to which an Award is made” and similar phrases shall be interpreted accordingly.

“Plan” means the Deutsche Bank Restricted Share Plan as governed by these Plan Rules.

“Plan Administrator” means DB Group Services (UK) Limited or any other person or entity appointed by the Committee for the purpose of administering the Plan as referred to in Rule 9.1.

“Plan Rules” or “Rules” means this document, including all applicable Schedules, which sets out the binding terms and conditions of the Plan (as amended from time to time pursuant to Rule 10).

“Proof of Certification” means any information deemed necessary or desirable by the Plan Administrator (i) to confirm a Participant’s compliance with the terms and provisions of an Award; (ii) to enable the Plan Administrator to apply the terms and provisions of an Award; or (iii) to enable the Plan Administrator (or any DB Group Company) to comply with its obligations in relation to an Award, including, but not limited to: copies of tax returns and employment or payroll-related documentation, or any confirmation or agreement by a Participant deemed necessary or desirable by the Plan Administrator to carry out any of the Plan Rules or any other rule or regulation, as determined by the Plan Administrator (including without limitation confirmation or agreement that the Participant is bound by the Plan Rules in relation to an Award).

“Proprietary Information” means any information which is not publicly available (other than as a result of the Participant’s action), including, without limitation, all financial or product information, business plans, client lists, compensation details or other confidential information, copyright, patent and design rights in any invention, design, discovery or improvement, model, computer program, system, database, formula or documentation, including information conceived, discovered or created during or in consequence of the Participant’s employment as a DB Employee.

“Release” in relation to an Award means that the Net Award Shares (or a portion of those shares) are no longer subject to forfeiture in accordance with the Rules and are capable of withdrawal by the Participant in accordance with Rule 7 and “Released” shall be interpreted accordingly.

“Release Date” means the last day of the Restricted Period as stated in the Award Statement (or any earlier date on which the Award or Tranche of an Award is Released or the Restricted Period ceases to apply under Rule 8), or any later date on which it is determined that any applicable Performance Conditions are satisfied and, in each case, subject to any delay in the Release Date pursuant to Rule 6.6.

“Relevant Individual” in relation to a Significant Adverse Event means a DB Employee or a contingent worker engaged by a DB Group Company whose conduct is the subject of an internal investigation by a DB Group Company in connection with that Significant Adverse Event which results in disciplinary measures or sanctions against the Relevant Individual, or would have resulted in such measures or sanctions (as determined by the Committee in its absolute discretion) if, in the case of a former DB Employee, the Relevant Individual had not ceased to be a DB Employee or, in the case of a contingent worker or former contingent worker, the Relevant Individual had been a DB Employee subject to disciplinary measures or sanctions by a DB Group Company.

“Representative” means, in the case of death or Total Disability, the Participant’s duly appointed beneficiary, legal representative or administrator, as applicable.

“Restricted Period” in relation to an Award means the period from the Award Date to the Release Date for that Award or Tranche of an Award.

“Restricted Services” means services that are substantially similar to any or all of the services provided by the Participant during the 12-month period prior to the Participant ceasing to be a DB Employee.

“Schedule” means any schedule to the Plan Rules approved by the Committee (as amended from time to time in accordance with Rule 10).

“Senior Executive Compensation Committee” means the committee delegated by the Management Board to govern this Plan.

“Significant Adverse Event” means an event (or series of events, in each case whether by any acts or omissions) that has resulted in any internal or external finding of misconduct or of risk (including without limitation regulatory, client, reputational, market and/or other risk), or financial loss (whether direct or indirect, and whether by way of a regulatory fine, sanction, action, or settlement, including any associated cost or otherwise), which, as determined by the Committee in its absolute discretion, is classified by the DB Group as being “Acute”, “Severe” or “High” (or a similar level under any alternative categorisation in place from time to time) and which the Committee has determined in its absolute discretion has had or is likely to have an adverse effect on the DB Group, a DB Group Company, a Division or a business unit.

“Subsidiary” means a company or other entity in which a Holding Company has a direct or indirect controlling interest or equity or ownership interest which represents more than fifty percent (50%) of the aggregate equity or ownership interest in that company or entity.

“Sufficiently Proximate” to a Relevant Individual in relation to a Significant Adverse Event means a Participant who is:

a) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a Relevant Individual who is a DB Employee (the “First Level Manager”), or a DB sponsor of a Relevant Individual who is a contingent worker engaged by a DB Group Company (the “First Level Sponsor”);

b) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a First Level Manager or First Level Sponsor of the Relevant Individual or the head of the business unit in which the Relevant Individual is employed or engaged;

c) only in case of a Significant Adverse Event which is classified by the DB Group as being “Acute” (or a similar level under any alternative categorisation in place from time to time), the head of Division, the Chief Country Officer(s), the CEO or Chief Operating Officer(s) where the Relevant Individual works (or worked) or is engaged (or was engaged);

in each case, at the time when Significant Adverse Event(s) (or portion thereof), or the actions or omissions (in each case, or portions thereof) of the Relevant Individual contributing to the Significant Adverse Effect, occurred and regardless of whether the Participant was himself responsible for, or contributed to, the Significant Adverse Event, in any way other than being Sufficiently Proximate to a Relevant Individual.

“Supervisory Board of Deutsche Bank” means the board that oversees and advises the Management Board in its management of the business.

“Total Disability” means either (a) a medically determinable physical or mental impairment (i) that can be expected to either (1) result in death or (2) last for a continuous period of not less than 12 months and (ii) as a result of which the Participant either (1) becomes unable to engage in any substantial gainful activity or (2) receives income replacement benefits for a period of not less than 6 months under a long-term disability plan covering DB Employees (but in no case shall the receipt of workers’ compensation benefits be considered to qualify as such benefits); or (b) the Participant is deemed Totally Disabled and eligible to receive disability benefits from the US Social Security Administration, provided that, if the Participant ceases to reside in the United States, the Committee may substitute such definition as they consider appropriate.

“Tranche” means a portion of an Award as detailed on the Award Statement, which may be subject to different provisions related to Release, and/or Performance Conditions, to other Tranches comprised within that Award.

“Upfront Award” means an Award referred to as an Upfront Award in the Award Statement.

3. Interpretation

In this Plan, where the context permits:

a) where an Award has been made in different Tranches, references to an Award shall be taken to refer to each Tranche separately; and

b) words in the singular shall include the plural and vice versa.

The headings in the Rules are for the sake of convenience only and should be ignored when construing the Rules.

Each Award granted under the Plan is subject to the Plan Rules as modified by any Schedules which apply to that Award, in each case as amended from time to time in accordance with Rule 10.2.

4. Awards

4.1 Eligibility: Subject to the terms and conditions in these Plan Rules, the Committee may from time to time make Awards or permit Awards to be made by such other persons as it may determine to such DB Employees as the Committee shall select.

4.2 Terms of Awards: Subject to the terms and conditions in these Plan Rules, the Committee shall be entitled to determine the terms of Awards and the dates on which those Awards are made.

4.3 Award Statement: As soon as practicable on or after the Award Date, the Participant shall be issued an Award Statement in relation to the Award in such form as the Committee shall determine in its sole discretion. The Award Statement shall state (in relation to each Tranche of the Award where applicable):

a) the Award Date;

b) the number of DB Shares subject to the Award (before any reductions to take account of tax and social security contributions in accordance with Rule 4.8) (the “Award Shares”);

c) the type of Award (Annual, New Hire, or Upfront Award);

d) the Release Date (assuming no acceleration or delay of the Release Date under these Plan Rules). and

e) details of any Performance Conditions applicable to the Award (other than any such Performance Condition which is just detailed in the Award Letter).

4.4 Performance Conditions: Awards or Tranches of Awards may be made subject to Performance Conditions as approved by the Committee at the time the Award is made. Any such conditions will be detailed in the Award Statement and/or the Award Letter. The degree to which a Performance Condition is satisfied will determine the extent to which the Net Award Shares subject to that Award or Tranche will be Released, and the degree to which the Performance Condition is satisfied must be determined before the Award or relevant part of the Award can be Released. An Award shall be forfeited to the extent that it is determined that it is no longer capable of being Released because the Performance Condition has not been satisfied in full. The Management Board may amend the Performance Conditions if circumstances exist such that the Management Board considers, in its sole discretion, that the existing Performance Conditions should be so amended to ensure that they remain appropriate or because of regulatory requirements including, without limitation, any regulatory or recovery intervention. Notwithstanding the foregoing, in relation to an Award held by a member of the Management Board, the Management Board's decision is not binding and the Supervisory Board will decide in its full discretion on the confirmation of or the deviation from the Management Board's decision for purposes of these Awards; the decision of the Supervisory Board shall be final and binding.

4.5 Compliance: The making of any Award is subject to any approvals or consents required under any applicable laws or regulations or by any governmental authority, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department.

4.6 Award Shares: The Plan Administrator shall on the Award Date cause the Award Shares to be held by the Nominee as nominee for the Participant during the Restricted Period (subject to the provisions of the Plan, and in particular Rule 4.8), and the beneficial interest in the Award Shares shall be held by the Participant from that date.

4.7 Acknowledgement of Award: to Acknowledge the Award the Participant must:

a) acknowledge the Award and agree to be bound by and comply with the provisions of the Plan and any other terms contained in the Award Statement in relation to the Award; and

b) enter into an election under Section 83(b) of the Internal Revenue Code of the United States of America ("83(b) Election") in relation to the DB Shares subject to the Award in a form acceptable to the Committee or the Plan Administrator;(such steps together being "Acknowledgement"). The procedure for Acknowledgement (including the period for doing so) will be communicated or made available to the Participant in such manner as the Committee or Plan Administrator may determine. If the Participant has not Acknowledged the Award in accordance with the specified procedure by the end of the period provided in that procedure, the Award and all the Award Shares shall be forfeited, and upon that forfeiture neither the Participant nor any Representative shall have any claim for compensation in relation to that forfeiture. Following such forfeiture, the Participant will no longer be able to Acknowledge the Award and shall forfeit all interest in the Award and the Award Shares subject to it, and no DB Group Company shall have any obligation to the Participant in relation to it. For the avoidance of doubt, the Participant shall not have any interest in the Tax Award Shares on any such forfeiture.

4.8 Award Tax Shares and Net Award Shares: Immediately following the time the Award Shares are first held by the Nominee as nominee for the Participant on the Award Date as provided in Rule 4.6, the smallest whole number of the Award Shares sufficient to satisfy the amount of any taxation and social security contributions (calculated on the basis that an 83(b) Election is made in relation to the Award Shares with effect from the Award Date) for which any DB Group Company is liable to account or withhold on behalf of the Participant in relation to the acquisition of the Award Shares by the Participant (the "Award Tax Shares") shall cease to be held by the Nominee as nominee for the Participant, the Participant shall no longer have any beneficial interest in the Award Tax Shares and the beneficial interest in those shares shall revert to the Nominee. The number of DB Shares remaining held by the Nominee as nominee for the Participant shall be the "Net Award Shares", which shall be held by the Nominee as nominee for the Participant subject to the Plan Rules for the remainder of the Restricted Period. The Award Tax Shares shall for all purposes be treated as retained by the DB Group to satisfy the relevant taxation or social security contributions, and shall no longer be subject to the Plan Rules.

The number of Award Tax Shares shall be determined by the Plan Administrator in its sole discretion. If, because of rounding, the number of Award Tax Shares is greater than the number required to satisfy the taxation and social security contributions by a fraction of a DB Share, that fraction may be dealt with in the manner the Plan Administrator in its sole discretion sees fit, including, but not limited to, making a cash payment to the Participant on Release of the Award (or Tranche of an Award) equal to the cash value of the fraction of one DB Share.

No DB Group Company takes any responsibility (except where legally required) as to the taxation or social security consequences of the Participant participating in the Plan and a Participant should therefore seek independent tax and social security advice.

4.9 Non-transferable Awards: A Participant may not at any time before the Release Date (i) transfer, assign, sell, pledge or grant to any person or entity any rights in respect of any Award or any of the Award Shares (other than to a Representative in the event of the death or Total Disability of the Participant); or (ii) enter into any transactions having the economic effect of hedging or otherwise offsetting the risk of price movements, or attempt to do so, with respect to all or part of the Award Shares. Nothing in this Rule shall prevent the operation of Rule 4.8. Unless the Plan Administrator or the Committee decides otherwise, any breach of this Rule 4.9 will result in the forfeiture by the Participant of the Participant's Award without any claim for compensation by the Participant or any Representative.

4.10 Dividend Rights: No dividends shall be paid, nor accrued, in relation to any of the Award Shares during the Restricted Period.

4.11 Voting Rights: There shall be no voting rights in respect of any of the Award Shares during the Restricted Period.

4.12 Effect of forfeiture: Where an Award is forfeited in accordance with any of the Plan Rules the Participant shall cease to have any rights in relation that Award to the extent that it is forfeited, and in particular the Participant shall no longer have any beneficial interest in any of the Award Shares so forfeited.

4.13 Surrender of Net Award Shares: A Participant may surrender Net Award Shares (or a part thereof) at any time, prior to the Release Date. Where Net Award Shares (or a part thereof) are so surrendered, the Participant shall cease to have any rights vis a vis any DB Group Company in relation to those Net Award Shares and the Participant shall no longer have any beneficial or other interest in any of the Net Award Shares so surrendered.

5. Impact of termination of employment

5.1 Termination: Save as provided in Rule 5.3, an Award will not be forfeited by reason of the Participant ceasing to be a DB Employee and (save as provided in Rule 5.2) will remain subject to the Plan Rules (including the Restricted Period and any Performance Conditions).

5.2 Termination upon death or Total Disability: If a Participant ceases to be a DB Employee due to death or Total Disability (documented to the reasonable satisfaction of the Plan Administrator), an Award which is not subject to a Performance Condition will, subject to Rule 6.6, be Released in full (to the extent not previously Released) on the next administratively possible Release Date for other Awards granted pursuant to the Plan following receipt of such documentation as the Plan Administrator may require to establish the entitlement of the Participant or the Representative claiming on behalf of the Participant.

If a Participant who has ceased to be a DB Employee subsequently dies, and at the time of death holds any Awards which are not subject to a Performance Condition, those Awards will, subject to Rule 6.6, be Released in full (to the extent not previously Released) on the next administratively possible Release Date for other Awards granted pursuant to the Plan following receipt of such documentation as the Plan Administrator may require to establish the entitlement of the Participant or the Representative claiming on behalf of the Participant.

Where an Award is subject to a Performance Condition the Restricted Period will continue in accordance with the Award Statement and subject to these Plan Rules (including, without limitation, the forfeiture provisions of Rule 6), and the Award will remain subject to the Performance Condition.

5.3 Termination resulting in Complete Forfeiture: Awards which have not been Released shall be automatically forfeited if, at any time prior to Release, the Participant ceases to be a DB Employee by reason of termination for Cause as decided by a DB Group Company, which shall have full discretion to make a Cause determination.

6. General forfeiture and clawback

6.1 Complete Forfeiture for certain acts: In addition to the other forfeiture provisions contained in the Plan Rules, a Participant shall automatically forfeit any Awards that have not been Released, without any claim for compensation by the Participant or any Representative, if any of the following events or activities occurs at any time prior to the Release Date for that Award, during or following employment as a DB Employee:

a) the Participant directly or indirectly solicits or entices away, or endeavours to solicit or entice away any individual person who is employed or engaged by any DB Group Company and, if following the termination of the Participant's employment as a DB Employee, with whom the Participant has had business dealings during the course of the Participant's employment in the 12 months immediately prior to the termination date;

b) the Participant solicits, directly or indirectly, any company, entity or individual who was a customer or client of any DB Group Company and, if following the termination of the Participant's employment as a DB Employee, with whom the Participant has had business dealings during the course of the Participant's employment in the 12 months immediately prior to the termination date in order to provide Restricted Services to such company, entity or individual;

c) the Participant directly or indirectly obtains, uses, discloses or disseminates Proprietary Information to any other company, individual or entity or otherwise employs Proprietary Information, except as specifically required in the proper performance of the Participant's duties for any DB Group Company;

d) the Participant acts in a manner that is prejudicial to the reputation of the DB Group or any DB Group Company;

e) the Participant or any Representative is responsible for any act or omission that breaches the terms of any agreement into which the Participant has entered with any DB Group Company, including any settlement or separation agreement or compromise agreement; or

f) the Participant fails to provide, if asked, Proof of Certification, in accordance with Rule 7.5.

6.2 Complete or Partial Forfeiture: In addition to the other forfeiture provisions contained in the Plan Rules, the Committee may, in its sole discretion, determine that a Participant shall forfeit such proportion (up to and including 100%) of any Award which has not been Released as may be determined by the Committee in its sole discretion without any claim for compensation by the Participant or any Representative in the following circumstances:

a) where a Participant engages in any conduct at any time prior to the Release Date, including prior to the Award Date, that:

i) breaches any Applicable DB Group Policy or Procedure;

ii) breaches any applicable laws or regulations imposed other than by the DB Group or any DB Group Company; or

iii) constitutes a Control Failure, whether arising by act or omission (or series of acts or omissions), whether in whole or in part, directly or indirectly;

in each case, where that conduct is the subject of an internal investigation by a DB Group Company or of an investigation by a regulatory or law enforcement body and it results in disciplinary measures or sanctions against the Participant or a DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company) or

would have resulted in such measures or sanctions if the Participant had not ceased to be a DB Employee (or ceased to be an employee of a specific DB Group Company whilst remaining a DB Employee);

b) where:

i) the grant of that Award was based on a performance measure or measures or on assumptions that are later determined to be materially inaccurate (regardless of whether any relevant measures or assumptions were communicated to the Participant); or

ii) the grant, vesting or settlement of any other award made to the Participant (whether under the Plan, other compensation plans or other bonus or incentive arrangements, and whether delivered or not) was based on a performance measure or measures or on assumptions that are later determined to be materially inaccurate (regardless of whether any relevant measures or assumptions were communicated to the Participant);

c) where a Significant Adverse Event occurs, and the Committee considers the Participant to be Sufficiently Proximate to a Relevant Individual in relation to that Significant Adverse Event; or

d) where the Committee determines, in its sole discretion, that forfeiture is required on the basis of prevailing regulatory requirements (which includes any legislation or guidance published by a regulator from time to time). For the avoidance of doubt, this includes (but is not limited to) having regard to sections 7 of InstitutsVergV and 45 para. 2 sentence 1 no. 5a, 6 of the German Banking Act (Kreditwesengesetz) (as may be amended, modified or replaced from time to time), including any order made by the German Federal Financial Supervisory Authority (BaFin) or any other competent regulatory authority, including the US Securities and Exchange Commission (SEC) and applicable securities listing exchanges in relation to such regulatory requirements. Forfeiture may include awards that are permitted to be recovered in satisfaction of the compliance obligations of such rules or laws, if such recovery is the selected method of recovery that the Committee determines is appropriate, alone or in combination with other methods or means of recovery.

Forfeiture under this Rule 6.2 may occur either before or after the Participant ceases to be a DB Employee for any reason.

6.3 Complete Forfeiture for Behaviour Amounting to Cause: A Participant shall automatically forfeit any Awards which have not been Released if:

a) during the Participant's employment as a DB Employee, the Participant is responsible for an act or omission, or a series of acts or omissions, which amounted to behaviour listed in the definition of Cause in Rule 2, whether or not the employment is terminated as a result of those acts or omissions;

b) after the termination of the Participant's employment as a DB Employee (for whatever reason), it is determined that the Participant was responsible for an act or omission, or a series of acts or omissions, while a DB Employee which gave rise to a right on the part of any DB Group Company to terminate the Participant's employment for Cause, even if that right was not exercised; or

c) after the termination of the Participant's employment as a DB Employee, the Participant is responsible for an act or omission, or a series of acts or omissions, which would have given rise to a right on the part of any DB Group Company to terminate the Participant's employment for Cause had the Participant been a DB Employee at the time of the acts or omissions,

in each case whether or not any DB Group Company or any officer or employee of any DB Group Company knew at the time of the act or omission, or series of acts or omissions, that the relevant right had arisen or would arise. Neither the Participant nor any Representative shall have any claim for compensation in relation to any forfeiture under this Rule 6.3.

6.4 Failure to provide details of brokerage or custody account: If the Net Award Shares are to be Released into a brokerage or custody account following the Release Date in accordance with Rule 7.1, and, if required by the Plan Administrator, the Participant has not provided details of a valid brokerage or custody account in accordance with Rule 7.2, the Committee may in its sole discretion forfeit the Award (and the Net Award Shares), and neither the Participant nor any Representative shall have any claim for compensation in relation to that forfeiture against any DB Group Company or the Nominee (as applicable).

6.5 Complete Forfeiture in connection with Restricted Services: A Participant that has ceased to be a DB Employee by reason of resignation, retirement or any other termination elected by that Participant shall automatically forfeit without any claim for compensation by the Participant or any Representative any Awards (or Tranche(s) of an Award) that have not been Released if it is determined by the Committee in its sole discretion that the Participant is employed or engaged in any capacity by a Financial Services Firm (whether directly or via an intermediary and whether or not for remuneration) in connection with the provision of Restricted Services before the Release Date, except where:

a) the services are provided in the ordinary course of a business other than a Financial Services Firm which employs or engages the Participant in any capacity; and

b) either:

i) the majority of the clients to whom the Participant's services are provided are not Financial Services Firms; or

ii) the services provided by the Participant taken as a whole are not Restricted Services.

6.6 Suspension:

a) If the Committee considers that circumstances may be such that forfeiture may result under Rule 5.3, Rule 6.1(a) to (f), Rule 6.2, Rule 6.3, Rule 6.5 or Rule 6.7, the Release Date for an Award may at the sole discretion of the Committee be delayed until after those circumstances have been investigated (including, but not limited to, pursuant to any investigation referred to in Rule 6.2) and a determination regarding forfeiture has been made.

b) In addition, and without limitation to rule 6.2(d), the Committee may delay the Release Date of an Award in order to comply with, or to enable the compliance with, prevailing regulatory requirements (which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time and (without limitation) sections 7 of InstitutsVergV and 45 para. 2 sentence 1 no. 5a, 6 of the German Banking Act (Kreditwesengesetz) (in each case, as may be amended, modified or replaced from time to time)).

c) Where the Release Date for an Award is delayed under Rule 6.6(a) and a determination has been made not to forfeit an Award (or portion of an Award), if:

i) the Participant disposes of the DB Shares immediately following the Release of the Award; and

ii) the Committee determines that the Participant has suffered a disadvantage as a result of the delay caused by the suspension due to changes in the value of a DB Share or changes in the relevant foreign exchange rates between the first date that DB Shares could have been sold by the Participant (taking account of any restrictions on the Participant's ability to sell DB Shares imposed by applicable laws or regulations, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department) following the date that Delivery was originally expected to occur (the "Earliest Sale Date") and the date of sale following the delayed Release Date,the Committee may, but is not obliged to, make a discretionary payment of such sum as it considers appropriate to the Participant by way of compensation, provided that in no event may any such sum exceed the difference in the value of the relevant DB Shares at the original Release Date and the value of those shares on the date of sale.

6.7 Additional Complete Forfeiture Provisions for Material Risk Takers: In addition to the other forfeiture provisions contained in the Plan Rules (and without prejudice to the operation of those provisions), if a Participant was a Material Risk Taker in any part of a Performance Period in relation to which an Award was made, and the Committee has determined that applicable laws or regulations require that a provision such as this Rule 6.7 apply to that Award, any part of that Award that has not been Released shall be forfeited, without any claim for compensation by the Participant or any Representative, if the Committee determines in its sole discretion that the Material Risk Taker has during that Performance Period:

a) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company (which, for the avoidance of doubt, shall include any significant supervisory measure imposed on DB Group or any DB Group Company); or

b) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or a similar provision in any other applicable regulation.

6.8 Clawback of Awards Delivered to Material Risk Takers or in relation to a competent regulatory authority:

a) This Rule 6.8 applies in relation to an Award (or, where applicable, Tranches of an Award) which has been Released where the Participant was a Material Risk Taker in any part of the Performance Period in relation to which the Award is made, and the Committee has determined that applicable laws or regulations require that a provision such as this Rule 6.8 apply to that Award, if the Committee determines in its sole discretion that the Material Risk Taker has during that Performance Period:

i) participated to a significant extent in or been responsible for conduct that has resulted in significant loss, or on the basis of prevailing regulatory requirements, in extreme exceptional cases the Material Risk Taker does not have to have been at fault due to the materiality of the loss, or a material regulatory sanction for any DB Group Company and the Committee has

determined that applicable laws or regulations require that a provision such as this Rule 6.8 apply

to that Award; or

ii) failed to comply to a significant extent with relevant external or internal rules regarding appropriate standards of conduct (including, without limitation, standards of fitness and propriety and/or any Applicable DB Group Policy or Procedure) within the ambit of section 18 para 5 sentence 3 no. 2 of InstitutsVergV or the equivalent provision in any other applicable regulation; or

iii) where the Committee determines, in its sole discretion, that clawback is required on the basis of prevailing regulatory requirements (which includes any legislation or guidance published by a regulator from time to time). For the avoidance of doubt, this includes any order made by the German Federal Financial Supervisory Authority (BaFin) or any other competent regulatory authority, including the US Securities and Exchange Commission (SEC) and applicable securities listing exchanges in relation to such regulatory or other legal requirements. Clawback required by such rules or laws, may also include awards delivered as well as made in the performance period, and, for the avoidance of doubt, may include awards that are permitted to be recovered in satisfaction of the compliance obligations of such rules or laws, if such recovery is the selected method of recovery that the Committee determines is appropriate, alone or in combination with other methods or means of recovery.

Clawback under this Rule 6.8 may occur either before or after the Participant ceases to be a DB Employee for any reason.

b) Where the Committee determines that this Rule 6.8 applies in relation to an Award (or Tranche of an Award), the Participant shall be required to reimburse the Clawback Amount to the DB Group in accordance with the provisions of this Rule 6.8. The Committee shall notify the Participant in writing of the determination and of the Clawback Amount that is due from the Participant (a “Clawback Notice”).

c) For the purposes of this Rule 6.8, the “Clawback Amount” shall be either:

i) the number of DB Shares originally subject to the part of the Award that has been Released, before any reduction in accordance with Rule 4.8, but taking account of any reduction resulting from failure to meet a Performance Condition in full, (the “Clawback Shares”); or

ii) the market value at the Release Date of the Clawback Shares (the “Clawback Cash”).

d) The Participant shall reimburse the DB Group for the Clawback Amount by either, at the election of the Participant, transferring the Clawback Shares to such person or entity designated by the Committee or paying the Clawback Cash to a DB Group Company designated by the Committee, as directed by the Committee, in each case as soon as possible after the Clawback Notice takes effect (as provided in Rule 12.2), and in any event within 30 days of that notice taking effect. If the Participant fails to reimburse the DB Group within 30 days of the notice taking effect, the DB Group reserves all of its rights to obtain reimbursement of the Clawback Amount (whether the Clawback Shares or the Clawback Cash, or any combination thereof, regardless of any election of the Participant) from the Participant in any way (or any combination of ways) it deems appropriate to the extent permitted by law. Without prejudice to the generality of the foregoing, any DB Group Company shall be entitled to:

i) deduct the relevant sum or part of it from any amounts due to the Participant from that DB Group Company (including salary) to the extent permitted by applicable law; and/or

ii) institute legal proceedings against the Participant for the recovery of the Clawback Amount or any part of it.

e) If the Committee considers that any taxation or social security contributions paid in relation to the Award may not be recovered from or repaid by the relevant tax authority following the application of this Rule 6.8, the Committee at its discretion, may, but is not required to, reduce the Clawback Amount to take account of this taxation or social security contributions. Where the Clawback Amount is so reduced, the Participant shall make reasonable efforts to recover the amount of taxation and social security contributions which resulted in the reduction from the relevant tax authority, and if any such taxation or social security contributions are subsequently recovered by the Participant from the relevant tax authority, the Participant shall pay the amount of any such taxation or social security contributions recovered by the Participant to the DB Group. If the Clawback Amount is reduced as described in this Rule 6.8(e) and a DB Group Company recovers any amount of taxation or social security contributions associated with the reduction, the DB Group Company shall retain the amount so recovered.

f) Neither the Participant nor any Representative shall have any claim for compensation as a result of the operation of this Rule 6.8.

g) This Rule 6.8 shall not apply to an Award unless the Clawback Notice is delivered so as to take effect before the second anniversary of the Last Release Date for the Award. For these purposes, the “Last Release Date” is the date set forth in the Award Statement as the date upon which the Award is Released, or where the Award is granted in Tranches, the final date set forth in the Award Statement as the date upon which a Tranche of the Award is Released.

7. Release

7.1 Release: As soon as practicable following the Release Date of an Award (or Tranche of an Award), the Participant shall be entitled to withdraw the Net Award Shares subject to that Award or Tranche (taking account of any forfeiture in accordance with the Plan Rules) from the Nominee and have the shares placed in a valid DB Group brokerage or custody account, or other brokerage or custody account approved by the Plan Administrator for this purpose, in the name of the Participant (and the Nominee shall be entitled to so place the Net Award Shares regardless of whether so requested by the Participant), and the Participant shall be free to sell those Shares, subject to the requisite Compliance Department approval as referred to in Rule 11.6.

7.2 Custody/brokerage account: If required by the Plan Administrator, the Participant or any Representative must provide to the Plan Administrator, before the Release Date or such other date as identified by the Plan Administrator, details of a valid DB Group brokerage or custody account, or other brokerage or custody account approved by the Plan Administrator for this purpose, into which the Net Award Shares may be placed, in a form satisfactory to the Plan Administrator.

7.3 Tax, social security and other statutory withholding: The Plan Administrator or any DB Group Company may withhold such amount and make such arrangements as it considers necessary to meet any liability to taxation, social security contributions or any other statutory deduction in the event any such liability arises in respect of the Release of Awards. Without limitation, the number of shares to be placed into a Participant’s custody or brokerage account may be reduced by a number of DB Shares or other assets with a value equal to the amount of such applicable tax, social security requirements and any other statutory deductions, and in each case the amount of the deduction or the reduced number of DB Shares shall be treated as Released. Depending on the Participant’s individual circumstances, if a Participant changes locations between the Award Date and Release, an Award may become subject to multiple withholding taxes or double taxation. The Plan Administrator or Nominee may sell an appropriate portion of the Net Award Shares and withhold sufficient sale proceeds to satisfy the withholding liability, and such portion of the Net Award Shares shall be treated as Released.

The Participant (or the Participant’s Representative, if applicable) is responsible for reporting the receipt of income or the proceeds of any sale as a result of the operation of this Rule 7.3 or otherwise to the appropriate tax authority (except where any DB Group Company is legally obliged to account for such reporting).

No DB Group Company takes any responsibility (except where legally required) as to the taxation, social security or other statutory deductions consequences of the Participant participating in the Plan and a Participant should therefore seek independent advice on tax, social security and other statutory deductions.

7.4 Proof of Certification: If the Plan Administrator requests any Proof of Certification, the Participant must provide such Proof of Certification in a form satisfactory to the Plan Administrator within 30 days of the request.

7.5 Notification of events: The Participant must notify the Plan Administrator of any events which may result in the forfeiture of the Award or any part of it prior to any Release Date. Furthermore, the Participant agrees that the Participant shall be deemed to warrant and undertake to the Plan Administrator and each DB Group Company on each Release Date that the Participant has not acted in any way giving rise to forfeiture pursuant to these Plan Rules at any time prior to the relevant Release Date.

If, contrary to Rule 6, the Participant derives any benefit, following the Release Date, to which the Participant is not entitled then the Plan Administrator (or any relevant DB Group Company) shall be entitled to a full recovery of all benefits derived by the Participant wrongly in breach of the warranty and undertaking and/or contrary to Rule 6. This shall be without prejudice to any other rights which any DB Group Company may have arising out of the act or omission giving rise to forfeiture.

7.6 Compliance: Any action in relation to an Award or the Award Shares is subject to any approvals or consents required under any applicable laws or regulations or by any governmental authority, the requirements of any exchange on which DB Shares are traded and any policy adopted by the Compliance Department.

8. Corporate events

8.1 Effect of Change of Control: Except as may otherwise be specified in a Participant's Award Statement, on or before the occurrence of a Change of Control, the Committee shall have the sole discretion to determine whether none, some or all of the outstanding Awards will be Released (and the extent to which any Performance Conditions applicable to those Awards shall be treated as satisfied) as a result of the Change of Control, to the extent not already Released.

8.2 Corporate successors: The Plan shall not be automatically terminated by a transfer or sale of the whole or substantially the whole of the assets of Deutsche Bank AG, or by its merger or consolidation into or with any other corporation or other entity, but the Plan or an equivalent equity incentive plan shall be continued after such sale, merger or consolidation subject to the agreement of the transferee, purchaser or successor entity. In the event that the Plan is not continued by the transferee, purchaser or successor entity, the Plan shall terminate subject to the provisions of the Plan, including Rule 7 and Rule 10, and the Participant or any Representative shall have no further claim for compensation arising out of any such termination of the Plan.

8.3 Changes in capitalisation: If any change affects DB Shares on account of a merger, reorganisation, rights issue, extraordinary stock dividend, stock split or similar changes which the Committee reasonably determines justifies adjustments to Awards, the Plan Administrator shall make such appropriate adjustments as are determined by the Committee to be necessary or appropriate to prevent enlargement or dilution of rights.

9. Administration

9.1 Administration by the Plan Administrator: The Plan Administrator shall be responsible for the general operation and administration of the Plan in accordance with its terms and for carrying out the provisions of the Plan in accordance with such resolutions as may from time to time be adopted, or decisions made, by the Committee and shall have all powers necessary to carry out the provisions of the Plan.

9.2 Interpretation by the Committee: The Committee will have full discretionary power to interpret and enforce the provisions of this Plan and to adopt such regulations for administering the Plan as it decides are necessary or desirable. All decisions made by the Committee (including, for the avoidance of doubt, by the Plan Administrator, the DB Group or a DB Group Company, where designated in the Plan Rules as the body to make the decision) pursuant to the Plan are final, conclusive and binding on all persons, including the Participants and any DB Group Company.

9.3 Forfeiture and Release: The Committee shall have full discretion to determine whether or not any of the events or activities set forth in Rule 5 and/or Rule 6 has occurred.

10. Amendment or termination of the Plan

10.1 Termination of Plan: The Committee may terminate the Plan at any time in its sole discretion. Termination of the Plan (as opposed to amendment of the Plan) would be without prejudice to the subsisting rights of Participants.

10.2 Amendment of Plan: The Committee may at any time amend, alter or add to all or any of the provisions of the Plan (including, for the avoidance of doubt, the amendment of existing Schedules and the addition of new Schedules) or of any Award Statement or any Performance Condition in any respect in its sole discretion, provided that the Committee cannot materially adversely affect a Participant’s existing Award except:

a) with the Participant’s prior consent; or

b) where the amendment, alteration or addition is made in order to comply with applicable regulatory requirements which, for the avoidance of doubt, includes any legislation or guidance published by a regulator from time to time.

For the avoidance of doubt, no oral representation or statement made by any party, including any employee, officer, or director of any DB Group Company as to the interpretation, application or operation of this Plan or any Awards under it either generally or to any specific set of circumstances shall bind any DB Group Company unless it is confirmed in writing by the Plan Administrator or Senior Executive Compensation Committee.

11. General

11.1 No guarantee of benefits or unintended rights:

a) The granting of an Award is at the sole discretion of the Committee (or other persons the Committee permits to make Awards under Rule 4.1). The Committee is not obligated to make any Award, or permit any Award to be made, in the future or to allow DB Employees to participate in any future or other compensation plan even if an Award has been awarded in one or more previous years.

b) Nothing in these Plan Rules shall be construed as an obligation or a guarantee by any DB Group Company, the Committee or the Plan Administrator with respect to the future value of an Award.

c) No Participant or any Representative shall have any right to receive a benefit under the Plan except in accordance with the terms of these Plan Rules.

d) An Award and resulting distribution shall not (except as may be required by taxation law or other applicable law) form part of the emoluments of individuals or count as wages or remuneration for pension or other purposes.

e) If a Participant ceases to be a DB Employee for any reason, and, as a result, loses or suffers a diminution in value of an Award in accordance with the Plan Rules, that Participant shall not be entitled, and shall be deemed irrevocably to have waived any entitlement, to any compensation by way of damages or otherwise in connection with that loss or diminution in value in relation to the Award, except as specifically provided for in the Rules.

f) Notwithstanding anything to the contrary in these Rules, the Participant shall not have, and waives any right to, bring a claim against any DB Group Company for any loss caused or alleged to have been caused by the manner in which any discretion referred to in these Rules has been exercised (or, as the case may be, not exercised).

11.2 No enlargement of Participant rights: The establishment of the Plan and the making of Awards under it is entirely at the sole discretion of the Committee, shall not be construed as an employment agreement and shall not give any Participant the right to be retained as a DB Employee or to otherwise impede the ability of any DB Group Company to terminate the Participant's employment. No communications concerning the Award shall be construed as forming part of a Participant's terms and conditions of employment or any employment agreement with any DB Group Company.

11.3 Severability: The invalidity or non-enforceability of any one or more provisions of these Rules shall not affect the validity or enforceability of any other provision of these Rules, which shall remain in full force and effect.

11.4 Limitations on liability: Notwithstanding anything to the contrary in these Rules, neither any DB Group Company, the Plan Administrator, nor any individual acting as an employee, agent or officer of any DB Group Company or the Plan Administrator, shall be liable to any Participant, former employee or any Representative for any claim, loss, liability or expense incurred in connection with the Plan.

11.5 Claims by Participants: Any claim or action of any kind by a Participant or Representative with respect to benefits under the Plan or these Plan Rules, including any arbitration or litigation filed in a court of law, must be brought within one year from the date a Participant's Award was Released or would have been Released had such Award not been forfeited or lapsed pursuant to these Rules, save to the extent that this restriction would be unlawful under applicable law.

11.6 Dealing in DB Shares: Any dealing in DB Shares acquired by a Participant pursuant to the Plan shall remain subject to the requisite Compliance Department approval.

11.7 Participant confidentiality: For the avoidance of doubt, nothing in these Rules shall prohibit or restrict the Plan Administrator, any Participant or any Group Company from disclosing information to any securities exchange, tax or regulatory authority having jurisdiction over any Group Company or in order to take professional advice or as ordered by a court of competent jurisdiction. Additionally, neither the Plan Administrator, any Participant nor any Group Company is prevented by these Rules from reporting any wrongdoing to a statutory regulator in circumstances in which there is a duty to disclose that wrongdoing or from reporting a criminal offence to the police or other relevant criminal enforcement body.

11.8 Assignment: Except in accordance with Rule 4.9, an Award is not transferable or assignable by the Participant. Notwithstanding this, any DB Group Company shall have the right to novate and/or assign its contractual rights and/or obligations under this Plan in full or in part to any other DB Group Company or an Acquirer Entity at its sole discretion without the express consent of the Participant.

11.9 Data protection: Any DB Group Company may collect and process various data that is personal to Participants (including, for example, name and address, taxpayer and social security identification numbers, and employee number or other means of confirming employment and title or position with a DB Group Company) for the purposes of administering the Plan, compliance with any requirement of law or regulation, including tax-related requirements, and the prevention or investigation of crimes and malpractice. This data will be collected directly from the Participant or from the DB Group Company that employs the Participant. A failure or refusal on the part of the Participant to provide or update the data (or to agree to the uses of the Participant's personal data described above) may result in the DB Group being unable to administer the Plan in respect of the Participant. A DB Group Company may disclose this data to its affiliates or service providers (including the Plan Administrator) in connection with the administration of the Plan. Some data processing may be done outside the country in which the Participant is employed, where laws and practices relating to the protection of personal data may be weaker than those in the country in which the Participant is employed, including in the United States of America, but wherever practicable the DB Group will take steps to ensure that Participants' personal information is adequately protected and complies, so far as possible, with the local data protection legislation in the country in which the Participant is employed. In certain circumstances courts, law enforcement agencies or regulatory agencies within or outside the country in which the Participant is employed may be entitled to access the data. Depending on the country in which the Participant is employed, the Participant may have the right to request access to, a copy of and correction of information held by the DB Group and may write to the local Data Protection Officers of the DB Group, at the contact details which will be provided from time to time, for these purposes and also to request that the DB Group specify or explain its policies and procedures in relation to data and the types of data held.

11.10 Entire agreement: These Plan Rules together with the Award Statement (and, if any Performance Condition is set out in an Award Letter, that Award Letter) set forth the entire understanding of the parties with respect to the Award described on the Award Statement. Any agreement, arrangement or communication, whether oral or written, pertaining to the Award described in the Award Statement is hereby superseded and the foregoing Award shall be subject to the provisions of these Plan Rules. To the extent that there is any inconsistency between these Rules and the Award Statement or other communications, these Plan Rules shall prevail.

12. Notices

12.1 Form of notices: All notices or other communications with respect to these Plan Rules shall be in writing and be delivered in person, by email, by facsimile transmission, by registered mail (return receipt requested, postage prepaid) or as may otherwise be indicated by the Plan Administrator (including via any online computer processes established by the Plan Administrator).

Notices or communications to the Plan Administrator or any DB Group Company shall be sent to the following address (or to such other address or in such other manner for the Plan Administrator or any DB Group Company as shall be notified to the Participant):

Plan Administrator (or DB Group Company)

HR Performance & Reward

c/o DB Group Services (UK) Limited

21 Moorfields

London EC2Y 9DB, United Kingdom

12.2 When notices take effect: Notices or other communications shall take effect:

a) if delivered by hand, upon delivery;

b) if posted, upon delivery, or, in relation to communications sent to a Participant by first class post, 10.00 a.m. (UK time) on the second day after posting if earlier;

c) if sent by facsimile or email, when a complete and legible copy of the relevant communication, whether that sent by facsimile or email (as the case may be) or a hard copy sent by post or delivered by hand, has been received at the appropriate address; and

d) if sent via any online computer processes established by the Plan Administrator, when that communication is registered by the system or acknowledged by the Participant, as the case may be.

12.3 Participants' contact details: It is each Participant's responsibility to keep the Plan Administrator updated with any change to address and other contact details for that Participant. By participating in the Plan, each Participant acknowledges and agrees that the Participant shall have no claim for compensation or otherwise for any loss suffered as a result of, or in connection with, a failure to keep contact details updated. Any notice or other communication given to a Participant by the Plan Administrator or any DB Group Company shall be validly given if sent to the last address validly notified to the Plan Administrator by the Participant (or in the absence of any such notification to the address that the Plan Administrator reasonably believes to be that Participant's address, or to be that Participant's address before any change of address which has not been validly notified to the Plan Administrator).

13. Applicable law and jurisdiction

Interpretation of these Plan Rules shall be governed by and construed in accordance with the laws of England and Wales to the exclusion of the rules on the conflict of laws. All disputes arising out of or in connection with this Award shall be subject to the exclusive jurisdiction of the courts of England and Wales.

The effective date of this document is March 1, 2025.

These Plan Rules (as may be amended from time to time) apply to all Awards granted on or after this Date and before Plan Rules are issued with a later effective date which will supersede and replace these Plan Rules in relation to future grants of Awards.

Deutsche Bank Restricted Share Plan 2025
Schedule: Californian Employees

This schedule ("Schedule") modifies the provisions of the Deutsche Bank Restricted Share Plan, as amended from time to time (the "Plan") with respect to Awards (1) in relation to which the Participant may, in the absence of the amendments effected by this Schedule, would be subject to rules concerning non-competition and non-solicitation, which are not permissible in the State of California.

The provisions of this Schedule apply automatically to those Awards (whether applicable at the Award Date or not) and supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder in relation to the respective Participants.

Any capitalized terms contained but not defined in this Schedule shall have the meaning provided in the Plan.

These modifications are made to the Plan with the intent that the Plan be compliant with Californian Law:

1 Definitions

The following definitions are removed from Rule 2 of the Plan:

"Restricted Services" means services that are substantially similar to any or all of the services provided by the Participant during the 12-month period prior to the Participant ceasing to be a DB Employee.

"Proof of Certification" means any information deemed necessary or desirable by the Plan Administrator (i) to confirm a Participant's compliance with the terms and provisions of an Award; (ii) to enable the Plan Administrator to apply the terms and provisions of an Award; or (iii) to enable the Plan Administrator (or any DB Group Company) to comply with its obligations in relation to an Award, including, but not limited to: copies of tax returns and employment or payroll-related documentation, or any confirmation or agreement by a Participant deemed necessary or desirable by the Plan Administrator to carry out any of the Plan Rules or any other rule or regulation, as determined by the Plan Administrator (including without limitation confirmation or agreement that the Participant is bound by the Plan Rules in relation to an Award).

2 General forfeiture and clawback

Rule 6.1 shall be replaced with the following:

6.1 Complete Forfeiture for certain acts: In addition to the other forfeiture provisions contained in the Plan Rules, a Participant shall automatically forfeit any Awards that have not been Released, without any claim for compensation by the Participant or any Representative, if any of the following events or activities occurs at any time prior to the Release Date for that Award, during or following employment as a DB Employee:

a) the Participant directly or indirectly obtains, uses, discloses or disseminates Proprietary Information to any other company, individual or entity or otherwise employs Proprietary Information, except as specifically required in the proper performance of the Participant’s duties for any DB Group Company;

b) the Participant acts in a manner that is prejudicial to the reputation of the DB Group or any DB Group Company;

c) the Participant or any Representative is responsible for any act or omission that breaches the terms of any agreement into which the Participant has entered with any DB Group Company, including any settlement or separation agreement or compromise agreement.

Rule 6.5 shall not apply for employees or former employees within the State of California.

Deutsche Bank Restricted Share Plan 2025
Schedule 2: Deutsche Bank AG Management Board Members

This schedule (“Schedule”) modifies the provisions of the Deutsche Bank Restricted Share Plan, as amended from time to time (the “Plan”) with respect to Awards in relation to which the Participant, in the absence of the amendments effected by this Schedule, would not be subject to rules applicable to Management Board Members of Deutsche Bank AG.

The provisions of this Schedule apply automatically to those Awards (whether applicable at the Award Date or not) and supersede any contrary provisions contained in the Plan or any Award Statement issued thereunder in relation to the respective Participants.

Any capitalised terms contained but not defined in this Schedule shall have the meaning provided in the Plan.

These modifications are made to the Plan with the intent that the Plan be compliant with German Law:

1 Definitions

The following definitions are removed from Rule 2 of the Plan:

“Award Letter” means a letter issued by a DB Group Company at or around the time of an Award Statement, which may set out Performance Conditions in relation to an Award as provided in Rule 4.4, and which may in some cases supplement an Award Statement

“Financial Services” includes (without limitation) any (or any combination) of the following:

a) commercial or retail banking;

b) brokerage;

c) wealth management;

d) insurance, pension or lending services;

e) financial, business, investment or economic advisory services (including raising or preserving capital or transitioning ownership of any asset);

f) asset management;

g) issuing, trading or selling instruments or other investments; and

h) advising on or investing in private equity or real estate,

and also includes any other activities engaged in by any DB Group Company that the Committee considers constitute financial services.

“Material Risk Taker” means a material risk taker (as determined by the DB Group in its sole discretion) having regard to InstitutsVergV or any other applicable regulation.

“Relevant Individual” in relation to a Significant Adverse Event means a DB Employee or a contingent worker engaged by a DB Group Company whose conduct is the subject of an internal investigation by a DB Group Company in connection with that Significant Adverse Event which results in disciplinary measures or sanctions against the Relevant Individual, or would have resulted in such measures or sanctions (as determined by the Committee in its absolute discretion) if, in the case of a former DB Employee, the Relevant Individual had not ceased to be a DB Employee or, in the case of a contingent worker or former contingent worker, the Relevant Individual had been a DB Employee subject to disciplinary measures or sanctions by a DB Group Company.

“Senior Executive Compensation Committee” means the committee delegated by the Management Board to govern this Plan.

“Significant Adverse Event” means an event (or series of events, in each case whether by any acts or omissions) that has resulted in any internal or external finding of misconduct or of risk (including without limitation regulatory, client, reputational, market and/or other risk), or financial loss (whether direct or indirect, and whether by way of a regulatory fine, sanction, action, or settlement, including any associated cost or otherwise), which, as determined by the Committee in its absolute discretion, is classified by the DB Group as being “Acute”, “Severe” or “High” (or a similar level under any alternative categorisation in place from time to time) and which the Committee has determined in its absolute discretion has had or is likely to have an adverse effect on the DB Group, a DB Group Company, a Division or a business unit.

“Sufficiently Proximate” to a Relevant Individual in relation to a Significant Adverse Event means a Participant who is:

a) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a Relevant Individual who is a DB Employee (the “First Level Manager”), or a DB sponsor of a Relevant Individual who is a contingent worker engaged by a DB Group Company (the “First Level Sponsor”);

b) a legal, local or functional manager (or other equivalent manager type applicable at the time) of a First Level Manager or First Level Sponsor of the Relevant Individual or the head of the business unit in which the Relevant Individual is employed or engaged;

c) only in case of a Significant Adverse Event which is classified by the DB Group as being “Acute” (or a similar level under any alternative categorisation in place from time to time), the head of Division, the Chief Country Officer(s), the CEO or Chief Operating Officer(s) where the Relevant Individual works (or worked) or is engaged (or was engaged); in each case, at the time when Significant Adverse Event(s) (or portion thereof), or the actions or omissions (in each case, or portions thereof) of the Relevant Individual contributing to the Significant Adverse Effect, occurred and regardless of whether the Participant was himself responsible for, or contributed to, the Significant Adverse Event, in any way other than being Sufficiently Proximate to a Relevant Individual.

The following definitions are amended from Rule 2 of the Plan to be defined accordingly as:

"Cause" means in respect of the termination of a Participant's employment an important reason for termination of the employment contract as a member of the Management Board as per sec. 626 of the German Civil Code (Bürgerliches Gesetzesbuch).

"Change of Control" means a change in the control of Deutsche Bank AG which shall occur if

1. a shareholder or several shareholders acting jointly acquire the majority of the shares or voting rights of Deutsche Bank AG; or

2. a shareholder or several shareholders acting jointly hold a voting share of more than one half of the voting capital represented at a general meeting of Deutsche Bank AG and, as a result of that, the duties previously performed by the Participant are substantially restricted or changed.

For the allocation of shares owned by third parties, the provisions of § 34 German Securities Trading Act (WpHG) apply accordingly.

"Committee" means the Supervisory Board of Deutsche Bank or a duly authorised committee thereof.

"DB Employee" means a person employed by any DB Group Company, including members of the Management Board.

"Restricted Services" means any work of the Participant either directly or indirectly, on a self-employed basis or as an employee or in any other form, for a Financial Services Firm. For the avoidance of doubt this includes services provided in revenue generating as well as infrastructure and support roles. The term "Restricted Services" shall apply without any geographical restrictions. If the Participant and Deutsche Bank have agreed on a differing non-competition provision in the employment contract, a termination agreement or any other applicable agreement, Restricted Services shall mean and be limited to any activities within the scope of such non-competition provision

"Plan Administrator" means Deutsche Bank AG

"Proprietary Information" means any information which is not publicly available (other than as a result of the Participant's action), including, without limitation, all financial or product information, business plans, client lists, compensation details or other confidential information, copyright, patent and design rights in any invention, design, discovery or improvement, model, computer program, system, database, formula or documentation, including information conceived, discovered or created during or in consequence of the Participant's employment as a DB Employee. An exception hereof shall apply if the disclosure of such information (i) does not impair the interests of Deutsche Bank, (ii) is required in due performance of the Participant's duties as a DB Employee or (iii) is legally mandatory. Unless an adverse effect on the interests of Deutsche Bank is obviously excluded, a disclosure of information shall only be deemed not to impair such interests if – to the extent possible – the Participant has informed the Management Board in advance and the Management Board has approved the disclosure.

“Financial Services Firm” which, within the meaning of these Plan Rules, are companies that fulfil the requirements of one or more of the following categories:

1. Institutions that are subject to the area of applicability of the InstitutsVergV and are to be classified as a “major institution” within the meaning of § 17 InstitutsVergV.

2. Institutions that are not subject to the area of applicability of the InstitutsVergV and whose total assets amount to or exceed Euro 15 billion based on the average as of the respective reporting dates of the last three full financial years.

3. Regulated financial services institutions that manage invested assets of more than Euro 100 billion.

4. An affiliated company pursuant to the definition in § 15 German Stock Corporation Act (AktG) of one of the companies within the meaning of Numbers 1 to 3.

If the Participant and Deutsche Bank have agreed on a differing non-competition provision in the employment contract, a termination agreement or any other applicable agreement, Financial Services Firm shall mean and be limited to any company within the scope of such non-competition provision.

2 Awards

Rule 4.3 (e) shall not apply.

Rule 4.4 shall be replaced with the following:

4.4 Performance Conditions: Awards or Tranches of Awards may be made subject to Performance Conditions as approved by the Committee at the time the Award is made. Any such conditions will be detailed in the Award Statement. The degree to which a Performance Condition is satisfied will determine the extent to which the Net Award Shares subject to that Award or Tranche will be released, and the degree to which the Performance Condition is satisfied must be determined before the Award or relevant part of the Award can be released. An Award shall be forfeited to the extent that it is determined that it is no longer capable of being released because the Performance Condition has not been satisfied in full. The Committee may amend the Performance Conditions subject to its equitable discretion if such amendment is required to ensure that the Performance Conditions remain appropriate and/or compliant with legal or regulatory requirements including, without limitation, any regulatory or recovery intervention. Any amendment is only permissible if it is compliant with all applicable legal and regulatory requirements. An amendment to the disadvantage of the Participant is only permissible if it is required due to legal and/or regulatory requirements or if the Participant agrees to the amendment.

Rule 4.9 shall be replaced with the following:

4.9 Non-transferable Awards: A Participant may not at any time before the release date (i) transfer, assign, sell, pledge or grant to any person or entity any rights in respect of any Award or any of the Award Shares, other than in the event of the death or Total Disability of the Participant; or (ii) enter into any transactions having the economic effect of hedging or otherwise offsetting the risk of price movements, or attempt to do so, with respect to all or part of the Award Shares. As a result of a breach of this Rule 4.9, a Participant shall forfeit such proportion (up to and including 100%) of Net Award Shares as may be determined by the Committee in its equitable discretion without any claim for compensation by the Participant or any Representative.

3 General forfeiture and clawback

Rule 6.2 (c) 6.7 and 6.8 shall not apply

4 Corporate Events

Rule 8.1 and 8.2 shall be replaced with the following:

8.1 Effect of Change of Control: Except as may otherwise be specified in a Participant's Award Statement, on or before the occurrence of a Change of Control, the Committee shall have the sole discretion to determine whether none, some or all of the outstanding Awards will be Released (and the extent to which any Performance Conditions applicable to those Awards shall be treated as satisfied) as a result of the Change of Control, to the extent not already Released. The Committee's decision is subject to and must comply with any applicable laws and other applicable regulations.

8.2 Corporate successors: The Plan shall not be automatically terminated by a transfer or sale of the whole or substantially the whole of the assets of Deutsche Bank AG, or by its merger or consolidation Into or with any other corporation or other entity, but the Plan or an equivalent equity incentive plan shall be continued after such sale, merger or consolidation subject to the agreement of the transferee, purchaser or successor entity. In the event that the Plan is not continued by the transferee, purchaser or successor entity, the Plan shall terminate subject to the provisions of the Plan, including Rule 7 and Rule 10, and the Participant or any Representative shall have no further claim for compensation arising out of any such termination of the Plan. A termination of the Plan shall only occur with effect for the future and shall not affect any rights already acquired by the Participant.

5 General

Rule 11.10 shall be replaced with the following:

11.10 Entire agreement: The Participant's employment contract, these Plan Rules, the Schedule for members of the Management Board and the Award Statement set forth the entire understanding of the parties with respect to the Award described on the Award Statement. To the extent that there is any inconsistency between any of the aforementioned provisions, the following hierarchy shall apply to the prevalence of contradicting provisions:

a) the Participant's employment contract;

b) the Schedule for Members of the Management Board;

c) these Plan Rules;

d) the Award Statement.

6 Notices

Rule 12.1 shall be replaced with the following:

12.1 Form of notices: All notices or other communications with respect to these Plan Rules shall be in writing and be delivered in person, by email, by facsimile transmission, by registered mail (return receipt requested, postage prepaid) or as may otherwise be indicated by the Plan Administrator (including via any online computer processes established by the Plan Administrator). Notices or communications to the Plan Administrator or any DB Group Company shall be sent to the following address (or to such other address or in such other manner for the Plan Administrator or any DB Group Company as shall be notified to the Participant):

Deutsche Bank AG

Head of Corporate Executive Matters

Taunusanlage 12

60325 Frankfurt am Main

Germany

7 Applicable law and jurisdiction

Rule 13 shall be replaced with the following:

Interpretation of these Plan Rules shall be governed by and construed in accordance with the laws of Germany to the exclusion of the rules on the conflict of laws. Overriding mandatory provisions of foreign law shall remain unaffected. All disputes arising out of or in connection with this Award shall be subject to the exclusive jurisdiction of the courts of Germany.

Exhibit 8.1

List of Subsidiaries

Serial No.	Name of company	Domicile of company	Footnote
Subsidiaries			
1	Deutsche Bank Aktiengesellschaft	Frankfurt am Main	
2	ABFS I Incorporated	Lutherville-Timonium	
3	Alex. Brown Financial Services Incorporated	Lutherville-Timonium	
4	Alex. Brown Investments Incorporated	Lutherville-Timonium	
5	Alfred Herrhausen Gesellschaft mbH i.L.	Berlin	
6	Argent Incorporated	Lutherville-Timonium	
7	Baldur Mortgages Limited	London	
8	Betriebs-Center für Banken AG	Frankfurt	
9	Better Financial Services GmbH	Berlin	
10	Better Payment Germany GmbH	Berlin	
11	BHW - Gesellschaft für Wohnungswirtschaft mbH	Hameln	
12	BHW Bausparkasse Aktiengesellschaft	Hameln	
13	BHW Holding GmbH	Hameln	
14	Borfield Sociedad Anonima	Montevideo	
15	Breaking Wave DB Limited	London	
16	BT Globenet Nominees Limited	London	
17	Cardea Real Estate S.r.l.	Milan	
18	Caribbean Resort Holdings, Inc.	New York	1
19	Cathay Advisory (Beijing) Co., Ltd.	Beijing	
20	Cathay Asset Management Company Limited	Ebène	
21	Cathay Capital Company (No 2) Limited	Ebène	
22	China Recovery Fund, LLC	Wilmington	
23	Cinda - DB NPL Securitization Trust 2003-1	Wilmington	1
24	Consumo Srl in Liquidazione	Milan	
25	D B Investments (GB) Limited	London	
26	D&M Turnaround Partners Godo Kaisha	Tokyo	
27	DB (Barbados) SRL	Christ Church	
28	DB (Malaysia) Nominee (Asing) Sdn. Bhd.	Kuala Lumpur	

Serial No.	Name of company	Domicile of company	Footnote
29	DB (Malaysia) Nominee (Tempatan) Sendirian Berhad	Kuala Lumpur	
30	DB Advisory Services S.A.S.	Bogotá	
31	DB Alex. Brown Holdings Incorporated	Wilmington	
32	DB Aotearoa Investments Limited	George Town	
33	DB Beteiligungs-Holding GmbH	Frankfurt	
34	DB Boracay LLC	Wilmington	
35	DB Capital Markets (Deutschland) GmbH	Frankfurt	
36	DB Cartera de Inmuebles 1, S.A.U.	Madrid	
37	DB Chestnut Holdings Limited (in voluntary liquidation)	George Town	
38	DB Commodity Financing Limited	London	
39	DB Corporate Advisory (Malaysia) Sdn. Bhd.	Kuala Lumpur	
40	DB Direkt GmbH	Frankfurt	
41	DB Equipment Leasing, Inc.	New York	
42	DB Finance (Delaware), LLC	Wilmington	
43	DB Global Technology SRL	Bucharest	
44	DB Global Technology, Inc.	Wilmington	
45	DB Group Services (UK) Limited	London	
46	DB Holdings (New York), Inc.	New York	
47	DB HR Solutions GmbH	Frankfurt	
48	DB Industrial Holdings Beteiligungs GmbH & Co. KG	Luetzen	2
49	DB Industrial Holdings GmbH	Luetzen	
50	DB Intermezzo LLC	Wilmington	
51	DB Internal Funding Limited	London	
52	DB International (Asia) Limited	Singapore	
53	DB International Investments Limited	London	
54	DB International Trust (Singapore) Limited	Singapore	
55	DB Investment Partners Limited	London	
56	DB Investment Partners Pte. Ltd.	Singapore	
57	DB Investment Services GmbH	Frankfurt	
58	DB IROC Leasing Corp.	New York	
59	DB London (Investor Services) Nominees Limited	London	
60	DB Management Support GmbH	Frankfurt	
61	DB Nominees (Hong Kong) Limited	Hong Kong	
62	DB Nominees (Jersey) Limited	St. Helier	
63	DB Nominees (Singapore) Pte Ltd	Singapore	
64	DB Omega Ltd.	George Town	
65	DB Operaciones y Servicios Interactivos, S.L.U.	Madrid	

Serial No.	Name of company	Domicile of company	Footnote
66	DB Overseas Finance Delaware, Inc.	Wilmington	
67	DB Overseas Holdings Limited	London	
68	DB Print GmbH	Frankfurt	
69	DB Private Clients Corp.	Wilmington	
70	DB Private Wealth Mortgage Ltd.	New York	
71	DB Re S.A.	Luxembourg	
72	DB Service Centre Limited	Dublin	
73	DB Services (Jersey) Limited	St. Helier	
74	DB Services Americas, Inc.	Wilmington	
75	DB Servizi Amministrativi S.r.l.	Milan	
76	DB Strategic Advisors, Inc.	Makati City	
77	DB Structured Derivative Products, LLC	Wilmington	
78	DB Structured Products, Inc.	Wilmington	
79	DB Trustee Services Limited	London	
80	DB Trustees (Hong Kong) Limited	Hong Kong	
81	DB U.S. Financial Markets Holding Corporation	Wilmington	
82	DB UK Bank Limited	London	
83	DB UK Holdings Limited	London	
84	DB UK PCAM Holdings Limited (in members' voluntary liquidation)	London	
85	DB USA Core Corporation	West Trenton	
86	DB USA Corporation	Wilmington	
87	DB Valoren S.à r.l.	Luxembourg	
88	DB Value S.à r.l.	Luxembourg	
89	DB VersicherungsManager GmbH	Frankfurt	
90	DB Vita S.A.	Luxembourg	
91	DBAH Capital, LLC	Wilmington	
92	DBCIBZ1	George Town	
93	DBFIC, Inc.	Wilmington	
94	DBNZ Overseas Investments (No.1) Limited	George Town	
95	DBOI Global Services (UK) Limited	London	
96	DBR Investments Co. Limited	George Town	
97	DBRE Global Real Estate Management IB, Ltd.	George Town	
98	DBRMSGP1	George Town	2, 3
99	DBUSBZ2, S.à r.l.	Luxembourg	
100	DBX Advisors LLC	Wilmington	
101	DEE Deutsche Erneuerbare Energien GmbH	Frankfurt	
102	DEUKONA Versicherungs-Vermittlungs-GmbH	Frankfurt	
103	Deutsche (Aotearoa) Capital Holdings New Zealand	Auckland	

Serial No.	Name of company	Domicile of company	Footnote
104	Deutsche (Aotearoa) Foreign Investments New Zealand	Auckland	
105	Deutsche (New Munster) Holdings New Zealand Limited	Auckland	
106	Deutsche Alternative Asset Management (UK) Limited	London	
107	Deutsche Asia Pacific Holdings Pte Ltd	Singapore	
108	Deutsche Asset Management (India) Private Limited	Mumbai	
109	Deutsche Australia Limited	Sydney	
110	Deutsche Bank (Cayman) Limited	George Town	
111	Deutsche Bank (China) Co., Ltd.	Beijing	
112	Deutsche Bank (Malaysia) Berhad	Kuala Lumpur	
113	Deutsche Bank (Suisse) SA	Geneva	
114	Deutsche Bank (Uruguay) Sociedad Anónima Institución Financiera Externa	Montevideo	
115	DEUTSCHE BANK A.S.	Istanbul	
116	Deutsche Bank Americas Holding Corp.	Wilmington	
117	Deutsche Bank Europe GmbH	Frankfurt	
118	Deutsche Bank Financial Company	George Town	
119	Deutsche Bank Holdings, Inc.	Wilmington	
120	Deutsche Bank Immobilien GmbH	Hameln	
121	Deutsche Bank Insurance Agency Incorporated	Wilmington	
122	Deutsche Bank Luxembourg S.A.	Luxembourg	
123	Deutsche Bank Mutui S.p.A.	Milan	
124	Deutsche Bank National Trust Company	Los Angeles	
125	Deutsche Bank Polska Spólka Akcyjna	Warsaw	
126	Deutsche Bank Representative Office Nigeria Limited	Lagos	
127	Deutsche Bank S.A. - Banco Alemão	Sao Paulo	
128	Deutsche Bank Securities Inc.	Wilmington	
129	Deutsche Bank Securities Limited	Toronto	
130	Deutsche Bank Società per Azioni	Milan	
131	Deutsche Bank Trust Company Americas	New York	
132	Deutsche Bank Trust Company Delaware	Wilmington	
133	Deutsche Bank Trust Company, National Association	New York	
134	Deutsche Bank Trust Corporation	New York	

Serial No.	Name of company	Domicile of company	Footnote
135	Deutsche Bank, Sociedad Anónima Española Unipersonal	Madrid	
136	Deutsche Capital Finance (2000) Limited	George Town	
137	Deutsche Capital Markets Australia Limited	Sydney	
138	Deutsche Cayman Ltd.	Camana Bay	
139	Deutsche Custody N.V.	Amsterdam	
140	Deutsche Domus New Zealand Limited	Auckland	
141	Deutsche Equities India Private Limited	Mumbai	
142	Deutsche Finance No. 2 Limited (in voluntary liquidation)	George Town	
143	Deutsche Foras New Zealand Limited	Auckland	
144	Deutsche Gesellschaft für Immobilien-Leasing mit beschränkter Haftung i.L.	Duesseldorf	
145	Deutsche Global Markets Limited	Tel Aviv	
146	Deutsche Group Holdings (SA) Proprietary Limited	Johannesburg	
147	Deutsche Group Services Pty Limited	Sydney	
148	Deutsche Grundbesitz-Anlagegesellschaft mit beschränkter Haftung	Frankfurt	
149	Deutsche Holdings (Grand Duchy)	Luxembourg	
150	Deutsche Holdings (Luxembourg) S.à r.l.	Luxembourg	
151	Deutsche Holdings Limited	London	
152	Deutsche Holdings No. 2 Limited	London	
153	Deutsche Holdings No. 3 Limited	London	
154	Deutsche Holdings No. 4 Limited (in members' voluntary liquidation)	London	
155	Deutsche Immobilien Leasing GmbH	Duesseldorf	
156	Deutsche India Holdings Private Limited	Mumbai	
157	Deutsche India Private Limited	Mumbai	
158	Deutsche International Corporate Services (Ireland) Limited	Dublin	
159	Deutsche Investments (Netherlands) N.V. in liquidatie	Amsterdam	
160	Deutsche Investments India Private Limited	Mumbai	

Serial No.	Name of company	Domicile of company	Footnote
161	Deutsche Investor Services Private Limited	Mumbai	
162	Deutsche Knowledge Services Pte. Ltd.	Singapore	
163	Deutsche Leasing New York Corp.	New York	
164	Deutsche Mexico Holdings S.à r.l.	Luxembourg	
165	Deutsche Morgan Grenfell Group Limited (in members' voluntary liquidation)	London	
166	Deutsche Mortgage & Asset Receiving Corporation	Wilmington	
167	Deutsche Nederland N.V.	Amsterdam	
168	Deutsche New Zealand Limited	Auckland	
169	Deutsche Nominees Limited	London	
170	Deutsche Oppenheim Family Office AG	Cologne	
171	Deutsche Overseas Issuance New Zealand Limited	Auckland	
172	Deutsche Postbank Finance Center Objekt GmbH	Schuettringen	
173	Deutsche Securities (India) Private Limited	New Delhi	
174	Deutsche Securities (Proprietary) Limited	Johannesburg	
175	Deutsche Securities (SA) (Proprietary) Limited	Johannesburg	
176	Deutsche Securities Asia Limited	Hong Kong	
177	Deutsche Securities Inc.	Tokyo	
178	Deutsche Securities Israel Ltd.	Tel Aviv	
179	Deutsche Securities Korea Co.	Seoul	
180	Deutsche Securities Saudi Arabia (a closed joint stock company)	Riyadh	
181	Deutsche Securities, S.A. de C.V., Casa de Bolsa	Mexico City	
182	Deutsche Services (CI) Limited	St. Helier	
183	Deutsche Services Polska Sp. z o.o.	Warsaw	
184	Deutsche StiftungsTrust GmbH	Frankfurt	
185	Deutsche Strategic Investment Holdings Yugen Kaisha	Tokyo	
186	Deutsche Trustee Company Limited	London	
187	Deutsche Trustee Services (India) Private Limited	Mumbai	
188	Deutsche Trustees Malaysia Berhad	Kuala Lumpur	
189	Deutsche Wealth Management S.G.I.I.C., S.A.	Madrid	

Serial No.	Name of company	Domicile of company	Footnote
190	Deutsches Institut für Altersvorsorge GmbH	Frankfurt	
191	DI Deutsche Immobilien Treuhandgesellschaft mbH	Frankfurt	
192	DISCA Beteiligungsgesellschaft mbH	Duesseldorf	
193	Durian (Luxembourg) S.à r.l.	Luxembourg	
194	DWS Alternatives France	Paris	
195	DWS Alternatives Global Limited	London	
196	DWS Alternatives GmbH	Frankfurt	
197	DWS Asset Management (Korea) Company Limited	Seoul	
198	DWS Beteiligungs GmbH	Frankfurt	
199	DWS CH AG	Zurich	
200	DWS Consulting Shanghai Limited	Shanghai	
201	DWS Corporate Management Shanghai Limited	Shanghai	
202	DWS Distributors, Inc.	Wilmington	
203	DWS Far Eastern Investments Limited	Taipei	
204	DWS Global Business Services Inc.	Taguig City	
205	DWS Group GmbH & Co. KGaA	Frankfurt	2
206	DWS Group Services UK Limited	London	
207	DWS Grundbesitz GmbH	Frankfurt	
208	DWS India Private Limited	Mumbai	
209	DWS International GmbH	Frankfurt	
210	DWS Investment GmbH	Frankfurt	
211	DWS Investment Management Americas, Inc.	Wilmington	
212	DWS Investment S.A.	Luxembourg	
213	DWS Investments Australia Limited	Sydney	
214	DWS Investments Hong Kong Limited	Hong Kong	
215	DWS Investments Japan Limited	Tokyo	
216	DWS Investments Singapore Limited	Singapore	
217	DWS Investments UK Limited	London	
218	DWS Management GmbH	Frankfurt	
219	DWS Real Estate GmbH	Frankfurt	
220	DWS Service Company	Wilmington	
221	DWS Trust Company	Concord	
222	DWS USA Corporation	Wilmington	
223	EC EUROPA IMMOBILIEN FONDS NR. 3 GmbH & CO. KG i.I.	Hamburg	

Serial No.	Name of company	Domicile of company	Footnote
224	European Value Added I (Alternate G.P.) LLP	London	
225	Fiduciaria Sant' Andrea S.r.l.	Milan	
226	Finanzberatungsgesellschaft mbH der Deutschen Bank	Berlin	
227	Fir (Luxembourg) S.à r.l.	Luxembourg	
228	Franz Urbig- und Oscar Schlitter-Stiftung Gesellschaft mit beschränkter Haftung	Frankfurt	
229	Fünfte SAB Treuhand und Verwaltung GmbH & Co. Suhl "Rimbachzentrum" KG	Bad Homburg	
230	German American Capital Corporation	Lutherville-Timonium	
231	Greenheart (Luxembourg) S.à r.l.	Luxembourg	
232	Greenwood Properties Corp.	New York	1
233	Grundstücksgesellschaft Frankfurt Bockenheimer Landstraße GbR	Troisdorf	2
234	Grundstücksgesellschaft Kerpen-Sindorf Vogelrutherfeld GbR	Troisdorf	2
235	Grundstücksgesellschaft Köln Oppenheimstraße GbR	Troisdorf	2
236	Grundstücksgesellschaft Wiesbaden Luisenstraße/Kirchgasse GbR	Troisdorf	2
237	Immobilienfonds Büro-Center Erfurt am Flughafen Bindersleben I GbR	Troisdorf	2
238	Immobilienfonds Wohn- und Geschäftshaus Köln-Blumenberg V GbR	Troisdorf	2
239	ISTRON Beteiligungs- und Verwaltungs-GmbH	Cologne	
240	Joint Stock Company Deutsche Bank DBU	Kyiv	
241	Jyogashima Godo Kaisha	Tokyo	
242	KEBA Gesellschaft für interne Services mbH	Frankfurt	
243	Kidson Pte Ltd	Singapore	
244	Konsul Inkasso GmbH	Essen	
245	LA Water Holdings Limited	George Town	
246	LAWL Pte. Ltd.	Singapore	
247	Leasing Verwaltungsgesellschaft Waltersdorf mbH	Schoenefeld	
248	Leonardo III Initial GP Limited	London	
249	MEF I Manager, S. à r.l.	Munsbach	
250	MIT Holdings, Inc.	Baltimore	

Serial No.	Name of company	Domicile of company	Footnote
251	MortgageIT Securities Corp.	Wilmington	
252	MortgageIT, Inc.	New York	
253	norisbank GmbH	Bonn	
254	Numis Corporation Limited	London	
255	Numis Europe Limited	Dublin	
256	Numis Nominees (Client) Limited	London	
257	Numis Nominees (NSI) Limited	London	
258	Numis Nominees Limited	London	
259	Numis Securities Limited	London	
260	OOO "Deutsche Bank TechCentre"	Moscow	
261	OOO "Deutsche Bank"	Moscow	
262	OPB Verwaltungs- und Treuhand GmbH	Cologne	
263	OPB-Oktava GmbH	Cologne	
264	OPPENHEIM Capital Advisory GmbH	Cologne	
265	OPPENHEIM PRIVATE EQUITY Verwaltungsgesellschaft mbH	Cologne	
266	PADUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	
267	PB Factoring GmbH	Bonn	
268	PCC Services GmbH der Deutschen Bank	Essen	
269	Plantation Bay, Inc.	St. Thomas	
270	Postbank Direkt GmbH	Bonn	
271	Postbank Filialvertrieb AG	Bonn	
272	Postbank Finanzberatung AG	Hameln	
273	Postbank Leasing GmbH	Bonn	
274	PT Deutsche Sekuritas Indonesia	Jakarta	
275	RoPro U.S. Holding, Inc.	Wilmington	
276	Route 28 Receivables, LLC	Wilmington	
277	RREEF America L.L.C.	Wilmington	
278	RREEF European Value Added I (G.P.) Limited	London	
279	RREEF Fund Holding LLC	Wilmington	
280	RREEF India Advisors Private Limited	Mumbai	
281	RREEF Management L.L.C.	Wilmington	
282	SAGITA Grundstücks-Vermietungsgesellschaft mbH i.L.	Duesseldorf	
283	Sal. Oppenheim jr. & Cie. Beteiligungs GmbH	Cologne	
284	SAPIO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	
285	Sharps SP I LLC	Wilmington	
286	Stelvio Immobiliare S.r.l.	Bolzano	

Serial No.	Name of company	Domicile of company	Footnote
287	Süddeutsche Vermögensverwaltung Gesellschaft mit beschränkter Haftung	Frankfurt	
288	TELO Beteiligungsgesellschaft mbH	Schoenefeld	
289	Thai Asset Enforcement and Recovery Asset Management Company Limited	Bangkok	
290	Treuinvest Service GmbH	Frankfurt	
291	VÖB-ZVD Processing GmbH	Bonn	
292	WEPLA Beteiligungsgesellschaft mbH	Frankfurt	

Serial No.	Name of company	Domicile of company	Footnote
Consolidated Structured Entities			
293	Al Mi'yar Capital SA	Luxembourg	4
294	Alguer Inversiones Designated Activity Company	Dublin	
295	Alixville Invest, S.L.	Madrid	
296	Altersvorsorge Fonds Hamburg Alter Wall Dr. Juncker KG	Frankfurt	
297	Atlas Investment Company 1 S.à r.l., en liquidation volontaire	Luxembourg	
298	Atlas Investment Company 2 S.à r.l., en liquidation volontaire	Luxembourg	
299	Atlas Investment Company 3 S.à r.l., en liquidation volontaire	Luxembourg	
300	Atlas Investment Company 4 S.à r.l., en liquidation volontaire	Luxembourg	
301	Atlas Portfolio Select SPC	George Town	
302	Atlas SICAV - FIS, en liquidation volontaire	Luxembourg	4
303	Australian Secured Personal Loans Trust	Melbourne	
304	Axia Insurance, Ltd.	Hamilton	4
305	Carpathian Investments Designated Activity Company	Dublin	
306	Cathay Capital Company Limited	Ebène	1
307	Cathay Strategic Investment Company Limited	Hong Kong	
308	Cayman Reference Fund Holdings Limited	George Town	
309	Ceto S.à r.l.	Luxembourg	
310	Charitable Luxembourg Four S.à r.l.	Luxembourg	
311	Charitable Luxembourg Three S.à r.l.	Luxembourg	
312	Charitable Luxembourg Two S.à r.l.	Luxembourg	
313	City Leasing (Thameside) Limited	London	
314	City Leasing Limited	London	
315	CLASS Limited	St. Helier	4
316	Collins Capital Low Volatility Performance II Special Investments, Ltd.	Road Town	
317	Crofton Invest, S.L.	Madrid	
318	Danube Properties S.à r.l., en faillite	Luxembourg	
319	DB Asset Finance I S.à r.l.	Luxembourg	
320	DB Asset Finance II S.à r.l.	Luxembourg	
321	DB Aster II, LLC	Wilmington	

Serial No.	Name of company	Domicile of company	Footnote
322	DB Aster, Inc.	Wilmington	
323	DB Aster, LLC	Wilmington	
324	DB Covered Bond S.r.l.	Conegliano	
325	DB Credit Investments S.à r.l.	Luxembourg	
326	DB Finance International GmbH	Frankfurt	
327	DB Holding Fundo de Investimento Multimercado Investimento no Exterior Crédito Privado	Sao Paulo	
328	DB Litigation Fee LLC	Wilmington	
329	DB Municipal Holdings LLC	Wilmington	
330	DB SPEARs/LIFERs, Series DB-8092 Trust	Wilmington	
331	DB SPEARs/LIFERs, Series DB-8093 Trust	Wilmington	
332	DB SPEARs/LIFERs, Series DB-8095 Trust	Wilmington	
333	DB SPEARs/LIFERs, Series DB-8096 Trust	Wilmington	
334	DB SPEARs/LIFERs, Series DB-8097 Trust	Wilmington	
335	DB SPEARs/LIFERs, Series DB-8098 Trust	Wilmington	
336	DB SPEARs/LIFERs, Series DB-8103 Trust	Wilmington	
337	DB SPEARs/LIFERs, Series DB-8108 Trust	Wilmington	
338	DB SPEARs/LIFERs, Series DB-8114 Trust	Wilmington	
339	DB SPEARs/LIFERs, Series DB-8119 Trust	Wilmington	
340	DB SPEARs/LIFERs, Series DB-8129 Trust	Wilmington	
341	DB SPEARs/LIFERs, Series DB-8139 Trust	Wilmington	
342	DB SPEARs/LIFERs, Series DB-8141 Trust	Wilmington	
343	DB SPEARs/LIFERs, Series DB-8142 Trust	Wilmington	
344	DB SPEARs/LIFERs, Series DB-8143 Trust	Wilmington	
345	DB SPEARs/LIFERs, Series DB-8144 Trust	Wilmington	
346	DB SPEARs/LIFERs, Series DB-8145 Trust	Wilmington	
347	DB SPEARs/LIFERs, Series DB-8146 Trust	Wilmington	

Serial No.	Name of company	Domicile of company	Footnote
348	DB SPEARs/LIFERs, Series DB-8147 Trust	Wilmington	
349	DB SPEARs/LIFERs, Series DB-8148 Trust	Wilmington	
350	DB SPEARs/LIFERs, Series DB-8149 Trust	Wilmington	
351	DB SPEARs/LIFERs, Series DB-8150 Trust	Wilmington	
352	DB SPEARs/LIFERs, Series DB-8151 Trust	Wilmington	
353	DB SPEARs/LIFERs, Series DB-8201 Trust	Wilmington	
354	DB SPEARs/LIFERs, Series DB-8202 Trust	Wilmington	
355	DB SPEARs/LIFERs, Series DBE-8055 Trust	Wilmington	
356	DB SPEARs/LIFERs, Series DBE-8057 Trust	Wilmington	
357	DB SPEARs/LIFERs, Series DBE-8060 Trust	Wilmington	
358	DB SPEARs/LIFERs, Series DBE-8067 Trust	Wilmington	
359	DB SPEARs/LIFERs, Series DBE-8070 Trust	Wilmington	
360	DB SPEARs/LIFERs, Series DBE-8071 Trust	Wilmington	
361	DB SPEARs/LIFERs, Series DBE-8081 Trust	Wilmington	
362	DB SPEARs/LIFERs, Series DBE-8082 Trust	Wilmington	
363	DB SPEARs/LIFERs, Series DBE-8090 Trust	Wilmington	
364	DB SPEARs/LIFERs, Series DBE-8099 Trust	Wilmington	
365	DB SPEARs/LIFERs, Series DBE-8100 Trust	Wilmington	
366	DB SPEARs/LIFERs, Series DBE-8101 Trust	Wilmington	
367	DB SPEARs/LIFERs, Series DBE-8105 Trust	Wilmington	
368	DB SPEARs/LIFERs, Series DBE-8106 Trust	Wilmington	
369	DB SPEARs/LIFERs, Series DBE-8107 Trust	Wilmington	
370	DB SPEARs/LIFERs, Series DBE-8109 Trust	Wilmington	
371	DB SPEARs/LIFERs, Series DBE-8110 Trust	Wilmington	

Serial No.	Name of company	Domicile of company	Footnote
372	DB SPEARs/LIFERs, Series DBE-8113 Trust	Wilmington	
373	DB SPEARs/LIFERs, Series DBE-8118 Trust	Wilmington	
374	DB SPEARs/LIFERs, Series DBE-8120 Trust	Wilmington	
375	DB SPEARs/LIFERs, Series DBE-8121 Trust	Wilmington	
376	DB SPEARs/LIFERs, Series DBE-8122 Trust	Wilmington	
377	DB SPEARs/LIFERs, Series DBE-8123 Trust	Wilmington	
378	DB SPEARs/LIFERs, Series DBE-8124 Trust	Wilmington	
379	DB SPEARs/LIFERs, Series DBE-8125 Trust	Wilmington	
380	DB SPEARs/LIFERs, Series DBE-8126 Trust	Wilmington	
381	DB SPEARs/LIFERs, Series DBE-8128 Trust	Wilmington	
382	DB SPEARs/LIFERs, Series DBE-8130 Trust	Wilmington	
383	DB SPEARs/LIFERs, Series DBE-8131 Trust	Wilmington	
384	DB SPEARs/LIFERs, Series DBE-8132 Trust	Wilmington	
385	DB SPEARs/LIFERs, Series DBE-8133 Trust	Wilmington	
386	DB SPEARs/LIFERs, Series DBE-8134 Trust	Wilmington	
387	DB SPEARs/LIFERs, Series DBE-8135 Trust	Wilmington	
388	DB SPEARs/LIFERs, Series DBE-8136 Trust	Wilmington	
389	DB SPEARs/LIFERs, Series DBE-8137 Trust	Wilmington	
390	DB SPEARs/LIFERs, Series DBE-8138 Trust	Wilmington	
391	DB SPEARs/LIFERs, Series DBE-8140 Trust	Wilmington	
392	DB SPEARs/LIFERs, Series DBE-8152 Trust	Wilmington	
393	DB SPEARs/LIFERs, Series DBE-8153 Trust	Wilmington	
394	DB SPEARs/LIFERs, Series DBE-8908 Trust	Newark	
395	DB SPEARs/LIFERs, Series DBE-8909 Trust	Newark	

Serial No.	Name of company	Domicile of company	Footnote
396	DB Structured Holdings Luxembourg S.à r.l.	Luxembourg	
397	DBRE Global Real Estate Management US IB, L.L.C.	Wilmington	
398	DBX ETF Trust	Wilmington	4
399	Deloraine Spain, S.L.	Madrid	
400	Deutsche Bank Luxembourg S.A. - Fiduciary Deposits	Luxembourg	4
401	Deutsche Bank Luxembourg S.A. - Fiduciary Note Programme	Luxembourg	4
402	Deutsche Colombia S.A.S. - en Liquidacion	Bogotá	
403	Deutsche Postbank Funding LLC I	Wilmington	
404	Deutsche Postbank Funding LLC III	Wilmington	
405	Deutsche Postbank Funding Trust I	Newark	
406	Deutsche Postbank Funding Trust III	Newark	
407	DWS Alternatives (IE) ICAV	Dublin	
408	DWS Concept	Luxembourg	4
409	DWS EREP Lux 1 S.à r.l.	Luxembourg	
410	DWS European Real Estate Partners S.C.A. SICAV-RAIF	Luxembourg	
411	DWS Funds	Luxembourg	4
412	DWS Garant	Luxembourg	4
413	DWS Invest	Luxembourg	4
414	DWS Invest (IE) ICAV	Dublin	
415	DWS Zeitwert Protect	Luxembourg	
416	DWS-Fonds Treasury Liquidity (EUR)	Frankfurt	
417	Dynamic Infrastructure Securities Fund LP	Wilmington	
418	Earls Eight Limited	George Town	4
419	Earls Four Limited	George Town	4
420	Einkaufszentrum "HVD Dresden" S.à.r.l & Co. KG i.I.	Cologne	
421	Emerald Asset Repackaging Designated Activity Company	Dublin	
422	Emerging Markets Capital Protected Investments Limited	George Town	4
423	Emeris	George Town	
424	Erste Frankfurter Hoist GmbH i.L.	Frankfurt	
425	Fondo Privado de Titulización PYMES I Designated Activity Company	Dublin	

Serial No.	Name of company	Domicile of company	Footnote
426	Freddie Mac Class A Taxable Multifamily M Certificates Series M-037	McLean	
427	Freddie Mac Class A Taxable Multifamily M Certificates Series M-039	McLean	
428	Freddie Mac Class A Taxable Multifamily M Certificates Series M-040	McLean	
429	Freddie Mac Class A Taxable Multifamily M Certificates Series M-041	McLean	
430	Freddie Mac Class A Taxable Multifamily M Certificates Series M-043	McLean	
431	Freddie Mac Class A Taxable Multifamily M Certificates Series M-044	McLean	
432	G.O. IB-US Management, L.L.C.	Wilmington	
433	GAC-HEL, Inc.	Wilmington	
434	Galene S.à r.l.	Luxembourg	
435	Gladyr Spain, S.L.	Madrid	
436	Global Opportunities Co-Investment Feeder, LLC	Wilmington	
437	Global Opportunities Co-Investment, LLC	George Town	
438	GWC-GAC Corp.	Wilmington	
439	Havbell Designated Activity Company	Maynooth	
440	Histria Inversiones Designated Activity Company	Dublin	
441	Infrastructure Debt Fund S.C.Sp. SICAV-RAIF	Luxembourg	
442	Inn Properties S.à r.l., en faillite	Luxembourg	
443	Investor Solutions Limited	St. Helier	4
444	Isar Properties S.à r.l., en faillite	Luxembourg	
445	IVAF (Jersey) Limited	St. Helier	
446	Kelona Invest, S.L.	Madrid	
447	Kelsey Street LLC	Wilmington	
448	KH Kitty Hall Holdings Limited	Dublin	
449	Kratus Inversiones Designated Activity Company	Dublin	
450	Kronos Funding Ltd	London	
451	Kuiper Credit Opportunities - Kuiper Compartment 01 - Bel-Air	Paris	
452	Ledyard, S.L.	Madrid	
453	87 Leonard Development LLC	Wilmington	

Serial No.	Name of company	Domicile of company	Footnote
454	LES Essex Crossing Holdings Acquisition LLC	Wilmington	
455	LES Essex Crossing Parent LLC	Wilmington	
456	LES Essex Crossing Property Holdings LLC	Wilmington	
457	Life Mortgage S.r.l.	Conegliano	
458	Lindsell Finance Limited (in dissolution)	St. Julian's	
459	Lockwood Invest, S.L.	Madrid	
460	London Industrial Leasing Limited	London	
461	Lunashadow Limited	Dublin	
462	1800 M Chaperone Investor LLC	Wilmington	
463	Malabo Holdings Designated Activity Company	Dublin	
464	Merlin XI	George Town	
465	Meseta Inversiones Designated Activity Company	Dublin	
466	Motion Picture Productions One GmbH & Co. KG	Frankfurt	2
467	MPP Beteiligungsgesellschaft mbH	Frankfurt	
468	Navegator - SGFTC, S.A.	Lisbon	
469	NCW Holding Inc.	Vancouver	
470	New 87 Leonard, LLC	Wilmington	
471	Oasis Securitisation S.r.l.	Conegliano	1
472	Oder Properties S.à r.l., en faillite	Luxembourg	
473	Palladium Global Investments S.A.	Luxembourg	4
474	Palladium Securities 1 S.A.	Luxembourg	4
475	PARTS Funding, LLC	Wilmington	
476	PEIF II SLP Feeder 2 LP	Edinburgh	
477	PEIF III SLP Feeder GP, S.à r.l.	Senningerberg	
478	PEIF III SLP Feeder, SCSp	Senningerberg	
479	PEIF IV SLP DWS Feeder, SCSp	Senningerberg	
480	Philippine Opportunities for Growth and Income (SPV-AMC), INC.	Makati City	
481	Property Debt Fund S.C.Sp. SICAV-RAIF	Luxembourg	
482	PUTTERs/DRIVERs, Series 3004 Trust	Wilmington	
483	PUTTERs/DRIVERs, Series 3005DB Trust	Wilmington	
484	PUTTERs/DRIVERs, Series 3007DB Trust	Wilmington	
485	QR Tower 2, LLC	Wilmington	
486	Radical Properties Unlimited Company	Dublin	

Serial No.	Name of company	Domicile of company	Footnote
487	Redstone Finance Designated Activity Company	Dublin	
488	Rhine Euro CLO I Designated Activity Company	Dublin	
489	Rhine Properties S.à r.l., en faillite	Luxembourg	
490	ROCKY 2021-1 SPV S.r.l.	Conegliano	
491	Romareda Holdings Designated Activity Company	Dublin	
492	RREEF DCH, L.L.C.	Wilmington	
493	Samburg Invest, S.L.	Madrid	
494	SCB Alpspitze UG (haftungsbeschränkt)	Frankfurt	
495	Seaconview Designated Activity Company	Maynooth	
496	SGI SLP Feeder GP S.à.r.l.	Senningerberg	
497	SGI SLP Feeder SCSp	Senningerberg	
498	Singer Island Tower Suite LLC	Wilmington	
499	Somkid Immobiliare S.r.l.	Conegliano	
500	SP Mortgage Trust	Wilmington	
501	SPV I Sociedad Anónima Cerrada	Lima	
502	SPV II Sociedad Anónima Cerrada	Lima	
503	Style City Limited	Dublin	
504	Sunrise Turnaround Partners G.K.	Tokyo	
505	300 SW Parent LLC	Wilmington	
506	300 SW Property Holdings LLC	Wilmington	
507	Swabia 1 Designated Activity Company (in liquidation)	Dublin	
508	Swabia 1. Vermögensbesitz-GmbH i.L.	Frankfurt	
509	Tagus - Sociedade de Titularização de Creditos, S.A.	Lisbon	
510	Tasman NZ Residential Mortgage Trust	Auckland	
511	Trave Properties S.à r.l., en faillite	Luxembourg	
512	VCJ Lease S.à r.l.	Luxembourg	
513	Waltzfire Limited	Dublin	
514	Wedverville Spain, S.L.	Madrid	
515	Wendelstein 2017-1 UG (haftungsbeschränkt)	Frankfurt	
516	Wendelstein 2024-1 UG (haftungsbeschränkt)	Frankfurt	
517	5353 WHMR LLC	Wilmington	
518	Xtrackers	Luxembourg	4
519	Xtrackers (IE) Public Limited Company	Dublin	4
520	Xtrackers II	Luxembourg	4
521	Zumirez Drive LLC	Wilmington	

Serial No.	Footnotes - English
1	Controlled.
2	Status as shareholder with unlimited liability pursuant to Section 313 (2) Number 6 HGB.
3	General Partnership.
4	The company made use of the exemption offered by Section 264 No. 3 HGB.
5	Only specified assets and related liabilities (silos) of this entity were consolidated.

Exhibit 11.1

PERSONAL ACCOUNT DEALING POLICY – DEUTSCHE BANK GROUP

1. Scope

This policy sets the minimum standards regarding the controls and prohibitions of personal investment and trading activity.[1]

This policy applies to all Employees and Contingent Worker Resources (CWRs). DB Sponsors of CWRs must familiarise themselves with the requirements of this policy, must instruct their CWRs that it applies to them, and must exercise their supervisory duties accordingly.

This policy is supplemented by, and must be read in conjunction with, the Personal Account Dealing Procedure – Deutsche Bank Group.

Training on this policy is regularly conducted as part of the Bank's mandatory training curriculum which is deployed to all Employees globally.

Employees who do not follow the obligations of this policy could be subject to a Red Flag. More information can be found on the Red Flags myDB site.

Employees are required to use the Employee Compliance Disclosure Systems to submit all disclosures that are required under this policy, unless notified otherwise.

The requirements of this policy are applicable to Employees for the duration of their employment, including if they are on leave. DB Group is not liable, and Employees will not be compensated for any financial disadvantage or loss arising from the application of this policy.

Capitalised terms have the meaning ascribed to them in the section

Glossary.

1.1. Exceptions to Policy Requirements and Escalations

Any exceptions to this policy must be submitted to the Global Head of Employee Compliance or their delegate for consideration. Compliance teams will escalate such requests to the Global Head of Employee Compliance.

[1] The *Compliance Risk Type Guidelines – Global* sets out the minimum control standards related to the risk type(s) addressed by this policy.

2. Requirements for All Employees

Requirements under section 2 apply to all Employees.

2.1. Investment Restrictions

2.1.1. Confidential Information and Inside Information

Employees must comply with the Policy for Using and Handling Client Confidential, Deutsche Bank Proprietary and Inside Information – Deutsche Bank Group and must not transact in any financial instrument of any issuer while in the possession of Inside Information or client or third party Confidential Information and certain types of DB Confidential Information, (e.g., where a DB restricted list is created), whether the information was obtained by way of their DB employment or otherwise.

Employees are prohibited from engaging in Market Abuse, which includes the use of Inside Information to acquire, dispose of, cancel or amend an order concerning a financial instrument or attempting to do so.

2.1.2. DB Roles and Responsibilities

Employees must comply with the Conflicts of Interest Policy – Deutsche Bank Group_and are not permitted to execute Personal Transactions based on any information gained by the Employee as a result of their DB roles and responsibilities. This includes, but is not limited to, any activity that the Employee is involved in as part of their role at DB, any information gained by way of coverage of existing or prospective clients and any DB Group trading positions or research.

Employees must consider any actual or perceived conflict that they may have, or that may arise, with DB Group or its clients and, in the event of, a conflict between the Employee's personal investments, the activities of DB Group's clients and DB Group shall take precedence.

Employee's Personal Transactions must not impact their roles and responsibilities of DB Group which includes avoiding frequent trading.

2.1.3. Prohibited Personal Transactions

Employees and their Related Parties are prohibited from:

- Trading any financial instruments of companies/issuers listed on the Restricted List (Covered Employees only)
- Trading DB/DWS Shares during Restricted Periods
- Trading speculatively
- Trading derivatives of DB Group underliers (e.g., DB Shares and DWS Shares)
- Trading non-DB Group derivatives, unless the transaction is for a legitimate, risk proportionate hedging strategy. Employees must be fully covered by holding the physical asset
- Front-Running or Piggy-Backing
- Undertaking Market Timing strategies
- Undertaking Short Positions
- Financial Spread-Betting and binary options
- Entering into Contracts for Difference (CFDs)
- Day Trading
- Joint or co-ordinated decisions to invest between Employees
- Forming or joining Investment Clubs
- Placing Good Till Cancelled orders for any instruments requiring preclearance
- Establishing Regular Savings Plans in Financial instruments that require preclearance
- Stock Borrowing and Stock Lending
- Participating in Initial Public Offerings (IPOs) where DB Group is involved (Covered Employees only)

2.1.3.1. Japan Employees

Employees located in Japan are prohibited from:

- Trading in any derivatives
- Executing Margin Transactions

2.1.3.2. US Employees

Employees located in the US and their Related Parties are prohibited from participating in IPOs

2.1.4. Trading Restrictions

Compliance can impose Employee trading restrictions or controls on financial instruments at any time and these can be applicable to all Employees or certain Employees, regardless of whether the Employee has Inside Information, Confidential Information or information arising from their DB roles and responsibilities in the financial instrument or issuer.

2.2. Attestation

Employees are required to complete an Initial Attestation and any further periodic attestations to confirm the accuracy and completeness of disclosures and/or to confirm the ongoing adherence to the obligations set out in this policy. Employees must complete attestations within the timeframe notified to them by Compliance.

2.3. Employee's Related Parties

Requirements in this policy extend to Related Parties. Employees must inform Related Parties of the requirements set out in this policy (including any subsequent changes) and ensure compliance.

2.4. Private Investment Transactions (PITs)

Employees must disclose existing PITs over which they either have influence or control, any trading authority, investment discretion or other Beneficial Ownership, whether held in their own name or the name of another person/entity.

Employees must disclose existing PITs over which their Related Party has either influence or control, any trading authority, investment discretion or other Beneficial Ownership, whether held in the Related Party's name or the name of another person/entity.

This requirement does not apply to Related Parties in the following countries, whether held in their own name or the name of another person/entity, unless the Covered Employee has influence or control, any trading authority, investment discretion or other Beneficial Ownership:

— Austria, Brazil, Germany, Italy, Luxembourg, Mexico, Netherlands, Russia, Spain, Sweden, Switzerland.

Employees must disclose PITs and provide any requested evidence within the timeframe notified to them by Compliance.

Employees must preclear new PITs as set out in section 3.5.

If a pre-existing PIT is declined, Covered Employees must:

— initiate the exit the PIT within the timeframe notified to them by Compliance; and

— provide written evidence of the termination via the Employee Compliance Disclosure Systems

2.5. Policy Violations

Violations will be issued to Employees if they fail to adhere to the requirements set out in this policy.

Violations may result in the issuance of Red Flags where an Employee is subject to Red Flags.

3. Additional Requirements for Covered Employees

Section 3 applies only to Employees who are designated as Covered Employees and their Related Parties. Covered Employees are more likely to come into possession of Inside Information or Confidential Information, where greater oversight is required when undertaking Personal Transactions.

Employees are Covered Employees if they are classified as 'Full PAD Applicable: Yes' as shown on their ETRA Profile under the 'My Details' tab.

Covered Employees include (non-exhaustive) Employees who are:

- Client Private
- DB Private
- Licenced Employees
- Designated as such by Compliance in consultation with Business Line Compliance and/or Units

Details of Covered Employees can be found [here].

3.1. Holding Periods

Covered Employees and their Related Parties must hold any financial instrument that requires preclearance for a minimum of 30 calendar days on a Last in First Out (LIFO) basis.

3.1.1. India Designated Persons Holding Period

Covered Employees who are India Designated Persons and their Related Parties must not Contra Trade and are required to hold any financial instruments listed on an Indian stock exchange for 6 months.

3.2. Prohibition on Purchasing Single Name Listed Company Instruments

Covered Employees in the Origination and Advisory Unit of the Investment Bank (excluding Employees who are designated as both Client public and DB public) and their Related Parties are prohibited from purchasing Single Name Listed Company Instruments within Self-Directed Trading Accounts. The prohibition includes:

- Purchasing Narrow Based ETPs containing any Single Name Listed Company Instruments
- Participation in IPOs
- Purchasing listed instruments issued by an entity that is unlisted

3.3. Trading Account Disclosure Requirements

Covered Employees must disclose Trading Accounts (both Self Directed Trading Accounts and Third Party Managed Accounts) within 30 days of:

- being assigned an Initial Attestation
- opening a Trading Account
- a Trading Account becoming a disclosable account per this policy (e.g., following marriage)

Disclosure of Trading Accounts includes those that are empty/dormant.

3.3.1. Trading Accounts that Require Disclosure

Covered Employees must disclose any Trading Account over which they either have influence or control, any trading authority, investment discretion or other Beneficial Ownership, whether held in their own name or the name of another person/entity.

Covered Employees must disclose any Trading Account over which their Related Party has either influence or control, any trading authority, investment discretion or other Beneficial Ownership, whether held in the Related Party's name or the name of another person/entity.

This requirement does not apply to Related Parties in the following countries, whether held in their own name or the name of another person/entity, unless the Covered Employee has influence or control, any trading authority, investment discretion or other Beneficial Ownership:

— EMEA: Austria, Germany, Italy, Luxembourg, Netherlands, Russia, Spain, Sweden, Switzerland

— Americas: Brazil, Mexico

3.3.1.1. Third Party Managed Accounts

Covered Employees must provide documentation upon request within the timeframe set by Compliance to evidence that Third Party Managed Accounts are managed on a fully discretionary basis.

3.3.2. Accounts that do not Require Disclosure

The following accounts do not require disclosure:

— Trading Accounts that are restricted only to holding or transacting in financial instruments which do not require preclearance as defined in section 3.5.1.

— Trading Accounts that can only hold investments from a pre-defined selection of funds where Employees make no investment decisions other than to select a risk appetite or percentage allocation (e.g., employer pension schemes, college savings accounts, health savings accounts, insurance policy accounts, dbZeitinvest scheme)

— Accounts that are restricted only to hold cash or cash equivalents (e.g., checking, savings and current accounts that cannot hold financial instruments, premium bonds, certificates of deposit, bank deposit programmes).

3.3.3. Designated Broker Requirements

Covered Employees and their Related Parties in the following countries must maintain Self-Directed Trading Accounts with a Designated Broker:

— Brazil

— Japan

— United States of America

Covered Employees in these countries who have Self-Directed Trading Accounts with a non-designated broker must either transfer account holdings to a Designated Broker or liquidate the account, with preclearance where required, and subsequently close the account within the timeframe set by Compliance.

Details of Designated Brokers can be found [here].

3.3.3.1. South Korea Covered Employees

The following Covered Employees in South Korea are required to hold a single Trading Account with a broker located in South Korea only and all trading activity must be executed via this single account:

- Covered Employees in Deutsche Bank AG, Filiale Seoul who engage in “financial investment business” as defined in the Financial Investment Services and Capital Markets Act (FSCMA).

- Covered Employees in Deutsche Securities Korea Co. and Related Parties of Covered Employees in Origination and Advisory.

3.4. Account Transaction Details

Covered Employee’s Trading Accounts in scope of this policy are subject to monitoring. As instructed by Compliance, Employees are required to provide Personal Transaction details (e.g., trade confirmations and /or statements) of their disclosable Trading Accounts.

Regardless of whether transactions were executed, Covered Employees must provide statements, trade confirmations or any other supporting documentation upon request within the timeframe set by Compliance.

3.5. Preclearance

Covered Employees are required to seek preclearance approval for Personal Transactions over which they, or their Related Parties, have exerted influence or control, any trading authority, investment discretion or have other Beneficial Ownership.

Covered Employees in the following countries are not required to seek preclearance approval for Personal Transactions where their Related Parties have either exerted influence or control, any trading authority or investment discretion, or have other Beneficial Ownership provided the Covered Employee has no prior knowledge of the Personal Transaction and the Personal Transaction is not executed on behalf of the Covered Employee or within a Trading Account in the Covered Employee’s sole or joint name.

- EU Countries, UK, Switzerland

Preclearance approval must be received from Compliance prior to:

- Instruction or execution of a Personal Transaction
- Additional investment into an existing holding
- Modification of an existing holding

  Covered Employees must execute Personal Transactions within the time period stated on the approval notification from Compliance.

3.5.1. Preclearance Exemptions

Covered Employees must obtain preclearance for all Personal Transactions except for:

Any Personal Transactions in the below, including any derivatives referencing the below:

- Open End Mutual Funds
- Broad Based ETPs (excluding Covered Employees in Research and Access Persons who must seek preclearance)
- Government Bonds issued by G20 Countries
- Digital Currency/Cryptocurrency
- Foreign Exchange
- Exchange Traded Commodities (ETC)

- Structured products based on an index or financial instruments based on an index
- Singapore Savings Bonds

Any Personal Transactions in:

- Disclosed Third Party Managed Accounts

Any Transactions where there are:

- Transfers between the Covered Employee's and Related Parties' disclosed Trading Accounts
- Receipt of shares by way of:
    - Dividend Reinvestment Plans (DRIPs)
    - Employer share purchase plans (e.g., DB Group Plans)
    - Compensation awards
    - Inheritance
- Electing to exercise rights accrued under a corporate action based on existing holdings (e.g., rights issues and tender offers, stock dividends/bonus issues, stock splits, spin offs)
- Exercise of physically or cash settled listed Options or Warrants
- Conversion, for example of Convertible Bonds, or loans

Examples of preclearable and non preclearable personal transactions can be found [here].

3.5.2. Foreign Exchange (FX) Requirements for Covered Employees primarily involved in FX

Covered Employees who are responsible for sales, structuring or trading of FX products (including spot FX) or who have regular access to client/house FX and/or flow position are prohibited from executing FX transactions for currency investment.

Certain FX transactions are permissible for these Covered Employees up to a cumulative total of €250,000 per calendar month. FX Transactions exceeding this limit require approval from Business Line Compliance and the MD level supervisor.

The following FX transactions are permissible:

- Transactions entered into for the management or administration of an Employees personal finances and domestic arrangements

- FX Transactions directly related to a Covered Employees personal securities transactions in non-home currency at either an individual asset or portfolio level

- Transactions to hedge currency exposure relating to holdings of underlying investments

- Transactions designed to hedge currency exposures relating to the sale of vesting DB Shares, which are subject to specific rules relating to the award and vesting of such securities

- Currency for personal or business travel.

For clarity, the above restrictions do not apply to FX transactions executed by a Covered Employee whose day-to-day activities only incidentally involve FX (so long as they do not have regular access to client / house FX and/or flow or position information).

4. Business Signatory Officer (BSO) Responsibilities

BSOs are responsible for reviewing Employees' preclearance requests for:

- Prohibitions set out in this policy
- Any actual or perceived conflict with the employee's role at DB Group.

BSOs may not review a request from an Employee where they currently have or are considering making the same investment unless the product or financial instrument is widely traded.

BSOs can find additional details on BSO requirements [here].

4.1.1. BSOs for Employees Located in Belgium

BSOs are not required to review preclearance requests for Covered Employees located in Belgium.

5. Glossary

Term	Definition
Beneficial Ownership	The opportunity to directly or indirectly profit from a Personal Transaction or bear the risk of any associated loss following a Personal Transaction
Broad Based ETP	An Exchange Traded Product with a basket of securities/assets which has 21 constituents or more
Business Allocation Plan	Documents the allocation of responsibilities amongst the members of the Management Board of DB AG
Business Signatory Officer (BSO)	Generally, the BSO is the first Supervisor (of corporate title of Vice President or higher) in the supervisory structure of the employee.
Confidential Information	Defined in the Policy for Using and Handling Client Confidential, Deutsche Bank Proprietary and Inside Information – Deutsche Bank Group as any information received or created by DB Group which is not in the public domain and there is an expectation, either contractually, regulatory or otherwise, that the information remains private. Confidential Information includes Inside Information, Proprietary Information and Third Party Information
Contingent Worker Resource (CWR)	A Contingent Worker Resource is a member of the workforce who does not have an employer-employee legal relationship with DB Group. These individuals were often formerly known as "externals". CWR include non-employees engaged through a third party and are captured in the HR System as they have System / Facility Access
Contra Trade	A trade or transaction which involves buying or selling any number of shares of a company and within 6 months, trading or transacting in an opposite transaction involving sell or buy following the prior transaction
Contracts for Difference (CFDs)	A contract for difference is a speculative financial derivative product that pays the difference in settlement price between the opening and closing of a trade
Covered Employee	An Employee who is subject to all Personal Account Dealing Policy requirements as set out in section 3
Day Trading	Buying and selling (or vice versa) the same financial instrument within the same trading day
DB AG	Deutsche Bank AG including its branches and representative offices
DB Group	DB AG and Legal Entities in which DB AG (directly or indirectly) holds an equity or voting capital share of more than 50% or controls them legally otherwise
DB Group Plan	A DB share purchase plan offered to employees. This includes Global Share Purchase Plan (GSPP) and Employee Share Ownership Plan (ESOP)
DB Shares	DB common stock or equity, DB bonds, or any other product (e.g. a warrant) with DB common stock or DB bonds as the underlying financial instrument.
Designated Broker	A broker that has an agreement with DB Group to provide account transaction details direct to DB Group for Employee Trading Accounts
DWS	DWS Group GmbH & Co KGaA and/or its group affiliates
DWS Shares	DWS common stock, equity, bonds or other products with DWS common stock or bonds as the underlying instrument
Employee	Any individual with an employment contract directly with a Legal Entity of DB Group

Exchange Traded Product	Exchange Traded Product (ETP) is a term used to collectively refer to Exchange Traded Notes (ETNs) and Exchange Traded Funds (ETFs)
Family Members	Spouse, civil partner, domestic partner, children, stepchildren, parent, parent-in-law, sibling, sibling in-law, grandparent, aunt, uncle, nephew or niece.
Financial Spread Betting	Speculation that involves placing a bet on the price movement of a security
Financially Responsible	Employee provides financial assistance (solely or jointly with others) for general living expenses
Front-Running	Trading ahead of or in tandem with customer or DB Group orders or research
Good Till Cancelled Orders	An order to buy or sell a security at a specified price that remains active until it is either rescinded by the investor or the trade is executed
G20 Government Bonds	A government issued bond, Treasury Note or Treasury Bill issued by one of the Group of 20 (G20) countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Switzerland, Turkey, the United Kingdom, the United States and the European Union)
India Designated Persons	In respect of Deutsche Equities India Private Limited, Deutsche Investments India Private Limited and all branches of DB AG in India: All Employees designated as Client Private; Employees designated as Client Public who are Managing Directors and Directors; and Any Employee who is wall crossed/deal logged for a particular deal/transaction
Infrastructure	An organisational area within DB Group other than a corporate division, as per the DB Business Allocation Plan
Initial Attestation	The attestation sent to an Employee upon commencing their employment with DB or are made subject to any additional requirements of the policy
Initial Public Offering	Offering a company's stock on a public exchange for the first time
Inside Information	Defined in the Policy for Using and Handling Client Confidential, Deutsche Bank Proprietary and Inside Information – Deutsche Bank Groupas precise information, not publicly available which relates directly or indirectly to one or more issuer or financial instrument, which, if publicly known, would likely have significant effect on the price of a publicly traded instrument
Investment Club	A group of people, company or similar with the purpose of pooling money and investing based on group investment decisions
Legal Entity	DB AG and / or any of its Subsidiaries
Last in First Out (LIFO)	The basis on which holding periods are calculated. Employees cannot enter into a sell transaction for a financial instrument in any Self-Directed Trading Account or PIT until they have held the latest purchase for the required minimum holding period
Management Board [of DB AG]	Governing body of DB AG responsible for managing DB AG
Market Abuse	Inappropriate market conduct that includes a variety of behaviours which undermine fairness, efficiency, and confidence in the financial markets, such as insider dealing and market manipulation

Market Timing	A trading strategy including moving in and out of the market to take advantage of short-term changes in prices
Narrow Based ETP	An Exchange Traded Product with a basket of securities/assets which has 20 constituents or less
Open End Mutual Fund	A collective fund of diverse investments that does not have any restriction on the number of shares it can issue and is typically issued to the public. Examples include Open Ended Investment Company (OEIC) and Société d'investissement à Capital Variable (SICAV). This excludes any PIT fund
Option	A financial instrument that offers the buyer the right, but not the obligation to buy (call option) or sell (put option) the underlying asset at an agreed upon price during a certain period of time or on a specific date
Over-the-counter (OTC) Derivatives	A financial contract that does not trade on an exchange with minimal intermediation or regulation
Personal Transaction	Any purchases, sales or transfers (including gifts, received or given) of any PIT or financial instrument that is publicly traded
Piggy-Backing	Trading in unison with or immediately after customer or DB Group orders
PIT	A PIT is a financial investment or product that is either not listed or, if listed, cannot be traded on any exchange. It includes all hedge funds, other unlisted funds (excluding Open End Mutual Funds), private equity, direct investment in their own or a third party's business, starting a personal business or investing capital in a business of any sort
Proprietary Information	Defined in the Policy for Using and Handling Client Confidential, Deutsche Bank Proprietary and Inside Information – Deutsche Bank Group as Information concerning DB Group's business and operations, its clients (including any information provided by its clients), intellectual property, credit analysis, proprietary software and other tangible or intangible material of any nature that is created by Employees to which other Employees may otherwise have access. It also includes trading positions of DB Group, confidential analysis of companies, industries or economic forecasts, pending investigations and regulatory matters and information transmitted through internal communications platforms such as emails, internal broadcasts, squawk boxes (hoot), and DB Group's intranet websites. Certain Proprietary Information may also be Inside Information.
Red Flags	DB Group monitors in-scope employees' adherence to certain risk-related policies and control processes. A violation of a Red Flags relevant policy or process means that an employee may be assigned a Red Flag. Individual's Red Flag results are considered in promotion, compensation and performance management decisions
Related Parties	All Countries: • Spouses, domestic partners, or spousal equivalents Additional country specific requirements detailed below: US, Canada, EMEA, Germany, UK • Children or stepchildren for whom the Covered Employee is Financially Responsible • Any Family Members of the Covered Employee who have resided in the same household for at least one year prior to the Personal Transaction APAC • Any Family Member for whom the Covered Employee is Financially Responsible
Restricted List	The Restricted list is a list of issuers involved in pending transactions that have been publicly announced where DB Group has a role and about which DB Group may have, or appear to have, Inside Information

Singapore Savings Bonds	A special type of Singapore Government Security that is issued by the Government of Singapore for individual investors, which is not listed on an exchange, cannot be traded in the open market or pledged as collateral, and can be fully redeemed in any given month
Self-Directed Trading Account	Trading Accounts over which the account holder has the ability to influence, execute, and instruct Personal Transactions
Short Positions	Selling financial instruments that are not owned in the expectation that falling prices will enable them to be bought at a profit before they have to be delivered
Single Name Listed Company Instrument	This includes all equities, bonds, warrants, any other financial instruments issued by a listed company, or third-party products referencing such instruments, or any related derivatives
Stock Borrowing	The temporary transfer of a financial instrument from an Employee to a borrower for a fee
Stock Lending	The practice of an Employee loaning shares of financial instruments to a third party
Subsidiary	Companies established pursuant to local laws and regulations of which Deutsche Bank AG is the direct or indirect parent company with majority participation. This will include any branches and representative offices of these Subsidiaries
DB Sponsor	The legal or functional manager of an employee or the assignment sponsor for CWRs
Third Party Information	Information received or obtained from clients, advisors, agents, consultants, distributors, joint ventures, representatives, vendors and Employees of Deutsche Bank in the course of business
Third Party Managed Account	An investment account where all decisions and activities are carried out by a professional account manager/broker based on a documented agreement and the Employee or Related Party has no ability to directly or indirectly influence or control any transactions or investment decisions. Third-Party Managed Accounts may not be managed by Family Members or Related Parties
Trading Account	Any investment account (including any individual sub-account) that has the ability to hold or execute a Personal Transaction in financial instruments in Third Party Managed Accounts and Self-Directed Trading Accounts
Unit	Refers to the organisational areas within DB Group, such as corporate divisions and Infrastructure functions, as per the DB Business Allocation Plan
Warrant	A financial instrument that gives the holder the right, but not the obligation, to buy from an issuer its securities at a certain price before expiration

6. List of Annexes and Attachments

Annex 1: Compliance Contacts and System Access ....

Annex 1: Compliance Contacts and System Access

Employees can access the Employee Compliance SharePoint site for details of regional Compliance contacts.

Employees are required to use the Employee Compliance Disclosure Systems to submit all details of disclosures that are required under this policy. In the event the system is inaccessible, please raise a ticket.

Exhibit 11.2

Excerpt from Code of Conduct

Employee related activities

(…)

Employee trading

Our bank sets out a personal account dealing policy to meet legal and regulatory requirements, to avoid the appearance of insider trading or other potential conflict.

It is your responsibility not to trade on, or otherwise take advantage of non-public price sensitive information and not to put your personal interests over those of our bank or its clients when engaging in trading for your personal or related accounts.

You should be familiar with the minimum global standards that are designed to ensure that personal investment activities are conducted appropriately.

Where required, you should notify Compliance of your personal trading accounts including those held at our bank or with a designated broker.

Where pre-clearance or approval are required, you must obtain pre-clearance/approval via the Employee Trading Request Application, i.e., the ETRA system, prior to engaging in personal account trading. Personal trading accounts where you have fully delegated the investment decisions to a third party by means of a written discretionary management agreement and where you cannot exercise any influence or discretion are required to be disclosed, however, trading is not required to be precleared.

There are minimum holding periods for investments which vary by location and division which are set out within the policy. For further information, reference the Personal Account Dealing Policy – Deutsche Bank Group.

Exhibit 12.1

Principal Executive Officer Certifications

I, Christian Sewing, certify that:

1. I have reviewed this annual report on Form 20-F of Deutsche Bank Aktiengesellschaft;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 13, 2025

/s/ Christian Sewing
Christian Sewing
Chairman of the Management Board
Chief Executive Officer

Exhibit 12.2

Principal Financial Officer Certifications

I, James von Moltke, certify that:

1. I have reviewed this annual report on Form 20-F of Deutsche Bank Aktiengesellschaft;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 13, 2025

/s/ James von Moltke
James von Moltke
Member of the Management Board
President and Chief Financial Officer

Exhibit 13.1

Chief Executive Officer Certification
Pursuant to 18 U.S.C. Section 1350

The undersigned hereby certifies pursuant to 18 U.S.C. Section 1350 that, to his knowledge, the Annual Report on Form 20-F for the year ended December 31, 2024 of Deutsche Bank Aktiengesellschaft fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that, to his knowledge, the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of Deutsche Bank Aktiengesellschaft.

Date: March 13, 2025

/s/ Christian Sewing
Christian Sewing
Chairman of the Management Board
Chief Executive Officer

Exhibit 13.2

Chief Financial Officer Certification
Pursuant to 18 U.S.C. Section 1350

The undersigned hereby certifies pursuant to 18 U.S.C. Section 1350 that, to his knowledge, the Annual Report on Form 20-F for the year ended December 31, 2024 of Deutsche Bank Aktiengesellschaft fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that, to his knowledge, the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of Deutsche Bank Aktiengesellschaft.

Date: March 13, 2025

/s/ James von Moltke
James von Moltke
Member of the Management Board
President and Chief Financial Officer

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form F-3 No. 333-278331) of Deutsche Bank Aktiengesellschaft, and

(2) Registration Statement (Form S-8 No. 333-223301) pertaining to the Employee Benefit Plans of Deutsche Bank Aktiengesellschaft

of our reports dated March 10, 2025, with respect to the consolidated financial statements of Deutsche Bank Aktiengesellschaft and the effectiveness of internal control over financial reporting of Deutsche Bank Aktiengesellschaft included in this Annual Report (Form 20-F) for the year ended December 31, 2024.

/s/ EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft

Eschborn/Frankfurt am Main, Germany

March 13, 2025