



# Pillar 3 Report as of June 30, 2022

# Content

## 4 Regulatory Framework

- 4 Basis of Presentation
  - 4 Basel 3 and CRR/CRD
  - 4 MREL (SRMR/BRRD) and TLAC (CRR)
  - 5 ICAAP, ILAAP and SREP
  - 5 New Definition of Default
- 

## 5 Key metrics

- 7 Key metrics of own funds and eligible liabilities
- 

## 9 Capital

- 9 Development and composition of Own Funds
- 

## 15 Scope of application of the regulatory framework

- 15 Reconciliation of regulatory own funds to IFRS balance sheet
  - 16 IFRS 9 transitional arrangements on own funds and temporary treatment of unrealized gains and losses
  - 17 Main features of capital instruments
  - 17 Capital buffers
    - 17 Minimum capital requirements and additional capital buffers
    - 18 Geographical distribution of credit exposures
  - 23 Institution specific countercyclical capital buffer
  - 23 Composition of own funds and eligible liabilities
- 

## 28 Capital requirements

- 28 Overview of RWA and capital requirements
- 

## 29 Leverage ratio

- 31 Process used to manage the risk of excessive leverage
  - 32 Factors that had an impact on the leverage ratio in the first half of 2022
- 

## 33 Credit risk and credit risk mitigation

- 33 General quantitative information on credit risk
    - 33 Residual maturity breakdown of credit exposure
    - 34 Quality of non-performing exposures by geography
    - 37 Credit quality of loans and advances to non-financial corporations by industry
  - 38 Performing and non-performing exposures and related provisions
  - 41 Credit quality of performing and non-performing exposures by past due days
    - 44 Development of non-performing loans and advances
    - 44 Credit quality of forborne exposures
    - 45 Minimum loss coverage for non-performing exposure
  - 47 Collateral obtained by taking possession
    - 48 Exposures subject to measures applied in response to the COVID-19 pandemic
  - 53 General quantitative information on credit risk mitigation
    - 53 Overview of credit risk mitigation techniques
- 

## 55 Credit risk and credit risk mitigation in the standardized approach

- 55 Quantitative information on the use of the standardized approach
    - 55 Standardized approach exposure by risk weight before and after credit mitigation
- 

## 58 Credit risk exposure and credit risk mitigation in the internal-rating-based approach

- 58 Quantitative information on the use of the IRB approach
    - 58 Foundation IRB exposure
    - 66 Advanced IRB exposure
    - 79 Total IRB exposure covered by credit derivatives
    - 79 Total IRB exposure covered by the use of CRM techniques
    - 83 Development of credit risk RWA
    - 83 Specialized lending and equity exposures in the banking book
- 

## 85 Counterparty credit risk (CCR)

- 85 Estimate of alpha factor
  - 85 CCR exposures by model approach and development
  - 86 CCR exposures development
  - 87 CCR CVA capital charge
  - 87 CCR exposures to central counterparties
  - 88 CCR exposures in the standardized approach
  - 89 CCR exposures within the foundation IRBA
  - 92 CCR exposures within the advanced IRBA
  - 98 CCR exposures after credit risk mitigation
  - 98 Credit derivatives exposures
- 

## 99 Exposure to securitization positions

- 99 Banking and trading book securitization exposures
  - 102 Securitization exposures in the non-trading book and associated regulatory capital requirements – institution acting as originator or as sponsor
  - 104 Securitization exposures in the non-trading book and associated regulatory capital requirements – institution acting as investor
  - 106 Exposures securitized by the institution – Exposures in default and specific credit risk adjustments
- 

## 108 Market risk

- 108 Own funds requirements for market risk under the standardized approach
  - 108 Market Risk Standardized Approach
- 108 Own funds requirements for market risk under the IMA
  - 108 Regulatory capital requirements for market risk
  - 109 Development of market risk RWA
- 110 Other quantitative information for market risk under the internal models approach
  - 110 Overview of Value-at-Risk Metrics
  - 111 Comparison of end-of-day VaR measures with one-day changes in portfolio's value

## 112 Exposure to interest rate risk in the banking book

112 Changes in the economic value of equity  
and net interest income

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## 112 Liquidity risk

112 Qualitative information on LCR  
114 Quantitative information on LCR  
114 The Net Stable Funding Ratio (NSFR)

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## 119 List of tables

# Regulatory framework

## Basis of Presentation

This Pillar 3 Report provides disclosures for the consolidated Deutsche Bank Group (the Group) as required by the global regulatory framework for capital and liquidity, which was established by the Basel Committee on Banking Supervision, also known as Basel 3.

In the European Union (EU), the Basel 3 framework is implemented by the amended versions of “Regulation (EU) 575/2013 on prudential requirements for credit institutions and investment firms” (Capital Requirements Regulation or “CRR”) and the “Directive (EU) 2013/36 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms” (Capital Requirements Directive or “CRD”). As a single rulebook, the CRR is directly applicable to credit institutions and investment firms in the European Union and provides the grounds for the determination of regulatory capital requirements, regulatory own funds, leverage and liquidity as well as other relevant requirements. In addition, the CRD was implemented into German law by means of further amendments to the German Banking Act (“Kreditwesengesetz” or “KWG”) and the German Solvency Regulation (SolvV) and accompanying regulations. Jointly, these laws and regulations represent the regulatory framework applicable in Germany.

The disclosure requirements are provided in Part Eight of the CRR and in Section 26a of the KWG. Further disclosure guidance has been provided by the European Banking Authority (“EBA”) in its “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” (EBA ITS).

The information provided in this Pillar 3 Report is unaudited. Due to rounding, numbers presented throughout this document may not add up precisely to the totals The Group reports and percentages may not precisely reflect the absolute figures.

## Basel 3 and CRR/CRD

The CRR/CRD lays the foundation for the calculation of the minimum regulatory requirements with respect to own funds and eligible liabilities, the Liquidity Coverage Ratio and the Net Stable Funding Ratio.

Regulation (EU) 2019/876 has introduced a minimum regulatory leverage ratio of 3 % determined as the ratio of Tier 1 capital and the regulatory leverage exposure. The binding leverage ratio is applicable since the reporting period ended June 30, 2021. The minimum regulatory leverage ratio of 3 % is increased if certain Euro-based exposures facing Eurosystem central banks are excluded from the leverage exposure. This was the case based on Decision (EU) 2021/1074 of the European Central Bank until March 31, 2022. From January 1, 2023 an additional leverage ratio buffer requirement of 50 % of the applicable Global Systemic Important Institutions (G-SII) buffer rate will apply. It is currently expected that this additional requirement will increase the leverage ratio requirement by 0.75 %.

There is still uncertainty as to how some of the CRR/CRD rules should be interpreted and there are still related binding Technical Standards for which a final version is not yet available. Thus, the Group will continue to refine assumptions and models in line with evolution of these regulations as well as the industry’s understanding and interpretation of the rules. Against this background, current CRR/CRD measures may not be comparable to previous expectations. Also CRR/CRD measures may not be comparable with similarly labeled measures used by competitors as the Group’s competitors’ assumptions and estimates may differ from Deutsche Bank’s.

## MREL (SRMR/BRRD) and TLAC (CRR)

Banks in the European Union are required to meet at all times a Minimum requirement for own funds and eligible liabilities (“MREL”) which ensures that banks have sufficient loss absorbing capacity in resolution to avoid recourse to taxpayers’ money. Relevant laws are the Single Resolution Mechanism Regulation (“SRMR”) and the Bank Recovery and Resolution Directive (“BRRD”) as implemented through the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, “SAG”).

In addition and as required in the CRR, G-SIIs in Europe need to have at least the maximum of 18% plus the combined buffer requirement of their RWA and 6.75% of their LRE as Total Loss Absorbing Capacity (“TLAC”).

Instruments which qualify for MREL and TLAC are own funds (Common Equity Tier 1, Additional Tier 1 and Tier 2) and certain eligible liabilities (mainly plain-vanilla unsecured bonds). Instruments qualifying for TLAC need to be fully subordinated to general creditor claims (e.g. senior non-preferred bonds). While this is not required for MREL, MREL regulations allow the Single Resolution Board (“SRB”) to also set an additional “subordination” requirement within MREL (but separate from TLAC) against which only subordinated liabilities and own funds can be counted.

MREL is determined by the competent resolution authorities for each supervised bank individually and depending on the preferred resolution strategy. In the case of Deutsche Bank AG, MREL is determined by the SRB. While there is no statutory minimum level of MREL, the CRR, SRMR, BRRD and delegated regulations 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). Deutsche Bank AG received its current total MREL and current subordinated MREL requirement with immediate applicability in the second quarter 2022.

## ICAAP, ILAAP and SREP

The internal capital adequacy assessment process (“ICAAP”) as stipulated in Pillar 2 of Basel 3 requires banks to identify and assess risks, to apply effective risk management techniques and to maintain adequate capitalization. The Groups internal liquidity adequacy assessment process (“ILAAP”) aims to ensure that sufficient levels of liquidity are maintained on an ongoing basis by identifying the key liquidity and funding risks to which the Group is exposed, by monitoring and measuring these risks, and by maintaining tools and resources to manage and mitigate these risks.

In accordance with Article 97 CRD supervisors regularly review, as part of the supervisory review and evaluation process (“SREP”), the arrangements, strategies, processes and mechanisms implemented by banks and evaluate: (a) risks to which the institution is or might be exposed; (b) risks the institution poses to the financial system; and (c) risks revealed by stress testing.

## New Definition of Default

In the third quarter of 2021, the Group introduced the new definition of default, which consists of two EBA guidelines. One guideline comprises an EBA technical standard regarding the materiality threshold for credit obligations past due (implemented with ECB regulation (EU) 2018/1845) and the second guideline covers the application of the definition of default. Both of these new requirements are jointly referred to below as EBA Guidelines on definition of default. The EBA Guidelines on definition of default replaced the default definition under Basel II and is applied to all key risk metrics throughout this Report, including as a trigger to Stage 3 in the Groups IFRS 9 expected credit loss (ECL) model.

## Key metrics

### **Article 447 (a-g) and Article 438 (b) CRR**

In the following table EU KM1, Deutsche Bank provides key regulatory metrics and ratios as well as related input components as defined by CRR and CRD. They comprise own funds, RWAs, capital ratios, additional requirements based on SREP, capital buffer requirements, leverage ratio, liquidity coverage ratio and net stable funding ratio.

EU KM1 – Key metrics

	a	b	c	d	e	
in € m. (unless stated otherwise)	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021	
<b>Available own funds (amounts)</b>						
1	Common Equity Tier 1 (CET 1) capital	47,932	46,687	46,506	45,633	45,476
2	Tier 1 capital	55,201	53,206	55,375	53,751	53,595
3	Total capital	65,246	63,093	62,732	61,203	61,128
<b>Risk weighted exposure amounts</b>						
4	Total risk-weighted exposure amount	369,970	364,431	351,629	350,733	344,945
<b>Capital ratios (as percentage of risk-weighted exposure amount)</b>						
5	Common Equity Tier 1 ratio (%)	13.0	12.8	13.2	13.0	13.2
6	Tier 1 ratio (%)	14.9	14.6	15.7	15.3	15.5
7	Total capital ratio (%)	17.6	17.3	17.8	17.5	17.7
<b>Additional own funds requirements based on SREP (as a percentage of risk-weighted exposure amount)</b>						
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	2.5	2.5	2.5	2.5	2.5
	of which:					
	to be made up of CET 1 capital (percentage points)	1.4	1.4	1.4	1.4	1.4
	to be made up of Tier 1 capital (percentage points)	1.9	1.9	1.9	1.9	1.9
EU 7d	Total SREP own funds requirements (%)	10.5	10.5	10.5	10.5	10.5
<b>Combined buffer requirement (as a percentage of risk-weighted exposure amount)</b>						
8	Capital conservation buffer (%)	2.5	2.5	2.5	2.5	2.5
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	0.0	0.0	0.0	0.0	0.0
9	Institution specific countercyclical capital buffer (%)	0.02	0.02	0.03	0.02	0.0
EU 9a	Systemic risk buffer (%)	0.0	0.0	0.0	0.0	0.0
10	Global Systemically Important Institution buffer (%)	1.5	1.5	1.5	1.5	1.5
EU 10a	Other Systemically Important Institution buffer (%)	2.0	2.0	2.0	2.0	2.0
11	Combined buffer requirement (%)	4.5	4.5	4.5	4.5	4.5
EU 11a	Overall capital requirements (%)	15.0	15.0	15.0	15.0	15.0
12	CET 1 available after meeting the total SREP own funds requirements	26,066	24,507	25,738	24,376	24,909
<b>Leverage ratio<sup>2 3</sup></b>						
13	Leverage ratio total exposure measure	1,279,798	1,163,662	1,124,628	1,119,468	1,111,115
14	Leverage ratio (%)	4.3	4.6	4.9	4.7	4.7
<b>Additional own funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure amount)</b>						
EU 14a	Additional own funds requirements to address the risk of excessive leverage (%)	0.0	0.0	0.0	0.0	0.0
	of which: to be made up of CET 1 capital					
EU 14b	(percentage points)	0.0	0.0	0.0	0.0	0.0
EU 14c	Total SREP leverage ratio requirements (%)	3.0	3.2	3.2	3.2	3.2
<b>Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)</b>						
EU 14d	Leverage ratio buffer requirement (%)	0.0	0.0	0.0	0.0	0.0
EU 14e	Overall leverage ratio requirements (%)	3.0	3.2	3.2	3.2	3.2
<b>Liquidity Coverage Ratio</b>						
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	215,480	218,448	219,604	220,467	221,606
EU 16a	Cash outflows - Total weighted value	214,162	211,611	212,302	212,397	212,712
EU 16b	Cash inflows - Total weighted value	56,978	55,092	57,441	58,515	61,603
16	Total net cash outflows (adjusted value)	157,184	156,519	154,861	153,882	151,109
17	Liquidity coverage ratio (%)	137	140	142	143	147
<b>Net Stable Funding Ratio</b>						
18	Total available stable funding	598,440	607,170	602,317	592,566	590,835
19	Total required stable funding	513,910	501,030	497,510	483,164	483,982
20	NSFR ratio (%) <sup>1</sup>	116	121	121	123	122

<sup>1</sup> NSFR has been updated for June 30, 2021

<sup>2</sup> Starting with the first quarter of 2022, the leverage ratio is presented as reported; the fully loaded definition has been discontinued in the first quarter 2022 due to immaterial difference; the comparative periods from June 30, 2021 until December 31, 2021 continue to disclose the fully loaded numbers following EBA guidance and do not include the IFRS 9 transitional provision as per Article 473a of the CRR; the transitional impact amounted to € 23 million as of June 30, 2022, € 20 million as of March 31, 2022, € 39 million as of December 31, 2021, € 29 million as of September 30, 2021 and € 29 million as of June 30, 2021

<sup>3</sup> Since April 1, 2022 Deutsche Bank no longer excludes certain central bank exposures, based on Article 429a (1) (n) CRR and the ECB Decision 2021/1074 as this temporary exemption during the COVID-19 pandemic ended on March 31, 2022. Not applying the temporary exclusion of certain central bank exposures, the leverage exposure was €

1,247 billion as of March 31, 2022, € 1,223 billion as of December 31, 2021, € 1,224 billion as of September 30, 2021 and € 1,219 billion as of June 30, 2021; the corresponding leverage ratios were 4.3% as of March, 31, 2022, 4.5% as of December 31, 2021, 4.3% as of September 30, 2021 and 4.3% as of June 30, 2021

## Key metrics of own funds and eligible liabilities

### Article 447 (h) CRR and Article 45i(3)(a,c) BRRD

The table below provides summary information about Deutsche Bank Group's "Minimum requirement for own funds and eligible liabilities" ("MREL") and its "G-SII Requirement for own funds and eligible liabilities" ("TLAC").

#### EU KM2 – Key metrics - MREL and G-SII Requirement for own funds and eligible liabilities (TLAC)

in € m. (unless stated otherwise)	Minimum requirement for own funds and eligible liabilities (MREL)		G-SII Requirement for own funds and eligible liabilities (TLAC)		d	e	f
	a	Mar 31, 2022	b	c			
	Jun 30, 2022	Mar 31, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021
<b>Own funds and eligible liabilities, ratios and components</b>							
1	Own funds and eligible liabilities	124,242	119,408	114,690	110,007	109,094	108,145
EU 1a	Own funds and subordinated liabilities	114,690	110,007	–	–	–	–
2	Total risk exposure amount of the resolution group (TREA)	369,970	364,431	369,970	364,431	351,629	344,945
3	Own funds and eligible liabilities as percentage of TREA	33.58	32.77	31.00	30.19	31.03	31.00
	of which:						
EU 3a	Own funds and subordinated liabilities	31.00	30.19	–	–	–	–
4	Total exposure measure of the resolution group (TEM)	1,279,798	1,163,662	1,279,798	1,163,662	1,124,667	1,111,144
5	Own funds and eligible liabilities as percentage of TEM	9.71	10.26	8.96	9.45	9.70	9.73
	of which:						
EU 5a	Own funds and subordinated liabilities	8.96	9.45	–	–	–	–
6a	Does the subordination exemption in Article 72b(4) of the CRR apply? (5% exemption)	–	–	no	no	no	no
6b	Pro-memo item - Aggregate amount of permitted non-subordinated eligible liabilities instruments if the subordination discretion as per Article 72b(3) CRR is applied (max 3.5% exemption)	–	–	0	0	0	0
6c	Pro-memo item: If a capped subordination exemption applies under Article 72b (3) CRR, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognized under row 1, divided by funding issued that ranks pari passu with excluded Liabilities and that would be recognized under row 1 if no cap was applied (%)	–	–	0	0	0	0
<b>Minimum requirement for own funds and eligible liabilities (MREL)</b>							
EU 7	MREL requirement expressed as percentage of the TREA	24.89	24.05	–	–	–	–
	of which:						
EU 8	to be met with own funds or subordinated liabilities	20.28	20.27	–	–	–	–
EU 9	MREL requirement expressed as percentage of TEM	7.01	6.88	–	–	–	–
	of which:						
EU 10	to be met with own funds or subordinated liabilities	7.01	6.88	–	–	–	–

As of June 30, 2022 the MREL ratio was 33.58% as percentage of Total Risk Exposure Amount (TREA) compared to a requirement of 29.41% of TREA including the 4.52% combined buffer requirement, equalling a surplus of € 15.4 billion above

its MREL requirement. The subordinated MREL ratio was 31.00% as percentage of TREA compared to a requirement of 24.80% of TREA including the 4.52% combined buffer requirement. The subordinated MREL surplus is € 22.9 billion.

As of June 30, 2022 the TLAC ratio was 31.00% as percentage of TREA compared to a requirement of 22.52% including the 4.52% combined buffer requirement, resulting in a surplus of € 31.4 billion. TLAC as a percentage of TEM was 8.96% compared to a requirement of 6.75%, which corresponds to a surplus of € 28.3 billion.

# Capital

## Development and composition of Own Funds

### Article 437 (a,d-f) CRR

Deutsche Bank's Total Regulatory capital as of June 30, 2022 amounted to € 65.2 billion compared to € 62.7 billion at the end of December 31, 2021. The Group's Tier 1 capital as of June 30, 2022 amounted to € 55.2 billion, consisting of a Common Equity Tier 1 (CET 1) capital of € 47.9 billion and Additional Tier 1 (AT1) capital of € 7.3 billion. The Tier 1 capital was € 0.2 billion lower than at the end of December 31, 2021 driven by decrease in AT1 capital of € 1.6 billion which is partially offset by an increase in CET 1 capital of € 1.4 billion.

The AT1 capital decrease of € 1.6 billion was mainly due to the redemption of AT1 capital instrument with a notional amount of € 1.75 billion during the first quarter of 2022 and € 0.6 billion grandfathered AT1 instruments not eligible from January 1, 2022 partially offset by a newly issued AT1 capital instrument with a notional amount of € 0.75 billion in the second quarter of 2022.

The CET 1 capital increase of 1.4 billion was mainly the result of the positive net profit of € 2.4 billion for the first half of 2022 which was partially offset by regulatory deductions for future common share dividend and AT1 coupon payments of € 0.5 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). Additional increases include the positive effects from currency translation adjustments of € 1.3 billion net of foreign exchange counter-effects of capital deduction items of € 0.2 billion.

These positive impacts were partly offset by deductions from equity compensation of € 0.3 billion, share buyback of € 0.3 billion, unrealized losses from financial instruments at fair value through other comprehensive income of € 0.6 billion driven mainly by rising EUR and USD interest rates and increased regulatory adjustments from prudential filters of € 0.4 billion (additional value adjustments) predominantly from market price dispersions and risk profile changes.

Starting with the first quarter of 2022, CET1, Tier 1 Capital and Total Capital is presented as reported. The fully loaded definition has been discontinued in the first quarter 2022 due to immaterial differences.

EU CC1 – Composition of regulatory own funds

in € m.		Jun 30, 2022	Dec 31, 2021	References <sup>1</sup>
		CRR/CRD	CRR/CRD	
<b>Common Equity Tier 1 (CET 1) capital: instruments and reserves</b>				
1	Capital instruments, related share premium accounts and other reserves	45,262	45,864	A
	of which: Instrument type 1 (ordinary shares) <sup>2</sup>	45,262	45,864	A
	of which: Instrument type 2	0	0	
	of which: Instrument type 3	0	0	
2	Retained earnings	12,347	10,506	B
3	Accumulated other comprehensive income (loss), net of tax	78	(444)	C
3a	Funds for general banking risk	0	0	
	Amount of qualifying items referred to in Art. 484 (3) and the related share premium accounts subject to phase-out from CET 1	0	0	
4	Minority interests (amount allowed in consolidated CET 1)	1,010	910	
5a	Independently reviewed interim profits net of any foreseeable charge or dividend <sup>3</sup>	1,838	1,379	B
<b>6</b>	<b>Common Equity Tier 1 (CET 1) capital before regulatory adjustments</b>	<b>60,536</b>	<b>58,215</b>	
<b>Common Equity Tier 1 (CET 1) capital: regulatory adjustments</b>				
7	Additional value adjustments (negative amount) <sup>4</sup>	(2,212)	(1,812)	
8	Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,015)	(4,897)	D
	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) are met) (negative amount)	(1,885)	(1,466)	E
10	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	372	42	
11	Negative amounts resulting from the calculation of expected loss amounts	(450)	(573)	
12	Any increase in equity that results from securitized assets (negative amount)	(0)	(0)	
13	Gains or losses on liabilities designated at fair value resulting from changes in own credit standing <sup>5</sup>	(109)	(56)	
14	Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,341)	(991)	F
15	Direct, indirect and synthetic holdings by an institution of own CET 1 instruments (negative amount) <sup>6</sup>	0	0	
16	Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0	0	
17	Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount) <sup>7</sup>	0	0	
18	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 10 % threshold and net of eligible short positions) (negative amount)	0	0	
19	Exposure amount of the following items which qualify for a risk weight of 1,250 %, where the institution opts for the deduction alternative	0	0	
20a	of which:			
20b	Qualifying holdings outside the financial sector (negative amount)	0	0	
20c	Securitization positions (negative amount)	0	0	
20d	Free deliveries (negative amount)	0	0	
21	Deferred tax assets arising from temporary differences (amount above 10 % threshold, net of related tax liabilities where the conditions in Article 38 (3) are met) (negative amount)	0	(151)	E
22	Amount exceeding the 17.65 % threshold (negative amount)	0	0	
	of which:			
23	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	
25	Deferred tax assets arising from temporary differences	0	0	E
25a	Losses for the current financial year (negative amount)	0	0	
25b	Foreseeable tax charges relating to CET 1 items except where the institution suitably adjusts the amount of CET 1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	0	0	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	0	0	
27a	Other regulatory adjustments (including IFRS 9 transitional adjustments when relevant) <sup>8</sup>	(1,964)	(1,805)	
<b>28</b>	<b>Total regulatory adjustments to Common Equity Tier 1 (CET 1) capital</b>	<b>(12,604)</b>	<b>(11,709)</b>	
<b>29</b>	<b>Common Equity Tier 1 (CET 1) capital</b>	<b>47,932</b>	<b>46,506</b>	
<b>Additional Tier 1 (AT1) capital: instruments</b>				
30	Capital instruments and the related share premium accounts	7,328	8,328	G
	of which:			
31	Classified as equity under applicable accounting standards	7,328	8,328	G
32	Classified as liabilities under applicable accounting standards	0	0	
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) of CRR	0	600	H
	of which:			
EU 33a	Amount of qualifying items referred to in Article 494a(1) subject to phase out from AT1	0	600	
EU 33b	Amount of qualifying items referred to in Article 494b(1) subject to phase out from AT1	0	0	

		Jun 30, 2022	Dec 31, 2021	Refer- ences <sup>1</sup>
in € m.		CRR/CRD	CRR/CRD	
34	Qualifying Tier 1 capital included in consolidated AT1 capital issued by subsidiaries and held by third parties	0	0	
35	of which: instruments issued by subsidiaries subject to phase out	0	0	
<b>36</b>	<b>Additional Tier 1 (AT1) capital before regulatory adjustments</b>	<b>7,328</b>	<b>8,928</b>	
<b>Additional Tier 1 (AT1) capital: regulatory adjustments</b>				
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(60)	(60)	G
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0	0	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10 % threshold and net of eligible short positions) (negative amount) <sup>7</sup>	0	0	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10 % threshold net of eligible short positions) (negative amount)	0	0	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	0	0	
42a	of which: Other regulatory adjustments to AT1 capital	0	0	
<b>43</b>	<b>Total regulatory adjustments to Additional Tier 1 (AT1) capital</b>	<b>(60)</b>	<b>(60)</b>	
<b>44</b>	<b>Additional Tier 1 (AT1) capital</b>	<b>7,268</b>	<b>8,868</b>	
<b>45</b>	<b>Tier 1 capital (T1 = CET 1 + AT1)</b>	<b>55,201</b>	<b>55,375</b>	
<b>Tier 2 (T2) capital: instruments and provisions</b>				
46	Capital instruments and the related share premium accounts <sup>9</sup>	10,091	7,402	I
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2 as described in Article 486(4) of CRR	30	30	I
	of which:			
EU 47a	Amount of qualifying items referred to in Article 494a (2) subject to phase out from T2	0	0	
EU 47b	Amount of qualifying items referred to in Article 494b (2) subject to phase out from T2	30	30	
48	Qualifying own funds instruments included in consolidated T2 capital issued by subsidiaries and held by third parties	4	5	I
49	of which: instruments issued by subsidiaries subject to phase out	0	0	
50	Credit risk adjustments	0	0	
<b>51</b>	<b>Tier 2 (T2) capital before regulatory adjustments</b>	<b>10,125<sup>12</sup></b>	<b>7,438<sup>12</sup></b>	
<b>Tier 2 (T2) capital: regulatory adjustments</b>				
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(80)	(80)	I
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0	0	
54	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount) <sup>7</sup>	0	0	
55	Direct, indirect and synthetic holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	0	0	
56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	0	0	
56b	Other regulatory adjustments to T2 capital	0	0	
<b>57</b>	<b>Total regulatory adjustments to Tier 2 (T2) capital</b>	<b>(80)</b>	<b>(80)</b>	
<b>58</b>	<b>Tier 2 (T2) capital</b>	<b>10,045<sup>12</sup></b>	<b>7,358<sup>12</sup></b>	
<b>59</b>	<b>Total capital (TC = T1 + T2)</b>	<b>65,246<sup>12</sup></b>	<b>62,732<sup>12</sup></b>	
<b>60</b>	<b>Total risk-weighted assets</b>	<b>369,970</b>	<b>351,629</b>	
<b>Capital ratios and buffers</b>				
61	Common Equity Tier 1 capital ratio (as a percentage of risk-weighted assets)	13.0	13.2	
62	Tier 1 capital ratio (as a percentage of risk-weighted assets)	14.9	15.7	
63	Total capital ratio (as a percentage of risk-weighted assets)	17.6	17.8	
64	Institution CET 1 overall capital requirement (CET 1 requirement in accordance with article 92 (1) of Regulation (EU) No 575/2013, plus additional CET 1 requirement which the institution is required to hold in accordance with Article 104(1)(a) of Directive 2013/36/EU, plus combined buffer requirement in accordance with Article 128(6) of Directive 2013/36/EU) expressed as a percentage of risk exposure amount <sup>10</sup>	10.4	10.4	
	of which:			
65	Capital conservation buffer requirement	2.5	2.5	
66	Countercyclical buffer requirement	0.02	0.03	
67	Systemic risk buffer requirement	0.0	0.0	
67a	Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	2.0	2.0	
67b	additional own funds requirements to address the risks other than the risk of excessive leverage	1.4	1.4	
68	Common Equity Tier 1 capital available to meet buffers (as a percentage of risk-weighted assets) <sup>11</sup>	7.0	7.3	

	Jun 30, 2022	Dec 31, 2021	Refer- ences <sup>1</sup>
in € m.	CRR/CRD	CRR/CRD	
<b>Amounts below the thresholds for deduction (before risk weighting)</b>			
72	2,893	2,847	
73	944	878	
75	4,747	4,846	
<b>Applicable caps on the inclusion of provisions in Tier 2 capital</b>			
76	0	0	
77	257	256	
78	0	0	
79	1,329	1,240	
<b>Capital instruments subject to phase-out arrangements</b>			
80	0	0	
81	0	0	
82	0	1,253	
83	0	0	
84	0	338	
85	0	0	

N/M – Not meaningful

<sup>1</sup> References provide the mapping of regulatory balance sheet items used to calculate regulatory capital as reflected in the column "References" and as presented in tables "EU CC2 – Reconciliation of regulatory own funds to balance sheet in the audited financial statements". Where applicable, more detailed information is provided in the respective reference footnote section

<sup>2</sup> Based on EBA list of Article 26(3) of CRR, competent authorities shall evaluate whether issuances of Common Equity Tier 1 instruments meet the criteria set out in Article 28 or, where applicable, Article 29

<sup>3</sup> Interim profits are recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4)

<sup>4</sup> The € 2.2 billion (December 2021: € 1.8 billion) additional value adjustments were derived from the EBA Regulatory Technical Standard on prudent valuation and are before consideration of a benefit from the related reduction of the shortfall of provisions to expected losses of € 0.1 billion (December 2021: € 0.1 billion)

<sup>5</sup> Represents gains and losses on liabilities and derivative liabilities carried at fair value that are a result of changes in own credit of the Group according to Article 33 (1) (b) CRR

<sup>6</sup> Excludes holdings that are already considered in the accounting base of Common Equity

<sup>7</sup> Based on the Group's current interpretation no deduction amount expected

<sup>8</sup> Includes capital deductions of 1.1 billion (December 2021: € 1.1 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.8 billion (December 2021: € 0.7 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures, € 5 million (December 2021: € 17 million) resulting from minimum value commitments as per Article 36 (1)(n) of the CRR and CET 1 decrease of € 23 million (December 2021: € 39 million) from IFRS 9 transitional provision as per Article 473a of the CRR

<sup>9</sup> Amortization is taken into account

<sup>10</sup> Includes CET1 Pillar 2 Requirement.

<sup>11</sup> Calculated as the CET1 Capital less the Group's CET1 capital requirements in accordance with article 92(1)(a) of Regulation (EU) No 575/2013 and following Article 104(1)(a) of Directive 2013/36/EU, and less any Common Equity Tier 1 items used by the Group to meet its additional Tier 1 and Tier 2 capital requirements. June 2021 numbers have been restated accordingly

<sup>12</sup> Includes € 30 million of instruments that qualify as Tier 2 instruments according to Article 494b (2) CRR

<sup>A</sup> Common shares, additional paid-in capital and common shares in treasury reflect regulatory eligible CET 1 capital instruments

<sup>B</sup> The position retained earnings in the regulatory balance sheet includes net income (loss) attributable to Deutsche Bank shareholders and additional equity components of € 2,365 million (December 2021: € 2,365 million). This item is excluded from the position retained earnings in the Own funds template (incl. RWA and capital ratios) and shown separately along with accrual for dividend and AT1 coupons of € (527) million (December 2021: € (987) million) the position independently reviewed interim profits net of any foreseeable charge or dividend

<sup>C</sup> Difference to regulatory balance sheet position driven by prudential filters for unrealized gains and losses

<sup>D</sup> Regulatory applicable amount is goodwill and other intangible assets of € 7,154 million (December 2021: € 6,824 million) plus goodwill from equity method investments of € 81 million (December 2021: € 78 million) as per regulatory balance sheet reduced by deferred tax liabilities on other intangibles of € 516 million (December 2021: € 423 million) and prudent software assets as per Art. 36 (1) (b) CRR of € 1,704 million (December 2021: € 1,581 million)

<sup>E</sup> Differences to balance sheet position mainly driven by adjustments as set out in Article 38 (2) to (5) CRR (e.g. regulatory offsetting requirements)

<sup>F</sup> Regulatory applicable amount is defined benefit pension fund assets of € 1,533 million (December 2021: € 1,209 million) reduced by deferred tax liabilities on defined benefit pension fund assets of € 192 million (December 2021: € 218 million)

<sup>G</sup> Additional equity components reflects regulatory eligible AT1 capital instruments

<sup>H</sup> Difference to regulatory balance sheet driven by regulatory adjustments as set out in Articles 51 to 61 CRR (e.g. current cap on AT1 instruments subject to phase-out arrangements)

<sup>I</sup> Difference to regulatory balance sheet driven by regulatory adjustments as set out in Articles 62 to 71 CRR (e.g. amortization, minority interest)

## Reconciliation of shareholders' equity to Own Funds

in € m.	Jun 30, 2022	Dec 31, 2021
<b>Total shareholders' equity per accounting balance sheet</b>	<b>59,788</b>	<b>58,027</b>
Deconsolidation/Consolidation of entities	265	265
of which:		
Additional paid-in capital	0	0
Retained earnings	265	265
Accumulated other comprehensive income (loss), net of tax	0	0
<b>Total shareholders' equity per regulatory balance sheet</b>	<b>60,053</b>	<b>58,292</b>
Minority Interests (amount allowed in consolidated CET 1)	1,010	910
AT1 coupon and shareholder dividend deduction <sup>1</sup>	(527)	(987)
<b>Common Equity Tier 1 (CET 1) capital before regulatory adjustments</b>	<b>60,536</b>	<b>58,215</b>
Prudential filters	(1,948)	(1,825)
of which:		
Additional value adjustments	(2,212)	(1,812)
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	263	(14)
Regulatory adjustments	(10,655)	(9,884)
of which:		
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(5,015)	(4,897)
Deferred tax assets that rely on future profitability	(1,885)	(1,617)
Negative amounts resulting from the calculation of expected loss amounts	(450)	(573)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(1,341)	(991)
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
Other <sup>2</sup>	(1,964)	(1,805)
<b>Common Equity Tier 1 capital</b>	<b>47,932</b>	<b>46,506</b>
<b>Additional Tier 1 capital</b>	<b>7,268</b>	<b>8,868</b>
Additional Tier 1 Notes (AT1 Notes)	7,268	8,268
Per balance sheet	7,328	8,305
Deconsolidation/Consolidation of entities	0	0
Regulatory adjustments to balance sheet position	(60)	(37)
Hybrid capital securities	0 <sup>3</sup>	600
Per balance sheet	521	528
Deconsolidation/Consolidation of entities	0	0
Regulatory adjustments to balance sheet position	(521)	72
Other regulatory adjustments	0	0
Deductions from Additional Tier 1 capital	0	0
<b>Tier 1 capital</b>	<b>55,201</b>	<b>55,375</b>
<b>Tier 2 capital</b>	<b>10,045</b>	<b>7,358</b>
Subordinated debt	10,045	7,358
Per balance sheet	11,658	8,896
Deconsolidation/Consolidation of entities	0	0
Regulatory adjustments to balance sheet position	(1,613)	(1,538)
of which:		
Amortization according to Art. 64 CRR	(1,664)	(1,221)
Other	51	(318)
Other regulatory adjustments	0	0
Deductions from Tier 2 capital	0	0
<b>Total capital</b>	<b>65,246</b>	<b>62,732</b>

<sup>1</sup> Interim profits are recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4)

<sup>2</sup> Includes capital deductions of € 1.1 billion (Dec 2021: € 1.1 billion) based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme, € 0.8 billion (Dec 2021: € 0.7 billion) based on ECB's supervisory recommendation for a prudential provisioning of non-performing exposures € 5 million (Dec 2021: € 17 million) resulting from minimum value commitments as per Article 36 (1)(n) of the CRR and CET 1 decrease of € 23 million (Dec 2021: € 39 million) from IFRS 9 transitional provision as per Article 473a of the CRR

<sup>3</sup> Excludes €600 million AT1 instruments from January 01, 2022 since they do not fulfil the definition in Art. 52 CRR

## Development of Own Funds

in € m.	six months ended Jun 30, 2022	six months ended Dec 31, 2021
<b>Common Equity Tier 1 (CET 1) capital - opening amount</b>	<b>46,506</b>	<b>45,476</b>
Common shares, net effect	0	0
of which:		
New shares issued (+)	0	0
Shares retired (-)	0	0
Additional paid-in capital	(213)	119
Retained earnings	2,828	807
of which:		
Actuarial gains (losses) rel. to defined benefit plans, net of tax and Currency Translation Adjustment (CTA)	360	238
Net income attributable to Deutsche Bank Shareholders	2,365	569
Common shares in treasury, net effect/(+) sales (-) purchase	(390)	22
Movements in accumulated other comprehensive income	522	510
of which:		
Foreign currency translation, net of tax	1,316	653
Unrealized gains and losses	(567)	(103)
Other	(227)	(40)
AT1 coupon and shareholder dividend deduction <sup>1</sup>	(527)	(341)
of which:		
Gross dividends (deduction)	(450)	(114)
Shares issued in lieu of dividends (add back)	0	0
Gross AT1 coupons (deduction)	(77)	(227)
Additional value adjustments	(400)	(91)
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(118)	(183)
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	(419)	61
Negative amounts resulting from the calculation of expected loss amounts	123	(83)
Removal of gains/losses resulting from changes in own credit standing in liabilities designated at fair value (net of tax)	(53)	10
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(349)	(108)
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
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)	151	(151)
Other, including regulatory adjustments	271	459
<b>Common Equity Tier 1 (CET 1) capital - closing amount</b>	<b>47,932</b>	<b>46,506</b>
<b>Additional Tier 1 (AT1) capital - opening amount</b>	<b>8,268<sup>2</sup></b>	<b>8,118</b>
New Additional Tier 1 eligible capital issues	725	1,243
Matured and called instruments	(1,750)	(500)
Transitional arrangements	0	0
of which:		
Amount excluded from Additional Tier 1 capital due to cap	0	0
Goodwill and other intangible assets (net of related tax liabilities)	0	0
Negative amounts resulting from the calculation of expected loss amounts	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	0	0
Other, including regulatory adjustments	25	7
<b>Additional Tier 1 (AT1) capital - closing amount</b>	<b>7,268</b>	<b>8,868</b>
<b>Tier 1 capital (T1 = CET 1 + AT1)</b>	<b>55,201</b>	<b>55,375</b>
<b>Tier 2 (T2) capital - opening amount</b>	<b>7,358</b>	<b>7,534</b>
New Tier 2 eligible capital issues	2,652	0
Matured and called instruments	0	0
Amortization adjustments	(444)	(391)
Transitional arrangements	0	0
of which:		
Inclusion of amount excluded from Additional Tier 1 capital due to cap	0	0
Amount to be deducted from or added to Additional Tier 2 capital with regard to additional filters and deductions required pre-CRR	0	0
Negative amounts resulting from the calculation of expected loss amounts	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	0	0
Other, including regulatory adjustments	479	215
<b>Tier 2 (T2) capital - closing amount</b>	<b>10,045</b>	<b>7,358</b>
<b>Total regulatory capital (TC = T1 + T2)</b>	<b>65,246</b>	<b>62,732</b>

<sup>1</sup> Interim profits are recognized as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4)

<sup>2</sup> Excludes €600 million AT1 instruments from January 01, 2022 since they do not fulfil the definition in Art. 52 CRR

# Scope of application of the regulatory framework

## Reconciliation of regulatory own funds to IFRS balance sheet

### Article 437 (a) CRR

The table below highlights the difference in the basis of consolidation for accounting and prudential reporting purposes as it compares the carrying values as reported under IFRS with the carrying values under the scope of the regulatory consolidation. References in the last column of the table provide the mapping of regulatory balance sheet items used to calculate regulatory capital. The reference columns presented below reconcile to the reference columns as presented in the template "EU CC1 – Composition of regulatory own funds".

### EU CC2 – Reconciliation of regulatory own funds to balance sheet in the audited financial statements

	Jun 30, 2022			Dec 31, 2021		
	a	b	References	a	b	References
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation		Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	
in € m.						
<b>Assets:</b>						
Cash and central bank balances	177,070	177,051		192,021	192,006	
Interbank balances (w/o central banks)	7,902	7,596		7,342	7,079	
Central bank funds sold and securities purchased under resale agreements	9,121	9,121		8,368	8,368	
Securities borrowed	164	164		63	63	
Financial assets at fair value through profit or loss						
of which:						
Trading assets	103,953	102,652		102,396	100,811	
Positive market values from derivative financial instruments	322,978	323,172		299,732	299,956	
Non-trading financial assets mandatory at fair value through profit and loss	88,723	89,326		88,965	89,455	
Financial assets designated at fair value through profit or loss	96	96		140	139	
Total financial assets at fair value through profit or loss	515,750	515,245		491,233	490,361	
Financial assets at Fair Value through OCI						
Financial assets mandatory at fair value through OCI	31,515	31,372		28,979	28,826	
Equity Instruments designated at fair value through OCI	0	0		0	0	
Total financial assets at fair value through OCI	31,515	31,372		28,979	28,826	
Financial assets available for sale	0	0		0	0	
Equity method investments	1,185	1,185		1,091	1,091	
of which: Goodwill	81	81	D	78	78	D
Loans at amortized cost	488,430	491,405		471,319	474,170	
Securities held to maturity	0	0		0	0	
Property and equipment	5,595	5,569		5,536	5,508	
Goodwill and other intangible assets	7,155	7,154	D	6,824	6,824	D
Other assets	135,110	135,045		103,785	103,674	
of which: Defined benefit pension fund assets	1,533	1,533	F	1,209	1,209	F
Assets for current tax	1,326	1,324		1,214	1,211	
Deferred tax assets	6,338	6,298	E	6,218	6,170	E
<b>Total assets</b>	<b>1,386,660</b>	<b>1,388,528</b>		<b>1,323,993</b>	<b>1,325,351</b>	
<b>Liabilities and equity:</b>						
Deposits	612,583	613,698		603,750	604,930	
Central bank funds purchased and securities sold under repurchase agreements	1,213	1,213		747	747	
Securities loaned	8	8		24	24	
Financial liabilities at fair value through profit or loss						
of which:						
Trading liabilities	58,970	59,027		54,718	54,756	

	Jun 30, 2022			Dec 31, 2021		
	a	b	References	a	b	References
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation		Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	
in € m.						
Negative market values from derivative financial instruments	303,475	303,660		287,108	287,223	
Financial liabilities designated at fair value through profit or loss	60,101	59,823		58,468	58,249	
Investment contract liabilities	494	0		562	0	
Total financial liabilities at fair value through profit or loss	423,040	422,510		400,857	400,227	
Other short-term borrowings	5,189	5,131		4,034	3,976	
Other liabilities	127,185	125,904		97,796	96,271	
Provisions	2,539	2,516		2,641	2,614	
Liabilities for current tax	690	676		600	587	
Deferred tax liabilities	882	796		501	417	
Long-term debt	143,924	146,497		144,485	146,818	
of which: Subordinated long-term debt <sup>1</sup>	11,658	11,658	H.I	8,896	8,896	H.I
Trust preferred securities <sup>1</sup>	521	521	H.I	528	528	H.I
Obligation to purchase common shares	0	0		0	0	
<b>Total liabilities</b>	<b>1,317,775</b>	<b>1,319,470</b>		<b>1,255,962</b>	<b>1,257,140</b>	
Common shares, no par value, nominal value of € 2.56	5,291	5,291	A	5,291	5,291	A
Additional paid-in capital	40,367	40,367	A	40,580	40,580	A
Retained earnings	14,448	14,713	B	12,607	12,871	B
Common shares in treasury, at cost	(396)	(396)	A	(6)	(6)	A
Equity classified as obligation to purchase common shares	0	0	A	0	0	A
Accumulated other comprehensive income, net of tax	78	78	C	(444)	(444)	C
<b>Total shareholders' equity</b>	<b>59,788</b>	<b>60,053</b>		<b>58,027</b>	<b>58,292</b>	
Additional equity components	7,328	7,328	G	8,305	8,305	G
Noncontrolling interests	1,769	1,677		1,698	1,613	
<b>Total equity</b>	<b>68,885</b>	<b>69,058</b>		<b>68,030</b>	<b>68,211</b>	
<b>Total liabilities and equity</b>	<b>1,386,660</b>	<b>1,388,528</b>		<b>1,323,993</b>	<b>1,325,351</b>	

<sup>1</sup> Eligible Additional Tier 1 and Tier 2 instruments are reflected in these balance sheet positions based on their IFRS carrying values.

## IFRS 9 transitional arrangements on own funds and temporary treatment of unrealized gains and losses

### Article 473a CRR and Article 468 CRR

As of June 30, 2020, Deutsche Bank applied the transitional arrangements in relation to IFRS 9 as provided in Article 473a CRR to all of the CET 1 measures. The CRR allowed for a phase-in of the CET 1 reduction due to the increase in credit loss allowance, as a result of the implementation of IFRS 9, over a five year period until year end 2022. The transitional provisions were structured such that there is a static component relating to increases of credit loss allowance observed as of January 2018 and a dynamic component relating to credit loss allowance increases observed between January 2018 and the current reporting date.

As per the CRR amendment published on June 26, 2020 the transitional provisions have been modified such that the dynamic component is reset, i.e. it separately covers the periods from January 1, 2018 to January 1, 2020 and the period from January 1, 2020 to the current reporting date, the phase-in period is extended until 2024, and the phase-in percentages are modified

In addition, the CRR amendment simplifies the implementation of the transitional provisions as the requirement to recalculate the exposure at default (EAD) for each individual credit risk standardized approach (CRSA) exposure taking into account the amounts added back to CET 1 no longer applies. Instead, an additional credit risk RWA amount equal to 100% times the credit loss allowance for the CRSA portfolio that has not reduced CET 1 due to the application of the transitional provisions is determined. The same amount is included in the leverage exposure. Deutsche Bank do make use of this simplification in the Group's application of transitional provisions.

The capital add back as of June 30, 2022 is € 22.7 million which includes € 14.6 million from the static component solely stemming from the CRSA portfolio due to the increase in credit loss allowances for the CRSA portfolio at transition from IAS 39

to IFRS 9 at the end of 2017 and beginning of 2018. There was no contribution from the IRBA portfolios, given the regulatory expected loss exceeded IFRS 9 credit loss allowances for the relevant reporting dates.

There is no contribution from the dynamic component from both CRSA and IBRA portfolios which compares credit loss allowance levels between January 1, 2018 and January 1, 2020. This is due to a reduction in credit loss allowance levels in the aforementioned period for the CRSA portfolio and the regulatory expected loss exceeding the credit loss allowance levels for the IRBA portfolio.

There is a contribution of € 8.1 million from the dynamic component which compares the credit loss allowance levels since January 1, 2020 and the reporting date. This is due to an increase in provisions for the CRSA portfolio since January 1, 2020.

The impact of the € 22.7 million capital add back as of June 30, 2022 on the CET 1, Tier 1 and Total Capital as well as risk weighted assets and leverage exposure did not lead to a material change of the related ratios. Therefore template 'IFRS 9-FL: Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs' is not being disclosed due to immateriality.

Deutsche Bank did not elect to apply the new Article 468 of CRR 'quick fix' which relates to the temporary treatment of unrealized gains and losses measured at fair value through other comprehensive income in view of the COVID-19 pandemic.

## Main features of capital instruments

### Article 437 (b-c) CRR

A description of the main features of the Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments issued by Deutsche Bank is published on Deutsche Bank's website ([db.com/ir/en/capital-instruments.htm](https://www.db.com/ir/en/capital-instruments.htm)). In addition, this website provides full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments to the extent that these do not constitute private placements and are treated confidentially.

## Capital buffers

### Article 440 CRR

#### Minimum capital requirements and additional capital buffers

The Pillar 1 CET 1 minimum capital requirement applicable to the Group is 4.50% of risk-weighted assets (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. The Group complied with the minimum regulatory capital adequacy requirements in 2021 and within the first half of 2022.

In addition to these minimum capital requirements, the following combined capital buffer requirements are fully effective beginning 2022. The capital conservation buffer requirement implemented in Section 10c German Banking Act, based on Article 129 CRD is 2.50% CET 1 capital of RWA in 2022 and onwards. 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 the Group's relevant credit exposures are located. As of June 30, 2022, the countercyclical capital buffer rate was at 0.02%.

Deutsche Bank continues to be designated as a global systemically important institution (G-SII) by BaFin in agreement with the Deutsche Bundesbank, resulting in a G-SII buffer requirement of 1.5% CET 1 capital of RWA in 2022. Additionally, Deutsche Bank AG has been classified by BaFin as an other systemically important institution (O-SII) with an additional buffer requirement of 2.00% that has to be met on a consolidated level. Hence, for Deutsche Bank, the O-SII buffer amounts to 2.00% in 2022. Only the higher of the buffers for systemically important institutions (G-SII buffer or O-SII buffer) must be applied. A systemic risk buffer (as of June 30, 2022 not applicable for DB) would have to be applied cumulatively.

In February 2022, the ECB informed Deutsche Bank that the capital requirements will remain unchanged and the decision requires Deutsche Bank to fulfill its 2.50% Pillar 2 requirement (SREP add-on) with at least 56.25% CET 1, 18.75% Additional Tier 1 and 25% Tier 2 capital. Accordingly, Deutsche Bank needs to maintain a CET 1 ratio, which as of June 30, 2022 is at least 10.43% on a consolidated basis. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50%, the Pillar 2 requirement (SREP add-on) of 1.41%, the capital conservation buffer of 2.50%, the countercyclical buffer (currently 0.02%) and the O-SII buffer of 2.00%.

In 2021, Deutsche Bank participated in the EBA Stress Test 2021 which was postponed from 2020 due to the COVID-19 pandemic. By its standard procedures, the ECB has considered the Group's quantitative performance in the adverse scenario as an input when reconsidering the level of the Pillar 2 guidance in its 2021 SREP assessment and the Group's qualitative performance as one aspect when holistically reviewing the Pillar 2 requirement.

## Geographical distribution of credit exposures

### **Article 440 (a) CRR**

The following tables disclose the amount of Deutsche Bank's countercyclical buffer as well as the geographical distribution of credit exposures relevant for its calculation in the standard format as set out in Commission Delegated Regulation (EU) 2015/1555. The geographical split table shows countries on an individual basis if each country imposes a countercyclical capital buffer rate or the total own funds requirements exceed € 20 million. The values for the remaining countries are shown as "Other".

Countercyclical capital buffer rates are determined by Basel Committee member jurisdictions. Countercyclical capital buffer varies according to a percentage of risk weighted assets. The "General credit exposures" include only credit exposures to the private sector. Exposures to the public sector and to institutions are not in scope. The "Trading book exposures" contain market risk standardized approach non-securitization and trading book securitization positions as well as the IRC ("Incremental Risk Charge").

EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

Jun 30, 2022

in € m.	General credit exposures		Relevant credit exposures – Market risk			Own funds requirements							
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for Internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
Australia	112	5,257	499	0	2,273	8,141	175	23	23	220	2,756	1.02	0.00
Austria	2	1,780	0	127	0	1,909	39	2	0	41	507	0.19	0.00
Bahrain	123	125	0	0	0	249	22	0	0	22	278	0.10	0.00
Belgium	81	2,455	0	306	30	2,872	73	6	0	79	993	0.37	0.00
Bermuda	25	1,138	0	0	374	1,537	59	1	20	80	1,001	0.37	0.00
Brazil	28	1,276	1	329	0	1,635	83	40	0	123	1,535	0.57	0.00
British Virgin Islands	41	6,397	0	4	0	6,442	57	0	0	57	718	0.26	0.00
Bulgaria	0	29	0	1	0	30	1	0	0	1	10	0.00	0.50
Canada	143	2,205	2	0	1,029	3,378	105	0	12	117	1,463	0.54	0.00
Cayman Islands	283	8,058	0	25	29	8,395	312	1	13	327	4,081	1.50	0.00
China	83	6,025	0	1,249	0	7,357	290	22	0	311	3,891	1.43	0.00
Czech Republic	2	215	0	19	0	236	7	0	0	7	88	0.03	0.50
Denmark	23	1,781	0	282	0	2,086	62	5	0	66	831	0.31	0.00
France	193	9,200	214	675	615	10,897	270	14	7	291	3,640	1.34	0.00
Germany	8,555	284,429	30	7,029	3,427	303,469	8,614	102	93	8,809	110,111	40.60	0.00
Ghana	0	434	0	1	0	434	23	0	0	23	291	0.11	0.00
Guernsey	30	813	0	0	0	843	20	0	0	20	254	0.09	0.00
Hong Kong	57	4,199	0	295	0	4,551	127	3	0	130	1,629	0.60	1.00
India	2,600	7,743	1	293	3,419	14,056	424	21	69	514	6,425	2.37	0.00
Indonesia	20	1,134	0	118	0	1,273	43	2	0	46	570	0.21	0.00
Ireland	314	6,720	88	138	3,299	10,559	183	12	103	299	3,734	1.38	0.00
Israel	10	779	0	273	0	1,062	64	21	0	85	1,062	0.39	0.00
Italy (incl. San Marino)	2,094	24,091	12	0	240	26,437	1,143	35	13	1,191	14,888	5.49	0.00
Ivory Coast	0	474	0	36	0	511	27	0	0	27	339	0.12	0.00
Japan	111	3,829	0	51	87	4,079	128	0	1	129	1,610	0.59	0.00
Jersey	49	2,970	0	23	1,005	4,047	122	1	16	138	1,729	0.64	0.00
Luxembourg	3,476	14,616	0	279	4,701	23,073	593	8	75	676	8,455	3.12	0.50
Malaysia	22	742	0	343	0	1,107	26	2	0	28	350	0.13	0.00
Mauritius	247	612	0	4	0	863	53	0	0	53	667	0.25	0.00
Mexico	3	1,696	0	0	0	1,699	65	2	0	66	828	0.31	0.00
Netherlands	736	13,501	114	1,755	626	16,732	466	44	27	537	6,708	2.47	0.00
Nigeria	1	358	0	3	0	361	29	0	0	29	363	0.13	0.00
Norway	19	744	0	297	0	1,060	25	5	0	30	373	0.14	1.50
Poland	15	2,569	0	0	0	2,585	57	0	0	57	717	0.26	0.00
Portugal	11	1,019	1	0	17	1,048	21	0	0	22	269	0.10	0.00
Russian Federation	16	829	0	0	0	845	51	0	0	51	643	0.24	0.00
Singapore	188	6,706	34	432	0	7,359	180	2	0	182	2,278	0.84	0.00
Slovakia	0	118	0	0	0	118	2	0	0	2	20	0.01	1.00
South Africa	0	314	0	1	0	316	26	3	0	29	361	0.13	0.00
South Korea	14	4,469	1	668	0	5,152	52	13	0	66	822	0.30	0.00

Jun 30, 2022

in € m.	General credit exposures		Relevant credit exposures – Market risk			Own funds requirements							
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for Internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
Spain	353	20,910	41	145	38	21,486	741	22	0	764	9,544	3.52	0.00
Sweden	4	2,288	0	407	0	2,699	97	4	0	101	1,268	0.47	0.00
Switzerland	26	13,178	0	700	0	13,905	209	5	0	214	2,676	0.99	0.00
Taiwan	6	1,232	0	40	0	1,278	25	0	0	25	312	0.12	0.00
Thailand	1	1,254	0	261	0	1,515	45	6	0	51	634	0.23	0.00
Turkey	17	975	0	0	0	992	59	0	0	59	732	0.27	0.00
United Arab Emirates	39	2,355	0	32	0	2,426	38	1	0	39	487	0.18	0.00
United Kingdom	456	22,534	63	1,800	1,166	26,020	774	37	13	824	10,294	3.80	0.00
United States of America (incl. Puerto Rico)	2,198	135,081	1,254	0	44,406	182,940	3,474	147	556	4,178	52,219	19.25	0.00
Uzbekistan	0	384	0	0	0	384	21	0	0	21	261	0.10	0.00
Vietnam	2	736	0	21	0	759	56	0	0	57	707	0.26	0.00
Other	395	11,952	354	993	460	14,153	330	40	14	384	4,805	1.77	0.00
<b>Total</b>	<b>23,222</b>	<b>644,730</b>	<b>2,707</b>	<b>19,458</b>	<b>67,243</b>	<b>757,360</b>	<b>19,987</b>	<b>655</b>	<b>1,056</b>	<b>21,698</b>	<b>271,225</b>	<b>100.00</b>	<b>0.02</b>

in € m.	General credit exposures		Relevant credit exposures – Market risk			Own funds requirements							
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for Internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
Australia	94	4,079	318	0	1,716	6,208	135	15	19	170	2,120	0.83	0.00
Austria	25	1,362	0	0	0	1,388	37	2	0	39	484	0.19	0.00
Bahrain	185	63	0	0	0	248	22	0	0	22	269	0.11	0.00
Belgium	71	2,151	0	0	30	2,252	54	3	0	57	713	0.28	0.00
Bermuda	33	1,130	1	0	167	1,331	65	2	2	69	861	0.34	0.00
Brazil	15	797	0	304	0	1,116	35	17	0	52	653	0.26	0.00
British Virgin Islands	92	7,651	0	6	0	7,748	77	0	0	77	962	0.38	0.00
Bulgaria	0	21	0	1	0	22	1	0	0	1	7	0.00	0.50
Canada	147	1,682	0	0	526	2,355	78	0	6	84	1,050	0.41	0.00
Cayman Islands	340	7,578	2	24	626	8,571	334	3	8	345	4,309	1.68	0.00
China	80	6,489	0	554	0	7,122	298	25	0	323	4,040	1.58	0.00
Colombia	3	349	0	12	0	364	20	1	0	21	265	0.10	0.00
Czech Republic	13	215	0	0	0	228	6	0	0	6	81	0.03	0.50
Denmark	33	1,351	0	0	0	1,384	53	0	0	53	663	0.26	0.00
France	147	8,270	9	0	619	9,044	250	5	8	262	3,276	1.28	0.00
Germany	9,964	278,389	14	0	3,899	292,267	7,957	6	80	8,043	100,539	39.27	0.00
Ghana	0	483	0	1	0	484	30	0	0	30	372	0.15	0.00
Hong Kong	172	4,088	0	255	0	4,516	155	3	0	159	1,982	0.77	1.00
India	2,299	7,385	0	320	3,081	13,086	442	21	63	526	6,576	2.57	0.00
Indonesia	65	1,225	0	366	0	1,657	51	12	0	63	783	0.31	0.00
Ireland	528	6,015	31	41	3,249	9,863	200	15	107	322	4,025	1.57	0.00
Israel	4	920	0	348	0	1,272	153	14	0	167	2,093	0.82	0.00
Italy (incl. San Marino)	2,052	23,194	55	0	230	25,532	1,128	18	10	1,156	14,455	5.65	0.00
Ivory Coast	0	459	0	27	0	486	26	0	0	26	323	0.13	0.00
Japan	130	4,007	0	681	94	4,913	136	4	1	141	1,769	0.69	0.00
Jersey	73	2,697	0	25	464	3,259	117	0	9	126	1,572	0.61	0.00
Luxembourg	2,420	13,927	0	166	4,416	20,929	610	11	71	692	8,653	3.38	0.50
Malaysia	18	621	0	289	0	929	23	2	0	25	315	0.12	0.00
Mauritius	168	299	0	0	0	468	31	0	0	31	385	0.15	0.00
Mexico	3	1,140	0	0	0	1,144	54	0	0	54	680	0.27	0.00
Netherlands	790	12,833	68	122	598	14,410	490	7	24	521	6,510	2.54	0.00
Norway	7	719	0	18	0	744	18	0	0	18	228	0.09	1.00
Poland	34	2,625	0	22	0	2,680	56	0	0	56	706	0.28	0.00
Portugal	83	604	0	0	43	729	26	6	1	33	410	0.16	0.00
Russian Federation	8	910	0	0	0	918	49	0	0	49	615	0.24	0.00
Saudi Arabia	30	1,615	0	0	0	1,645	25	0	0	25	312	0.12	0.00
Singapore	246	6,628	0	406	0	7,280	201	2	0	204	2,548	1.00	0.00
Slovakia	0	96	0	0	0	96	1	0	0	1	17	0.01	1.00
South Korea	13	7,137	0	2,336	0	9,486	94	69	0	163	2,043	0.80	0.00
Spain	404	19,512	40	0	81	20,037	632	46	3	681	8,517	3.33	0.00
Sri Lanka	1	210	0	27	0	238	23	1	0	24	295	0.12	0.00

Dec 31, 2021

	General credit exposures		Relevant credit exposures – Market risk			Own funds requirements							
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for Internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
in € m.													
Sweden	6	2,047	0	103	0	2,157	97	0	0	97	1,214	0.47	0.00
Switzerland	87	18,555	0	81	0	18,723	291	1	0	292	3,646	1.42	0.00
Taiwan	7	1,113	0	38	0	1,159	29	0	0	29	359	0.14	0.00
Thailand	1	1,239	0	263	0	1,503	48	7	0	54	681	0.27	0.00
Turkey	30	588	0	0	0	618	30	0	0	31	383	0.15	0.00
United Arab Emirates	33	2,017	0	20	0	2,070	34	0	0	34	431	0.17	0.00
United Kingdom	613	17,577	7	506	693	19,395	700	22	10	733	9,157	3.58	0.00
United States of America (incl. Puerto Rico)	1,669	107,553	1,586	0	43,466	154,274	3,159	177	544	3,880	48,503	18.95	0.00
Vietnam	1	584	0	0	0	584	46	0	0	47	582	0.23	0.00
Other	185	9,860	309	488	409	11,251	316	40	8	365	4,560	1.78	0.00
<b>Total</b>	<b>23,422</b>	<b>602,060</b>	<b>2,441</b>	<b>7,850</b>	<b>64,409</b>	<b>700,183</b>	<b>18,943</b>	<b>561</b>	<b>975</b>	<b>20,479</b>	<b>255,992</b>	<b>100.00</b>	<b>0.03</b>

## Institution specific countercyclical capital buffer

### Article 440 (b) CRR

The following table shows an overview of Deutsche Bank's countercyclical buffer rate and requirements.

#### EU CCyb2 – Institution-specific countercyclical capital buffer

	Jun 30, 2022	Dec 31, 2021
1 Total risk exposure amount (in € m.)	369,970	351,629
2 Institution specific countercyclical buffer rate	0.02 %	0.03 %
3 Institution specific countercyclical buffer requirement (in € m.)	88	91

## Composition of own funds and eligible liabilities

### Article 437a CRR and Article 45i(3)(b) BRRD

This section provides detailed information on the composition of Deutsche Bank's own funds and eligible liabilities, its main features, its ranking in the creditor hierarchy and its maturities.

As of June 30, 2022 the Group's available own funds and eligible liabilities amounted to € 124.2 billion, consisting of € 65.3 billion own funds, € 49.4 billion subordinated liabilities and € 9.6 billion non-subordinated liabilities. The Group's regulatory CET1 capital included in the own funds contains € 23 million from the IFRS 9 transitional impact.

Deutsche Bank predominantly relies on own funds and subordinated eligible liabilities counting towards TLAC and subordinated MREL for meeting its MREL requirement. Only 7.69% of the Group's MREL capacity is contributed from eligible liabilities which are not subordinated. Deutsche Bank has no permission as per CRR Article 72b (3) or (4) to use non-subordinated eligible liabilities for meeting subordinated MREL or TLAC. As of June 30, 2022, 38.61% of the subordinated liabilities were issued prior to June 27, 2019 and therefore grandfathered regarding the eligibility criteria newly established through Article 72b CRR.

As of June 30, 2022, Deutsche Bank has excess of CET 1 capital of 7.05% of TREA after meeting the resolution group's requirements. This is well above the institution specific combined buffer requirement of 4.52% and establishes a comfortable distance to triggering distribution restrictions under the MREL Minimum Distributable Amount ("M-MDA") rules.

EU TLAC1 – Composition of MREL and G-SII requirement for own funds end eligible liabilities

		Jun 30, 2022		
		a	b	c
		Minimum requirement for own funds and eligible liabilities (MREL)	G-SII Requirement for own funds and eligible liabilities (TLAC)	Memo item: Amounts eligible for the purposes of MREL, but not TLAC
in € m.				
<b>Own funds and eligible liabilities and adjustments</b>				
1	Common Equity Tier 1 capital (CET1)	47,932	47,932	–
2	Additional Tier 1 capital (AT1)	7,268	7,268	–
6	Tier 2 capital (T2)	10,045	10,045	–
11	Own funds for the purpose of Articles 92a CRR and 45 BRRD	65,246	65,246	–
<b>Own funds and eligible liabilities: Non-regulatory capital elements</b>				
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered)	29,385	29,385	–
EU 12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	0	0	–
EU 12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 27 June 2019 (subordinated grandfathered)	18,479	18,479	–
EU 12c	Tier 2 instruments with a residual maturity of at least one year to the extent they do not qualify as Tier 2 items	1,580	1,580	–
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap)	5,595	–	5,595
EU 13a	Eligible liabilities that are not subordinated to excluded liabilities issued prior to 27 June 2019 (pre-cap)	3,957	–	3,957
14	Amount of non subordinated instruments eligible, where applicable after application of Article 72b (3) CRR	–	–	–
17	Eligible liabilities items before adjustments	58,996	49,444	9,552
EU 17a	of which: subordinated	49,444	49,444	–
<b>Own funds and eligible liabilities: Adjustments to non-regulatory capital elements</b>				
18	Own funds and eligible liabilities items before adjustments	124,242	114,690	9,552
19	(Deduction of exposures between MPE resolution groups)	–	0	–
20	(Deduction of investments in other eligible liabilities instruments)	–	0	–
22	Own funds and eligible liabilities after adjustments	124,242	114,690	9,552
EU 22a	of which: Own funds and subordinated	114,690	–	–
<b>Risk-weighted exposure amount and leverage exposure measure of the resolution group</b>				
23	Total risk exposure amount	369,970	369,970	–
24	Total exposure measure	1,279,798	1,279,798	–
<b>Ratio of own funds and eligible liabilities</b>				
25	Own funds and eligible liabilities (as a percentage of total risk exposure amount)	33.58	31.00	–
EU 25a	of which: Own funds and subordinated	31.00	–	–
26	Own funds and eligible liabilities (as a percentage of total exposure measure)	9.71	8.96	–
EU 26a	of which: Own funds and subordinated	8.96	–	–
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements	7.05	7.05	–
28	Institution-specific combined buffer requirement	–	4.52	–
29	of which: Capital conservation buffer requirement	–	2.50	–
30	Countercyclical buffer requirement	–	0.02	–
31	Systemic risk buffer requirement	–	0.00	–
EU 31a	Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	–	2.00	–
<b>Memorandum items</b>				
EU 32a	Total amount of excluded liabilities referred to in Article 72a(2) CRR	–	535,643	–

		Dec 31, 2021		
		a	b	c
		Minimum requirement for own funds and eligible liabilities (MREL)	G-SII Requirement for own funds and eligible liabilities (TLAC)	Memo item: Amounts eligible for the purposes of MREL, but not TLAC
in € m.				
<b>Own funds and eligible liabilities and adjustments</b>				
1	Common Equity Tier 1 capital (CET1)	46,506	46,506	-
2	Additional Tier 1 capital (AT1)	8,868	8,868	-
6	Tier 2 capital (T2)	7,358	7,358	-
11	Own funds for the purpose of Articles 92a CRR and 45 BRRD	62,732	62,732	-
<b>Own funds and eligible liabilities: Non-regulatory capital elements</b>				
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered)	22,852	22,852	-
EU 12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	0	0	-
EU 12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 27 June 2019 (subordinated grandfathered)	22,301	22,301	-
EU 12c	Tier 2 instruments with a residual maturity of at least one year to the extent they do not qualify as Tier 2 items	1,208	1,208	-
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap)	4,707	-	4,707
EU 13a	Eligible liabilities that are not subordinated to excluded liabilities issued prior to 27 June 2019 (pre-cap)	1,051	-	1,051
14	Amount of non subordinated instruments eligible, where applicable after application of Article 72b (3) CRR	-	-	-
17	Eligible liabilities items before adjustments	52,120	46,361	5,759
EU 17a	of which: subordinated	46,361	46,361	-
<b>Own funds and eligible liabilities: Adjustments to non-regulatory capital elements</b>				
18	Own funds and eligible liabilities items before adjustments	114,853	109,094	5,759
19	(Deduction of exposures between MPE resolution groups)	-	0	-
20	(Deduction of investments in other eligible liabilities instruments)	-	0	-
22	Own funds and eligible liabilities after adjustments	114,853	109,094	5,759
EU 22a	of which: Own funds and subordinated	109,094	-	-
<b>Risk-weighted exposure amount and leverage exposure measure of the resolution group</b>				
23	Total risk exposure amount	351,629	351,629	-
24	Total exposure measure	1,124,667	1,124,667	-
<b>Ratio of own funds and eligible liabilities</b>				
25	Own funds and eligible liabilities (as a percentage of total risk exposure amount)	32.66	31.03	-
EU 25a	of which: Own funds and subordinated	31.03	-	-
26	Own funds and eligible liabilities (as a percentage of total exposure measure)	10.21	9.70	-
EU 26a	of which: Own funds and subordinated	9.70	-	-
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements	7.32	7.32	-
28	Institution-specific combined buffer requirement	-	4.53	-
29	of which: Capital conservation buffer requirement	-	2.50	-
30	Countercyclical buffer requirement	-	0.03	-
31	Systemic risk buffer requirement	-	0.00	-
EU 31a	Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-	2.00	-
<b>Memorandum items</b>				
EU 32a	Total amount of excluded liabilities referred to in Article 72a(2) CRR	-	482,170	-

## Main features of eligible liabilities instruments

A description of the main features of the Group's senior non-preferred subordinated eligible liabilities instruments eligible for subordinated MREL and TLAC and issued by Deutsche Bank is published on Deutsche Bank's website ([db.com/ir/en/capital-instruments.htm](http://db.com/ir/en/capital-instruments.htm)) to the extent that these do not constitute private placements and are treated confidentially.

## Ranking in the creditor hierarchy and maturity

The following table provides a simplified overview of the ranking of liabilities in an insolvency proceeding under German law. The ranking is presented from the more junior liabilities to the more senior liabilities. Deutsche Bank AG's subordinated eligible liability instruments qualifying for MREL and TLAC through meeting all of the conditions in CRR Article 72b (2) or being grandfathered pursuant to CRR Article 494b (3) are exclusively rank at position 11 in the below order. Non-subordinated eligible liabilities instruments which are eligible for MREL rank in position 12. Deutsche Bank has no permission as per CRR Article 72b (3) or (4) to include eligible liability instruments ranking in position 12 into eligible liabilities for meeting subordinated MREL or TLAC requirements.

### Ranking of liabilities in an insolvency proceeding under German law

Rank	Label of claims	Code
1	<b>Common equity Tier 1 instruments</b>	Section 199 of the Insolvency Code
2	<b>Additional Tier 1 instruments</b>	
3	<b>Tier 2 instruments</b>	
4	Claims subordinated by virtue of a contractual subordination clause not specifying the pertinent rank (other than Additional Tier 1 or Tier 2 instruments)	Section 39 (2) of the Insolvency Code
5	Claims for repayment of shareholder loans and accrued interest thereon	Section 39 (1) no. 5 of the Insolvency Code
6	Claims for the delivery of goods or provision of services free of charge	Section 39 (1) no. 4 of the Insolvency Code
7	Criminal and administrative fines	Section 39 (1) no. 3 of the Insolvency Code
8	Creditors' costs related to the insolvency proceeding	Section 39 (1) no. 2 of the Insolvency Code
9	Interest and late payment surcharges accrued after the opening of insolvency proceedings	Section 39 (1) no. 1 of the Insolvency Code
10	Claims subordinated by virtue of a contractual subordination clause which specifies the relevant ranking	Section 39 (2) of the Insolvency Code
11	<b>Non-preferred creditor claims arising from non-subordinated, unsecured non-structured debt instruments which</b>  (i) are issued before 21 July 2018 and are neither deposits within the positions of no. 13 and 14 nor money market instruments  (ii) are issued from 21 July 2018 onwards, have an original contractual maturity of at least one year, do not qualify as deposits within the position of no. 13 and 14 and the contractual documentation and, where applicable, the prospectus explicitly refer to the lower ranking	
12	<b>General creditors' claims</b>	Section 38 of the Insolvency Code in conjunction with Section 46f (5) of the Banking Act, including instruments covered by Section 46f (6) sentence 3 and 46f (7) of the Banking Act
13	Deposits not covered, but preferential	Section 46f (4) no. 2 of the Banking Act
14	Deposits covered and preferential	Section 46f (4) no. 1 of the Banking Act
15	Costs of proceeding and obligations binding on the estate	Sections 53 to 55 of the Insolvency Code
16	Claims subject to a right of separation in insolvency proceedings	Sections 49 to 51 of the Insolvency Code
17	Claims subject to a right of segregation in insolvency proceedings	Sections 47 and 48 of the Insolvency Code

Deutsche Bank's own funds and eligible liabilities fall into these insolvency ranks as per below table on the basis of German insolvency law. The "subset of liabilities and own funds less excluded liabilities that are own funds and liabilities potentially eligible for meeting MREL" is identical to Deutsche Bank Group's own funds and eligible liabilities available to meet MREL for which maturities are provided in addition. Eligible liabilities included in insolvency rank 11 and 12 in these lines are EXCLUSIVELY issued out of the resolution entity Deutsche Bank AG at the individual level. Other ranks - including own funds - represent Deutsche Bank Group values as Deutsche Bank AG is not subject to capital requirements on individual level given it has been granted a capital waiver.

EU TLAC3a – Creditor ranking

	Jun 30, 2022									
in € m.	1	2	3	4	5	6	7	8	9	Total
Description of insolvency rank	R1	R2	R3	R11	R12	R13	R14	R16	R17	
Liabilities and own funds	47,932	7,268	11,625	53,540	382,326	97,128	204,747	268,878	20,993	1,094,439
of which:										
Excluded liabilities	0	0	0	0	41,026	0	204,747	268,878	20,993	535,643
Liabilities and own funds less excluded liabilities	47,932	7,268	11,625	53,540	341,300	97,128	0	0	0	558,795
Subset of Liabilities and own funds less excluded liabilities that are own funds and liabilities potentially eligible for meeting TLAC/MREL	47,932	7,268	11,625	47,864	9,552	0	0	0	0	124,242
of which:										
Residual maturity ≥ 1 year < 2 years	0	0	1,602	3,297	4,888	0	0	0	0	9,787
Residual maturity ≥ 2 year < 5 years	0	0	2,216	22,367	2,947	0	0	0	0	27,530
Residual maturity ≥ 5 years < 10 years	0	0	5,656	14,845	1,030	0	0	0	0	21,531
Residual maturity ≥ 10 years, but excluding perpetual securities	0	0	2,152	7,355	687	0	0	0	0	10,194
Perpetual securities	47,932	7,268	0	0	0	0	0	0	0	55,201

# Capital requirements

## Overview of RWA and capital requirements

### Article 438 (d) CRR

The table below shows RWA broken down by risk types and model approaches compared to the previous quarter end. It also shows the corresponding minimum capital requirements, which is derived by multiplying the respective RWA by an 8% capital ratio.

#### EU OV1 – Overview of RWA

		Jun 30, 2022		Mar 31, 2022	
		a	c1	b	c2
in € m.		RWA	Minimum capital requirements	RWA	Minimum capital requirements
1	Credit risk (excluding CCR)	226,060	18,085	224,482	17,959
	of which:				
2	The standardized approach (SA)	19,261	1,541	18,640	1,491
3	The foundation IRB (FIRB) approach	2,168	173	2,092	167
4	Slotting approach	591	47	680	54
EU 4a	Equities under the simple riskweighted approach	11,225	898	13,234	1,059
5	The advanced IRB (AIRB) approach	192,814	15,425	189,836	15,187
6	Counterparty credit risk (CCR)	28,880	2,310	30,686	2,455
	of which:				
7	The standardized approach	2,793	223	2,783	223
8	Internal model method (IMM)	19,058	1,525	19,045	1,524
EU 8a	Risk exposure to a CCP	593	47	655	52
EU 8b	Credit Valuation Adjustment (CVA)	4,808	385	6,256	501
9	Other CCR	1,628	130	1,948	156
15	Settlement risk	156	12	295	24
16	Securitization exposures in the banking book (after the cap)	13,205	1,056	12,555	1,004
	of which:				
17	SEC-IRBA approach	7,510	601	7,302	584
18	SEC-ERBA (including IAA)	474	38	532	43
19	SEC-SA approach	4,778	382	4,312	345
EU 19a	1250% / deduction	443	35	408	33
20	Market risk	28,068	2,245	21,939	1,755
	of which:				
20	Standardized approach	3,245	260	3,255	260
21	IMA	24,824	1,986	18,683	1,495
EU 22a	Large exposures	0	0	0	0
23	Operational risk	59,373	4,750	60,369	4,829
	of which:				
EU 23a	Basic indicator approach	0	0	0	0
EU 23b	Standardized approach	0	0	0	0
EU 23c	Advanced measurement approach	59,373	4,750	60,369	4,829
	Amounts below the thresholds for deduction (subject to 250% risk weight)	14,228	1,138	14,106	1,128
29	Total	369,970	29,598	364,431	29,154

As of June 30, 2022, RWA was € 370.0 billion compared to € 364.4 billion as of March 31, 2022. The increase of € 5.5 billion was primarily driven by the RWA for market risk, credit risk (excluding CCR) and securitization exposures in the banking book (after the cap), which was partially offset by reductions in operational risk and counterparty credit risk (CCR) RWA. The market risk RWA increased by € 6.1 billion primarily driven by the Stressed Value-at-Risk (SVaR) and Value-at-Risk (VaR) components, included in the internal model approach (IMA). The increase in the VaR component was driven by the inclusion of the recent market volatility as well as the increased capital multiplier, which also drove the increase in the SVaR component. The increase in credit risk RWA (excluding CCR) by € 1.6 billion was mainly driven by an increase of € 3.0 billion in the advanced IRB (AIRB) approach primarily due to foreign exchange movements, partly offset by a decrease in asset size. Additionally, credit risk RWA (excluding CCR) under the standardized approach (SA) increased by € 0.6 billion mainly due to increases in the exposure classes corporates and institutions, partly offset by the exposure class collective investment undertakings. These increases were partly compensated by a decrease of € 2.0 billion in equities under the simple riskweighted approach mainly due to exchange-traded equity exposures. RWA for securitization exposure in the banking book (after the cap) increased by € 0.7 billion mainly driven by SEC-SA approach due to increased exposures. The operational risk RWA decreased by € 1.0 billion mainly resulting from a more favorable development of the Groups internal loss profile feeding

into the capital model, partly offset by updates to the qualitative adjustments. Additionally, counterparty credit risk (CCR) RWA decreased by € 1.8 billion mainly driven by a model refinement affecting the credit value adjustment (CVA) calculation.

The movements of RWA for credit and market risk are discussed below in sections “Development of credit risk RWA”, “CCR exposures development” and “Development of market risk RWA”.

## Leverage ratio

Deutsche Bank manages its balance sheet on a Group level and, where applicable, locally in each region. In the allocation of financial resources the Group favors business portfolios with the highest positive impact on its profitability and shareholder value. The Group monitors and analyzes balance sheet developments and tracks certain market observed balance sheet ratios. Based on this, the Group triggers discussions and management action by the Group Risk Committee (GRC).

### Article 451 (1)(a-c),(2) and (3) CRR

The following tables show the leverage ratio exposure and the leverage ratio. The first table EU LR1 delivers a reconciliation of accounting assets reported in the IFRS financial statements to the leverage ratio exposure. The leverage ratio common disclosure table EU LR2 presents the components of the leverage exposure, the Tier 1 Capital and the leverage ratio as well as the mean value for gross securities financing transaction (SFT) assets. For further details on Tier 1 capital please also refer to the “Regulatory capital composition, prudential filters and deduction items” section in chapter “Capital” on page 8 in this report. Table EU LR3 provides a further breakdown of the balance sheet exposures (excluding derivatives, SFTs and exempted exposures).

#### EU LR1 – LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

in € bn. (unless stated otherwise)		Jun 30, 2022	Dec 31, 2021
1	Total assets as per published financial statements	1,387	1,324
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	2	1
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	0	0
4	(Adjustment for temporary exemption of exposures to central banks (if applicable))	0	(99)
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	N/M	N/M
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(20)	(12)
7	Adjustment for eligible cash pooling transactions	18	17
8	Adjustment for derivative financial instruments	(176)	(165)
9	Adjustment for securities financing transactions (SFTs)	4	3
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	127	115
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	(5)	(5)
EU-11a	(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	N/M	N/M
EU-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	N/M	N/M
12	Other adjustments	(56)	(55)
13	Total exposure measure	1,280	1,125

N/M – Not meaningful

## EU LR2 – LRCom: Leverage ratio common disclosure

in € bn. (unless stated otherwise)		Jun 30, 2022	Dec 31, 2021
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	977	842
2	Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable accounting framework	0	1
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(40)	(37)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	0	0
5	(General credit risk adjustments to on-balance sheet items)	(5)	(5)
6	(Asset amounts deducted in determining Tier 1 capital)	(10)	(9)
7	<b>Total on-balance sheet exposures (excluding derivatives and SFTs)</b>	<b>922</b>	<b>791</b>
<b>Derivative exposures</b>			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	53	46
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	N/M	N/M
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	80	82
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	N/M	N/M
EU-9b	Exposure determined under Original Exposure Method	N/M	N/M
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(7)	(6)
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	N/M	N/M
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (Original exposure method)	N/M	N/M
11	Adjusted effective notional amount of written credit derivatives	580	460
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(559)	(444)
13	<b>Total derivatives exposures</b>	<b>148</b>	<b>138</b>
<b>Securities financing transaction (SFT) exposures</b>			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	228	194
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(139)	(108)
16	Counterparty credit risk exposure for SFT assets	5	5
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	N/M	N/M
17	Agent transaction exposures	0	0
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	0	0
18	<b>Total securities financing transaction exposures</b>	<b>94</b>	<b>91</b>
<b>Other off-balance sheet exposures</b>			
19	Off-balance sheet exposures at gross notional amount	371	327
20	(Adjustments for conversion to credit equivalent amounts)	(245)	(211)
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	(0)	(0)
22	<b>Off-balance sheet exposures</b>	<b>126</b>	<b>115</b>
<b>Excluded exposures</b>			
EU-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	N/M	N/M
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a(1) CRR (on and off balance sheet))	N/M	N/M
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	N/M	N/M
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans)	N/M	N/M
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	N/M	N/M
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	(5)	(5)
EU-22g	(Excluded excess collateral deposited at triparty agents)	N/M	N/M
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	N/M	N/M
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	N/M	N/M
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	(5)	(5)
EU-22k	<b>Total exempted exposures</b>	<b>(10)</b>	<b>(10)</b>
<b>Capital and total exposure measure</b>			
23	Tier 1 capital	55.2	54.7
24	<b>Total exposure measure</b>	<b>1,280</b>	<b>1,125</b>
<b>Leverage ratio</b>			
25	Leverage ratio (in %)	4.3%	4.9%
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	4.3%	4.9%
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) (%)	4.3%	4.5%
26	Regulatory minimum leverage ratio requirement (%)	3.0%	3.2%
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%)	0.0%	0.0%
EU-26b	of which: to be made up of CET1 capital	0.0%	0.0%
27	Leverage ratio buffer requirement (%)	0.0%	0.0%
EU-27a	<b>Overall leverage ratio requirement (%)</b>	<b>3.0%</b>	<b>3.2%</b>
<b>Choice on transitional arrangements and relevant exposures</b>			

in € bn. (unless stated otherwise)		Jun 30, 2022	Dec 31, 2021
EU-27b	Choice on transitional arrangements for the definition of the capital measure <sup>1</sup>	Transitional	Fully phased in
<b>Disclosure of mean values</b>			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	135	120
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	89	86
30	Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	1,326	1,159
30a	Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	1,326	1,258
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.2%	4.7%
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.2%	4.4%
<b>Memorandum items</b>			
	Tier 1 capital (according to transitional rules)		55.4
	Total exposure measure (according to transitional rules)		1,125
	Leverage ratio (according to transitional rules, in %)		4.9%

N/M – Not meaningful

<sup>1</sup> Starting with the first quarter of 2022, the leverage ratio is presented as reported. The fully loaded definition has been discontinued in the first quarter 2022 due to immaterial differences.

#### EU LR3 – LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

in € bn. (unless stated otherwise)		Jun 30, 2022	Dec 31, 2021
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures)	921	791
	of which:		
EU-2	Trading book exposures	116	106
EU-3	Banking book exposures	806	685
	of which:		
EU-4	Covered bonds	0	0
EU-5	Exposures treated as sovereigns	230	136
EU-6	Exposures to regional governments, MDB, international organizations and PSE, not treated as sovereigns	1	1
EU-7	Institutions	12	12
EU-8	Secured by mortgages of immovable properties	220	214
EU-9	Retail exposures	35	34
EU-10	Corporates	227	212
EU-11	Exposures in default	10	9
EU-12	Other exposures (e.g. equity, securitizations, and other non-credit obligation assets)	72	66

## Process used to manage the risk of excessive leverage

### Article 451 (1)(d) CRR and EU LRA

The Group Risk Committee (GRC) is mandated to oversee, control and monitor integrated planning of the Group's risk profile and capital capacity. The Group Asset and Liability Committee (ALCO) actively manages leverage exposure capacity within the Risk Appetite Framework via a limit setting process to

- Allocate group leverage exposure capacity to businesses;
- Support business achievement of strategic performance plans;
- Provide a firm basis for achieving the target leverage ratio;
- Incentivize businesses to make appropriate decisions on their portfolios, with consideration to asset maturity and encumbrance amongst others; and
- Maintain risk and leverage exposure discipline.

The governance framework ensures that the leverage exposure capacity is carefully decided to reach the Group's external leverage ratio target set for year end 2022 and avoids an excessive leverage of the bank and its divisions. The resulting leverage exposure limits include all assets including those inflating the Group's balance sheet through asset encumbrance. In

the case of divisions exceeding their agreed limits, charges are imposed on the division for the excess amount. The limit excess charges are calculated in accordance with the Group-wide limit-setting framework for leverage.

## Factors that had an impact on the leverage ratio in the first half of 2022

### Article 451 (1)(e) CRR and EU LRA

Since April 1, 2022 the Group no longer excludes certain central bank exposures from its leverage exposure. This temporary exemption during the COVID-19 pandemic, which was based on Article 429a (1) (n) CRR and the ECB Decision 2021/1074, ended on March 31, 2022. As a consequence, also the applicable minimum leverage ratio no longer has to be increased and is therefore at 3.0%.

As of June 30, 2022, the leverage ratio was 4.3% compared to 4.9% as of December 31, 2021. This takes into account a Tier 1 capital of € 55.2 billion over an applicable exposure measure of € 1,280 billion as of June 30, 2022 (€ 54.7 billion and € 1,125 billion as of December 31, 2021, respectively). Not applying the temporary exclusion of certain central bank exposures amounting to € 99 billion, the leverage exposure was € 1,223 billion as of December 31, 2021, corresponding to a leverage ratio of 4.5%.

Not considering the temporary exclusion of certain central bank balance for December 31, 2021, in the first half of 2022 the leverage exposure increased by € 57 billion to € 1,280 billion, largely driven by the leverage exposure for the asset items not related to derivatives and SFTs which increased by € 33 billion. This reflects the development of the balance sheet loans growth by € 23 billion and the non-derivative trading assets increase by € 4 billion. Pending settlements were unchanged on a net basis despite being € 8 billion higher on a gross basis from seasonally low year-end levels. The remaining asset items increased by € 20 billion, largely related to Held-to-collect debt securities. These increases were partly offset by cash and central bank/interbank balances which decreased by € 14 billion. Off-balance sheet leverage exposures increased by € 11 billion corresponding to higher notional amounts for irrevocable lending commitments. In addition, the leverage exposure related to derivatives increased by € 10 billion. Furthermore, SFT-related items (securities purchased under resale agreements, securities borrowed and receivables from prime brokerage) increased by € 3 billion, in line with the development on the balance sheet.

The increase in leverage exposure in the first half 2022 included a foreign exchange impact of € 37 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.

# Credit risk and credit risk mitigation

## General quantitative information on credit risk

### Residual maturity breakdown of credit exposure

#### Article 442 (g) CRR

Table EU CR1-A provides the net credit exposures by maturities and exposure classes. The exposure amount includes on-balance sheet items, whereby the net exposure value is calculated by deducting credit risk adjustments from its gross carrying amount. The net exposure is split into the below 5 categories based on the residual contractual maturity of the instrument.

- On Demand – where the counterparty has a choice of when the amount is repaid
- Bucketing remaining maturity – 0 to 1 year, 1 to 5 years, and more than 5 years
- No stated maturity – where an exposure has no stated maturity for reasons other than the counterparty having the choice of the repayment date

The breakdown into the exposure classes follows those as defined for the IRBA (i.e., combining the advanced and foundation IRB) as well as for the standardized approach. In the IRB approach, the line item “Central governments and central banks” includes exposures to regional governments or local authorities, public sector entities, multilateral development banks and international organizations. The exposure class “Other items” within the standardized approach includes all exposures not covered in the other categories

#### EU CR1-A – Maturity of exposures

		Jun 30, 2022					
		a	b	c	d	e	f
		Net exposure value					
in € m.		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Central governments and central banks	79,965	13,930	10,377	15,547	0	119,819
2	Institutions	6,183	4,406	1,586	1,233	0	13,408
3	Corporates	17,950	105,664	90,546	33,960	0	248,120
4	Retail	2,228	6,005	19,776	183,769	0	211,778
5	Equity	1,283	953	3	85	0	2,324
5a	Other non-credit obligation asset	3,970	2,703	720	4,282	0	11,675
6	<b>Total IRB approach</b>	<b>111,578</b>	<b>133,661</b>	<b>123,010</b>	<b>238,876</b>	<b>0</b>	<b>607,124</b>
7	Central governments or central banks	95,027	3,357	4,842	7,301	0	110,527
8	Regional governments or local authorities	27	2,225	334	347	0	2,933
9	Public sector entities	85	26	231	258	0	600
10	Multilateral development banks	0	48	426	218	0	692
11	International organizations	0	850	0	70	0	920
12	Institutions	147	24	1	2,666	0	2,838
13	Corporates	2,182	3,340	3,871	1,409	0	10,802
14	Retail	444	188	445	671	0	1,748
15	Secured by mortgages on immovable property	571	495	769	3,231	0	5,066
16	Exposures in default <sup>1</sup>	137	145	196	349	0	827
17	Items associated with particularly high risk	14	3	4	54	0	75
18	Covered bonds	0	0	0	0	0	0
19	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
20	Collective investments undertakings (CIU)	0	0	0	0	0	0
21	Equity exposures	0	0	0	0	0	0
22	Other items	0	7	0	0	0	7
23	<b>Total standardized approach</b>	<b>98,498</b>	<b>10,563</b>	<b>10,922</b>	<b>16,224</b>	<b>0</b>	<b>136,207</b>
24	<b>Total</b>	<b>210,076</b>	<b>144,223</b>	<b>133,932</b>	<b>255,100</b>	<b>0</b>	<b>743,332</b>

		Dec 31, 2021					
		a	b	c	d	e	f
		Net exposure value					
in € m.		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Central governments and central banks	86,010	9,969	11,584	10,653	0	118,215
2	Institutions	5,498	4,048	2,497	1,329	0	13,372
3	Corporates	15,257	104,641	79,889	30,644	0	230,431
4	Retail	2,248	5,543	20,061	180,997	0	208,849
5	Equity	1,336	773	0	69	0	2,178
5a	Other non-credit obligation asset	2,688	4,814	800	2,450	0	10,751
6	<b>Total IRB approach</b>	<b>113,037</b>	<b>129,787</b>	<b>114,831</b>	<b>226,141</b>	<b>0</b>	<b>583,797</b>
7	Central governments or central banks	104,307	5,493	2,115	3,180	0	115,096
8	Regional governments or local authorities	43	1,995	999	532	0	3,569
9	Public sector entities	62	129	69	420	0	681
10	Multilateral development banks	0	73	46	344	0	463
11	International organizations	0	727	0	82	0	808
12	Institutions	216	26	1	2,430	0	2,673
13	Corporates	2,675	6,546	4,262	1,732	0	15,215
14	Retail	429	176	435	643	0	1,683
15	Secured by mortgages on immovable property						
		570	592	983	3,015	0	5,160
16	Exposures in default <sup>1</sup>	157	138	185	597	0	1,077
17	Items associated with particularly high risk	20	1	4	57	0	82
18	Covered bonds	0	0	0	0	0	0
19	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
20	Collective investments undertakings (CIU)	0	0	0	0	0	0
21	Equity exposures	0	0	0	0	0	0
22	Other items	0	2	0	0	0	2
23	<b>Total standardized approach</b>	<b>108,321</b>	<b>15,760</b>	<b>8,915</b>	<b>12,435</b>	<b>0</b>	<b>145,431</b>
24	<b>Total</b>	<b>221,358</b>	<b>145,547</b>	<b>123,747</b>	<b>238,576</b>	<b>0</b>	<b>729,228</b>

<sup>1</sup> In light of EBA guidance (Q&A 2017\_3481) we present the defaulted exposure within the standardized approach as a total in row 16 but also show a breakdown of defaulted exposure and assign it to their respective exposure classes. In order to avoid double counting of exposures, the total exposure of the standardized approach as presented in row 23 does not take into account figures disclosed under row 16.

## Quality of non-performing exposures by geography

The following 6 tables (EU CQ4, EU CQ5, EU CR1, EU CQ3, EU CR2 and EUCQ1) provide information on performing and non-performing exposures.

Relevant exposures are debt instruments (debt securities, loans, advances, demand deposits) as well as off-balance sheet exposures (loan commitments given, financial guarantees given and any other commitments) excluding those exposures held for trading.

The amounts shown are based on the IFRS gross carrying and nominal values according to the regulatory scope of consolidation. The gross carrying amount reflects the exposure value before deduction of accumulated impairment, provisions and accumulated negative changes due to credit risk for non-performing exposures.

An exposure is being classified as non-performing if it meets the non-performing criteria in Article 47a of the CRR and an exposure is classified as defaulted if it meets the definition of default as per Article 178 of the CRR. Exposures subject to impairment under IFRS 9 include debt instruments at amortized cost and fair value through OCI as well as off-balance sheet exposures.

### Article 442 (c+e) CRR

Table EU CQ4 provides information about performing and non-performing exposures broken down by significant countries. For each reporting period Deutsche Bank considers the top 25 countries by exposure to be significant, as it represents more than 90% of the Group's total exposure. Immaterial exposures, with individual exposures being below € 3 billion, are included in "Other countries". The geographical distribution is based on the legal domicile of the counterparty or issuer.

EU CQ4 – Quality of non-performing exposures by geography

		Jun 30, 2022						
		a	b	c	d	e	f	g
		Gross carrying/nominal amount					Provisions on off-balance-sheet commitments and financial guarantees	Accumulated negative changes in fair value due to credit risk on non-performing exposures
		of which non-performing			of which subject to impairment	Accumulated impairment		
	in € m.			of which defaulted	of which subject to impairment	Accumulated impairment		
1	<b>On-balance-sheet exposures<sup>1</sup></b>	751,064	12,802	12,781	664,687	5,057	0	18
2	Australia	5,646	118	118	5,208	36	0	0
3	Austria	2,451	2	2	1,516	6	0	0
4	Belgium	2,581	24	19	2,547	2	0	0
5	Canada	4,234	0	0	2,806	8	0	0
6	Cayman Islands	26,578	194	194	11,949	11	0	0
7	China	5,678	57	57	5,614	13	0	0
8	France	13,974	72	72	7,371	21	0	0
9	Germany	261,791	3,947	3,945	258,708	2,188	0	0
10	Hong Kong	3,909	547	547	3,835	110	0	0
11	India	11,310	459	459	10,571	115	0	0
12	Ireland	10,138	822	822	6,958	111	0	0
13	Italy	36,077	1,438	1,438	35,457	1,047	0	0
14	Japan	12,504	102	102	3,896	9	0	0
15	Jersey	3,316	55	55	3,280	37	0	0
16	Luxembourg	17,205	54	54	15,689	31	0	0
17	Netherlands	12,459	244	240	12,022	88	0	13
18	Poland	6,067	89	89	5,875	45	0	1
19	Singapore	6,579	96	96	6,449	17	0	0
20	Spain	21,393	1,065	1,060	21,348	387	0	0
21	Sweden	2,014	51	51	1,606	3	0	0
22	Switzerland	7,908	429	429	7,680	36	0	0
23	Turkey	6,669	139	139	4,753	13	0	0
24	U.S.	167,076	1,732	1,731	137,371	338	0	0
25	United Kingdom	36,268	74	74	27,897	62	0	0
26	Virgin Islands, British	6,455	106	106	6,455	25	0	0
27	Other countries	60,783	886	883	55,663	296	0	4
28	<b>Off-balance-sheet exposures</b>	304,225	2,719	2,715	0	0	473	0
29	Australia	3,458	27	27	0	0	2	0
30	Austria	1,551	1	1	0	0	1	0
31	Belgium	2,665	20	20	0	0	5	0
32	Canada	2,619	0	0	0	0	3	0
33	Cayman Islands	1,691	12	12	0	0	0	0
34	China	2,469	0	0	0	0	0	0
35	France	8,961	1	1	0	0	4	0
36	Germany	88,857	360	359	0	0	120	0
37	Hong Kong	1,542	58	58	0	0	4	0
38	India	4,079	10	10	0	0	3	0
39	Ireland	3,065	61	61	0	0	16	0
40	Italy	8,340	17	15	0	0	14	0
41	Japan	1,174	0	0	0	0	1	0
42	Jersey	875	7	7	0	0	1	0
43	Luxembourg	7,288	103	103	0	0	6	0
44	Netherlands	11,643	248	248	0	0	35	0
45	Poland	628	0	0	0	0	0	0
46	Singapore	3,279	5	5	0	0	2	0
47	Spain	6,691	75	74	0	0	22	0
48	Sweden	2,095	5	5	0	0	1	0
49	Switzerland	10,635	3	3	0	0	5	0
50	Turkey	337	4	4	0	0	2	0
51	U.S.	102,449	1,421	1,421	0	0	152	0
52	United Kingdom	10,596	29	29	0	0	11	0
53	Virgin Islands, British	386	0	0	0	0	0	0
54	Other countries	16,850	99	99	0	0	32	0
55	<b>Total</b>	<b>1,055,288</b>	<b>15,521</b>	<b>15,496</b>	<b>664,687</b>	<b>5,057</b>	<b>473</b>	<b>18</b>

<sup>1</sup> The on-balance sheet exposure includes only debt securities and loans & advances

		Dec 31, 2021						
		a	b	c	d	e	f	g
		Gross carrying/nominal amount					Provisions on off-balance-sheet commitments and financial guarantees	Accumulated negative changes in fair value due to credit risk on non-performing exposures
		of which non-performing			of which subject to impairment	Accumulated impairment		
in € m.				of which defaulted	of which subject to impairment	Accumulated impairment		
1	<b>On-balance-sheet exposures<sup>1</sup></b>	699,901	13,106	12,768	613,640	4,895	0	19
2	Australia	5,112	149	127	4,568	27	0	0
3	Belgium	2,471	12	12	2,430	2	0	0
4	Canada	2,844	0	0	2,006	2	0	0
5	Cayman Islands	21,254	179	179	9,566	13	0	0
6	China	5,895	46	46	5,810	3	0	0
7	France	20,295	82	82	6,995	22	0	0
8	Germany	251,564	3,986	3,949	248,168	2,234	0	0
9	Hong Kong	4,432	642	642	4,245	81	0	0
10	India	10,131	459	459	9,346	108	0	0
11	Ireland	10,118	846	724	6,485	126	0	0
12	Italy	26,615	1,552	1,546	25,877	1,063	0	0
13	Japan	7,645	142	142	3,865	19	0	0
14	Jersey	2,316	110	110	2,271	37	0	0
15	Luxembourg	16,005	87	87	14,653	21	0	1
16	Netherlands	17,539	265	265	16,968	110	0	13
17	Poland	4,007	95	92	3,930	51	0	1
18	Saudi Arabia	1,612	0	0	1,612	0	0	0
19	Singapore	6,445	98	98	6,325	16	0	0
20	Spain	19,000	1,136	1,123	18,458	366	0	0
21	Sweden	1,872	1	1	1,494	6	0	0
22	Switzerland	14,532	384	384	14,391	29	0	0
23	Turkey	5,556	39	39	4,678	8	0	0
24	U.S.	150,552	1,949	1,816	121,367	298	0	0
25	United Kingdom	30,526	124	123	20,180	56	0	0
26	Virgin Islands, British	7,519	70	70	7,476	33	0	0
27	Other countries	54,042	652	651	50,475	165	0	4
28	<b>Off-balance-sheet exposures</b>	282,745	2,713	2,700	0	0	449	0
29	Australia	2,706	44	44	0	0	1	0
30	Belgium	2,237	0	0	0	0	1	0
31	Canada	2,399	0	0	0	0	3	0
32	Cayman Islands	1,667	0	0	0	0	0	0
33	China	2,353	2	2	0	0	0	0
34	France	9,133	38	38	0	0	5	0
35	Germany	85,212	425	418	0	0	141	0
36	Hong Kong	2,014	58	58	0	0	4	0
37	India	4,197	16	16	0	0	2	0
38	Ireland	3,023	6	6	0	0	2	0
39	Italy	7,699	19	17	0	0	11	0
40	Japan	1,159	0	0	0	0	1	0
41	Jersey	1,121	10	10	0	0	1	0
42	Luxembourg	7,194	49	49	0	0	6	0
43	Netherlands	10,644	227	227	0	0	21	0
44	Poland	574	0	0	0	0	0	0
45	Saudi Arabia	1,923	141	141	0	0	26	0
46	Singapore	2,539	4	4	0	0	3	0
47	Spain	6,510	73	72	0	0	18	0
48	Sweden	1,931	0	0	0	0	1	0
49	Switzerland	9,233	56	56	0	0	3	0
50	Turkey	184	9	9	0	0	0	0
51	U.S.	90,469	1,368	1,368	0	0	163	0
52	United Kingdom	10,372	44	44	0	0	9	0
53	Virgin Islands, British	72	0	0	0	0	0	0
54	Other countries	16,184	124	121	0	0	29	0
55	<b>Total</b>	<b>982,646</b>	<b>15,819</b>	<b>15,468</b>	<b>613,640</b>	<b>4,895</b>	<b>449</b>	<b>19</b>

<sup>1</sup> The on-balance sheet exposure includes only debt securities and loans & advances

## Credit quality of loans and advances to non-financial corporations by industry

### Article 442 (c+e) CRR

Table EU CQ5 provides information about performing and non-performing exposures to non-financial corporations broken down by industry. The industry classification is based on NACE codes. NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) is a European industry standard classification system for classifying business activities.

#### EU CQ5 – Credit quality of loans and advances to non-financial corporations by industry

							Jun 30, 2022
	a	b	c	d	e	f	
	Gross carrying amount					Accumulated negative changes in fair value due to credit risk on non-performing exposures	
	of which non-performing						
in € m.			of which defaulted	of which loans and advances subject to impairment	Accumulated impairment		
1	Agriculture, forestry and fishing	540	29	29	540	10	0
2	Mining and quarrying	2,851	40	40	2,812	25	0
3	Manufacturing	34,501	1,322	1,322	34,493	609	0
4	Electricity, gas, steam and air conditioning supply	5,021	168	168	5,021	68	0
5	Water supply	548	49	49	548	9	0
6	Construction	4,738	381	380	4,735	203	0
7	Wholesale and retail trade	24,760	824	824	24,736	457	0
8	Transport and storage	6,519	267	265	6,493	91	0
9	Accommodation and food service activities	2,127	136	136	2,127	71	0
10	Information and communication	8,521	144	144	8,518	109	0
11	Financial and insurance activities	36,967	1,101	1,101	36,129	384	0
12	Real estate activities	45,734	940	940	45,615	191	0
13	Professional, scientific and technical activities	9,458	197	192	9,458	105	0
14	Administrative and support service activities	9,101	418	418	9,031	119	0
15	Public administration and defense, compulsory social security	1,720	0	0	342	0	0
16	Education	271	5	5	271	3	0
17	Human health services and social work activities	4,460	95	95	4,435	28	0
18	Arts, entertainment and recreation	1,134	31	30	1,134	8	0
19	Other service activities	9,876	237	233	9,861	118	4
20	Total	208,847	6,383	6,370	206,301	2,610	4

							Dec 31, 2021					
							a	b	c	d	e	f
							Gross carrying amount					Accumulated negative changes in fair value due to credit risk on non- performing exposures
							of which non-performing					
in € m.							of which defaulted		of which loans and advances subject to impairment		Accumulated impairment	
1	Agriculture, forestry and fishing	646	30	29	646	12	0					
2	Mining and quarrying	2,958	63	63	2,958	17	0					
3	Manufacturing	37,719	1,112	1,043	37,692	532	0					
4	Electricity, gas, steam and air conditioning supply	4,728	117	117	4,683	45	0					
5	Water supply	484	50	50	484	11	0					
6	Construction	4,408	390	389	4,406	192	0					
7	Wholesale and retail trade	22,728	785	782	22,695	436	0					
8	Transport and storage	5,824	364	364	5,736	75	0					
9	Accommodation and food service activities	2,273	140	140	2,273	70	0					
10	Information and communication	7,513	172	172	7,433	112	0					
11	Financial and insurance activities	32,064	1,208 <sup>1</sup>	1,130 <sup>1</sup>	31,243 <sup>1</sup>	329 <sup>1</sup>	0					
12	Real estate activities	41,219	1,107 <sup>1</sup>	1,107 <sup>1</sup>	41,177 <sup>1</sup>	180 <sup>1</sup>	0					
13	Professional, scientific and technical activities	9,164	235	230	9,164	104	0					
14	Administrative and support service activities	10,786	511	511	10,715	193	0					
15	Public administration and defense, compulsory social security	1,434	0	0	338	0	0					
16	Education	218	5	5	218	3	0					
17	Human health services and social work activities	4,023	106	105	3,998	28	0					
18	Arts, entertainment and recreation	1,076	13	12	1,076	8	0					
19	Other service activities	7,749	205	202	7,744	106 <sup>1</sup>	4					
20	<b>Total</b>	<b>197,015</b>	<b>6,613</b>	<b>6,450</b>	<b>194,680</b>	<b>2,452<sup>1</sup></b>	<b>4</b>					

<sup>1</sup> Comparatives aligned to current presentation

## Performing and non-performing exposures and related provisions

### Article 442 (c) CRR

Table EU CR1 provides information about performing and non-performing exposures broken down by Supervisory Reporting counterparty classes.

EU CR1 - Performing and non-performing exposures and related provisions

Jun 30, 2022

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Gross carrying amount/nominal amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							
	Performing exposures			Non-performing exposures			Performing exposures - accumulated impairment and provisions			Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			Collaterals and financial guarantees received on		
	Total	of which: stage 1	of which: stage 2	Total	of which: stage 2	of which: stage 3	Total	of which: stage 1	of which: stage 2	Total	of which: stage 2	of which: stage 3	Accumulated partial write-off	non-performing exposures	non-performing exposures
in € m.															
<b>Cash balances at central banks and other demand deposits</b>	<b>182,554</b>	<b>181,763</b>	<b>791</b>	<b>81</b>	<b>0</b>	<b>81</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>0</b>
<b>Loans and advances</b>															
Central banks	6,646	2,762	47	0	0	0	0	0	0	0	0	0	0	5,571	0
General governments	19,409	15,743	1,683	98	0	98	11	5	6	5	0	5	0	4,929	91
Credit institutions	50,753	37,337	1,278	33	0	33	35	34	2	0	0	0	0	15,328	0
Other financial corporations	191,843	128,570	3,749	1,323	8	1,027	81	65	15	67	0	47	2	105,957	382
Non-financial corporations	202,463	177,684	22,391	6,383	19	5,617	477	218	259	2,137	1	2,027	115	100,353	2,488
of which: SMEs	30,462	24,987	5,447	1,391	8	1,219	79	22	57	573	0	567	3	21,160	527
Households	210,448	193,940	16,508	4,476	162	4,309	552	212	341	1,563	17	1,545	14	149,299	1,960
<b>Total Loans and advances</b>	<b>681,562</b>	<b>556,035</b>	<b>45,657</b>	<b>12,314</b>	<b>189</b>	<b>11,084</b>	<b>1,156</b>	<b>533</b>	<b>623</b>	<b>3,773</b>	<b>17</b>	<b>3,624</b>	<b>131</b>	<b>381,437</b>	<b>4,921</b>
<b>Debt securities</b>															
Central banks	835	835	0	0	0	0	0	0	0	0	0	0	0	0	0
General governments	43,160	41,114	98	19	0	19	23	23	1	9	0	9	0	0	0
Credit institutions	2,022	2,010	0	0	0	0	0	0	0	0	0	0	0	0	0
Other financial corporations	6,103	4,654	227	26	0	0	14	8	6	13	0	0	0	163	0
Non-financial corporations	4,579	1,519	68	443	0	366	22	21	1	65	0	65	0	37	260
<b>Total Debt securities</b>	<b>56,700</b>	<b>50,132</b>	<b>392</b>	<b>488</b>	<b>0</b>	<b>386</b>	<b>59</b>	<b>52</b>	<b>7</b>	<b>87</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>200</b>	<b>260</b>
<b>Off-balance sheet exposures</b>															
Central banks	122	120	2	0	0	0	1	1	0	0	0	0	0	17	0
General governments	2,942	2,586	356	2	0	2	2	1	1	0	0	0	0	139	0
Credit institutions	7,856	7,795	61	1	0	1	4	4	0	0	0	0	0	680	0
Other financial corporations	44,304	43,005	1,299	245	0	244	20	16	4	21	0	21	0	9,391	0
Non-financial corporations	212,677	198,063	14,613	2,376	0	2,351	209	127	83	179	0	179	0	21,796	447
Households	33,604	32,341	1,263	96	2	94	25	8	17	10	0	10	0	9,140	25
<b>Total Off-balance sheet exposures</b>	<b>301,505</b>	<b>283,910</b>	<b>17,595</b>	<b>2,719</b>	<b>3</b>	<b>2,692</b>	<b>262</b>	<b>157</b>	<b>105</b>	<b>211</b>	<b>0</b>	<b>211</b>	<b>0</b>	<b>41,164</b>	<b>472</b>
<b>Total<sup>1</sup></b>	<b>1,222,321</b>	<b>1,071,840</b>	<b>64,435</b>	<b>15,602</b>	<b>191</b>	<b>14,242</b>	<b>1,491</b>	<b>751</b>	<b>740</b>	<b>4,071</b>	<b>17</b>	<b>3,910</b>	<b>131</b>	<b>422,913</b>	<b>5,653</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

Dec 31, 2021

in € m.	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Gross carrying amount/nominal amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							
	Performing exposures			Non-performing exposures			Performing exposures - accumulated impairment and provisions			Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			Collaterals and financial guarantees received on		
	Total	of which: stage 1	of which: stage 2	Total	of which: stage 2	of which: stage 3	Total	of which: stage 1	of which: stage 2	Total	of which: stage 2	of which: stage 3	Accumulated partial write-off	performing exposures	non-performing exposures
<b>Cash balances at central banks and other demand deposits</b>	<b>197,089</b>	<b>196,797</b>	<b>292</b>	<b>27</b>	<b>0</b>	<b>27</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Loans and advances</b>															
Central banks	6,012	2,376	44	0	0	0	0	0	0	0	0	0	0	5,439	0
General governments	14,299	11,509	1,918	49	0	49	13	2	11	5	0	5	0	3,617	40
Credit institutions	48,710	35,849	670	9	0	9	25	25	0	0	0	0	0	17,025	0
Other financial corporations	175,825	111,911	3,417	1,302	0	967	66	48	18	67	0	49	6	100,826	440
Non-financial corporations	190,402	168,843	19,297	6,613	24	5,847	350	154	195	2,030	1	1,926	126	91,332	2,685
of which: SMEs	28,516	24,321	4,182	1,410	8	1,335	66	19	46	555	0	554	18	19,550	467
Households	207,290	192,675	14,614	4,649	160	4,474	521	224	298	1,755	16	1,737	22	145,658	1,978
<b>Total Loans and advances</b>	<b>642,538</b>	<b>523,163</b>	<b>39,958</b>	<b>12,621</b>	<b>184</b>	<b>11,345</b>	<b>975</b>	<b>453</b>	<b>522</b>	<b>3,858</b>	<b>17</b>	<b>3,718</b>	<b>153</b>	<b>363,897</b>	<b>5,144</b>
<b>Debt securities</b>															
Central banks	672	672	0	0	0	0	0	0	0	0	0	0	0	0	0
General governments	30,539	28,643	73	0	0	0	8	7	0	0	0	0	0	0	0
Credit institutions	2,468	2,363	0	0	0	0	1	1	0	0	0	0	0	0	0
Other financial corporations	6,216	4,486	211	39	0	25	6	2	4	13	0	0	0	162	0
Non-financial corporations	4,363	1,224	3	446	0	378	10	10	0	45	0	45	0	37	62
<b>Total Debt securities</b>	<b>44,258</b>	<b>37,387</b>	<b>288</b>	<b>485</b>	<b>0</b>	<b>403</b>	<b>24</b>	<b>19</b>	<b>4</b>	<b>58</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>200</b>	<b>62</b>
<b>Off-balance sheet exposures</b>															
Central banks	32	27	5	72	0	72	0	0	0	0	0	0	0	11	5
General governments	2,778	2,282	496	10	0	10	2	1	2	0	0	0	0	168	6
Credit institutions	7,858	7,661	197	0	0	0	1	1	0	0	0	0	0	376	0
Other financial corporations	40,053	38,846	1,207	205	0	205	15	11	5	8	0	8	0	6,883	31
Non-financial corporations	198,183	186,837	11,346	2,346	6	2,329	165	85	80	202	0	202	0	19,914	405
Households	31,128	29,965	1,162	80	2	78	40	16	24	16	0	15	0	7,552	36
<b>Total Off-balance sheet exposures</b>	<b>280,032</b>	<b>265,618</b>	<b>14,413</b>	<b>2,713</b>	<b>8</b>	<b>2,694</b>	<b>224</b>	<b>113</b>	<b>110</b>	<b>225</b>	<b>0</b>	<b>225</b>	<b>0</b>	<b>34,903</b>	<b>483</b>
<b>Total<sup>1</sup></b>	<b>1,163,916</b>	<b>1,022,966</b>	<b>54,952</b>	<b>15,847</b>	<b>192</b>	<b>14,470</b>	<b>1,227</b>	<b>590</b>	<b>637</b>	<b>4,141</b>	<b>17</b>	<b>3,988</b>	<b>153</b>	<b>398,999</b>	<b>5,689</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

## Credit quality of performing and non-performing exposures by past due days

### **Article 442 (c-d) CRR**

Table EU CQ4 provides information about performing and non-performing exposures by past due days broken down by Supervisory Reporting counterparty classes.

EU CQ3 – Credit quality of performing and non-performing exposures by past due days

	Jun 30, 2022											
	a	b	c	d	e	f	g	h	i	j	k	l
	Performing exposures					Non-performing exposure						
in € m.	Total	Not past due or past due <= 30 days	Past due >30d and <=90d	Total	Unlikely to pay that are not past due or past due <= 90d	Past due >90d and <=180d	Past due >180d and <=1yr	Past due >1yr and <=2yrs	Past due >2 and <=5 yrs	Past due >5 and <=7yrs	Past due >7 years	of which defaulted
Cash balances at central banks and other demand deposits	182,554	182,026	527,5622	80,5438	80,5438	0	0	0	0	0	0	80,5438
<b>Loans and advances</b>												
Central banks	6,646	6,646	0	0	0	0	0	0	0	0	0	0
General governments	19,409	19,409	0	98	97	0	0	0	1	0	0	98
Credit institutions	50,753	50,753	0	33	33	0	0	0	0	0	0	33
Other financial corporations	191,843	191,700	143	1,323	1,216	3	3	8	93	0	1	1,316
Non-financial corporations	202,463	202,250	213	6,383	4,348	399	256	360	509	159	353	6,370
of which:												
SME's	30,462	30,434	28	1,391	781	41	48	117	200	86	118	1,383
Households	210,448	209,998	450	4,476	2,326	311	440	535	550	113	201	4,476
<b>Total Loans and advances</b>	<b>681,562</b>	<b>680,756</b>	<b>805</b>	<b>12,314</b>	<b>8,020</b>	<b>713</b>	<b>699</b>	<b>902</b>	<b>1,152</b>	<b>272</b>	<b>555</b>	<b>12,293</b>
<b>Debt securities</b>												
Central banks	835	835	0	0	0	0	0	0	0	0	0	0
General governments	43,160	43,160	0	19	19	0	0	0	0	0	0	19
Credit institutions	2,022	2,022	0	0	0	0	0	0	0	0	0	0
Other financial corporations	6,103	6,103	0	26	26	0	0	0	0	0	0	26
Non-financial corporations	4,579	4,538	41	443	250	193	0	0	0	0	0	443
<b>Total Debt securities</b>	<b>56,700</b>	<b>56,658</b>	<b>41</b>	<b>488</b>	<b>295</b>	<b>193</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>488</b>
<b>Off-balance sheet exposures</b>												
Central banks	122	0	0	0	0	0	0	0	0	0	0	0
General governments	2,942	0	0	2	0	0	0	0	0	0	0	2
Credit institutions	7,856	0	0	1	0	0	0	0	0	0	0	1
Other financial corporations	44,304	0	0	245	0	0	0	0	0	0	0	245
Non-financial corporations	212,677	0	0	2,376	0	0	0	0	0	0	0	2,371
Households	33,604	0	0	96	0	0	0	0	0	0	0	96
<b>Total Off-balance sheet exposures</b>	<b>301,505</b>	<b>0</b>	<b>0</b>	<b>2,719</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,715</b>
<b>Total<sup>1</sup></b>	<b>1,222,321</b>	<b>919,441</b>	<b>1,374</b>	<b>15,602</b>	<b>8,396</b>	<b>906</b>	<b>699</b>	<b>902</b>	<b>1,152</b>	<b>272</b>	<b>555</b>	<b>15,576</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

Dec 31, 2021												
	a	b	c	d	e	f	g	h	i	j	k	l
	Performing exposures										Non-performing exposure	
in € m.	Total	Not past due or past due <= 30 days	Past due >30d and <=90d	Total	Unlikely to pay that are not past due or past due <= 90d	Past due >90d and <=180d	Past due >180d and <=1yr	Past due >1yr and <=2yrs	Past due >2 and <=5 yrs	Past due >5 and <=7yrs	Past due >7 years	of which defaulted
Cash balances at central banks and other demand deposits	197,089	197,089	0	27.4371	27.4371	0	0	0	0	0	0	27.4371
<b>Loans and advances</b>												
Central banks	6,012	6,012	0	0	0	0	0	0	0	0	0	0
General governments	14,299	14,299	0	49	47	0	0	0	1	0	1	49
Credit institutions	48,710	48,710	0	9	9	0	0	0	0	0	0	9
Other financial corporations	175,825	175,741	84	1,302	1,127	2	61	8	102	1	1	1,302
Non-financial corporations	190,402	190,264	138	6,613	4,814	239	362	246	440	166	345	6,450
of which:												
SME's	28,516	28,498	18	1,410	846	33	43	91	203	85	109	1,339
Households	207,290	206,930	360	4,649	2,374	312	503	467	646	113	235	4,474
<b>Total Loans and advances</b>	<b>642,538</b>	<b>641,956</b>	<b>582</b>	<b>12,621</b>	<b>8,371</b>	<b>553</b>	<b>926</b>	<b>721</b>	<b>1,189</b>	<b>280</b>	<b>582</b>	<b>12,283</b>
<b>Debt securities</b>												
Central banks	672	672	0	0	0	0	0	0	0	0	0	0
General governments	30,539	30,539	0	0	0	0	0	0	0	0	0	0
Credit institutions	2,468	2,468	0	0	0	0	0	0	0	0	0	0
Other financial corporations	6,216	6,216	0	39	39	0	0	0	0	0	0	39
Non-financial corporations	4,363	4,363	0	446	446	0	0	0	0	0	0	446
<b>Total Debt securities</b>	<b>44,258</b>	<b>44,258</b>	<b>0</b>	<b>485</b>	<b>485</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>485</b>
<b>Off-balance sheet exposures</b>												
Central banks	32	0	0	72	0	0	0	0	0	0	0	72
General governments	2,778	0	0	10	0	0	0	0	0	0	0	6
Credit institutions	7,858	0	0	0	0	0	0	0	0	0	0	0
Other financial corporations	40,053	0	0	205	0	0	0	0	0	0	0	205
Non-financial corporations	198,183	0	0	2,346	0	0	0	0	0	0	0	2,339
Households	31,128	0	0	80	0	0	0	0	0	0	0	78
<b>Total Off-balance sheet exposures</b>	<b>280,032</b>	<b>0</b>	<b>0</b>	<b>2,713</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,700</b>
<b>Total<sup>1</sup></b>	<b>1,163,916</b>	<b>883,303</b>	<b>582</b>	<b>15,847</b>	<b>8,883</b>	<b>553</b>	<b>926</b>	<b>721</b>	<b>1,189</b>	<b>280</b>	<b>582</b>	<b>15,495</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

## Development of non-performing loans and advances

### Article 442 (f) CRR

#### EU CR2 – Changes in the stock of non-performing loans and advances

	Jun 30, 2022	Dec 31, 2021
	a	a
	Gross carrying amount	Gross carrying amount
in € m.		
1 Initial stock of non-performing loans and advances	12,621	12,656
2 Inflows to non-performing portfolios	2,629	2,742
3 Outflows from non-performing portfolios	(2,937)	(2,777)
4 Outflows due to write-offs	(439)	(340)
5 Outflow due to other situations <sup>1</sup>	(2,498)	(2,437)
6 Final stock of non-performing loans and advances	12,314	12,621

<sup>1</sup> Inflows and outflows include restructurings and modifications.

## Credit quality of forborne exposures

### Article 442 (c) CRR

Exposures are being classified as forborne according to the criteria in Article 47b of the CRR. Of the total forborne exposures of € 15 billion included in the table below, € 5.5 billion is related to COVID-19 related forbearance measures, of which more than 87% is performing.

#### EU CQ1 – Credit quality of forborne exposures

	Jun 30, 2022							
	a	b	c	d	e	f	g	h
	Gross carrying amount of forborne exposures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
	Performing forborne	Non-performing forborne	Non-performing forborne, of which defaulted	Non-performing forborne, of which impaired	on performing forborne exposures	on non-performing forborne exposures	Total	of which, non-performing exposures with forbearance measures
in € m.								
Cash balances at central banks and other demand deposits	0	0	0	0	0	0	0	0
Loans and advances	8,009	4,672	4,652	4,525	75	1,151	8,031	2,351
Central banks	0	0	0	0	0	0	0	0
General governments	139	2	2	2	0	1	132	0
Credit institutions	0	9	9	9	0	0	0	0
Other financial corporations	669	337	337	337	3	16	703	204
Non-financial corporations	5,823	2,784	2,781	2,654	47	774	5,412	1,240
Households	1,378	1,539	1,523	1,523	26	359	1,784	907
Debt securities	96	240	240	193	0	0	193	193
Loan commitments given	1,785	247	247	247	14	24	159	20
<b>Total<sup>1</sup></b>	<b>9,890</b>	<b>5,158</b>	<b>5,139</b>	<b>4,965</b>	<b>89</b>	<b>1,175</b>	<b>8,382</b>	<b>2,564</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

	Dec 31, 2021							
	a	b	c	d	e	f	g	h
	Gross carrying amount of forborne exposures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
in € m.	Performing forborne	Non-performing forborne	Non-performing forborne, of which defaulted	Non-performing forborne, of which impaired	on performing forborne exposures	on non-performing forborne exposures	Total	of which, non-performing exposures with forbearance measures
<b>Cash balances at central banks and other demand deposits</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Loans and advances	8,781	4,847	4,793	4,788	84	1,255	8,672	2,440
Central banks	0	0	0	0	0	0	0	0
General governments	129	24	24	24	0	2	143	22
Credit institutions	0	9	9	9	0	0	0	0
Other financial corporations	865	369	369	369	5	24	909	236
Non-financial corporations	6,463	2,869	2,833	2,828	52	844	5,956	1,296
Households	1,323	1,576	1,558	1,558	28	385	1,664	886
Debt securities	395	256	256	213	0	0	16	0
Loan commitments given	2,776	341	331	331	15	35	451	17
<b>Total</b>	<b>11,952</b>	<b>5,443</b>	<b>5,380</b>	<b>5,332</b>	<b>99</b>	<b>1,290</b>	<b>9,140</b>	<b>2,457</b>

<sup>1</sup> Total including Cash balances at central banks and other demand deposits.

## Minimum loss coverage for non-performing exposure

### Minimum loss coverage for non-performing exposure under Pillar 1

On April 25, 2019 the European Commission published the amendment on Regulation (EU) 2019/630 on minimum loss coverage on non-performing exposure. This regulation established a prudential treatment for NPEs arising from loans originated from April 26, 2019 onwards ("CRR - NPE Flow") and represents a Pillar 1 measure which is legally binding and applies to all banks established in the EU.

The CRR regulation on minimum loss coverage for non-performing exposure does not focus on NPEs arising from loans originated before April 26, 2019 ("CRR - NPE Stock").

The following table provides an overview on Deutsche Bank's CRR NPE Flow as of June 30, 2022 and December 31, 2021.

### CRR – NPE Flow

	Jun 30, 2022			
	Time passed since exposures classified as non-performing			Total
in € m.	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	2,925	733	0	3,658
Exposure value <sup>1</sup>	3,344	882	0	4,225
Total minimum coverage requirement	0	243	0	243
Total provisions and adjustments or deductions (uncapped)	934	270	0	1,204
Total provisions and adjustments or deductions (capped)	0	168	0	168
Applicable amount of insufficient coverage	0	74	0	74

<sup>1</sup> Exposure value in accordance with Article 47c CRR

	Dec 31, 2021			
	Time passed since exposures classified as non-performing			Total
in € m.	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	2,556	280	0	2,836
Exposure value <sup>1</sup>	2,888	372	0	3,260
Total minimum coverage requirement	0	105	0	105
Total provisions and adjustments or deductions (uncapped)	784	192	0	975
Total provisions and adjustments or deductions (capped)	0	74	0	74
Applicable amount of insufficient coverage	0	31	0	31

<sup>1</sup> Exposure value in accordance with Article 47c CRR

## Minimum loss coverage for non-performing exposure under Pillar 2

### Non-performing exposures arising from clients defaulting after April 1, 2018

In March 2018 ECB published its “Addendum to the ECB Guidance to banks on non-performing loans: supervisory expectations for prudential provisioning of non-performing exposures”. The guidance focus on NPEs arising from clients defaulting after April 1, 2018 (“ECB – NPE Flow”). Like for the CRR – NPE Flow a time dependent minimum loss coverage is required. The ECB guidance represents a Pillar 2 measure and its application is subject to a supervisory dialog between the bank and the ECB in context of the annual SREP process.

The ECB – NPE Flow and the CRR – NPE Flow differ in the following three key aspects:

- Timing of application: Exposures defaulting after April 1, 2018 are in scope of the ECB – NPE Flow, but are only in scope of the CRR – NPE Flow if loans are originated after April 26, 2019.
- Treatment of loans in the trading book / traded assets: CRR – NPE Flow excludes all loans in the regulatory trading book whereas the ECB – NPE Flow excludes traded assets in accordance with the accounting classifications.
- Treatment of Forbearance Measuring CRR – NPE Flow considers a one year freeze period of minimum loss coverage for exposures where a forbearance measure has been granted. This freeze period for loans with forbearance measure does not exist under the ECB – NPE Flow.

As long as the aforementioned differences exist, Deutsche Bank will report in the following table all NPE exposures under the ECB – NPE Flow, which are not covered in the CRR – NPE Flow.

The following table provides an overview on Deutsche Bank’s ECB – NPE Flow as of June 30, 2022 and December 31, 2021, not reflected within the CRR – NPE Flow:

### ECB – NPE Flow

in € m.	Jun 30, 2022			
	Time passed since exposures classified as non-performing			Total
	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	5,796	3,546 <sup>0</sup>	0	9,342
Exposure value <sup>1</sup>	5,864	3,779 <sup>0</sup>	0	9,643
Total minimum coverage requirement	0	1,451 <sup>0</sup>	0	1,451
Total provisions and adjustments or deductions (uncapped)	1,244	1,434 <sup>0</sup>	0	2,678
Total provisions and adjustments or deductions (capped)	0	994 <sup>0</sup>	0	994
Applicable amount of insufficient coverage	0	457 <sup>0</sup>	0	457

<sup>1</sup> Exposure value in accordance with Article 47c CRR

in € m.	Dec 31, 2021			
	Time passed since exposures classified as non-performing			Total
	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	8,064	2,211 <sup>0</sup>	0	10,276
Exposure value <sup>1</sup>	8,305	2,517 <sup>0</sup>	0	10,822
Total minimum coverage requirement	0	1,018 <sup>0</sup>	0	1,018 <sup>2</sup>
Total provisions and adjustments or deductions (uncapped)	1,660	1,086 <sup>0</sup>	0	2,747
Total provisions and adjustments or deductions (capped)	0	729 <sup>0</sup>	0	729 <sup>2</sup>
Applicable amount of insufficient coverage	0	289 <sup>0</sup>	0	289

<sup>1</sup> Exposure value in accordance with Article 47c CRR

<sup>2</sup> Prior year’s comparatives aligned to presentation in the current year

### Non-performing exposures arising from clients defaulting before April 1, 2018

ECB announced on July 11, 2018 that legacy stock of NPEs would be addressed by discussing bank-specific supervisory expectations for the provisioning of NPEs.

In August 2019, the ECB published its “Communication on supervisory coverage expectations for NPEs” introducing a minimum loss coverage expectation for NPEs arising from clients defaulting before April 1, 2018 (ECB – NPE Stock).

In a first step, banks were allocated to three comparable groups on the basis of the bank’s net NPL ratios at the end of 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 100% minimum loss coverage by year end 2024 for secured loans and by year end 2023 for unsecured loans.

The following table provides an overview on Deutsche Bank's ECB - NPE Stock as of June 30, 2022 and December 31, 2021.

#### ECB – NPE Stock

in € m.	Jun 30, 2022			
	Time passed since exposures classified as non-performing			Total
	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	0	1,993	531	2,523
Exposure value <sup>1</sup>	0	4,154	6,658	10,812
Total minimum coverage requirement	0	2,717	5,316	8,034
Total provisions and adjustments or deductions (uncapped)	0	2,933	6,468	9,401
Total provisions and adjustments or deductions (capped)	0	2,476	5,236	7,712
Applicable amount of insufficient coverage	0	241	80	322

<sup>1</sup> Exposure value in accordance with Article 47c CRR

in € m.	Dec 31, 2021			
	Time passed since exposures classified as non-performing			Total
	up to 2yrs	>2 and <=9yrs	>9yrs	
Non-Performing Exposure	0	2,067	669	2,736
Exposure value <sup>1</sup>	0	4,943	6,786	11,729
Total minimum coverage requirement	0	3,350	5,418	8,769
Total provisions and adjustments or deductions (uncapped)	0	3,555	6,539	10,094
Total provisions and adjustments or deductions (capped)	0	3,031	5,309	8,340
Applicable amount of insufficient coverage	0	319	109	428

<sup>1</sup> Exposure value in accordance with Article 47c CRR

The shortfall between the minimum loss coverage requirements for non-performing exposure for ECB – NPE Flow and ECB - NPE Stock and the risk reserves recorded in line with IFRS 9 for defaulted (Stage 3) assets amounted to € 853 million as of June 30, 2022 versus € 748 million as of December 31, 2021 and was deducted from CET 1. This additional CET 1 charge can be considered as additional loss reserve and led to a € 420 million RWA relief in June 30, 2022 and € 384 million in December 31, 2021.

#### Reconciliation of non-performing exposure

The following table reconciles the non-performing exposure reported in template EU CR1 into the minimum loss coverage framework.

#### Reconciliation of non-performing exposure

in € m.	Jun 30, 2022	
	Exposure	Provisions
Total Non-Performing Exposure and related provisions	15,602	4,071
of which:		
CRR – NPE Flow	3,658	860
ECB – NPE Flow	9,421	2,074
ECB – NPE Stock	2,523	1,137

<sup>1</sup> Treatment of loans in the Trading Book / Traded Assets: CRR – NPE Flow excludes all loans in the regulatory Trading Book whereas the ECB – NPE Flow excludes Traded Assets in accordance with the accounting classifications

in € m.	Dec 31, 2021	
	Exposure	Provisions
Total Non-Performing Exposure and related provisions	15,847	4,141
of which:		
CRR – NPE Flow	2,836	678
ECB – NPE Flow	10,276	2,132
ECB – NPE Stock	2,736	1,331

<sup>1</sup> Treatment of loans in the Trading Book / Traded Assets: CRR – NPE Flow excludes all loans in the regulatory Trading Book whereas the ECB – NPE Flow excludes Traded Assets in accordance with the accounting classifications

## Collateral obtained by taking possession

#### Article 442 (c) CRR

Table EU CQ7 provides information about the collateral that has been obtained at the reporting date. Collateral obtained by taking possession includes assets that were not pledged by the debtor as collateral but obtained in exchange for the cancellation of debt.

The value at initial recognition reflects the gross carrying amount at the point in time of the initial recognition in the Group's balance sheet, while accumulated negative changes reflect the difference between the value at initial recognition and the carrying amount at the reporting date.

#### EU CQ7 – Collateral obtained by taking possession and execution processes

		Jun 30, 2022		Dec 31, 2021	
		a	b	a	b
		Collateral obtained by taking possession		Collateral obtained by taking possession	
		Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes
in € m.					
1	Property, plant and equipment (PP&E)	0	0	0	0
2	Other than PP&E	44	33	46	35
3	Residential immovable property	38	28	39	30
4	Commercial immovable property	6	5	7	5
5	Movable property (auto, shipping, etc.)	0	0	0	0
6	Equity and debt instruments	0	0	0	0
7	Other	0	0	0	0
8	<b>Total</b>	<b>44</b>	<b>33</b>	<b>46</b>	<b>35</b>

## Exposures subject to measures applied in response to the COVID-19 pandemic

In 2020, EBA issued a “Statement on the application of the prudential framework regarding Default, Forbearance and IFRS 9 in light of COVID-19 measures”, along with guidance on legislative and non-legislative moratoria. On December 2, 2020 after closely monitoring the developments of the COVID-19 pandemic and, in particular, the impact of the second COVID-19 wave and the related government restrictions taken in many EU countries, EBA reactivated its guidelines on legislative and non-legislative moratoria which applied until March 31, 2021.

COVID-19 template 1 provides details on the small amount of loans and advances that continue to be subject to EBA-compliant moratoria (legislative and non-legislative).



Dec 31, 2021

in € m.	Dec 31, 2021														Gross carrying amount Inflows to non-performing exposures	
	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk								
	Performing				Non-performing			Performing				Non-performing				
	Total	Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	Total	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Total	Total	Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	Total	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Total		
1	Loans and advances subject to moratorium	23	6	8	2	0	1	25	(0)	(0)	(0)	(0)	(0)	(0)	(1)	0
2	of which: Households	12	6	8	2	0	1	14	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
3	of which: Collateralized by residential immovable property	12	6	8	2	0	1	14	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
4	of which: Non-financial corporations	10	0	0	0	0	0	11	(0)	0	0	0	0	0	(0)	0
5	of which: Small and Medium-sized Enterprises	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	of which: Collateralized by commercial immovable property	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<sup>1</sup> Template 1 includes only loans and advances subject to active legislative and non-legislative moratoria (Dec 31,2020 comparatives exclude extensions of Italian moratoria).

The below COVID-19 template 2, provides details on loans and advances that met the requirements for EBA-compliant moratoria (legislative and non-legislative). As can be seen in the table, almost all of the moratoria have expired and as of June 30, 2022, only € 5 million of moratoria are still active. More than 95% of these clients who took advantage of moratoria have now resumed payments.

COVID-19 template 2: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria

		Jun 30, 2022									
		a	b	c	d	e	f	g	h	i	
		Number of obligors (in 1,000s)	Gross carrying amount							Residual maturity of moratoria	
in € m. (unless stated otherwise)			Total	Of which: legislative moratoria	Of which: expired	<= 3 months	> 3 and <= 6 months	> 6 and <= 9 months	> 9 and <= 12 months	> 1 yr	
1	Loans and advances for which moratorium was offered	76	7,027	–	–	–	–	–	–	–	
2	Loans and advances subject to moratorium (granted)	74	6,681	5,731	6,676	2	1	1	1	1	
3	of which: Households	–	4,650	3,943	4,644	2	1	1	1	1	
4	of which: Collateralized by residential immovable property	–	3,916	3,411	3,911	1	1	1	1	1	
5	of which: Non-financial corporations	–	2,005	1,769	2,005	–	0	–	–	–	
6	of which: Small and Medium-sized Enterprises	–	923	763	923	–	0	–	–	–	
7	of which: Collateralized by commercial immovable property	–	236	131	236	–	0	–	–	–	

		Dec 31, 2021									
		a	b	c	d	e	f	g	h	i	
		Number of obligors (in 1,000s)	Gross carrying amount							Residual maturity of moratoria	
in € m. (unless stated otherwise)			Total	Of which: legislative moratoria	Of which: expired	<= 3 months	> 3 and <= 6 months	> 6 and <= 9 months	> 9 and <= 12 months	> 1 yr	
1	Loans and advances for which moratorium was offered	86	7,714	–	–	–	–	–	–	–	
2	Loans and advances subject to moratorium (granted)	84	7,368	6,304	7,343	9	14	1	1	1	
3	of which: Households	–	5,055	4,268	5,041	8	3	1	1	1	
4	of which: Collateralized by residential immovable property	–	4,148	3,618	4,134	8	3	1	1	1	
5	of which: Non-financial corporations	–	2,283	2,016	2,272	0	10	–	–	–	
6	of which: Small and Medium-sized Enterprises	–	1,069	896	1,069	–	–	–	–	–	
7	of which: Collateralized by commercial immovable property	–	252	140	252	–	–	–	–	–	

COVID-19 template 3 provides details on outstanding loans and advances as referred to in paragraph 15 of EBA GL 2020 07 that are subject to public guarantee schemes that Member States introduced in response to the COVID-19 pandemic. In the case of refinancing of previous debt with a new loan or of repackaging of several debts into a new loan, the new loan recognized in the financial statements is reported in this template provided that it is covered by a public guarantee scheme related to the COVID-19 pandemic. The template provides a breakdown of the gross carrying amount, the forbearance measures and the amount of public guarantees related to loans and advances and the inflows to non-performing exposure.

The Group has originated approximately € 4.3 billion of loans under the public guarantee scheme until June 2022 and in most cases the terms of the new originated loans and advances are between two and five years. Approximately € 1.9 billion of loans were granted in Germany via programs sponsored by Kreditanstalt für Wiederaufbau (KfW), of which, € 0.3 billion were derecognized as the terms of the loan and guarantee met the criteria for derecognition under IFRS 9, and € 1.9 billion were originated in Spain and € 0.5 billion in Luxembourg. As of June 30, 2022, 97% of the loans that were granted public guarantees continue to make regular repayments.

**COVID-19 template 3: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 pandemic (excluding derecognized loans)**

		Jun 30, 2022			
		a	b	c	d
		Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
in € m.		Total	of which: forborne	Public guarantees received	Inflows to non-performing exposures
1	Newly originated loans and advances subject to public guarantee schemes	4,011	169	3,426	17
2	of which: Households	37	–	–	0
3	of which: Collateralized by residential immovable property	0	–	–	0
4	of which: Non-financial corporations	3,964	169	3,385	17
5	of which: Small and Medium-sized Enterprises	2,332	–	–	11
6	of which: Collateralized by commercial immovable property	0	–	–	0

		Dec 31, 2021			
		a	b	c	d
		Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
in € m.		Total	of which: forborne	Public guarantees received	Inflows to non-performing exposures
1	Newly originated loans and advances subject to public guarantee schemes	3,952	132	3,416	28
2	of which: Households	38	–	–	0
3	of which: Collateralized by residential immovable property	0	–	–	0
4	of which: Non-financial corporations	3,901	132	3,371	27
5	of which: Small and Medium-sized Enterprises	2,220	–	–	0
6	of which: Collateralized by commercial immovable property	0	–	–	0

## General quantitative information on credit risk mitigation

### Overview of credit risk mitigation techniques

#### Article 453 (f) CRR

The table EU CR3 below shows a breakdown of unsecured and secured credit risk exposures and credit risk exposures secured by various credit risk mitigants for all loans and debt securities including the carrying amounts of the total population which are in default. Exposures unsecured (column a) represent the carrying amount of credit risk exposures (net of credit risk adjustments) that do not benefit from a credit risk mitigation technique, regardless of whether this technique is recognized in the CRR. Exposures secured (column b) represent the carrying amount of exposures that have at least one credit risk mitigation (CRM) mechanism (collateral, financial guarantees, credit derivatives) associated with them. Exposure secured by various credit risk mitigants (column c-e) are the carrying amount of exposures (net of credit risk adjustments) partly or totally secured by collateral, financial guarantees and credit derivatives, whereby only the secured portion of the overall exposure is presented. The allocation of the carrying amount of multi-secured exposures to their different CRM mechanisms is made by

order of priority, starting with the CRM mechanism expected to be called first in the event of a loss, and within the limits of the carrying amount primarily observed of the secured exposures. Moreover, no overcollateralization is considered.

### EU CR3 – CRM techniques – Overview

		Jun 30, 2022				
		a	b	c	d	e
in € m.		Exposures unsecured: Carrying amount	Exposures secured: Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total Loans and advances	485,210	386,358	348,849	37,509	0
2	Total Debt securities	56,581	460	460	0	0
<b>3</b>	<b>Total exposures</b>	<b>541,791</b>	<b>386,818</b>	<b>349,309</b>	<b>37,509</b>	<b>0</b>
4	of which: non-performing	3,762	5,181	4,515	665	0
5	of which: defaulted	3,740	5,070	4,450	619	0

		Dec 31, 2021				
		a	b	c	d	e
in € m.		Exposures unsecured: Carrying amount	Exposures secured: Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total Loans and advances	483,236	369,040	334,321	34,719	0
2	Total Debt securities	44,480	262	262	0	0
<b>3</b>	<b>Total exposures</b>	<b>527,716</b>	<b>369,302</b>	<b>334,583</b>	<b>34,719</b>	<b>0</b>
4	of which: non-performing	7,900	5,206	4,555	651	0
5	of which: defaulted	7,562	5,206	4,555	651	0

For June 30, 2022 exposures are aligned with changes in the latest guidelines wherein column 'a' (Exposures unsecured: Carrying Amount) is reported net of impairment hence not comparable with December 31, 2021. Secured and unsecured total exposures increased from € 897 billion in December 2021 to € 929 billion in June 2022, driven by increases in secured loans and advances by € 17 billion, unsecured debt securities by € 12 billion and unsecured loans and advances by € 2 billion.

# Credit risk and credit risk mitigation in the standardized approach

## Quantitative information on the use of the standardized approach

### Standardized approach exposure by risk weight before and after credit mitigation

#### Article 444 (e) CRR and Article 453 (g-i) CRR

The table below shows the credit risk exposure before and post credit conversion factors and credit risk mitigation obtained in the form of eligible financial collateral, guarantees and credit derivatives based on the exposure at default values (EAD) in the standardized approach as well as related RWA and average risk weights broken down by regulatory exposure classes and a split into on- and off-balance sheet exposures.

#### EU CR4 – Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects

		Jun 30, 2022											
		a		b		c		d		e		f	
in € m. (unless stated otherwise)		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density				RWA		RWA density	
Exposure classes		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount								
1	Central governments or central banks	110,812	47	110,849	1					2		0%	
2	Regional government or local authorities	2,936	5,452	2,934	4,055					6		0.08%	
3	Public sector entities	603	42	644	10					30		4.54%	
4	Multilateral development banks	714	0	714	0					0		0%	
5	International organizations	919	0	919	0					0		0%	
6	Institutions	2,968	284	2,991	57					226		7.42%	
7	Corporates	13,673	3,472	10,415	807					10,946		97.54%	
8	Retail	2,057	1,583	1,652	66					1,216		70.76%	
9	Secured by mortgages on immovable property	4,287	0	4,104	0					1,513		36.87%	
10	Exposures in default	872	25	836	8					1,069		126.68%	
11	Exposures associated with particularly high risk	62	17	62	1					94		150.00%	
12	Covered bonds	0	0	0	0					0		0%	
13	Institutions and corporates with a short-term credit assessment	0	0	0	0					0		0%	
14	Collective investments undertakings (CIU)	356	10,863	356	2,949					4,135		125.11%	
15	Equity	0	0	0	0					0		0%	
16	Other items	30	0	30	0					24		81.10%	
17	Total	140,290	21,785	136,507	7,955					19,261		13.33%	

		Dec 31, 2021											
in € m. (unless stated otherwise)		a		b		c		d		e		f	
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density							
Exposure classes		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density						
1	Central governments or central banks	115,115	13	115,407	6	2	0%						
2	Regional government or local authorities	3,569	5,391	3,576	1,457	19	0.37% <sup>1</sup>						
3	Public sector entities	682	41	726	10	39	5.29%						
4	Multilateral development banks	463	0	463	0	0	0%						
5	International organizations	808	0	808	0	0	0%						
6	Institutions	2,749	284	2,749	58	175	6.22%						
7	Corporates	13,489	2,979	9,997	638	10,290	96.75%						
8	Retail	1,964	1,648	1,578	67	1,159	70.44%						
9	Secured by mortgages on immovable property	4,329	0	4,138	0	1,559	37.68%						
10	Exposures in default	1,020	7	984	0	1,271	129.09%						
11	Items associated with particularly high risk	69	7	69	1	105	150.00%						
12	Covered bonds	0	0	0	0	0	0%						
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0%						
14	Collective investments undertakings (CIU)	306	16,506	306	4,028	4,399	101.49%						
15	Equity exposures	0	0	0	0	0	0%						
16	Other items	40	0	40	0	39	96.73%						
17	<b>Total</b>	<b>144,603</b>	<b>26,877</b>	<b>140,842</b>	<b>6,266</b>	<b>19,056</b>	<b>12.95%</b>						

<sup>1</sup> Comparatives aligned to current presentation.

In the following tables the exposure at default values (EAD) per regulatory exposure class are assigned to their standardized risk weights. Deducted or unrated items are split out separately. The exposures are shown after the shift to the exposure class of the protection seller, if applicable.

#### EU CR5 – Standardized approach

		Jun 30, 2022					
in € m.		Risk Weight					
Exposure classes		0%	2%	4%	10%	20%	35%
1	Central governments or central banks	110,844	0	0	0	3	0
2	Regional governments or local authorities	6,962	0	0	0	27	0
3	Public sector entities	526	0	0	0	114	0
4	Multilateral development banks	715	0	0	0	0	0
5	International organizations	919	0	0	0	0	0
6	Institutions	2,560	50	0	0	225	0
7	Corporates	0	0	0	0	273	0
8	Retail exposures	0	0	0	0	0	182
9	Exposures secured by mortgages on immovable property	0	0	0	0	0	3,498
10	Exposures in default	0	0	0	0	0	0
11	Exposures associated with particularly high risk	0	0	0	0	0	0
12	Covered bonds	0	0	0	0	0	0
13	Exposures to institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
14	Units or shares in collective investment undertakings (CIU)	1,657	0	0	0	380	0
15	Equity exposures	0	0	0	0	0	0
16	Other items	0	0	0	0	7	0
17	<b>Total</b>	<b>124,182</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,030</b>	<b>3,680</b>

		Jun 30, 2022					Risk Weight
in € m.		50%	70%	75%	100%	150%	250%
Exposure classes							
1	Central governments or central banks	4	0	0	0	0	0
2	Regional governments or local authorities	0	0	0	0	0	0
3	Public sector entities	14	0	0	0	0	0
4	Multilateral development banks	0	0	0	0	0	0
5	International organizations	0	0	0	0	0	0
6	Institutions	66	0	0	147	0	0
7	Corporates	74	0	0	10,777	96	0
8	Retail	0	0	1,536	0	0	0
9	Secured by mortgages on immovable property	606	0	0	0	0	0
10	Exposures in default	0	0	0	393	450	0
11	Items associated with particularly high risk	0	0	0	0	63	0
12	Covered bonds	0	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
14	Collective investments undertakings (CIU)	19	0	0	980	3	0
15	Equity exposures	0	0	0	0	0	0
16	Other items	0	0	0	23	0	0
17	<b>Total</b>	<b>784</b>	<b>0</b>	<b>1,536</b>	<b>12,321</b>	<b>612</b>	<b>0</b>

		Jun 30, 2022				Of which: unrated
in € m.		Risk Weight				
Exposure classes		370%	1250%	Others	Total	
1	Central governments or central banks	0	0	0	110,850	110,850
2	Regional governments or local authorities	0	0	0	6,989	6,989
3	Public sector entities	0	0	0	654	642
4	Multilateral development banks	0	0	0	715	715
5	International organizations	0	0	0	919	919
6	Institutions	0	0	0	3,048	3,027
7	Corporates	0	2	0	11,222	11,155
8	Retail	0	0	0	1,718	1,718
9	Secured by mortgages on immovable property	0	0	0	4,104	4,086
10	Exposures in default	0	0	0	844	844
11	Items associated with particularly high risk	0	0	0	63	63
12	Covered bonds	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0
14	Collective investments undertakings (CIU)	0	231	34	3,305	3,302
15	Equity exposures	0	0	0	0	0
16	Other items	0	0	0	30	30
17	<b>Total</b>	<b>0</b>	<b>233</b>	<b>34</b>	<b>144,461</b>	<b>144,338</b>

		Dec 31, 2021					Risk Weight
in € m.		0%	2%	4%	10%	20%	35%
Exposure classes							
1	Central governments or central banks	115,405	0	0	0	4	0
2	Regional governments or local authorities	4,988	0	0	0	34	0
3	Public sector entities	555	0	0	0	176	0
4	Multilateral development banks	463	0	0	0	0	0
5	International organizations	808	0	0	0	0	0
6	Institutions	2,329	50	0	0	327	0
7	Corporates	79	0	0	0	196	0
8	Retail	0	0	0	0	0	187
9	Secured by mortgages on immovable property	0	0	0	0	0	3,323
10	Exposures in default	0	0	0	0	0	0
11	Items associated with particularly high risk	0	0	0	0	0	0
12	Covered bonds	0	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
14	Collective investments undertakings (CIU)	67	0	0	0	13	0
15	Equity exposures	0	0	0	0	0	0
16	Other items	0	0	0	0	2	0
17	<b>Total<sup>1</sup></b>	<b>124,694</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>751</b>	<b>3,510</b>

		Dec 31, 2021					
in € m.		Risk Weight					
Exposure classes		50%	70%	75%	100%	150%	250%
1	Central governments or central banks	3	0	0	0	0	0
2	Regional governments or local authorities	0	0	0	12	0	0
3	Public sector entities	3	0	0	2	0	0
4	Multilateral development banks	0	0	0	0	0	0
5	International organizations	0	0	0	0	0	0
6	Institutions	52	0	0	44	2	0
7	Corporates	79	0	0	10,230	51	0
8	Retail	0	0	1,458	0	0	0
9	Secured by mortgages on immovable property	815	0	0	0	0	0
10	Exposures in default	0	0	0	372	612	0
11	Items associated with particularly high risk	0	0	0	0	70	0
12	Covered bonds	0	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
14	Collective investments undertakings (CIU)	17	0	0	737	2	0
15	Equity exposures	0	0	0	0	0	0
16	Other items	0	0	0	39	0	0
17	<b>Total<sup>1</sup></b>	<b>969</b>	<b>0</b>	<b>1,458</b>	<b>11,437</b>	<b>738</b>	<b>0</b>

		Dec 31, 2021				
in € m.		Risk Weight				
Exposure classes		370%	1250%	Others	Total	Of which: unrated
1	Central governments or central banks	0	0	0	115,413	115,413
2	Regional governments or local authorities	0	0	0	5,033	5,031
3	Public sector entities	0	0	0	736	696
4	Multilateral development banks	0	0	0	463	463
5	International organizations	0	0	0	808	808
6	Institutions	0	3	0	2,807	2,783
7	Corporates	0	1	0	10,635	10,449
8	Retail	0	0	0	1,645	1,645
9	Secured by mortgages on immovable property	0	0	0	4,138	4,122
10	Exposures in default	0	0	0	984	984
11	Items associated with particularly high risk	0	0	0	70	70
12	Covered bonds	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0
14	Collective investments undertakings (CIU)	0	255	3,242	4,334	4,322
15	Equity exposures	0	0	0	0	0
16	Other items	0	0	0	41	41
17	<b>Total<sup>1</sup></b>	<b>0</b>	<b>259</b>	<b>3,242</b>	<b>147,108</b>	<b>146,828</b>

<sup>1</sup> Comparatives aligned to current presentation.

## Credit risk exposure and credit risk mitigation in the internal-rating-based approach

### Quantitative information on the use of the IRB approach

#### Foundation IRB exposure

##### Article 452 (g) (i-v) CRR

The following series of tables details Deutsche Bank's foundation internal rating based (IRB) exposures distributed on its internal rating scale for all relevant regulatory exposure classes. The tables exclude the counterparty credit risk position from derivatives and securities financing transactions which are presented separately in the section "Counterparty credit risk" in this report from page 84 to 98.

The tables show the on-balance sheet as well as the off-balance sheet exposure with their corresponding exposure-weighted credit conversion factors. All undrawn commitment exposure values shown below are assigned to the exposure class of the borrower and not to the exposure class of the counterparty providing Deutsche Bank credit protection.

In addition, the tables provide the exposure post CRM and credit conversion factor (CCF), where exposures covered by guarantees or credit derivatives are assigned to the protection seller.

The exposure post CCF & CRM is presented in conjunction with exposures-weighted average PD, LGD, maturity as well as the RWA and the average risk weight (RW). The tables provide the defaulted exposure separately.

Further details in the tables are number of obligors, regulatory expected loss and provisions comprising specific risk adjustments.

EU CR6 – FIRB approach – Credit risk exposures by exposure class and PD range

Jun 30, 2022												
in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Central governments and central banks</b>												
0.00 to <0.15	0	0	0	50	0.00	0.0	45.00	2.5	0	0	0	–
0.00 to <0.10	0	0	0	50	0.00	0.0	45.00	2.5	0	0.00	0	–
0.10 to <0.15	0	0	0	0	0	0.0	0	0	0	0	0	–
0.15 to <0.25	0	1	0	0	0.23	0.0	42.69	2.5	0	47.61	0	–
0.25 to <0.50	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.50 to <0.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.75 to <2.50	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.75 to <1.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
1.75 to <2.5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <10.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
5 to <10	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
10.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
10 to <20	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
20 to <30	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
30.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
100.00 (Default)	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
<b>Sub-total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>50</b>	<b>0.00</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>0</b>	<b>0.10</b>	<b>0</b>	<b>–</b>
<b>Institutions</b>												
0.00 to <0.15	3	13	0	3	0.05	0.0	19.71	2.5	0	8.57	0	–
0.00 to <0.10	3	12	0	3	0.04	0.0	20.20	2.5	0	8.21	0	–
0.10 to <0.15	0	1	0	0	0.15	0.0	12.33	2.5	0	13.96	0	–
0.15 to <0.25	0	2	0	0	0.25	0.0	12.33	2.5	0	14.46	0	–
0.25 to <0.50	0	0	0	0	0.38	0.0	42.69	2.5	0	61.54	0	–
0.50 to <0.75	0	0	0	0	0	0	0	0	0	0	0	–
0.75 to <2.50	0	0	75.00	0	2.0600	0.00	12.3300	2.50	0	33.6200	0	–
0.75 to <1.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
1.75 to <2.5	0	0	75.00	0	2.0600	0.00	12.3300	2.50	0	33.6200	0	–
2.50 to <10.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
5 to <10	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
10.00 to <100.00	1	0	0	1	20.00	0.0	44.99	2.5	2	286.56	0	–
10 to <20	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
20 to <30	1	0	0	1	20.00	0.0	44.99	2.5	2	286.56	0	–
30.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
100.00 (Default)	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
<b>Sub-total</b>	<b>4</b>	<b>15</b>	<b>0.03</b>	<b>4</b>	<b>4.37</b>	<b>0.1</b>	<b>25.49</b>	<b>2.5</b>	<b>3</b>	<b>69.85</b>	<b>0</b>	<b>–</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Corporates</b>												
0.00 to <0.15	2,237	2,290	2.08	2,640	0.10	1.8	18.48	2.5	348	13.19	1	2
0.00 to <0.10	1,571	1,600	1.24	1,999	0.08	1.1	17.16	2.5	213	10.64	0	0
0.10 to <0.15	666	689	4.04	641	0.16	0.7	22.61	2.5	135	21.12	0	2
0.15 to <0.25	1,005	1,105	1.51	943	0.26	2.7	28.53	2.5	324	34.40	1	0
0.25 to <0.50	1,009	1,113	4.68	943	0.43	3.5	32.97	2.5	475	50.40	1	0
0.50 to <0.75	564	623	2.32	497	0.74	2.2	32.10	2.5	307	61.74	1	0
0.75 to <2.50	505	449	9.74	470	1.60	1.0	29.84	2.5	351	74.65	2	1
0.75 to <1.75	301	322	13.33	283	1.29	0.8	30.96	2.5	207	72.97	1	1
1.75 to <2.5	204	127	0.64	186	2.07	0.2	28.16	2.5	144	77.20	1	0
2.50 to <10.00	178	166	0.01	167	5.44	0.2	20.73	2.5	127	75.73	2	0
2.50 to <5	120	121	0	113	4.09	0.1	18.46	2.5	69	61.16	1	0
5 to <10	58	44	0.03	54	8.24	0.1	25.45	2.5	58	106.02	1	0
10.00 to <100.00	154	96	9.26	128	21.45	1.0	35.77	2.5	234	183.07	9	5
10 to <20	26	7	52.46	30	15.70	0.0	42.00	2.5	55	185.44	2	1
20 to <30	112	76	7.04	82	21.09	1.0	38.06	2.5	168	203.97	7	4
30.00 to <100.00	16	13	0	16	34.05	0.0	12.33	2.5	11	70.44	1	0
100.00 (Default)	96	2	0.15	95	100.00	0.9	42.51	2.5	0	0.00	41	67
<b>Sub-total</b>	<b>5,748</b>	<b>5,844</b>	<b>3.14</b>	<b>5,882</b>	<b>2.58</b>	<b>13.4</b>	<b>25.30</b>	<b>2.5</b>	<b>2,166</b>	<b>36.82</b>	<b>58</b>	<b>75</b>
<b>of which:</b>												
<b>SMEs</b>												
0.00 to <0.15	8	20	13.86	25	0.07	0.1	33.71	2.5	3	14.08	0	–
0.00 to <0.10	7	12	22.49	24	0.07	0.1	33.52	2.5	3	13.73	0	–
0.10 to <0.15	1	8	0	1	0.16	0.1	39.24	2.5	0	24.40	0	–
0.15 to <0.25	12	20	0	11	0.24	0.1	30.43	2.5	3	23.64	0	–
0.25 to <0.50	15	26	0	12	0.39	0.2	40.87	2.5	5	40.49	0	–
0.50 to <0.75	16	24	0	13	0.70	0.1	34.18	2.5	6	42.98	0	–
0.75 to <2.50	19	34	17.65	22	1.60	0.1	25.45	2.5	10	43.70	0	0
0.75 to <1.75	9	19	30.66	12	1.29	0.1	35.93	2.5	7	58.47	0	0
1.75 to <2.5	10	14	0	10	1.97	0.0	13.21	2.5	3	26.46	0	–
2.50 to <10.00	21	26	0	19	5.36	0.0	12.69	2.5	7	36.26	0	–
2.50 to <5	13	18	0	13	4.12	0.0	12.84	2.5	5	37.26	0	–
5 to <10	8	7	0	6	8.19	0.0	12.33	2.5	2	33.96	0	–
10.00 to <100.00	37	11	25.94	29	18.88	0.1	40.53	2.5	44	153.20	2	1
10 to <20	14	3	75.00	16	16.86	0.0	45.00	2.5	29	176.99	1	1
20 to <30	22	6	6.93	11	20.58	0.1	36.30	2.5	14	127.05	1	0
30.00 to <100.00	1	1	0	1	34.11	0.0	12.33	2.5	0	48.57	0	–
100.00 (Default)	1	0	0	1	100.00	0.0	45.00	2.5	0	0.00	0	1
<b>Sub-total</b>	<b>130</b>	<b>159</b>	<b>7.22</b>	<b>130</b>	<b>5.99</b>	<b>0.8</b>	<b>31.32</b>	<b>2.5</b>	<b>77</b>	<b>58.94</b>	<b>3</b>	<b>2</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
Other												
0.00 to <0.15	2,228	2,270	1.98	2,616	0.10	1.7	18.34	2.5	345	13.18	1	2
0.00 to <0.10	1,564	1,588	1.07	1,975	0.08	1.1	16.96	2.5	209	10.61	0	0
0.10 to <0.15	664	682	4.09	640	0.16	0.7	22.59	2.5	135	21.11	0	2
0.15 to <0.25	993	1,085	1.54	933	0.26	2.6	28.51	2.5	322	34.53	1	0
0.25 to <0.50	994	1,087	4.79	931	0.43	3.3	32.87	2.5	470	50.53	1	0
0.50 to <0.75	549	599	2.41	484	0.74	2.1	32.04	2.5	301	62.24	1	0
0.75 to <2.50	485	416	9.10	448	1.60	0.9	30.06	2.5	341	76.17	2	1
0.75 to <1.75	292	303	12.22	271	1.29	0.8	30.74	2.5	200	73.60	1	1
1.75 to <2.5	194	113	0.72	176	2.08	0.1	29.02	2.5	141	80.11	1	0
2.50 to <10.00	157	140	0.01	148	5.45	0.1	21.74	2.5	120	80.70	2	0
2.50 to <5	107	103	0	100	4.09	0.1	19.19	2.5	64	64.27	1	0
5 to <10	50	37	0.03	49	8.25	0.0	26.98	2.5	56	114.42	1	0
10.00 to <100.00	117	85	7.16	99	22.20	0.9	34.39	2.5	190	191.74	7	4
10 to <20	12	4	33.30	13	14.25	0.0	38.23	2.5	26	196.07	1	0
20 to <30	90	69	7.05	71	21.17	0.9	38.34	2.5	154	216.29	6	3
30.00 to <100.00	15	12	0	15	34.05	0.0	12.33	2.5	11	71.76	1	0
100.00 (Default)	95	2	0.16	94	100.00	0.9	42.49	2.5	0	0.00	40	66
<b>Sub-total</b>	<b>5,619</b>	<b>5,684</b>	<b>3.03</b>	<b>5,752</b>	<b>2.50</b>	<b>12.6</b>	<b>25.16</b>	<b>2.5</b>	<b>2,089</b>	<b>36.32</b>	<b>55</b>	<b>73</b>
<b>All exposure classes</b>												
<b>Total</b>	<b>5,753</b>	<b>5,860</b>	<b>3.13</b>	<b>5,936</b>	<b>2.55</b>	<b>13.4</b>	<b>25.47</b>	<b>2.5</b>	<b>2,168</b>	<b>36.53</b>	<b>58</b>	<b>75</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Central governments and central banks</b>												
0.00 to <0.15	0	0	0	58	0.00	0.00	45.00	2.5	0	0.0100	0	–
0.00 to <0.10	0	0	0	58	0.00	0.0	45.00	2.5	0	0.00	0	–
0.10 to <0.15	0	0	0	0	0.1500	0.00	42.6900	2.50	0	37.6400	0	–
0.15 to <0.25	0	0	0	0	0.2300	0.0	42.6900	2.50	0	47.6100	0	–
0.25 to <0.50	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.50 to <0.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.75 to <2.50	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.75 to <1.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
1.75 to <2.5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <10.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
5 to <10	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
10.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
10 to <20	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
20 to <30	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
30.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
100.00 (Default)	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0.00</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>0</b>	<b>0.0900</b>	<b>0</b>	<b>–</b>
<b>Institutions</b>												
0.00 to <0.15	2	10	0	2	0.04	0.0	39.85	2.5	0	14.40	0	–
0.00 to <0.10	2	10	0	2	0.04	0.0	40.50	2.5	0	14.39	0	–
0.10 to <0.15	0	0	0	0	0.15	0.0	12.33	2.5	0	14.82	0	–
0.15 to <0.25	0	2	0	0	0.25	0.0	13.05	2.5	0	15.63	0	–
0.25 to <0.50	0	1	0	0	0.38	0.0	42.69	2.5	0	61.54	0	–
0.50 to <0.75	0	0	0	0	0.6900	0.0	42.6900	2.50	0	80.4900	0	–
0.75 to <2.50	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
0.75 to <1.75	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
1.75 to <2.5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
2.50 to <10.00	0	0	0	0	0.00	0	0.00	0.0	0	0.00	0	–
2.50 to <5	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
5 to <10	0	0	0	0	0.00	0	0.00	0.0	0	0.00	0	–
10.00 to <100.00	1	0	0	1	20.00	0.0	45.00	2.50	2	286.62	0	–
10 to <20	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
20 to <30	1	0	0	1	20.00	0.0	45.00	2.50	2	286.62	0	–
30.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
100.00 (Default)	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
<b>Sub-total</b>	<b>3</b>	<b>13</b>	<b>0</b>	<b>3</b>	<b>5.00</b>	<b>0.1</b>	<b>41.10</b>	<b>2.5</b>	<b>3</b>	<b>82.40</b>	<b>0</b>	<b>–</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Corporates</b>												
0.00 to <0.15	2,025	2,393	4.79	2,546	0.10	1.5	19.32	2.5	356	13.99	1	2
0.00 to <0.10	1,068	1,183	3.36	1,598	0.07	0.9	19.12	2.5	189	11.80	0	0
0.10 to <0.15	957	1,210	6.18	948	0.16	0.6	19.66	2.5	168	17.69	0	2
0.15 to <0.25	1,119	1,188	3.57	1,065	0.25	2.5	28.54	2.5	357	33.55	1	0
0.25 to <0.50	800	944	2.62	706	0.41	3.3	36.79	2.5	387	54.80	1	0
0.50 to <0.75	622	668	3.62	528	0.72	2.2	27.35	2.5	278	52.60	1	1
0.75 to <2.50	553	528	8.68	546	1.58	0.9	30.14	2.5	422	77.26	3	1
0.75 to <1.75	366	409	8.33	365	1.30	0.8	29.29	2.5	259	70.94	1	0
1.75 to <2.5	187	119	9.90	181	2.15	0.1	31.85	2.5	163	89.96	1	0
2.50 to <10.00	221	166	3.27	191	5.83	0.2	20.63	2.5	141	73.93	3	2
2.50 to <5	142	128	0.43	113	4.08	0.1	18.12	2.5	71	62.63	1	0
5 to <10	78	38	12.77	78	8.38	0.1	24.27	2.5	70	90.38	2	1
10.00 to <100.00	109	139	6.18	74	21.34	1.2	35.78	2.5	128	171.31	5	2
10 to <20	17	12	2.34	15	14.06	0.0	34.97	2.5	28	179.12	1	0
20 to <30	78	83	9.95	45	20.08	1.2	43.03	2.5	90	199.09	4	1
30.00 to <100.00	14	43	0	14	33.95	0.0	12.33	2.5	9	69.01	1	0
100.00 (Default)	89	2	0.32	88	100.00	0.1	44.84	2.5	0	0.00	40	57
<b>Sub-total</b>	<b>5,536</b>	<b>6,028</b>	<b>4.40</b>	<b>5,744</b>	<b>2.36</b>	<b>12.0</b>	<b>25.59</b>	<b>2.5</b>	<b>2,069</b>	<b>36.01</b>	<b>54</b>	<b>64</b>
<b>of which:</b>												
<b>SMEs</b>												
0.00 to <0.15	23	12	33.21	41	0.12	0.0	36.80	2.5	8	20.59	0	–
0.00 to <0.10	1	1	0	15	0.04	0.0	25.19	2.5	1	8.12	0	–
0.10 to <0.15	22	11	36.22	26	0.17	0.0	43.47	2.5	7	27.75	0	–
0.15 to <0.25	12	14	0	10	0.24	0.1	30.74	2.5	2	23.08	0	–
0.25 to <0.50	12	26	0	9	0.39	0.1	33.61	2.5	3	32.28	0	–
0.50 to <0.75	16	26	0	11	0.70	0.1	36.00	2.5	5	44.78	0	–
0.75 to <2.50	16	31	13.23	16	1.77	0.1	23.57	2.5	7	44.06	0	0
0.75 to <1.75	10	16	0	7	1.27	0.1	16.64	2.5	2	28.13	0	–
1.75 to <2.5	5	15	27.76	10	2.13	0.0	28.53	2.5	5	55.47	0	0
2.50 to <10.00	38	26	7.42	37	6.52	0.0	28.67	2.5	31	84.21	1	1
2.50 to <5	14	17	0	14	3.92	0.0	12.33	2.5	5	34.28	0	–
5 to <10	24	8	22.33	22	8.19	0.0	39.10	2.5	26	116.09	1	1
10.00 to <100.00	41	8	0.26	24	20.96	0.1	42.59	2.5	37	157.75	2	0
10 to <20	0	0	0	0	14.29	0.0	12.33	2.5	0	43.05	0	–
20 to <30	40	6	0.35	22	20.00	0.1	44.81	2.5	36	165.77	2	0
30.00 to <100.00	2	2	0	2	34.15	0.0	12.33	2.5	1	48.44	0	–
100.00 (Default)	5	0	1.27	5	100.00	0.0	45.00	2.5	0	0.00	2	1
<b>Sub-total</b>	<b>162</b>	<b>143</b>	<b>7.07</b>	<b>153</b>	<b>8.51</b>	<b>0.7</b>	<b>33.96</b>	<b>2.5</b>	<b>94</b>	<b>61.25</b>	<b>5</b>	<b>2</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
Other												
0.00 to <0.15	2,002	2,381	4.64	2,505	0.10	1.5	19.03	2.5	348	13.89	1	2
0.00 to <0.10	1,067	1,182	3.36	1,583	0.07	0.9	19.06	2.5	187	11.84	0	0
0.10 to <0.15	935	1,199	5.90	922	0.16	0.6	18.99	2.5	161	17.40	0	2
0.15 to <0.25	1,107	1,173	3.61	1,055	0.25	2.4	28.52	2.5	355	33.65	1	0
0.25 to <0.50	788	918	2.69	696	0.41	3.1	36.83	2.5	384	55.11	1	0
0.50 to <0.75	607	642	3.77	517	0.72	2.1	27.17	2.5	273	52.76	1	1
0.75 to <2.50	537	497	8.40	530	1.57	0.9	30.34	2.5	415	78.29	3	1
0.75 to <1.75	356	393	8.68	358	1.30	0.7	29.53	2.5	257	71.76	1	0
1.75 to <2.5	182	104	7.36	172	2.15	0.1	32.03	2.5	158	91.88	1	0
2.50 to <10.00	183	140	2.52	154	5.66	0.1	18.72	2.5	110	71.49	2	1
2.50 to <5	128	111	0.50	99	4.10	0.1	18.96	2.5	66	66.72	1	0
5 to <10	55	30	10.05	55	8.45	0.0	18.28	2.5	44	79.99	1	1
10.00 to <100.00	68	131	6.53	51	21.52	1.1	32.63	2.5	90	177.58	3	1
10 to <20	17	12	2.35	15	14.06	0.0	34.98	2.5	28	179.18	1	0
20 to <30	39	78	10.65	24	20.15	1.1	41.37	2.5	54	230.13	2	1
30.00 to <100.00	12	41	0	12	33.92	0.0	12.33	2.5	9	71.77	0	0
100.00 (Default)	83	2	0.20	82	100.00	0.1	44.83	2.5	0	0.00	38	56
<b>Sub-total</b>	<b>5,374</b>	<b>5,885</b>	<b>4.34</b>	<b>5,591</b>	<b>2.19</b>	<b>11.3</b>	<b>25.36</b>	<b>2.5</b>	<b>1,975</b>	<b>35.32</b>	<b>49</b>	<b>62</b>
<b>All exposure classes</b>												
<b>Total</b>	<b>5,540</b>	<b>6,042</b>	<b>4.40</b>	<b>5,806</b>	<b>2.33</b>	<b>12.0</b>	<b>25.79</b>	<b>2.5</b>	<b>2,071</b>	<b>35.68</b>	<b>54</b>	<b>64</b>

## Advanced IRB exposure

### **Article 452 (g) (i-v) CRR**

The following series of tables details Deutsche Bank's advanced internal rating based (IRB) exposures distributed on its internal rating scale for all relevant regulatory exposure classes. The tables exclude the counterparty credit risk position from derivatives and securities financing transactions which are presented separately in the section "Counterparty credit risk" in this report from page 84 to 98.

The tables show the on-balance sheet as well as the off-balance sheet exposure with their corresponding exposure-weighted credit conversion factors. All undrawn commitment exposure values shown below are assigned to the exposure class of the borrower and not to the exposure class of the counterparty providing Deutsche Bank credit protection.

In addition, the tables provide the exposure post CRM and CCF, where exposures covered by guarantees or credit derivatives are assigned to the protection seller.

The exposure post CCF and CRM is presented in conjunction with exposures-weighted average PD, LGD, maturity as well as the RWA and the average risk weight (RW). The effect of double default, as far as applicable to exposures outside of former Postbank, is considered in the average RW. It implies that for a guaranteed exposure a loss only occurs if the primary obligor and the guarantor fail to meet their obligations at the same time. The tables provide the defaulted exposure separately, where Deutsche Bank applies an LGD estimate already incorporating potential unexpected losses in the loss rate estimate as required by Article 181 (1) (h) CRR.

Further details in the tables are number of obligors, regulatory expected loss and provisions comprising specific risk adjustments.

EU CR6 – AIRB approach – Credit risk exposures by exposure class and PD range

												Jun 30, 2022
in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Central governments and central banks</b>												
0.00 to <0.15	110,142	377	24.96	124,606	0.00	0.1	50.39	1.3	1,082	0.87	2	0
0.00 to <0.10	109,957	375	24.99	124,420	0.00	0.1	50.39	1.3	1,033	0.83	2	0
0.10 to <0.15	185	2	20.10	186	0.14	0.0	50.00	0.9	49	26.41	0	0
0.15 to <0.25	1,336	7	20.17	1,659	0.23	0.0	50.00	1.6	758	45.67	2	0
0.25 to <0.50	1,247	145	20.05	1,276	0.39	0.0	49.89	1.9	825	64.65	2	0
0.50 to <0.75	620	2	55.03	410	0.64	0.0	50.00	0.9	279	67.92	1	0
0.75 to <2.50	5,445	170	35.28	5,003	1.76	0.0	97.35	4.8	12,120	242.23	2	1
0.75 to <1.75	87	1	97.62	18	1.07	0.0	31.94	3.6	13	74.71	0	0
1.75 to <2.5	5,358	170	35.03	4,986	1.76	0.0	97.58	4.8	12,107	242.83	2	1
2.50 to <10.00	1,852	692	45.52	395	6.18	0.0	39.45	3.2	361	91.53	4	10
2.50 to <5	681	171	35.24	217	4.73	0.0	49.86	4.8	181	83.38	0	3
5 to <10	1,171	521	48.90	178	7.95	0.0	26.73	1.3	180	101.49	4	8
10.00 to <100.00	1,389	34	35.00	694	13.01	0.0	41.97	1.1	1,349	194.18	38	5
10 to <20	1,389	34	35.00	694	13.01	0.0	41.97	1.1	1,349	194.18	38	5
20 to <30	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
30.00 to <100.00	0	0	0	0	0.00	0.0	0.00	0.0	0	0.00	0	–
100.00 (Default)	164	2	35.02	70	100.00	0.0	18.94	1.1	137	195.61	13	12
<b>Sub-total</b>	<b>122,195</b>	<b>1,430</b>	<b>35.92</b>	<b>134,114</b>	<b>0.21</b>	<b>0.2</b>	<b>52.04</b>	<b>1.5</b>	<b>16,910</b>	<b>12.61</b>	<b>65</b>	<b>29</b>
<b>Institutions</b>												
0.00 to <0.15	9,043	5,486	41.31	14,839	0.05	0.4	55.88	1.4	1,836	12.37	3	2
0.00 to <0.10	8,553	5,005	42.06	14,143	0.05	0.4	56.72	1.4	1,660	11.74	2	2
0.10 to <0.15	490	480	33.59	695	0.15	0.1	38.86	0.9	176	25.25	0	0
0.15 to <0.25	299	222	35.79	532	0.25	0.1	48.96	1.2	265	49.83	1	0
0.25 to <0.50	192	531	53.48	418	0.43	0.1	31.09	0.8	200	47.95	1	0
0.50 to <0.75	1,621	453	74.49	1,764	0.70	0.1	30.56	1.0	997	56.56	4	2
0.75 to <2.50	824	446	18.46	772	1.72	0.1	8.99	2.7	193	25.00	1	1
0.75 to <1.75	186	41	59.76	205	1.13	0.0	15.34	2.2	69	33.61	0	0
1.75 to <2.5	638	406	14.34	567	1.93	0.0	6.69	2.9	124	21.89	1	0
2.50 to <10.00	1,249	659	43.85	1,313	3.51	0.0	10.99	1.9	483	36.75	6	5
2.50 to <5	1,195	338	61.94	1,268	3.32	0.0	10.76	1.9	451	35.56	5	3
5 to <10	54	321	24.80	46	8.74	0.0	17.33	1.1	32	69.69	1	3
10.00 to <100.00	31	59	43.89	56	13.58	0.0	19.38	3.6	61	109.19	2	0
10 to <20	31	59	43.89	56	13.57	0.0	19.37	3.6	61	109.15	2	0
20 to <30	0	0	0	0	0	0	0	0	0	0	0	–
30.00 to <100.00	0	0	0	0	49.5004	2.00	43.9800	0.00	0	213.1104	0	0
100.00 (Default)	1,903	1	100.00	1,904	100.00	0.0	0.30	4.9	65	3.41	4	1
<b>Sub-total</b>	<b>15,163</b>	<b>7,857</b>	<b>42.83</b>	<b>21,597</b>	<b>9.23</b>	<b>0.8</b>	<b>43.76</b>	<b>1.7</b>	<b>4,101</b>	<b>18.99</b>	<b>22</b>	<b>12</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Corporates</b>												
0.00 to <0.15	82,081	125,781	32.20	123,430	0.08	19.4	32.39	2.1	26,384	21.38	57	22
0.00 to <0.10	62,516	99,772	32.25	96,559	0.06	14.2	32.84	2.1	15,532	16.09	20	13
0.10 to <0.15	19,565	26,009	32.00	26,871	0.15	5.2	30.74	2.3	10,852	40.38	37	9
0.15 to <0.25	22,697	21,512	29.39	27,919	0.24	6.3	28.04	2.4	8,073	28.91	18	12
0.25 to <0.50	22,928	17,629	32.16	27,403	0.41	5.9	28.70	2.3	10,980	40.07	32	21
0.50 to <0.75	20,565	11,015	32.84	22,763	0.67	5.0	26.35	2.4	10,167	44.66	44	28
0.75 to <2.50	40,351	54,397	14.88	43,211	1.50	7.1	27.99	2.5	24,011	55.57	163	113
0.75 to <1.75	17,164	12,801	32.36	19,053	1.11	4.0	23.94	2.2	9,514	49.93	52	41
1.75 to <2.5	23,187	41,595	9.53	24,158	1.80	3.1	31.17	2.8	14,497	60.01	111	72
2.50 to <10.00	33,995	28,596	30.55	38,273	5.27	4.0	20.28	2.6	26,708	69.78	374	289
2.50 to <5	22,786	20,392	31.20	25,932	3.92	3.3	23.20	2.7	19,385	74.75	228	196
5 to <10	11,208	8,204	28.93	12,342	8.10	0.8	14.17	2.2	7,324	59.34	146	93
10.00 to <100.00	5,819	2,660	39.62	5,293	18.11	0.9	20.28	2.0	4,407	83.27	155	112
10 to <20	3,840	2,197	38.12	3,585	13.47	0.4	18.09	2.1	2,833	79.03	89	68
20 to <30	997	316	49.82	771	22.14	0.3	24.39	2.0	991	128.56	42	31
30.00 to <100.00	982	146	40.07	937	32.55	0.2	25.27	1.5	583	62.21	24	13
100.00 (Default)	16,064	2,602	27.66	15,888	100.00	3.2	24.39	3.1	3,173	19.97	3,859	3,903
<b>Sub-total</b>	<b>244,499</b>	<b>264,191</b>	<b>28.28</b>	<b>304,181</b>	<b>6.56</b>	<b>51.8</b>	<b>28.43</b>	<b>2.3</b>	<b>113,903</b>	<b>37.45</b>	<b>4,702</b>	<b>4,500</b>
<b>of which:</b>												
<b>SMEs</b>												
0.00 to <0.15	3,906	3,337	32.52	4,976	0.10	5.0	29.55	3.2	709	14.24	1	1
0.00 to <0.10	2,310	2,047	31.72	3,026	0.07	2.7	29.33	3.3	336	11.10	1	1
0.10 to <0.15	1,596	1,290	33.80	1,950	0.15	2.3	29.90	3.2	373	19.13	1	0
0.15 to <0.25	2,732	1,497	33.21	2,984	0.24	3.0	34.89	3.4	923	30.94	3	2
0.25 to <0.50	2,101	1,605	34.39	2,357	0.41	2.8	32.58	3.1	802	34.02	3	3
0.50 to <0.75	2,258	1,071	38.97	2,325	0.68	2.2	35.77	2.5	1,042	44.81	5	4
0.75 to <2.50	4,091	1,865	34.04	3,873	1.54	3.1	37.96	2.9	1,769	45.67	23	19
0.75 to <1.75	1,624	1,164	31.21	1,612	1.13	1.7	33.32	2.4	823	51.09	6	5
1.75 to <2.5	2,466	701	38.74	2,262	1.82	1.3	41.27	3.3	945	41.80	17	14
2.50 to <10.00	2,353	949	36.38	2,090	4.98	1.5	35.22	2.4	1,668	79.83	34	26
2.50 to <5	1,802	773	32.55	1,507	3.77	1.3	37.76	2.6	1,181	78.38	21	19
5 to <10	551	175	53.30	583	8.11	0.3	28.66	2.0	487	83.59	14	7
10.00 to <100.00	505	131	33.94	329	21.13	0.4	41.95	2.8	521	158.45	27	23
10 to <20	207	92	26.20	163	13.57	0.1	41.02	2.5	233	143.00	9	6
20 to <30	170	16	63.68	60	21.33	0.2	66.78	0.9	143	237.99	8	13
30.00 to <100.00	128	24	44.32	106	32.68	0.1	29.28	4.4	145	137.19	10	4
100.00 (Default)	2,284	356	23.12	2,319	100.00	2.1	65.22	1.7	591	25.48	1,505	1,612
<b>Sub-total</b>	<b>20,228</b>	<b>10,811</b>	<b>33.84</b>	<b>21,252</b>	<b>12.18</b>	<b>20.1</b>	<b>37.49</b>	<b>2.8</b>	<b>8,025</b>	<b>37.76</b>	<b>1,602</b>	<b>1,689</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Specialized Lending</b>												
0.00 to <0.15	7,365	463	62.97	7,524	0.11	0.1	4.84	3.1	347	4.62	0	2
0.00 to <0.10	4,233	294	46.73	4,281	0.08	0.1	4.58	3.0	165	3.85	0	0
0.10 to <0.15	3,132	169	91.34	3,243	0.14	0.1	5.18	3.1	182	5.62	0	2
0.15 to <0.25	3,592	83	19.09	3,518	0.23	0.1	5.79	2.6	224	6.37	0	0
0.25 to <0.50	4,008	702	82.41	4,490	0.39	0.1	14.29	2.6	1,038	23.13	2	2
0.50 to <0.75	4,438	357	77.56	4,687	0.65	0.1	13.11	2.8	1,164	24.84	4	4
0.75 to <2.50	6,456	1,386	50.97	6,745	1.43	0.3	9.46	2.7	1,664	24.67	9	8
0.75 to <1.75	3,284	664	47.43	3,428	1.09	0.2	9.81	2.4	778	22.70	4	3
1.75 to <2.5	3,171	722	54.23	3,317	1.78	0.1	9.10	2.9	886	26.71	6	5
2.50 to <10.00	14,400	1,869	28.47	14,424	5.89	0.4	6.78	2.3	3,542	24.55	54	39
2.50 to <5	7,715	968	36.34	7,739	4.13	0.2	7.70	2.5	1,979	25.57	23	21
5 to <10	6,685	901	20.01	6,686	7.93	0.2	5.70	2.0	1,563	23.38	31	18
10.00 to <100.00	1,922	302	26.57	1,994	14.79	0.0	10.25	2.4	1,012	50.75	33	18
10 to <20	1,556	284	27.02	1,625	13.01	0.0	7.90	2.5	585	36.01	17	11
20 to <30	340	18	19.56	344	22.01	0.0	21.97	1.9	424	123.44	17	8
30.00 to <100.00	25	0	0	25	31.01	0.0	2.00	4.1	2	9.49	0	0
100.00 (Default)	3,100	72	41.92	3,090	100.00	0.1	22.79	2.9	436	14.10	714	631
<b>Sub-total</b>	<b>45,281</b>	<b>5,234</b>	<b>47.99</b>	<b>46,473</b>	<b>9.46</b>	<b>1.4</b>	<b>9.36</b>	<b>2.6</b>	<b>9,427</b>	<b>20.29</b>	<b>818</b>	<b>705</b>
<b>Other</b>												
0.00 to <0.15	70,810	121,981	32.07	110,930	0.08	14.3	34.38	2.0	25,328	22.83	55	19
0.00 to <0.10	55,973	97,431	32.22	89,252	0.06	11.5	34.32	2.0	15,031	16.84	19	13
0.10 to <0.15	14,837	24,550	31.50	21,678	0.15	2.8	34.64	2.1	10,297	47.50	36	6
0.15 to <0.25	16,373	19,932	29.15	21,416	0.24	3.3	30.74	2.2	6,925	32.34	15	10
0.25 to <0.50	16,819	15,323	29.62	20,557	0.41	3.0	31.40	2.2	9,140	44.46	27	16
0.50 to <0.75	13,869	9,587	30.49	15,751	0.67	2.6	28.90	2.2	7,960	50.54	35	20
0.75 to <2.50	29,804	51,146	13.21	32,593	1.50	3.7	30.65	2.4	20,578	63.14	131	86
0.75 to <1.75	12,256	10,973	31.57	14,014	1.12	2.1	26.32	2.1	7,912	56.46	42	34
1.75 to <2.5	17,549	40,173	8.22	18,580	1.79	1.6	33.88	2.7	12,666	68.17	89	53
2.50 to <10.00	17,242	25,779	30.48	21,759	4.88	2.1	27.80	2.7	21,498	98.80	286	225
2.50 to <5	13,270	18,651	30.88	16,686	3.84	1.8	29.07	2.8	16,224	97.24	184	157
5 to <10	3,973	7,128	29.45	5,074	8.31	0.4	23.66	2.4	5,274	103.95	102	68
10.00 to <100.00	3,393	2,226	41.73	2,970	20.01	0.4	24.61	1.7	2,875	96.78	94	70
10 to <20	2,077	1,821	40.46	1,797	13.88	0.2	25.22	1.8	2,015	112.13	64	51
20 to <30	486	282	51.01	367	22.39	0.1	19.73	2.3	424	115.49	17	11
30.00 to <100.00	829	123	39.26	806	32.59	0.1	25.48	1.1	435	54.03	14	9
100.00 (Default)	10,680	2,174	27.93	10,479	100.00	1.0	15.83	3.5	2,147	20.49	1,640	1,660
<b>Sub-total</b>	<b>178,990</b>	<b>248,147</b>	<b>27.62</b>	<b>236,456</b>	<b>5.48</b>	<b>30.4</b>	<b>31.36</b>	<b>2.2</b>	<b>96,451</b>	<b>40.79</b>	<b>2,282</b>	<b>2,106</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Retail</b>												
0.00 to <0.15	32,055	18,144	54.97	42,997	0.11	3,533.0	25.45	14.0	2,132	4.96	12	9
0.00 to <0.10	16,335	14,986	53.61	25,153	0.08	2,814.3	28.67	11.3	978	3.89	6	4
0.10 to <0.15	15,720	3,158	61.44	17,843	0.15	718.7	20.92	17.8	1,153	6.46	6	4
0.15 to <0.25	27,221	4,182	60.78	29,839	0.25	808.4	20.20	21.4	2,802	9.39	15	12
0.25 to <0.50	39,306	5,084	66.14	42,610	0.41	782.7	20.66	23.7	6,129	14.38	37	28
0.50 to <0.75	44,987	4,897	75.45	48,517	0.73	828.4	22.38	23.2	11,210	23.11	79	58
0.75 to <2.50	46,535	4,216	72.29	49,157	0.71	1,427.9	27.81	18.6	20,778	42.27	214	140
0.75 to <1.75	29,375	2,911	75.93	31,381	1.26	753.6	25.64	20.0	11,397	36.32	101	61
1.75 to <2.5	17,160	1,305	64.17	17,776	2.04	674.3	31.63	16.3	9,382	52.78	113	79
2.50 to <10.00	18,772	1,156	63.30	19,061	4.90	802.9	33.11	16.5	13,150	68.99	302	277
2.50 to <5	14,112	881	59.62	14,276	3.87	626.9	33.78	15.6	9,298	65.13	184	171
5 to <10	4,660	275	75.07	4,785	7.97	176.0	31.11	19.2	3,852	80.51	119	106
10.00 to <100.00	3,498	206	77.07	3,519	21.52	150.3	30.71	18.4	3,927	111.58	233	178
10 to <20	1,964	130	80.26	2,011	13.88	77.7	29.95	18.8	2,057	102.29	83	71
20 to <30	720	44	72.95	713	22.60	33.9	31.93	17.4	874	122.67	51	43
30.00 to <100.00	814	32	69.69	796	39.88	38.7	31.53	18.5	996	125.15	99	64
100.00 (Default)	3,744	107	59.06	3,736	100.00	203.4	45.47	9.7	1,246	33.35	1,727	1,784
<b>Sub-total</b>	<b>216,118</b>	<b>37,992</b>	<b>62.05</b>	<b>239,436</b>	<b>2.68</b>	<b>8,537.1</b>	<b>24.81</b>	<b>19.7</b>	<b>61,374</b>	<b>25.63</b>	<b>2,619</b>	<b>2,487</b>
<b>of which:</b>												
Secured by real estate property SMEs												
0.00 to <0.15	1,371	191	58.35	1,476	0.12	7.9	14.11	14.9	50	3.38	0	0
0.00 to <0.10	454	78	60.93	500	0.09	3.1	13.81	14.3	13	2.58	0	0
0.10 to <0.15	917	113	56.57	976	0.14	4.8	14.26	15.2	37	3.79	0	0
0.15 to <0.25	1,606	131	58.87	1,678	0.23	7.3	14.39	15.7	93	5.56	1	0
0.25 to <0.50	1,646	121	57.81	1,706	0.40	7.2	14.86	15.8	144	8.47	1	1
0.50 to <0.75	1,363	88	56.14	1,392	0.66	6.0	14.58	15.9	167	12.02	1	1
0.75 to <2.50	1,629	72	54.47	1,617	1.39	6.6	14.82	15.8	326	20.17	3	4
0.75 to <1.75	974	45	57.75	963	1.11	4.2	15.29	15.9	175	18.12	2	2
1.75 to <2.5	655	27	48.88	655	1.82	2.5	14.13	15.6	152	23.19	2	2
2.50 to <10.00	618	24	53.39	620	4.33	2.5	14.20	15.1	233	37.54	4	6
2.50 to <5	526	21	54.82	529	3.67	2.1	14.28	15.2	186	35.08	3	4
5 to <10	92	4	44.93	91	8.19	0.4	13.73	14.3	47	51.78	1	1
10.00 to <100.00	80	5	45.56	79	19.39	0.4	13.59	14.6	50	63.63	2	2
10 to <20	45	4	45.28	46	13.35	0.2	14.29	15.6	28	62.13	1	1
20 to <30	19	1	47.28	18	22.72	0.1	13.71	13.8	13	71.34	1	1
30.00 to <100.00	16	0	64.00	15	33.32	0.1	11.41	12.8	9	59.12	1	1
100.00 (Default)	83	0	39.39	79	100.00	0.4	29.86	9.9	35	44.07	25	34
<b>Sub-total</b>	<b>8,395</b>	<b>633</b>	<b>57.31</b>	<b>8,647</b>	<b>1.91</b>	<b>38.3</b>	<b>14.67</b>	<b>15.5</b>	<b>1,099</b>	<b>12.71</b>	<b>37</b>	<b>47</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
Secured by real estate property non-SMEs												
0.00 to <0.15	27,189	983	59.48	27,770	0.12	252.1	14.68	20.1	1,217	4.38	5	5
0.00 to <0.10	13,721	439	58.59	13,978	0.09	144.7	13.74	19.1	448	3.20	2	2
0.10 to <0.15	13,468	543	60.21	13,793	0.15	107.4	15.62	21.1	770	5.58	3	3
0.15 to <0.25	23,313	1,210	72.48	24,185	0.25	171.9	16.30	24.1	1,996	8.25	10	10
0.25 to <0.50	34,655	2,408	82.69	36,634	0.41	226.9	18.02	25.7	4,834	13.20	27	23
0.50 to <0.75	39,879	2,999	87.78	42,493	0.73	253.0	19.98	25.0	9,247	21.76	63	47
0.75 to <2.50	34,178	2,451	88.38	36,314	0.40	207.0	21.31	22.7	13,596	37.44	120	68
0.75 to <1.75	23,585	1,878	89.84	25,258	1.28	143.2	21.29	22.9	8,484	33.59	70	37
1.75 to <2.5	10,592	573	83.59	11,057	2.10	63.8	21.38	22.2	5,111	46.23	51	31
2.50 to <10.00	9,267	332	81.65	9,512	4.97	62.2	18.71	25.9	6,183	65.00	90	92
2.50 to <5	6,838	265	79.84	7,029	3.93	46.3	18.47	24.6	4,035	57.40	52	59
5 to <10	2,430	66	88.89	2,484	7.92	15.9	19.41	29.7	2,149	86.50	38	33
10.00 to <100.00	2,082	53	93.43	2,115	22.04	13.8	19.99	25.6	2,410	113.93	95	54
10 to <20	1,173	33	94.47	1,200	13.93	7.6	19.75	25.7	1,303	108.63	33	22
20 to <30	418	9	89.61	422	22.70	2.8	20.01	25.0	519	123.03	19	13
30.00 to <100.00	491	11	93.48	493	41.18	3.4	20.56	25.9	587	119.06	43	19
100.00 (Default)	1,331	27	95.23	1,351	100.00	12.1	21.05	21.4	654	48.37	293	271
<b>Sub-total</b>	<b>171,893</b>	<b>10,463</b>	<b>82.18</b>	<b>180,375</b>	<b>1.66</b>	<b>1,199.0</b>	<b>18.48</b>	<b>23.8</b>	<b>40,136</b>	<b>22.25</b>	<b>704</b>	<b>569</b>
Qualifying Revolving												
0.00 to <0.15	55	11,130	68.56	7,685	0.08	2,488.1	55.53	0.0	245	3.18	4	1
0.00 to <0.10	23	9,609	68.62	6,617	0.07	2,087.4	55.81	0.0	186	2.81	3	0
0.10 to <0.15	32	1,520	68.19	1,068	0.16	400.7	53.79	0.0	59	5.51	1	0
0.15 to <0.25	63	1,257	66.14	895	0.25	368.2	53.49	0.0	70	7.88	1	0
0.25 to <0.50	91	764	63.37	575	0.42	273.4	52.78	0.0	67	11.60	1	0
0.50 to <0.75	125	526	61.62	449	0.73	236.2	52.72	0.0	81	18.09	2	1
0.75 to <2.50	208	445	62.15	485	1.61	278.6	52.17	0.0	156	32.13	4	2
0.75 to <1.75	113	285	62.08	289	1.27	162.5	52.16	0.0	78	27.11	2	1
1.75 to <2.5	96	160	62.28	196	2.12	116.1	52.17	0.0	77	39.54	2	1
2.50 to <10.00	166	203	63.81	296	5.37	166.5	53.68	0.0	226	76.43	9	6
2.50 to <5	110	139	63.99	199	4.05	119.6	52.69	0.0	125	62.65	4	3
5 to <10	56	64	63.44	97	8.06	46.9	55.71	0.0	102	104.74	4	3
10.00 to <100.00	58	38	65.78	83	21.59	39.7	55.09	0.0	132	158.11	10	6
10 to <20	28	27	66.28	45	14.03	21.5	56.01	0.0	65	143.36	4	2
20 to <30	14	8	65.23	19	22.44	9.0	54.48	0.0	32	169.48	2	1
30.00 to <100.00	17	3	63.31	19	38.72	9.3	53.51	0.0	35	181.97	4	2
100.00 (Default)	103	16	68.19	115	100.00	51.8	60.54	0.0	77	67.34	64	76
<b>Sub-total</b>	<b>870</b>	<b>14,379</b>	<b>67.55</b>	<b>10,583</b>	<b>1.61</b>	<b>3,902.5</b>	<b>54.93</b>	<b>0.0</b>	<b>1,054</b>	<b>9.96</b>	<b>95</b>	<b>92</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Other retail SMEs</b>												
0.00 to <0.15	660	2,535	22.54	1,376	0.11	38.0	44.45	2.9	135	9.81	1	0
0.00 to <0.10	356	2,073	16.30	819	0.09	23.7	45.27	2.6	73	8.88	0	0
0.10 to <0.15	304	462	50.53	557	0.14	14.4	43.26	3.4	62	11.17	0	0
0.15 to <0.25	484	797	34.71	786	0.23	23.6	44.45	4.2	131	16.71	1	0
0.25 to <0.50	574	946	27.17	744	0.39	26.1	45.81	3.3	179	24.08	1	1
0.50 to <0.75	539	560	38.04	617	0.65	16.5	49.60	5.1	210	33.98	2	1
0.75 to <2.50	1,030	624	43.83	944	1.40	17.0	55.61	3.7	474	50.25	7	3
0.75 to <1.75	527	357	41.93	509	1.08	10.1	54.15	3.8	231	45.35	3	1
1.75 to <2.5	503	267	46.36	435	1.77	6.9	57.31	3.6	243	55.98	4	2
2.50 to <10.00	814	269	38.69	527	4.42	11.6	60.90	2.6	356	67.65	13	7
2.50 to <5	662	232	39.32	432	3.65	8.9	61.38	2.6	289	66.85	9	5
5 to <10	152	37	34.68	94	7.96	2.6	58.74	3.0	67	71.32	4	3
10.00 to <100.00	176	33	49.79	81	20.24	2.7	61.18	2.1	78	96.65	9	6
10 to <20	80	14	37.34	35	13.04	1.2	61.50	2.2	29	84.35	3	2
20 to <30	52	15	67.83	30	22.01	0.7	58.11	1.8	30	99.91	3	1
30.00 to <100.00	44	5	30.16	16	32.32	0.8	66.07	2.7	19	116.90	3	3
100.00 (Default)	285	20	24.24	238	100.00	3.3	59.67	1.8	102	43.05	142	200
<b>Sub-total</b>	<b>4,562</b>	<b>5,783</b>	<b>29.68</b>	<b>5,312</b>	<b>5.66</b>	<b>138.8</b>	<b>49.79</b>	<b>3.5</b>	<b>1,666</b>	<b>31.37</b>	<b>176</b>	<b>218</b>
<b>Other retail non-SMEs</b>												
0.00 to <0.15	2,781	3,306	32.55	4,689	0.10	747.0	37.98	4.3	485	10.34	2	2
0.00 to <0.10	1,781	2,787	28.60	3,240	0.08	555.5	35.71	2.8	259	8.00	1	1
0.10 to <0.15	1,000	519	53.72	1,449	0.15	191.5	43.06	7.4	225	15.56	1	1
0.15 to <0.25	1,755	787	60.92	2,296	0.25	237.5	44.36	11.7	511	22.27	3	2
0.25 to <0.50	2,341	845	66.24	2,951	0.41	249.1	44.21	13.2	905	30.67	6	4
0.50 to <0.75	3,081	725	65.68	3,567	0.72	316.6	45.53	11.0	1,505	42.19	12	9
0.75 to <2.50	9,491	625	46.86	9,797	1.63	918.7	50.14	6.4	6,226	63.56	79	63
0.75 to <1.75	4,176	346	49.30	4,362	1.22	433.6	48.08	6.8	2,429	55.68	25	21
1.75 to <2.5	5,314	279	43.83	5,435	1.96	485.1	51.81	6.0	3,798	69.88	54	42
2.50 to <10.00	7,907	328	65.32	8,106	4.86	560.2	48.89	7.1	6,151	75.89	187	167
2.50 to <5	5,977	224	54.44	6,088	3.82	450.0	50.57	6.7	4,664	76.62	116	100
5 to <10	1,931	104	88.64	2,018	8.02	110.2	43.82	8.1	1,487	73.70	71	66
10.00 to <100.00	1,102	77	85.29	1,161	20.82	93.6	47.51	8.1	1,257	108.26	116	111
10 to <20	638	53	92.36	685	13.86	47.1	45.50	9.0	631	92.05	43	44
20 to <30	218	11	73.22	224	22.48	21.3	50.45	7.0	281	125.18	26	27
30.00 to <100.00	247	12	65.95	251	38.34	25.2	50.36	6.7	345	137.38	48	40
100.00 (Default)	1,941	43	49.25	1,953	100.00	135.7	60.39	3.2	378	19.36	1,203	1,204
<b>Sub-total</b>	<b>30,399</b>	<b>6,735</b>	<b>47.29</b>	<b>34,519</b>	<b>8.10</b>	<b>3,258.5</b>	<b>47.32</b>	<b>7.6</b>	<b>17,419</b>	<b>50.46</b>	<b>1,608</b>	<b>1,561</b>
<b>All exposure classes</b>												
<b>Total</b>	<b>597,976</b>	<b>311,470</b>	<b>32.80</b>	<b>699,329</b>	<b>4.10</b>	<b>8,589.9</b>	<b>32.19</b>	<b>8.1</b>	<b>196,288</b>	<b>28.07</b>	<b>7,408</b>	<b>7,028</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Central governments and central banks</b>												
0.00 to <0.15	107,855	81	54.44	121,984	0.00	0.1	50.41	1.1	669	0.55	1	0
0.00 to <0.10	107,489	81	54.45	121,619	0.00	0.1	50.41	1.1	616	0.51	1	0
0.10 to <0.15	366	0	12.77	366	0.14	0.0	50.00	2.5	53	14.50	0	0
0.15 to <0.25	1,369	0	82.14	1,701	0.23	0.0	50.00	1.7	803	47.23	2	0
0.25 to <0.50	2,147	0	99.99	2,230	0.39	0.0	49.88	2.2	1,527	68.47	4	0
0.50 to <0.75	493	67	21.22	495	0.64	0.0	49.87	1.1	354	71.67	2	0
0.75 to <2.50	5,353	172	41.02	5,049	1.74	0.0	97.78	4.8	12,279	243.19	1	0
0.75 to <1.75	266	104	35.80	168	1.07	0.0	47.15	0.7	131	77.55	1	0
1.75 to <2.5	5,086	67	49.09	4,881	1.76	0.0	99.52	5.0	12,149	248.91	0	0
2.50 to <10.00	2,425	481	35.93	514	5.29	0.0	48.04	3.0	645	125.52	8	15
2.50 to <5	2,126	430	35.37	399	4.52	0.0	48.30	3.6	446	111.80	4	14
5 to <10	299	50	40.76	116	7.95	0.0	47.15	0.8	200	172.87	4	2
10.00 to <100.00	432	144	35.01	29	13.01	0.0	50.00	1.7	69	235.95	2	1
10 to <20	432	144	35.01	29	13.01	0.0	50.00	1.7	69	235.95	2	1
20 to <30	0	0	0	0	0.00	0	0.00	0.0	0	0.00	0	–
30.00 to <100.00	0	0	0	0	0.00	0	0.00	0.0	0	0.00	0	–
100.00 (Default)	46	108	96.27	62	100.00	0.0	21.28	0.3	15	24.16	2	4
<b>Sub-total</b>	<b>120,119</b>	<b>1,052</b>	<b>43.32</b>	<b>132,063</b>	<b>0.15</b>	<b>0.2</b>	<b>52.18</b>	<b>1.3</b>	<b>16,361</b>	<b>12.39</b>	<b>23</b>	<b>21</b>
<b>Institutions</b>												
0.00 to <0.15	8,316	4,856	44.86	12,852	0.05	0.9	51.60	1.2	1,461	11.37	2	1
0.00 to <0.10	8,089	4,102	44.93	12,240	0.05	0.8	52.61	1.2	1,333	10.89	2	1
0.10 to <0.15	227	754	44.47	612	0.15	0.1	31.41	1.2	127	20.82	0	0
0.15 to <0.25	701	153	42.44	921	0.24	0.1	48.32	2.2	506	54.92	1	0
0.25 to <0.50	451	491	57.85	656	0.43	0.1	35.32	0.5	331	50.50	1	0
0.50 to <0.75	1,090	260	55.59	1,177	0.69	0.1	38.47	1.0	802	68.14	3	1
0.75 to <2.50	838	220	74.28	899	1.26	0.1	16.08	2.7	364	40.56	2	1
0.75 to <1.75	739	168	73.91	774	1.16	0.0	15.98	3.0	311	40.17	2	0
1.75 to <2.5	100	52	75.47	125	1.89	0.0	16.64	0.8	54	42.96	0	0
2.50 to <10.00	1,552	216	56.11	1,461	3.35	0.0	11.32	2.2	589	40.33	7	3
2.50 to <5	1,517	167	63.68	1,457	3.34	0.0	11.27	2.2	585	40.14	7	2
5 to <10	35	49	30.28	4	8.65	0.0	25.32	1.5	4	102.49	0	0
10.00 to <100.00	37	143	37.75	84	13.85	0.0	19.03	2.7	86	102.47	2	1
10 to <20	37	143	37.75	84	13.85	0.0	19.02	2.7	86	102.46	2	1
20 to <30	0	0	0	0	20.00	0.0	99.99	1.0	0	525.16	0	0
30.00 to <100.00	0	0	0	0	0.00	0	0.00	0.0	0	0.00	0	–
100.00 (Default)	1,754	0	0	1,754	100.00	0.0	1.12	4.9	242	13.77	1	1
<b>Sub-total</b>	<b>14,740</b>	<b>6,339</b>	<b>47.49</b>	<b>19,804</b>	<b>9.32</b>	<b>1.2</b>	<b>40.94</b>	<b>1.7</b>	<b>4,381</b>	<b>22.12</b>	<b>21</b>	<b>7</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Corporates</b>												
0.00 to <0.15	85,039	113,635	31.29	122,564	0.08	20.1	32.88	2.1	21,473	17.52	33	15
0.00 to <0.10	65,211	85,494	31.87	94,884	0.06	15.6	32.84	2.1	14,628	15.42	19	9
0.10 to <0.15	19,828	28,141	29.52	27,680	0.15	4.6	33.02	2.1	6,845	24.73	14	7
0.15 to <0.25	20,854	17,514	31.28	25,219	0.24	5.2	31.01	2.2	7,657	30.36	18	7
0.25 to <0.50	19,727	14,667	28.56	22,649	0.40	5.0	27.98	2.3	8,448	37.30	26	11
0.50 to <0.75	16,922	9,984	30.34	18,568	0.67	4.4	25.69	2.3	7,888	42.48	32	17
0.75 to <2.50	33,696	18,595	34.02	35,266	1.49	6.1	27.38	2.4	19,852	56.29	133	71
0.75 to <1.75	14,333	9,770	33.81	15,708	1.11	3.6	24.96	2.3	7,960	50.67	44	23
1.75 to <2.5	19,363	8,825	34.25	19,558	1.80	2.5	29.33	2.6	11,892	60.80	89	48
2.50 to <10.00	28,937	28,660	30.23	33,737	5.62	3.6	22.51	2.8	27,390	81.19	395	240
2.50 to <5	18,183	17,102	30.38	20,239	4.00	2.6	26.04	3.0	17,570	86.81	206	128
5 to <10	10,753	11,558	29.99	13,498	8.05	1.0	17.22	2.6	9,820	72.75	189	111
10.00 to <100.00	4,731	2,780	41.85	4,707	21.22	0.9	18.81	2.3	3,948	83.88	156	85
10 to <20	3,281	1,651	41.32	3,176	13.41	0.3	18.62	2.3	2,550	80.26	74	45
20 to <30	885	1,010	43.05	1,021	22.53	0.4	21.09	2.0	1,068	104.64	46	32
30.00 to <100.00	565	119	38.81	510	67.20	0.1	15.48	3.1	330	64.80	35	8
100.00 (Default)	14,283	2,493	30.29	14,135	98.72	3.6	30.52	2.9	3,572	25.27	4,122	4,260
<b>Sub-total</b>	<b>224,188</b>	<b>208,327</b>	<b>31.28</b>	<b>276,845</b>	<b>6.41</b>	<b>48.9</b>	<b>29.50</b>	<b>2.3</b>	<b>100,227</b>	<b>36.20</b>	<b>4,915</b>	<b>4,706</b>
<b>of which:</b>												
<b>SMEs</b>												
0.00 to <0.15	4,575	3,475	33.47	5,596	0.10	6.0	30.80	3.1	791	14.13	2	2
0.00 to <0.10	3,034	2,356	31.32	3,736	0.07	4.3	29.03	3.1	384	10.29	1	1
0.10 to <0.15	1,541	1,119	38.00	1,860	0.16	1.7	34.35	3.1	406	21.84	1	0
0.15 to <0.25	2,225	1,182	34.77	2,367	0.25	2.1	34.36	3.0	634	26.77	2	1
0.25 to <0.50	1,806	1,665	34.76	2,175	0.42	2.0	35.04	3.0	792	36.43	3	2
0.50 to <0.75	2,123	872	36.16	2,089	0.70	1.7	36.90	2.9	1,030	49.32	5	2
0.75 to <2.50	3,527	1,163	38.19	3,222	1.62	2.4	31.74	3.2	1,820	56.50	16	13
0.75 to <1.75	1,361	528	38.62	1,220	1.20	1.4	36.12	2.4	649	53.19	5	4
1.75 to <2.5	2,167	634	37.84	2,002	1.87	1.0	29.07	3.7	1,171	58.52	11	9
2.50 to <10.00	1,772	754	34.97	1,605	5.38	1.1	33.60	2.6	1,306	81.35	28	18
2.50 to <5	1,205	539	30.75	1,030	3.75	0.9	35.53	2.9	789	76.62	13	11
5 to <10	566	215	45.56	575	8.30	0.3	30.13	2.0	516	89.83	15	7
10.00 to <100.00	509	114	34.61	405	19.41	0.4	42.01	2.0	620	153.28	33	21
10 to <20	250	76	31.11	233	13.81	0.1	39.61	1.6	306	131.36	13	6
20 to <30	166	31	36.55	89	21.74	0.2	52.62	1.4	173	195.05	10	13
30.00 to <100.00	94	7	63.25	83	32.65	0.0	37.43	3.9	141	170.25	10	2
100.00 (Default)	1,685	134	38.11	1,682	100.00	1.1	63.41	1.9	440	26.13	1,048	1,127
<b>Sub-total</b>	<b>18,222</b>	<b>9,359</b>	<b>34.90</b>	<b>19,141</b>	<b>10.11</b>	<b>16.7</b>	<b>35.88</b>	<b>2.9</b>	<b>7,433</b>	<b>38.83</b>	<b>1,138</b>	<b>1,186</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Specialized Lending</b>												
0.00 to <0.15	8,745	268	48.54	8,743	0.10	0.2	6.50	3.0	379	4.34	0	2
0.00 to <0.10	5,991	236	44.52	6,010	0.08	0.1	7.18	2.7	222	3.70	0	0
0.10 to <0.15	2,754	32	77.93	2,733	0.14	0.1	5.00	3.6	157	5.73	0	2
0.15 to <0.25	3,099	103	17.97	3,028	0.23	0.1	7.59	2.8	253	8.34	1	0
0.25 to <0.50	3,353	122	36.04	3,321	0.39	0.1	10.08	3.0	530	15.95	1	1
0.50 to <0.75	3,648	120	66.78	3,747	0.66	0.1	10.91	2.8	822	21.95	3	3
0.75 to <2.50	6,291	823	54.22	6,236	1.42	0.3	13.37	2.8	1,757	28.18	10	7
0.75 to <1.75	3,273	399	56.56	3,290	1.10	0.2	17.19	2.5	990	30.07	6	3
1.75 to <2.5	3,017	424	51.74	2,946	1.79	0.1	9.11	3.1	768	26.06	5	4
2.50 to <10.00	11,808	1,395	23.92	11,814	6.35	0.3	7.68	2.5	3,267	27.66	55	34
2.50 to <5	5,146	560	27.15	4,986	4.17	0.2	8.56	2.4	1,328	26.64	17	12
5 to <10	6,662	835	21.75	6,828	7.94	0.2	7.03	2.5	1,939	28.40	38	21
10.00 to <100.00	1,485	321	35.42	1,589	16.25	0.1	8.91	2.8	686	43.18	23	10
10 to <20	1,174	249	33.25	1,247	13.00	0.0	8.86	2.9	526	42.21	14	6
20 to <30	252	72	42.89	283	22.01	0.0	10.15	2.2	157	55.55	6	4
30.00 to <100.00	59	0	0	59	57.63	0.0	3.92	4.1	2	4.16	2	0
100.00 (Default)	2,989	80	27.87	2,933	100.00	0.2	31.70	3.1	535	18.25	889	812
<b>Sub-total</b>	<b>41,418</b>	<b>3,233</b>	<b>36.78</b>	<b>41,411</b>	<b>9.86</b>	<b>1.3</b>	<b>10.52</b>	<b>2.8</b>	<b>8,230</b>	<b>19.87</b>	<b>983</b>	<b>869</b>
<b>Other</b>												
0.00 to <0.15	71,719	109,892	31.17	108,225	0.08	14.0	35.12	2.0	20,303	18.76	31	11
0.00 to <0.10	56,186	82,902	31.85	85,138	0.06	11.2	34.82	2.0	14,021	16.47	18	7
0.10 to <0.15	15,533	26,990	29.11	23,087	0.15	2.8	36.23	1.9	6,282	27.21	13	4
0.15 to <0.25	15,530	16,228	31.11	19,824	0.24	3.0	34.19	2.0	6,770	34.15	15	6
0.25 to <0.50	14,568	12,880	27.69	17,153	0.41	2.9	30.55	2.1	7,126	41.54	22	9
0.50 to <0.75	11,151	8,991	29.29	12,732	0.67	2.6	28.20	2.1	6,035	47.40	24	12
0.75 to <2.50	23,878	16,609	32.73	25,808	1.50	3.4	30.22	2.3	16,274	63.06	107	52
0.75 to <1.75	9,699	8,843	32.49	11,198	1.10	2.0	26.02	2.3	6,321	56.45	34	16
1.75 to <2.5	14,179	7,767	33.00	14,611	1.80	1.4	33.44	2.3	9,953	68.12	73	35
2.50 to <10.00	15,357	26,512	30.42	20,318	5.22	2.1	30.26	3.0	22,817	112.30	312	188
2.50 to <5	11,832	16,003	30.48	14,222	3.96	1.5	31.48	3.2	15,452	108.65	176	105
5 to <10	3,524	10,509	30.33	6,096	8.16	0.6	27.43	2.7	7,364	120.81	136	83
10.00 to <100.00	2,736	2,345	43.08	2,714	24.39	0.5	21.15	2.1	2,642	97.35	100	54
10 to <20	1,857	1,326	43.43	1,696	13.66	0.2	22.90	1.9	1,717	101.22	47	33
20 to <30	467	907	43.29	649	22.87	0.2	21.57	2.1	738	113.70	30	14
30.00 to <100.00	412	112	37.23	368	76.52	0.1	12.37	2.8	187	50.69	23	6
100.00 (Default)	9,608	2,278	29.92	9,519	98.09	2.4	24.34	3.1	2,597	27.28	2,184	2,321
<b>Sub-total</b>	<b>164,548</b>	<b>195,735</b>	<b>31.01</b>	<b>216,293</b>	<b>5.43</b>	<b>30.9</b>	<b>32.57</b>	<b>2.2</b>	<b>84,564</b>	<b>39.10</b>	<b>2,795</b>	<b>2,652</b>

Dec 31, 2021

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Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Retail</b>												
0.00 to <0.15	31,239	18,057	54.95	41,528	0.11	3,515.7	25.17	14.1	2,023	4.87	12	9
0.00 to <0.10	15,911	14,868	53.49	24,129	0.08	2,776.9	28.36	11.5	919	3.81	6	4
0.10 to <0.15	15,327	3,189	61.76	17,399	0.15	738.8	20.75	17.8	1,104	6.35	6	4
0.15 to <0.25	27,307	4,037	60.12	29,793	0.25	829.9	20.12	21.2	2,776	9.32	15	13
0.25 to <0.50	38,853	4,711	64.09	41,763	0.41	796.8	20.64	23.5	5,996	14.36	36	29
0.50 to <0.75	44,078	4,654	74.13	47,291	0.73	837.8	22.40	23.1	10,931	23.12	78	60
0.75 to <2.50	46,038	4,039	68.87	48,289	0.69	1,445.1	27.89	18.7	20,482	42.41	214	135
0.75 to <1.75	29,152	2,711	71.91	30,829	1.27	758.7	25.74	20.0	11,229	36.42	100	63
1.75 to <2.5	16,886	1,328	62.67	17,460	2.06	686.4	31.67	16.3	9,253	52.99	113	71
2.50 to <10.00	18,333	1,137	59.14	18,608	4.95	827.9	33.13	16.0	12,812	68.85	301	254
2.50 to <5	13,748	887	55.89	13,924	3.92	645.6	33.80	15.1	9,052	65.01	184	151
5 to <10	4,585	250	70.66	4,684	8.02	182.2	31.13	18.6	3,760	80.28	117	103
10.00 to <100.00	3,499	166	73.32	3,499	21.26	196.9	30.54	18.1	3,695	105.60	219	171
10 to <20	2,023	94	73.78	2,027	13.98	81.5	29.85	18.1	2,105	103.80	85	69
20 to <30	698	43	75.01	707	22.66	78.7	32.91	16.4	869	122.95	52	40
30.00 to <100.00	778	29	69.28	765	39.25	36.8	30.19	19.5	721	94.32	82	62
100.00 (Default)	3,870	107	67.61	3,886	100.00	211.2	46.09	9.4	1,177	30.29	1,789	1,871
<b>Sub-total</b>	<b>213,217</b>	<b>36,908</b>	<b>60.87</b>	<b>234,657</b>	<b>2.78</b>	<b>8,661.4</b>	<b>24.78</b>	<b>19.6</b>	<b>59,891</b>	<b>25.52</b>	<b>2,664</b>	<b>2,543</b>
<b>of which:</b>												
Secured by real estate property SMEs												
0.00 to <0.15	1,402	190	58.07	1,505	0.12	8.0	13.65	14.4	49	3.27	0	0
0.00 to <0.10	500	91	57.85	551	0.08	3.2	12.88	13.9	13	2.37	0	0
0.10 to <0.15	902	99	58.28	954	0.14	4.8	14.09	14.7	36	3.79	0	0
0.15 to <0.25	1,647	117	59.33	1,711	0.23	7.4	14.55	15.7	96	5.63	1	0
0.25 to <0.50	1,696	106	55.70	1,744	0.40	7.5	14.65	15.7	146	8.35	1	0
0.50 to <0.75	1,391	84	57.29	1,427	0.66	6.3	14.43	15.5	171	11.95	1	1
0.75 to <2.50	1,681	84	56.58	1,690	1.41	7.0	14.92	15.6	351	20.76	4	3
0.75 to <1.75	982	50	58.67	997	1.11	4.3	14.81	15.7	176	17.70	2	1
1.75 to <2.5	700	34	53.46	693	1.85	2.7	15.07	15.5	174	25.15	2	2
2.50 to <10.00	648	27	50.57	649	4.35	2.6	14.96	15.2	255	39.27	4	5
2.50 to <5	551	25	50.61	553	3.69	2.2	14.85	15.4	201	36.29	3	4
5 to <10	97	2	49.91	96	8.17	0.4	15.56	13.6	54	56.48	1	1
10.00 to <100.00	106	1	48.86	78	20.26	0.4	12.01	13.3	45	57.07	2	2
10 to <20	69	1	49.75	43	13.58	0.2	11.53	13.6	22	52.31	1	1
20 to <30	18	0	60.87	17	22.95	0.1	12.03	13.6	11	64.26	0	0
30.00 to <100.00	20	0	40.79	18	33.34	0.1	13.13	12.2	11	61.44	1	1
100.00 (Default)	93	0	51.10	91	100.00	0.4	27.80	9.9	34	37.16	25	33
<b>Sub-total</b>	<b>8,664</b>	<b>608</b>	<b>57.25</b>	<b>8,895</b>	<b>2.04</b>	<b>39.6</b>	<b>14.61</b>	<b>15.3</b>	<b>1,146</b>	<b>12.88</b>	<b>38</b>	<b>44</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
Secured by real estate property non-SMEs												
0.00 to <0.15	26,506	792	60.06	26,980	0.12	255.0	14.46	20.1	1,171	4.34	5	6
0.00 to <0.10	13,341	347	58.66	13,544	0.09	146.0	13.51	19.1	430	3.17	2	3
0.10 to <0.15	13,164	445	61.15	13,436	0.15	108.9	15.41	21.1	741	5.52	3	3
0.15 to <0.25	23,349	1,027	72.80	24,089	0.25	174.9	16.25	24.0	1,981	8.22	10	10
0.25 to <0.50	34,216	1,901	82.45	35,768	0.41	229.2	17.94	25.5	4,705	13.15	27	24
0.50 to <0.75	38,987	2,616	88.95	41,299	0.73	252.9	19.93	24.9	8,967	21.71	61	49
0.75 to <2.50	33,652	2,071	88.01	35,443	0.35	207.9	21.28	22.9	13,235	37.34	117	68
0.75 to <1.75	23,364	1,519	89.17	24,703	1.28	144.2	21.23	23.1	8,267	33.47	68	39
1.75 to <2.5	10,288	552	84.82	10,740	2.10	63.7	21.38	22.3	4,967	46.25	49	29
2.50 to <10.00	8,891	315	82.11	9,119	4.98	61.2	18.58	25.7	5,883	64.52	86	84
2.50 to <5	6,545	246	79.47	6,714	3.92	45.4	18.31	24.3	3,815	56.81	49	52
5 to <10	2,346	70	91.41	2,405	7.95	15.8	19.31	29.5	2,069	86.03	37	32
10.00 to <100.00	2,086	52	92.95	2,118	21.56	14.0	19.94	25.7	2,400	113.31	92	55
10 to <20	1,205	36	93.06	1,235	13.95	8.0	20.15	25.5	1,367	110.71	35	22
20 to <30	397	6	92.46	399	22.72	2.8	19.31	24.9	474	118.89	17	11
30.00 to <100.00	483	9	92.88	484	40.02	3.3	19.92	27.0	558	115.34	40	22
100.00 (Default)	1,331	27	97.25	1,351	100.00	12.0	21.80	21.3	638	47.20	297	281
<b>Sub-total</b>	<b>169,017</b>	<b>8,800</b>	<b>82.65</b>	<b>176,167</b>	<b>1.66</b>	<b>1,207.1</b>	<b>18.40</b>	<b>23.8</b>	<b>38,979</b>	<b>22.13</b>	<b>694</b>	<b>578</b>
Qualifying Revolving												
0.00 to <0.15	50	11,189	68.47	7,711	0.08	2,492.9	55.57	0.0	251	3.25	4	1
0.00 to <0.10	22	9,575	68.53	6,583	0.07	2,075.2	55.85	0.0	188	2.86	3	0
0.10 to <0.15	28	1,613	68.16	1,128	0.16	417.7	53.96	0.0	62	5.53	1	0
0.15 to <0.25	58	1,331	66.18	939	0.25	382.2	53.59	0.0	74	7.89	1	0
0.25 to <0.50	90	804	63.44	600	0.42	281.6	52.69	0.0	70	11.59	1	1
0.50 to <0.75	116	550	61.63	455	0.74	241.3	52.71	0.0	83	18.14	2	1
0.75 to <2.50	201	469	61.86	490	1.62	282.6	52.15	0.0	159	32.33	4	2
0.75 to <1.75	107	299	61.62	292	1.28	164.6	52.08	0.0	79	27.23	2	1
1.75 to <2.5	93	170	62.26	199	2.13	118.0	52.26	0.0	79	39.81	2	1
2.50 to <10.00	165	208	63.59	297	5.36	167.5	53.81	0.0	228	76.75	9	5
2.50 to <5	110	143	63.63	201	4.07	119.9	52.70	0.0	126	62.89	4	3
5 to <10	55	65	63.50	96	8.07	47.6	56.13	0.0	102	105.70	4	3
10.00 to <100.00	56	38	65.32	80	21.48	40.0	55.40	0.0	128	158.92	10	6
10 to <20	27	26	65.72	44	14.05	22.1	56.32	0.0	64	144.42	3	2
20 to <30	13	8	64.96	19	22.45	9.1	54.85	0.0	32	170.77	2	1
30.00 to <100.00	16	3	62.95	18	39.04	8.8	53.66	0.0	32	182.59	4	2
100.00 (Default)	261	17	67.36	272	100.00	58.6	71.69	(0.0)	87	31.85	190	210
<b>Sub-total</b>	<b>997</b>	<b>14,604</b>	<b>67.44</b>	<b>10,846</b>	<b>3.02</b>	<b>3,946.6</b>	<b>55.32</b>	<b>0.0</b>	<b>1,078</b>	<b>9.94</b>	<b>221</b>	<b>226</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l
Exposure class/ PD scale	On-balance sheet exposures	Off-balance- sheet exposures pre- CCF	Exposure weighted average CCF (in %)	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors (in 1,000s)	Exposure weighted average LGD (%)	Exposure weighted average maturity (in years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (in %)	Expected Loss amount	Value adjustments and Provisions
<b>Other retail SMEs</b>												
0.00 to <0.15	725	2,638	23.45	1,420	0.11	37.3	44.66	2.9	141	9.93	1	0
0.00 to <0.10	396	2,153	17.29	843	0.09	22.8	45.70	2.3	75	8.92	0	0
0.10 to <0.15	329	485	50.82	577	0.14	14.5	43.14	3.7	66	11.40	0	0
0.15 to <0.25	520	815	35.78	807	0.24	23.9	44.42	3.4	136	16.90	1	0
0.25 to <0.50	586	965	28.93	756	0.40	25.8	46.56	3.1	187	24.76	1	1
0.50 to <0.75	570	597	36.54	581	0.67	17.2	50.99	3.4	204	35.13	2	1
0.75 to <2.50	1,117	723	43.45	972	1.44	18.4	55.62	3.2	490	50.35	7	3
0.75 to <1.75	588	433	41.56	522	1.11	11.1	55.52	2.8	243	46.60	3	1
1.75 to <2.5	529	289	46.27	451	1.82	7.3	55.74	3.7	246	54.70	4	2
2.50 to <10.00	724	262	40.57	485	4.48	11.3	57.80	2.9	315	64.86	12	7
2.50 to <5	592	222	41.73	402	3.73	8.7	57.99	2.9	257	63.91	8	5
5 to <10	133	40	34.10	83	8.14	2.5	56.86	2.9	58	69.45	4	2
10.00 to <100.00	146	38	58.87	83	19.79	2.9	56.76	2.4	76	91.83	9	5
10 to <20	73	13	34.37	34	13.46	1.3	58.29	2.9	28	81.60	2	2
20 to <30	37	20	81.00	34	21.01	1.0	51.57	1.5	31	91.03	4	1
30.00 to <100.00	36	5	32.83	15	31.40	0.7	64.88	3.1	18	116.73	3	2
100.00 (Default)	294	22	41.12	260	100.00	3.4	58.03	2.1	60	23.23	150	215
<b>Sub-total</b>	<b>4,683</b>	<b>6,060</b>	<b>30.68</b>	<b>5,365</b>	<b>6.01</b>	<b>140.1</b>	<b>49.59</b>	<b>3.1</b>	<b>1,610</b>	<b>30.01</b>	<b>183</b>	<b>232</b>
<b>Other retail non-SMEs</b>												
0.00 to <0.15	2,556	3,248	32.53	3,911	0.10	722.5	36.50	4.5	411	10.51	2	2
0.00 to <0.10	1,653	2,702	28.26	2,606	0.08	529.7	33.76	3.0	213	8.16	1	1
0.10 to <0.15	904	546	53.68	1,305	0.15	192.9	41.95	7.5	198	15.20	1	1
0.15 to <0.25	1,733	747	58.57	2,247	0.25	241.5	43.17	11.1	488	21.71	2	2
0.25 to <0.50	2,265	935	64.55	2,895	0.42	252.9	44.15	13.3	888	30.69	5	4
0.50 to <0.75	3,014	808	64.19	3,529	0.72	320.2	45.90	11.2	1,508	42.72	12	8
0.75 to <2.50	9,387	693	44.44	9,693	1.68	929.3	50.29	6.4	6,248	64.46	82	58
0.75 to <1.75	4,110	410	49.17	4,316	1.24	434.5	48.72	7.0	2,462	57.06	26	21
1.75 to <2.5	5,277	283	37.61	5,378	2.03	494.8	51.56	5.9	3,785	70.39	56	38
2.50 to <10.00	7,904	325	49.67	8,058	4.97	585.3	48.80	6.5	6,131	76.09	191	153
2.50 to <5	5,950	251	41.49	6,053	3.94	469.4	50.47	6.2	4,653	76.87	120	88
5 to <10	1,954	74	77.52	2,004	8.08	115.9	43.78	7.3	1,478	73.74	71	64
10.00 to <100.00	1,106	39	69.33	1,139	20.85	139.5	47.86	6.6	1,046	91.85	107	103
10 to <20	649	19	74.66	672	14.07	50.0	45.66	6.8	624	92.86	43	42
20 to <30	233	8	57.66	238	22.80	65.7	52.84	5.8	321	134.76	29	26
30.00 to <100.00	224	11	69.08	230	38.63	23.8	49.10	6.7	102	44.43	35	35
100.00 (Default)	1,892	41	62.76	1,911	100.00	136.8	58.86	3.3	358	18.74	1,128	1,133
<b>Sub-total</b>	<b>29,857</b>	<b>6,836</b>	<b>45.91</b>	<b>33,384</b>	<b>8.27</b>	<b>3,328.0</b>	<b>47.25</b>	<b>7.4</b>	<b>17,078</b>	<b>51.16</b>	<b>1,529</b>	<b>1,462</b>
<b>All exposure classes</b>												
<b>Total</b>	<b>572,264</b>	<b>252,626</b>	<b>36.06</b>	<b>663,369</b>	<b>3.97</b>	<b>8,711.7</b>	<b>32.69</b>	<b>8.2</b>	<b>180,861</b>	<b>27.26</b>	<b>7,622</b>	<b>7,276</b>

## Total IRB exposure covered by credit derivatives

### Article 453 (j) CRR

The table below presents the Group's IRB exposures, split into FIRB and AIRB. The table shows the RWA by the relevant exposure classes prior and after the usage of CRM techniques in the form of credit derivatives, where the exposure is then assigned to the exposure class of the protection seller.

#### EU CR7 – IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques

in € m.		Jun 30, 2022		Dec 31, 2021	
		a	b	a	b
		pre-credit derivatives RWA	Actual RWA	pre-credit derivatives RWA	Actual RWA
1	<b>Exposures under FIRB</b>				
2	Central governments and central banks	0	0	0	0
3	Institutions	3	3	3	3
3a	Corporates	2,753	2,757	2,766	2,768
	of which:				
4	SMEs	77	77	94	94
5	Specialized lending	591	591	699	699
	Others	2,085	2,089	1,973	1,975
6a	<b>Sub-total FIRB</b>	<b>2,756</b>	<b>2,759</b>	<b>2,769</b>	<b>2,770</b>
7	<b>Exposures under AIRB</b>				
8	Central governments and central banks	16,910	16,910	16,361	16,361
9	Institutions	4,046	4,101	4,339	4,381
9a	Corporates	115,301	113,903	101,209	100,227
	of which:				
10	SMEs	8,025	8,025	7,433	7,433
11	Specialized lending	9,427	9,427	8,239	8,230
	Others	97,849	96,451	85,537	84,564
12a	Retail	61,374	61,374	59,891	59,891
	of which:				
13	Secured by real estate property SMEs	1,099	1,099	1,146	1,146
14	Secured by real estate property non-SMEs	40,136	40,136	38,979	38,979
15	Qualifying revolving	1,054	1,054	1,078	1,078
16	Other retail SMEs	1,666	1,666	1,610	1,610
17	Other retail non-SMEs	17,419	17,419	17,078	17,078
19a	<b>Sub-total AIRB</b>	<b>197,632</b>	<b>196,288</b>	<b>181,801</b>	<b>180,861</b>
20	<b>Total</b>	<b>200,387</b>	<b>199,047</b>	<b>184,569</b>	<b>183,631</b>

Deutsche Bank's RWA for exposures under the IRB approach is € 199.0 billion as of June 30, 2022 in comparison to € 183.6 billion as of the prior period. The increase of € 15.4 billion is predominantly driven by increases in RWA within the Group's AIRB for the exposure classes "Corporates – Others", "Corporates – Specialized Lending" and Retail - Secured by real estate property non-SMEs". The RWA for Corporate exposures mainly benefitted from the application of credit derivatives.

## Total IRB exposure covered by the use of CRM techniques

### Article 453 (g) CRR

The below two tables present Deutsche Bank's FIRB and AIRB exposures and the extent of the use of CRM techniques broken down by exposure classes. The CRM techniques are separately shown for funded credit protection (FCP) and unfunded credit protection (UFCP). For FCP the table also presents a split between the part of exposures covered by other eligible collaterals and the part of exposures covered by other funded credit protection. Additionally, the RWA without substitution effects (reduction effects only) and the RWA with substitution effects (both reduction and substitution effects) are shown.

EU CR7-A – Foundation IRB approach – Extent of the use of CRM techniques

														Jun 30, 2022																			
														m	n																		
														Credit risk Mitigation methods in the calculation of RWEAs																			
														Credit risk mitigation techniques																			
														Unfunded credit protection (UFCP)																			
														Funded credit protection (FCP)																			
														Part of exposures covered by Other eligible collaterals (%)		Part of exposures covered by Other funded credit protection (%)																	
														of which: Part of exposures covered by Immovable property		of which: Part of exposures covered by Receivables		of which: Part of exposures covered by Other physical collateral		of which: Part of exposures covered by Cash on deposit		of which: Part of exposures covered by Life insurance policies		of which: Part of exposures covered by Instruments held by a third party		Part of exposures covered by Guarantees		Part of exposures covered by Credit Derivatives		RWA without substitution effects (reduction effects only)		RWA with substitution effects (both reduction and substitution effects)	
in € m. (unless stated otherwise)	Total exposures	Part of exposures covered by Financial Collaterals (%)	Total	Collaterals (%)	%	%	Total	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%						
<b>Central governments and central banks</b>	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0							
Institutions	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	3							
Corporates	6,792	0.00	9.46	9.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,757	2,757								
of which:																																	
SME	130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77	77								
Specialized lending	910	0.00	70.51	70.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	591	591								
Other	5,752	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,089	2,089								
<b>Total</b>	<b>6,846</b>	<b>0.00</b>	<b>9.39</b>	<b>9.39</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,759</b>	<b>2,759</b>																	

														Dec 31, 2021																			
														m	n																		
														Credit risk Mitigation methods in the calculation of RWEAs																			
														Credit risk mitigation techniques																			
														Unfunded credit protection (UFCP)																			
														Funded credit protection (FCP)																			
														Part of exposures covered by Other eligible collaterals (%)		Part of exposures covered by Other funded credit protection (%)																	
														of which: Part of exposures covered by Immovable property		of which: Part of exposures covered by Receivables		of which: Part of exposures covered by Other physical collateral		of which: Part of exposures covered by Cash on deposit		of which: Part of exposures covered by Life insurance policies		of which: Part of exposures covered by Instruments held by a third party		Part of exposures covered by Guarantees		Part of exposures covered by Credit Derivatives		RWA without substitution effects (reduction effects only)		RWA with substitution effects (both reduction and substitution effects)	
in € m. (unless stated otherwise)	Total exposures	Part of exposures covered by Financial Collaterals (%)	Total	Collaterals (%)	%	%	Total	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%					
<b>Central governments and central banks</b>	58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0							
Institutions	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	3							
Corporates	6,743	0.00	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,768	2,768								
of which:																																	
SME	153	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94	94								
Specialized lending	998	0.00	66.59	66.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	699	699								
Other	5,591	0.00	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,975	1,975								
<b>Total</b>	<b>6,804</b>	<b>0.00</b>	<b>9.91</b>	<b>9.91</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,770</b>	<b>2,770</b>																	

EU CR7-A – Advanced IRB approach – Extent of the use of CRM techniques

														Jun 30, 2022																			
														m	n																		
														Credit risk Mitigation methods in the calculation of RWEAs																			
														Credit risk mitigation techniques																			
														Unfunded credit protection (UFCP)																			
														Funded credit protection (FCP)																			
														Part of exposures covered by Other eligible collaterals (%)		Part of exposures covered by Other funded credit protection (%)																	
														of which:		of which:		of which:		of which:													
														Part of exposures covered by Immovable property		Part of exposures covered by Receivables		Part of exposures covered by Other physical collateral		Part of exposures covered by Cash on deposit		Part of exposures covered by Life insurance policies		Part of exposures covered by Instruments held by a third party		Part of exposures covered by Guarantees		Part of exposures covered by Credit Derivatives		RWA without substitution effects (reduction effects only)		RWA with substitution effects (both reduction and substitution effects)	
in € m. (unless stated otherwise)	Total exposures	Part of exposures covered by Financial Collaterals (%)	Total	Collaterals (%)	of which: Part of exposures covered by Receivables (%)	of which: Part of exposures covered by Other physical collateral (%)	Total	Part of exposures covered by Cash on deposit (%)	of which: Part of exposures covered by Life insurance policies (%)	of which: Part of exposures covered by Instruments held by a third party (%)	Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	RWA without substitution effects (reduction effects only)	RWA with substitution effects (both reduction and substitution effects)																			
<b>Central governments and central banks</b>																																	
	134,114	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.00	17,189	16,910																			
Institutions	21,597	7.30	1.54	1.34	0.00	0.20	0.53	0.52	0.01	0.00	0.00	0.00	3,907	4,101																			
Corporates	304,181	16.27	19.35	17.72	0.35	1.28	1.79	1.31	0.49	0.00	0.00	0.00	115,315	113,903																			
of which:																																	
SME	21,252	6.26	24.78	22.53	0.17	2.08	1.19	1.00	0.88	0.00	0.00	0.00	8,100	8,025																			
Specialized lending	46,473	0.80	65.77	62.42	0.00	3.35	0.12	0.12	0.00	0.00	0.00	0.00	9,733	9,427																			
Other	236,456	20.21	9.74	8.50	0.43	0.81	2.17	1.57	0.55	0.00	0.00	0.00	97,483	96,451																			
Retail	239,436	2.86	54.26	54.07	0.18	0.01	0.43	0.01	0.42	0.00	0.00	0.00	61,039	61,374																			
of which:																																	
Secured by real estate property																																	
SMEs	8,647	2.45	73.89	73.40	0.46	0.02	2.50	0.01	2.49	0.00	0.00	0.00	1,126	1,099																			
Secured by real estate property non-SMEs																																	
Qualifying revolving	180,375	2.42	68.42	68.23	0.19	0.00	0.39	0.00	0.39	0.00	0.00	0.00	40,181	40,136																			
Other retail SMEs	10,583	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,054	1,054																			
Other retail non-SMEs	5,312	4.11	1.20	0.11	0.82	0.27	0.97	0.01	0.96	0.00	0.00	0.00	1,453	1,666																			
SMEs	34,519	5.99	0.13	0.09	0.04	0.01	0.14	0.01	0.13	0.00	0.00	0.00	17,225	17,419																			
<b>Total</b>	<b>699,329</b>	<b>8.28</b>	<b>27.04</b>	<b>26.26</b>	<b>0.21</b>	<b>0.57</b>	<b>0.96</b>	<b>0.60</b>	<b>0.36</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>197,451</b>	<b>196,288</b>																			

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g	h	i	j	k	l	m	n
	Total exposures	Part of exposures covered by Financial Collaterals (%)	Credit risk mitigation techniques										Credit risk Mitigation methods in the calculation of RWEAs	
			Funded credit protection (FCP)						Unfunded credit protection (UFCP)				RWA without substitution effects (reduction effects only)	RWA with substitution effects (both reduction and substitution effects)
			Part of exposures covered by Other eligible collaterals (%)			Part of exposures covered by Other funded credit protection (%)			Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	Part of exposures covered by Instruments held by a third party (%)	Part of exposures covered by Cash on deposit (%)		
Total	of which: Part of exposures covered by Immovable property Collaterals (%)	of which: Part of exposures covered by Receivables (%)	of which: Part of exposures covered by Other physical collateral (%)	Total	of which: Part of exposures covered by Cash on deposit (%)	of which: Part of exposures covered by Life insurance policies (%)	of which: Part of exposures covered by Instruments held by a third party (%)							
<b>Central governments and central banks</b>	132,063	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	16,730	16,361
Institutions	19,804	5.01	2.57	2.24	0.00	0.33	0.36	0.39	0.00	0.00	0.00	0.00	4,109	4,381
Corporates	276,898	15.68	19.01	17.43	0.32	1.26	1.31	0.85	0.46	0.00	0.00	0.00	101,294	100,227
of which:														
SME	19,141	4.73	25.86	23.72	0.14	2.00	1.21	0.29	0.92	0.00	0.00	0.00	7,520	7,433
Specialized lending	41,405	0.89	63.78	60.08	0.00	3.71	0.11	0.11	0.00	0.00	0.00	0.00	8,481	8,230
Other	216,351	19.48	9.83	8.71	0.39	0.73	1.55	1.04	0.51	0.00	0.00	0.00	85,293	84,564
Retail	234,657	2.89	54.12	53.92	0.19	0.01	0.47	0.01	0.46	0.00	0.00	0.00	59,644	59,891
of which:														
Secured by real estate property														
SMEs	8,895	2.52	73.77	73.28	0.47	0.02	2.71	0.01	2.70	0.00	0.00	0.00	1,177	1,146
Secured by real estate property non-SMEs	176,167	2.47	68.30	68.10	0.19	0.00	0.43	0.01	0.42	0.00	0.00	0.00	39,029	38,979
Qualifying revolving	10,846	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,078	1,078
Other retail SMEs	5,365	4.26	1.33	0.11	0.85	0.37	1.05	0.02	1.03	0.00	0.00	0.00	1,433	1,610
Other retail non-SMEs	33,384	5.95	0.12	0.07	0.04	0.01	0.15	0.01	0.14	0.00	0.00	0.00	16,927	17,078
<b>Total</b>	<b>663,422</b>	<b>7.72</b>	<b>27.15</b>	<b>26.41</b>	<b>0.20</b>	<b>0.54</b>	<b>0.73</b>	<b>0.37</b>	<b>0.36</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>181,777</b>	<b>180,861</b>

## Development of credit risk RWA

### Article 438 (h) CRR

The following table provides an analysis of key drivers for RWA movements observed for credit risk, excluding counterparty credit risk, to the extent covered in the IRB approaches in the current and previous reporting period.

#### EU CR8 – RWA flow statement of credit risk exposures under the IRB approach

		Three months ended Jun 30, 2022	Three months ended Mar 31, 2022
		a	a
		RWA	RWA
in € m.			
1	Risk weighted exposure amount as at the end of the previous reporting period	192,608	179,700
2	Asset size	(1,677)	4,877
3	Asset quality	40	1,285
4	Model updates	(44)	(135)
5	Methodology and policy	0	5,541
6	Acquisitions and disposals	0	0
7	Foreign exchange movements	4,645	1,341
8	Other	0	0
9	Risk weighted exposure amount as at the end of the reporting period	195,573	192,608

Organic changes in the Groups portfolio size and composition are considered in the category “asset size”. The category “asset quality” represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage and netting activities. “Model updates” include model refinements and further roll out of advanced internal models. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the “methodology and policy” section. “Acquisition and disposals” show significant exposure movements which can be clearly assigned to acquisition or disposal related activities. Changes that cannot be attributed to the above categories are reflected in the category “other”.

The increase in RWA for credit risk exposures under the IRB approach of 1.5% or € 3.0 billion since March 31, 2022 is primarily resulting from Foreign exchange movements. The decrease in the category “asset size” reflects lower RWA due to balance sheet management in Deutsche Bank businesses and de-risking in the Capital Release Unit.

## Specialized lending and equity exposures in the banking book

### Article 438 (e) CRR

The table below summarizes the foundation approach exposure for specialized lending where a former Postbank portfolio is part of the “income-producing real estate and high volatility commercial real estate” slotting category. Deutsche Bank does not treat any further exposures under the slotting approach as they are covered under the AIRB. Consequently, Deutsche Bank does not disclose tables for “Project finance”, “Object finance” and “Commodities finance”. For the calculation of minimum capital requirements regulatory risk weights are applied where potential risk mitigating factors are already considered in the assignment of the risk weight. The table presents the on- and off-balance-sheet exposures, the EAD and RWA as well as the associated regulatory expected losses.

#### EU CR10.02 – Specialized lending: Income-producing real estate and high volatility commercial real estate (Slotting approach)

in € m.		Jun 30, 2022					
(unless stated otherwise)		On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Expected losses
Regulatory categories	Remaining maturity						
Category 1	Less than 2.5 years	171	61	50 %	217	108	0
	Equal to or more than 2.5 years	659	25	70 %	678	475	3
Category 2	Less than 2.5 years	14	0	70 %	14	10	0
	Equal to or more than 2.5 years	15	0	90 %	15	13	0
Category 3	Less than 2.5 years	0	0	115 %	0	0	0
	Equal to or more than 2.5 years	0	0	115 %	0	0	0
Category 4	Less than 2.5 years	0	0	250 %	0	0	0
	Equal to or more than 2.5 years	0	0	250 %	0	0	0
Category 5	Less than 2.5 years	0	0	–	0	0	0
	Equal to or more than 2.5 years	10	0	–	10	0	9
Total	Less than 2.5 years	186	61	–	231	119	0
	Equal to or more than 2.5 years	684	25	–	703	488	12

in € m.  
(unless stated otherwise)

		Dec 31, 2021					
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Expected losses
Category 1	Less than 2.5 years	97	99	50 %	172	86	0
	Equal to or more than 2.5 years	833	13	70 %	843	590	3
Category 2	Less than 2.5 years	20	0	70 %	20	14	0
	Equal to or more than 2.5 years	28	0	90 %	28	25	0
Category 3	Less than 2.5 years	4	0	115 %	4	4	0
	Equal to or more than 2.5 years	0	0	115 %	0	0	0
Category 4	Less than 2.5 years	1	26	250 %	20	51	2
	Equal to or more than 2.5 years	1	2	250 %	2	5	0
Category 5	Less than 2.5 years	0	0	–	0	0	0
	Equal to or more than 2.5 years	15	0	–	15	0	10
<b>Total</b>	Less than 2.5 years	<b>122</b>	<b>125</b>	<b>–</b>	<b>216</b>	<b>155</b>	<b>2</b>
	Equal to or more than 2.5 years	<b>877</b>	<b>15</b>	<b>–</b>	<b>888</b>	<b>620</b>	<b>14</b>

As part of the advanced IRBA Deutsche Bank uses supervisory defined risk weights according to the simple risk weight approach for the Group's equity positions. The table below presents the on- and off-balance-sheet exposures, the EAD, RWA and capital requirements for the categories of equity exposures as set out in Article 155 (2) CRR. For all of these positions no credit risk mitigation techniques have been applied.

#### EU CR10.05 – Equity exposures under the simple risk-weighted approach

in € m.  
(unless stated otherwise)

		Jun 30, 2022					
Categories		On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Capital requirements
Private equity exposures sufficiently diversified		298	0	190 %	298	566	2
Exchange-traded equity exposures		175	792	290 %	966	2,803	8
All other equity exposures		2,094	29	370 %	2,123	7,857	51
<b>Total</b>		<b>2,567</b>	<b>821</b>	<b>–</b>	<b>3,388</b>	<b>11,225</b>	<b>61</b>

in € m.  
(unless stated otherwise)

		Dec 31, 2021					
Categories		On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Capital requirements
Private equity exposures sufficiently diversified		594	0	190 %	594	1,129	5
Exchange-traded equity exposures		606	1,716	290 %	2,323	6,736	14
All other equity exposures		1,506	28	370 %	1,533	5,674	37
<b>Total</b>		<b>2,707</b>	<b>1,744</b>	<b>–</b>	<b>4,450</b>	<b>13,539</b>	<b>55</b>

Deutsche Bank's RWA for equity exposures under the simple risk-weighted approach were at € 11.2 billion as of June 30, 2022 in comparison to € 13.5 billion in the prior period. The decrease of € 2.3 billion is predominantly driven by exchange-traded equity exposures, partly offset by other equity exposures.

# Counterparty credit risk (CCR)

## Estimate of alpha factor

### Article 439 (k) CRR

Under the internal model method (IMM) approach the exposure at default (EAD) is calculated as the product of the expected positive exposure (EPE) and a multiplier 'Alpha' ( $\alpha$ ). The scaling factor alpha is applied in order to correct for amongst others correlations between parties, concentration risk and to account for the level of volatility/correlation that might coincide with a downturn. Deutsche Bank received regulatory approval to use its own calibrated alpha factor, however, for its regulatory capital calculation the regulatory minimum level has to be applied. In 2020, the regulatory floor has been increased from 1.2 to 1.25. For the small population of transactions for which a simulation cannot be computed or is subject to regulatory restrictions (such as for those with risk factors not approved by the supervisory authorities or for specific wrong-way risk), the EAD used is derived from the new Standardized Approach for Counterparty Credit Risk (SA-CCR) according to Article 274 CRR.

## CCR exposures by model approach and development

### Article 439 (f, g, k) CRR

The following table shows the methods used for calculating the regulatory requirements for CCR exposure including the main parameters for each method. Exposures relevant for credit valuation adjustment (CVA) charges and exposures cleared through a central counterparty (CCP) are presented separately in table EU CCR2 and EU CCR8, respectively. Deutsche Bank does not make use of the original exposure method for derivatives nor the financial collateral simple method for SFTs. Deutsche Bank also uses the new standardized approach for counterparty credit risk (SA-CCR) to calculate the exposure at default for derivatives. This approach still consists of a replacement cost and a potential future exposure but also considers a multiplier. The multiplier differentiates between margined and non-margined trades and recognizes netting and hedging benefits as well as collateralization. Under the internal model method (IMM) only the effective expected positive exposure (EEPE) and the exposure at default are presented. For the calculation of the Group's CCR RWA the higher of the stressed EEPE and the unstressed EEPE is taken into consideration. The simulation process of future market values in the internal model also includes the impact from regulatory netting and collateralization across all asset classes.

### EU CCR1 – Analysis of CCR exposure by approach

		Jun 30, 2022							
		a	b	c	d	e	f	g	h
in € m. (unless stated otherwise)		Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	RWA
EU1	EU - Original Exposure Method (for derivatives)	0	0	–	1.4	0	0	0	0
EU2	EU - Simplified SA-CCR (for derivatives)	0	0	–	1.4	0	0	0	0
1	SA-CCR (for derivatives)	2,482	2,981	–	1.4	11,319	7,648	7,648	2,793
2	IMM (for derivatives and SFTs)	–	–	60,243	1.25	586,541	75,548	75,303	19,058
	of which:								
2a	Securities financing transactions netting sets	–	–	27,149	–	472,315	33,937	33,937	2,317
2b	Derivatives and long settlement transactions netting sets	–	–	33,093	–	114,226	41,611	41,367	16,741
2c	from Contractual cross-product netting sets	–	–	0	–	0	0	0	0
3	Financial collateral simple method (for SFTs)	–	–	–	–	0	0	0	0
4	Financial collateral comprehensive method (for SFTs)	–	–	–	–	58,037	26,232	26,232	1,628
5	VaR for SFTs	–	–	–	–	0	0	0	0
6	Total	–	–	–	–	655,897	109,428	109,184	23,479

		Dec 31, 2021							
		a	b	c	d	e	f	g	h
in € m. (unless stated otherwise)		Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post- CRM	Exposure value	RWA
	EU - Original Exposure								
EU1	Method (for derivatives)	0	0	–	1.4	0	0	0	0
	EU - Simplified SA-CCR (for derivatives)	0	0	–	1.4	0	0	0	0
EU2	SA-CCR (for derivatives)	1,764	2,870	–	1.4	10,483	6,550	6,550	2,217
	IMM (for derivatives and SFTs)	–	–	56,239	1.25	497,704	70,567	70,299	19,957
	of which:								
2a	Securities financing transactions netting sets	–	–	21,310	–	392,742	26,638	26,638	2,010
2b	Derivatives and long settlement transactions netting sets	–	–	34,929	–	104,962	43,930	43,661	17,947
2c	from Contractual cross- product netting sets	–	–	0	–	0	0	0	0
3	Financial collateral simple method (for SFTs)	–	–	–	–	0	0	0	0
4	Financial collateral comprehensive method (for SFTs)	–	–	–	–	84,247	23,659	19,820	2,047
5	VaR for SFTs	–	–	–	–	0	0	0	0
6	Total	–	–	–	–	592,434	100,776	96,669	24,221

The size of Deutsche Bank's on- and off-balance-sheet derivative business is at € 686.5 billion as of June 30, 2022 (€ 681.6 billion as of December 31, 2021), which makes around 50% of the Group's total assets.

Deutsche Bank's CRR RWA stands at € 23.5 billion as of June 30, 2022 reflecting a decrease of € 0.7 billion from December 31, 2021. The decrease is predominantly driven by reduced RWA under IMM for derivatives and long settlement transactions netting sets as well as Financial collateral comprehensive method for securities financing transactions, partly offset by increased RWA under SA-CCR for derivatives and IMM for securities financing transactions.

## CCR exposures development

### Article 438 (h) CRR

The following table provides an analysis of key drivers for RWA movements observed for counterparty credit risk exposures calculated under the internal model method (IMM) in the current and previous reporting period.

#### EU CCR7 – RWA flow statement of counterparty credit risk exposures under the internal model method

		Three months ended Jun 30, 2022	Three months ended Mar 31, 2022
		a	a
in € m.		RWA	RWA
1	Counterparty credit risk RWA under the IMM opening balance	19,216	20,171
2	Asset size	(476)	(1,322)
3	Credit quality of counterparties	(68)	(18)
4	Model updates (IMM only)	0	0
5	Methodology and policy (IMM only)	0	0
6	Acquisitions and disposals	0	0
7	Foreign exchange movements	529	385
8	Other	0	0
9	Counterparty credit risk RWA under the IMM closing balance	19,201	19,216

Organic changes in portfolio size and composition are considered in the category "asset size". The category "credit quality of counterparties" represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage and netting activities. "Model updates (IMM only)" include model refinements and further roll out of advanced internal models. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the "methodology and policy (IMM only)" section. "Acquisition and disposals" shows significant exposure movements which can be clearly assigned to acquisition or disposal related activities. Changes that cannot be attributed to the above categories are reflected in the category "other".

The RWA for counterparty credit risk exposures under the IMM is almost flat compared to December 31, 2021. The decreases in “asset size”, reflecting a change in the composition of the portfolio, and in the category “credit quality of counterparties” were offset by increases stemming from Foreign exchange movements.

## CCR CVA capital charge

### Article 439 (h) CRR

The table below EU CCR2 provides a breakdown of the credit valuation adjustment (CVA) RWA into advanced and standardized approaches. Furthermore the incremental contributions from the VaR and stressed VaR components are highlighted. The Group calculates the majority of the CVA based on an internal model as approved by the competent supervisory authority, which is consistent with the movement in the advanced method, driving the reported CVA RWA of € 4.7 billion (98%), whilst the standardized method covers only € 96 million (2%) of the total CVA RWA. The stressed VaR component is the main driver of advanced CVA RWA, which results from the stressed period volatilities considered. The overall decrease was primarily driven by model refinement in the risk representation affecting the CVA RWA calculation and changes in risk profile of the portfolio inclusive of risk mitigating hedges.

### EU CCR2 – CVA capital charge

	Jun 30, 2022		Dec 31, 2021	
	a	b	a	b
in € m.	Exposure value	RWA	Exposure value	RWA
1 Total portfolios subject to the Advanced Method	68,046	4,712	56,373	6,204
2 (i) VaR component (including the 3x multiplier)	0	893	0	696
3 (ii) Stressed VaR component (including the 3x multiplier)	0	3,819	0	5,508
4 Transactions subject to the Standardised method	415	96	504	124
Transactions subject to the Alternative approach (Based on the Original Exposure Method)	0	0	0	0
5 Total transactions subject to own funds requirements for CVA risk	68,462	4,808	56,877	6,327

## CCR exposures to central counterparties

### Article 439 (i) CRR

The table below presents an overview of Deutsche Bank’s exposures and capital requirements to central counterparties arising from transactions, margins and contributions to default funds. As of June 30, 2022, Deutsche Bank mainly reported exposures to qualifying central counterparties (QCCP) as defined in Article 4 (88) CRR.

## EU CCR8 – Exposures to CCPs

	Jun 30, 2022		Dec 31, 2021	
	a	b	a	b
in € m.	Exposure value	RWA	Exposure value	RWA
1 Exposures to QCCPs (total)	-	593	-	737
Exposures for trades at QCCPs (excluding initial margin and default fund contributions)	5,928	119	12,357	247
of which:				
3 (i) OTC derivatives	1,488	30	1,723	34
4 (ii) Exchange-traded derivatives	1,001	20	1,653	33
5 (iii) Securities financing transactions	3,438	69	8,981	180
6 (iv) Netting sets where cross-product netting has been approved	0	0	0	0
7 Segregated initial margin	5,331	-	5,220	-
8 Non-segregated initial margin	2,780	56	2,021	40
9 Pre-funded default fund contributions	1,615	419	1,615	449
10 Unfunded default fund contributions	0	0	0	0
11 Exposures to non-QCCPs (total)	-	0	-	0
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions)	0	0	0	0
of which:				
13 (i) OTC derivatives	0	0	0	0
14 (ii) Exchange-traded derivatives	0	0	0	0
15 (iii) Securities financing transactions	0	0	0	0
16 (iv) Netting sets where cross-product netting has been approved	0	0	0	0
17 Segregated initial margin	0	-	0	-
18 Non-segregated initial margin	0	0	0	0
19 Prefunded default fund contributions	0	0	0	0
20 Unfunded default fund contributions	0	0	0	0

## CCR exposures in the standardized approach

### Article 444 (e) CRR

The following table provides the counterparty credit risk exposures in the standardized approach broken down by risk weights and regulatory exposure classes. This table excludes risk weighted exposure amounts derived from own funds requirements for CVA risk but includes exposures cleared through a CCP.

### EU CCR3 – Standardized approach – CCR exposures by regulatory portfolio and risk

in € m.	Jun 30, 2022						
	Risk Weight						
Exposure classes	0%	2%	4%	10%	20%	50%	70%
1 Central governments or central banks	3,459	0	0	0	0	0	0
2 Regional governments or local authorities	115	0	0	0	0	0	0
3 Public sector entities	370	0	0	0	3	0	0
4 Multilateral development banks	404	0	0	0	0	0	0
5 International organizations	0	0	0	0	0	0	0
6 Institutions	15	8,706	1	0	96	23	0
7 Corporates	125	0	0	0	217	5	0
8 Retail	0	0	0	0	0	0	0
Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0
9 Other items	0	0	0	0	0	0	0
11 Total	4,487	8,706	1	0	315	29	0

		Jun 30, 2022				
in € m.		Risk Weight				
Exposure classes		75%	100%	150%	Others	Total
1	Central governments or central banks	0	0	0	0	3,459
2	Regional governments or local authorities	0	0	0	0	115
3	Public sector entities	0	0	0	0	372
4	Multilateral development banks	0	0	0	0	404
5	International organizations	0	0	0	0	0
6	Institutions	0	11	0	0	8,853
7	Corporates	0	1,005	2	0	1,353
8	Retail	1	0	0	0	1
9	Institutions and corporates with a short-term credit assessment	0	0	0	0	0
10	Other items	0	0	2	0	2
11	<b>Total</b>	<b>1</b>	<b>1,016</b>	<b>4</b>	<b>0</b>	<b>14,558</b>

		Dec 31, 2021						
in € m.		Risk Weight						
Exposure classes		0%	2%	4%	10%	20%	50%	70%
1	Central governments or central banks	6,504	0	0	0	0	0	0
2	Regional governments or local authorities	178	0	0	0	21	0	0
3	Public sector entities	442	0	0	0	0	0	0
4	Multilateral development banks	395	0	0	0	0	0	0
5	International organizations	0	0	0	0	0	0	0
6	Institutions	21	10,459	1	0	51	9	0
7	Corporates	99	0	0	0	25	1	0
8	Retail	0	0	0	0	0	0	0
9	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0
10	Other items	0	0	0	0	0	0	0
11	<b>Total<sup>1</sup></b>	<b>7,639</b>	<b>10,459</b>	<b>1</b>	<b>0</b>	<b>97</b>	<b>10</b>	<b>0</b>

		Dec 31, 2021				
in € m.		Risk Weight				
Exposure classes		75%	100%	150%	Others	Total
1	Central governments or central banks	0	0	0	0	6,504
2	Regional governments or local authorities	0	0	0	0	198
3	Public sector entities	0	0	0	0	442
4	Multilateral development banks	0	0	0	0	395
5	International organizations	0	0	0	0	0
6	Institutions	0	78	0	0	10,620
7	Corporates	0	1,079	0	0	1,203
8	Retail	4	0	0	0	4
9	Institutions and corporates with a short-term credit assessment	0	0	0	0	0
10	Other items	0	0	3	0	3
11	<b>Total<sup>1</sup></b>	<b>4</b>	<b>1,157</b>	<b>3</b>	<b>0</b>	<b>19,370</b>

<sup>1</sup> Comparatives aligned to current presentation.

## CCR exposures within the foundation IRBA

### Article 452 (g) CRR

The following tables disclose Deutsche Bank's foundation IRBA counterparty credit risk exposures, i.e., derivatives and securities financing transactions, distributed on its internal rating scale for exposure classes central governments and central banks, institutions as well as corporates with its relevant subcategories. CVA charges or exposures cleared through a CCP are excluded.

Deutsche Bank discloses the exposure after CCF and CRM, where exposures covered by guarantees or credit derivatives are assigned to the protection seller.

The exposure after CCF and CRM is presented in conjunction with exposures-weighted average PD, RWAs, the average risk weight (RW) and the number of obligors. In addition, it provides the average LGD and average maturity, which is regulatory pre-defined in the foundation IRB. The tables provide the defaulted exposure separately.

EU CCR4 – FIRB approach – CCR exposures by portfolio and PD scale

in € m.							Jun 30, 2022
(unless stated otherwise)							
	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Density of risk weighted exposure amounts
<b>Central governments and central banks</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Institutions</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0.77	0.0	45.00	2.5	0	88.81
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0.77</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>0</b>	<b>88.81</b>
<b>Corporates</b>							
0.00 to <0.15	5	0.16	0.1	45.00	2.5	2	38.78
0.15 to <0.25	28	0.26	0.0	45.00	2.5	15	53.09
0.25 to <0.50	6	0.49	0.0	45.00	2.5	5	72.01
0.50 to <0.75	7	0.82	0.0	45.00	2.5	7	90.46
0.75 to <2.50	25	2.03	0.1	45.00	2.5	18	71.74
2.50 to <10.00	2	4.29	0.0	45.00	2.5	2	99.11
10.00 to <100.00	0	19.61	0.0	45.00	2.5	0	218.35
100.00 (Default)	2	100.00	0.0	45.00	2.5	0	0
<b>Sub-total</b>	<b>75</b>	<b>3.60</b>	<b>0.3</b>	<b>45.00</b>	<b>2.5</b>	<b>48</b>	<b>63.63</b>
<b>of which:</b>							
<b>SMEs</b>							
0.00 to <0.15	1	0.15	0.0	45.00	2.5	0	26.55
0.15 to <0.25	0	0.26	0.0	45.00	2.5	0	37.86
0.25 to <0.50	0	0.44	0.0	45.00	2.5	0	46.40
0.50 to <0.75	0	0.76	0.0	45.00	2.5	0	61.77
0.75 to <2.50	2	1.89	0.0	45.00	2.5	1	77.21
2.50 to <10.00	2	4.13	0.0	45.00	2.5	2	95.25
10.00 to <100.00	0	15.96	0.0	45.00	2.5	0	163.93
100.00 (Default)	0	100.00	0.0	45.00	2.5	0	0
<b>Sub-total</b>	<b>6</b>	<b>2.32</b>	<b>0.1</b>	<b>45.00</b>	<b>2.5</b>	<b>4</b>	<b>71.41</b>
<b>Specialized Lending</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	22	2.06	0.0	45.00	2.5	16	69.96
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	2	100.00	0.0	45.00	2.5	0	0
<b>Sub-total</b>	<b>24</b>	<b>9.50</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>16</b>	<b>64.65</b>
<b>Other</b>							
0.00 to <0.15	4	0.17	0.0	45.00	2.5	2	42.06
0.15 to <0.25	28	0.26	0.0	45.00	2.5	15	53.28
0.25 to <0.50	6	0.49	0.0	45.00	2.5	4	72.83
0.50 to <0.75	7	0.82	0.0	45.00	2.5	6	90.97
0.75 to <2.50	1	1.47	0.0	45.00	2.5	1	110.78
2.50 to <10.00	0	8.12	0.0	45.00	2.5	0	189.24
10.00 to <100.00	0	22.21	0.0	45.00	2.5	0	257.12
100.00 (Default)	0	100.00	0.0	45.00	2.5	0	0
<b>Sub-total</b>	<b>46</b>	<b>0.66</b>	<b>0.2</b>	<b>45.00</b>	<b>2.5</b>	<b>28</b>	<b>62.13</b>
<b>Total</b>	<b>75</b>	<b>3.60</b>	<b>0.3</b>	<b>45.00</b>	<b>2.5</b>	<b>48</b>	<b>63.63</b>

							Dec 31, 2021
in € m.							
(unless stated otherwise)							
	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Density of risk weighted exposure amounts
<b>Central governments and central banks</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Institutions</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0.77	0.0	45.00	2.5	0	88.81
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0.77</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>0</b>	<b>88.81</b>
<b>Corporates</b>							
0.00 to <0.15	26	0.13	0.1	45.00	2.5	9	35.73
0.15 to <0.25	96	0.26	0.1	45.00	2.5	50	52.55
0.25 to <0.50	16	0.43	0.0	45.00	2.5	11	66.78
0.50 to <0.75	40	0.77	0.0	45.00	2.5	35	87.95
0.75 to <2.50	112	2.05	0.1	45.00	2.5	88	78.30
2.50 to <10.00	1	7.53	0.0	45.00	2.5	3	178.09
10.00 to <100.00	2	14.39	0.0	45.00	2.5	3	167.61
100.00 (Default)	6	100.00	0.0	45.00	2.5	0	0
<b>Sub-total<sup>1</sup></b>	<b>299</b>	<b>2.97</b>	<b>0.3</b>	<b>45.00</b>	<b>2.5</b>	<b>199</b>	<b>66.62</b>
<b>of which:</b>							
<b>SMEs</b>							
0.00 to <0.15	2	0.16	0.0	45.00	2.5	1	27.28
0.15 to <0.25	4	0.25	0.0	45.00	2.5	1	35.70
0.25 to <0.50	1	0.43	0.0	45.00	2.5	1	46.20
0.50 to <0.75	1	0.77	0.0	45.00	2.5	1	58.29
0.75 to <2.50	2	2.07	0.0	45.00	2.5	2	79.54
2.50 to <10.00	0	6.64	0.0	45.00	2.5	0	121.17
10.00 to <100.00	2	14.41	0.0	45.00	2.5	2	152.56
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>12</b>	<b>2.48</b>	<b>0.1</b>	<b>45.00</b>	<b>2.5</b>	<b>8</b>	<b>60.96</b>
<b>Specialized Lending</b>							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	102	2.06	0.0	45.00	2.5	76	74.88
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	4	100.00	0.0	45.00	2.5	0	0
<b>Sub-total<sup>1</sup></b>	<b>105</b>	<b>5.50</b>	<b>0.0</b>	<b>45.00</b>	<b>2.5</b>	<b>76</b>	<b>72.25</b>
<b>Other</b>							
0.00 to <0.15	24	0.13	0.0	45.00	2.5	9	36.50
0.15 to <0.25	92	0.26	0.0	45.00	2.5	49	53.26
0.25 to <0.50	15	0.43	0.0	45.00	2.5	10	68.50
0.50 to <0.75	39	0.77	0.0	45.00	2.5	35	88.81
0.75 to <2.50	8	2.00	0.0	45.00	2.5	10	120.88
2.50 to <10.00	1	7.63	0.0	45.00	2.5	2	184.39
10.00 to <100.00	0	14.29	0.0	45.00	2.5	1	231.41
100.00 (Default)	2	100.00	0.0	45.00	2.5	0	0
<b>Sub-total</b>	<b>182</b>	<b>1.54</b>	<b>0.2</b>	<b>45.00</b>	<b>2.5</b>	<b>116</b>	<b>63.74</b>
<b>Total</b>	<b>299</b>	<b>2.97</b>	<b>0.3</b>	<b>45.00</b>	<b>2.5</b>	<b>199</b>	<b>66.62</b>

## CCR exposures within the advanced IRBA

### **Article 452 (g) CRR**

The following tables disclose Deutsche Bank's advanced IRBA counterparty credit risk exposures, i.e. derivatives and securities financing transactions, distributed on its internal rating scale for exposure classes central governments and central banks, institutions as well as corporates with its relevant subcategories. CVA charges or exposures cleared through a CCP are excluded.

Deutsche Bank discloses the exposure after CCF & CRM, where exposures covered by guarantees or credit derivatives are assigned to the protection seller.

The exposure after CCF & CRM is presented in conjunction with exposure-weighted average PD, LGD, and maturity as well as the RWA, the average risk weight (RW) and the number of obligors. The effect of double default, as far as applicable to exposures outside of former Postbank, is considered in the average RW. It implies that for a guaranteed exposure a loss only occurs if the primary obligor and the guarantor fail to meet their obligations at the same time. The tables provide the defaulted exposure separately, where Deutsche Bank applies an LGD estimate already incorporating potential unexpected losses in the loss rate estimate as required by Article 181 (1)(h) CRR.

EU CCR4 – AIRB approach – CCR exposures by portfolio and PD scale

Jun 30, 2022

in € m. (unless stated otherwise)							
	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Density of risk weighted exposure amounts
<b>Central governments and central banks</b>							
0.00 to <0.15	13,310	0.01	0.1	42.66	0.5	262	1.97
0.15 to <0.25	125	0.23	0.0	36.83	3.3	53	42.35
0.25 to <0.50	182	0.39	0.0	50.00	1.0	97	53.48
0.50 to <0.75	8	0.64	0.0	40.12	3.0	6	73.09
0.75 to <2.50	173	1.76	0.0	42.22	3.3	201	116.52
2.50 to <10.00	711	2.93	0.0	9.87	2.3	207	29.06
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>14,510</b>	<b>0.18</b>	<b>0.1</b>	<b>41.09</b>	<b>0.6</b>	<b>827</b>	<b>5.70</b>
<b>Institutions</b>							
0.00 to <0.15	12,782	0.06	0.3	41.42	0.9	2,089	16.35
0.15 to <0.25	733	0.25	0.0	32.79	1.3	281	38.31
0.25 to <0.50	354	0.42	0.0	50.47	2.5	317	89.64
0.50 to <0.75	532	0.69	0.0	40.35	1.4	462	86.88
0.75 to <2.50	1,572	1.79	0.0	16.94	1.6	722	45.93
2.50 to <10.00	339	3.48	0.0	13.48	0.9	172	50.86
10.00 to <100.00	2	14.31	0.0	47.75	0.7	4	230.95
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>16,314</b>	<b>0.33</b>	<b>0.5</b>	<b>38.35</b>	<b>1.1</b>	<b>4,048</b>	<b>24.81</b>
<b>Corporates</b>							
0.00 to <0.15	58,188	0.05	8.2	35.58	1.2	6,981	12.00
0.15 to <0.25	3,042	0.24	1.2	43.20	2.4	1,584	52.06
0.25 to <0.50	2,574	0.41	0.9	57.13	1.7	1,948	75.66
0.50 to <0.75	2,146	0.66	0.8	54.14	2.0	2,163	100.75
0.75 to <2.50	5,313	1.25	1.1	26.96	1.6	3,191	60.06
2.50 to <10.00	1,000	3.81	0.5	45.29	2.6	1,332	133.22
10.00 to <100.00	61	20.16	0.1	52.97	1.8	169	276.45
100.00 (Default)	77	100.00	0.0	34.36	3.8	79	101.85
<b>Sub-total</b>	<b>72,402</b>	<b>0.35</b>	<b>12.9</b>	<b>36.73</b>	<b>1.3</b>	<b>17,447</b>	<b>24.10</b>
<b>of which:</b>							
<b>SMEs</b>							
0.00 to <0.15	3,456	0.04	0.4	32.02	0.4	148	4.30
0.15 to <0.25	78	0.24	0.1	49.67	1.9	33	42.36
0.25 to <0.50	103	0.41	0.1	80.90	2.8	94	91.17
0.50 to <0.75	204	0.64	0.1	76.10	1.9	226	111.09
0.75 to <2.50	233	1.43	0.3	94.93	1.6	235	100.65
2.50 to <10.00	111	4.11	0.2	65.24	2.1	152	136.49
10.00 to <100.00	2	14.01	0.0	63.31	1.5	5	196.20
100.00 (Default)	3	100.00	0.0	76.61	1.1	5	193.67
<b>Sub-total</b>	<b>4,190</b>	<b>0.34</b>	<b>1.2</b>	<b>40.12</b>	<b>0.7</b>	<b>898</b>	<b>21.43</b>
<b>Specialized Lending</b>							
0.00 to <0.15	251	0.08	0.0	19.41	4.5	43	17.32
0.15 to <0.25	73	0.23	0.0	37.96	4.0	41	55.67
0.25 to <0.50	10	0.39	0.0	36.81	3.5	6	58.44
0.50 to <0.75	18	0.64	0.0	54.30	4.0	23	124.51
0.75 to <2.50	80	1.55	0.0	33.62	3.6	60	75.46
2.50 to <10.00	129	3.00	0.0	16.62	5.0	81	63.01
10.00 to <100.00	1	22.02	0.0	59.69	3.0	4	342.56
100.00 (Default)	18	100.00	0.0	29.50	4.9	11	61.24
<b>Sub-total</b>	<b>580</b>	<b>4.13</b>	<b>0.1</b>	<b>24.89</b>	<b>4.4</b>	<b>269</b>	<b>46.37</b>
<b>Other</b>							
0.00 to <0.15	54,481	0.05	7.8	35.88	1.2	6,789	12.46
0.15 to <0.25	2,891	0.24	1.1	43.16	2.3	1,510	52.23
0.25 to <0.50	2,461	0.41	0.8	56.23	1.6	1,848	75.09
0.50 to <0.75	1,924	0.66	0.7	51.81	2.0	1,913	99.43
0.75 to <2.50	5,000	1.24	0.8	23.68	1.5	2,896	57.92
2.50 to <10.00	760	3.90	0.3	47.21	2.3	1,099	144.62
10.00 to <100.00	58	20.37	0.0	52.42	1.8	161	278.53
100.00 (Default)	57	100.00	0.0	34.00	3.6	63	110.66
<b>Sub-total</b>	<b>67,632</b>	<b>0.32</b>	<b>11.5</b>	<b>36.63</b>	<b>1.3</b>	<b>16,280</b>	<b>24.07</b>

Jun 30, 2022

in € m. (unless stated otherwise)	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Density of risk weighted exposure amounts
<b>Retail</b>							
0.00 to <0.15	9	0.07	0.3	56.71	1.9	1	10.77
0.15 to <0.25	4	0.23	0.1	55.77	1.1	1	26.37
0.25 to <0.50	1	0.39	0.1	71.10	3.2	1	41.02
0.50 to <0.75	2	0.64	0.1	75.91	1.4	2	62.65
0.75 to <2.50	5	1.39	0.1	78.76	1.7	4	87.40
2.50 to <10.00	8	4.86	0.1	81.61	1.2	10	117.53
10.00 to <100.00	1	47.38	0.0	82.50	1.1	2	134.35
100.00 (Default)	0	100.00	0.0	15.40	1.1	0	192.55
<b>Sub-total</b>	<b>31</b>	<b>3.63</b>	<b>0.7</b>	<b>69.70</b>	<b>1.6</b>	<b>20</b>	<b>63.40</b>
<b>of which:</b>							
Secured by real estate property SMEs							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Secured by real estate property non-SMEs							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Qualifying Revolving							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Other retail SMEs							
0.00 to <0.15	1	0.07	0.0	63.35	1.0	0	10.23
0.15 to <0.25	0	0.23	0.0	56.98	1.0	0	20.47
0.25 to <0.50	1	0.39	0.0	77.41	1.1	0	38.90
0.50 to <0.75	1	0.64	0.0	76.27	0.9	0	50.66
0.75 to <2.50	2	1.20	0.0	80.57	1.1	1	70.32
2.50 to <10.00	3	5.11	0.0	81.96	1.2	2	97.76
10.00 to <100.00	0	26.00	0.0	82.50	1.3	0	158.56
100.00 (Default)	0	100.00	0.0	5.00	0.4	0	62.50
<b>Sub-total</b>	<b>7</b>	<b>3.36</b>	<b>0.1</b>	<b>77.23</b>	<b>1.1</b>	<b>5</b>	<b>68.37</b>
Other retail non-SMEs							
0.00 to <0.15	8	0.07	0.3	55.69	2.0	1	10.86
0.15 to <0.25	4	0.23	0.0	55.75	1.1	1	26.47
0.25 to <0.50	1	0.39	0.0	65.22	5.2	0	43.01
0.50 to <0.75	2	0.64	0.0	75.80	1.5	1	66.09
0.75 to <2.50	3	1.48	0.1	77.82	2.1	3	96.26
2.50 to <10.00	6	4.75	0.1	81.46	1.2	7	126.24

							Jun 30, 2022
in € m. (unless stated otherwise)							
	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Density of risk weighted exposure amounts
10.00 to <100.00	1	53.84	0.0	82.50	1.0	1	127.03
100.00 (Default)	0	100.00	0.0	16.50	1.1	0	206.25
<b>Sub-total</b>	<b>24</b>	<b>3.71</b>	<b>0.5</b>	<b>67.54</b>	<b>1.7</b>	<b>15</b>	<b>61.98</b>
<b>Total (all exposure classes)</b>	<b>103,257</b>	<b>0.32</b>	<b>14.2</b>	<b>37.61</b>	<b>1.2</b>	<b>22,342</b>	<b>21.64</b>

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Average RW (in %)
<b>Central governments and central banks</b>							
0.00 to <0.15	7,007	0.02	0.1	41.71	0.7	233	3.33
0.15 to <0.25	73	0.23	0.0	27.25	4.9	33	45.24
0.25 to <0.50	396	0.39	0.0	49.92	1.0	218	55.02
0.50 to <0.75	13	0.64	0.0	39.27	3.1	10	73.35
0.75 to <2.50	171	1.38	0.0	41.05	3.8	187	109.05
2.50 to <10.00	785	2.94	0.0	22.32	2.8	542	69.00
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>8,445</b>	<b>0.34</b>	<b>0.1</b>	<b>40.15</b>	<b>1.0</b>	<b>1,222</b>	<b>14.47</b>
<b>Institutions</b>							
0.00 to <0.15	18,479	0.06	0.8	38.94	1.0	2,684	14.52
0.15 to <0.25	692	0.25	0.0	36.35	1.8	346	50.02
0.25 to <0.50	344	0.41	0.0	49.54	2.8	315	91.50
0.50 to <0.75	1,108	0.67	0.0	20.30	1.3	463	41.74
0.75 to <2.50	961	1.43	0.0	20.34	0.6	414	43.04
2.50 to <10.00	512	3.29	0.0	8.56	0.5	166	32.38
10.00 to <100.00	25	14.74	0.0	45.00	1.5	59	238.75
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>22,121</b>	<b>0.28</b>	<b>0.9</b>	<b>36.10</b>	<b>1.0</b>	<b>4,446</b>	<b>20.10</b>
<b>Corporates</b>							
0.00 to <0.15	42,934	0.05	8.0	36.39	1.3	5,539	12.90
0.15 to <0.25	3,140	0.24	1.1	47.04	2.3	1,798	57.26
0.25 to <0.50	2,494	0.40	0.7	50.27	1.8	1,802	72.25
0.50 to <0.75	2,621	0.66	0.9	51.00	2.5	2,398	91.48
0.75 to <2.50	8,127	1.60	1.1	20.75	1.6	4,053	49.87
2.50 to <10.00	1,272	4.26	0.5	39.00	2.8	1,378	108.29
10.00 to <100.00	65	21.16	0.1	42.85	1.9	137	209.57
100.00 (Default)	118	100.00	0.1	17.45	3.9	115	97.47
<b>Sub-total</b>	<b>60,771</b>	<b>0.61</b>	<b>12.4</b>	<b>36.09</b>	<b>1.5</b>	<b>17,220</b>	<b>28.34</b>
<b>of which:</b>							
<b>SMEs</b>							
0.00 to <0.15	2,283	0.04	0.6	32.94	1.4	193	8.45
0.15 to <0.25	98	0.24	0.1	47.78	2.4	46	46.41
0.25 to <0.50	147	0.40	0.1	75.65	1.9	111	75.91
0.50 to <0.75	408	0.65	0.2	63.12	2.5	442	108.35
0.75 to <2.50	247	1.23	0.3	51.23	2.2	233	94.62
2.50 to <10.00	84	4.22	0.1	41.49	3.7	82	98.44
10.00 to <100.00	4	17.13	0.0	41.97	4.7	7	177.53
100.00 (Default)	5	100.00	0.0	51.89	3.3	3	72.18
<b>Sub-total</b>	<b>3,274</b>	<b>0.50</b>	<b>1.4</b>	<b>40.69</b>	<b>1.7</b>	<b>1,117</b>	<b>34.12</b>
<b>Specialized Lending</b>							
0.00 to <0.15	97	0.08	0.0	34.36	4.2	26	27.02
0.15 to <0.25	48	0.23	0.0	54.96	3.8	35	72.57
0.25 to <0.50	24	0.39	0.0	45.03	3.4	18	73.10
0.50 to <0.75	57	0.64	0.0	48.61	3.2	57	98.86
0.75 to <2.50	98	1.59	0.0	33.61	4.2	92	93.49
2.50 to <10.00	282	3.03	0.0	17.17	4.8	177	62.87
10.00 to <100.00	4	20.03	0.0	52.91	2.3	13	289.54
100.00 (Default)	34	100.00	0.0	24.28	4.7	20	60.39
<b>Sub-total</b>	<b>645</b>	<b>7.06</b>	<b>0.1</b>	<b>29.52</b>	<b>4.3</b>	<b>437</b>	<b>67.87</b>
<b>Other</b>							
0.00 to <0.15	40,554	0.05	7.3	36.58	1.3	5,320	13.12
0.15 to <0.25	2,994	0.24	0.9	46.89	2.3	1,718	57.37
0.25 to <0.50	2,323	0.40	0.6	48.72	1.7	1,673	72.01
0.50 to <0.75	2,156	0.66	0.7	48.77	2.4	1,900	88.10
0.75 to <2.50	7,782	1.61	0.8	19.62	1.5	3,728	47.90
2.50 to <10.00	907	4.65	0.4	45.55	2.1	1,118	123.30
10.00 to <100.00	57	21.50	0.0	42.13	1.7	118	205.42
100.00 (Default)	79	100.00	0.0	12.41	3.5	91	114.91
<b>Sub-total</b>	<b>56,852</b>	<b>0.54</b>	<b>10.8</b>	<b>35.90</b>	<b>1.4</b>	<b>15,665</b>	<b>27.55</b>
<b>Retail</b>							
0.00 to <0.15	7	0.08	0.2	56.48	2.7	1	11.73

Dec 31, 2021

in € m. (unless stated otherwise)	a	b	c	d	e	f	g
Exposure class/ PD scale	Exposure value	Average PD (in %)	Number of obligors (in 1,000)	Average LGD (in %)	Average maturity (in years)	RWA	Average RW (in %)
0.15 to <0.25	3	0.23	0.0	60.95	2.0	1	28.13
0.25 to <0.50	6	0.39	0.1	62.14	3.7	2	37.12
0.50 to <0.75	4	0.64	0.1	73.57	2.3	2	60.62
0.75 to <2.50	16	1.39	0.2	77.06	2.2	13	82.51
2.50 to <10.00	4	4.68	0.1	73.40	2.7	4	97.66
10.00 to <100.00	1	26.95	0.0	81.19	0.8	1	170.72
100.00 (Default)	0	100.00	0.0	6.11	1.0	0	76.34
<b>Sub-total</b>	<b>41</b>	<b>1.66</b>	<b>0.6</b>	<b>69.28</b>	<b>2.5</b>	<b>24</b>	<b>60.08</b>
<b>of which:</b>							
Secured by real estate property SMEs							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Secured by real estate property non-SMEs							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Qualifying Revolving							
0.00 to <0.15	0	0	0	0	0	0	0
0.15 to <0.25	0	0	0	0	0	0	0
0.25 to <0.50	0	0	0	0	0	0	0
0.50 to <0.75	0	0	0	0	0	0	0
0.75 to <2.50	0	0	0	0	0	0	0
2.50 to <10.00	0	0	0	0	0	0	0
10.00 to <100.00	0	0	0	0	0	0	0
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Other retail SMEs							
0.00 to <0.15	1	0.08	0.0	62.01	1.2	0	10.76
0.15 to <0.25	0	0.23	0.0	67.10	1.3	0	24.16
0.25 to <0.50	2	0.40	0.0	70.55	3.3	1	35.72
0.50 to <0.75	1	0.65	0.0	73.88	1.5	0	49.20
0.75 to <2.50	7	1.33	0.1	76.36	2.2	5	68.64
2.50 to <10.00	2	4.97	0.0	74.70	1.8	2	88.18
10.00 to <100.00	0	27.55	0.0	80.41	0.7	1	159.13
100.00 (Default)	0	100.00	0.0	6.11	1.0	0	76.34
<b>Sub-total</b>	<b>14</b>	<b>2.62</b>	<b>0.2</b>	<b>74.34</b>	<b>2.1</b>	<b>9</b>	<b>65.53</b>
Other retail non-SMEs							
0.00 to <0.15	7	0.08	0.2	56.07	2.8	1	11.80
0.15 to <0.25	3	0.23	0.0	60.25	2.1	1	28.59
0.25 to <0.50	4	0.39	0.0	57.42	3.9	1	37.90
0.50 to <0.75	3	0.64	0.0	73.47	2.6	2	64.08
0.75 to <2.50	8	1.45	0.1	77.70	2.2	8	95.04
2.50 to <10.00	2	4.30	0.0	71.70	4.0	2	110.08
10.00 to <100.00	0	25.96	0.0	82.50	1.0	0	190.07
100.00 (Default)	0	0	0	0	0	0	0
<b>Sub-total</b>	<b>27</b>	<b>1.15</b>	<b>0.5</b>	<b>66.60</b>	<b>2.7</b>	<b>15</b>	<b>57.19</b>
<b>Total (all exposure classes)</b>	<b>91,378</b>	<b>0.51</b>	<b>14.0</b>	<b>36.48</b>	<b>1.3</b>	<b>22,912</b>	<b>25.07</b>

## CCR exposures after credit risk mitigation

### Article 439 (e) CRR

The following table presents information on Deutsche Bank's counterparty credit risk (CCR) exposure and the composition of collateral used in both derivatives transactions and securities financing transactions (SFTs).

Table EU CCR5 discloses a breakdown of all types of collateral posted or received to support or reduce CCR exposures related to derivatives and SFTs. For SFTs, collateral refers to both legs of the transaction as collateral received and collateral posted.

### EU CCR5 – Composition of collateral for exposures to CCR

	Jun 30, 2022							
	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
in € m.	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
Cash – domestic currency	1	43,340	0	35,868	1,016	77,580	0	85,449
Cash – other currencies	751	46,418	2	31,134	12,821	149,444	0	195,196
Domestic sovereign debt	110	228	0	2,101	7	4,248	4	1,175
Other Sovereign debt	0	0	0	0	23	4,572	23	8,962
Government agency debt	0	0	0	0	0	0	0	0
Corporate bonds	1,131	19,851	0	6,979	1,491	242,618	2,744	244,462
Equity securities	0	3,191	0	0	659	66,364	23,508	24,965
Other collateral	5,302	3,220	5,390	4,673	0	7,230	0	3,865
<b>Total</b>	<b>7,295</b>	<b>116,247</b>	<b>5,392</b>	<b>80,755</b>	<b>16,019</b>	<b>552,056</b>	<b>26,279</b>	<b>564,075</b>

	Dec 31, 2021							
	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
in € m.	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
Cash – domestic currency	1	36,828	0	29,533	2,108	54,346	0	69,195
Cash – other currencies	587	32,587	5	22,196	14,769	143,807	0	177,959
Domestic sovereign debt	128	180	0	2,318	13	2,617	0	805
Other Sovereign debt	0	0	0	0	6	4,186	8	3,596
Government agency debt	0	0	0	0	0	0	0	0
Corporate bonds	1,179	15,132	0	7,374	405	212,772	6,590	207,954
Equity securities	1	3,374	0	0	232	57,636	19,048	30,834
Other collateral	5,086	1,240	5,258	2,834	6	5,804	0	3,440
<b>Total</b>	<b>6,982</b>	<b>89,341</b>	<b>5,264</b>	<b>64,255</b>	<b>17,539</b>	<b>481,168</b>	<b>25,646</b>	<b>493,783</b>

## Credit derivatives exposures

### Article 439 (j) CRR

The table below discloses the exposure of the credit derivative transactions split into protection bought and sold, as well as a split into product types.

### EU CCR6 – Credit derivatives exposures

	Jun 30, 2022		Dec 31, 2021 <sup>1</sup>	
	a	b	a	b
in € m.	Protection bought	Protection sold	Protection bought	Protection sold
<b>Notionals</b>				
Single-name credit default swaps	10,059	400	9,749	199
Index credit default swaps	848	2	6	2
Total return swaps	2,060	0	2,815	0
Credit options	1,359	200	2,561	0
Other credit derivatives	636,723	612,661	529,947	491,109
<b>Total notionals</b>	<b>651,049</b>	<b>613,263</b>	<b>545,078</b>	<b>491,309</b>
<b>Fair values</b>				
Positive fair value (asset)	7,689	2,612	1,639	13,964
Negative fair value (liability)	(2,415)	(6,495)	(15,632)	(1,192)

<sup>1</sup> Comparatives aligned to current presentation.

# Exposure to securitization positions

## Banking and trading book securitization exposures

### Article 449 (j) CRR

The amounts reported in the following two tables provide details of the Group's securitization exposures separately for the regulatory non-trading and trading book. The details of the Group's trading book securitization positions subject to the market risk standardized approach (MRSA) are included in this chapter.

The table EU SEC1 details the total non-trading book securitization exposure split by exposure type that the Group has securitized in its capacity as either originator or sponsor and finally positions which have been purchased through investment activities as investor. Each table provides a break-down by traditional and synthetic as well as simple transparent and standardized ('simple, transparent and standardised securitisation' or 'STS securitisation' means a securitisation that meets the requirements set out in Article 18 of Regulation (EU) 2017/2402) and non-STS securitization transactions. The originator and sponsor columns (a-k) also contain retained positions, even where the Group does not achieve significant risk transfer (SRT) and shows the current retention of its contribution to the originated or sponsored amount. The amounts reported are the securitized principal notional amounts where no SRT is achieved. If SRT is achieved, then the aggregated regulatory exposure values (EAD) are shown. As the Group ceased the use of ABCP programs in 2015, there are no securitizations positions subject to the Internal Assessment Approach as of June 30, 2022.

The table EU SEC2 provides the total purchased or retained securitization exposure held in the bank's regulatory trading book separately for originator, sponsor and investor activities split by exposure type of the securitized assets and also further broken down into traditional and synthetic transactions as well as STS and non-STS securitizations. The amounts reported are the EAD.

EU SEC1 – Securitization exposures in the non-trading book

Jun 30, 2022															
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
	Traditional			Synthetic				Traditional		Synthetic		Traditional		Synthetic	
in € m.	STS	of which: SRT	Non-STS	of which: SRT	Total	of which: SRT	Subtotal	STS	Non-STS	Subtotal		STS	Non-STS	Subtotal	
<b>Total exposures</b>	214	0	71	71	18,461	18,461	18,746	0	2,498	0	2,498	700	45,438	0	46,138
Retail	214	0	40	40	0	0	255	0	1,884	0	1,884	636	13,141	0	13,778
of which:															
Residential Mortgage	0	0	40	40	0	0	40	0	1,867	0	1,867	624	6,808	0	7,432
Credit Card	0	0	0	0	0	0	0	0	0	0	0	0	442	0	442
Other retail exposures	214	0	0	0	0	0	214	0	17	0	17	13	5,891	0	5,904
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale	0	0	31	31	18,461	18,461	18,492	0	614	0	614	64	32,296	0	32,360
of which:															
Loans to corporates	0	0	0	0	18,461	18,461	18,461	0	468	0	468	5	24,714	0	24,719
Commercial Mortgage	0	0	31	31	0	0	31	0	105	0	105	0	180	0	180
Lease and receivables	0	0	0	0	0	0	0	0	41	0	41	33	3,159	0	3,192
Other wholesale	0	0	0	0	0	0	0	0	0	0	0	26	4,243	0	4,270
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dec 31, 2021															
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
	Traditional			Synthetic				Traditional		Synthetic		Traditional		Synthetic	
in € m.	STS	of which: SRT	Non-STS	of which: SRT	Total	of which: SRT	Subtotal	STS	Non-STS	Subtotal		STS	Non-STS	Subtotal	
<b>Total exposures</b>	214 <sup>1</sup>	0	114	114	19,560	19,560	19,888 <sup>1</sup>	0	2,030	0	2,030	1,199	41,431	0	42,630
Retail	214 <sup>1</sup>	0	43	43	0	0	257 <sup>1</sup>	0	1,605	0	1,605	961	11,267	0	12,228
of which:															
Residential Mortgage	0	0	43	43	0	0	43	0	1,569	0	1,569	858	5,755	0	6,613
Credit Card	0	0	0	0	0	0	0	0	0	0	0	0	467	0	467
Other retail exposures	214 <sup>1</sup>	0	0	0	0	0	214 <sup>1</sup>	0	36	0	36	103	5,044	0	5,147
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale	0	0	71	71	19,560	19,560	19,631	0	425	0	425	238	30,165	0	30,402
of which:															
Loans to corporates	0	0	18	18	19,560	19,560	19,578	0	327	0	327	11	22,945	0	22,956
Commercial Mortgage	0	0	53	53	0	0	53	0	72	0	72	0	351	0	351
Lease and receivables	0	0	0	0	0	0	0	0	26	0	26	143	3,245	0	3,387
Other wholesale	0	0	0	0	0	0	0	0	0	0	0	84	3,624	0	3,708
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<sup>1</sup> Adjusted to represent change in interpretation of risk retention requirements for self-securitizations compared to December 31, 2021

EU SEC2 – Securitization exposures in the trading book

												Jun 30, 2022		
	a	b	c		d	e	f	g		h	i	j	k	l
	Institution acts as originator				Institution acts as sponsor				Institution acts as investor					
	Traditional		Synthetic		Traditional		Synthetic		Traditional		Synthetic			
in € m.	STS	Non-STS		Subtotal	STS	Non-STS		Subtotal	STS	Non-STS		Subtotal		
<b>Total exposures</b>	0	207	0	207	0	0	0	0	4	2,489	0	2,493		
Retail	0	0	0	0	0	0	0	0	4	909	0	913		
of which:														
Residential Mortgage	0	0	0	0	0	0	0	0	4	812	0	816		
Credit Card	0	0	0	0	0	0	0	0	0	19	0	19		
Other retail exposures	0	0	0	0	0	0	0	0	0	78	0	78		
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0		
Wholesale	0	207	0	207	0	0	0	0	0	1,580	0	1,580		
of which:														
Loans to corporates	0	0	0	0	0	0	0	0	0	1,005	0	1,005		
Commercial Mortgage	0	207	0	207	0	0	0	0	0	407	0	407		
Lease and receivables	0	0	0	0	0	0	0	0	0	21	0	21		
Other wholesale	0	0	0	0	0	0	0	0	0	147	0	147		
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0		

...

												Dec 31, 2021		
	a	b	c		d	e	f	g		h	i	j	k	l
	Institution acts as originator				Institution acts as sponsor				Institution acts as investor					
	Traditional		Synthetic		Traditional		Synthetic		Traditional		Synthetic			
in € m.	STS	Non-STS		Subtotal	STS	Non-STS		Subtotal	STS	Non-STS		Subtotal		
<b>Total exposures</b>	0	466	0	466	0	3	0	3	2	1,943	22	1,967		
Retail	0	0	0	0	0	3	0	3	0	683	0	683		
of which:														
Residential Mortgage	0	0	0	0	0	3	0	3	0	572	0	572		
Credit Card	0	0	0	0	0	0	0	0	0	8	0	8		
Other retail exposures	0	0	0	0	0	0	0	0	0	103	0	103		
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0		
Wholesale	0	466	0	466	0	0	0	0	2	1,261	22	1,284		
of which:														
Loans to corporates	0	0	0	0	0	0	0	0	0	392	22	414		
Commercial Mortgage	0	466	0	466	0	0	0	0	0	735	0	735		
Lease and receivables	0	0	0	0	0	0	0	0	2	18	0	20		
Other wholesale	0	0	0	0	0	0	0	0	0	116	0	116		
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0		

Overall, the aggregate exposure volume generated by the securitization business was at about € 70.1 billion as of June 30, 2022, which was a decrease of € 1 billion compared to December 31, 2021. A large majority of the exposure resided in the non-trading book with € 67.4 billion, whereas the trading book portion represented only a minor contribution of € 2.7 billion aggregate exposure value. That was a decrease of € 1.2 billion in the non-trading book driven by originator positions and an increase of € 0.3 billion in the trading book, compared to December 31, 2021.

As of June 30, 2022, in the non-trading book there were two dominant contributions, which together cover € 64.6 billion of the total € 67.4 billion aggregate exposure volume of that book. One dominant part consisted of the traditional securitizations with a volume of € 46.1 billion, where the Group acts as investor by purchasing securitization investments. The other dominant part was composed of the synthetic securitization transactions with a volume of € 18.5 billion, where the Group acts as originator. From a securitized asset perspective, the dominant asset types were loans to corporates and mortgages (commercial mortgages and residential mortgages). In the non-trading book the loans to corporates underlied € 43.6 billion of exposure volume, or 65% of the overall exposure volume in the non-trading book, and in the trading book the loans to corporates covered € 1 billion, representing 37% of the total exposure volume of that book. The mortgages represented the dominant part in the trading book with € 1.4 billion out of € 2.7 billion, whereas the mortgages in the non-trading book with a contribution of € 9.7 billion represented the less dominant part in that book. Together, the securitized asset types “Loans to corporates” and “Mortgage”, underlied around € 55.7 billion of € 70.1 billion overall securitization position exposure, which represented 80% of that volume.

Of the overall volume of securitization business of € 70.1 billion only a minority of € 0.9 billion was classified as simple, transparent and standardized (STS). This represented 1.3% of the overall exposure volume in securitizations.

## Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

### Article 449 (k)(i) CRR

The table EU SEC3 presents the retained or purchased non-trading book securitizations, where the Group acts as originator or sponsor.

Firstly, the exposure values are broken down by risk-weight bands (columns a-e). Additionally the Group presents the exposure values, risk weighted exposure amounts and capital requirements separately for each regulatory RWA calculation approach (columns f-q). All just mentioned values are vertically broken down by traditional and synthetic transactions, securitization and re-securitization, as well as by retail or wholesale and a specific column for STS traditional transactions.

For the meaning of the names used in the following sections for the regulatory calculation approaches of the securitization framework (SEC-IRBA, SEC-SA and SEC-ERBA), please see the short description below.

- SEC-IRBA (Articles 259 and 260 CRR): Approach to be used in case the securitized assets would be treated under the IRBA approach if not securitized and reside on the Group's books. At least 95 % of the exposure value of the securitized assets need to be treated under the IRBA approaches in order to apply this approach. There are a number of additional requirements in order to apply this approach (see Article 258 CRR).
- SEC-SA (Articles 261 and 262 CRR): In case SEC-IRBA is not applicable, the SEC-SA is generally to be applied. For this the capital requirement ratio under the SA approach (KSA) of the pool of securitized assets needs to be calculated as if it was not securitized and as if it was on the Group's book. In addition the delinquent asset ratio on the pool level needs to be determined.
- SEC-ERBA (Articles 263 and 264 CRR): This can be applied, if an eligible external or inferred rating is available. The risk weight is determined by a lookup table from the rating letter and the maturity of the position. In case the SEC-ERBA is available there are certain rules to determine when the SEC-ERBA is to be used instead of the SEC-SA (for details see Article 254 CRR).
- 1,250 %: In all other cases, a risk weight of 1,250 % is applied.

EU SEC3 – Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

																		Jun 30, 2022
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)					RWA (by regulatory approach)					Capital charge after cap		
in € m.	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	
<b>Total exposures</b>	17,656	3,311	0	42	21	20,803	42	164	21	3,455	135	26	261	305	5	2	21	
Traditional transactions	2,530	0	0	37	1	2,362	42	164	1	364	135	26	11	24	5	2	1	
Securitization	2,530	0	0	37	1	2,362	42	164	1	364	135	26	11	24	5	2	1	
Retail underlying	1,894	0	0	30	0	1,876	21	28	0	291	99	6	1	18	3	0	0	
of which:																		
STS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	636	0	0	7	1	486	21	137	1	73	36	20	10	6	3	2	1	
of which:																		
STS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Synthetic transactions	15,125	3,311	0	5	20	18,441	0	0	20	3,091	0	0	250	282	0	0	20	
Securitization	15,125	3,311	0	5	20	18,441	0	0	20	3,091	0	0	250	282	0	0	20	
Retail underlying	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	15,125	3,311	0	5	20	18,441	0	0	20	3,091	0	0	250	282	0	0	20	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

																		Dec 31, 2021
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)					RWA (by regulatory approach)					Capital charge after cap		
in € m.	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	
<b>Total exposures</b>	18,650	2,961	2	64	26	21,433	70	174	26	3,455	163	56	327	291	7	3	25	
Traditional transactions	2,064	18	2	59	0	1,899	70	174	0	294	163	56	6	21	7	3	0	
Securitization	2,064	18	2	59	0	1,899	70	174	0	294	163	56	2	21	7	3	0	
Retail underlying	1,597	18	2	30	0	1,595	42	10	0	248	113	4	2	17	3	0	0	
of which:																		
STS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	467	0	0	28	0	304	28	164	0	46	50	52	0	4	4	3	0	
of which:																		
STS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	
Synthetic transactions	16,586	2,943	0	5	26	19,534	0	0	26	3,162	0	0	320	270	0	0	24	
Securitization	16,586	2,943	0	5	26	19,534	0	0	26	3,162	0	0	320	270	0	0	24	
Retail underlying	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	16,586	2,943	0	5	26	19,534	0	0	26	3,162	0	0	320	270	0	0	24	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

The overall exposure volume of the securitization exposures in the non-trading book was € 67.2 billion by June 30, 2022, of which € 21 billion were represented by positions for which the Group acts as originator or sponsor, which was a minor decrease of € 0.7 billion compared to December 31, 2021. The securitization exposure for these two roles were concentrated in the lowest risk-weight band, with risk-weights equal to or lower than 20%. These positions were mainly treated by the SEC-IRBA method of the securitization framework of CRR. This reflects first and foremost the way the own synthetic securitizations, which covered €18.5 billion or 88% of the € 21 billion of exposure volume, are structured, namely such that the senior tranche which attracts a minimal risk-weight is kept, while subordinated tranches are transferred to third parties. As a consequence, the RWA before capping and the capital requirements were also concentrated under the method of SEC-IRBA. On the other hand, the overall capital requirements for originators and sponsors amount increased by € 7 million from € 326 million as of December 31, 2021 to € 333 million by June 30, 2022, of which € 305 million or circa 92% were treated under SEC-IRBA. The small relative movements in that portfolio, around 3% decrease in exposure levels and 2% increase of capital requirements reflects the stability of the originator business in the reporting period.

## Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

### Article 449 (k)(ii) CRR

The table EU SEC4 presents the purchased non-trading book securitizations, where the Group acts as investor, i.e. wherever the Group is not acting as originator or sponsor.

Firstly, the exposure values are broken down by risk-weight bands (columns a-e). Additionally, the Group presents the exposure values, risk weighted exposure amounts and capital requirements for securitization positions provided separately for each regulatory RWA calculation approach (columns f-q). All of these values are vertically broken down by traditional and synthetic transactions, securitization and re-securitization, as well as by retail or wholesale and a specific row for STS for traditional transactions.

EU SEC4 – Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

																		Jun 30, 2022
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)					RWA (by regulatory approach)					Capital charge after cap		
in € m.	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	
<b>Total exposures</b>	42,148	2,023	1,625	317	25	21,000	611	24,501	25	4,085	533	6,741	313	296	33	380	15	
Traditional transactions	42,148	2,023	1,625	317	25	21,000	611	24,501	25	4,085	533	6,741	313	296	33	380	15	
Securitization	42,148	2,023	1,625	317	25	21,000	611	24,501	25	4,085	533	6,741	309	296	33	380	14	
Retail underlying	11,699	1,033	777	254	15	9,413	389	3,961	15	2,038	312	3,124	183	135	16	92	4	
of which:																		
STS	636	0	0	0	0	0	0	636	0	0	0	69	0	0	0	6	0	
Wholesale	30,449	989	848	63	10	11,587	223	20,540	10	2,047	221	3,617	126	160	16	288	10	
of which:																		
STS	64	0	0	0	0	0	59	5	0	0	6	0	0	0	0	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	
Synthetic transactions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retail underlying	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

																		Dec 31, 2021
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)					RWA (by regulatory approach)					Capital charge after cap		
in € m.	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA(incl uding IAA)	SEC-SA	1250% / deductions	
<b>Total exposures</b>	38,859	2,333	1,148	274	16	20,114	1,133	21,367	16	3,822	502	6,061	197	279	31	323	16	
Traditional transactions	38,859	2,333	1,148	274	16	20,114	1,133	21,367	16	3,822	502	6,061	197	279	31	323	16	
Securitization	38,859	2,333	1,148	274	16	20,114	1,133	21,367	16	3,822	502	6,061	196	279	31	323	16	
Retail underlying	9,649	1,578	773	228	0	7,514	844	3,870	0	1,674	463	3,178	1	113	28	92	0	
of which:																		
STS	922	39	0	0	0	0	400	561	0	0	40	68	0	0	3	5	0	
Wholesale	29,210	755	375	47	16	12,600	290	17,497	16	2,148	39	2,884	195	166	3	231	16	
of which:																		
STS	238	0	0	0	0	0	238	0	0	0	24	0	0	0	2	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Synthetic transactions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retail underlying	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wholesale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Re-securitization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

The overall exposure volume of the securitization exposures in the non-trading book was € 67.2 billion by June 30, 2022, for which € 46.1 billion the Group acts as investor, which was an increase of 3.5 billion compared with December 31, 2021. With € 42.2 billion, or 91% of the exposure volume, the majority of the exposure volume of the investor portfolio was concentrated in the lowest risk-weight bucket, with risk-weights below or equal to 20%. A minor portion of € 2 billion or 4% is allocated to the second lowest risk-weight bucket of risk-weights greater than 20% and lower than or equal to 50%. The two most important methods applied to the investor portfolio were the SEC-IRBA and the SEC-SA. The SEC-SA was applied to an exposure volume of € 24.5 billion or 53% and the SEC-IRBA was applied to € 21 billion or 46% of the full investor exposure amount. A minority portion of € 0.6 billion was covered by the SEC-ERBA. The least beneficial approach resulting in 1250% risk-weight had to be applied only to € 25 million exposure volume of this portfolio. The impact on capital requirements after the cap was, that also the two look-through approaches, SEC-IRBA and SEC-SA, covered almost 93% of the investor portfolio capital requirements, which amounted to € 676 million. The SEC-SA covered € 380 million or 52% and the SEC-IRBA covered € 296 million or 41% of the overall capital requirements of € 724 million, which was an increase of € 75 million compared to December 31, 2021 with an amount of € 649 million.

Compared to December 31, 2021 there was an increase of € 2.8 billion in the overall exposure volume of the non-trading book, across all three roles, which was mainly driven by investor positions. That movement was mainly resulting from an increase of € 3.5 billion in the investor activities, only partly balanced by a decrease of € 0.7 billion in the originator and sponsor business, which was due to amortization of current pools or outplacing to the market. As a consequence the overall capital requirements of the non-trading book increased by 8% from € 975 million as of December 31, 2021, to € 1,057 million by June 30, 2022.

## Exposures securitized by the institution - Exposures in default and specific credit risk adjustments

### Article 449 (I) CRR

The table EU SEC5 presents the outstanding nominal amounts where the Group acts as originator or sponsor along with exposures which have been classified as defaulted according to Article 178 CRR and its relating specific credit risk adjustments in accordance with Article 110 CRR. The amounts are broken down by the exposure type of the securitized exposures. The outstanding nominal amounts shown correspond to the share of the Group's contribution to the securitized assets.

#### EU SEC5 - Article 449 (I) CRR - Exposures securitized by the institution - Exposures in default and specific credit risk adjustments

	Jun 30, 2022		
	a	b	c
	Exposures securitized by the institution - Institution acts as originator or as sponsor		
	Total outstanding nominal amount	Total amount of specific credit risk adjustments made during the period	
in € m.	Total	of which exposures in default	
<b>Total exposures</b>	125,014	4,014	98
<b>Retail (total)</b>	37,092	2,110	0
Residential mortgage	32,590	2,062	0
Credit card	0	0	0
Other retail exposures	4,402	48	0
Re-securitization	100	0	0
<b>Wholesale (total)</b>	87,922	1,903	98
Loans to corporates	21,177	85	98
Commercial mortgage	66,700	1,819	0
Lease and receivables	44	0	0
Other wholesale	0	0	0
Re-securitization	1	0	0

...

in € m.	Dec 31, 2021		
	a	b	c
	Exposures securitized by the institution - Institution acts as originator or as sponsor		
	Total outstanding nominal amount	of which exposures in default	Total amount of specific credit risk adjustments made during the period
<b>Total exposures</b>	122,741	3,884	73
<b>Retail (total)</b>	36,672	1,773	0
Residential mortgage	32,115	1,741	0
Credit card	0	0	0
Other retail exposures	4,525	32	0
Re-securitization	32	0	0
<b>Wholesale (total)</b>	86,070	2,111	73
Loans to corporates	22,648	73	73
Commercial mortgage	63,301	2,038	0
Lease and receivables	28	0	0
Other wholesale	91	0	0
Re-securitization	1	0	0

The total outstanding nominal amount of securitized assets by the Group in the roles of originator or sponsor as of June 30, 2022 was € 125 billion, which was an increase of € 2.3 billion compared with € 122.7 billion as of December 31, 2021, which was mainly driven by the increase of € 3.4 billion on the asset type commercial mortgage from € 63.3 billion by December 31, 2021 to € 66.7 billion as of June 30, 2022. The outstanding nominal amount where the Group acts as originator contributed the majority of € 121.3 billion or 97% of the total outstanding nominal amount. The outstanding nominal amount where the Group acts as sponsor was represented by € 3.7 billion or 3% of the total outstanding amount. Breaking down the total outstanding nominal amount of securitized assets into asset types, mortgages contributed € 99.3 billion or 79% of the total outstanding amount. These can be broken down into commercial mortgages representing € 66.7 billion of the outstanding amount and residential mortgages contributing € 32.6 billion of the outstanding nominal amount. The second essential part was comprised of loans to corporates, which contributed € 21.2 billion of the outstanding nominal amount or 17% of the total outstanding nominal amount.

Securitized assets flagged as defaulted by June 30, 2022 added up to a total of € 4 billion, which were split into € 1.8 billion for commercial mortgages, € 2.1 billion for residential mortgages and € 0.1 billion for loans to corporates. This reflected a minor increase of € 0.1 billion compared with December 31, 2021. In relative terms the defaulted asset ratios were 2.7% for commercial mortgages, 6.3% for residential mortgages and 0.4% for loans to corporates. Overall, the ratio of defaulted assets in the pools of these securitization was at 3.2%, which remained stable compared to December 31, 2021.

## Market risk

### Own funds requirements for market risk under the standardized approach

#### Market Risk Standardized Approach

##### Article 445 CRR

As of June 30, 2022, the securitization positions, for which the specific interest rate risk is calculated using the market risk standardized approach, generated capital requirements of € 223 million corresponding to risk weighted-assets of € 2.79 billion. As of December 31, 2021 these positions generated capital requirements of € 221 million corresponding to risk weighted-assets of € 2.76 billion.

The capital requirement for Collective Investment Undertakings under the market risk standardized approach was € 24 million corresponding to risk weighted-assets of € 302 million as of June 30, 2022, compared with € 11 million and € 138 million, respectively, as of December 31, 2021.

##### EU MR1 – Market risk under the standardized approach

in € m.	Jun 30, 2022	Dec 31, 2021
	a	a
	RWA	RWA
<b>Outright products</b>		
1 Interest rate risk (general and specific) <sup>1</sup>	149	84
2 Equity risk (general and specific) <sup>2</sup>	96	64
3 Foreign exchange risk <sup>3</sup>	201	158
4 Commodity risk	0	0
<b>Options</b>		
5 Simplified approach	0	0
6 Delta-plus method	0	0
7 Scenario approach	0	0
8 Securitization (specific risk) <sup>4</sup>	2,785	2,765
<b>9 Total</b>	<b>3,231</b>	<b>3,071</b>

<sup>1</sup> Interest Rate risk RWA of € 149 million is from collective investment undertakings

<sup>2</sup> Equity risk RWA of € 96 million is from collective investment undertakings

<sup>3</sup> Foreign Exchange risk RWA includes € 58 million from collective investment undertakings and € 143 million related to placeholders for foreign exchange exposures

<sup>4</sup> Securitization (specific risk) RWA includes € 14 million charge from nth-to-default exposures

### Own funds requirements for market risk under the IMA

#### Regulatory capital requirements for market risk

##### Article 455 (e) CRR

The table below presents all internal model-related components relevant for the capital requirement calculation for market risk.

## EU MR2-A – Market Risk under the internal models approach (IMA)

in € m.	Jun 30, 2022		Dec 31, 2021	
	a	b	a	b
	RWA	Capital requirements	RWA	Capital requirements
1 VaR (higher of values a and b)	5,951	476	3,538	283
a) Previous day's VaR (Article 365(1) (VaRt-1))	–	124	–	73
b) Multiplication factor (mc) x average of previous 60 working days (VaRavg)	–	476	–	283
2 SVaR (higher of values a and b)	14,677	1,174	9,360	749
a) Latest SVaR (sVaRt-1)	–	286	–	189
b) Multiplication factor (ms) x average of previous 60 working days (sVaRavg)	–	1,174	–	749
3 Incremental risk charge -IRC (higher of values a and b)	4,195	336	3,657	293
a) Most recent IRC value	–	301	–	253
b) 12 weeks average IRC measure	–	336	–	293
4 Comprehensive Risk Measure – CRM (higher of values a, b and c)	–	–	–	–
a) Most recent risk measure of comprehensive risk measure	–	–	–	–
b) 12 weeks average of comprehensive risk measure	–	–	–	–
c) Comprehensive risk measure Floor	–	–	–	–
5 Other	0	0	147	12
6 Total	24,824	1,986	16,702	1,336

As of June 30, 2022 the Internal Models Approach (IMA) components for market risk totaled € 24.8 billion, which was an increase of € 8.1 billion since December 31, 2021. The increase in value-at-risk was driven by inclusion of recent market volatility, due to war in Ukraine and central bank actions to curb inflation, in the value-at-risk model, and from changes in interest rate and credit spread exposures in the Investment Bank. In addition, increase in value-at-risk and stressed value-at-risk components was also driven by increase in capital multiplier from 4 to 4.65 due to increase in Buy & Hold Backtesting outliers from 3 to 7.

## Development of market risk RWA

### Article 438 (h) CRR

The following table EU MR2-B provides an analysis of key drivers for movements observed for market risk RWA covered by internal models (i.e. value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure) in the current and previous reporting period. It also shows the corresponding movements in capital requirements, derived from RWA with an 8 % capital ratio.

## EU MR2-B – RWA flow statements of market risk exposures under the IMA

in € m.	Three months ended Jun 30, 2022						
	a	b	c	d	e	f	g
	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWA	Total capital requirements
1 Market Risk RWA opening balance	3,887	11,099	3,698	–	0	18,683	1,495
1a Regulatory adjustment <sup>1</sup>	(2,530)	(6,860)	(23)	–	0	(9,412)	(753)
1b RWA at the previous quarter-end (end of the day)	1,357	4,239	3,675	–	0	9,271	742
2 Movement in risk levels	598	(678)	91	–	0	11	1
3 Model updates/changes	25	(163)	0	–	0	(138)	(11)
4 Methodology and policy	0	0	0	–	0	0	0
5 Acquisitions and disposals	0	0	0	–	0	0	0
6 Foreign exchange movements	0	0	0	–	0	0	0
6a Market data changes and recalibrations <sup>2</sup>	(427)	177	0	–	0	(250)	(20)
7 Other	0	0	0	–	0	0	0
8a RWA at the end of the reporting period (end of the day)	1,554	3,575	3,766	–	0	8,895	712
8b Regulatory adjustment <sup>1</sup>	4,397	11,102	429	–	0	15,928	1,274
8 Market Risk RWA closing balance	5,951	14,677	4,195	–	0	24,824	1,986

<sup>1</sup> Indicates the difference between reported RWA (based on 60day average) and RWA (based on VaR / SVaR as of quarter-end) at the beginning (1b) and end (8a) of period.

<sup>2</sup> Indicates the spot impact on RWA at the time of go-live and does not reflect the RWA impact from market volatility feeding through the VaR model.

		Three months ended Mar 31, 2022						
		a	b	c	d	e	f	g
in € m.		VaR	SVaR	IRC	Compre- hensive risk measure	Other	Total RWA	Total capital requirements
<b>1</b>	Market Risk RWA opening balance	<b>3,538</b>	<b>9,360</b>	<b>3,657</b>	–	<b>147</b>	<b>16,702</b>	<b>1,336</b>
<b>1a</b>	Regulatory adjustment <sup>1</sup>	(2,625)	(6,996)	0	–	0	(9,621)	(770)
<b>1b</b>	RWA at the previous quarter-end (end of the day)	913	2,364	3,657	–	147	7,081	566
<b>2</b>	Movement in risk levels	432	619	18	–	(147)	921	74
<b>3</b>	Model updates/changes	0	0	0	–	0	0	0
<b>4</b>	Methodology and policy	0	0	0	–	0	0	0
<b>5</b>	Acquisitions and disposals	0	0	0	–	0	0	0
<b>6</b>	Foreign exchange movements	0	0	0	–	0	0	0
<b>6a</b>	Market data changes and recalibrations	13	1,256	0	–	0	1,269	102
<b>7</b>	Other	0	0	0	–	0	0	0
<b>8a</b>	RWA at the end of the reporting period (end of the day)	1,357	4,239	3,675	–	0	9,271	742
<b>8b</b>	Regulatory adjustment <sup>1</sup>	2,530	6,860	23	–	0	9,412	753
<b>8</b>	Market Risk RWA closing balance	<b>3,887</b>	<b>11,099</b>	<b>3,698</b>	–	<b>0</b>	<b>18,683</b>	<b>1,495</b>

<sup>1</sup> Indicates the difference between reported RWA (based on 60day average) and RWA (based on VaR / SVaR as of quarter-end) at the beginning (1b) and end (8b) of period.

The market risk RWA movements due to position changes are represented in line “Movement in risk levels”. Changes to the Group’s market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of “Model updates/changes”. In the “Methodology and policy” category the Group reflects regulatory driven changes to its market risk RWA models and calculations. Significant acquisitions and disposals would be assigned to the line item “Acquisition and disposals”. The impacts of “Foreign exchange movements” are not calculated for IMA (Internal Models Approach) components. Changes in market data levels, return assumptions for negative market levels, volatilities, correlations, liquidity and ratings are included under the “Market data changes and recalibrations” category.

As of June 30, 2022, the IMA components for market risk totaled € 24.8 billion, which was an increase of € 6.1 billion since March 31, 2022. The increase in value-at-risk was driven by inclusion of recent market volatility, due to war in Ukraine and central bank actions to curb inflation, in the value-at-risk model, and from changes in interest rate and credit spread exposures in Investment Bank. In addition, increase in value-at-risk and stressed value-at-risk components was also driven by increase in capital multiplier from 4 to 4.65 due to increase in Buy & Hold Backtesting outliers from 3 to 7.

## Other quantitative information for market risk under the internal models approach

### Overview of Value-at-Risk Metrics

#### Article 455 (d) CRR

The following table, EU MR3, displays the maximum, minimum, average and the ending for the reporting period values resulting from the different types of models. This table is based on the spot values of the metrics as opposed to the regulatory defined calculation (e.g. not considering any comparisons between spot and average values used in the actual RWA calculations). The VaR and SVaR are both based on ten day holding periods.

### EU MR3 – IMA values for trading portfolios<sup>1</sup>

in € m.		Jun 30, 2022	Dec 31, 2021
		a	a
<b>VaR (10 day 99 %)</b>			
1	Maximum value	181.1	89.2
2	Average value	91.9	65.8
3	Minimum value	54.5	48.9
4	Period end	133.3	77.3
<b>SVaR (10 day 99 %)</b>			
5	Maximum value	372.7	318.4
6	Average value	239.9	183.5
7	Minimum value	142.1	85.9
8	Period end	290.7	191.3
<b>IRC (99.9 %)</b>			
9	Maximum value	414.0	555.9
10	Average value	315.7	352.1
11	Minimum value	233.3	226.6
12	Period end	301.3	253.3
<b>Comprehensive risk capital charge (99.9 %)</b>			
13	Maximum value	–	–
14	Average value	–	–
15	Minimum value	–	–
16	Period end	–	–

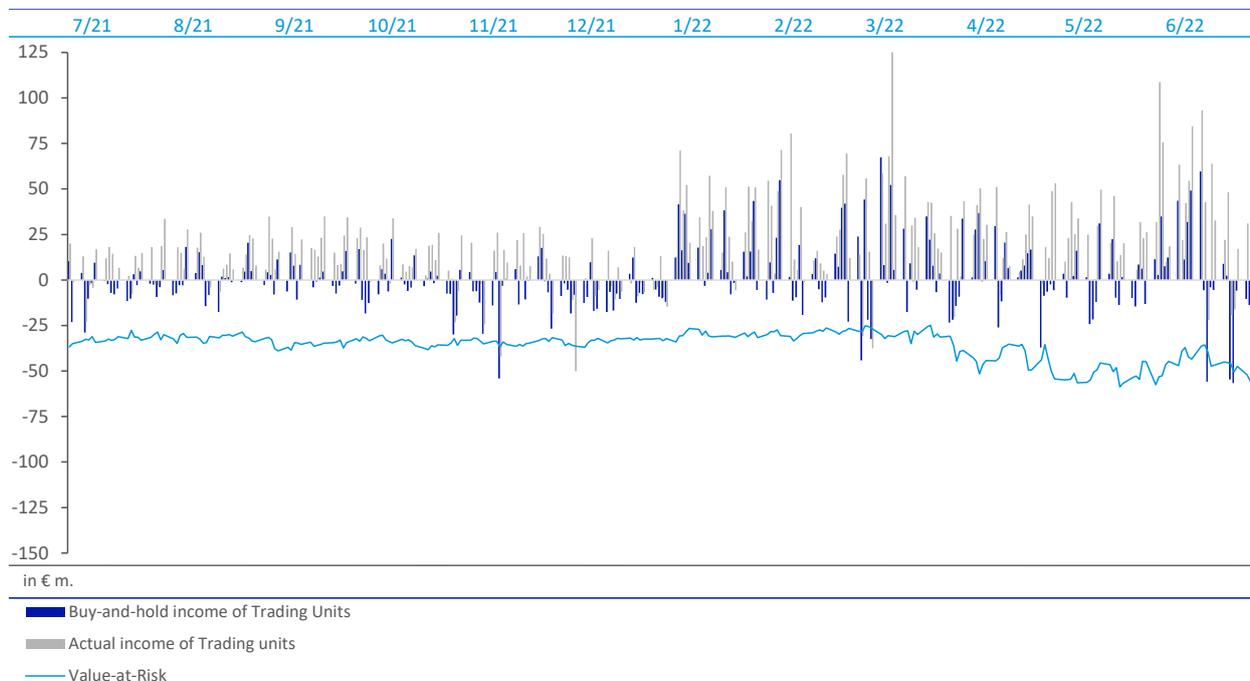
<sup>1</sup> Amounts show the maximum, average and minimum for the preceding six month period.

## Comparison of end-of-day VaR measures with one-day changes in portfolio's value

### Article 455 (g) CRR

The following graph shows the trading units daily buy-and-hold and actual income in comparison to the value-at-risk (1 day holding period) 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 Group's trading positions with the buy and hold income.

### EU MR4 – Comparison of VaR estimates with gains and losses



During the reporting period (January 2022 - June 2022), the Group observed 2 Actual and 6 buy-and-hold backtesting outliers. The outliers were driven by a sharp increase in market volatility in interest rates leading to market moves that were larger than those within the preceding one-year period used in the value-at-risk calculation. In the last 1 year period we have observed 4 Actual and 7 buy-and-hold backtesting outliers.

## Exposure to interest rate risk in the banking book

### Article 448 CRR

## Changes in the economic value of equity and net interest income

### Article 448 (a-b,d) CRR

The following table shows the impact on the Group's net interest income in the non-trading 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 European Banking Authority (EBA).

#### EU IRRBB1 - Changes in the economic value of equity and net interest income under six supervisory shock scenarios

in € bn.	Changes of the economic value of equity		Changes of the net interest income <sup>1</sup>	
	Jun 30, 2022	Dec 31, 2021	Jun 30, 2022	Dec 31, 2021
Parallel up	(4.4)	(3.5)	2.2	1.4
Parallel down	0.6	0.1	(1.0)	(0.9)
Steeper	(0.3)	(0.0)	(0.4)	(0.7)
Flattener	(1.4)	(1.3)	1.8	1.1
Short rate up	(2.3)	(1.7)	2.6	1.7
Short rate down	0.9	0.4	(1.0)	(0.9)
<b>Maximum</b>	<b>(4.4)</b>	<b>(3.5)</b>	<b>(1.0)</b>	<b>(0.9)</b>

<sup>1</sup> Changes of the 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 (EVE) loss was € (4.4) billion as of June 2022, compared to € (3.5) billion as of December 2021.

The increase in the maximum Economic Value of Equity loss for the 'Parallel up' interest rate scenario was mainly driven by changes in risk positions in Deutsche Bank's Central Investment Office. Those risks are part of the IRRBB framework and are managed via defined risk management strategies.

The maximum one-year loss in net interest income (NII) was € (1.0) billion as of June 2022, compared to € (0.9) billion as of December 2021.

The increase in the maximum net interest income loss in the short rate down scenario is mainly driven by the increase in Euro interest rates observed in the first half of 2022. The increase leads to higher interest rate downward shocks that are applied in floored regulatory standard scenarios with corresponding higher net interest income losses.

## Liquidity risk

## Qualitative information on LCR

### Article 451a CRR (EU LIQB)

#### The Liquidity Coverage Ratio (LCR)

The LCR 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 ("HQLA") that could be used to raise liquidity, measured against the total volume of net cash outflows, arising from both contractual and modelled exposures, in a stressed scenario.

This requirement has been implemented into European law, via the Commission Delegated Regulation (EU) 2015/61, adopted in October 2014. Compliance with the LCR was required in the EU from October 1, 2015.

The Group's average LCR of 137% (twelve months average) 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.

The Group's Liquidity Coverage Ratio (LCR) was 133% as of June 30, 2022, or € 51 billion of excess over the regulatory minimum of 100%. This compares to 133%, or € 52 billion of excess liquidity at December 31, 2021. The marginal change in surplus was primarily driven by net new capital market issuances and retail deposit inflows offset by loan growth and higher outflows from commitments.

#### Concentration of funding and liquidity sources

Diversification of the Group's funding profile in terms of investor types, regions and products is an important element of the Group's liquidity risk management framework. The Group's most stable funding sources for which the Bank has introduced a minimum risk appetite stem from capital markets issuances and equity, as well as from retail, and transaction banking clients. Other customer deposits and secured funding and short positions are additional sources of funding. Unsecured wholesale funding represents unsecured wholesale liabilities sourced primarily by the Treasury Pool Management team. Given the relatively short-term nature of these liabilities, it is predominantly used to fund liquid trading assets.

To promote the additional diversification of the Group's refinancing activities, the bank holds a license to issue mortgage Pfandbriefe. The Group continues to run a program for the purpose of issuing Covered Bonds under Spanish law (Cedulas) and participate in the TLTRO III program. Additionally, the Group expanded in 2020 its potential investor base by introducing the Group's Sustainable Finance Framework and issued a Green Bond in June 2020.

Unsecured wholesale funding comprises a range of institutional products, such as Certificate of Deposits (CDs), Commercial Papers (CPs) as well as Money Market deposits.

To avoid any unwanted reliance on these short-term funding sources, and to promote a sound funding profile which complies with the defined risk appetite, the Group has implemented limits (across tenors) on these funding sources which are derived from daily stress testing analysis. In addition, the bank limits the total volume of unsecured wholesale funding to manage the reliance on this funding source as part of the overall funding diversification.

#### Composition of HQLA

The average HQLA of € 215 billion 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.

The HQLA as of June 30, 2022 of € 207 billion is primarily held in Level 1 cash and central bank reserves (74%) and Level 1 high quality securities (23%). This compares to € 207 billion as of December 31, 2021 primarily held in Level 1 cash and central bank reserves (81%) and Level 1 high quality securities (17%).

#### Derivative exposures and potential collateral calls

The majority of outflows related to derivative exposures and other collateral requirements shown in item 11 are in relation to derivative contractual cash outflows that are offset by derivative cash inflows shown in item 19 Other cash inflows.

Other significant outflows relate to the impact of an adverse market scenario on derivatives based on the 24 month historical look back approach and the potential posting of additional collateral as a result of a 3 notch downgrade of DB's credit rating (as per regulatory requirements).

#### Currency mismatch in the LCR

The LCR is calculated for EUR, USD and GBP which have been identified as significant currencies (having liabilities > 5% of total group liabilities excluding regulatory capital and off balance sheet liabilities) in accordance with the Commission Delegated Regulation (EU) 2015/61. No explicit LCR risk appetite is set for the significant currencies. However, limits have been defined over the respective significant currency stressed Net Liquidity Position (sNLP). This allows the internal monitoring and management of risks stemming from currency mismatches that may arise from liquidity inflows and outflows over the short-term horizon.

#### Other items in the LCR calculation that are not captured in the LCR disclosure template but that the institution considers relevant for its liquidity profile

The Pillar 3 disclosure obligations require Banks to disclose the 12 months rolling averages each quarter. The Group does not consider anything else relevant for disclosure.

## Quantitative information on LCR

### Article 451a CRR

#### EU LIQ1 – LCR disclosure template

in € bn.	Total unweighted value (average)				Total weighted value (average)			
	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021
Quarter ending on								
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
<b>High-quality liquid assets</b>								
1 Total high-quality liquid assets (HQLA)	-	-	-	-	215	218	220	220
<b>Cash-outflows</b>								
2 Retail deposits and deposits from small business costumers	277	279	280	281	15	16	16	17
of which:								
3 Stable deposits	127	123	120	116	6	6	6	6
4 Less stable deposits	67	72	77	81	9	9	10	11
5 Unsecured wholesale funding	242	235	228	222	105	101	98	95
of which:								
6 Operational deposits (all counterparties) and deposits in network of cooperative banks	86	84	83	82	21	21	20	20
7 Non-operational deposits (all counterparties)	154	149	144	137	82	79	76	73
8 Unsecured debt	2	2	2	2	2	2	2	2
9 Secured wholesale funding	-	-	-	-	13	15	17	19
10 Additional requirements	214	207	203	200	68	66	68	69
of which:								
11 Outflows related to derivative exposures and other collateral requirements	26	25	27	28	22	20	23	25
12 Outflows related to loss of funding on debt products	0	0	0	0	0	0	0	0
13 Credit and liquidity facilities	187	181	176	172	46	46	45	44
14 Other contractual funding obligations	65	61	56	51	8	8	7	7
15 Other contingent funding obligations	223	201	173	142	5	5	5	5
16 Total cash outflows	-	-	-	-	214	212	212	212
<b>Cash - inflows</b>								
17 Secured lending (e.g. reverse repos)	310	300	280	265	15	16	17	17
18 Inflows from fully performing exposures	52	49	47	44	36	34	33	31
19 Other cash inflows	10	8	11	13	10	8	11	13
EU 19a Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies	-	-	-	-	4	3	3	3
EU 19b Excess inflows from a related specialized credit institution	-	-	-	-	0	0	0	0
20 Total cash inflows	371	357	337	322	57	55	57	59
of which:								
EU 20a Fully exempt inflows	0	0	0	0	0	0	0	0
EU 20b Inflows subject to 90% cap	0	0	0	0	0	0	0	0
EU 20c Inflows subject to 75% cap	339	324	305	290	57	55	57	59
<b>Total adjusted value</b>								
21 Liquidity buffer	-	-	-	-	215	218	220	220
22 Total net cash outflows	-	-	-	-	157	157	155	154
23 Liquidity coverage ratio (%)	-	-	-	-	137	140	142	143

## The Net Stable Funding Ratio (NSFR)

The NSFR requires banks to maintain a stable funding profile in relation to its 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 source of funding), relative to the amount of Required Stable Funding (a function of the liquidity characteristics of various assets held).

The Capital Requirements Regulation II ("CRR2"), the regulation which defines and implements the NSFR for the EU, was finalized in June 2019 and is effective from June 28, 2021.

The NSFR as of June 30, 2022 calculated in accordance with the CRR2 stands at 116%, or € 85 billion of excess over regulatory minimum of 100%.

#### EU LIQ2 – Net stable funding ratio template

		Jun 30, 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
in € b.		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available stable funding (ASF) items</b>						
1	Capital items and instruments	68	0	0	12	80
2	Own funds	68	0	0	10	78
3	Other capital instruments	–	0	0	2	2
4	Retail deposits	–	250	21	2	256
5	Stable deposits	–	175	20	2	187
6	Less stable deposits	–	75	2	1	69
7	Wholesale funding:	–	363	52	123	258
8	Operational deposits	–	82	0	0	41
9	Other wholesale funding	–	281	52	123	217
10	Interdependent liabilities	–	0	0	0	0
11	Other liabilities:	15	142	3	3	4
12	NSFR derivative liabilities	15	–	–	–	–
13	All other liabilities and capital instruments not included in the above categories	–	142	3	3	4
14	<b>Total available stable funding (ASF)</b>	–	–	–	–	<b>598</b>
<b>Required stable funding (RSF) items</b>						
15	Total high-quality liquid assets (HQLA)	–	–	–	–	20
EU 15a	Assets encumbered for more than 12m in cover pool	–	0	0	23	20
16	Deposits held at other financial institutions for operational purposes	–	0	0	0	0
17	Performing loans and securities:	–	176	41	396	394
18	Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut	–	57	7	1	5
19	Performing securities financing transaction with financial customers collateralized by other assets and loans and advances to financial institutions	–	24	11	53	61
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:	–	59	15	137	157
21	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	2	0	4	4
22	Performing residential mortgages, of which:	–	3	1	132	97
23	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	2	1	105	74
24	Other loans and securities that are not default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	–	32	6	74	74
25	Interdependent assets	–	0	0	0	0
26	Other assets:	0	146	2	23	63
27	Physical traded commodities	–	–	–	1	1
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–	–	–	7	6
29	NSFR derivative assets	–	–	–	14	14
30	NSFR derivative liabilities before deduction of variation margin posted	–	–	–	60	3
31	All other assets not included in the above categories	–	65	2	23	40
32	Off-balance sheet items	–	66	36	153	17
33	<b>Total required stable funding (RSF)</b>	–	–	–	–	<b>514</b>
34	<b>Net Stable Funding Ratio (in percent)</b>	–	–	–	–	<b>116</b>

		Mar 31, 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
in € b.		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available stable funding (ASF) Items</b>						
1	Capital items and instruments	65	0	0	13	79
2	Own funds	65	0	0	10	75
3	Other capital instruments	–	0	0	3	3
4	Retail deposits	–	249	22	2	255
5	Stable deposits	–	175	20	2	187
6	Less stable deposits	–	74	2	0	68
7	Wholesale funding:	–	258	30	143	269
8	Operational deposits	–	86	0	0	43
9	Other wholesale funding	–	172	30	143	226
10	Interdependent liabilities	–	0	0	0	0
11	Other liabilities:	10	162	2	3	4
12	NSFR derivative liabilities	10	–	–	–	–
13	All other liabilities and capital instruments not included in the above categories	–	162	2	3	4
14	<b>Total available stable funding (ASF)</b>	–	–	–	–	<b>607</b>
<b>Required stable funding (RSF) Items</b>						
15	Total high-quality liquid assets (HQLA)	–	–	–	–	19
EU 15a	Assets encumbered for more than 12m in cover pool	–	0	0	25	21
16	Deposits held at other financial institutions for operational purposes	–	0	0	0	0
17	Performing loans and securities:	–	182	27	390	385
18	Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut	–	51	1	5	7
19	Performing securities financing transaction with financial customers collateralized by other assets and loans and advances to financial institutions	–	32	7	53	60
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs,	–	63	14	128	151
	of which:					
21	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	5	1	7	7
22	Performing residential mortgages,	–	3	1	129	94
	of which:					
23	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	3	1	107	76
24	Other loans and securities that are not default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	–	32	5	74	73
25	Interdependent assets	–	0	0	0	0
26	Other assets:	0	151	2	22	62
27	Physical traded commodities	–	–	–	1	0
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–	–	–	7	6
29	NSFR derivative assets	–	–	–	15	15
30	NSFR derivative liabilities before deduction of variation margin posted	–	–	–	48	2
31	All other assets not included in the above categories	–	82	2	21	38
32	Off-balance sheet items	–	57	36	148	15
33	<b>Total required stable funding (RSF)</b>	–	–	–	–	<b>501</b>
34	<b>Net Stable Funding Ratio (in percent)</b>	–	–	–	–	<b>121</b>

		Dec 31, 2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
in € b.		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available stable funding (ASF) Items</b>						
1	Capital items and instruments	67	0	0	9	76
2	Own funds	67	0	0	7	74
3	Other capital instruments	–	0	0	2	2
4	Retail deposits	–	248	22	2	255
5	Stable deposits	–	175	20	2	187
6	Less stable deposits	–	74	1	0	68
7	Wholesale funding:	–	359	24	144	268
8	Operational deposits	–	83	0	0	42
9	Other wholesale funding	–	275	24	144	226
10	Interdependent liabilities	–	0	0	0	0
11	Other liabilities:	11	118	3	2	4
12	NSFR derivative liabilities	11	–	–	–	–
13	All other liabilities and capital instruments not included in the above categories	–	118	3	2	4
14	<b>Total available stable funding (ASF)</b>	–	–	–	–	<b>602</b>
<b>Required stable funding (RSF) Items</b>						
15	Total high-quality liquid assets (HQLA)	–	–	–	–	20
EU 15a	Assets encumbered for more than 12m in cover pool	–	0	0	24	21
16	Deposits held at other financial institutions for operational purposes	–	0	0	0	0
17	Performing loans and securities:	–	182	28	386	382
18	Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut	–	50	1	5	6
19	Performing securities financing transaction with financial customers collateralized by other assets and loans and advances to financial institutions	–	28	7	52	58
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs,	–	70	14	123	148
	of which:					
21	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	10	1	6	10
22	Performing residential mortgages,	–	1	1	130	95
	of which:					
23	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	1	1	104	73
24	Other loans and securities that are not default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	–	33	5	76	75
25	Interdependent assets	–	0	0	0	0
26	Other assets:	0	131	1	21	60
27	Physical traded commodities	–	–	–	0	0
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–	–	–	7	6
29	NSFR derivative assets	–	–	–	15	15
30	NSFR derivative liabilities before deduction of variation margin posted	–	–	–	56	3
31	All other assets not included in the above categories	–	53	1	21	36
32	Off-balance sheet items	–	59	29	143	14
33	<b>Total required stable funding (RSF)</b>	–	–	–	–	<b>498</b>
34	<b>Net Stable Funding Ratio (in percent)</b>	–	–	–	–	<b>121</b>

		Sep 30, 2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
in € b.		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available stable funding (ASF) Items</b>						
1	Capital items and instruments	65	0	0	10	75
2	Own funds	65	0	0	7	72
3	Other capital instruments	–	0	0	2	2
4	Retail deposits	–	247	21	2	253
5	Stable deposits	–	173	20	2	185
6	Less stable deposits	–	74	1	0	68
7	Wholesale funding:	–	363	19	142	261
8	Operational deposits	–	81	0	0	40
9	Other wholesale funding	–	282	19	142	221
10	Interdependent liabilities	–	0	0	0	0
11	Other liabilities:	14	150	3	2	4
12	NSFR derivative liabilities	14	–	–	–	–
13	All other liabilities and capital instruments not included in the above categories	–	150	3	2	4
14	<b>Total available stable funding (ASF)</b>	–	–	–	–	<b>593</b>
<b>Required stable funding (RSF) Items</b>						
15	Total high-quality liquid assets (HQLA)	–	–	–	–	21
EU 15a	Assets encumbered for more than 12m in cover pool	–	0	0	25	21
16	Deposits held at other financial institutions for operational purposes	–	0	0	0	0
17	Performing loans and securities:	–	173	29	372	367
18	Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut	–	46	1	7	8
19	Performing securities financing transaction with financial customers collateralized by other assets and loans and advances to financial institutions	–	33	6	45	51
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs,	–	60	15	117	139
	of which:					
21	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	2	1	4	4
22	Performing residential mortgages,	–	1	1	127	94
	of which:					
23	With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk	–	1	1	89	61
24	Other loans and securities that are not default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	–	32	5	76	75
25	Interdependent assets	–	0	0	0	0
26	Other assets:	0	153	2	22	61
27	Physical traded commodities	–	–	–	1	1
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–	–	–	7	6
29	NSFR derivative assets	–	–	–	14	14
30	NSFR derivative liabilities before deduction of variation margin posted	–	–	–	56	3
31	All other assets not included in the above categories	–	76	2	21	37
32	Off-balance sheet items	–	60	27	142	14
33	<b>Total required stable funding (RSF)</b>	–	–	–	–	<b>483</b>
34	<b>Net Stable Funding Ratio (in percent)</b>	–	–	–	–	<b>123</b>

## List of tables

EU KM1 – Key metrics .....	6
EU KM2 – Key metrics - MREL and G-SII Requirement for own funds and eligible liabilities (TLAC) .....	7
EU CC1 – Composition of regulatory own funds .....	10
Reconciliation of shareholders’ equity to Own Funds .....	13
Development of Own Funds .....	14
EU CC2 – Reconciliation of regulatory own funds to balance sheet in the audited financial statements .....	15
EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer .....	19
EU CCyB2 – Institution-specific countercyclical capital buffer .....	23
EU TLAC1 – Composition of MREL and G-SII requirement for own funds end eligible liabilities .....	24
Ranking of liabilities in an insolvency proceeding under German law .....	26
EU TLAC3a – Creditor ranking .....	27
EU OV1 – Overview of RWA .....	28
EU LR1 – LRSum: Summary reconciliation of accounting assets and leverage ratio exposures .....	29
EU LR2 – LRCom: Leverage ratio common disclosure .....	30
EU LR3 – LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) .....	31
EU CR1-A – Maturity of exposures .....	33
EU CQ4 – Quality of non-performing exposures by geography .....	35
EU CQ5 – Credit quality of loans and advances to non-financial corporations by industry .....	37
EU CR1 - Performing and non-performing exposures and related provisions .....	39
EU CQ3 – Credit quality of performing and non-performing exposures by past due days .....	42
EU CR2 – Changes in the stock of non-performing loans and advances .....	44
EU CQ1 – Credit quality of forborne exposures .....	44
CRR – NPE Flow .....	45
ECB – NPE Flow .....	46
ECB – NPE Stock .....	47
Reconciliation of non-performing exposure .....	47
EU CQ7 – Collateral obtained by taking possession and execution processes .....	48
COVID-19 template 1: Information on loans and advances subject to legislative and non-legislative moratoria <sup>1</sup> .....	49
COVID-19 template 2: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria .....	52
COVID-19 template 3: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 pandemic (excluding derecognized loans) .....	53
EU CR3 – CRM techniques – Overview .....	54
EU CR4 – Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects .....	55
EU CR5 – Standardized approach .....	56
EU CR6 – FIRB approach – Credit risk exposures by exposure class and PD range .....	60
EU CR6 – AIRB approach – Credit risk exposures by exposure class and PD range .....	67
EU CR7 – IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques .....	79

EU CR7-A – Foundation IRB approach – Extent of the use of CRM techniques.....	80
EU CR7-A – Advanced IRB approach – Extent of the use of CRM techniques .....	81
EU CR8 – RWA flow statement of credit risk exposures under the IRB approach.....	83
EU CR10.02 – Specialized lending: Income-producing real estate and high volatility commercial real estate (Slotting approach).....	83
EU CR10.05 – Equity exposures under the simple risk-weighted approach.....	84
EU CCR1 – Analysis of CCR exposure by approach.....	85
EU CCR7 – RWA flow statement of counterparty credit risk exposures under the internal model method .....	86
EU CCR2 – CVA capital charge .....	87
EU CCR8 – Exposures to CCPs.....	88
EU CCR3 – Standardized approach – CCR exposures by regulatory portfolio and risk .....	88
EU CCR4 – FIRB approach – CCR exposures by portfolio and PD scale.....	90
EU CCR4 – AIRB approach – CCR exposures by portfolio and PD scale .....	93
EU CCR5 – Composition of collateral for exposures to CCR .....	98
EU CCR6 – Credit derivatives exposures .....	98
EU SEC1 – Securitization exposures in the non-trading book .....	100
EU SEC2 – Securitization exposures in the trading book.....	101
EU SEC3 – Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor .....	103
EU SEC4 – Securitization exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor.....	105
EU SEC5 - Article 449 (I) CRR - Exposures securitized by the institution - Exposures in default and specific credit risk adjustments.....	106
EU MR1 – Market risk under the standardized approach .....	108
EU MR2-A – Market Risk under the internal models approach (IMA).....	109
EU MR2-B – RWA flow statements of market risk exposures under the IMA .....	109
EU MR3 – IMA values for trading portfolios <sup>1</sup> .....	111
EU MR4 – Comparison of VaR estimates with gains and losses .....	111
EU IRRBB1 - Changes in the economic value of equity and net interest income under six supervisory shock scenarios .....	112
EU LIQ1 – LCR disclosure template .....	114
EU LIQ2 – Net stable funding ratio template .....	115

