COMMERZBANK

Disclosure Report as at 31 December

2024

in accordance with the Capital Requirements Regulation (CRR)

The bank at your side

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Due to rounding, numbers and percentages presented throughout this report may not add up precisely to the totals provided.

Introduction

Commerzbank

Commerzbank is the leading bank for German SMEs and a strong partner for around 24,000 corporate customer groups. Annual adjustments to the groups at the turn of the year, optimisation of the customer portfolio in terms of profitability and return as well as a system-related deviation in the recording of institutional customers compared to the previous year led to a decline compared to 2023. In addition, Commerzbank serves almost 11 million private and small-business customers in Germany.

As a universal bank, Commerzbank offers a comprehensive portfolio of financial services through its two business segments – Corporate Clients and Private and Small-Business Customers. With a presence in more than 40 countries, Commerzbank is represented wherever its SME, large corporate and institutional customers need it. The Bank also supports international customers with a business relationship to Germany, Austria and/or Switzerland and companies in selected future-oriented industries. With invested assets of more than €400bn, Commerzbank is also one of the leading banks for private and small-business customers in Germany. It offers a comprehensive range of products and services under the Commerzbank brand through its omnichannel approach: online and mobile, by telephone and video in the advisory centre, and in person in its approximately 400 branches. Under the comdirect brand, it offers (as a primary digital bank) all core services around the clock and (as a service broker) solutions for saving, investing and securities trading. Its Polish subsidiary mBank S.A. is an innovative digital bank that serves approximately 5.8 million private and corporate customers, predominantly in Poland, but also in the Czech Republic and Slovakia.

On the domestic market, Commerzbank AG is headquartered in Frankfurt am Main, from where it manages its branch network and its advisory centre. Its most important German subsidiary is Commerz Real AG. Outside of Germany, Commerzbank – including through mBank in Poland – had three material subsidiaries, 14 operational foreign branches and 27 representative offices as at the reporting date. With our international locations, we cover all major trade corridors. In these locations we offer tailor-made solutions for local corporate and institutional customers and support local export-oriented companies worldwide. However, the focus of the Bank's international activities is on Europe.

The two segments Private and Small-Business Customers and Corporate Clients are each managed by a member of the Board of Managing Directors.

The staff, management and support functions are combined in the external reporting in the Others and Consolidation segment.

Further information on the management of the Commerzbank Group and its management bodies can be found in Annex 3 and on the Commerzbank website under Commerzbank, Investor Relations, Corporate Governance.

Objective of the Disclosure Report

This report is intended to give the reader a detailed insight into Commerzbank's current risk profile and risk management. In particular, it contains information on:

- the Commerzbank Group's structure from both a regulatory and accounting perspective,
- the Group's capital structure,
- the Commerzbank Group's general risk management system and
- the risk management in respect of specific types of risk.

The report may also be seen as complementary to the Annual Report pursuant to the German Commercial Code (Handelsgesetzbuch – HGB), since in contrast to the Annual Report it focuses primarily on the supervisory perspective.

In this report Commerzbank Aktiengesellschaft as the ultimate parent company of the regulated banking group is complying with the disclosure requirements of Articles 431 – 455 of regulation (EU) 2019/876 (CRR II) of the European parliament and of the Council of 20 May 2019 amending the Regulation (EU) No. (CRR I) – as of 31 December 2024. The regulation is supplemented by the final draft implementing technical standards EBA EBA/ITS/2020/04 from 24 June 2020, which specify the tables integrated in the report. The names of the predefined tables are indicated by the table names provided with the prefix EU.

Article 449a CRR requires the disclosure of information on environmental, social and governance risks (ESG risks). With the Implementing Regulation (EU) 2022/2453 by the Commission from 30 November 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 with regard to the disclosure of environmental, social and governance risks, EBA has specified the requirements. These are be published in Annex 4 of this report.

In accordance with Article 45i of Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (BRRD) and §51 of the Act on the Recovery and Resolution of Institutions and Financial Groups (SAG), institutions must also publish information on own funds and eligible liabilities (MREL). The disclosure requirements here follow the implementing technical standards in accordance with Implementing Regulation (EU) 2021/763 of 23.4.2021, as last amended by Implementing Regulation (EU) 2024/1618 of 6.6.2024.

Scope

In general[1], this Disclosure Report is based on the group of companies consolidated for regulatory purposes. The companies consolidated for regulatory purposes only include those carrying out banking and other financial business. The consolidated group consists of a domestic parent company and its affiliated companies. The aim of regulatory consolidation is to prevent multiple use of capital that in fact exists only once by subsidiary companies in the financial sector. The companies consolidated under IFRS, by contrast, comprise all the companies controlled by the ultimate parent company.

In the context of the disclosure requirements (Article 431 (3) CRR), besides the Disclosure Report itself, all policies and processes have to be documented as a main component to fulfil the Pillar 3 requirements of the Basel framework. The appropriateness and practicality of the Bank's disclosure practice has to be reviewed on a regular basis. For this purpose, Commerzbank has defined guidelines for the Disclosure Report which regulate the overarching, strategic part of the instructions. The operative targets and responsibility are additionally defined in separate documents.

The Group's Disclosure Report complies with applicable legal and regulatory requirements and is prepared in accordance with the Group's internal policies, procedures, systems and internal controls.

The Group's Board of Managing Directors has approved this report for publication and confirmed that Commerzbank complies with the requirements of Article 431 (3) CRR.

Commerzbank is a large institution in accordance with Article 4 (1) No. 146 CRR, thus implementing the frequency requirements of Article 433a CRR.

Waiver rule pursuant to Article 7 CRR

According to Article 7 CRR in conjunction with section 2a (1) KWG, parent companies within the group of companies consolidated for regulatory purposes are also entitled to this exemption. The opportunity this offers for Commerzbank Aktiengesellschaft as the ultimate parent company of the Commerzbank Group to be exempted from the requirements at single entity level pursuant to Article 7(3) CRR has been utilised since 2007.

Utilisation of the waiver rule was reported at the outset to BaFin and the Bundesbank with evidence of compliance with the requirements.

Subordinate companies of the institute group do not currently make use of the waiver rule.

[1] see chapter "Minimum requirement for own funds and eligible liabilities (MREL)" to meet the MREL requirements at the level of the "Commerzbank resolution group"

Equity capital, capital requirement and RWA

Key metrics

In order to facilitate market participants' access to the most important equity and liquidity ratios of the institutions, Table KM1 with key parameters was introduced from June 2021.

The table shows the information required by Articles 447(a) to (g) and 438 (b) CRR. In particular, these include the available own funds, risk-weighted exposure amounts, capital ratios, combined capital buffers, leverage ratio and liquidity ratios, as well as some additional own funds requirements in order to obtain an overall overview of Commerzbank.

Common Equity Tier 1 (CET1) capital amounted to €26.2bn as of the reporting date, compared to €25.3bn as of 30 September 2024. The increase in the Common Equity Tier 1 (CET1) capital was mainly due to the inclusion of our 2024 net profit, taking into account accrual for dividends, outstanding share buybacks, and AT-1 interest as well as the positive development of the currency translation reserve.

Commerzbank achieved a Common Equity Tier 1 (CET1) ratio of 15.1% compared to 14.8% in the previous quarter. Taking into account two directly eligible AT1 new issuances totaling 1.4 billion euros and the partial buyback of an existing AT1 bond totaling 0.5 billion euros, the Tier 1 capital ratio was 17.6% compared to 16.7% as of September 30, 2024.

Tier 2 capital amounted to €5.7bn as of the reporting date, caused by an increase of €0.4bn compared to the previous quarter. New issues resulted in an increase of €0.5bn in Tier 2 capital, while amortisation effects reduced it by €0.1bn. Quarter on quarter, eligible equity increased by €2.4bn to €36.3bn. The total capital ratio (with transitional provisions) was 20.9% as at the reporting date compared with 19.8% as at 30 September 2024. The additional capital requirement for risks other than the risk of excessive leverage (P2R) remained unchanged from the previous quarter at 2.25% of the total capital, of which at least 1.27% must be covered by Common Equity Tier 1 capital.

The leverage ratio shows the ratio of Tier 1 capital to leverage ratio exposure, consisting of the non risk-weighted assets plus off-balance sheet positions. The way in which exposure to derivatives, securities financing transactions and off-balance sheet positions is calculated is laid down by regulators. As a non risk-sensitive figure the leverage ratio is intended to supplement risk-based measures of capital adequacy.

The leverage ratio was 4.8% as of 31 December 2024 (compared to 4.4% as of 30 September 2024). The leverage ratio increased due to a decrease in leverage ratio exposure as well as an increase in regulatory Tier 1 capital.

At 142.1% (average of the last 12 month-end values), Commerzbank was well above the minimum 100% level required for the Liquidity Coverage Ratio (LCR). Commerzbank’s liquidity situation as at the end of the quarter was therefore comfortable given its conservative and forward-looking funding strategy.

The Net Stable Funding Ratio (NSFR) as of 31 December 2024 underlines the solid funding position of Commerzbank Group. It reflects the customer-focused business model with a high contribution to the Available Stable Funding (ASF) from customer deposits. The main share of the Required Stable Funding (RSF) results from the loan business, and the main share of the ASF results from customer deposits.

The NSFR decreased from 128.8% to 126.1% in the fourth quarter of 2024. This is due to the increase in loans (RSF).

EU KM1: Key metrics

		a	b	c	d	e
Line	**€m | %**	**31.12.2024**	**30.9.2024**	**30.6.2024**	**31.3.2024**	**31.12.2023**
Available own funds (amounts)						
1	Common Equity Tier 1 (CET1) capital	26,212	25,316	25,520	25,769	25,720
2	Tier 1 capital	30,558	28,535	28,735	28,981	28,926
3	Total capital	36,278	33,892	34,171	33,782	33,859
Risk-weighted exposure amounts						
4	Total risk-weighted exposure amount	173,378	170,865	172,887	173,081	175,114
Capital ratios (as a percentage of risk-weighted exposure amount)						
5	Common Equity Tier 1 ratio (%)	15.12	14.82	14.76	14.89	14.69
6	Tier 1 ratio (%)	17.63	16.70	16.62	16.74	16.52
7	Total capital ratio (%)	20.92	19.84	19.77	19.52	19.34
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)						
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	2.25	2.25	2.25	2.25	2.00
EU 7b	of which: to be made up of CET1 capital (percentage points)	1.27	1.27	1.27	1.27	1.13
EU 7c	of which: to be made up of Tier 1 capital (percentage points)	1.69	1.69	1.69	1.69	1.50
EU 7d	Total SREP own funds requirements (%)	10.25	10.25	10.25	10.25	10.00
Combined buffer requirement (as a percentage of risk-weighted exposure amount)						
8	Capital conservation buffer (%)	2.50	2.50	2.50	2.50	2.50
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	–	–	–	–	–
9	Institution specific countercyclical capital buffer (%)	0.66	0.66	0.67	0.66	0.64
EU 9a	Systemic risk buffer (%)	0.10	0.10	0.10	0.10	0.10
10	Global Systemically Important Institution buffer (%)	–	–	–	–	–
EU 10a	Other Systemically Important Institution buffer (%)	1.25	1.25	1.25	1.25	1.25
11	Combined buffer requirement (%)	4.51	4.51	4.52	4.51	4.49
EU 11a	Overall capital requirements (%)	14.76	14.76	14.77	14.76	14.49
12	CET1 available after meeting the total SREP own funds requirements (%)	9.35	9.01	8.93	9.06	9.02
Leverage ratio						
13	Total exposure measure	632,751	642,657	641,499	630,827	592,257
14	Leverage ratio (%)	4.83	4.44	4.48	4.59	4.88
Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)						
EU 14a	Additional own funds requirements to address the risk of excessive leverage (%)	0.10	0.10	0.10	0.10	–
EU 14b	of which: to be made up of CET1 capital (percentage points)	–	–	–	–	–
EU 14c	Total SREP leverage ratio requirements (%)	3.10	3.10	3.10	3.10	3.00
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)						
EU 14d	Leverage ratio buffer requirement (%)	–	–	–	–	–
EU 14e	Overall leverage ratio requirements (%)	3.10	3.10	3.10	3.10	3.00

EU KM1 part 2: Key metrics

		a	b	c	d	e
Line	**€m | %**	**31.12.2024**	**30.9.2024**	**30.6.2024**	**31.3.2024**	**31.12.2023**
Liquidity Coverage Ratio						
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	138,862	140,346	135,237	128,577	122,676
EU 16a	Cash outflows - Total weighted value	121,633	120,391	117,762	114,594	110,761
EU 16b	Cash inflows - Total weighted value	23,933	23,124	22,537	21,756	20,731
16	Total net cash outflows (adjusted value)	97,700	97,268	95,225	92,838	90,030
17	Liquidity Coverage Ratio (%)	142.1	144.3	141.9	138.3	136.2
Net Stable Funding Ratio						
18	Total available stable funding	358,148	355,417	352,668	350,311	340,083
19	Total required stable funding	284,106	275,872	270,657	266,422	261,246
20	NSFR ratio (%)	126.1	128.8	130.3	131.5	130.2

Minimum requirement for own funds and eligible liabilities (MREL)

For credit institutions established in the euro zone and issuers supervised under the Single Supervisory Mechanism (SSM), Regulation (EU) No 806/2014 provides for the consistent application of resolution rules throughout the euro zone under the responsibility of the Single Resolution Board (SRB). The banks concerned must also comply with a minimum requirement for own funds and eligible liabilities (MREL) set by the competent resolution authority for each institution and the group to which it belongs.

In May 2024, Commerzbank AG received its current decision on the definition of the MREL for the "Commerzbank resolution group", consisting of the

i. Commerzbank AG as the resolution entity and
ii. all other subsidiaries of the resolution entity except mBank S.A. and its subsidiaries.

The SRB has therefore decided for a resolution strategy with two separate resolution groups (Multiple Point of Entry or MPE) for the Commerzbank Group. Commerzbank must comply with the MREL exclusively for the Commerzbank resolution group.

Table EU KM2 shows the stock of own funds and eligible liabilities and the fulfillment of the MREL below:

EU KM2: Key metrics – MREL

		a
		Minimum requirement for own funds and eligible liabilities (MREL)
	€m	**31.12.2024**
Own funds and eligible liabilities, ratios and components		
1	Own funds and eligible liabilities	55,030
EU-1a	Of which own funds and subordinated liabilities	48,350
2	Total risk exposure amount of the resolution group (TREA)	155,433
3	Own funds and eligible liabilities as a percentage of the TREA	35.40%
EU-3a	Of which own funds and subordinated liabilities	31.11%
4	Total exposure measure (TEM) of the resolution group	575,091
5	Own funds and eligible liabilities as percentage of the TEM	9.57%
EU-5a	Of which own funds or subordinated liabilities	8.41%
6a	Does the subordination exemption in Article 72b(4) of Regulation (EU) No 575/2013 apply? (5 % exemption)	
6b	Aggregate amount of permitted non-subordinated eligible liabilities instruments if the subordination discretion in accordance with Article 72b(3) of Regulation (EU) No 575/2013 is applied (max 3.5 % exemption)	
6c	If a capped subordination exemption applies in accordance with Article 72b (3) of Regulation (EU) No 575/2013, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised under row 1, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised under row 1 if no cap was applied (%)	
Minimum requirement for own funds and eligible liabilities (MREL)		
EU-7	MREL expressed as a percentage of the TREA	23.44%
EU-8	Of which to be met with own funds or subordinated liabilities	18.07%
EU-9	MREL expressed as a percentage of the TEM	6.78%
EU-10	Of which to be met with own funds or subordinated liabilities	6.78%

Table EU TLAC1 shows the composition of Own Funds and eligible liabilities to fulfill MREL.

EU TLAC1 – Composition – MREL-Requirement for own funds and eligible liabilities

		a
	€m	Minimum requirement for own funds and eligible liabilities (MREL)
Own funds and eligible liabilities and adjustments		
1	Common Equity Tier 1 (CET1) capital	26,080
2	Additional Tier 1 (AT1) capital	4,073
6	Tier 2 (T2) capital	5,520
11	Own funds for the purpose of Articles 92a CRR and 45 BRRD	35,673
Own funds and eligible liabilities: Non-regulatory capital elements		
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered)	7,574
EU-12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	–
EU-12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 27 June 2019 (subordinated grandfathered)	3,952
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	1,408
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap)	6,680
EU-13a	Eligible liabilities that are not subordinated to excluded liabilities issued prior to 27 June 2019 (pre-cap)	–
14	Amount of non subordinated instruments eligible, where applicable after application of Article 72b (3) CRR	6,680
17	Eligible liabilities items before adjustments	19,614
EU-17a	Of which subordinated	12,933
Own funds and eligible liabilities: Adjustments to non-regulatory capital elements		
18	Own funds and eligible liabilities items before adjustments	55,287
20	(Deduction of investments in other eligible liabilities instruments)	−257
22	Own funds and eligible liabilities after adjustments	55,030
EU-22a	Of which own funds and subordinated	48,350
Risk-weighted exposure amount and leverage exposure measure of the resolution group		
23	Total risk exposure amount	155,433
24	Total exposure measure	575,091
Ratio of own funds and eligible liabilities		
25	Own funds and eligible liabilities as a percentage of the TREA	35.40%
EU-25a	Of which own funds and subordinated liabilities	31.11%
26	Own funds and eligible liabilities as percentage of the TEM	9.57%
EU-26a	Of which own funds and subordinated liabilities	8.41%
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements	11.01%

In accordance with the SRB' requirements, the Commerzbank resolution entity fulfills its MREL with own funds at the level of the resolution group and with externally issued liabilities of Commerzbank AG. The own funds are therefore transformed from the Commerzbank Group to the Commerzbank resolution group.

The subordinated liabilities are recognized with their outstanding amount and consist of:

- Amounts of Tier 2 instruments with a residual maturity of one year or more that cannot be recognized as own funds under regulatory law and
- Non-preferred senior liabilities with a residual maturity of one year or more (non-preferred senior).

The total amount of eligible liabilities is derived from subordinated liabilities and other MREL eligible instruments with a residual maturity of one year or more (preferred senior unsecured instruments).

Unused prior permission amounts, covered by a SRB permission to call, redeem, repay or repurchase eligible liabilities instruments in accordance with Article 78a of Regulation (EU) No 575/2013, are deducted. According to disclosure requirements these are shown in row 20 of table EU TLAC1.

The total risk amount (TREA) and the total risk exposure measure (LRE) are transformed from the Commerzbank Group to the Commerzbank resolution group in accordance with the MPE resolution strategy.

In relation to TREA, Commerzbank is fulfilling its MREL of 23.44% at 35.40% as of 31 December 2024. The subordination requirement of 18.07% is met with 31.11%.

To determine the "maximum distributable amount related to the minimum requirement for own funds and eligible liabilities " (M-MDA), Commerzbank must comply with the current combined buffer requirement (CBR) in relation to the Commerzbank resolution group in addition to the TREA-based requirements. As of 31 December 2024, this CBR is 4.61% of the TREA.

In relation to the LRE, Commerzbank is fulfilling its MREL of 6.78% at 9.57% as of 31 December 2024.

Table EU TLAC3b shows own funds and eligible liabilities of Commerzbank AG as resolution entity for the fulfillment of MREL. The ranking of creditors up to and including rank 12 is shown.

EU TLAC3b: Creditor ranking - resolution entity

		Insolvency ranking						
	€m	1	2	3	4	5	6	Sum from 1 to 12
1	Description of insolvency rank	Rank 1	Rank 2	Rank 3	Rank 4	Rank 11	Rank 12	
5	Own funds and liabilities potentially eligible for meeting MREL	15,225	4,323	6,969	–	11,525	6,680	**44,722**
6	of which residual maturity ≥ 1 year < 2 years	–	–	1,008	–	1,741	2,768	**5,517**
7	of which residual maturity ≥ 2 year < 5 years	–	–	1,578	–	4,247	2,818	**8,643**
8	of which residual maturity ≥ 5 years < 10 years	–	–	3,884	–	3,832	568	**8,285**
9	of which residual maturity ≥ 10 years, but excluding perpetual securities	–	–	497	–	1,705	526	**2,728**
10	of which perpetual securities	15,225	4,323	–	–	–	–	**19,548**

The description of the insolvency ranking follows the standardized presentation of the insolvency rankings for Germany published by BaFin as the national competent resolution authority and must be used for reporting companies as follows:

Description of the rank in insolvency	Label of the claims	Legal basis
Rank 1	Common equity Tier 1 instruments	Section 199 of the Insolvency Code, Section 46f (7a) sentence 5 no. 3 of the KWG
Rank 2	Additional Tier 1 instruments	Section 46f (7a) sentence 5 no. 2 of the KWG
Rank 3	Tier 2 instruments	Section 46f (7a) sentence 5 no. 1 of the KWG
Rank 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
Rank 11	Non-preferred creditor claims arising from non-subordinated, unsecured non-structured debt instruments which (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	Section 38 of the Insolvency Code in conjunction with Section 46f (5) and (6); where applicable, in conjunction with Section 46f (9) of the KWG
Rank 12	General creditors’ claims	Section 38 of the Insolvency Code in conjunction with Section 46f (5) of the KWG, including instruments covered by Section 46f (6) sentence 3 and 46f (7) of the KWG

The information on own funds refers to Commerzbank AG, while tables EU KM2 and EU TLAC1 show own funds of Commerzbank resolution group. Ranks 5 – 10, which are not listed, are not relevant for Commerzbank AG.

Capital structure

The main rules governing compliance with minimum regulatory capital ratios for solvency purposes in the EU are contained in the Capital Requirements Directive (CRD) and primarily in the Capital Requirements Regulation (CRR). This legislation is supplemented at national level in Germany by further provisions in the German Banking Act, the German Solvency Regulation and other regulations. In addition, other regulatory issues are interpreted by Implementing Technical Standards (ITS) and Regulatory Technical Standards (RTS).

Parts of the requirements are subject to well-defined transitional provisions (with transitional provisions). The CRR in its current version provides for transitional provisions for capital deductions, Additional Tier 1 capital and Tier 2 capital.

The transitional provisions allow Tier 2 instruments that do not meet the requirements of the current CRR to be counted until June 2025.

For the Commerzbank Group, the transitional provisions laid down in Article 468 CRR and Article 473a shall not apply. Commerzbank has received approval from the supervisor for the application of the transitional regime to IFRS 9 in accordance with Article 473a CRR. However, this transitional arrangement will not apply as of 31 December 2024.

Common Equity Tier 1 (CET1) capital consists largely of subscribed capital plus reserves and non-controlling interests. Adjustments to this figure may be necessitated by any number of causes, for example intangible assets, write-downs of assets (if assets are not valued cautiously enough in the regulator's view), shortfalls due to the comparison of expected losses (EL) with the provisions recognised for them and the correction of tax loss carry-forwards. Adding Additional Tier 1 capital (AT1), which can contain subordinated debt instruments with certain conditions, produces Tier 1 capital. Tier 2 capital consists largely of subordinated debt instruments which are not eligible as Additional Tier 1 capital. The eligibility of these capital components has been reduced, as over the final five years of their life they may now only be amortised on a straight-line basis.

At Commerzbank, the Common Equity Tier 1 capital is a key management target. The Bank's specifications for the capital ratios far exceed the minimum statutory requirements. The Bank's risk-bearing capacity and market expectations play an important role in determining the internal capital ratio targets. For this reason, Commerzbank has defined minimum internal quotas for regulatory capital in addition to the supervisory requirements.

CET1 capital is allocated via a regular process that takes account of the Bank's strategic direction, profitable new business opportunities in the core business of each business segment as well as aspects of risk-bearing capacity.

Measures relating to the Bank's capital are approved by the full Board of Managing Directors, subject to the authorisation granted by the annual general meeting. During the past year, Commerzbank met the minimum statutory capital requirements as well as the requirements of the ECB and EBA at all times.

The evaluations in the tables below comprehensively illustrate the total own funds available for the entire Commerzbank Group. These own funds are also the basis for the calculation of the equity capital adequacy as reported to the Bundesbank.

Details of the issued capital instruments of Commerzbank Group according to Article 437 (1) b) and c) CRR and using Table EU CCA in Annex VII to the Regulation (EU) 2021/637 can be found in Annex 6 and on the Commerzbank website in the section Debt holder information/Capital instruments. The Commerzbank Group is not obliged to disclose under Article 437a CRR (eligible liabilities).

Table EU CC1 shows the composition of regulatory own funds and the capital ratios as defined in Article 437 a), d), e) and f) CRR and Annex VII of Regulation (EU) 2021/637 as of 31 December 2024:

EU CC1: Composition of regulatory own funds

Line €m		(a) Amounts	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	11,296	j+k
1a	of which: subscribed capital	1,154	j
1b	of which: share premium	10,143	k
2	Retained earnings	16,331	l
3	Accumulated other comprehensive income (and other reserves)	−261	n
EU-3a	Funds for general banking risk	–	
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1	–	
5	Minority interests (amount allowed in consolidated CET1)	699	q
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	1,181	m
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	29,246	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	−512	
8	Intangible assets (net of related tax liability) (negative amount)	−836	a+d
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	−150	c
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	21	o
12	Negative amounts resulting from the calculation of expected loss amounts	−232	
13	Any increase in equity that results from securitised assets (negative amount)	–	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	168	
15	Defined-benefit pension fund assets (negative amount)	−698	f+e
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	0	
17	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)	–	
18	Direct, indirect and synthetic holdings by the institution of the CET1 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)	–	
19	Direct, indirect and synthetic holdings by the institution of the CET1 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)	–	
EU-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	−48	
EU-20b	of which: qualifying holdings outside the financial sector (negative amount)	–	
EU-20c	of which: securitisation positions (negative amount)	−47	
EU-20d	of which: free deliveries (negative amount)	−1	

Line €m		(a) Amounts	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	–	b
22	Amount exceeding the 17.65% threshold (negative amount)	–	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	–	
25	of which: deferred tax assets arising from temporary differences	–	
EU-25a	Losses for the current financial year (negative amount)	–	m
EU-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	–	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	–	
27a	Other regulatory adjusments	–748	
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	–3,034	
29	Common Equity Tier 1 (CET1) capital	26,212	
Additional Tier 1 (AT1) capital: instruments			
30	Capital instruments and the related share premium accounts	4,073	p
31	of which: classified as equity under applicable accounting standards	4,073	p
32	of which: classified as liabilities under applicable accounting standards	–	
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1	–	
EU-33a	Amount of qualifying items referred to in Article 494a(1) subject to phase out from AT1	–	
EU-33b	Amount of qualifying items referred to in Article 494b(1) subject to phase out from AT1	–	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	273	
35	of which: instruments issued by subsidiaries subject to phase out	–	
36	Additional Tier 1 (AT1) capital before regulatory adjustments	4,346	
Additional Tier 1 (AT1) capital: regulatory adjustments			
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	–	
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)	–	
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 10% threshold and net of eligible short positions) (negative amount)	–	
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 (net of eligible short positions) (negative amount)	–	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	–	
42a	Other regulatory adjustments to AT1 capital	–	
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	–	
44	Additional Tier 1 (AT1) capital	4,346	
45	Tier 1 capital (T1 = CET1 + AT1)	30,558	

Line €m		(a) Amounts	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Tier 2 (T2) capital: instruments			
46	Capital instruments and the related share premium accounts	5,499	g+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) CRR	–	
EU-47a	Amount of qualifying items referred to in Article 494a (2) subject to phase out from T2	–	
EU-47b	Amount of qualifying items referred to in Article 494b (2) subject to phase out from T2	17	h
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	200	
49	of which: instruments issued by subsidiaries subject to phase out	–	
50	Credit risk adjustments	35	
51	Tier 2 (T2) capital before regulatory adjustments	5,750	
Tier 2 (T2) capital: regulatory adjustments			
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	−30	
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)	–	
54	Direct and indirect 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)	–	
55	Direct and indirect 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)	–	
EU-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	–	
EU-56b	Other regulatory adjusments to T2 capital	–	
57	Total regulatory adjustments to Tier 2 (T2) capital	−30	
58	Tier 2 (T2) capital	5,720	
59	Total capital (TC = T1 + T2)	36,278	
60	Total risk exposure amount	173,378	
Capital ratios and requirements including buffers (%)			
61	Common Equity Tier 1	15.12	
62	Tier 1	17.63	
63	Total capital	20.92	
64	Institution CET1 overall capital requirements	10.27	
65	of which: capital conservation buffer requirement	2.50	
66	of which: countercyclical capital buffer requirement	0.66	
67	of which: systemic risk buffer requirement	0.10	
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer requirement	1.25	
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage	1.27	
68	Common Equity Tier 1 capital (as a percentage of risk exposure amount) available after meeting the minimum capital requirements	9.35	

Line €m		(a) Amounts	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	716	
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	210	
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	1,932	
Applicable caps on the inclusion of provisions in Tier 2			
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	–	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	415	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	35	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	618	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	–	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	–	
82	Current cap on AT1 instruments subject to phase out arrangements	–	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	–	
84	Current cap on T2 instruments subject to phase out arrangements	–	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	–	

Connection between balance-sheet and regulatory positions

For Commerzbank as a banking group as defined in section 10a KWG and Article 11 CRR the capital relevant to the determination of regulatory capital is based on the consolidated financial statements under FINREP which is prepared based on the Group balance sheet according to IFRS. To reconcile the requirements for regulatory capital with the slightly different amounts reported in the financial statements, capital as determined under IFRS was adjusted with the aid of so-called prudential filters.

There was no under-capitalisation of subsidiaries subject to the deduction method during the period under review. Nor are there any obstacles to the transfer of own funds or the repayment of liabilities in accordance with Article 436 f) CRR between Commerzbank AG and the main subsidiaries in the reporting period.

In the year under review, there were no subsidiaries not included in the consolidation with lower own resources than the required amount.

Regarding the use of the exemption under Article 7 CRR, see section "Waiver rule pursuant to Article 7 CRR" in the chapter "Introduction". The consolidation at single entity level under Article 9 CRR was not used.

Intra-group business and business with related companies and persons have no material impact on the risk profile of the consolidated group.

In accordance with Article 437 a) CRR and the Implementing Regulation (EU) 2021/637, Table EU CC2 shows a comparison of the published balance sheet (column a) with the carrying amounts under the regulatory scope of consolidation (column b) and a reference (column c) of the balance sheet items to regulatory own funds shown in Table EU CC1.

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

		a	b	c
	€m	**As reported in published financial statements**	**Under the regulatory scope of consolidation**	**Reference**
		31.12.2024	**31.12.2024**	
Assets				
1	Cash on hand and cash on demand	73,001	72,914	
2	Financial assets - Amortised Cost	310,925	328,371	
3	Financial assets - Fair Value OCI	56,725	56,725	
4	Financial Assets - Fair Value Option	–	–	
5	Financial Assets - Mandatorily Fair Value P&L	67,849	67,938	
6	Financial Assets - Held for Trading	36,831	36,903	
7	Value adjustment on portfolio fair value hedges	−1,546	−1,546	
8	Positive fair values of derivative hedging instruments	1,280	1,280	
9	Holdings in companies accounted for using the equity method	166	131	
10	Intangible assets	1,785	1,782	a
11	Fixed assets	2,244	2,239	
12	Investment properties	322	159	
13	Non-current assets held for sale and disposal groups	83	83	
14	Current tax assets	216	216	
15	Deferred tax assets	1,929	1,948	
16	of which: deferred tax assets arising from temporary differences	1,912	1,932	b
17	of which: deferred tax assets do not arise from temporary differences	150	150	c
18	of which: deferred tax liabilities arising from intangible assets	−173	−173	d
19	of which: deferred tax liabilities arising from defined benefit pension fund assets	−89	−89	e
20	Other assets	2,837	2,852	
21	of which: Asset surplus of pension plan assets	788	788	f
22	**Total assets**	**554,646**	**571,994**	

EU CC2_part2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements

		a	b	c
	€m	As reported in published financial statements 31.12.2024	Under the regulatory scope of consolidation 31.12.2024	Reference
Liabilities				
23	Financial Liabilities - Amortised Cost	440,519	440,975	
24	of which: eligible Tier 2 issuances	2,973	2,973	g
25	of which: eligible AT1 and Tier 2 issuances subject to transitional provisions	75	75	h
26	Financial Liabilities - Fair Value Option	46,513	46,513	
27	of which: eligible Tier 2 issuances	3,929	3,929	i
28	Financial Liabilities - Held for Trading	23,227	23,227	
29	Value adjustment on portfolio fair value hedges	−2,262	−2,262	
30	Negative fair values of derivative hedging instruments	2,306	2,306	
31	Provisions	3,748	3,745	
32	Current tax liabilities	467	467	
33	Deferred tax liabilities	46	44	
34	Liabilities of disposal groups	7	7	
35	Other liabilities	4,357	21,265	
36	**Total liabilities**	**518,930**	**536,287**	
37	Subscribed capital	1,154	1,154	j
38	Capital reserve	10,143	10,143	k
39	Retained earnings	16,324	16,315	l
40	Distributable profit/loss from current year	2,677	2,677	m
41	Accumulated other comprehensive income (and other reserves)	−254	−246	n
42	thereof Valuation of cash flow hedges	−21	−21	o
43	Additional equity components	4,425	4,425	
44	thereof eligible AT1 issues	4,073	4,073	p
45	Non-controlling interests	1,249	1,239	q
46	**Total Equity**	**35,716**	**35,707**	
47	**Total liabilities**	**554,646**	**571,994**	

Explanation of the differences between risk exposure amounts for accounting and regulatory purposes

In table EU LI1, there is in total a difference of €17.3bn between the carrying values according to the group of consolidated companies reported in the balance sheet (column a) and the carrying values according to the regulatory group of consolidated companies (column b). The difference is mainly due to the different treatment of individual companies in the balance sheet and regulatory scope of consolidation of the Commerzbank Group, as well as the resulting differences in consolidation. The companies where the consolidation methods for accounting and regulatory purposes differ are listed entity by entity in table EU LI3 in Annex 1.

Table EU LI2 shows the main reasons for the differences between the carrying values for financial reporting in the balance sheet and the regulatory risk exposure amounts (exposure in the standard approach and EaD in the IRB approach). The carrying values are reconciled to the regulatory risk exposure amounts. Row 1 of table EU LI2 comprises the carrying values of assets and row 2 the carrying values of liabilities for the regulatory group of companies in accordance with the allocation of table EU LI1. Column a of rows 1 and 2 corresponds to the total of column b in table EU LI1 less the total of column g in table EU LI1. Row 3 is the difference between row 1 and row 2.

The target figures to be reconciled (row 12) are the input values for the RWA calculation. The target figure includes both on-balance-sheet and off-balance-sheet positions after credit risk mitigation methods (CRM) and after application of the credit conversion factors (CCF). The target figure for market risk is at present not clearly defined in functional terms. In the internal model, risk parameters such as VaR, SVaR and IRC and the RWAs calculated from them are relevant. By contrast, exposure values are not considered separately here for the regulatory reporting. For this reason, a reconciliation of the values for market risk to the exposure taken into account for regulatory purposes has been dispensed within table EU LI2. As a result, no total has been calculated for rows 5 to 12 in column a.

Row 4 "Off-balance-sheet amounts" shows the off-balance-sheet amounts before taking into account credit conversion factors (CCFs).

Row 5 „Differences in valuations“ discloses the valuation differences between the carrying amounts in the balance sheet and regulatory exposures attributable to the additional value adjustments (premiums for prudent valuation). The premiums are applied to the categories of market price uncertainty, position close-out costs, model risk, concentrated positions, future administrative costs, early contract termination and operational risk.

Row 6 "Differences resulting from different netting rules, other than those already included in row 2" shows the effects from the different regulatory netting rules compared with those for accounting purposes, taking into account the netting effect in accordance with row 2. In terms of counterparty credit risk, effects result from derivatives and SFTs.

Row 7 "Differences due to the consideration of allowances" shows the value adjustments to the IRBA positions for credit risk. The carrying values on the balance sheet are net carrying values (after loan loss provisions). Under the IRB approach the risk exposure amount is in general the carrying values in the balance sheet; credit risk adjustments such as valuation allowances are not deducted. Value adjustments deducted from the carrying value of assets when drawing up the financial statements are added back as part of the reconciliation.

Row 8 "Differences caused by the use of credit risk mitigation techniques (CRMs)" reports the collateralisation effects that are included in the calculation of the exposure value after collateralisation.

Row 9 "Differences caused by credit conversation factors" reports the amount by which off-balance sheet exposures are included in the risk exposure amounts considered for regulatory purposes.

Row 10 shows the amount for synthetically securitised credit exposures that continue to be reported in the balance sheet item Financial assets - amortised cost, but are no longer included in the regulatory credit risk exposure due to the transfer of risk.

In row 11 "Others", the other reconciliation effects not already included in reconciliation rows 5 to 10 are reported.

EU LI1: Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

	a	b	c	d	e	f	g
			Carrying values of items				
€m	Carrying values as reported in published financial statements	Carrying values under scope of prudential consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to own funds requirements or subject to deduction from own funds
Assets							
Cash on hand and cash on demand	73,001	72,914	72,914	–	–	24,758	–
Financial assets - Amortised Cost	310,925	328,371	307,430	10,528	10,413	77,163	–
Financial assets - Fair Value OCI	56,725	56,725	55,546	–	1,179	16,210	–
Financial Assets - Mandatorily Fair Value P&L	67,849	67,938	2,786	60,454	4,678	66,129	20
Financial Assets - Held for Trading	36,831	36,903	–	24,352	42	31,761	0
Value adjustment on portfolio fair value hedges	–1,546	–1,546	–1,546	–	–	–	–
Positive fair values of derivative hedging instruments	1,280	1,280	–	1,280	–	439	–
Holdings in companies accounted for using the equity method	166	131	131	–	–	–	–
Intangible assets	1,785	1,782	–	–	–	–	1,782
Fixed assets	2,244	2,239	2,239	–	–	–	–
Investment properties	322	159	159	–	–	–	–
Non-current assets held for sale and disposal groups	83	83	83	–	–	–	–
Current tax assets	216	216	216	–	–	–	–
Deferred tax assets	1,929	1,948	2,104	–	–	–	–156
Other assets	2,837	2,852	1,830	–	–	234	788
Total assets	**554,646**	**571,994**	**443,892**	**96,614**	**16,313**	**216,693**	**2,433**
Liabilities							
Financial Liabilities - Amortised Cost	440,519	440,975	–	8,306	–	162,513	432,669
Financial Liabilities - Fair Value Option	46,513	46,513	–	35,734	–	35,734	10,780
Financial Liabilities - Held for Trading	23,227	23,227	–	21,698	–	21,206	6
Value adjustment on portfolio fair value hedges	–2,262	–2,262	–	–	–	–	–2,262
Negative fair values of derivative hedging instruments	2,306	2,306	–	2,306	–	362	–
Provisions	3,748	3,745	–	–	–	–	3,745
Current tax liabilities	467	467	–	–	–	–	467
Deferred tax liabilities	46	44	–	–	–	–	44
Liabilities of disposal groups	7	7	–	–	–	–	7
Other liabilities	4,357	21,264	–	–	–	–	21,264
Equity	35,716	35,707	–	–	–	–	35,707
Total liabilities and equity	**554,646**	**571,994**	**–**	**68,043**	**–**	**219,815**	**502,427**

EU LI2: Main sources of differences between regulatory exposure amounts and carrying values in Group financial statements

		a	b	c	d	e
	€m	Total	Items subject to			
			Credit risk framework	CCR framework	Securitisation framework	Market risk framework
1	Assets carrying value amount under the scope of prudential consolidation (as per template LI1)	569,561	443,892	96,614	16,313	216,693
2	Liabilities carrying value amount under the scope of prudential consolidation (as per template LI1)	69,567	–	68,043	–	219,815
3	Total net amount under the scope of prudential consolidation	499,994	443,892	28,571	16,313	−3,122
4	Off-balance-sheet amounts	193,779	193,779	–	–	34,357
5	Differences in valuations		–	512	–	
6	Differences due to different netting rules, other than those already included in row 2		–	−1,889	–	
7	Differences due to consideration of allowances		3,083	–	–	
8	Differences caused by the use of credit risk mitigation techniques (CRMs)		−1,109	–	–	
9	Differences caused by credit conversation factors		−14,799	–	–	
10	Differences caused by securitizations with risk transfer		−12,278	–	12,169	
11	Others[1]		3,178	–	–	
12	Exposure amounts considered for regulatory purposes		615,748	27,193	28,482	

1) Mainly includes valuation differences due to different definitions in accordance with regulatory requirements compared to accounting.

Table PV1 gives an overview of the valuation measures according to article 436 e) CRR within the framework of the Prudent Valuation according to EBA/RTS/2020/04 as of 31 December 2024. The individual valuation adjustments are classified in a granular way according to risk categories as well as their classification in the banking or trading book.

EU PV1: Prudent valuation adjustments (PVA):

		a	b	c	d	e	EU e1	EU e2	f	g	h
	€m	Risk category					Category level AVA - Valuation uncertainty		Total category level post-diversification		
Line	Category level AVA	Equity	Interest Rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA		Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
1	Market price uncertainty	207	167	13	9	4	5	2	203	43	161
3	Close-out cost	1	13	13	1	2	13	18	31	25	6
4	Concentrated positions	118	80	–	10	–	–	–	207	38	169
5	Early termination	–	–	–	–	–	–	–	–	–	–
6	Model risk	1	3	0	–	–	27	16	23	19	5
7	Operational risk	10	10	2	1	0	–	–	23	7	17
10	Future administrative costs	3	16	1	–	4	–	–	23	21	2
12	Total Additional Valuation Adjustments (AVAs)								512	152	360

Capital requirement and RWA

The capital requirements set out below relate to the Commerzbank Group and the figures are the same with regard to content as in the capital adequacy reports submitted to the Deutsche Bundesbank under Basel 3 Pillar 1.

The countercyclical capital buffer (CCyB) is part of a set of macroprudential instruments, designed to help counteract procyclicality of the financial system. Capital should be accumulated when cyclical systemic risk is considered to be rising, creating buffers that increase the resilience of the banking sector during periods of stress when losses materialize. This will help maintain the credit supply and dampen the downturn of the financial cycle. The CCyB can also help dampen excessive credit growth during the upswing of the financial cycle.

Table EU CCyB1 shows the geographical distribution of the exposures relevant for the calculation of the countercyclical buffer, as defined in Article 440 a) CRR as of 31 December 2024. The credit risk, market risk and securitisations are highlighted separately.

The countries listed below cover more than 99% of Commerzbank's own funds requirements. The further breakdown of the countries listed under line "Other" is omitted for reasons of materiality.

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

		a	b	c	d	e	f	g	h	i	j	k	l	m
		General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures – Exposure value for non-trading book	Total exposure value	Own fund requirements				Risk-weighted exposure amounts	Own fund requirements weights (in %)	Countercyclical buffer rate (%)
Line	Countries €m	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models			Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total			
001	DE (Germany)	20,968	199,262	0	253	11,600	232,083	5,498	24	125	5,647	70,589	56.6	0.75
002	PL (Poland)	5,915	23,422	0	0	4,418	33,755	1,362	0	94	1,456	18,201	14.6	–
003	US (United States of America)	1,331	12,464	0	384	4,623	18,802	486	15	96	598	7,474	6.0	–
004	GB (United Kingdom of Great Britain and Northern Ireland)	6,253	5,504	0	173	1,137	13,067	440	22	19	481	6,010	4.8	2.0
005	FR (France)	314	5,215	0	186	4,341	10,056	224	22	65	311	3,885	3.1	1.0
006	NL (Netherlands)	607	4,345	0	71	766	5,789	214	16	10	241	3,010	2.4	2.0
007	CH (Switzerland)	474	4,670	0	93	0	5,237	172	27	0	199	2,489	2.0	–
008	LU (Luxembourg)	1,739	2,679	0	12	98	4,528	166	3	2	170	2,131	1.7	0.5
009	CZ (Czechia)	1,492	1,095	0	0	0	2,587	105	0	0	105	1,317	1.1	1.3
010	IT (Italy)	106	1,305	0	57	411	1,879	70	20	12	101	1,266	1.0	–
011	AT (Austria)	251	2,366	0	6	124	2,748	98	0	1	99	1,243	1.0	–
012	ES (Spain)	11	1,971	0	31	0	2,012	64	5	0	69	862	0.7	–
013	BE (Belgium)	146	1,024	0	13	190	1,373	44	1	2	47	591	0.5	1.0
014	SE (Sweden)	96	940	0	18	0	1,054	37	2	0	39	485	0.4	2.0
015	IE (Ireland)	293	612	0	6	0	912	37	1	0	38	475	0.4	1.5
016	SK (Slovakia)	705	70	0	0	0	775	33	0	0	33	407	0.3	1.5
017	KY (Cayman Islands)	340	120	0	0	0	460	32	0	0	32	398	0.3	–
018	SG (Singapore)	125	829	0	6	0	960	28	2	0	30	376	0.3	–

EU CCyB1 part 2: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer

		a	b	c	d	e	f	g	h	i	j	k	l	m
		General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures – Exposure value for non-trading book	Total exposure value	Own fund requirements				Risk-weighted exposure amounts	Own fund requirements weights (in %)	Countercyclical buffer rate (%)
Line	Countries €m	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models			Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total			
019	HK (Hong Kong)	1	415	0	38	0	454	27	2	0	29	361	0.3	0.5
020	CN (China)	42	591	0	0	0	633	28	0	0	28	353	0.3	–
021	FI (Finland)	172	466	0	13	50	701	19	2	0	21	264	0.2	–
022	DK (Denmark)	17	546	0	6	0	569	19	0	0	20	246	0.2	2.5
023	JP (Japan)	15	1,220	0	1	0	1,235	19	0	0	19	234	0.2	–
024	BR (Brazil)	342	209	0	0	0	552	16	0	0	16	194	0.2	–
025	BM (Bermuda)	263	101	0	0	0	364	15	0	0	15	186	0.1	–
026	NO (Norway)	9	262	0	13	0	284	13	0	0	14	171	0.1	2.5
027	CA (Canada)	955	305	0	14	0	1,273	10	2	0	13	158	0.1	–
028	AU (Australia)	0	390	0	9	0	399	10	1	0	11	135	0.1	1.0
029	MX (Mexico)	10	99	0	0	0	109	4	6	0	11	133	0.1	–
030	HU (Hungary)	15	182	0	0	0	197	10	0	0	10	122	0.1	0.5
031	Other	3,509	1,184	0	89	0	4,782	78	6	0	85	1,058	0.8	0.2
032	**Total**	**46,518**	**273,863**	**0**	**1,490**	**27,760**	**349,630**	**9,380**	**180**	**425**	**9,986**	**124,823**	**100.0**	

Table EU CCyB2 shows the countercyclical capital buffer according to article 440 b) CRR as of 31 December 2024.

EU CCyB2: Amount of institution-specific countercyclical capital buffer

		a
Line	€m | %	**31.12.2024**
010	Total risk exposure amount	173,378
020	Institution specific countercyclical capital buffer rate	0.6576
030	Institution specific countercyclical capital buffer requirement	1,140.17

Capital requirements by risk type

As required by Article 438 d), Table EU OV1 shows an overview of risk-weighted assets (RWA) and the associated capital requirements by risk type.

Of the overall capital requirement 74.2% relates to credit risk positions (excluding counterparty credit risk). Commerzbank uses the Advanced Internal Ratings Based Approach (advanced IRBA; in the following referred to as IRBA) to determine the regulatory capital required. Article 150 CRR gives the option of partial use. The Standardised Approach to Credit Risk (SACR) may be used for part of the portfolios.

Commerzbank Group and accordingly the group companies included in the disclosure are, as IRBA banks as defined in Article 147 CRR, generally obliged to value investments in accordance with the IRBA rules. The CRR allows items to be permanently exempted from the IRBA. Commerzbank applies Article 150 CRR and values all investment positions using the permanent partial use according to the SACR, provided that the individual equity position is not measured in the SACR anyway. Investments that are linked to particularly high risks as defined in Article 128 CRR, such as private equity investments or venture capital exposures, are shown in the corresponding SACR exposure class.

Of the overall capital requirement 5.0% relates to counterparty credit risk. Based on the EBA requirements, credit value adjustments (CVAs) are also assigned to this credit risk category.

Securitised positions in the banking book are also shown as a separate credit risk category subject to a capital requirement in the table EU OV1 below (3.1% of total capital requirement).

Pursuant to Article 92 (3) b) and c) CRR, adequate capital must be set aside for market risk positions. As of 31 December 2024, capital requirements here are 3.8% of total requirements. Commerzbank uses an internal market risk model to calculate the regulatory capital requirement. This affects both the equity price and interest rate-related risk positions in the trading book as well as the total of currency positions and commodity positions. The standar dised approaches are applied for smaller units in Commerzbank Group in accordance with the partial use option.

Commerzbank uses the standardized approach (SA) to calculate the capital adequacy requirement for operational risks. This risk category accounts for 13.9% of the total capital requirements.

EU OV1: Overview of RWAs as of 31 December 2024

		a	b	c
		Risk-weighted exposure amounts		Total own funds requirements
	€m	31.12.2024	30.9.2024	31.12.2024
1	Credit risk (excluding CCR)	128,681	127,964	10,295
2	thereof: standard approach	31,418	30,635	2,513
3	thereof: the foundation IRB (F-IRB) approach	–	–	–
4	thereof: slotting approach	1,287	1,185	103
EU 4a	thereof: equities under the simple riskweighted approach	–	–	–
5	thereof: the advanced IRB (A-IRB) approach	95,976	96,144	7,678
6	Counterparty credit risk - CCR	8,730	9,708	698
7	thereof: standard approach	845	920	68
8	thereof: internal model method (IMM)	6,321	6,961	506
EU 8a	thereof: exposures to a CCP	267	292	21
EU 8b	thereof: credit valuation adjustment - CVA	1,021	1,152	82
9	thereof: other CCR	275	383	22
15	Settlement risk	0	0	0
16	Securitisation exposures in the non-trading book (after the cap)	5,318	4,736	425
17	thereof: SEC-IRBA	2,223	1,628	178
18	thereof SEC-ERBA (incl. IAA)	2,274	2,321	182
19	thereof: SEC-SA	822	788	66
EU 19a	thereof: 1250% / deduction (for information)	591	1,095	47
20	Position, foreign exchange and commodities risks (Market risk)	6,555	5,880	524
21	thereof: standard approach	1,273	1,114	102
22	thereof: IMA	5,282	4,766	423
EU 22a	Large exposures	–	–	–
23	Operational risk	24,093	22,576	1,927
EU 23a	thereof: basic indicator approach	–	–	–
EU 23b	thereof: standard approach	24,093	22,576	1,927
EU 23c	thereof: advanced measurement approach	–	–	–
24	Amounts below the thresholds for deduction (subject to 250% risk weight) (for information)	5,353	5,407	428
29	**Total**	**173,378**	**170,865**	**13,870**

Risk weighted assets amounted to 173.4 billion euros as of December 31, 2024, approximately 2.5 billion euros higher than in the previous quarter. The increase is mainly due to operational risk due to the inclusion of increased earnings in 2024.

The overviews of the development of risk-weighted assets (RWA) by main drivers EU CR8: RWA flow statements of credit risk exposures under the IRB approach, EU CCR7: RWA flow statements of CCR exposures under the IMM as well as EU MR2-B: RWA flow statements of market risk exposures under the IMA are given in the chapters on the respective risk types.

Disclosure of indicators of global systemic importance

To identify institutions that might have global systemic importance, the Basel Committee on Banking Supervision (BCBS) collects indicators of size, cross-border activity, interconnectedness, substitutability and complexity once a year from potentially global systemically important banks. According to last year's survey, Commerzbank Group does not belong to the group classified as global systemically important banks (G-SIBs).

Commerzbank was requested by Deutsche Bundesbank in a letter dated January 2025 to participate in this year's survey as a potentially systemically important bank.

The detailed information on the indicators of systemic importance pursuant to Article 441 CRR can be found in Annex 2.

Leverage Ratio

Leverage ratio

The leverage ratio shows the ratio of Tier 1 capital to leverage ratio exposure, consisting of the non-risk-weighted assets plus off-balance sheet positions. The way in which exposure to derivatives, securities financing transactions and off-balance sheet positions is calculated is laid down by regulators. As a non-risk-sensitive figure the leverage ratio is intended to supplement risk-based measures of capital adequacy.

Avoiding the risk of excessive leverage is an integral part of Commerzbank's balance sheet management. Commerzbank has set up a quantitative and qualitative framework to calculate, monitor and manage the leverage ratio.

Group Finance is responsible for quantifying the leverage ratio based on regulatory requirements and provides regulators with quarterly reports.

In June 2021 with CRR II the leverage ratio became effective as a minimum capital requirement and must be fulfilled at all times. To ensure the fulfillment, guidance on leverage ratio exposure for each segment incl. Others and Consolidation (containing Treasury as well as the liquidity reserve portfolios) is given by the Asset Liability Committee (ALCO). Additionally, the Group must report daily averages of securities financing transactions (SFT).

Commerzbank has set an internal target for the leverage ratio which supplements the targets for the risk-based capital ratios.

Group Finance regularly reports the Group leverage ratio to the ALCO and thus the Board of Managing Directors. The development of the segment-specific leverage ratio exposure compared to guidance provided is controlled by a monthly monitoring and reported to the ALCO.

Future development of the leverage ratio exposure and the leverage ratio is layed out in the Bank's internal multiyear planning process. Furthermore, Group Finance monitors upcoming changes in regulatory requirements and performs impact analyses of such changes on the leverage ratio.

Key decisions on management and monitoring of the leverage ratio are taken by the ALCO, subject to confirmation by the Board of Managing Directors.

The leverage ratio was 4.8% as of 31 December 2024 (compared to 4.4% as of 30 September 2024). The leverage ratio increased due to a decrease in leverage ratio exposure as well as an increase in regulatory Tier 1 capital.

As of reporting date 31 December 2024, the leverage ratio exposure was at €632.8bn compared to €642.7bn as of 30 September 2024. Leverage ratio exposure thus decreased by €9.9bn, mainly due to the decrease in cash reserve and SFT balance sheet volume. This was mainly driven by decreases in repo business partly compensated by increasing deposit volumes. The increase in deposits continued in an environment of falling interest rates following adjustments in deposit conditions.

The repo business is usually subject to seasonal fluctuations with decreases towards year end and higher volumes during the year with an indirect impact on leverage ratio. Cash reserves have further been reduced by increases in loan volumes and financial investments following the Group's growth strategy. This asset exchange remains without material impact on the leverage ratio exposure.

Table EU LR1 shows the summary reconciliation of accounting assets and leverage ratio exposures in accordance with Article 451 (1) b) CRR as of 31 December 2024. Where the value "Total assets as per published financial statements" corresponds to total assets according to Table EU CC2, line 22, column a. After all discretionary margins have been disclosed in the assessment according to the balance sheet or risk view, the leverage ratio total exposure measure is shown in line 13.

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

		a
	€m	Applicable amount
1	**Total assets as per published financial statements**	**554,646**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	17,348
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	–
4	(Adjustment for temporary exemption of exposures to central banks (if applicable))	–
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)	–
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	−16
7	Adjustment for eligible cash pooling transactions	223
8	Adjustments for derivative financial instruments	7,606
9	Adjustment for securities financing transactions (SFTs)	2,842
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	53,638
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	–
EU-11a	(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	–
EU-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	–
12	Other adjustments	−3,536
13	**Total exposure measure**	**632,751**

Table EU LR2 shows the individual components for the calculation the leverage ratio referred to in Article 451 CRR as of 31 December 2024:

EU LR2: LRCom – Leverage ratio common disclosure

		CRR leverage ratio exposures	
		a	b
	€m	31.12.2024	30.6.2024
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	497,078	512,165
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	–	–
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	−9,263	−9,888
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	–	–
5	(General credit risk adjustments to on-balance sheet items)	–	–
6	(Asset amounts deducted in determining Tier 1 capital)	−2,300	−2,300
7	Total on-balance sheet exposures (excluding derivatives and SFTs)	485,514	499,977
Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	16,653	17,956
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	–	–
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	22,709	21,300
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	–	–
EU-9b	Exposure determined under Original Exposure Method	–	–
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	−8,427	−10,491
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	–	–
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (original Exposure Method)	–	–
11	Adjusted effective notional amount of written credit derivatives	6,157	6,526
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	−3,757	−4,484
13	Total derivatives exposures	33,335	30,806
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	104,647	93,356
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	−41,164	−31,561
16	Counterparty credit risk exposure for SFT assets	2,842	2,346
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	–	–
17	Agent transaction exposures	–	–
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	–	–
18	Total securities financing transaction exposures	66,325	64,140
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	190,683	185,005
20	(Adjustments for conversion to credit equivalent amounts)	−137,045	−132,578
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	–	–
22	Off-balance sheet exposures	53,638	52,427

		CRR leverage ratio exposures	
		a	b
	€m	31.12.2024	30.6.2024
Excluded exposures			
EU-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	–	–
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a (1) CRR (on and off balance sheet))	–	–
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	–	–
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans)	–	–
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	–	–
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	−6,061	−5,850
EU-22g	(Excluded excess collateral deposited at triparty agents)	–	–
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	–	–
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	–	–
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	–	–
EU-22k	(Total exempted exposures)	−6,061	−5,850
Capital and total exposure measure			
23	Tier 1 capital fully loaded	30,558	28,735
23	Tier 1 capital with transitional provisions	30,558	28,735
24	Total exposure measure	632,751	641,499
Leverage ratio			
25	Leverage ratio fully loaded (%)	4.83	4.48
25	Leverage ratio with transitional provisions (%)	4.83	4.48
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	4.83	4.48
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) with transitional provisions (%)	4.83	4.48
26	Regulatory minimum leverage ratio requirement (%)	3.00	3.00
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%)	0.10	0.10
EU-26b	of which: to be made up of CET1 capital (percentage points)	–	–
27	Leverage ratio buffer requirement (%)	–	–
EU-27a	Overall leverage ratio requirement (%)	3.10	3.10
Choice on transitional arrangements and relevant exposures			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	Applying the transitional arrangements and fully loaded	Applying the transitional arrangements and fully loaded

	€m	CRR leverage ratio exposures	
		a	b
		31.12.2024	30.6.2024
Disclosure of mean values			
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	82,172	
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	63,483	
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)	651,440	
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)	651,440	
31	Leverage ratio with transitional provisions (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)	4.69	
31a	Leverage ratio with transitional provisions (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)	4.69	

Table EU LR3 shows the split up of on-balance exposures in trading and banking book according to Article 451 (1) b) CRR as of 31 December 2024.

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

		CRR leverage ratio exposures
		a
	€m	31.12.2024
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**494,180**
EU-2	Trading book exposures	43,037
EU-3	Banking book exposures, of which:	451,143
EU-4	Covered bonds	15,355
EU-5	Exposures treated as sovereigns	135,093
EU-6	Exposures to regional governments, MDB, international organisations and PSE, not treated as sovereigns	5,062
EU-7	Institutions	27,174
EU-8	Secured by mortgages of immovable properties	90,242
EU-9	Retail exposures	54,464
EU-10	Corporates	69,730
EU-11	Exposures in default	3,515
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	50,510

Risk-oriented overall bank management

Commerzbank defines risk as the danger of possible losses or prof-its foregone due to internal or external factors. In risk management, we normally distinguish between quantifiable and nonquantifiable types of risk. Quantifiable risks are those to which a value can normally be attached in financial statements or in regulatory capital requirements, while non-quantifiable risks, for example, include compliance and reputational risk.

Risk statement

According to Article 435 (1) e) and f) CRR, the risk statement is a declaration approved by the management body providing assurance that the risk management systems put in place are adequate and giving a description of the institution's general risk profile associated with the business strategy. The approval by the Board of Managing Directors was given together with the approval of the Disclosure Report.

Commerzbank is the leading bank for German SMEs and a strong partner for around 24,000 corporate customer groups. Annual adjustments to the groups at the turn of the year, optimisation of the customer portfolio in terms of profitability and return as well as a system-related deviation in the recording of institutional customers compared to the previous year led to a decline compared to 2023. In addition, Commerzbank serves almost 11 million private and small-business customers in Germany. As a universal bank, Commerzbank offers a comprehensive portfolio of financial services through its two business segments – Corporate Clients and Private and Small-Business Customers. With a presence in more than 40 countries, Commerzbank is represented wherever its SME, large corporate and institutional customers need it. The Bank also supports international customers with a business relationship to Germany, Austria and/or Switzerland and companies in selected future-oriented industries. With invested assets of more than €400bn, Commerzbank is also one of the leading banks for private and small-business customers in Germany.

It offers a comprehensive range of products and services under the Commerzbank brand through its omnichannel approach: online and mobile, by telephone and video in the advisory centre, and in person in its approximately 400 branches.

Commerzbank has developed its "Momentum" strategy further and, in doing so, has set itself significantly more ambitious financial targets than before. The more ambitious financial targets that Commerzbank published in September 2024 previously applied for the period until 2027. These targets are now anticipated to be partially exceeded as early as 2027 on the way to reaching the more ambitious targets by the end of 2028. It will do so by building on its recognised strengths in business with private and small-business customers (including asset and wealth management, which is to be further expanded following recent acquisitions), further enhancement of its market leadership among SMEs and the growth of mBank. It will also push ahead systematically with its range of digital processes, solutions and products (including by expanding its distribution partnerships) in all business areas.

In the Private and Small-Business Customers segment, the Bank will refine its two-brand strategy with greater differentiation in terms of prices and offerings. The Commerzbank brand will continue to stand not only for a comprehensive digital offering but also for access to a branch-based bank that offers personal advice and a comprehensive range of services. Under the comdirect brand, it will offer (as a primary digital bank) all core services around the clock and (as a service broker) solutions for saving, investing and securities trading. The Bank aims to increase the new business volume of ist lending to private and small-business customers. It will also modernise its payments business and reinforce its omnichannel initiative.

Commerzbank is aiming in its corporate client business for even greater penetration of the customer base that consists of SMEs and large corporates. It is therefore strengthening the Mittelstandsbank Direkt team so that it can provide more active customer support. In addition, Commerzbank is strengthening its range of financing solutions, particularly for large corporates, and is actively supporting its SME clients with succession financing. Advisory and financing services for strategic sustainability matters such as decarbonisation and the development of reporting on ESG issues are also playing an important role. The Corporate Clients segment will focus on international growth and expand its business with German clients in the USA and Asia. The segment will also intensify its business relations with North American and Asian companies in selected sectors. It will increase its earnings potential by winning new corporate clients that have high risk-weighted-asset (RWA) efficiency. On the product side, the range of services for foreign exchange, interest rate, and commodity products, and transaction banking, especially for payment transactions and foreign trade business, will be specifically strengthened.

Commerzbank's measures to accelerate organic growth will be supported by targeted acquisitions. It will also seek further strategic partnerships, particularly with regard to the development of innovative products, distribution channels and IT services.

The Group Risk Strategy, together with the business strategy, regulates the strategic risk management guidelines for the development of Commerzbank's investment portfolio. With acceptance from its business model arising inherent existential threats the Group Risk Strategy takes into account exogenous factors, such as risks from the macroeconomic environment, as well as new regulatory requirements and endogenous factors. The starting point for the risk strategic orientation are the results of the annual risk inventory. In the risk inventory process, all economically significant quantifiable and unquantifiable risks arising from our business activities are determined in terms of their materiality for risk management. Based on the results of the risk inventory 2024 we classified default risk (with the main sub-risk

types credit risk, issuer risk, counterparty risk, reserve risk, legal verity risk and country and transfer risk), market risk, operational risk, compliance risk, information and communication technology risk, physical asset risk, business risk, reputational risk, liquidity risk, model risk and third party risk as material types of risk for the Commerzbank Group.

The scope and management of credit risk, counterparty credit risk, securitisations, market risk, liquidity risk and operational risk are presented in the relevant chapters of this report. The chapter "Other material risks" provides information on other types of risk classified as material.

Our portfolio is clearly dominated by default risks, which account for 66% of economically required capital. Of the on-balance sheet exposures, more than 50% are attributable to our home market in Germany and just under a third to other European countries. The Group's exposure at default increased from €536bn to €549bn in 2024. The risk density slightly decreased over the same period from 21 basis points to 19 basis points. Market risk in the trading book increased significantly in 2024. Value at Risk (VaR) decreased from €14m to €6m in 2024. OpRisk RWA increased year on year. The total charge for OpRisk events rose from €1,176m to €1,130m compared with the previous year. Risk appetite, determined by Group Risk Strategy, refers to the maximum risk, in terms of both the amount and structure, which the Bank is willing and able to incur in pursuing its business objectives, without exposing itself to existential threats (beyond inherent risks). The guiding idea is to ensure that the Group holds sufficient liquidity and capital. It is quantified in terms of risk limits for capital and liquidity management with defined escalation mechanisms, and the definition of a minimum refinancing period for the liquidity reserve. These are supplemented by guidelines for risk-strategic positioning and, when appropriate, their specification as quantitative guidelines. The guidelines take into account current risks as well as exogenous factors (including macroeconomic influences and regulatory requirements). For all significant quantifiable risks, limits and guidelines are set. Non-quantifiable risks are to be limited and monitored in the respective sub-risk strategies with suitable guidelines. For early risk detection and the identification of potential negative developments, the Group risk strategy additionally defines early warning indicators for the capital and liquidity risk management.

The core function of a bank as a liquidity and risk transformer leads to unavoidable threats that, in extreme cases, can endanger the existence of the institution. The existential threats inherent in the business model for Commerzbank, include the default of Germany, the collapse of the Eurozone, the default of one or several other major European countries or the default of the USA, a collapse of the financial markets in conjunction with a loss of the basic functionalities of the European Central Bank (ECB) or a bank run with threats exceeding those known from 2023, a collapse or massive malfunction of global clearing-houses, as well as extreme cyberattacks on states and institutions due to increasing digitalization and geopolitical tensions.

A key component of liquidity risk management is the daily calculation of the liquidity gap profile. The subject of the liquidity gap profile is the date-specific, cross-portfolio representation of future expected deterministic or stochastic inflows and outflows of funds, based on which liquidity needs or surpluses are determined for each maturity band. Based on the methodology of the liquidity gap profile, control mechanisms such as recovery and early warning indicators are correspondingly limited and monitored. There are limits for the liquidity gap profile in the maturity ranges up to one year. The corporate limits are broken down into individual corporate units and currencies.

To meet the minimum requirements for the regulatory Liquidity Coverage Ratio (LCR), the bank has established corresponding limits and early warning indicators. Commerzbank significantly exceeded the required minimum ratio of 100% for LCR, with an average of 134.7% over the last three month-end values. At the end of the year 2024, the average LCR for the last twelve month-end values was 142.1%. The Net Stable Funding Ratio (NSFR) describes the regulatory requirement for stable refinancing in a ratio between the amount of available stable refinancing and the amount of required stable refinancing over a period of one year. The quota itself is defined as the quotient of the weighted available stable refinancing and the weighted required stable refinancing. It has a minimum threshold of 100%. As of 31 December 2024, the NSFR was 126.1%, clearly exceeding the minimum ratio. The Leverage Ratio sets the core capital (Tier-1 capital) in relation to the leverage ratio exposure, which consists of non-risk-weighted assets and off-balance-sheet positions. The leverage ratio was 4.8% as of 31 December 2024.

To ensure an adequate capital backing, compliance with economic risk-bearing capacity requirements and the regulatory capital ratios is reviewed by means of an early warning system in both a forecast scenario and an adverse stress scenario.

The risk-bearing capacity (RBC) ratio, measured by means of the RBC ratio, is clearly met at 211%. The Common Equity Tier 1 ratio was 15.1% at €173.4bn RWA and €26.2bn common equity tier at the end of 2024.

Commerzbank's target for its Common Equity Tier 1 capital ratio is based on the capital requirements resulting from the Supervisory Review and Evaluation Process (SREP). This minimum requirement culminates in the MDA threshold, which was 10.27% at the end of 2024. This compares with a CET1 ratio of 15.1%. Commerzbank thus has a significant capital buffer above the regulatory minimum requirements. Thus, Commerzbank has a significant capital buffer above the regulatory minimum requirements. For the year 2025, Commerzbank expects a CET1 ratio of at least 14%. This target size already takes into account a planned distribution of at least 100% of net earnings after the deduction of fully discretionary AT1 coupons, but before restructuring provisions for the fiscal year 2025.

Nevertheless, numerous risk factors can significantly impact the forecasted annual results for 2025 in an unpredictable, non-quantifiable manner. These include still high global economic risks.

Moreover, geopolitical risks, such as the Russia-Ukraine war, which can significantly accelerate existing inflationary tendencies through the substantial increase in raw material prices, have the potential to negatively affect the economy and thereby impact our business development. Additionally, trade conflicts between economic blocs in Europe, North America, and Asia triggered by political tensions remain a possibility. Other risk factors include a further intensification of the domestic competitive situation. Declining margins to levels unattractive from a risk-return perspective, as well as inflation-induced cost increases, could delay and/or reduce the effectiveness of the expected positive effects from Commerzbank's profitability enhancement measures in the coming years.

The risk result in the credit business of the group amounted to €–743m in the fiscal year 2024. For the year 2025, the bank expects charges in the risk result of around €–850m. This expectation takes into account at least partial utilisation of the so-called “Top-Level Adjustment” (TLA). With a non-performing exposure (NPE) ratio of only 1.1%, the quality of the credit book remains high at the end of the year 2024.

Comprehensive, timely, transparent and methodologically sound risk measurement is the basic prerequisite for ensuring that the Commerzbank Group has sufficient liquidity and capital resources at all times. The processes we deploy make our business and risk strategy measurable, transparent and controllable. The methods and models we use to measure risk are in line with current, common banking industry standards and are subject to regular review by Risk Controlling, Internal Audit, our external auditors and the German and European supervisory authorities. In our assessment, the processes are well suited to safeguarding risk-bearing capacity and permanent solvency on a lasting basis. We consider our risk management methods and processes and our risk management system as a whole to be appropriate and effective.

Risk management organisation

Commerzbank regards risk management as a task for the whole Bank. The Chief Risk Officer (CRO) is responsible for developing and implementing the Group’s risk policy guidelines for quantifiable risks, laid down by the Board of Managing Directors, as well as for measuring these risks. The CRO regularly reports to the Board of Managing Directors and the Supervisory Board’s Risk Committee on the overall risk situation within the Group. In 2024, six regular meetings of the Risk Committee took place.

As of 31 December 2024, the risk management organisation comprised Group Credit Risk – Corporate Clients, Group Credit Risk – Private and Small-Business Customers, Group Risk Control, Group Cyber Risk & Information Security, Group Big Data & Advanced Analytics (BDAA), and Group Model Risk Management & Validation. BDAA moved from Group Risk Management to Group Services on 1 February 2025.

The CRO also has responsibility for Group Compliance. It is Group Compliance’s responsibility to establish appropriate governance, procedures and systems to allow the Bank to avoid unintentional endangerment as a consequence of compliance risks. Group Compliance is led by the Chief Compliance Officer.

All divisions have a direct reporting line to the CRO.

The Board of Managing Directors has exclusive responsibility for fundamental strategic decisions. The Board of Managing Directors has delegated operative risk management to committees. Under the relevant rules of procedure, these are: the Group Credit Committee, the Group Market Risk Committee, the Group OpRisk Committee, the Group Cyber Risk & Information Security Committee and the Group Strategic Risk Committee, which decides on risk issues of an overarching nature. The CRO chairs all these committees and has the right of veto. The CRO is also a member of the Group Asset Liability Committee. Here the CRO also has a right of veto on certain topics (e.g. liquidity risk issues).

The tasks and competencies of the respective committees are described below:

The **Supervisory Board’s Risk Committee** is the Bank’s highest risk committee. It comprises at least five Supervisory Board members. The Risk Committee’s tasks include monitoring the risk management system and dealing with risks such as market, credit and operational risks as well as reputational risk, information and communication technology (ICT) risk, and environmental, social and governance (ESG) risk. The Risk Committee determines the type, scope, format and frequency of the information that must be presented to the Board of Managing Directors about strategy and risk.

The **Group Credit Committee** is the decision-making committee for operative credit risk management, comprising two representatives each from the back office and front office. The Group Credit Committee takes decisions in line with the competencies delegated to it by the Board of Managing Directors and is responsible below the Board of Managing Directors for managing all credit risk. It acts on the basis of the prevailing Group credit risk strategy.

The **Group Market Risk Committee** monitors market risk in the interests of the Bank as a whole and manages limit requirements in line with risk-bearing capacity. To do this, all material market risks from the trading and banking book are analysed to identify risks early and for active risk management purposes. The focus here is on optimising the risk/return profile.

The **Group OpRisk Committee** (OpRiskCo) is responsible for managing operational risk within the Group and in this regard acts as the highest escalation and decision-making committee below the Board of Managing Directors. The OpRiskCo also addresses all important regulatory issues that arise in connection with the management of operational risks within the Group. In addition, it deals with standards on governance and assessing the functioning of the internal control system (ICS) within the Commerzbank Group.

The **Cyber Risk & Information Security Committee** (CRISCo) monitors and manages ICT risk in the overall interests of the Bank. In

this respect, it acts as the highest decision-making and escalation committee below the Board of Managing Directors. The CRISCo addresses all regulatory aspects relevant to cyber and information security issues and has the aim of ensuring appropriate risk management in this regard in accordance with internationally recognised standards.

The **Group Strategic Risk Committee** acts as the discussion and decision-making committee for all types of risk, and its main objective is to monitor and manage risks at portfolio level. This covers risk measurement, risk transparency and risk management.

The **Group Asset Liability Committee** (Group ALCO) is the Commerzbank Group committee responsible for the Group-wide and integrated management of financial resources, namely capital, liquidity and balance sheet structure, in accordance with the regulatory framework. This includes the interest rate and liquidity risk models as well as the rules of the fund transfer pricing. The Group ALCO monitors in particular the Group’s risk-bearing capacity and as such plays an important part in the Internal Capital Adequacy Assessment Process (ICAAP). Resolutions of the Group ALCO are presented to the Board of Managing Directors for confirmation. In case of violation of a recovery plan indicator, the Group ALCO plays a coordinating role regarding the estimation of the situation and the introduction of measures.

Moreover, risk issues are dealt with in other committees listed below:

Compliance topics are dealt with in the **Global Compliance Board** (GCB). The GCB has been established as a forum to share updates on major compliance topics and supervisory actions regarding compliance in the Bank. Furthermore, the GCB serves as an information platform for segments and functions about compliance culture, changes in compliance regulations, updates of compliance-related policies and their implications.

The **Group Risk Management Executive Committee** acts as the discussion and decision-making committee within Group Risk Management and is responsible in particular for the organisation and strategic development of risk management as well as the creation and maintenance of a uniform risk culture. It also ensures that the Group risk strategy and the resolutions of the Board of Managing Directors are implemented in the risk function.

Risk strategy and risk management

The Group risk strategy, in line with the business strategy, governs the strategic risk focus of the Commerzbank Group. It sets the risk appetite as the maximum risk that the Bank is prepared and able to accept while following its business objectives without exposing itself to existential threats over and above the risks inherent in the business. The guiding idea is to ensure that the Group holds sufficient liquidity and capital. That also includes ensuring that the business strategy can be implemented through a risk profile that is commensurate with the leeway determined by regulatory and capital market factors. Based on these requirements, suitable limits are defined for the risk resources of capital and liquidity available to the Group. The overarching limits of the Group risk strategy are consistent with the indicator thresholds of the recovery plan.

Technological advances, customer expectations and regulations – along with the continuous and rapid IT implementations these necessitate – pose ongoing challenges to the Group’s focused business model and continue to be some of the most significant idiosyncratic business risks facing the Group. The “Moving forward” business strategy systematically focuses on the key stakeholders – the customers, employees and investors – and their expectations in what continues to be a very volatile and challenging environment. The growth path embarked upon will continue to be pursued while simultaneously boosting profitability and the Bank’s attractiveness as an employer. Commerzbank has defined the three pillars of its current strategy as excellence, responsibility and growth. With regard to risk costs, the aim is to cover them through operational business at all times.

The core functions of banks as transformers of liquidity and risk give rise to inevitable threats that can in extreme cases endanger the continued existence of the institution. These depend on the bank’s particular business model and are accepted in the pursuit of business objectives. The basis for Commerzbank’s strategic alignment is its business strategy. In the event of a sustained change in the assessment of the inherent and existential threats to Commerzbank, the Board of Managing Directors may have to adjust the business model and thus the business and risk strategy in the medium and long term. A distinction can be made between the types of risk accepted on the basis of two fundamental threat scenarios. The occurrence of an inherent, existential threat jeopardises the continued existence of Commerzbank. In this case, rescuing Commerzbank would hardly be feasible without state measures or significant regulatory support measures (e.g. protective guarantees, tolerance of significant deviations from regulatory capital requirements, rescue merger) or activation of the Single Resolution Mechanism (SRM).

However, mitigation strategies are developed to counter these inherent existential threats in order, as far as possible, to reduce the probability of damage or the extent thereof. On the other hand, if a threat materialises that is inherent in the business model but not

existential, there is always the possibility of mitigation through, among other things, capital measures available on the market or the use of appropriate capital buffers. It is therefore not necessary to activate the SRM in this threat scenario. For Commerzbank, the existential threats inherent in its business model include, among others, the default of Germany, the disintegration of the eurozone, the default of one or more of the other major European countries, the default of the United States, a collapse of the financial markets in connection with a loss of the basic functionalities of the European Central Bank (ECB), a bank run whose threat level is higher than that seen in 2023, a collapse of or a massive malfunction in global clearing houses, as well as extreme cyber attacks on states and institutions due to increasing digitalisation and geopolitical tension.

When pursuing its business targets, the Bank accepts threats inherent in its business model (non-existential threats). These include the default of one or a small number of large (peripheral) eurozone countries without significant systemic consequences and a deep recession lasting several years with severe effects on the German economy and the resulting consequences such as huge loan defaults, excessive drawing of lines of credit by customers or a significant outflow of customer deposits with effects on the liquidity situation. If geopolitical crises ensue, such as that currently resulting from Russia's ongoing war against Ukraine, or trade wars, for example between the USA and China, this may have a huge impact on global markets and threaten Commerzbank's business model as an international institution. The measures taken by Commerzbank with a view to managing market, liquidity, credit and operational risk in response to the specific requirements of the geopolitical crisis – i.e. the measures taken to adjust to the new scenario following the invasion of Ukraine by the Russian army – remain in place. However, the observed effects on value chains and commodity prices also show that the impact is still ongoing and remains difficult to assess given the additional uncertainty about further developments, for example under Donald Trump's renewed presidency or developments in the Middle East. In general, the geopolitical risk profile needs to be taken into account when defining the risk appetite in the sense of a forward-looking determination of the (country) risk disposition for possible geopolitical crises. Serious threats can also arise ICT risk, which includes cyber risk. Depending on the severity and impact of a cyber attack, ICT risk can also be viewed as an existential threat. Commerzbank is therefore continuously working to improve the Group's cyber resilience. The further evolution and possible consequences of mBank's situation in connection with loans indexed in Swiss francs and with the additional credit holidays granted by the national regulator in combination with a default by Poland pose political risks. These pose a significant threat to Commerzbank and could require special mitigating capital market measures.

Environmental risk represents another inherent threat. By this we mean both climate risk and biodiversity risk, each of which can be further subdivided into physical risk and transition risk. These horizontal risk drivers can materialise for Commerzbank in physical or transition risks via other types of risk. The transition aspects in particular harbour risks (as well as opportunities) in the short term that are difficult to assess. Identifying and mitigating this threat to Commerzbank is one of the objectives of risk strategy.

The need to record and manage environmental risk was already established as a fundamental part of the assessment of risk-bearing capacity. Furthermore, the carbon emission intensities of the customer portfolio continued to be reported within Commerzbank's ESG framework on the basis of explicit and externally communicated sector targets (SBTi), and an initial control system has been set up. On this basis, the management of climate risk in connection with the sustainability strategy being pursued will be further expanded and operationalised, including the ongoing improvement of data and methods.

For Commerzbank, sustainability encompasses not only the key issue of environmental protection but also social concerns and responsible corporate governance. This is reflected in a wide range of its activities and memberships as well as internal and external regulations. However, increasing regulatory expectations regarding the management and disclosure of social and governance risks (as evidenced in the seventh amendment of the German Minimum Requirements for Risk Management (MaRisk), the EBA's implementing technical standards (ITS) on the disclosure of ESG risks and the EBA's draft guidelines on the management of ESG risks) are driving the systematic integration of social and governance risks into risk management processes. Commerzbank therefore conducts materiality analyses for environmental risks and social or governance risks as risk drivers for the main risk types.

To the extent that it is able to do so, Commerzbank makes early preparations in anticipation of forthcoming changes in regulatory requirements and accounting standards. Such changes and their (retrospective) interpretation may have lasting implications for – and even threaten the survival of – Commerzbank's business model. Commerzbank accepts these regulatory risks because there are many cases where there is no option to mitigate or manage them.

The Group risk strategy covers all material risks to which Commerzbank is currently exposed as listed in the risk inventory. It is updated annually or on an ad hoc basis as required and set out in further detail in the form of sub-risk strategies for the risk types which are material. These are then specified and made operational through policies, regulations and instructions/guidelines. By means of the upstream risk inventory process, Commerzbank aims to ensure that all risk types of relevance to the Group are identified and their materiality assessed. The assessment of the materiality of a risk is based on whether its occurrence could have a major direct or indirect impact on the Group's risk-bearing capacity.

As part of the planning process, the Board of Managing Directors decides how much of the risk coverage potential of the Group should be utilised. On that basis, individual types of quantifiable risk contributing to the capital requirements are limited in a second stage. A capital framework is allocated to the management-relevant units

through the planning process. Compliance with limits and guidelines is monitored during the year, and management measures are put in place where required. In addition, further early warning thresholds are established in the Group risk strategy. Potential negative developments can be identified at an early stage with the help of these indicators.

One of the primary tasks of risk management is the avoidance of risk concentrations. These can arise from the synchronous movement of risk positions both within a single risk type (intra-risk concentrations) and across different risk types (inter-risk concentrations). The latter result from common risk drivers or from interactions between different risk drivers of different risk types.

By establishing risk management and controlling processes, Commerzbank aims at the identification, assessment, management, monitoring and communication of material risks and related risk concentrations. Scenario analyses are regularly used to ensure transparency regarding risk concentrations. The structure of the scenarios and the integrated approach aim to systematically examine the impact of adverse scenarios on portfolio priorities and risk concentrations. Management is regularly informed about the results of the analyses so that the potential risk of losses can be avoided in good time.

The Group Risk & Capital Monitor is the monthly management-oriented risk report on issues regarding capital and on Commerzbank's management of financial and non-financial risks. It shows all of the relevant risk types according to the risk inventory, including economic and regulatory risk-bearing capacity, for the Commerzbank Group. The report's aims include providing the Board of Managing Directors and the Supervisory Board's Risk Committee with transparent and comprehensive information, highlighting important developments from a risk perspective and setting management measures. The report is also used in particular to monitor limits and guidelines within the Group risk strategy. Responsibility for approving the Group risk strategy and the Group Risk & Capital Monitor lies with the Board of Managing Directors.

Commerzbank has adopted a code of conduct that defines binding minimum standards for Commerzbank's corporate responsibility, its dealings with customers, business partners and colleagues, and its day-to-day business. It goes without saying that the Bank complies with relevant laws, regulatory requirements, industry standards and internal rules, and this therefore forms a particularly important part of its risk culture. It actively requires employees to behave appropriately, courageously, with integrity and in compliance with rules, and any failure to comply with rules is penalised. Expanded procedures ensure that misconduct is evaluated in a uniform and fair manner, strengthening consequence management on a long-term basis.

The main pillar of the Bank's overall risk management and culture is the principle of three lines of defence (3LoD), which is a core element of the Corporate Constitution. Under the 3LoD principle, protecting against undesirable risks is an activity that should not be restricted to the risk function. Each unit (segment or function) forms the first line of defence within its area of operational responsibility and is directly responsible for identifying and managing risks within it while complying with the prescribed risk standards and policies. For example, the front office forms the first line of defence in all business decisions and has to take risk aspects into account in reaching them. The second line of defence for each type of risk lays down standards for appropriate management of risks of that type, monitors this and ensures the application of such standards, and analyses and evaluates the risks. The second line of defence for individual risk types is generally within the risk function, but it can also be performed by units outside of it (for example, Group Communications). Particularly for credit risk, this includes involvement in the credit decision process by means of a second vote. Units outside the risk function (e.g. Group Communications) also operate as the second line of defence for certain risk types. The third line of defence is Internal Audit.

Corporate governance information pursuant to Article 435 (2) CRR

Corporate governance information pursuant to Article 435 (2) CRR can be found in Annex 3 as well as on the Commerzbank internet pages under Commerzbank, Investor Relations, Corporate Governance.

Environmental, social and governance (ESG) risks pursuant to Article 449a CRR

Information on environmental, social and governance (ESG) risks pursuant to Article 449a CRR can be found in Annex 4. Further information on sustainability can also be found in our comprehensive sustainability reporting in accordance with international standards (e.g. TCFD, GRI) and the ESG framework of Commerzbank in the Sustainability Portal on the Commerzbank internet pages under Commerzbank, Investor Relations, Sustainability.

Remuneration information pursuant to Article 450 CRR

Commerzbank AG, as a significant institution, is required under Art. 16 (1) of the German Remuneration Ordinance for Institutions (InstitutsVergV) in conjunction with Article 450 of Regulation (EU) No. 575/2013 to disclose information on remuneration structures and, pursuant to Art. 27 (1) sentence 3, further information in the Group context. In addition to the remuneration policy in general, the disclosure includes, in particular, explanations of the remuneration systems, remuneration governance, and quantitative information on the total amount of all remuneration, in particular the remuneration for so-called risk takers.

The remuneration regulations for credit and financial institutions are set out at European level in the EU Capital Requirements Directive (CRD) and the EU Capital Requirements Regulation (CRR), among other places.

Remuneration information pursuant to Article 450 CRR for employees of Commerzbank AG is shown in the Remuneration Report in Annex 5. The Remuneration Report for the Board of Managing Directors and the Supervisory Board is published separately on the Commerzbank internet pages under Investor Relations, Publications and events, Financial reports.

Information on risk positions in crypto assets and related activities according to Article 451b CRR

In the Corporate Clients segment, Commerzbank provides the cryptocurrency custody service according to § 32 (1) in conjunction with § 1 (1a) No. 6 KWG in the version applicable before December 30, 2024, in conjunction with § 50 (1) No. 1 KMAG. Commerzbank intends to offer this service according to Article 3 (1) No. 16 a) (custody and administration of crypto assets for customers) in conjunction with the provision of transfer services for crypto assets for customers pursuant to Article 3 (1) No. 16 j) MiCAR. Commerzbank AG has established the crypto custody business as a new product field in the Corporate Clients area and has also firmly anchored it in the growth product strategy for the Capital Markets division.

The crypto custody service is provided exclusively by Commerzbank AG domestically. The above-mentioned services will initially be provided for the crypto assets Bitcoin (BTC) and Ether (ETH). The receipt and delivery of crypto assets (i.e., provision of transfer services) is limited only to carefully vetted crypto asset service providers within the framework of so-called self-transfers by customers.

There were no risk positions in crypto assets within the meaning of Article 451b (1) a, b, c as of the reporting date.

Risk-bearing capacity and stress testing

Risk-bearing capacity analysis is a key part of overall bank management and Commerzbank's ICAAP. The purpose is to ensure that sufficient capital is held at all times. The risk-bearing capacity concept is reviewed and optimised annually. The risk-bearing capacity encompasses a normative (regulatory) perspective and an economic perspective. For information about the key figures for the normative perspective, see Note 63 (Selected key regulatory figures) of the Group financial statements.

When determining the economically required capital, allowance is made for potential unexpected fluctuations in value. Where such fluctuations exceed forecasts, they must be covered by the available economic capital to absorb unexpected losses (risk coverage potential). Only the economic value of equity components that absorb losses in the going concern approach is taken into account in determining the economic risk coverage potential.

The capital requirement for the risks taken is quantified using the internal economic capital model. All risk types of the Commerzbank Group classified as significant and quantifiable within the annual risk inventory are taken into account when determining the economically required capital. The economic risk approach therefore also comprises risk types that are not included in the regulatory requirements for banks' capital adequacy. The model also reflects diversification effects incorporating all types of risk. The confidence level for the calculation of economically required capital is 99.90% and is harmonised with the going concern approach. The quantifiable significant risks in the economic capital model are divided into default risk, market risk, operational risk and (not separately disclosed in the following table) business risk and physical asset risk. Furthermore, reserve risk is included in the risk-bearing capacity calculation by means of a corresponding risk buffer. Business risk is the risk of a potential loss resulting from deviations in actual income and expense from the respective budgeted figures. Business risk is used to substantiate a higher-level management buffer that ensures the responsiveness of capital management. Physical asset risk is the risk of an unexpected fall in the value of owned property which is either already recognised as an asset in the Group's balance sheet or which can be recognised during the next 12 months under contractually assured obligations with option character (especially real estate). Environmental, social and governance (ESG) risk is defined within Commerzbank as horizontal risk drivers that are manifested in existing risk types, with both transition and physical risks being considered. The annual materiality assessment of ESG risk provides a comprehensive overview of its impact on existing material risk types identified in the risk inventory. Environmental risks are reflected in Commerzbank's risk-bearing capacity analysis through a risk buffer for default and market risks that are materially affected by environmental risks. In addition, a premium on business risk in the above-mentioned buffer reflects the fact that the business and reputational risks have been identified as being materially affected by ESG factors. Further information about these risks can be found in Annex 4 of this report.

The results of the risk-bearing capacity analysis are shown using the risk-bearing capacity ratio (RBC ratio), indicating the excess of the risk coverage potential in relation to the economically required capital. Risk-bearing capacity (RBC) is monitored and managed monthly at Group level. As of 31 December 2024, the RBC ratio was 211%. The increase in the economic risk coverage potential compared with 31 December 2023 was mainly due to the inclusion of our 2024 net profit, after taking account of the accrual for dividends, share buybacks and AT-1 interest, the positive change in the currency translation reserve and the decline in capital deductions (mainly deductions for deferred taxes and hidden liabilities). The decline in the economically required capital for default risk was mainly due to rating and volume changes in the customer portfolio and the regular update to the parameters used in the credit risk model. The main driver for the increase in operational risk was a more conservative consideration of the residual risks from mBank's loans indexed in Swiss francs and other foreign currencies.

RBC1: Risk-bearing capacity Group

Risk-bearing capacity Group | €bn	31.12.2024	31.12.2023
Economic risk coverage potential	26	24
Economically required capital[1]	12	13
thereof for default risk[2]	8	9
thereof for market risk[3]	3	3
thereof for operational risk[4]	3	2
thereof diversification effects	−2	−2
RBC ratio[5]	**211%**	**191%**

[1] Including physical asset risk, risk of unlisted investments and the risk buffer for reserve risk, for the quantification of potential fluctuations in value of intangibles, for goodwill and for environmental risks.
[2] Including buffers for planned changes in methods.
[3] Including deposit model risk.
[4] Including information and communication technology risk, third party risk and compliance risk.
[5] RBC ratio = economic risk coverage potential/economically required capital (including risk buffer).

Commerzbank uses macroeconomic stress tests to review the risk-bearing capacity in the event of assumed adverse changes in the economic environment. The underlying scenarios take into account the interdependence of the development of the real economy and the financial economy. They are updated quarterly and approved by the Group ALCO. The scenarios describe an extraordinary but plausible adverse development in the economy, focusing in particular on portfolio priorities (e.g. export-based sectors in Germany) and business strategies of relevance to Commerzbank. Current adverse developments (e.g. high energy costs) are also taken into account when creating the scenarios. Stress tests in the economic perspective cover a time horizon of 12 months. The scenario simulation is run quarterly at Group level using the input parameters of the economic capital

requirements calculation for all material and quantifiable risk types. In addition to the capital required, the income statement is also subjected to a stress test based on the macroeconomic scenarios. Based on this, changes in the risk coverage potential are simulated. Whereas the RBC ratio is embedded into Commerzbank's limit system, early warning thresholds are set for risk-bearing capacity in a stressed environment. Ongoing monitoring of the limits and early warning thresholds is a key part of internal reporting. Defined escalations are triggered if the limits are breached.

The risk-bearing capacity and stress testing concept is subject to an annual internal review and is refined on an ongoing basis. The development of the regulatory environment is also taken into account. In addition to the regular stress tests, reverse stress tests are implemented annually at Group level. Unlike regular stress testing, the result of the simulation – a sustained threat to the Bank – is determined in advance. The aim of the analysis process in the reverse stress test is to improve the transparency of Bank-specific risk potential and interactions of risk by identifying and assessing extreme scenarios and events. On this basis, for instance, action fields in risk management including the regular stress tests can be identified and taken into account in the ongoing development efforts. Commerzbank carries out various environmental risk-related scenario analyses and stress tests every year. All material risk types are analysed in terms of the degree to which they are impacted by environmental risk, while risk types materially affected by environmental risk undergo a stress test. Commerzbank also takes part in supervisory stress tests – in particular it participated in the EBA's "One-off Fit-for-55 climate risk scenario analysis" in 2024.

A. Default risk

Default risk is defined as the risk of losses sustained or profits foregone due to the default of a counterparty. It is a quantifiable material risk and includes the sub-risk types of credit default risk, issuer risk, counterparty credit risk, country and transfer risk, dilution risk and reserve risk.

Risk management

Strategy and organisation

The credit risk strategy is the sub-risk strategy for default risks and is derived from the Group risk strategy. It is embedded in the Commerzbank Group's ICAAP and forms a link between the Bank's overall risk management across all risk types and the operationalisation of default risk management. The overriding aim is to ensure the adequate quality of the credit portfolio. To this end, the credit risk strategy defines the credit risk tolerance, specifies risk strategy priorities, provides an overview of the material credit risk management concepts and thereby plays an integral part in maintaining the Group's risk-bearing capacity. The credit risk strategy makes use of quantitative and qualitative management tools that are intended to give decision-makers clear guidance on both portfolio management and decisions in specific cases.

The environment remained a challenging one in 2024, which was manifested in particular in a persistent recession, ongoing geopolitical tensions and changing trade corridors. The resulting impact on Commerzbank's loan portfolio was to be seen primarily in sectors that were particularly affected by this environment. In its credit risk management, Commerzbank continues to be guided by the principle of seeking a low-risk profile while limiting cluster risks and undertaking portfolio-specific risk management. A further focal point in this connection is financing the transformation of the German economy with a view to achieving the objectives of the Paris Agreement.

Credit risk management is a joint task of the front office and the risk function, based on a standardised Group-wide credit risk culture and the 3LoD principle. Impeccable moral and ethical conduct in compliance with the law and regulations is a key element of a culture of integrity and core to the credit risk culture. Default risks are assessed against uniform standards, regardless of segment limits. In line with the 3LoD principle, the front office is the first line of defence and must take risk aspects into account when taking business decisions. The risk function (back office and Risk Controlling) is the second line of defence, its fundamental task being to manage, limit and monitor risks. The third line of defence is Internal Audit. It is tasked with independently auditing the Bank's processes and safeguards, and as such also assesses the activities of the first and second lines of defence.

Below the Board of Managing Directors, the Group Credit Committee is the highest decision-making committee for operative credit risk management, comprising two representatives each from the back office and front office. It takes decisions in line with the competencies delegated to it by the Board of Managing Directors and is responsible for managing all credit risks. In so doing, the Group Credit Committee operates on the basis of the valid credit risk strategy. Reporting to the Group Credit Committee are sub-credit committees, which operate on the basis of their respective rules of procedure and within the competencies approved by the Board of Managing Directors. The risk function cannot be outvoted in any governing body that makes lending decisions.

Discrete back-office areas are responsible for operational credit risk management at portfolio level and on a case-by-case basis. The responsibilities are separated between the performing loan area on the one hand and Intensive Care on the other. All credit decisions in the performing loan area are risk/return decisions. The front and back office take joint responsibility for risk and return from an exposure, with the front office having primary responsibility for the return, and the back office for the risk. Accordingly, neither office can be overruled in its primary responsibility in the credit decision process. Since the risk management function cannot be overruled in the credit decision-making process, the third-line-of-defence concept is adhered to.

Higher-risk customers are handled by specialist Intensive Care areas. The customers are moved to these areas as soon as they meet defined criteria for assignment or mandatory transfer. The principal reasons for assignment to Intensive Care areas are criteria relating to number of days overdrawn, together with event-related criteria such as rating, third-party enforcement measures or credit fraud. The Intensive Care function decides on further action based on the circumstances of individual cases. Customers must be transferred to Intensive Care if they are in default (for example due to insolvency). This graduated approach ensures that higher-risk customers can continue to be managed promptly by specialists in a manner appropriate to the risks involved and in defined standardised processes.

Risk management

Commerzbank manages default risk using a comprehensive risk management system. The management framework comprises an organisational structure, methods and models, quantitative and qualitative management tools and regulations and processes. The risk management system ensures that the entire portfolio and the sub-portfolios, right down to individual exposure level, are managed consistently and thoroughly on a top-down basis.

The key figures required for the operational process of risk management are based on the overarching Group objectives. The principle of seeking a low-risk profile in all business decisions is closely combined here with the risk function's aim of providing support for business that is appropriate in terms of risk. Preference is given to transactions and products with a low level of complexity. Another focus is on the responsiveness of a credit line or exposure.

Quantitative credit risk strategy guidelines limit risks with regard to poorer credit ratings and exposures with high loss-at-default contributions (concentration management) and for selected sub-portfolios with a high risk weight or regulatory importance, and, as applicable, for individual products with a high portfolio share. Detailed arrangements for operationalising the guidelines for selected sub-portfolios are set out in separate portfolio policies. In addition, qualitative management guidelines in the form of credit policies define the target business of the Bank. At the level of individual transactions, they regulate the transaction type for which the available risk resources are to be used. These credit policies are firmly embedded in the credit process: transactions which do not meet the requirements are escalated through a fixed competence regulation.

Group-wide guiding principles are based on risk-oriented analyses of trends (e.g. of the development of weaker credit ratings over time) combined with an assessment of external framework conditions and internal rules. Risk-oriented analyses on key dates (e.g. rating profile of individual asset classes) are used in particular to derive portfolio guiding principles. Trend analyses of product-specific risk drivers are key factors for determining product guiding principles (e.g. loan-to-value of mortgage lending). In contrast, credit and portfolio policies are primarily produced through a multi-level coordination process involving the product and portfolio managers from the front and back offices, combined with an assessment of internal and external information sources.

To monitor compliance with credit risk strategic rules, continuous monitoring and reporting has also been set up at whole Group level and at segment or sub-portfolio level. Asset quality reviews as part of the second line of defence make an important contribution to quality assurance. The focus of these reviews is on regular spot checks of selected dual-control lending processes. Ad hoc reporting processes have been established. In addition, crisis events may pose a risk to the Bank's capital and liquidity adequacy and thereby to its risk-bearing capacity. In a crisis, the Risk Mitigation Task Force will manage decisions flexibly in a coordinated, Group-wide process. For example, the Russia-Ukraine war prompted the establishment of the Task Force at the beginning of 2022; the Task Force continued its work in 2024, in order to identify effects on the Group portfolio as quickly as possible and to be able to take countermeasures. As part of the process, emergency action plans should ensure that risk mitigation measures are implemented quickly and efficiently.

The avoidance of risk concentrations is a core strategy of risk management. Risk concentrations are actively managed in order to identify at an early stage and contain the increased potential for loss from the synchronous movement of risk positions. In addition to exposure-related credit risk concentrations (bulk risks), default risk also includes country and sector concentrations. Segment-specific features are taken into account here.

Management and the Supervisory Board's Risk Committee are regularly informed about the results of the analyses.

Management of economic capital commitment

Economic capital commitment is managed in order to ensure that the Commerzbank Group holds sufficient capital. To this end, all relevant risk types in the Group risk strategy for economic risk capital are given limits on a Group-wide basis, with, in particular, a CVaR limit being specified. Due to the systematically restricted options for reducing default risk on a short-term basis, it is important to take account of expected trends (medium-term and long-term) in order to manage credit risk. For this reason, forecast values of credit risk parameters play a key role in ongoing management. At segment and business area level, changes to forecasts are monitored and adjustments made when necessary. There is no cascaded capital limit concept for credit risk below Group level.

Country risk management

In establishing country risk, transfer risks are recognised that arise from the economic and political situation of a country and to which all economic entities in the country are subject. Country risks are managed on the basis of transfer risk limits defined at country level. Country exposures which are significant for Commerzbank due to their size are handled by the Credit Committee on a separate basis.

The regional breakdown of the exposure corresponds to the Bank's strategic direction and reflects the main areas of its global business activities.

Overview of management instruments and levels

Risk strategies and policies	Limit and guideline systems	Portfolio monitoring and reporting	Structures of organisation and committees
Group			
Overall risk strategy plus sub-risk strategies for significant risk types Establishment of a general risk understanding and creation of a uniform risk culture	Definition of Group limits (across all risk types) for capital and liquidity management Additional definition of guidelines as key points of the aspired target portfolio	Group Risk & Capital Monitor plus risk type specific Group formats (including flash reporting) Uniform, consolidated data repository as basis for Group reporting	Ensuring exchange of information and networking in committees that operate across all risk types Retaining qualified staff in line with progressive product innovation or regulatory adjustments
Sub-portfolios			
Formulation of risk policy in guidelines (portfolios, asset classes, etc.) Differenciated credit authorities based on compliance of transactions with the Bank's risk policy	Performance metrics on level of risk categories and sub-portfolios Expansion of Group-wide performance metrics using sub-portfolio-specific indicators	Reports to the risk committee of the Supervisory Board (e.g. MaRisk report or effects of the coronavirus pandemic) Asset quality review and analysis of High Attention Parts (HAP) Trigger monitoring with escalation and reporting lines	Interdisciplinary composition of segment committees Ensuring uniform economic opinions
Individual exposures			
Rating-dependent and bulk-sensitive credit authority regulations with clear escalation processes	Limitation of bulk risk	Limit monitoring at individual exposure level Monthly report to the Board of Managing Directors on the development of bulk risks Review of individual customers/exposures resulting from asset quality review or HAP analyses	Deal team structures Institutionalized exchange within the risk function, also taking account of economic developments Sector-wise organization of domestic corporate business

Credit risk model

The quantification of default risks takes place through the implementation of a Group-wide credit risk model, which consists of internally developed rating systems and a loan portfolio model. The rating systems calculate the risk parameters of probability of default (PD), exposure at default (EaD[1]) and loss given default (LGD) for every credit risk position. This enables the expected loss and risk-weighted assets to be calculated for each individual position pursuant to the IRB approach, insofar as the underlying positions do not fall within the scope of the standardised approach.

The loan portfolio model also produces probability statements on losses from credit defaults and rating changes at portfolio level. Unexpected loss (credit value at risk – CVaR) is quantified on a risk horizon of one year. The model measures the extent of potential credit risk losses over and above the expected loss and must be backed by equity capital within the internal capital adequacy assessment process (ICAAP).

Commerzbank’s loan portfolio model is an in-house model which, as with the CreditMetrics or Moody’s KMV model, is based on the asset value approach. A Monte Carlo simulation simulates potential realisations of borrowers’ assets and thus associated rating changes or defaults. Possible future losses at portfolio level are calculated and statistically analysed on this basis.

The loan portfolio model requires transaction and customer data: level of exposure, creditworthiness, expected loss given default, country and sector classification.

Dependencies between possible default events are also modelled through around 60 systematic risk factors. Specific model parameters (correlations) measure the connection of individual borrowers to these system factors and the correlation between system factors. This way they quantify potential diversification effects between different sectors and countries.

Commerzbank's rating systems are thus both the basis for the determination of risk-weighted assets and, together with the loan portfolio model, an essential component of the internal risk and capital management of the Group's portfolio.

Rating procedures

A key component of Commerzbank’s rating architecture is the use of single point of methodology rating procedures, taking advantage of a central suite of computation kernels. This uniform process architecture not only facilitates risk management and monitoring but also supports consistent rating assignments within the Commerzbank Group. The rating processes are in turn embedded in rating systems. In addition to the conventional methods of assessing creditworthiness and risk, these comprise all the processes for preparing data, calculating ratings and implementing monitoring and management measures.

The use of rating processes is an essential component of risk assessment in the Commerzbank Group, irrespective of regulatory requirements. The resulting ratings are then used in front and back-office credit decision-making processes, the determination of loan loss provisions under IFRS and internal measurement of CVaR and risk-bearing capacity, respectively. Rating processes are also further revised and improved. These improvements make risk forecasts more accurate and improve management mechanisms.

The tables below show the rating processes used in the IRBA in the individual asset classes according to the CRR and their main elements as at the reporting date. The R-SCR, R-LRG, RS-CRE, RS-CFD and NBFI models have no longer been used in the IRB approach for the purposes of RWA determination since the introduction of the revised model strategy in 2022. These portfolios are subject to the credit standard approach (SACR).

Further models are in use at mBank. Details are given in section 5.3 of the mBank disclosure report on their English internet page (About mBank → Capital Adequacy Information Policy).

[1] Economic EaD: Exposure at default amount taking into account a potential (partial) drawing of open lines and contingent liabilities that will adversely affect risk-bearing capacity in the event of default.

VAL-A: Material IRBA rating procedures by exposure class

Exposure class	Name of the material rating procedures
Institutions	RFI-BANK, R-CORP/COSCO
Corparates - SMEs	R-CORP/COSCO
Corporates - specialised lending	RS-REN
Corporates - other	R-CORP/COSCO
Retail - secured by mortgages / SMEs	CORES, R-CORP/COSCO
Retail - secured by mortgages / non-SMEs	CORES
Retail - qualifying revolving	CORES
Retail - other / SMEs	R-CORP/COSCO, CORES
Retail - other / non-SMEs	CORES

VAL-B: Core components of IRBA rating procedures

Scope	Procedure	Hard facts	Soft facts	Overruling
Banks	RFI-BANK	▪	▪	▪
Corporate customers	R-CORP/COSCO	▪	▪	▪
Private customers	CORES	▪		
Renewable energies	RS-REN	▪	▪	▪

In the rating procedures, various analysis areas are evaluated, which can be divided into hard facts and soft facts. Hard facts refer to system-based factors which are used in the rating process and allow no scope for interpretation. For instance, these may be data from companies' annual financial statements, the income of a private individual, or the age of the documents being used.

Soft facts refer to structured areas of analysis where the rating analyst needs to make an assessment and where there is therefore scope for discretion on a case-by-case basis. Examples include an assessment of management or the competitive situation of the customer being rated.

Overruling is a downstream area of analysis where there is a further opportunity for the analyst to assess circumstances separately based on his or her personal judgement. The system result can be adjusted upwards or downwards. The relevant reason for the decision is adequately documented. Overruling should particularly be used when there are strongly fluctuating developments (e.g. market changes) such that an adequate assessment of a company's situation based on the analysis of statistical information (e.g. annual financial statements) is not sufficient to give a future-oriented probability of default. Due to the degree of freedom this gives the rating process, overruling is subject to strict standards and regular monitoring, especially in case of upgrades.

The Commerzbank rating methods comprise 25 rating classes for customers not in default (1.0 to 5.8) and five default classes (6.1 to 6.5). The Commerzbank master scale allocates precisely one rating class, stable over time, to each probability of default. The rating methods are validated annually and recalibrated where necessary so that they reflect the latest assessment based on all actual observed defaults.

The probability of default ranges assigned to the ratings are the same for all portfolios. This ensures internal comparability consistent with the master scale method. For guidance and indicative purposes, the Commerzbank master scale also shows external ratings as well as credit quality steps in accordance with Article 136 CRR. However, a direct reconciliation is not possible, because external ratings of different portfolios show fluctuating default rates from year to year.

The credit decision, which is based, among other things, on the rating result, includes the credit competencies of individual employees as well as the competencies of the committees (Board of Managing Directors, credit committee, credit sub-committees) are graduated by a range of factors including size of exposure and rating class.

Commerzbank master scale

Commerzbank AG rating	PD and EL mid-point %	PD and EL range %	S&P scale		Credit quality steps in accordance with Article 136 CRR[1]	
1.0	0	0	AAA	AAA	I	Investment Grade
1.2	0.01	0 – 0.02				
1.4	0.02	0.02 – 0.03	AA+	AA		
1.6	0.04	0.03 – 0.05	AA, AA–		II	
1.8	0.07	0.05 – 0.08	A+, A	A		
2.0	0.11	0.08 – 0.13	A–			
2.2	0.17	0.13 – 0.21	BBB+	BBB	III	
2.4	0.26	0.21 – 0.31	BBB			
2.6	0.39	0.31 – 0.47				
2.8	0.57	0.47 – 0.68	BBB–			
3.0	0.81	0.68 – 0.96	BB+	BB	IV	Sub-investment grade
3.2	1.14	0.96 – 1.34	BB			
3.4	1.56	1.34 – 1.81				
3.6	2.10	1.81 – 2.40	BB–			
3.8	2.74	2.40 – 3.10				
4.0	3.50	3.10 – 3.90	B+	B	V	Non-investment grade
4.2	4.35	3.90 – 4.86	B			
4.4	5.42	4.86 – 6.04				
4.6	6.74	6.04 – 7.52				
4.8	8.39	7.52 – 9.35	B–			
5.0	10.43	9.35 – 11.64				
5.2	12.98	11.64 – 14.48	CCC+	CCC	VI	
5.4	16.15	14.48 – 18.01	CCC, CCC–			
5.6	20.09	18.01 – 22.41	CC, C	CC, C		
5.8	47.34	22.41 – 99.99				
6.1	100	> 90 days past due	D			Default
6.2	100	Imminent insolvency				
6.3	100	Restructuring with recapitalisation				
6.4	100	Termination without insolvency				
6.5	100	Insolvency				

[1] CRR = Capital Requirements Regulation (EU) No 575/2013.

The following table EU CR6-A shows the scope of the use of IRB and SA approaches pursuant Article 452 b) CRR as of 31 December 2024:

EU CR6-A: Scope of the use of IRB and SA approaches

		a	b	c	d	e
	€m	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA (%)	Percentage of total exposure value subject to a roll-out plan (%)	Percentage of total exposure value subject to IRB Approach (%)
1	Central governments or central banks	1,248	132,272	100%	–	–
1.1	Of which Regional governments or local authorities		22,459	100%	–	–
1.2	Of which Public sector entities		4,244	100%	–	–
2	Institutions	44,952	50,322	16%	84%	–
3	Corporates	119,417	124,834	15%	85%	–
3.1	Of which Corporates - Specialised lending, excluding slotting approach		7,556	–	100%	–
3.2	Of which Corporates - Specialised lending under slotting approach		9,287	–	100%	–
4	Retail	149,685	138,911	4%	96%	–
4.1	thereof secured by mortgages / SMEs		3,133	2%	98%	–
4.2	thereof secured by mortgages / non-SMEs		106,921	1%	99%	–
4.3	thereof qualifying revolving		2,928	–	100%	–
4.4	thereof other / SME		7,379	1%	99%	–
4.5	thereof other / non-SMEs		18,550	25%	75%	–
5	Equity IRB	–	706	100%	–	–
6	Other non-credit obligation assets	4,745	5,039	6%	94%	–
7	**Total**	**320,047**	**452,085**	**37%**	**63%**	**–**

The credit conversion factor according to SACR is used to determine the leverage ratio; this might result in parts of column b in lower figures compared to column a.

Risk parameters

In addition to classifying the probability of default (PD) within the scope of the rating process, correctly assessing loss severity is essential for a reliable and holistic risk assessment. The loss severity is determined firstly by the exposure at default (EaD) and secondly by the loss given default (LGD).

In general, modelling the probabilities of default is based on the Bank's internal long-standing empirical default data. Should this data not be sufficient for specific portfolios (low-default portfolios), different approaches are used to model the probabilities of default. Shadow rating procedures are one option. Comparing the Bank's internal risk factors with the ratings of external agencies gives indications of how the Bank's credit rating estimates should be classified in relative terms. The shadow rating procedures are calibrated based on empirical default rates over many years for the rating classes used by external rating agencies. In rating procedures for special funding, the customer's credit rating derives principally from the cash flows generated by the rating object. Typically, the rating procedures are therefore based on cash flow simulations using stochastic processes. The procedures are normally used in low default or low number portfolios for which only very few external benchmarks exist. The models are therefore causally derived. Calibration is either based on historical defaults or often with the help of expert knowledge. Wholly expert-based rating procedures are the final option. No external target criterion is available for these procedures and there are no cash flow simulations. Parameterisation of the models and their calibration are based wholly on expert knowledge.

When forecasting EaD unused credit lines and other contingent liabilities are included via credit conversion factors (CCFs). Depending on the transaction and the customer, the CCFs describe the probability of drawdown in the event of a default within the next twelve months.

The LGD is primarily determined by the expected proceeds from collateral and unsecured portions of loans. Proceeds from collateral are modelled via recovery rates representing a discount on the previously defined market value. The recovery rate depends on the characteristics of the collateral. For instance, when modelling for properties, the collateral is differentiated by property type and location. To determine the proceeds on unsecured portions of loans, the focus is primarily on the characteristics of the customer and the transaction. In addition, "recoveries" of previously defaulted customers, i.e. the continuation of the payment obligations by the customer, play an important role in the LGD estimation.

The CCF and LGD models are based on bank-internal empirical loss data. For this purpose, Commerzbank refers to a database of internal credit defaults since 1997. New defaults are recorded continuously and are made available for statistical analysis once processing is complete. For quality assurance purposes, the data collection process is monitored by a number of controls and automatic checking procedures.

Both the internal and regulatory requirements of the CRR are considered when developing statistical models for estimating EaD and LGD. Discussions with experts from back office and debt workout departments play an important role when identifying relevant factors and validating the results. In instances where there is only a small number of historical default or collateral utilisation cases, the empirical analyses are supplemented with expert assessments.

It is possible that a positive correlation of the risk parameters PD, LGD and CCF with one or more common macroeconomic risk factors may lead to a heightened systematic credit risk. It is for this reason that Art. 181 (1) b) CRR requires the use of LGD estimates that are appropriate even in an economic downturn (so-called downturn LGDs). Periods of an economic downturn are characterised by systemically high default rates above the long-term average. In downturn analyses, downturn years were determined and/or confirmed to estimate the risk parameters (CCF and LGD components). Statistical models, particularly regression models, are used to examine whether the downturn phases identified have a significant impact on the loss ratios; if applicable, an appropriate discount is determined.

All models are regularly validated and recalibrated based on the new findings, if necessary. Empirically-based PD, LGD and EaD parameters are used in all important internal processes at Commerzbank. The PD, LGD and EaD models employed by Commerzbank for natural persons, SMEs, corporates, banks and renewable energies are approved for the advanced IRB approach for the asset classes listed in Art. 452 c) i) to iv) CRR. The suitability of the models was verified by the Bundesbank, BaFin and the ECB as part of the inspection prior to the granting of authorisation for the advanced IRB approach and ex post reviews.

Finally, combining the above components yields an assessment of the expected loss (EL = EaD*PD*LGD) and the risk density as a ratio of EL to EaD (EL to EaD in basis points). The internal master scale is used to clearly allocate borrower PDs (customer ratings) to the Bank's internal rating classes.

Validation

Pursuant to Article 185 CRR, all risk classification procedures are subject to a regular validation and calibration of parameters. The credit risk control unit is the relevant unit for model development and parameter calibration. The relevant models are validated at least once a year and the results recorded in validation reports. Responsibility for this lies with the independent validation unit. Independence is ensured by a separate department below the Board of Managing Directors.

All validation results together with the need for action resulting from them are presented for approval to a validation committee in which senior management is represented. A summary of the validation committee's results as well as any irregularities and necessary changes are presented to the Bank's Strategic Risk Committee; approval is required if there are any red validation traffic lights. Regular monitoring of procedures is an additional system control element. To check the quality of the rating procedures, specialist personnel within Internal Audit regularly review the methods and processes used and inspect validation and monitoring methods. In the event of changes to the rating systems in accordance with Article 143 CRR, an independent formal investigation is carried out to establish whether the relevant quantitative and qualitative criteria were considered during categorisation, together with the resulting categorisation.

Validation concepts are defining which analyses have to be carried out rotationally for the PD rating systems as well as for CCF and LGD models. The material analysis results are grouped and evaluated using a traffic-light system. If the standards and limits that have been defined in the validation concept are not met, it must be clarified if there is a need for action. In this case, concrete steps must be defined along with a timetable for implementing them. These steps may include, for instance, measures to improve data quality or a revision of the process in question.

Generally, a distinction is to be made between the method validation and the process validation of the models. Data quality aspects and statistical analyses are of specific interest for the method validation. This involves comparing the model forecasts with the reality over the course of the assessment period. The quality of the forecasts is verified using mathematical/statistical methods. Assessing the discriminatory power of rating procedures may involve using Gini coefficients, concordance indices and hit rate analyses, for instance. The calibration of procedures may be checked using various statistical tests, such as the Spiegelhalter or binomial test. Validation and model development do not take into account any regulatory floors for PD. These are only taken into account during the regulatory capital calculation to determine RWA.

Depending on the type of model a different validation procedure to back-test each single model has to be applied, as described in the following:

- **Default/non-default rating procedure:** In default/non-default models, ratio selection, parameter estimates and calibration are mainly based on internal default periods. A check is therefore made during validation to ascertain whether the internally measured default rates tally with the predicted probabilities of default. Discriminatory power is also checked by calculating the AUC value, and the Gini coefficient respectively.
- **Hybrid models:** Hybrid models are basically mixtures of default/non–default models and shadow rating procedures. For the latter, external ratings are the target criterion. The bank portfolio now includes an internal data history. In order to further enhance the stability of the model, external ratings were also incorporated in the development of the process. In these procedures the validation techniques of default/non-default models are combined with the additional techniques of the shadow rating procedures.
- **Cash flow-based procedures**: In rating procedures for special funding, the customer's credit rating derives principally from the cash flows generated by the rating object. Typically, the rating procedures are therefore based on cash flow simulations using stochastic processes. The procedures are normally used in low default and low number respectively portfolios for which only very few external benchmarks exist. The models are therefore causally produced. Direct comparisons of the predicted PDs with realised default rates and discriminatory power analyses using the AUC are fraught with considerable uncertainty due to the low number of defaults. The statistical testing of CCF and LGD predictions of these models are primarily based on descriptive analyses of the input data and comparisons of the cash flows and volatilities predicted by the users with actual cash flows.
- **CCF and LGD models**: On the basis of additional default and loss data full-sample and out-of-sample tests are carried out through statistical backtests. In this context the validity of existing parameter differentiations and the discriminatory power of the applied risk factors have always to be analysed. Data quality and the representativeness of observations for future loss events are also important subjects of analyses.

The following table VAL1 gives an overview of the quantitative model approaches used for the individual rating procedures. The scope of application of the rating procedures is presented in the section on rating procedures in tables VAL-A and VAL-B.

VAL1: Overview on IRBA rating procedures of Commerzbank AG

	PD validation		CCF / LGD validation	
Rating procedure	Methodology	Data history Years	Methodology	Data history Years
RFI-BANK	Hybrid	13	Calibrated empirically	25
R-CORP/COSCO	Default/non-default	15	Calibrated empirically	25
CORES	Default/non-default	16	Calibrated empirically	25
RS-REN	Cash flow simulation	11	Cash flow simulation	17

Process validation is carried out in collaboration with the risk model users. This includes compliance of the procedures with regulations, overruling analyses and general user acceptance. For CCF and LGD procedures the precise technical implementation of parameters in all using systems has to be verified. Asset Quality Reviews established in credit risk management also guarantee a continuously reliable data quality and the implementation of the model true to the process. Monthly reporting of rating coverage to the Board of Managing Directors ensures that the portfolios are valued using up-to-date and valid rating analyses.

The validations performed in 2024 show largely unremarkable findings. The validation results for all separately calibrated IRBA parameters and/or sub-models are summarised in the tables below and broken down by PD, LGD and CCF method. This shows the cases in which the tolerance limits set by the corresponding validation concepts were exceeded, as a result of which adjustments regarding the calibration are recommended.

It should be noted that the scope of the models shown in Table VAL1 is limited to the IRBA application area and their use for capital requirement calculation. With these models, the bank is in different phases of the approval processes as a result of extensive revisions. The revised versions of CORES, R-CORP/COSCO, and RFI-Bank are already in productive use, while the previous version is still used for RS-REN. The CCF and LGD models are also still the previous versions. The validation reflects this status.

Anomalies with recommended checks for adjustment requirements were found in the PD models only for R-CORP/COSCO based on internal validation standards. Here, one calibration segment exhibits conservative calibration, while in two other segments, the estimated selection probabilities partly fall below the associated default rates on the current time scale. However, all models require adjustments due to the associated approval reviews.

Noticeable conservatism was identified during the current validations in the LGD parameters for private customers and a sub-portfolio of corporate customers. The validations of the CCF models indicated the need to review adjustment requirements in the retail sector. Here too, the model predictions are conservative.

VAL2: Validation results per calibration segment (validation based on data basis 2024)

	PD		LGD		CCF	
Validation	Number	EaD in %	Number	EaD in %	Number	EaD in %
Adequate	7	81	282	83	27	98
Too conservative - adjustment to be analysed	1	1	16	17	5	2
Too progressive - adjustment to be analysed	2	18	0	0	0	0
Total	**10**	**100**	**298**	**100**	**32**	**100**

In this overview, it should be noted that the EaD values in the calibration segments refer to the entire segment. The stated values do not mean that conservative or progressive calibrations apply to the entire EaD volume. Possible underestimations are reflected in the form of capital buffers.

An overview of the PD validation results as of 31 December 2024 for the relevant rating systems by IRBA asset class is provided in table EU CR9. The basis for this is the rating systems that were productive at the time. mBank operates independent retail and corporate rating procedures, which can be found in section 5.3 of the disclosure report of mBank on the bank's English-language homepage (at About mBank → Capital Adequacy Information Policy).

These are found with smaller proportions in the present analysis, with the default rates of mBank generally exceeding those of Commerzbank. Additionally, it is noteworthy that debtors with short-term contracts under twelve months do not significantly influence the default rates.

In general, the results are unremarkable. The observed default rates typically fall within or below the designated PD bands. The exposure class 'Institutes' determined by RFI-BANK and R-CORP/COSCO exhibits consistently conservative calibration. This is

also true, with the exception of a few PD bands, for the two exposure classes for corporates. The exposure class 'Corporates, of which others' is determined by R-CORP/COSCO, while the exposure class 'Corporates, of which specialized lending' is determined by RS-REN.

In contrast, the situation is different in the exposure class for smaller enterprises, 'Corporates, of which SMEs,' which is dominated by R-CORP/COSCO. Here, a significant number of PD bands have shown an underestimation of default rates over the past years. Additionally, there are indications of underestimations of default rates over the past years in the exposure classes 'Retail, secured by mortgages / thereof SMEs' and 'Retail other / thereof SMEs,' the latter especially having significant contributions also from R-CORP/COSCO alongside CORES. In these observations, the persistently poor economic environment in Germany over a considerable period of time is likely reflected.

The three exposure classes for retail that have not yet been addressed are dominated by CORES. Underestimations of default rates in the individual PD bands exist only occasionally.

EU CR9_part 1: IRB approach – Backtesting of PD per exposure class

a	b	c	d	e	f	g	h
	PD scale	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate %
			of which: number of obligors which defaulted during the year				
Central governments or central banks	0.00 to < 0.15	0	0	-	-	-	-
	0.00 to <0.10	0	0	-	-	-	-
	0.10 to <0.15	0	0	-	-	-	-
	0.15 to < 0.25	0	0	-	-	-	-
	0.25 to < 0.50	0	0	-	-	-	-
	0.50 to < 0.75	0	0	-	-	-	-
	0.75 to < 2.50	0	0	-	-	-	-
	0.75 to <1.75	0	0	-	-	-	-
	1.75 to <2.50	0	0	-	-	-	-
	2.50 to 10.00	0	0	-	-	-	-
	2.5 to <5	0	0	-	-	-	-
	5 to <10	0	0	-	-	-	-
	10.00 to < 100.00	0	0	-	-	-	-
	10 to <20	0	0	-	-	-	-
	20 to <30	0	0	-	-	-	-
	30 to <100	0	0	-	-	-	-
	100.00 (default)	0	0	-	-	-	-
Institutions	0.00 to < 0.15	1,101	0	-	0.06	0.06	-
	0.00 to <0.10	870	0	-	0.05	0.05	-
	0.10 to <0.15	231	0	-	0.12	0.12	-
	0.15 to < 0.25	202	0	-	0.19	0.19	-
	0.25 to < 0.50	418	0	-	0.37	0.35	0.12
	0.50 to < 0.75	251	0	-	0.62	0.61	-
	0.75 to < 2.50	599	1	0.17	1.11	1.45	0.13
	0.75 to <1.75	436	0	-	1.09	1.21	0.07
	1.75 to <2.50	163	1	0.61	2.00	2.09	0.34
	2.50 to 10.00	522	3	0.57	3.14	4.45	0.38
	2.5 to <5	366	1	0.27	2.99	3.50	0.05
	5 to <10	156	2	1.28	6.02	6.70	1.07
	10.00 to < 100.00	146	3	2.05	37.89	46.75	1.30
	10 to <20	31	2	6.45	13.01	13.36	3.51
	20 to <30	11	0	-	23.86	23.56	-
	30 to <100	104	1	0.96	48.89	59.16	0.81
	100.00 (default)	13	0	-	100.00	100.00	-

EU CR9_part 2: IRB approach – Backtesting of PD per exposure class

a	b	c	d	e	f	g	h
	PD scale	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate %
			of which: number of obligors which defaulted during the year				
Corporates, thereof SMEs	0.00 to < 0.15	490	0	-	0.08	0.09	0.11
	0.00 to <0.10	291	0	-	0.07	0.06	0.21
	0.10 to <0.15	199	0	-	0.12	0.12	-
	0.15 to < 0.25	426	1	0.23	0.21	0.20	0.26
	0.25 to < 0.50	813	9	1.11	0.36	0.36	0.92
	0.50 to < 0.75	573	7	1.22	0.63	0.61	1.15
	0.75 to < 2.50	2,274	37	1.63	1.45	1.41	2.86
	0.75 to <1.75	1,714	24	1.40	1.19	1.18	2.12
	1.75 to <2.50	560	13	2.32	2.07	2.09	5.33
	2.50 to 10.00	1,149	71	6.18	4.46	4.29	13.71
	2.5 to <5	856	36	4.21	3.41	3.40	11.04
	5 to <10	293	35	11.95	6.88	6.88	20.68
	10.00 to < 100.00	173	27	15.61	18.07	19.77	24.36
	10 to <20	127	21	16.54	13.79	13.10	28.49
	20 to <30	16	2	12.50	23.52	22.56	27.16
	30 to <100	30	4	13.33	42.57	46.49	11.08
	100.00 (default)	302	7	2.32	100.00	100.00	39.08
Corporates, thereof specialised lending	0.00 to < 0.15	324	4	1.23	0.04	0.03	0.28
	0.00 to <0.10	319	4	1.25	0.04	0.03	0.29
	0.10 to <0.15	5	0	-	0.12	0.13	-
	0.15 to < 0.25	5	0	-	0.19	0.19	-
	0.25 to < 0.50	14	0	-	0.35	0.38	0.12
	0.50 to < 0.75	12	0	-	0.59	0.59	-
	0.75 to < 2.50	19	0	-	1.29	1.30	0.54
	0.75 to <1.75	15	0	-	1.19	1.10	0.65
	1.75 to <2.50	4	0	-	2.25	2.06	-
	2.50 to 10.00	7	0	-	4.65	3.59	0.66
	2.5 to <5	6	0	-	3.40	3.31	-
	5 to <10	1	0	-	7.64	5.23	2.16
	10.00 to < 100.00	1	0	-	10.80	85.92	1.19
	10 to <20	0	0	-	10.77	-	-
	20 to <30	0	0	-	26.51	-	-
	30 to <100	1	0	-	-	85.92	1.44
	100.00 (default)	4	0	-	100.00	100.00	5.11

EU CR9_part 3: IRB approach – Backtesting of PD per exposure class

a	b	c	d	e	f	g	h
	PD scale	**Number of obligors at the end of the previous year**		**Observed average default rate (%)**	**Exposures weighted average PD (%)**	**Average PD (%)**	**Average historical annual default rate %**
			of which: number of obligors which defaulted during the year				
Corporates, thereof other	0.00 to < 0.15	5,027	4	0.08	0.08	0.10	0.09
	0.00 to <0.10	2,237	3	0.13	0.05	0.06	0.07
	0.10 to <0.15	2,790	1	0.04	0.13	0.13	0.11
	0.15 to < 0.25	6,063	3	0.05	0.19	0.20	0.35
	0.25 to < 0.50	10,416	5	0.05	0.36	0.36	0.17
	0.50 to < 0.75	5,264	17	0.32	0.59	0.61	0.83
	0.75 to < 2.50	9,413	67	0.71	1.33	1.34	1.07
	0.75 to <1.75	6,877	51	0.74	1.11	1.11	0.84
	1.75 to <2.50	2,536	16	0.63	2.01	1.97	1.68
	2.50 to 10.00	4,605	98	2.13	4.19	4.23	3.94
	2.5 to <5	3,564	65	1.82	3.47	3.46	2.69
	5 to <10	1,041	33	3.17	6.62	6.88	6.65
	10.00 to < 100.00	1,493	25	1.67	22.99	33.60	4.75
	10 to <20	525	20	3.81	14.35	13.79	7.05
	20 to <30	177	1	0.57	27.36	23.98	9.31
	30 to <100	791	4	0.51	61.42	48.91	1.40
	100.00 (default)	1,113	10	0.90	101.16	100.00	10.48
Retail secured by mortgages / SMEs	0.00 to < 0.15	24,498	32	0.13	0.07	0.06	0.12
	0.00 to <0.10	20,624	26	0.13	0.05	0.05	0.11
	0.10 to <0.15	3,874	6	0.15	0.12	0.12	0.18
	0.15 to < 0.25	10,725	20	0.19	0.20	0.20	0.17
	0.25 to < 0.50	14,371	35	0.24	0.38	0.36	0.27
	0.50 to < 0.75	6,121	18	0.29	0.62	0.60	0.31
	0.75 to < 2.50	5,921	66	1.11	1.34	1.24	1.17
	0.75 to <1.75	5,028	47	0.93	1.17	1.09	1.00
	1.75 to <2.50	893	19	2.13	2.01	2.05	2.08
	2.50 to 10.00	1,526	77	5.05	4.92	4.78	4.87
	2.5 to <5	945	39	4.13	3.53	3.35	3.79
	5 to <10	581	38	6.54	7.23	7.11	6.82
	10.00 to < 100.00	578	100	17.30	39.28	22.13	17.85
	10 to <20	309	49	15.86	13.67	13.62	14.15
	20 to <30	154	29	18.83	23.93	24.00	20.79
	30 to <100	115	22	19.13	79.82	42.47	24.62
	100.00 (default)	800	31	3.88	100.00	100.00	25.58

EU CR9_part 4: IRB approach – Backtesting of PD per exposure class

a	b	c	d	e	f	g	h
	PD scale	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate %
			of which: number of obligors which defaulted during the year				
Retail secured by mortgages / non-SMEs	0.00 to < 0.15	267,214	179	0.07	0.06	0.06	0.07
	0.00 to <0.10	215,890	128	0.06	0.04	0.05	0.06
	0.10 to <0.15	51,324	51	0.10	0.13	0.12	0.10
	0.15 to < 0.25	134,125	124	0.09	0.20	0.20	0.09
	0.25 to < 0.50	108,478	146	0.13	0.34	0.35	0.14
	0.50 to < 0.75	26,217	82	0.31	0.60	0.60	0.32
	0.75 to < 2.50	18,664	159	0.85	1.30	1.22	1.01
	0.75 to <1.75	15,913	121	0.76	1.12	1.07	0.86
	1.75 to <2.50	2,751	38	1.38	2.05	2.08	1.90
	2.50 to 10.00	7,748	247	3.19	4.94	5.08	3.91
	2.5 to <5	4,317	115	2.66	3.58	3.46	2.89
	5 to <10	3,431	132	3.85	7.07	7.14	5.26
	10.00 to < 100.00	4,049	434	10.72	25.84	23.65	13.07
	10 to <20	2,054	171	8.32	13.94	13.82	10.22
	20 to <30	1,101	143	12.99	23.92	23.84	15.09
	30 to <100	894	120	13.42	47.21	46.01	19.07
	100.00 (default)	3,712	90	2.42	100.00	100.00	25.23
Retail qualifying revolving	0.00 to < 0.15	1,668,629	250	0.02	0.04	0.05	0.03
	0.00 to <0.10	1,546,489	176	0.01	0.04	0.04	0.02
	0.10 to <0.15	122,140	74	0.06	0.12	0.12	0.10
	0.15 to < 0.25	191,283	131	0.07	0.20	0.20	0.14
	0.25 to < 0.50	233,320	365	0.16	0.37	0.36	0.30
	0.50 to < 0.75	98,053	381	0.39	0.61	0.62	0.55
	0.75 to < 2.50	232,259	1,842	0.79	1.39	1.41	1.16
	0.75 to <1.75	170,426	1,132	0.66	1.17	1.17	1.00
	1.75 to <2.50	61,833	710	1.15	2.07	2.09	1.65
	2.50 to 10.00	139,312	4,105	2.95	4.76	4.54	3.89
	2.5 to <5	99,533	1,856	1.86	3.52	3.57	2.59
	5 to <10	39,779	2,249	5.65	7.15	6.98	6.86
	10.00 to < 100.00	33,156	3,961	11.95	23.57	21.68	14.92
	10 to <20	20,446	1,785	8.73	13.59	13.33	10.80
	20 to <30	6,339	1,112	17.54	23.99	24.41	19.34
	30 to <100	6,371	1,064	16.70	48.21	45.98	24.31
	100.00 (default)	24,607	377	1.53	100.00	100.00	23.30

EU CR9_part 5: IRB approach – Backtesting of PD per exposure class

a	b	c	d	e	f	g	h
	PD scale	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate %
Retail other / SME	0.00 to < 0.15	112,975	60	0.05	0.09	0.07	0.07
	0.00 to <0.10	93,446	41	0.04	0.06	0.05	0.05
	0.10 to <0.15	19,529	19	0.10	0.13	0.12	0.15
	0.15 to < 0.25	36,403	65	0.18	0.20	0.20	0.20
	0.25 to < 0.50	77,273	208	0.27	0.36	0.36	0.36
	0.50 to < 0.75	39,321	162	0.41	0.63	0.61	0.53
	0.75 to < 2.50	87,721	1,168	1.33	1.43	1.38	1.51
	0.75 to <1.75	67,605	717	1.06	1.22	1.17	1.25
	1.75 to <2.50	20,116	451	2.24	2.03	2.08	2.42
	2.50 to 10.00	56,504	2,541	4.50	4.60	4.88	5.21
	2.5 to <5	35,505	1,172	3.30	3.53	3.53	3.86
	5 to <10	20,999	1,369	6.52	6.98	7.16	7.13
	10.00 to < 100.00	19,293	2,978	15.44	24.34	22.08	18.33
	10 to <20	10,899	1,166	10.70	13.92	13.70	12.95
	20 to <30	4,733	880	18.59	24.17	23.71	23.72
	30 to <100	3,661	932	25.46	56.34	45.00	26.85
	100.00 (default)	19,879	422	2.12	100.00	100.00	38.42
Retail other / non-SME	0.00 to < 0.15	98,403	74	0.08	0.06	0.06	0.08
	0.00 to <0.10	83,274	56	0.07	0.04	0.04	0.06
	0.10 to <0.15	15,129	18	0.12	0.13	0.13	0.18
	0.15 to < 0.25	46,686	62	0.13	0.20	0.20	0.15
	0.25 to < 0.50	82,176	164	0.20	0.34	0.36	0.25
	0.50 to < 0.75	55,094	196	0.36	0.60	0.62	0.51
	0.75 to < 2.50	203,175	1,889	0.93	1.42	1.39	1.23
	0.75 to <1.75	157,006	1,129	0.72	1.18	1.19	0.95
	1.75 to <2.50	46,169	760	1.65	2.06	2.07	2.27
	2.50 to 10.00	120,148	3,206	2.67	4.57	4.57	4.28
	2.5 to <5	83,801	1,738	2.07	3.48	3.62	3.40
	5 to <10	36,347	1,468	4.04	6.99	6.78	5.94
	10.00 to < 100.00	35,962	3,873	10.77	25.60	20.59	14.24
	10 to <20	23,620	1,717	7.28	14.08	12.82	8.98
	20 to <30	6,327	1,066	16.85	23.93	24.51	22.17
	30 to <100	6,015	1,090	18.12	51.62	47.09	22.88
	100.00 (default)	33,834	568	1.68	100.00	100.00	27.32

Table EU CR9.1 is not presented as Commerzbank does not make any PD estimates under Article 180 (1) f) CRR.

Credit risk mitigation

At Commerzbank, risks are mitigated via a range of measures including collateral and netting.

The collateral mainly takes the form of mortgages, financial collateral, guarantees, indemnity letters, credit derivatives, life insurances, other registered liens and other real collateral. Within the scope of the IRBA assessments, this collateral was recognised by the regulator as eligible collateral.

The Bank takes account of credit risk mitigating effects arising from the receipt of eligible guarantees (guarantees/ sureties, comparable claims on third parties) by using the risk weight of the guarantor.

Regulatory setting-off provided, as part of the assessment of their declaration of liability, guarantors are subject to a review of their creditworthiness and rating in accordance with their sector and business. The aim of the creditworthiness check is to establish the guarantor's creditworthiness and maximum solvency.

In accordance with the CRR, the quality of the collateral recognised by the regulator is subject to rigorous review and is continuously monitored. In particular, this includes establishing the legal enforceability of the collateral and ensuring that it is valued regularly. Depending on the collateral type, this takes place at adequate intervals, in principle at least annually, in the case of real estate collaterals in accordance with the regulatory requirements, depending on the type and value of the property by monitoring the market values or by means of an annual review of the valuation as well as or as circumstances require. Positive correlations between the creditworthiness of the borrower and the value of the collateral or guarantee are established in the collateral processing and lending process and collateral instruments affected are not offset. Collateral is processed exclusively separated from the market side.

The Bank carries out collateral concentration analyses for lending collateral (physical and personal collateral) where necessary. Various aspects such as collateral category, borrower's rating class and regional allocation of the collateral are examined.

With reference to these aspects, the Board of Managing Directors is kept informed on a regular basis of the development of the collateral pool and possible anomalies/concentrations. As of 31 December 2024, more than three quarters of the calculated collateral of the hedged non-outstanding receivables were attributable to clients with an investment grade rating.

The valuation and processing of collateral are governed by universally applicable standards and collateral-specific instructions (guidelines, descriptions of processes, IT instructions). Collateral agreements are legally validated; as far as possible, standard contracts and samples are used. The standards established to hedge against or mitigate the risks of loans, which also take account of the regulatory requirements of CRR, include, amongst others:

- Legal and operational standards for documentation and data collection as well as valuation standards.
- The standardisation and updating of collateral valuations are ensured by laying down valuation processes, prescribing standardised valuation methods, parameters and defined discounts for collateral, clearly defining responsibilities for the processing and valuation process, and stipulating requirements for revaluations at regular intervals.
- Other standards for taking account of specific risks, e.g. operational risks, correlation and concentration risks, market price change risks (e.g. due to currency fluctuations), country risks, legal risks or risks of changes in the law, and risks of insufficient insurance cover.

For the vast majority of its default risk positions from counterparty credit risk, Commerzbank Group uses the internal model method (IMM) according to Article 283 CRR. The credit equivalent amounts are determined as expected future exposure through the simulation of various market scenarios, taking netting and collateral into account.

Also for securities repurchase, lending and comparable transactions involving securities or goods, the exposures are determined in accordance with Article 283 CRR in conjunction with Article 273 (2) CRR on the basis of an internal model method. Guarantees and credit derivatives are considered via the substitution approach. The double-default procedure defined under Article 153 (3) CRR is applied.

Details on the use of credit risk mitigation techniques in default risks from counterparty credit risk are set out in the section on counterparty credit risk.

The following table EU CR3 gives an overview of the extent of the use of credit risk mitigation techniques. The items shown in column c are mainly positions secured by mortgages.

The table refers to in Article 453 f) CRR as of 31 December 2024, i.e. loans and advances are shown separately as well as the defaulted risk positions.

EU CR3: Credit risk mitigation (CRM) techniques – overview

		a	b	c	d	e
	€m	**Exposures unsecured – Carrying amount**	**Exposures secured – Carrying amount**			
				Exposures secured by collateral	**Exposures secured by financial guarantees**	
						Exposures secured by credit derivatives
1	Loans and advances	226,684	187,005	176,195	10,810	–
2	Debt securities	109,578	657	–	657	
3	**Total**	**336,262**	**187,662**	**176,195**	**11,467**	**–**
4	Of which non-performing exposures	1,275	2,259	1,019	1,241	–
EU-5	Of which defaulted	1,275	2,259			

Credit risk and credit risk mitigation in the SACR

This chapter presents the effects of the credit risk mitigation on the Commerzbank Group's standardised approach (SACR) portfolio, divided by exposure classes and the risk weight used.

The portfolios currently excluded from the IRBA are measured in accordance with SACR regulations as permitted under partial use provisions. In contrast to the IRBA, the SACR is largely based on a flat risk weighting or external ratings. Commerzbank has nominated the rating agencies Standard & Poor's Rating Services, Moody's Investors Service and FitchRatings for the use of external ratings.

Where an external credit rating is available for a position, that external rating is used to determine the risk weighting. Commerzbank uses the standard mapping of external credit assessments to the relevant credit quality steps published by the EBA in accordance with Article 136 CRR. Where two or more external credit ratings are available for one position, the risk weighting is assigned in accordance with the provisions of Article 138 CRR.

For unrated positions, if the conditions set out in Articles 139 and 140 CRR are met, a risk weighting is calculated on the basis of a derived credit rating. In all other cases, the position is treated as an unrated exposure.

External ratings are used for central governments or central banks, regional and local governments, public-sector entities, multilateral development banks, institutions, companies and covered bonds. They are not used for positions in local currency in order to derive risk weightings for foreign currency exposures.

Under the SACR, guarantees are treated according to the substitution principle. This means that the borrower's risk weighting is replaced by that of the guarantor. Consequently, the guaranteed amount is transferred from the borrower's exposure class to that of the guarantor. This is why the exposure before CRM for assets guaranteed by central governments and central banks, for example, is less than after CRM. However, a transfer only takes place if the risk weighting of the guarantor is lower than that of the borrower. This can be seen in table EU CR4.

This table also shows the impact of the credit risk mitigation techniques used in the SACR portfolio in accordance with Chapter 4 of Title II of Part Three CRR and the conversion factors used in accordance with Article 111 CRR.

Table EU CR4 contains the information in accordance with articles 444 e) and 453 g), h) and i) CRR, i.e. the exposure values before and after conversion factors and credit risk mitigation, which are assigned to the individual credit ratings by exposure class, divided between balance sheet and off-balance sheet exposure values, and the exposure values deducted from own funds, as of 31 December 2024.

For the reported SACR exposure value, unlike the IRBA, the valuation allowances based on each of the positions are deducted. Table EU CR5 shows the distribution of exposure values after credit risk mitigation and conversion factors by exposure class and risk weight as of 31 December 2024, in accordance with Article 444 e) CRR.

EU CR4: Standardised approach – Credit risk exposure and CRM effects

		a	b	c	d	e	f
	Exposure classes	**Exposures before CCF and CRM**		**Exposures post CCF and CRM**		**RWAs and RWA density**	
	€m	**On-balance-sheet amount**	**Off-balance-sheet amount**	**On-balance-sheet amount**	**Off-balance-sheet amount**	**RWAs**	**RWA density**
1	Central governments or central banks	105,842	4,073	110,615	4,343	2,936	2.6%
2	Regional government or local authorities	26,720	398	28,294	14	1,257	4.4%
3	Public sector entities	4,777	182	5,822	27	220	3.8%
4	Multilateral development banks	2,383	–	2,796	83	8	0.3%
5	International organisations	1,170	0	1,170	–	–	–
6	Institutions	3,130	3,031	3,673	857	1,200	26.5%
7	Corporates	9,884	8,104	12,481	2,102	10,804	74.1%
8	Retail	4,957	3,516	4,838	72	3,672	74.8%
9	Secured by mortgages on immovable property	9,491	71	9,491	24	3,565	37.5%
10	Exposures in default	411	48	265	6	310	114.5%
11	Exposures associated with particularly high risk	513	43	513	9	783	150.0%
12	Covered bonds	–	–	–	–	–	–
13	Institutions and corporates with a short-term credit assessment	50	–	50	–	10	20.0%
14	Collective investment undertakings	2,566	–	2,566	–	1,115	43.5%
15	Equity	670	–	670	–	971	145.0%
16	Other items	2,145	2	2,145	2	4,567	212.8%
17	**Total**	**174,708**	**19,468**	**185,388**	**7,539**	**31,418**	**16.3%**

EU CR5: Standardised approach

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
Exposure classes	**Risk weight**															**Total**	**Of which unrated**
€m	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Others**		
Central governments or central banks	106,526	–	–	510	6,589	–	335	–	–	487	0	316	–	–	195	114,957	–
Regional government or local authorities	23,200	–	–	–	4,344	–	711	–	–	–	–	–	–	–	52	28,308	26,720
Public sector entities	5,077	–	–	–	619	–	1	–	–	1	–	–	–	–	152	5,849	–
Multilateral development banks	2,839	–	–	–	40	–	–	–	–	–	–	–	–	–	–	2,879	2,376
International organisations	1,170	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1,170	1,170
Institutions	4	33	771	–	2,533	–	1,054	–	–	135	0	–	–	–	–	4,531	0
Corporates	88	0	–	–	2,037	0	3,382	–	–	9,077	–	–	–	–	–	14,584	15
Retail	–	–	–	–	–	–	–	–	4,910	–	–	–	–	–	–	4,910	–
Secured by mortgages on immovable property	–	–	–	–	–	5,871	3,642	–	–	–	3	–	–	–	–	9,515	–
Exposures in default	–	–	–	–	–	–	–	–	–	192	79	–	–	–	–	271	–
Exposures associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	522	–	–	–	–	522	339
Covered bonds	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Institutions and corporates with a short-term credit assessment	–	–	–	–	50	–	–	–	–	–	–	–	–	–	–	50	–
Collective investment undertakings	538	–	–	–	518	–	1,262	–	–	186	55	–	–	9	–	2,566	–
Equity	–	–	–	–	–	–	–	–	–	469	–	201	–	–	–	670	670
Other items	–	–	–	–	3	–	–	–	–	528	–	1,615	–	–	–	2,146	235
Total	**139,441**	**33**	**771**	**510**	**16,733**	**5,871**	**10,386**	**–**	**4,910**	**11,074**	**658**	**2,133**	**–**	**9**	**399**	**192,927**	**31,524**

In order to mitigate credit risk in the SACR, the Commerzbank Group takes financial collateral and guarantees into consideration. These are dealt with separately in the section on risk mitigation. Furthermore, collateral in the form of property charges also reduces the risk weighting.

Past due positions are shown with a risk weighting of 150%. Depending on the impairments based on these positions in accordance with IFRS 9 or the collateral, a risk weighting of 100% can be applied or they may be shifted to another exposure class.

The amount of the exposures secured by collateral, financial guarantees or credit derivatives and the amount of unsecured exposures by asset class is shown in table EU CR3 in the section on credit risk mitigation. The effectively secured risk position values, i.e. taking into consideration all of the relevant haircuts for the collateral, are allocated to the SACR exposure class. In taking financial collateral into account as a credit risk mitigation technique, Commerzbank generally uses the comprehensive method as defined under Articles 223 to 228 CRR. In doing so, the risk exposure value for the default risk position is reduced by the value of the financial collateral.

Credit risk and credit risk mitigation in the IRBA

The credit risk of the Commerzbank Group's IRBA portfolio divided into the relevant IRBA asset classes and PD ranges is shown below. The information in table EU CR6 on on-balance-sheet gross receivables refers to the risk exposure values to be determined according to Article 166 CRR. These represent the expected amounts of the IRBA positions that will be exposed to a risk of loss. The off-balance-sheet claims are shown before taking into account credit risk adjustments and conversion factors. Exposure at default (regulatory EaD) shows the exposure values after taking into account credit risk mitigation. The risk parameters CCF, PD and LGD are calculated as EaD-weighted averages. The IRBA default definition is also used for internal purposes.

The companies in the Commerzbank Group use the IRBA approach. They may therefore use internal estimates of credit conversion factors (CCFs) for regulatory purposes, too. CCFs are necessary for off-balance-sheet transactions in order to assess the likely exposure in the event of a possible default on commitments that have not yet been drawn.

Tables EU CR6. EU CR7 and EU CR7-A show only portfolios which fall within the scope of IRBA and are rated with a rating process that has been approved by the supervisory authority. Positions in the risk exposure class other non-loan-related assets are not listed in table EU CR6. These assets amounting to €11.5bn do not have any creditworthiness risks and are therefore not relevant for the management of default risks. Table EU CR6 also does not include mBank S.A. positions of €1.3bn risk weighted assets, which are subject to the IRBA slotting approach in accordance with Article 153 (5) CRR and are shown in table EU CR10. Investment positions with a fixed risk weighting according to Article 155 (2) CRR are not relevant in the Commerzbank Group as of 31 December 2024 and are therefore not part of table EU CR10.

The securitisation exposures in the IRBA are presented separately in the section on securitisations in this report. Counterparty default risks are shown in the section on default risks from counterparty credit risks in this report.

The impact of credit derivatives used as credit risk mitigation techniques on the amount of RWA of credit risk in the IRBA portfolio as of 31 December 2024 comes to about 0.2% (see the next table EU CR7).

The risk exposure values shown in this section generally differ from the EaD values in the Annual Report (economic EaD) due to the following:

- According to the EBA disclosure requirements, credit risk and counterparty credit risk are presented separately in the Disclosure Report.
- The figures shown in this Disclosure Report refer to the regulatory scope of consolidation. By contrast, the figures in the Annual Report refer to the IFRS scope of consolidation.

The amount of the exposures secured by collateral, financial guarantees or credit derivatives and the amount of unsecured exposures by asset class is shown in table EU CR3 in the section on credit risk mitigation. In addition to the collateral in the standardised approach to credit risk (hereinafter referred to as SACR), under the IRBA some physical and other collateral which is only eligible for recognition under the IRBA is also offset.

The calculation of collateral is based on market values weighted with recovery rates. These recovery rates are based on empirical data and form part of the LGD models. By definition, the rates cannot exceed 100%; therefore, the collateral values are normally lower than the market values. By contrast, under the IRBA the substitution approach is used to offset guarantees and credit derivatives. The protection therefore does not take effect in the LGD, as is the case with financial and other IRBA collateral, but via the substitution of the debtor's risk weight with that of the guarantor. Alternatively, the double-default procedure may be used in the IRBA.

Table EU CR6 contains the information described above in accordance with Article 452 g) CRR as of 31 December 2024 for the AIRB portfolio. As Commerzbank does not have any F-IRB positions, a corresponding table is not required.

EU CR6_part 1: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	PD scale	On-balance sheet exposures €m	Off-balance-sheet exposures pre-CCF €m	Exposure weighted average CCF	Exposure post CCF and post CRM €m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors | €m	Density of risk weighted exposure amount	Expected loss amount €m	Value adjustments and provisions €m
Central governments or central banks	0.00 to < 0.15	570	531	0.37	877	0.05	39	92.61	2.0	339	0.39	0.4	–
	0.00 to <0.10	509	487	0.36	792	0.04	33	92.23	2.1	291	0.37	0.3	–
	0.10 to <0.15	61	43	0.43	85	0.13	6	96.22	1.4	48	0.57	0.1	–
	0.15 to < 0.25	17	16	0.46	25	0.20	6	100.00	1.5	19	0.79	0.0	–
	0.25 to < 0.50	69	165	0.24	109	0.35	12	100.00	1.8	126	1.16	0.4	–
	0.50 to < 0.75	98	71	0.36	124	0.58	9	100.00	1.1	159	1.28	0.7	–
	0.75 to < 2.50	54	15	0.47	61	1.38	16	100.00	1.2	114	1.86	0.8	–
	0.75 to <1.75	36	6	0.47	39	0.92	8	100.00	1.2	65	1.65	0.4	–
	1.75 to <2.50	18	9	0.47	22	2.21	8	100.00	1.3	49	2.23	0.5	–
	2.50 to 10.00	109	85	0.45	147	3.70	47	100.00	1.0	374	2.53	5.3	–
	2.5 to <5	98	73	0.44	130	3.39	23	100.00	1.0	320	2.45	4.3	–
	5 to <10	11	13	0.48	17	6.08	24	100.00	1.4	54	3.15	1.0	–
	10.00 to < 100.00	9	17	0.46	17	44.41	32	100.00	1.1	55	3.31	5.4	–
	10 to <20	0	7	0.42	3	15.41	17	100.00	0.7	12	3.96	0.4	–
	20 to <30	1	2	0.48	2	24.50	3	100.00	1.1	10	5.04	0.5	–
	30 to <100	8	8	0.48	12	54.99	12	100.00	1.2	34	2.86	4.5	–
	100.00 (default)	–	–	–	–	–	–	–	–	–	–	–	–
	Subtotal	926	900	0.36	1,360	1.13	161	95.23	1.7	1,186	0.87	13.1	–
Institutions	0.00 to < 0.15	26,489	3,294	0.45	29,706	0.06	1,427	21.14	2.7	3,285	0.11	3.8	−1.4
	0.00 to <0.10	20,936	2,662	0.45	23,806	0.05	1,207	22.39	2.6	2,428	0.10	2.6	−0.9
	0.10 to <0.15	5,553	633	0.48	5,900	0.12	220	16.09	3.2	857	0.15	1.2	−0.5
	0.15 to < 0.25	3,661	693	0.46	3,711	0.19	254	26.56	2.2	947	0.26	1.9	−1.1
	0.25 to < 0.50	4,903	2,249	0.37	4,706	0.37	466	32.24	1.6	1,780	0.38	5.8	−3.2
	0.50 to < 0.75	1,583	1,153	0.44	1,698	0.62	315	35.15	1.4	902	0.53	3.8	−3.0
	0.75 to < 2.50	2,479	1,894	0.44	2,528	1.11	550	30.74	1.2	1,431	0.57	8.6	−15.1
	0.75 to <1.75	2,452	1,778	0.44	2,461	1.09	489	30.73	1.2	1,382	0.56	8.2	−14.9
	1.75 to <2.50	27	116	0.36	68	2.00	61	31.18	1.3	50	0.74	0.4	−0.2
	2.50 to 10.00	935	745	0.47	846	3.14	272	33.06	1.0	852	1.01	8.7	−4.9
	2.5 to <5	867	681	0.47	806	2.99	225	33.44	1.0	818	1.01	8.1	−4.2
	5 to <10	68	64	0.47	40	6.02	47	25.17	0.9	34	0.86	0.6	−0.8
	10.00 to < 100.00	308	331	0.46	259	37.89	144	26.46	0.7	310	1.20	26.5	−6.1
	10 to <20	148	56	0.48	37	13.01	55	14.60	1.3	20	0.54	0.5	−0.6
	20 to <30	26	131	0.43	61	23.86	40	10.86	1.0	37	0.61	1.5	−0.9
	30 to <100	134	143	0.48	162	48.89	49	35.06	0.5	254	1.57	24.4	−4.7
	100.00 (default)	94	7	0.49	79	100.00	17	43.61	0.6	49	0.63	35.0	−20.7
	Subtotal	40,451	10,367	0.43	43,532	0.66	3,445	24.21	2.3	9,558	0.22	94.3	−55.6

EU CR6_part 2: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	PD scale	On-balance sheet exposures €m	Off-balance-sheet exposures pre-CCF €m	Exposure weighted average CCF	Exposure post CCF and post CRM €m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors | €m	Density of risk weighted exposure amount	Expected loss amount €m	Value adjustments and provisions €m
Corporates, thereof SMEs	0.00 to < 0.15	645	371	0.47	783	0.08	442	41.80	2.8	140	0.18	0.3	–0.2
	0.00 to <0.10	532	282	0.47	633	0.07	321	40.60	3.0	105	0.17	0.2	–0.2
	0.10 to <0.15	113	89	0.45	150	0.12	121	46.85	2.2	35	0.24	0.1	–0.1
	0.15 to < 0.25	249	108	0.51	279	0.21	210	42.59	2.8	71	0.26	0.2	–0.2
	0.25 to < 0.50	1,060	590	0.48	1,281	0.36	681	43.58	2.6	543	0.42	2.0	–2.3
	0.50 to < 0.75	513	339	0.50	640	0.63	510	42.26	2.2	318	0.50	1.7	–1.6
	0.75 to < 2.50	1,833	965	0.52	2,237	1.45	2,190	42.71	2.1	1,485	0.66	13.5	–12.4
	0.75 to <1.75	1,270	728	0.51	1,571	1.19	1,473	42.52	2.2	1,005	0.64	7.8	–6.8
	1.75 to <2.50	563	237	0.55	666	2.07	717	43.14	1.9	479	0.72	5.7	–5.6
	2.50 to 10.00	1,137	511	0.60	1,348	4.46	1,489	42.10	1.6	1,230	0.91	24.6	–19.4
	2.5 to <5	796	385	0.60	942	3.41	1,069	43.31	1.6	811	0.86	13.7	–10.4
	5 to <10	341	126	0.60	406	6.88	420	39.30	1.7	419	1.03	10.9	–9.0
	10.00 to < 100.00	271	65	0.57	298	18.07	336	40.61	1.5	395	1.33	21.3	–20.7
	10 to <20	202	44	0.54	219	13.79	176	40.28	1.5	274	1.25	11.6	–12.5
	20 to <30	44	17	0.59	52	23.52	59	41.51	1.4	80	1.54	5.1	–5.4
	30 to <100	25	4	0.78	27	42.57	101	41.61	2.2	42	1.56	4.6	–2.7
	100.00 (default)	396	53	0.35	386	100.00	354	51.04	1.3	226	0.59	182.7	–180.1
	Subtotal	6,102	3,001	0.51	7,252	7.48	6,212	42.96	2.1	4,409	0.61	246.3	–236.9
Corporates, thereof specialised lending	0.00 to < 0.15	4,134	602	0.42	4,389	0.04	303	40.18	3.8	690	0.16	0.9	–0.3
	0.00 to <0.10	3,757	544	0.43	3,988	0.04	295	37.76	4.0	569	0.14	0.6	–0.2
	0.10 to <0.15	377	58	0.41	401	0.12	8	64.24	2.4	121	0.30	0.3	–0.1
	0.15 to < 0.25	590	424	0.30	717	0.19	22	60.05	3.2	301	0.42	0.8	–0.7
	0.25 to < 0.50	545	142	0.24	579	0.35	14	64.82	2.9	328	0.57	1.3	–0.9
	0.50 to < 0.75	699	484	0.39	888	0.59	24	62.04	3.2	644	0.73	3.2	–1.7
	0.75 to < 2.50	606	487	0.41	806	1.29	22	55.40	2.6	647	0.80	5.7	–3.0
	0.75 to <1.75	555	433	0.41	731	1.19	18	56.29	2.4	574	0.79	4.9	–2.4
	1.75 to <2.50	51	54	0.45	76	2.25	4	46.81	4.5	72	0.95	0.8	–0.6
	2.50 to 10.00	150	134	0.47	213	4.65	13	40.86	2.8	195	0.92	4.3	–4.3
	2.5 to <5	99	109	0.47	150	3.40	8	38.22	2.4	119	0.79	2.1	–2.4
	5 to <10	52	25	0.45	63	7.64	5	47.17	3.7	77	1.22	2.2	–1.9
	10.00 to < 100.00	56	1	0.20	57	10.80	3	31.91	4.3	60	1.07	1.9	–5.7
	10 to <20	56	1	0.20	56	10.77	2	31.89	4.3	60	1.07	1.9	–5.7
	20 to <30	0	–	–	0	26.51	1	45.06	1.0	0	1.53	0.0	0.0
	30 to <100	–	–	–	–	–	–	–	–	–	–	–	–
	100.00 (default)	86	58	0.21	98	100.00	7	70.82	2.4	28	0.28	69.6	–72.0
	Subtotal	6,867	2,332	0.38	7,747	1.75	408	48.30	3.5	2,892	0.37	87.8	–88.5

EU CR6_part 3: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	PD scale	On-balance sheet exposures €m	Off-balance-sheet exposures pre-CCF €m	Exposure weighted average CCF	Exposure post CCF and post CRM €m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors | €m	Density of risk weighted exposure amount	Expected loss amount €m	Value adjustments and provisions €m
Corporates, thereof other	0.00 to < 0.15	13,182	43,223	0.39	28,378	0.08	6,051	39.54	2.2	6,513	0.23	9.7	−7.8
	0.00 to <0.10	6,491	24,137	0.39	15,748	0.05	2,894	39.18	2.2	2,602	0.17	3.1	−2.2
	0.10 to <0.15	6,691	19,085	0.38	12,631	0.13	3,157	39.98	2.1	3,912	0.31	6.6	−5.6
	0.15 to < 0.25	9,279	27,808	0.38	19,476	0.19	5,653	39.22	2.2	7,528	0.39	15.0	−13.1
	0.25 to < 0.50	13,155	27,756	0.37	21,569	0.36	10,708	39.36	1.9	11,171	0.52	32.5	−26.0
	0.50 to < 0.75	5,092	14,444	0.31	8,651	0.59	5,724	39.87	1.7	5,746	0.66	21.9	−22.9
	0.75 to < 2.50	8,261	8,987	0.39	8,608	1.33	11,043	39.74	1.6	7,993	0.93	398.8	−41.1
	0.75 to <1.75	5,205	6,591	0.38	6,528	1.11	7,118	39.05	1.5	5,750	0.88	380.4	−27.2
	1.75 to <2.50	3,056	2,396	0.41	2,080	2.01	3,925	41.93	1.7	2,243	1.08	18.4	−13.9
	2.50 to 10.00	2,528	3,038	0.36	3,055	4.19	5,084	36.22	1.5	3,678	1.20	59.8	−47.0
	2.5 to <5	1,961	2,486	0.35	2,350	3.47	3,894	36.33	1.6	2,707	1.15	36.2	−36.1
	5 to <10	567	552	0.37	704	6.62	1,190	35.84	1.2	971	1.38	23.6	−10.8
	10.00 to < 100.00	790	888	0.37	891	22.99	1,642	38.21	1.5	1,746	1.96	126.2	−183.6
	10 to <20	668	392	0.35	592	14.35	720	38.73	1.2	1,136	1.92	41.9	−23.7
	20 to <30	30	438	0.38	188	27.36	191	38.07	3.0	440	2.34	23.4	−7.1
	30 to <100	92	58	0.45	112	61.42	731	35.74	0.8	170	1.52	61.0	−152.8
	100.00 (default)	2,778	766	0.33	1,836	101.16	1,348	56.86	1.1	1,138	0.62	1,086.1	−1,241.6
	Subtotal	55,065	126,910	0.37	92,463	2.70	47,253	39.70	2.0	45,514	0.49	1,750.0	−1,583.0
Retail secured by mortgages / SMEs	0.00 to < 0.15	810	116	0.50	866	0.07	4,208	19.16		24	0.03	0.1	−0.1
	0.00 to <0.10	638	79	0.48	675	0.05	3,145	18.97		15	0.02	0.1	−0.1
	0.10 to <0.15	172	37	0.54	191	0.12	1,063	19.83		9	0.05	0.0	0.0
	0.15 to < 0.25	221	28	0.57	235	0.20	1,639	22.16		17	0.07	0.1	−0.1
	0.25 to < 0.50	587	99	0.47	628	0.38	4,468	25.60		83	0.13	0.6	−1.0
	0.50 to < 0.75	387	45	0.56	409	0.62	2,995	27.30		84	0.20	0.7	−1.0
	0.75 to < 2.50	628	40	0.52	642	1.34	4,586	26.92		211	0.33	2.3	−4.4
	0.75 to <1.75	497	35	0.50	510	1.17	3,537	26.71		154	0.30	1.6	−3.2
	1.75 to <2.50	131	5	0.62	132	2.01	1,049	27.73		57	0.43	0.7	−1.2
	2.50 to 10.00	204	9	0.49	206	4.92	1,383	26.94		136	0.66	2.5	−4.8
	2.5 to <5	125	9	0.49	128	3.53	940	27.79		77	0.60	1.2	−2.4
	5 to <10	78	0	0.44	78	7.23	443	25.53		58	0.75	1.2	−2.3
	10.00 to < 100.00	63	4	0.39	64	39.28	365	23.10		55	0.86	4.5	−6.3
	10 to <20	31	3	0.32	31	13.67	216	27.14		34	1.10	1.1	−1.9
	20 to <30	9	1	0.62	10	23.93	68	28.66		13	1.32	0.7	−0.7
	30 to <100	23	0	0.48	23	79.82	81	15.36		8	0.34	2.7	−3.7
	100.00 (default)	137	18	0.24	138	100.00	738	37.31		77	0.56	32.9	−27.7
	Subtotal	3,036	360	0.49	3,187	5.89	20,382	24.62		687	0.22	43.6	−45.4

EU CR6_part 4: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	PD scale	On-balance sheet exposures €m	Off-balance-sheet exposures pre-CCF €m	Exposure weighted average CCF	Exposure post CCF and post CRM €m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors | €m	Density of risk weighted exposure amount	Expected loss amount €m	Value adjustments and provisions €m
Retail secured by mortgages / non-SMEs	0.00 to < 0.15	46,649	696	0.85	47,239	0.06	445,274	16.35		1,266	0.0	4.7	−9.2
	0.00 to <0.10	36,912	454	0.90	37,318	0.04	337,191	15.02		648	0.0	2.2	−5.4
	0.10 to <0.15	9,738	242	0.76	9,922	0.13	108,083	21.36		618	0.0	2.5	−3.8
	0.15 to < 0.25	20,333	235	0.85	20,533	0.20	205,713	16.24		1,343	0.0	6.3	−7.6
	0.25 to < 0.50	24,596	232	0.90	24,803	0.34	187,009	17.01		2,550	0.1	13.8	−21.8
	0.50 to < 0.75	5,428	63	0.90	5,484	0.60	42,031	17.42		849	0.1	5.4	−12.6
	0.75 to < 2.50	5,609	49	0.93	5,653	1.30	41,843	16.57		1,377	0.2	11.5	−42.9
	0.75 to <1.75	4,508	44	0.93	4,548	1.12	34,257	16.47		998	0.2	7.8	−28.2
	1.75 to <2.50	1,101	6	0.93	1,106	2.05	7,586	16.99		379	0.3	3.7	−14.7
	2.50 to 10.00	1,529	8	0.78	1,534	4.94	13,598	16.32		782	0.5	11.4	−30.5
	2.5 to <5	934	7	0.78	939	3.58	8,271	16.41		412	0.4	5.1	−15.6
	5 to <10	594	2	0.80	596	7.07	5,327	16.18		370	0.6	6.3	−15.0
	10.00 to < 100.00	580	1	0.69	581	25.84	5,974	16.60		502	0.8	23.2	−26.0
	10 to <20	255	0	0.70	255	13.94	2,428	16.50		210	0.8	5.4	−9.0
	20 to <30	169	1	0.85	169	23.92	1,659	16.40		162	0.9	6.4	−7.3
	30 to <100	157	0	0.51	157	47.21	1,887	16.96		129	0.8	11.4	−9.7
	100.00 (default)	574	1	0.97	575	100.0	6,584	43.70		323	0.5	103.3	−104.9
	Subtotal	105,299	1,286	0.86	106,403	1.00	948,026	16.70		8,991	0.0	179.6	−255.6
Retail qualifying revolving	0.00 to < 0.15	204	10,42	0.74	7,920	0.04	2,530,16	65.64		154	0.0	2.1	−1.3
	0.00 to <0.10	163	9,834	0.74	7,458	0.04	2,295,91	65.86		133	0.0	1.8	−0.9
	0.10 to <0.15	41	594	0.71	463	0.12	234,250	62.11		22	0.0	0.3	−0.3
	0.15 to < 0.25	67	671	0.68	526	0.20	264,768	58.58		35	0.0	0.6	−0.5
	0.25 to < 0.50	162	1,260	0.72	1,068	0.37	541,006	58.80		117	0.1	2.3	−2.1
	0.50 to < 0.75	121	460	0.72	450	0.61	246,113	58.63		74	0.1	1.6	−1.7
	0.75 to < 2.50	457	721	0.73	987	1.39	560,707	64.06		334	0.3	8.9	−13.3
	0.75 to <1.75	308	591	0.73	740	1.17	422,938	63.23		217	0.2	5.5	−7.8
	1.75 to <2.50	149	130	0.75	247	2.07	137,769	66.53		117	0.4	3.4	−5.5
	2.50 to 10.00	333	178	0.77	472	4.76	283,985	69.57		409	0.8	15.6	−22.9
	2.5 to <5	218	120	0.77	311	3.52	194,003	69.42		224	0.7	7.6	−12.2
	5 to <10	116	58	0.78	161	7.15	89,982	69.86		184	1.1	8.0	−10.8
	10.00 to < 100.00	115	46	0.74	150	23.57	77,998	69.88		277	1.8	24.5	−17.0
	10 to <20	68	27	0.76	88	13.59	50,046	70.15		146	1.6	8.4	−8.0
	20 to <30	22	6	0.74	26	23.99	13,842	70.47		56	2.1	4.4	−3.2
	30 to <100	26	14	0.70	35	48.21	14,110	68.78		75	2.1	11.7	−5.7
	100.00 (default)	91	6	0.94	97	100.0	30,327	78.10		126	1.3	68.3	−55.3
	Subtotal	1,550	13,77	0.73	11,669	1.54	4,535,06	64.61		1,526	0.1	124.0	−114.1

EU CR6_part 5: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	PD scale	On-balance sheet exposures €m	Off-balance-sheet exposures pre-CCF €m	Exposure weighted average CCF	Exposure post CCF and post CRM €m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors | €m	Density of risk weighted exposure amount	Expected loss amount €m	Value adjustments and provisions €m
Retail other / SME	0.00 to < 0.15	487	1,993	0.47	1,359	0.09	38,899	49.18		122	0.09	0.6	−0.7
	0.00 to <0.10	291	1,323	0.43	827	0.06	20,104	48.77		58	0.07	0.3	−0.3
	0.10 to <0.15	196	670	0.53	532	0.13	18,795	49.82		65	0.12	0.3	−0.3
	0.15 to < 0.25	313	1,089	0.50	804	0.20	38,320	50.92		133	0.17	0.8	−0.8
	0.25 to < 0.50	783	2,044	0.46	1,623	0.36	72,794	46.42		361	0.22	2.6	−2.9
	0.50 to < 0.75	636	839	0.51	1,010	0.63	85,591	43.63		304	0.30	2.7	−3.3
	0.75 to < 2.50	2,153	2,068	0.47	2,944	1.43	221,801	51.37		1,446	0.49	21.7	−31.2
	0.75 to <1.75	1,539	1,701	0.46	2,171	1.22	167,680	51.05		1,007	0.46	13.5	−18.1
	1.75 to <2.50	614	367	0.53	773	2.03	54,121	52.26		439	0.57	8.2	−13.1
	2.50 to 10.00	1,168	501	0.48	1,348	4.60	91,442	52.40		870	0.65	31.8	−55.9
	2.5 to <5	780	416	0.46	933	3.53	64,831	53.27		595	0.64	17.5	−30.7
	5 to <10	388	85	0.55	415	6.98	26,611	50.47		275	0.66	14.4	−25.1
	10.00 to < 100.00	358	65	0.45	370	24.34	20,804	49.67		324	0.87	46.2	−48.7
	10 to <20	215	55	0.42	226	13.92	12,825	48.52		179	0.79	15.0	−21.9
	20 to <30	69	5	0.57	70	24.17	4,073	45.93		69	0.98	7.6	−8.9
	30 to <100	75	5	0.62	74	56.34	3,906	56.71		76	1.02	23.6	−18.0
	100.00 (default)	437	61	0.44	422	100.00	25,129	70.95		511	1.21	278.0	−247.6
	Subtotal	6,335	8,659	0.47	9,880	6.39	594,780	50.34		4,071	0.41	384.5	−391.1
Retail other / non-SME	0.00 to < 0.15	4,193	2,952	0.88	6,776	0.06	242,426	47.43		564	0.08	2.0	−7.6
	0.00 to <0.10	3,352	2,172	0.86	5,204	0.04	182,286	46.60		312	0.06	1.0	−4.8
	0.10 to <0.15	841	780	0.94	1,572	0.13	60,140	50.18		252	0.16	1.0	−2.8
	0.15 to < 0.25	1,929	1,152	0.96	3,028	0.20	74,921	50.91		684	0.23	3.2	−8.4
	0.25 to < 0.50	2,751	1,342	0.94	4,007	0.34	136,464	50.64		1,285	0.32	7.3	−17.3
	0.50 to < 0.75	798	401	0.92	1,161	0.60	138,367	50.37		550	0.47	4.2	−7.9
	0.75 to < 2.50	1,519	386	0.88	1,845	1.42	630,065	54.28		1,383	0.75	18.1	−25.6
	0.75 to <1.75	1,067	311	0.88	1,331	1.18	416,112	53.53		941	0.71	10.9	−15.6
	1.75 to <2.50	451	75	0.89	514	2.06	213,953	56.22		443	0.86	7.1	−10.0
	2.50 to 10.00	563	90	0.86	635	4.57	383,755	57.00		633	1.00	20.7	−23.8
	2.5 to <5	391	59	0.86	438	3.48	271,134	58.89		433	0.99	10.9	−13.2
	5 to <10	172	32	0.85	197	6.99	112,621	52.82		200	1.01	9.8	−10.6
	10.00 to < 100.00	186	12	0.74	194	25.60	90,981	56.30		269	1.39	36.2	−22.9
	10 to <20	101	7	0.79	106	14.08	51,642	55.86		138	1.30	10.7	−8.2
	20 to <30	37	2	0.62	38	23.93	18,093	55.62		57	1.50	8.7	−4.9
	30 to <100	48	3	0.71	49	51.62	21,246	57.75		74	1.49	16.8	−9.9
	100.00 (default)	265	6	0.48	255	100.00	71,469	66.32		215	0.84	179.0	−147.0
	Subtotal	12,206	6,341	0.91	17,901	2.18	1,768,448	50.34		5,582	0.31	270.6	−260.5

Table EU CR7 shows the effect of credit derivatives used as CRM techniques on RWA per exposure class as per Article 453 (j) CRR as of 31 December 2024.

The table shows that Commerzbank does not hold any exposures with a FIRB approach.

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

		a	b
	€m	**Pre-credit derivatives risk weighted exposure amount**	**Actual risk weighted exposure amount**
1	**Exposures under F-IRB**	**–**	**–**
2	Central governments or central banks	–	–
3	Institutions	–	–
4	Corporates	–	–
4.1	thereof SMEs	–	–
4.2	thereof specialised lending	–	–
5	**Exposures under A-IRB**	**85,589**	**85,720**
6	Central governments or central banks	1,186	1,186
7	Institutions	9,546	9,574
8	Corporates	54,000	54,103
8.1	thereof SMEs	4,409	4,409
8.2	thereof specialised lending	4,180	4,180
9	Retail	20,857	20,857
9.1	thereof secured by mortgages / SMEs	687	687
9.2	thereof secured by mortgages / non-SMEs	8,991	8,991
9.3	thereof qualifying revolving	1,526	1,526
9.4	thereof other / SME	4,071	4,071
9.5	thereof other / non-SMEs	5,582	5,582
10	**Total**	**85,589**	**85,720**

Table EU CR7-A shows pro rata the various hedges of the total risk position by exposure classes according to Article 453 g) CRR as of 31 December 2024 for the AIRB Portfolio. As Commerzbank does not have any F-IRB positions, a corresponding table is not required.

EU CR7-A: IRB approach – Disclosure of the extent of the use of CRM techniques

		a	b	c	d	e	f	g	h	i	j	k	l	m	n
A-IRB		Total exposures	Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
			Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)		RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
	€m		Part of exposures covered by Financial Collaterals (%)	Part of exposures covered by Other eligible collaterals (%)	Part of exposures covered by Immovable property Collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)	Part of exposures covered by Other funded credit protection (%)	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 (%)		
1	Central governments or central banks	1,360	–	–	–	–	–	–	–	–	–	–	–	1,184	1,186
2	Institutions	43,548	2.60	0.62	0.04	0.12	0.46	–	–	–	–	–	–	9,625	9,574
3	Corporates	109,318	2.23	7.22	4.56	0.80	1.86	0.03	–	0.03	–	0.99	–	51,737	54,103
3.1	thereof SMEs	7,252	4.23	29.49	23.00	3.05	3.44	0.34	–	0.34	–	12.13	–	4,429	4,409
3.2	thereof specialised lending	9,603	0.00	11.21	11.13	0.03	0.05	–	–	–	–	–	–	4,180	4,180
3.3	thereof other	92,464	2.31	5.06	2.43	0.70	1.93	0.01	–	0.01	–	0.22	–	43,128	45,515
4	Retail	149,040	1.72	52.73	52.64	0.04	0.05	0.34	–	0.34	–	–	–	20,505	20,857
4.1	thereof secured by mortgages / SMEs	3,187	1.32	64.80	64.62	0.05	0.14	0.66	–	0.66	–	–	–	690	687
4.2	thereof secured by mortgages / non-SMEs	106,403	1.23	71.80	71.80	–	–	0.34	–	0.34	–	–	–	8,992	8,991
4.3	thereof qualifying revolving	11,669	–	–	–	–	–	–	–	–	–	–	–	1,526	1,526
4.4	thereof other / SME	9,880	2.90	1.32	0.01	0.62	0.68	0.34	–	0.34	–	–	–	4,108	4,071
4.5	thereof other / non-SMEs	17,901	5.11	0.00	0.00	–	–	0.51	–	0.51	–	–	–	5,189	5,582
5	**Total**	**303,266**	**2.02**	**28.61**	**27.52**	**0.33**	**0.76**	**0.18**	**–**	**0.18**	**–**	**0.36**	**–**	**83,052**	**85,720**

Table EU CR8 below shows changes in the RWA of the credit risk in the IRBA portfolio of Commerzbank Group between 30 September 2024 and 31 December 2024.

The RWAs from credit risks remained nearly stable in the fourth quarter of 2024 due to the following opposing effects: Increases resulted from a model adjustment at mBank and exchange rate changes (primarily USD). On the other hand, RWA-reducing effects mainly stemmed from parameter improvements in retail and institutions, as well as RWA relief due to new securitization transactions.

Table EU CR8 shows the information according to Article 438 h) CRR as of 31 December 2024:

EU CR8: RWA flow statements of credit risk exposures under the IRB approach

		a
	€m	Risk-weighted exposure amount (RWA)
1	**RWA as at the end of the previous reporting period**	**97,330**
2	Asset size	−515
3	Asset quality	−1,773
4	Model updates	1,400
5	Methodology and policy	–
6	Acquisitions and disposals	–
7	Foreign exchange movements	854
8	Other	−33
9	**RWA as at the end of the current reporting period**	**97,263**

In the following we show the portfolios with the simple risk-weight approach. The technical implementation standards provide for a subdivision into Specialised lending: Project finance (slotting approach), Income-producing real estate and high volatility com-mercial real estate (slotting approach), object finance (slotting approach) as well as commodities finance (slotting approach) and equity exposures under the simple risk-weighted approach. For Com-merzbank only the special financing of real estate is relevant as part of the slotting approach, so only Table EU CR10.2 is shown.

Table EU CR10.2 shows the information referred to in Article 438 e) CRR as of 31 December 2024:

EU CR10.2: Specialised lending: Income-producing real estate and high volatility commercial real estate (Slotting approach)

€m		a	b	c	d	e	f
Regulatory categories	Remaining maturity	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
Category 1	Less than 2.5 years	8	1	50%	9	4	–
	Equal to or more than 2.5 years	92	–	70%	92	54	0
Category 2	Less than 2.5 years	484	338	70%	710	443	3
	Equal to or more than 2.5 years	712	11	90%	716	561	6
Category 3	Less than 2.5 years	111	33	115%	130	130	4
	Equal to or more than 2.5 years	114	2	115%	116	116	3
Category 4	Less than 2.5 years	–	–	250%	–	–	–
	Equal to or more than 2.5 years	–	–	250%	–	–	–
Category 5	Less than 2.5 years	39	–	-	39	–	20
	Equal to or more than 2.5 years	71	0	-	71	–	36
Total	**Less than 2.5 years**	**643**	**372**		**888**	**577**	**26**
	Equal to or more than 2.5 years	**989**	**13**		**995**	**731**	**45**

Loan loss provisions for default risks

Responsibility for processing non-performing loans is mainly carried out by Group Credit Risk. This division brings together the specific expert knowledge needed to support customers undergoing restructuring and to successfully process terminated commitments including collateral realisation.

IFRS 9 stipulates that impairments for credit risks from loans and securities that are not recognised at fair value through profit or loss must be recognised using a 3-stage model based on expected credit losses. In the Commerzbank Group, the following financial instruments are included in the scope of this impairment model:

- financial assets in the form of loans and advances as well as securitised debt instruments measured at amortised cost;
- financial assets in the form of loans and advances as well as securitised debt instruments measured at fair value through other comprehensive income (FVOCI);
- lease receivables;
- irrevocable lending commitments which under IFRS 9 are not measured at fair value through profit or loss;
- financial guarantees within the scope of IFRS 9 that are not measured at fair value through profit or loss.

The Group determines the impairment using a 3-stage model based on the following requirements:

- In stage 1, as a rule all financial instruments are recognised if their risk of a loan loss (hereinafter default risk) has not risen significantly since their initial recognition. In addition, Commerzbank makes use of the option under IFRS 9 B 5.5.23 (so-called Low Credit Risk Excemption or LCRE) and classifies transactions that have a low default risk on the reporting date in Stage 1. These are securities and financial instruments with states, local or regional authorities of the OECD whose internal credit rating on the reporting date is in the investment grade range (corresponding to Commerzbank rating 2.8 or better). An impairment must be recognised for financial instruments in stage 1 in the amount of the expected credit losses from possible events of default over the term of the transaction, subject to a maximum of 12 months (12-month ECL).
- Stage 2 includes those financial instruments with default risk that has risen significantly since their initial recognition and which are not subject to LCRE at the financial reporting date. In addition to a customer-specific change in the PD, Commerzbank defines further qualitative criteria whose presence is assumed to denote a significant increase in default risk. Instruments are then allocated to stage 2 independently of the individual change in PD. Impairments in stage 2 are recognised in the amount of the financial instrument's lifetime expected credit loss (LECL). For financial instruments that are committed for an unlimited period (open transactions), a top-down approach is used to determine the LECL as a percentage of the current loss at default (LaD) on the basis of realised historical losses.
- Financial instruments that are classified as impaired as at the reporting date are allocated to stage 3. As the criterion for this, Commerzbank uses the definition of a default pursuant to Article 178 CRR as well as the supplementary EBA guidance on the application of the definition of default pursuant to Article 178 CRR. This approach is consistent because the ECL calculation also uses statistical risk parameters derived from the Basel IRB approach, which are modified to meet the requirements of IFRS 9. The following events are decisive in determining the default of a customer:

  - Overdraft (over 90 days past due)
  - Unlikely to pay (probability of settlement of the liabilities)
  - Restructuring / destressed Restructuring with concession
  - The Bank has demanded immediate repayment of its claims
  - The customer is in insolvency proceedings

The LECL is likewise used as the value of the required impairment for stage-3 financial instruments in default. When determining the LECL, the Group distinguishes in principle between significant and insignificant cases. The amount of the LECL for insignificant transactions (volumes up to €10m) is determined based on statistical risk parameters. The LECL for significant transactions (volumes greater than €10m) is the expected value of the losses derived from individual expert assessments of future cash flows based on several potential scenarios and their probability of occurrence. The scenarios and probabilities are based on assessments by recovery and resolution specialists. For each scenario – without regard to whether it is a continuation or sale scenario – the timing and amount of the expected future cash flows are estimated. Both the customer-specific and the macroeconomic situation are taken into account (for example commodity price developments), as well as the sector environment, with a view to the future. The estimate is also based on external information. Sources include indices (e.g. World Corruption Index), forecasts (e.g. by the IMF), information from global associations of financial service providers (e.g. the Institute of International Finance) and publications from rating agencies and auditing firms.

If a default criterion no longer applies, the financial instrument recovers and, after the applicable probation period has been adhered to, is no longer allocated to stage 3. After recovery, a new assessment is made based on the updated rating information to see if the default risk has increased significantly since initial recognition in the balance sheet and the instrument is allocated to stage 1 or stage 2 accordingly.

Financial instruments which when initially recognised are already considered impaired as per the aforementioned definition (purchased or originated credit-impaired, or POCI) are handled outside the three-stage impairment model and are therefore not allocated to any of the three stages. The initial recognition is based on fair value without recording an impairment, however using an effective interest rate that is adjusted for creditworthiness. The impairment recognised in the income statement impairment recognised in subsequent periods equals the cumulative change in the LECL since the initial recognition in the balance sheet. The LECL remains the basis for the measurement, even if the value of the financial instrument has risen.

Claims are written off in the balance sheet as soon as it is reasonable to assume that a financial asset is not realisable in full or in part and that the claims are therefore uncollectible. Uncollectability may arise in the settlement process for various objective reasons, such as the demise of the borrower without realisable assets in the estate or completion of insolvency proceedings without further prospect of payments. Moreover, loans are generally regarded as (partially) uncollectible at the latest 720 days after their due date and are (partially) written down to the expected recoverable amount within the framework of existing loan loss provisions. Such a (partial) write-down has no direct impact on ongoing debt collection measures.

Assessment of a significant increase in default risk

Commerzbank's rating systems combine into the PD all available quantitative and qualitative information relevant for forecasting the default risk. This metric is based primarily on a statistical selection and weighting of all available indicators. In addition, the PD adjusted in accordance with IFRS 9 requirements takes into account not only historical information and the current economic environment, but also, in particular, forward-looking information such as the forecast for the development of macroeconomic conditions.

Commerzbank generally uses the PD only as a frame of reference for assessing whether the default risk of a financial instrument has risen significantly since the date of its initial recognition. By anchoring the review of the relative transfer criterion in the robust processes and procedures of the Bank's Group-wide credit-risk-management framework (in particular, early identification of credit risk, controlling of overdrafts and the re-rating process), the Bank ensures that a significant increase in the default risk is identified in a reliable and timely manner based on objective criteria.

Commerzbank applies additional qualitative criteria for the assignment to stage 2. These are:

- clients where a financial instrument is substantially past due for more than 20 days,
- Customers who were transferred to the Credit Watchlist as part of the risk early warning processes,
- clients managed in intensive care
- clients whose Commerzbank credit rating is 4.6 or worse on the reporting date;
- clients whose Commerzbank credit rating on the reporting date is 4.0 or worse and whose external credit rating is 5.0 or worse;
- customers who are granted a forbearance measure according to Article 47b CRR that does not lead to a default (stage 3);
- Financial instruments whose PD on the reporting date has at least tripled compared to the PD when the balance sheet was accessed and whose credit rating on the reporting date is higher than 2.8. (Threefold PD).
- Collective staging assignment for individual sub-portfolios. As of the current reporting date, this includes
  - Customers belonging to a sub-sector for which an industry traffic light of yellow or red was assigned on the reporting date.
  - Customers who were categorized as F - H in a climate-related credit risk assessment process (scale from A+ to H). For residential properties, the "Loan-to-Value" was considered alongside the energy efficiency class.

The review to determine whether the default risk as at the financial reporting date has risen significantly since the initial recognition of the respective financial instrument is performed as at the end of the reporting period. This review compares the observed probability of default over the residual maturity of the financial instrument (lifetime PD) against the lifetime PD over the same period as expected on the date of initial recognition. In accordance with IFRS requirements, the comparison between original and current PD is made on the basis of the probability of default over a period of 12 months after the reporting date ("12-month PD"). In these cases, the Bank uses equivalence analyses to demonstrate that no material variances have occurred compared with an assessment using the lifetime PD.

A quantile and then thresholds in the form of rating levels are set using a statistical procedure in order to determine whether an increase in the PD compared with the initial recognition date is "significant". These thresholds, which are differentiated by rating models, represent a critical degree of variance from the expectation of the average PD development. If the current PD exceeds this threshold, a critical deviation is present and leads to an assignment to stage 2. In order to ensure an economically sound assignment of the stage, transaction-specific factors are taken into account, including the extent of the PD at the initial recognition date, the term to date and the remaining term of the transaction.

Commerzbank generally refrains from checking whether there is a significant increase in the default risk as at the reporting date compared to the time of acquisition of the relevant financial instrument for those transactions for which there is a low default risk as at the reporting date (IFRS 9 B 5.5.23 option). These are securities and financial instruments with states, local or regional authorities of the OECD whose internal credit rating on the reporting date is in the investment grade range (corresponding to Commerzbank rating 2.8 or better).

Financial instruments are retransferred from stage 2 to stage 1 if at the end of the reporting period the default risk is no longer significantly elevated compared with the initial recognition date.

Calculation of the expected credit loss

Commerzbank calculates the ECL as the probability-weighted, unbiased and discounted expected value of future loan losses over the total residual maturity of the respective financial instrument. The 12-month ECL used for the recognition of impairments in stage 1 is the portion of the LECL that results from default events which are expected to occur within twelve months following the end of the reporting period. The determination of the ECL is carried out according to the IFRS9 prescribed stage model.

The ECL for stage 1 and stage 2 as well as for insignificant financial instruments in stage 3 is determined on an individual transaction basis taking into account statistical risk parameters. These parameters have been derived from the Basel IRB approach and modified to meet the requirements of IFRS 9. The significant main parameters used in this determination include the:

- customer-specific PD;
- loss given default (LGD); and the
- exposure at default (EaD).

The Group derives the PD by applying an internal ratings procedure, which is based on the respective customer group. The determination includes a wide variety of qualitative and quantitative variables, which are taken into account or weighted based on the respective procedure. The allocation of the PD ranges to the internal rating categories and the reconciliation to external ratings can be found in the master scale contained in the section rating procedures in this report.

The LGD is the forecasted loss given default as a percentage of the exposure at default (EaD), taking into account collateral and the capital recovery potential on the unsecured portion. The Group's estimates, which are made specifically for different types of collateral and customer groups, are determined using both observed historical portfolio data and diverse external information, such as indices and data regarding the development of purchasing power. The EaD is the expected loan utilisation as at the default date, taking into account a (partial) drawing of open lines.

All risk parameters used from the Bank's internal models have been adjusted to meet the specific requirements of IFRS 9, and the forecast horizon has been extended accordingly to cover the entire term of the financial instruments. For example, the forecast for the development of the exposure over the entire term of the financial instrument therefore also includes, in particular, contractual and statutory termination rights.

In the case of loan products that consist of a utilised loan amount and an open credit line and for which in customary com-mercial practice the credit risk is not limited to the contractual notice period (in Commerzbank this relates primarily to revolving products without a contractually agreed repayment structure, such as overdrafts and credit card facilities), the LECL must be determined using a behavioral maturity, which typically exceeds the maximum contractual period. In order to ensure that the LECL for these products is determined in an empirically sound manner in compliance with IFRS 9 requirements, Commerzbank calculates the LECL directly for these products based on realised historical losses.

As a rule, the Group estimates the risk parameters specific to IFRS 9 based not only on historical default information but also, in particular, on the current economic environment (point-in-time perspective) and forward-looking information. This assessment primarily involves reviewing the effects which the Bank's macro-economic forecasts will have regarding the amount of the ECL, and including these effects in the determination of the ECL This is based on an expert estimate derived from the macroeconomic scenario, which takes account of factors such as GDP growth, inflation, long-term interest rate developments and the unemployment rate.

Potential effects from non-linear correlations between different macroeconomic scenarios and the ECL are corrected using a separately deter-mined adjustment factor. The baseline scenario and a pessimistic and an optimistic scenario are included in the determination of the factor. The weightings for the individual scenarios are also determined by relevant experts and are regulated within the framework of a policy.

IFRS 9 requires the inclusion of forward-looking information when determining the expected credit loss. However, the IFRS 9 ECL model result implemented at Commerzbank does not take into account forward-looking effects resulting from unforeseeable, singular events, such as natural disasters, material political decisions or military conflicts. Such risks are provided for by a top-level adjustment (TLA). The examination as to whether such TLAs with the involvement of senior management are necessary, as well as their possible implementation, are regulated in a policy.

In the 2024 financial year, such an adjustment of the IFRS 9 ECL model result was further deemed necessary because the expected negative impacts in the baseline scenario are not fully covered by the parameters used in the relevant models.

The methodology for determining the adaptation requirements of the ECL model result is the same as for the secondary effects TLA in the year 2023.

The tables on loan loss provisions below show the gross carrying values of all risk positions in default and not in default in the IFRS categories AC and FVOCI, including the associated stock of credit risk adjustments, the credit risk adjustment charges in the year 2024 as well as the accumulated write-offs.

The gross carrying values for risk positions not in default also include loans that are past due by at least one day up to 90 days but are not defined as in default by virtue of the minimum threshold (1.0% of the limit or €100 in the retail business or €500 in the individual business).

Commerzbank shall use its definition of default in accordance with Article 178 CRR and the supplementary EBA guideline (EBA/GL/2016/07 from 18.1.2017 on the application of the definition of default in accordance with Article 178 CRR of the Regulation (EU) No. 575/2013) as a criterion for the default. Commerzbank Group prepares consolidated financial statements based on the International Financial Reporting Standards (IFRS) in accordance with paragraph 315a(1) of the German Commercial Code (HGB). Credit risk mitigation techniques applicable to mitigate risks for the purpose of determining the capital requirement are not relevant for the determination of the claim amount in terms of accounting.

The information in the tables below is structured mainly by risk exposure class. The breakdown by country and economic sector is shown in tables CQ4 and CQ5. The following definitions are used:

- Specific credit risk adjustments shall include the following items in accordance with Article 4 I(95) CRR and EU183/2014 (last confirmed in EBA/OP/2017/02):
  - The sum of Lifetime Expected Credit Loss (LECL) for significant claims in default, determined on the basis of individual cash flow estimates, taking into account various possible scenarios (loan loss provision stage 3 on-balance and off-balance, significant).
  - LECL for non-significant exposures in default, transaction-based determined on the basis of statistical risk parameters (stage 3 on balance and off balance, non-significant)
  - LECL for on- and off-balance exposures not in default showing a significant increase in credit risk as according to IFRS9 (stage 2 on- and off-balance) and
  - ECL for on- and off-balance exposures not in default and not showing a significant increase in credit risk as according to IFRS9 (stage 1 on- and off-balance).
- General credit risk adjustments according to the definition in EU183/2014 include the following:
  - the secondary effects TLA amounting to 228 million euros
  - collective staging assignment for individual sub-portfolios. As of the current reporting date, this includes
    - Customers belonging to a sub-sector for which an industry traffic light of yellow or red was assigned on the reporting date.
    - Customers who were categorized as F - H in a climate-related credit risk assessment process (scale from A+ to H). For residential properties, the "Loan-to-Value" was considered alongside the energy efficiency class.
- The column accumulated write-offs is the balance of write-ups and write-downs

The following section contains an overview of the total portfolio, which is subject to default from credit risk and various further evaluations according to the specifications of EBA ITS 2020/04.

Instruments with counterparty credit risk are not opposed to this chapter. The disclosure is carried out separately in the section default risk from counterparty credit risk.

The following tables also do not contain synthetic securitisation positions of Commerzbank with a regulatory recognized risk transfer in accordance with Articles 244 and 245 of the CRR, nor do they contain any securitisation positions from the sponsor or investor business. These items are shown in the separate chapter securitisations.

The gross carrying value of the defaulted risk positions is at €6.7bn as of 31 December 2024 (December 2023: €5.0bn). Additional information can be found in the annual report as of December 31, 2024, in the chapter on default risks. In addition to the loan loss provisions presented in the tables, the gross carrying values are also offset by collateral, which is taken into account accordingly in the calculation of the expected credit loss (specific credit risk adjustments).

The breakdown by gross carrying values reflects the Commerzbank Group's focus on Germany and selected markets throughout Europe. This means that the vast majority of the expected credit loss and the loan loss provisions, respectively, are attributable to borrowers based in these regions.

Commerzbank does not display table 9 on foreclosed assets, which is also required in the above-mentioned EBA guidelines, as it currently has no foreclosed assets in stock.

The following table EU CR1 shows the risk positions divided into performing and non-performing exposures, separated by the type of debt securities (Cash balances at central banks and other demand deposits, loans and advances, debt securities and off-balance-sheet exposure) and their counterparties as defined in Article 442 c) and f) CRR as of 31 December 2024:

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

		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**						**Accumulated partial write-offs**	**Collaterals and financial guarantees received**	
		Performing Portfolio			**Non-performing Portfolio**			**Performing Portfolio - accumulated impairment and provisions**			**Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**				**On performing exposures**	**On non-performing exposures**
	€m		**thereof Stage 1**	**thereof Stage 2**		**thereof Stage 2**	**thereof Stage 3**		**thereof Stage 1**	**thereof Stage 2**		**thereof Stage 2**	**thereof Stage 3**			
005	**Cash balances at central banks and other demand deposits**	**71,836**	**71,648**	**188**	**–**	**–**	**–**	**−7**	**–**	**−7**	**–**	**–**	**–**		**–**	**–**
010	**Loans and advances**	**340,193**	**233,381**	**43,657**	**4,806**	**–**	**4,476**	**−1,032**	**−262**	**−767**	**−2,108**	**–**	**−2,037**	**−939**	**185,403**	**1,602**
020	Central banks	6,131	2,263	–	–	–	–	−2	−2	–	–	–	–	–	5,930	–
030	Central governments	19,052	18,140	912	155	–	134	−3	−2	−1	−13	–	−7	–	931	124
040	Credit institutions	44,740	16,971	1,857	112	–	105	−22	−8	−15	−19	–	−19	−1	28,798	19
050	Other financial corporations	46,574	12,689	1,466	80	–	79	−11	−4	−7	−14	–	−14	−1	32,634	3
060	Non-financial corporations	93,375	68,701	23,811	3,240	–	3,005	−624	−140	−484	−1,547	–	−1,501	−585	33,525	873
070	thereof SMEs	27,636	21,482	6,071	1,191	–	1,122	−285	−82	−202	−542	–	−532	−141	13,965	323
080	Households	130,321	114,619	15,610	1,219	–	1,153	−369	−106	−261	−514	–	−497	−353	83,586	583
090	**Debt securities**	**109,454**	**104,409**	**1,129**	**870**	**–**	**870**	**−54**	**−31**	**−23**	**−34**	**–**	**−34**	**–**	**–**	**657**
100	Central banks	4,803	3,469	–	–	–	–	−1	−1	–	–	–	–	–	–	–
110	Central governments	33,389	31,965	529	–	–	–	−31	−16	−15	–	–	–	–	–	–
120	Credit institutions	31,222	30,625	283	608	–	608	−4	−3	−1	−24	–	−24	–	–	485
130	Other financial corporations	34,537	33,483	73	82	–	82	−7	−4	−3	−3	–	−3	–	–	–
140	Non-financial corporations	5,502	4,867	244	179	–	179	−11	−7	−5	−7	–	−7	–	–	172

		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**						**Accumulated partial write-offs**	**Collaterals and financial guarantees received**	
		Performing Portfolio			**Non-performing Portfolio**			**Performing Portfolio - accumulated impairment and provisions**			**Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**				**On performing exposures**	**On non-performing exposures**
	€m		**thereof Stage 1**	**thereof Stage 2**		**thereof Stage 2**	**thereof Stage 3**		**thereof Stage 1**	**thereof Stage 2**		**thereof Stage 2**	**thereof Stage 3**			
150	**Off-balance-sheet exposures**	**196,570**	**116,606**	**27,542**	**986**	**–**	**463**	**333**	**79**	**215**	**239**	**–**	**112**		**6,037**	**55**
160	Central banks	–	–	–	–	–	–	–	–	–	–	–	–		39	–
170	Central governments	1,672	1,275	72	31	–	31	–	–	–	1	–	1		1	–
180	Credit institutions	9,998	2,467	105	–	–	–	14	1	–	–	–	–		792	–
190	Other financial corporations	13,450	9,808	535	14	–	8	6	3	3	5	–	–		1,045	–
200	Non-financial corporations	146,067	79,189	25,456	926	–	412	253	59	168	227	–	105		3,361	54
210	Households	25,383	23,868	1,375	15	–	12	60	16	44	7	–	6		799	1
220	**Total**	**718,053**	**526,044**	**72,516**	**6,662**	**–**	**5,809**	**−1,419**	**−372**	**−1,005**	**−2,381**	**–**	**−2,183**	**−939**	**191,440**	**2,314**

In accordance with the EBA risk Dash Board's guidance, Commerzbank's NPE rate as of 31 December 2024 was 1.1%.

In Table EU CR1-A, the net exposure value for loans and advances and debt securities is broken down by maturity according to Article 442 g) CRR as of 31 December 2024.

EU CR1-A: Maturity of exposures

		a	b	c	d	e	f
		Net exposure values					
	€m	Can be terminated at any time	<= 1 year	> 1 year <= 5 years	> 5 years	No specified maturity	Total
1	Loans and advances	16,724	112,685	53,606	153,957	–	336,972
2	Debt securities	2,861	11,998	40,472	54,809	–	110,139
3	**Total**	**19,586**	**124,683**	**94,077**	**208,766**	**–**	**447,112**

Table EU CR2 shows the development of the stock of non-performing loans and advances required under Article 442 f) CRR from 30 June 2024 to 31 December 2024.

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

		a
	€m	Exposure at Default
010	**Initial stock of non-performing loans and advances**	**5,471**
020	Inflows to non-performing portfolios	2,320
030	Outflows from non-performing portfolios	–143
040	Outflows due to write-offs	–755
050	Outflow due to other situations	–441
060	**Final stock of non-performing loans and advances**	**6,451**

The following table EU CQ1 shows the credit quality of forborne exposures according to Article 442 c) CRR as of 31 December 2024, broken down by the type of debt instruments and its counterparties. The quality is assessed based on the measures initiated – shown for performing, defaulted and impaired exposures, as well as the provisions and the collateral, provide information on the quality of the forborne portfolio.

EU CQ1 Credit quality of forborne exposures

		a	b	c	d	e	f	g	h
	€m	Gross carrying value of positions with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collaterals and financial guarantees received on forborne exposures	
		Performing Portfolio	Non-performing Portfolio			On performing exposures with forbearance measures	On non-performing exposures with forbearance measures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
				Of which defaulted	Of which impaired				
005	Cash balances at central banks and other demand deposits	–	–	–	–	–	–	–	–
010	Loans and advances	2,307	2,033	2,033	2,029	−38	−877	1,350	598
020	Central banks	–	–	–	–	–	–	–	–
030	Central governments	–	27	27	27	–	−5	18	18
040	Credit institutions	–	–	–	–	–	–	–	–
050	Other financial corporations	9	4	4	4	–	−1	2	2
060	Non-financial corporations	1,932	1,744	1,744	1,739	−28	−803	979	441
070	Households	365	259	259	259	−10	−68	351	138
080	Debt securities	–	682	682	682	–	−25	657	657
090	Loan commitments given	781	333	333	333	12	84	19	6
100	**Total**	**3,088**	**3,048**	**3,048**	**3,044**	**−50**	**−986**	**2,026**	**1,261**

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

		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount / nominal amount											
		Performing Portfolio			**Non-performing Portfolio**								
	€m		**Not past due or Past due ≤ 30 days**	**Past due > 30 days ≤ 90 days**		**Unlikely to pay that are not past-due or past-due ≤ 90 days**	**Past due > 90 days ≤ 180 days**	**Past due > 180 days ≤ 1 year**	**Past due > 1 year ≤ 2 years**	**Past due > 2 year ≤ 5 years**	**Past due > 5 year ≤ 7 years**	**Past due > 7 years**	**Of which: defaulted**
005	**Cash balances at central banks and other demand deposits**	**71,836**	**71,836**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
010	**Loans and advances**	**340,193**	**339,745**	**448**	**4,806**	**2,582**	**305**	**566**	**736**	**458**	**66**	**94**	**4,806**
020	Central banks	6,131	6,131	–	–	–	–	–	–	–	–	–	–
030	Central governments	19,052	19,050	2	155	27	–	10	6	112	–	–	155
040	Credit institutions	44,740	44,661	79	112	92	–	8	5	–	–	7	112
050	Other financial corporations	46,574	46,574	1	80	76	–	1	1	1	1	–	80
060	Non-financial corporations	93,375	93,158	217	3,240	1,922	203	334	480	217	37	45	3,240
070	thereof SMEs	27,636	27,526	110	1,191	663	85	164	179	75	15	9	1,191
080	Households	130,321	130,172	150	1,219	465	101	213	243	128	28	42	1,219
090	**Debt securities**	**109,454**	**109,447**	**7**	**870**	**870**	**–**	**–**	**–**	**–**	**–**	**–**	**870**
100	Central banks	4,803	4,803	–	–	–	–	–	–	–	–	–	–
110	Central governments	33,389	33,389	–	–	–	–	–	–	–	–	–	–
120	Credit institutions	31,222	31,222	–	608	608	–	–	–	–	–	–	608
130	Other financial corporations	34,537	34,530	7	82	82	–	–	–	–	–	–	82
140	Non-financial corporations	5,502	5,502	–	179	179	–	–	–	–	–	–	179
150	**Off-balance-sheet exposures**	**196,570**			**986**								**986**
160	Central banks	–			–								–
170	Central governments	1,672			31								31
180	Credit institutions	9,998			–								–
190	Other financial corporations	13,450			14								14
200	Non-financial corporations	146,067			926								926
210	Households	25,383			15								15
220	**Total**	**718,053**	**521,028**	**455**	**6,662**	**3,452**	**305**	**566**	**736**	**458**	**66**	**94**	**6,662**

Table EU CQ4 shows the quality of the non-performing exposures by geography according to Article 442c) and e) CRR as of 31 December 2024. The countries listed in the table account for more than 90% of Commerzbank's total exposure (both balance and off-balance sheet). The remaining countries are summarized in the line "others".

EU CQ4: Quality of non-performing exposures by geography

		a	c	e	f	g
	€m	Gross carrying amount /nominal amount	Of which defaulted	Accumulated impairment	Provisions on off-balance sheet commitments and financial guarantee given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
010	**On balance sheet exposures**	**455,323**	**5,675**	**−3,215**		**−13**
020	Germany	225,132	2,773	−1,950		−5
030	Poland	42,423	1,112	−805		−8
040	Cayman Islands	22,024	–	0		–
050	United Kingdom of Great Britain and Northern Ireland	21,398	833	−50		0
060	United States of America	18,713	99	−40		–
070	France	14,333	1	−3		–
080	Luxembourg	13,175	149	−52		–
090	Italy	12,683	17	−28		–
100	Ireland	8,449	0	−3		–
110	Spain	6,778	29	−13		–
120	Czechia	6,686	47	−41		–
130	Canada	5,171	0	−1		–
140	Netherlands	5,141	36	−31		–
150	Japan	4,712	20	−1		–
160	Austria	4,707	22	−13		–
170	Others	43,798	538	−184		0
180	**Off balance sheet exposures**	**197,556**	**986**		**572**	
190	Germany	110,405	797		426	
200	United States of America	17,974	0		11	
210	Poland	10,322	44		43	
220	France	7,622	11		4	
230	Switzerland	6,684	9		11	
240	United Kingdom of Great Britain and Northern Ireland	6,105	7		3	
250	Netherlands	4,976	35		10	
260	Spain	4,279	2		1	
270	Austria	3,116	1		4	
280	Italy	2,738	0		3	
290	Luxembourg	2,470	4		5	
300	Ireland	2,181	0		1	
310	Others	18,685	75		52	
320	**Total**	**652,879**	**6,662**	**−3,215**	**572**	**−13**

[1] The countries listed in the table cover more than 90% of Commerzbank's total exposure (both balance sheet and off-balance sheet). The following countries are located in the lines "others": Other international organizations, Switzerland, Singapore, Belgium, Sweden, Norway, Australia, Bahamas, China, Korea, Republic of, Finland, Slovakia, Turkey, Hong Kong, Egypt, Bangladesh, Portugal, United Arab Emirates, New Zealand, Denmark, Croatia, Greece, Uzbekistan, Brazil, Jersey, Bermuda, Angola, Ecuador, Viet Nam, Indonesia, India. The remaining countries, each with less than 0.1% of the total exposure, are not listed here for reasons of materiality.

Table EU CQ5 shows the credit quality of loans and advances by industries according to Article 442 c) and e) CRR as of 31 December 2024:

EU CQ5: Credit quality of loans and advances by industry

		a	b	c	d	e	f
		Gross carrying amount				**Accumulated impairment**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
			of which: non-performing		**of which: loans and advances subject to impairment**		
	€m			**Of which defaulted**			
010	Agriculture, forestry and fishing	670	10	10	670	−6	–
020	Mining and quarrying	1,050	64	64	1,050	−7	–
030	Manufacturing	30,123	1,450	1,450	29,459	−1,063	−5
040	Electricity, gas, steam and air conditioning supply	11,106	89	89	11,106	−78	–
050	Water supply	2,339	9	9	2,329	−6	–
060	Construction	2,740	136	136	2,732	−81	−1
070	Wholesale and retail trade	12,956	692	692	12,893	−387	−2
080	Transport and storage	5,338	109	109	5,335	−59	–
090	Accommodation and food service activities	703	20	20	701	−14	–
100	Information and communication	5,349	77	77	5,330	−59	–
110	Financial and insurance actvities	–	–	–	–	–	–
120	Real estate activities	13,470	328	328	13,459	−179	−1
130	Professional, scientific and technical activities	5,113	134	134	5,096	−94	−1
140	Administrative and support service activities	2,749	56	56	2,747	−34	–
150	Public administration and defense, compulsory social security	14	–	–	14	–	–
160	Education	140	14	14	139	−6	–
170	Human health services and social work activities	1,226	20	20	1,224	−32	–
180	Arts, entertainment and recreation	597	4	4	596	−4	–
190	Other services	931	28	28	892	−51	–
200	**Total**	**96,615**	**3,240**	**3,240**	**95,772**	**−2,160**	**−11**

B. Counterparty credit risk

Risk management

Counterparty credit risk (default risk from counterparty default risk) is defined as the risk of losses sustained or profits foregone due to the default of a counterparty in the context of a derivative or securities financing transaction. In addition to market price risks, derivative positions also give rise to default risks when a claim arises against the counterparty in the form of positive market values.

Commerzbank also looks at what is known as correlation risk (wrong way risk). This occurs when a counterparty's exposure and credit quality (rating) are negatively correlated. Wrong way risk is therefore an additional risk source, as the credit exposure is generally measured independently from the counterparty's creditworthiness. Commerzbank has a clear definition of specific and general wrong way risk. There are guidelines to assist in identifying and quantifying wrong way risk. They also set out how the exposure must be adjusted to allow for the wrong way risk. In the case of secured transactions, the potential relationship between the performance of the collateral and the credit rating of the counterparty also has to be considered and captured according to the Commerzbank collateral matrix.[1]

The derivative positions shown in the tables below do not include securitisation positions as defined in the CRR as these are shown in the securitisations chapter. This means that interest rate and currency swaps or credit derivative transactions entered into with special-purpose securitisation companies are not included.

Risk appetite is operationally structured in the Group Risk Strategy through a consistent management system with limits, benchmarks for risk strategy positioning and supplementary guidelines. The specific risk appetite for the lending business is derived from this and structured further in the credit risk strategy. The risk strategy focus of the credit risk strategy thus adopts the cross-segment benchmarks of the Group Risk Strategy that are relevant for the default risk and specifies them specifically for the lending business of the individual segments. Furthermore, the limit concept of the Group Risk Strategy is supplemented by quantitative guidelines to limit risk concentrations and weaker credit ratings. Downstream policies operationalise the risk appetite at the level of selected sub-portfolios.

In order to minimise both the economic and the regulatory credit risk arising from these instruments, Commerzbank enters into master agreements (bilateral netting agreements) such as the 2002 ISDA Master Agreement or the German Master Agreement for Financial Futures with the respective counterparties. By means of such bilateral netting agreements, the positive and negative market values of the derivatives contracts included under a master agreement can be offset against one another, and the regulatory add-ons for future risks of these products can be reduced. This netting process reduces the credit risk to a single net claim on the contracting party (close-out netting). Table EU CCR5-A contains a detailed presentation of netting effects. The netting policy sets out the requirements for the external and internal netting of derivatives and repo transactions. For repo/lending transactions Commerzbank makes a distinction between "full netting" and "single transaction netting". Single transaction netting allows the netting of exposure and collateral in one transaction, while in full netting all transactions can be netted against each other.

For both regulatory reports and the internal measurement and monitoring of credit exposures, these risk-mitigating techniques are only used if Commerzbank considers them enforceable in the jurisdiction in question, should the counterparty become insolvent. Legal opinions are obtained from various international law firms in order to verify enforceability. Legal opinions are obtained from various international law firms in order to verify enforceability.

Similar to the master agreements are the collateral agreements (e.g. collateralisation annex for financial futures contracts, Credit Support Annex), which Commerzbank concludes with its business partners to secure the net claim or liability remaining after netting (receipt or provision of collateral). As a rule, this collateral management reduces credit risk by means of prompt, usually daily or weekly, measurement and adjustment of the customer exposure. Commerzbank only uses cash and securities pledged as collateral under master agreements. Table EU CCR5 gives a detailed list of collateral provided and received.

Regulations for risk mitigation measures are stipulated by the "Guideline for Collateralized Trading". The guideline covers legal aspects such as types of master agreements and the enforceability of netting transactions and collateral under master agreements. It describes the requirements governing the netting of collateral and the structuring of Credit Support Annexes.

The basis for determining the netting amounts for the default risk from derivative positions is not the positive market values but instead the so-called credit equivalent values. Credit equivalent values effectively correspond to the risk position values of balance-sheet default risk positions, as a credit conversion factor of 100% is applied to derivative positions.

[1] Although in a regulatory context wrong way risk is normally mentioned in connection with counterparty risk, Commerzbank also considers it in connection with issuer risk (e.g. between the issuer of a bond and the guarantor).

To determine the assessment basis of derivative default risk positions, Commerzbank uses the internal model method (IMM) pursuant to Article 283 ff. CRR and the market valuation method pursuant to Article 274 CRR.

The approach to risk quantification under the IMM is generally based on a risk simulation which generates future market scenarios and creates portfolio valuations based on these scenarios. Netting and collateral agreements are taken into account.

In applying the internal model method, the EaD is defined per counterparty as the product of the alpha factor and the calculated effective expected positive exposure E*. Risks that are not taken into account when determining E*, correlation risks for example, are included in the capital adequacy calculation through the alpha factor. Banks can either estimate the alpha factor themselves or use the supervisory value. Commerzbank does not carry out its own estimation of the alpha factor and applies the value specified by the supervisory authority when determining the exposure at default.

The exposure values for the counterparty default risk from derivative positions and securities financing transactions – including exchange-traded derivatives – used to determine the (net) assessment basis amounted to €1,932m using the standardised approach (SA-CCR) and €22,349m using the internal model method (see table EU CCR1 – Analysis of counterparty credit risk by approach) as of 31 December 2024. The proportion of derivatives and securities financing transactions processed via central counterparties measured by exposure value according to credit risk mitigation techniques was 8%. Table EU CCR8 shows the exposures to central counterparties (CCPs). Table EU CCR4 provides an overview of the risk positions managed under the AIRB approach by exposure class and PD scale.

All operative units, branches and subsidiaries are, subject to compliance with the regulations, authorised to use credit derivatives to hedge credit risks in loan portfolios (i.e. purchase of hedges). This allows them to hedge credit risks with a credit derivative without having to sell or assign the loan. A detailed list of credit derivatives can be found in table EU CCR6 – Credit derivatives exposures.

Commerzbank creates credit reserves (credit valuation adjustments, CVA) for derivatives, securities financing transactions and money market transactions reported at fair value in order to account for the counterparty's expected default risk. The offsetting of credit reserves compensates for the fair values of the transaction calculated on the basis of risk-free parameters. The CVA are determined by the sum of the discounted expected exposures until the end of the contract period of the transaction, weighted by the marginal probability of default of the counterparty and in consideration of the expected loss upon default of the counterparty. In order to calculate the expected exposure, Commerzbank uses a Monte Carlo simulation based on a risk-neutral calibration.

As part of the regulatory requirements under Basel 3, since 2015 the Commerzbank Group has additionally calculated the capital requirements for credit value adjustments (CVA risk) according to Article 381 ff. CRR. For the portfolios of Commerzbank Aktiengesellschaft, CVA risk is calculated using the advanced method according to Article 383 CRR via a sensitivity-based approach. For the Group's subsidiaries, the standardised approach according to Article 384 CRR is applied. As of 31 December 2024, there were eligible hedges under Article 386 CRR: Single name CDS of €87m. The capital requirements for CVA risk amounted to €82m (€1,021m RWA, see table EU CCR2 – CVA capital charge) as of 31 December 2024 for the Group.

Table EU CCR1 shows the counterparty default risk as defined in Article 439 f), g), k) and m) CRR as of 31 December 2024:

Information on regulatory methods

EU CCR1: Analysis of CCR exposure by approach

		a	b	c	d	e	f	g	h
	€m	**Replace-ment cost (RC)**	**Potential future exposure (PFE)**	**EEPE**	**Alpha used for computing regulatory exposure value**	**Exposure value pre-CRM**	**Exposure value post-CRM**	**Exposure value**	**RWAs**
EU 1	EU - Original Exposure Method (for derivatives)	–	–		1.4	–	–	–	–
EU 2	EU - Simplified SA-CCR (for derivatives)	–	–		1.4	–	–	–	–
1	SA-CCR (for derivatives)	440	967		1.4	2,447	1,998	1,932	845
2	IMM (for derivatives and SFTs)			16,017	1.4	142,940	22,424	22,349	6,321
2a	Of which securities financing transactions			4,003		118,277	5,604	5,603	1,038
2b	Of which derivatives and long settlement transactions			12,014		24,663	16,820	16,745	5,283
2c	Of which from contractual cross-product netting			–		–	–	–	–
3	Financial collateral simple method (for SFTs)					–	–	–	–
4	Financial collateral comprehensive method (for SFTs)					14,397	2,379	2,491	275
5	VaR for SFTs					–	–	–	–
6	**Total**					**159,784**	**26,801**	**26,772**	**7,441**

Table EU CCR2 shows the own funds requirements for CVA risks, broken down by approach according to Article 439 h) CRR as of 31 December 2024:

EU CCR2: Transactions subject to own funds requirements for CVA risk

		a	b
	€m	**Exposure value**	**RWAs**
1	Total transactions subject to the Advanced method	7,000	686
2	(i) VaR component (including the 3× multiplier)		63
3	(ii) SVaR component (including the 3× multiplier)		623
4	Transactions subject to the Standardised method	821	335
EU4	Transactions subject to the Alternative approach (Based on the Original Exposure Method)	–	–
5	**Total transactions subject to own funds requirements for CVA risk**	**7,821**	**1,021**

Table EU CCR3 shows the allocation of credit counterparty risk in the standardized approach by exposure classes as defined in Articles 439 l) and 444 e) CRR as of 31 December 2024:

EU CCR3: Standardised approach – CCR exposures by regulatory exposure class and risk weights

		a	b	c	d	e	f	g	h	i	j	k	l
	Exposure classes | €m	**Risk weight**											
		0%	**2%**	**4%**	**10%**	**20%**	**50%**	**70%**	**75%**	**100%**	**150%**	**Other**	**Total**
1	Central governments or central banks	4,166	–	–	–	–	–	–	–	–	–	–	4,166
2	Regional governments or local authorities	236	–	–	–	–	–	–	–	–	–	–	236
3	Public sector entities	250	–	–	–	6	–	–	–	0	–	–	256
4	Multilateral development banks	90	–	–	–	4	–	–	–	–	–	–	94
5	International organisations	7	–	–	–	–	–	–	–	–	–	–	7
6	Institutions	–	998	700	–	1,799	489	–	–	–	–	–	3,987
7	Corporates	–	1,153	–	–	285	188	–	–	952	0	–	2,578
8	Retail	–	–	–	–	–	–	–	12	–	–	–	12
9	Institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–
10	Other items	–	–	–	–	–	–	–	–	0	19	–	19
11	**Total**	**4,750**	**2,151**	**700**	**–**	**2,094**	**677**	**–**	**12**	**952**	**19**	**–**	**11,354**

Information by regulatory risk-weighting approach

Table EU CCR4 shows the credit counterparty risk according to exposure classes and PD scale according to Articles 439 l) and 452 g) CRR as of 31 December 2024:

EU CCR4: IRB approach – CCR exposures by exposure class and PD scale

		a	b	c	d	e	f	g
	PD scale	Exposure value	Average PD	Number of obligors	Average LGD	Average maturity[1]	RWAs	RWA density
		€m	%		%	years	€m	
Central governments or central banks	0.00 to < 0.15	90	0.00	13	100.00	0.9	27	30.4
	0.15 to < 0.25	0	0.07	3	100.00	1.2	0	68.5
	0.25 to < 0.50	10	0.06	7	100.00	0.9	8	78.1
	0.50 to < 0.75	6	0.38	4	100.00	1.6	9	144.4
	0.75 to < 2.50	2	0.02	5	100.00	1.0	3	167.2
	2.50 to < 10.00	4	0.06	10	100.00	0.7	9	246.2
	10.00 to < 100.00	4	–	4	100.00	1.5	18	416.8
	100.00 (Default)	–	–	–	-	-	–	–
	Subtotal	**116**	**0.03**	**46**	**100.00**	**1.0**	**75**	**64.2**
Institutions	0.00 to < 0.15	7,691	0.06	707	43.47	1.0	1,596	20.8
	0.15 to < 0.25	346	0.20	107	44.32	1.0	139	40.0
	0.25 to < 0.50	571	0.33	147	38.79	2.0	287	50.3
	0.50 to < 0.75	163	0.61	77	50.90	1.0	128	78.6
	0.75 to < 2.50	220	0.96	114	45.52	1.0	194	88.4
	2.50 to < 10.00	15	3.51	27	48.40	1.0	21	141.0
	10.00 to < 100.00	12	18.53	24	56.91	1.0	35	288.9
	100.00 (Default)	0	100.00	1	41.60	1.0	0	62.5
	Subtotal	**9,019**	**0.15**	**1,203**	**43.42**	**1.0**	**2,401**	**26.6**
Corporates	0.00 to < 0.15	4,461	0.10	848	41.55	1.7	928	20.8
	0.15 to < 0.25	1,681	0.21	762	44.06	2.3	680	40.4
	0.25 to < 0.50	1,330	0.35	1,277	41.12	1.5	644	48.4
	0.50 to < 0.75	573	0.61	637	42.31	2.0	401	69.9
	0.75 to < 2.50	417	1.17	912	43.20	1.6	361	86.8
	2.50 to < 10.00	70	4.06	381	46.50	1.5	101	143.8
	10.00 to < 100.00	25	18.04	69	43.21	1.3	49	198.6
	100.00 (Default)	19	100.00	39	46.49	1.0	12	63.6
	Subtotal	**8,575**	**0.55**	**4,925**	**42.17**	**1.8**	**3,176**	**37.0**
Retail	0.00 to < 0.15	115	0.05	541	50.87		8	6.7
	0.15 to < 0.25	7	0.20	142	50.92		2	23.4
	0.25 to < 0.50	13	0.33	278	50.97		4	30.4
	0.50 to < 0.75	3	0.61	158	51.14		2	47.2
	0.75 to < 2.50	7	1.39	284	53.15		5	64.8
	2.50 to < 10.00	12	3.85	203	52.47		9	75.4
	10.00 to < 100.00	0	48.73	17	50.37		0	115.1
	100.00 (Default)	0	100.00	8	63.75		0	62.5
	Subtotal	**158**	**1.43**	**1,631**	**51.12**		**29**	**18.6**
Total (all exposure classes)		**17,868**	**0.34**	**7,805**	**41.75**	**2.0**	**5,680**	**31.8**

[1]) Parameter is not subject to the RWA calculation for retail business. Hence, in compliance with EBA/GL/2016/11, no disclosure for retail business.

Table EU CCR5 shows the composition of the collateral for the credit counterparty risk in accordance with Article 439 e) CRR as of 31 December 2024.

EU CCR5: Composition of collateral for CCR exposures

		a	b	c	d	e	f	g	h
	€m	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	
		Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
1	Cash – domestic currency	–	10,984	9	9,228	–	176	–	190
2	Cash – other currencies	–	3,049	121	2,051	–	176	–	95
3	Domestic sovereign debt	108	–	–	5	–	15,445	–	12,922
4	Other sovereign debt	772	184	595	1,581	–	62,748	–	54,128
5	Government agency debt	–	–	–	–	–	–	–	–
6	Corporate bonds	57	45	–	–	–	19,516	–	12,801
7	Equity securities	22	–	–	–	–	5	–	0
8	Other collateral	49	201	10	433	–	35,394	–	31,535
9	**Total**	**1,008**	**14,463**	**735**	**13,297**	**–**	**133,460**	**–**	**111,671**

Table EU CCR6 shows a summary of credit derivatives for hedging by product as per Article 439 j) CRR as of 31 December 2024:

EU CCR6: Credit derivatives exposures

		a	b
	€m	**Protection bought**	**Protection sold**
Notionals			
1	Single-name credit default swaps	6,208	2,122
2	Index credit default swaps	1,955	4,036
3	Total return swaps	3,836	–
4	Credit options	–	–
5	Other credit derivatives	–	–
6	**Total notionals**	**11,999**	**6,158**
Fair value			
7	Positive fair value (asset)	162	85
8	Negative fair value (liability)	−292	0

The following table EU CCR7 shows the development of RWA by main driver of credit counterparty risk according to the internal model method (IMM) in the fourth quarter of 2024 in accordance with Article 438 h) CRR.

The decrease in RWA is primarily due to a regulatory-approved model adjustment for counterparty credit risk. This reduction is partially offset by a higher volume.

EU CCR7: RWA flow statements of CCR exposures under the IMM

		a
	€m	**Risk-weighted assets (RWA)**
1	**RWA as at the end of the previous reporting period**	**6,961**
2	Asset size	285
3	Credit quality of counterparties	−77
4	Model updates (IMM only)	−771
5	Methodology and policy (IMM only)	–
6	Acquisitions and disposals	–
7	Foreign exchange movements	−77
8	Other	–
9	**RWA as at the end of the current reporting period**	**6,321**

Further information on counterparty credit risk

Table EU CCR8 shows the breakdown of risk positions by central counterparties as per Article 439 i) CRR as of 31 December 2024:

EU CCR8: Exposures to CCPs

		a	b
	€m	Exposure value	RWAs
1	**Exposures to QCCPs (total)**		**267.4**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	2,451	55.0
3	(i) OTC derivatives	770	21.4
4	(ii) Exchange-traded derivatives	830	16.6
5	(iii) SFTs	851	17.0
6	(iv) Netting sets where cross-product netting has been approved	–	–
7	Segregated initial margin	130	
8	Non-segregated initial margin	–	–
9	Prefunded default fund contributions	679	212.3
10	Unfunded default fund contributions	–	–
11	**Exposures to non-QCCPs (total)**		**–**
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	–	–
13	(i) OTC derivatives	–	–
14	(ii) Exchange-traded derivatives	–	–
15	(iii) SFTs	–	–
16	(iv) Netting sets where cross-product netting has been approved	–	–
17	Segregated initial margin	–	
18	Non-segregated initial margin	–	–
19	Prefunded default fund contributions	–	–
20	Unfunded default fund contributions	–	–

Contractual agreements that oblige Commerzbank to provide additional collateral to its counterparties in the event of a downgrading of its own rating exist primarily in the context of the secured and unsecured OTC derivatives business.

Within the stress testing, additional collateral requirements for a simultaneous downgrade of Commerzbank's rating by the rating agencies Standard & Poor's and Moody's by three grades are determined. The regular review of these additional collateral arrangements is based in particular on contractual information on unsecured and secured derivatives transactions (in the case of the latter, in particular on the collateral notes, the so-called credit support annexes, which are set up within the netting framework agreements of the OTC derivatives business).

addCCR1: Additional contractual obligations (in stress test)

Additional contractual obligations | €m	
Contractual derivative outflows and margin calls	150
thereof collateralised interest rate derivatives	100
thereof uncollateralised interest rate derivatives	50
Other contractual outflows and margin calls	70
Total 2024	**220**
Total 2023	420

C. Securitisations

In securitisation business Commerzbank performs the three roles provided for in regulatory legislation, namely originator, sponsor and investor.

› **Originator** Parts of the Bank's own loan portfolio are placed selectively on the capital markets through securitisation transactions. The transfer of the credit risk is by means of synthetic securitisations where the portfolio is hedged through credit derivative and financial guarantee contracts.

Commerzbank has in recent years securitised receivables from loans to the Bank's customers with a current volume of €12.4bn, primarily for capital management purposes (31 December 2023: €14.7bn.

As of 31 December 2024, of the outstanding securitisations of Commerzbank, risk exposures of €11.4bn (31 December 2023: €13.1bn) were retained. By far the largest portion of these positions is accounted for by €11.4bn of senior tranches, which are nearly all rated good or very good (December 2023: €11.9bn).

The assets securitized by Commerzbank are bank-owned receivables from medium-sized and large companies based in Europe, in particular in Germany.

In the year under review, Commerzbank has issued one synthetic STS (simple, transparent and standardized) securitisation with a volume of €2bn, which are based on receivables from corporates mainly from Germany and other European countries.

In addition, the Polish subsidiary of Commerzbank mBank has issued a synthetic STS securitisation with a volume of €2.3bn based on receivables from private customers.

As part of the overall management of the Bank, the Commerzbank Group constantly reviews opportunities to securitise its own assets. This process is primarily influenced by the market conditions prevailing at any one time.

In the reporting year, due to the structure of the transactions, Commerzbank did not hold any securitisation exposures for which additional capital was required as a result of an investor share to be taken into consideration by the originator under Article 246 (Regulation (EU) 2017/2401). In addition, during the reporting year Commerzbank provided no implicit support within the meaning of Article 250 (Regulation (EU) 2017/2401).

In the period under review, Commerzbank did not sell investment products resulting from its role as originator to companies that are managed or advised in investments by Commerzbank.

› **Sponsor** By securitising their own portfolios of receivables, i.e. selling their receivables on a non-recourse basis, Commerzbank's customers are able to tap alternative sources of funding on the capital markets (Conduit business). Structuring, arranging and securitising these receivables portfolios, particularly those of customers in the Corporate Clients segment, is a key component of the structured finance product range. Special purpose vehicles (purchasing entities) are typically established to manage these assets. The ABS conduit Silver Tower established by the bank primarily acts as the purchasing entity.

The refinancing of the purchases is regularly done through the issuance of short-term registered notes. As sponsor, the Bank is responsible for structuring and, as a rule, purchasing and refinancing the transactions. Commerzbank provides the special purpose vehicles with note purchase agreements to enable access to short-term liquidity through the purchase of registered notes.

These note purchase agreements are counted in full when determining the risk-weighted exposures. The mainly high diversified portfolios of receivables generally derive from customers' working capital, such as trade receivables and car, machinery and equipment leases. The receivables portfolios therefore reflect the differing businesses of those selling the receivables.

Commerzbank currently holds a derivative position to hedge interest rate risks with only one special purpose vehicle outside Silver Tower S.A.

The volume of sponsor securitisation positions in the Conduit business increased by €0.1bn to €4.6bn in 2024.

› **Investor** The Commerzbank Group invests under its regulatory banking book in securitisation positions. The Bank's internal credit risk strategy allows entering into new securitisation positions provided that the risk profile of each securitisation position is subjected to a differentiated analysis and documentation. This allows transaction risk drivers that may impact directly or indirectly on the securitised position's risk content to be taken into account. In the year under review Commerzbank invested in senior-ranking securitisation positions, mainly backed by pools of corporate loans.

Risk management

The internal processes for monitoring the risk profile of securitisation exposures are based on the provisions of Articles 5 (due diligence for institutional investors) and 7 (transparency requirements for originators, sponsors and SSPE) ((Regulation (2017/2402) amending Regulation (575/2013)) and on the principles of the Minimum Requirements for Risk Management (MaRisk) as amended. These apply equally to all securitisation positions, regardless of whether Commerzbank is an originator, sponsor or investor.

The processes put in place by the Bank take account of the individual risk profile of securitisation exposures on the basis of a wide range of information sources. They ensure that various risks directly and indirectly affecting the probability of default of the securitised positions are monitored in a continuous and timely manner. This also includes carrying out regular stress tests that take account of macroeconomic factors and the individual risk profile of the securitised positions.

› **Originator** The credit process for loans to customers does not distinguish between loans which the Bank will securitise at a later date and those for which it will continue to assume the risk. Transactions which allow reliefs in capital for regulatory purposes are subject to a monitoring process that ensures the continuous compliance with the regulations on significant risk transfer according to Articles 244 and 245 (Regulation (2017/2401)). The amount to be retained in securitisation transactions in accordance with Article 6 Regulation ((2017/2402) amending Regulation (575/2013)) is reviewed regularly and published in the Investor Report. A potential placement risk for Commerzbank's transactions is taken fully into account, as the receivables are included in full in the Bank's risk and capital management process up until the actual risk transfer by means of securitisation and placement.

› **Sponsor** The customer transactions funded via conduits are subject to an ongoing credit process. A risk analysis of the transactions is conducted when the transactions are structured and again in regular reviews which are carried out annually and as circumstances require. A rating is assigned using the Commerzbank`s own ABS rating systems (internal assessment approach). For this purpose we take into account all significant risk drivers of the securitised receivables portfolio (e.g. type of receivable, default rates, collateral provided, diversification, dilution risks, commingling risks) and of the securitisation structure (e.g. whether the creditor claims have a waterfall structure, credit enhancements). Qualitative risk drivers ascertained from regular on-site visits to the seller of receivables as well as the seller's financial position are also taken into account. For trade receivables, structure-inherent covers through credit insurance are taken into account in the rating model and credit analysis. Credit insurance is used in order to mitigate concentration risk. The main counterparties here are Euler Hermes Deutschland, the German branch of Euler Hermes SA and the German branch of Compagnie Française d'Assurance pour le Commerce Extérieur SA (Coface). Before any purchase of customer receivables, the minimum conditions agreed in the contract documentation are reviewed and any non-qualifying receivables are excluded. After the receivables have been bought, their quality is reviewed continuously. If any potential problems come to light another credit analysis of the structure is carried out.

› **Investor** Strict internal guidelines must be followed when acquiring a new securitisation position. Such positions are subject to a specific internal credit process that also ensures that the specific requirements for securitisation positions regarding due diligence and retention under Articles 5 and 6 ((Regulation (2017/2402) amending Regulation (575/2013)) are met. In the credit process applied to the Bank's securitisation portfolio, the risk profile of the securitisation positions is analysed quarterly or as circumstances require. In preparing a credit assessment, at the level of the individual tranche a securitisation-specific rating system is used which has been developed internally within the Bank, while external standard models are also applied. As with securitisation exposures, the ranking of the individual tranches contained in the pool within a securitisation structure are taken into account in this analysis, as are the specific features of the asset classes and of the different jurisdictions, in order to generate the expected aggregate cash flow. The results are then used to model the entire waterfall structure at the level of the tranche.

› **Nature of other risks** Commerzbank takes into account not only the original default risk of the securitised receivables but also secondary risks such as market value risk, liquidity risk, legal risk and operational risk insofar as they are relevant with a direct or indirect impact on the default risk. This process looks, for example, at the performance reports for the securitised receivables, changes in external ratings and movements in the market value of the securitisation exposures.

When determining market price risk, changes relating to interest rates, foreign currency rates or credit spreads, among others, are taken into account for the risk assessment of each tranche. In addition, the combination of various conventional risk measures (e.g. VaR) ensures the appropriate management of market risk concentrations at Group level.

Liquidity risk refers in this context to the risk that Commerzbank will be unable to meet its payment obligations on a day-to-day basis. Liquidity risks from securitisations are modelled conservatively in the internal liquidity risk model. In the case of variable-use transactions, it is assumed that the purchase facilities provided to the special-purpose vehicles must be funded by Commerzbank for the duration of their term almost completely and until the maturity date of the last funded claim. Securitisations only qualify as liquid assets if they are eligible for rediscount at the European Central Bank. These positions are only included in the liquidity risk calculation after applying conservative discounts.

Legal risk in the context of securitisation transactions is the risk that the Bank might suffer losses as a result of flaws in legal transaction structures or as a result of missing or flawed legal documentation. Commerzbank's independent Legal department and external law firms are responsible for examining legal structures and all transaction contracts. In terms of content, risks are divided into those arising from the sphere of the originator itself or those directly connected with the portfolio to be securitised. The subsequent refinancing and collateral structure are also a key element of legal structuring and risk assessment.

As well as being associated with legal risk as a risk type under the overall heading of operational risk, securitisation business is subject to the Group-wide management of operational risks. It therefore falls within the framework used by Commerzbank to measure operational risks.

Valuation methods and quantitative information

Regulatory valuation of securitisations

The EU securitisation regulation comprises of two regulations: the securitisation regulation (Regulation (EU)2017/2402) that for the first time creates a European framework for simple, transparent and standardised securitisations (STS) as well as regulation (EU) 2017/2401 where the necessary amendments regarding regulation (EU) No 575/2013 (Capital Requirements Regulation, CRR) are adapted.

The securitisation regulation regulates and harmonises the due diligence requirements for institutional investors, the transparency requirements and the specific requirements for the new STS-securitisations. STS-securitisations are considered to be of high quality and therefore receive a more benign capital treatment.

The hierarchy foresees the internal based approach (SEC-IRBA) at the top of the hierarchy if at least 95% of the underlying exposure amounts can be calculated with the SEC-IRBA. If this is not the case the standardised approach (SEC-SA) is to be used. Only if the SEC-SA is not applicable the SEC-ERBA which is based on eligible external ratings is relevant.

Securitisation positions in the banking book

› **Originator** Capital is held against synthetic securitisation tranches that have been placed on the market based on the risk weighting of the party providing the collateral. Counterparties to the hedging instruments used, e.g. financial guarantees, are institutional investors, whose deposits serve as collateral. For the transactions newly issued by Commerzbank AG and mBank in 2024, the credit risk is placed using Credit Linked Notes. For all own transactions the approach based on internal ratings (SEC-IRBA) is applied.

› **Sponsor** For capital requirements within the Conduit business the Standardised Approach according to the amendments to CRR (EU Regulation 2017/2401) applies. For purposes within the internal capital model, portfolio monitoring as well as setting limits (ICAAP-processes), Commerzbank's own rating systems (IAA) had been used for the receivables classes of trade receivables, car finance and leasing, equipment leasing and consumer lending. In addition, the internal assessment approach is subject to an annual validation by Commerzbank's risk function.

The approaches to modelling probability of default (PD) or expected loss (EL) for securitisation tranches differ depending on the type of the securitised asset class. They follow the guidelines of the rating agencies and include main risk drivers of the securitized portfolio as well as the special structural features of the securitisation position. Other quantitative and qualitative risk components that are regarded as material by Commerzbank are also included in the assessment. These include, in particular, seller risks and qualitative risk drivers that are evaluated via structured qualitative questionnaires. The result of the rating process is a tranche-specific rating derived from the quantitative and qualitative results of the assessment approach. Depending on the specific approach used, this rating is based on the probability of default or expected loss of the securitised tranche.

For the asset classes trade receivables, car finance and leasing, equipment leasing and consumer lending, a range of different stress factors used by the rating agencies are applied, depending on the main risk drivers for the relevant transactions. These are, for example, stress factors on concentration risks, default risks, dilution risks and interest rate risks. Quantitative and qualitative modelling components devised by the Bank are also used. When calculating loss buffers, stress factors are determined individually for different securitised asset types on the basis of the risk profiles of the securitisation transactions.

› **Investor** For investor positions, external ratings are generally available and lead to the SEC-ERBA according the CRR (Regulation 2017/2401). Commerzbank takes account of all available external ratings of securitisation positions issued by the rating agencies nominated by Commerzbank, namely Standard & Poor's, Moody's and FitchRatings. It does so irrespective of the type of receivables securitised and the type of securitisation exposure.

Companies which are consolidated within the Commerzbank Group for regulatory purposes may, as part of the Group-wide business and risk strategy, act as investors in securitisation transactions in which the Bank is acting as sponsor or originator.

Valuation and accounting procedures

In true sale or synthetic securitisation transactions via special purpose vehicles, IFRS accounting regulations require the Bank to review whether or not the securitising special purpose vehicles need to be consolidated in accordance with IFRS 10. This review process is centralised in the Commerzbank Group in the accounting department. The central unit is informed of the establishment or restructuring of a special purpose vehicle. On the basis of the information submitted, it carries out a review to determine whether or not the special purpose vehicle needs to be consolidated.

› **Originator** If the special purpose vehicle is consolidated as part of the Commerzbank Group, no further derecognition test is carried out under IFRS 9. The asset is not derecognised in this case. If the special purpose vehicle does not have to be consolidated, in true sale securitisations the possible derecognition of the securitised receivables from the balance sheet is assessed. Following an assessment of the risks and rewards of ownership as the primary derecognition criterion and the control concept as the secondary derecognition criterion according to IFRS 9.3.2, a derecognition or partial derecognition is reported where appropriate. In the case of synthetic securitisations, the underlying receivables remain on the balance sheet. As with securitised receivables in true sale securitisations that are not derecognised, they are reported in their original IFRS category.

These receivables continue to be accounted for in accordance with the rules for this IFRS category. Where securitised receivables are derecognised, any resultant gains or losses are recognised in the income statement. In some cases, the derecognition of receivables may lead to the first-time recognition of new exposures, for example bonds issued by special purpose vehicles. Under IFRS these exposures are categorised on the basis of the intention with which the securities were acquired and the type of securities according to IFRS 9 (FVTPL, Amortised Cost and FVOCI). Please refer to the notes to the IFRS Group financial statements (Annual Report 2024, Notes to the balance sheet, from page 415 onwards) for a detailed explanation of the classification rules and the related valuation procedures.

No securitisation transactions leading to derecognition of receivables were carried out in the period under review. As a result, no gains or losses were realised from the sale of receivables in connection with securitisation transactions during the reporting period. The transaction Coco Finance II–3 Ltd. founded in 2020 was deconsolidated in November 2024 and has now been terminated. In addition, there were eight other synthetic securitisation transactions in the reporting period without the use of a securitisation special purpose vehicle.

If assets are earmarked for securitisation, this has no direct impact on their accounting treatment or measurement within the applicable IFRS categories.

› **Sponsor** Single compartments of Silver Tower S.A. are established for Silver Tower transactions instead of using purchasing entities. The Silver Tower S.A. and their compartments are not being consolidated.

› **Investor** Under IFRS, investor positions are categorised on the basis of the intention with which the securities were acquired and the type of securities according to IFRS 9 (FVTPL, Amortised Cost and FVOCI). For a detailed explanation, please refer to the notes to the IFRS Group financial statements (Annual Report 2024, Notes to the balance sheet, from page 415 onwards), which also explains the related valuation procedures. If the securitisation exposures are traded on liquid markets with observable pricing, they are valued on the basis of independent market prices. If direct measurement at market prices is not possible, the value of the securitisation exposure is determined using prices from external providers. In some cases, the value of the securitisation exposure is determined with the help of valuation models. This involves the application of a discounted cash flow approach, with the cash flows and other relevant parameters being based on data observable on the market. Moreover, the approach is calibrated with market data for application to similar securitisation structures. In many cases the prices estimated by external providers are used. There were no significant changes in the methods used to value securitisation positions in the period under review.

Quantitative information on securitisations

Securitisation positions in the banking book The following information relates to transactions for which risk-weighted exposures are determined in accordance with Articles 242–270 regulation amending CRR (EU Regulation 2017/2401). This also includes the Commerzbank Group's own securitisation transactions for which capital relief is available and made use of for regulatory purposes.

The total volume of all retained or acquired securitisation exposures (on- and off-balance-sheet) was €27.7bn as at the reporting date year-end 2023: €28.6bn). This amount corresponds to the exposures after deducting eligible collateral.

The retained or purchased securitisation positions are presented below, broken down by type of underlying securitized exposures.

The following table EU SEC1 shows the total amount of securitisation positions in the banking book broken down by originator, sponsor and investor by asset class according to Article 449 j) CRR as of 31 December 2024.

EU SEC1: Securitisation exposures in the banking book as of 31 December 2024

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
€m		Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
		Traditional				Synthetic		Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
		STS		Non-STS			of which SRT		STS	Non-STS			STS	Non-STS		
			of which SRT		of which SRT											
1	**Total exposures**	**–**	**–**	**–**	**–**	**11,428**	**11,428**	**11,428**	**3,442**	**1,236**	**–**	**4,678**	**2,292**	**9,283**	**–**	**11,575**
2	Retail (total)	–	–	–	–	2,118	2,118	2,118	–	–	–	–	2,092	1,585	–	3,677
3	residential mortgage	–	–	–	–	–	–	–	–	–	–	–	–	41	–	41
4	credit card	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5	other retail exposures	–	–	–	–	2,118	2,118	2,118	–	–	–	–	2,092	1,544	–	3,636
6	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7	Wholesale (total)	–	–	–	–	9,309	9,309	9,309	3,442	1,236	–	4,678	199	7,698	–	7,898
8	loans to corporates	–	–	–	–	9,309	9,309	9,309	121	93	–	215	–	7,163	–	7,163
9	commercial mortgage	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10	lease and receivables	–	–	–	–	–	–	–	1,269	267	–	1,536	124	–	–	124
11	other wholesale	–	–	–	–	–	–	–	2,052	875	–	2,927	75	535	–	610
12	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

According to Article 449 j) CRR table EU SEC2 shows the securitisation positions in the trading book. Commerzbank had no IFRS trading book positions as of 31 December 2024.

In accordance with Article 449 k) (i) CRR, table EU SEC3 shows the securitisation positions in the non-trading book according to risk weights and the relevant supervisory calculation approaches for originator and sponsor positions as of 31 December 2024:

EU SEC3: Securitisation exposures in the banking book and associated regulatory capital requirements - institution acting as originator or as sponsor

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
	€m	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (incl. IAA)	SEC-SA	1250% RW
1	**Total exposures**	**13,823**	**2,188**	**93**	**–**	**28**	**11,454**	**–**	**4,678**	**28**	**2,223**	**–**	**610**	**28**	**178**	**–**	**49**	**28**
2	Traditional transactions	4,514	70	93	–	–	–	–	4,678	–	–	–	610	–	–	–	49	–
3	Securitisation	4,514	70	93	–	–	–	–	4,678	–	–	–	610	–	–	–	49	–
4	Retail underlying	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5	Of which STS	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Wholesale	4,514	70	93	–	–	–	–	4,678	–	–	–	610	–	–	–	49	–
7	Of which STS	–	–	–	–	–	–	–	3,442	–	–	–	344	–	–	–	–	–
8	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9	Synthetic transactions	9,309	2,118	–	–	28	11,454	–	–	28	2,223	–	–	28	178	–	–	28
10	Securitisation	9,309	2,118	–	–	28	11,454	–	–	28	2,223	–	–	28	178	–	–	28
11	Retail underlying	–	2,118	–	–	–	2,145	–	–	–	861	–	–	–	69	–	–	–
12	Wholesale	9,309	–	–	–	28	9,309	–	–	28	1,362	–	–	28	109	–	–	28
13	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table EU SEC4 shows the securitisation positions in the non-trading book according to risk weights and the relevant supervisory calculation approaches for investor positions according to Article 449 k) (ii) CRR as of 31 December 2024:

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

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
	€m	**Exposure values (by RW bands/deductions)**					**Exposure values (by regulatory approach)**				**RWEA (by regulatory approach)**				**Capital charge after cap**			
		≤20% RW	**>20% to 50% RW**	**>50% to 100% RW**	**>100% to <1250% RW**	**1250% RW/ deductions**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250% RW/ deductions**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250% RW**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250% RW**
1	**Total exposures**	**10,030**	**1,233**	**293**	**78**	**20**	**–**	**9,984**	**1,670**	**20**	**–**	**2,274**	**211**	**20**	**–**	**182**	**17**	**20**
2	Traditional	10,030	1,233	293	78	20	–	9,984	1,670	20	–	2,274	211	20	–	182	17	20
3	Securitisation	10,030	1,233	293	78	20	–	9,984	1,670	20	–	2,274	211	20	–	182	17	20
4	Retail underlying	2,128	1,224	283	–	–	–	2,705	931	–	–	739	104	–	–	59	8	–
5	Of which STS	2,092	–	–	–	–	–	1,161	931	–	–	116	104	–	–	9	8	–
6	Wholesale	7,902	9	10	78	20	–	7,279	739	20	–	1,535	107	20	–	123	9	20
7	Of which STS	199	–	–	–	–	–	124	75	–	–	12	8	–	–	–	1	–
8	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9	Synthetic securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10	Securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11	Retail underlying	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12	Wholesale	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table EU SEC5 shows the amount of the specific credit risk adjustments and the exposures in default from originator and sponsor transactions according to Article 449 l) CRR as of 31 December 2024:

EU SEC5: Exposures securitised by the institution - Exposures in default and specific credit risk adjustments

		a	b	c
		Exposures securitised by the institution - Institution acts as originator or as sponsor		
	€m	**Total outstanding nominal amount**		**Total amount of specific credit risk adjustments made during the period**
			Of which exposures in default	
1	**Total exposures**	**27,794**	**137**	**16.67**
2	Retail (total)	2,339	18	12.70
3	residential mortgage	–	–	–
4	credit card	–	–	–
5	other retail exposures	2,339	18	12.70
6	re-securitisation	–	–	–
7	Wholesale (total)	25,456	119	3.97
8	loans to corporates	12,519	99	3.82
9	commercial mortgage	–	–	–
10	lease and receivables	12,931	21	0.15
11	other wholesale	5	–	–
12	re-securitisation	–	–	–

Based on the country of the securitised claim, the securitisation exposures originate predominantly from Germany at 47% (2023: 45%), in Poland 17% (2023: 16%) and in the USA 16% (2023: 15%).

In the year under review, Commerzbank had no resecuritisation positions in its portfolio.

D. Market risk

Market risk is the risk of potential financial losses due to changes in market prices (interest rates, commodities, credit spreads, exchange rates and equity prices) or in parameters that affect prices such as volatilities and correlations. Losses may impact profit or loss directly, e.g. in the case of trading book positions. However, for banking book positions they are generally reflected in the revaluation reserve or in hidden liabilities/reserves.

Risk management

Strategy and organisation

Commerzbank's market risk strategy is derived from its Group Risk Strategy and the business strategies of the individual segments. It sets targets for market risk management in relation to Commerzbank's main business activities. The core market risk management tasks are the identification of all material market risks and drivers of market risk for the Group and the independent measurement and evaluation of these. The results and estimates serve as the basis for risk/return-oriented management.

The Board of Managing Directors of Commerzbank is responsible for ensuring the effective management of market risk throughout the Commerzbank Group. Specific levels of authority and responsibility in relation to market risk management have been assigned to the appropriate market risk committees.

In the Group Market Risk Committee, segment representatives, along with representatives from the risk function and finance area, discuss current risk positioning issues and decide on appropriate action. Chaired by the risk function, the Group Market Risk Committee, which meets monthly, deals with the Commerzbank Group's market risk position. Discussions centre on the monthly market risk report, which is also presented to the Board of Managing Directors for their consideration. The report summarises the latest developments on financial markets, the Bank's positioning and related risk ratios.

The risk management process involves the identification, measurement, management and monitoring of risks and reporting on them. It is the responsibility in functional terms of market risk management, which is independent of trading activities. Central market risk management is complemented by decentralised market risk management units at segment level and for regional units and subsidiaries. The close integration of central and local risk management with the business units means that the risk management process starts in the trading areas themselves. The trading units are responsible in particular for the active management of market risk positions, e.g. reduction measures or hedging.

Risk management

Commerzbank uses a wide range of quantitative and qualitative tools to manage and monitor market risk. Quantitative limits for sensitivities, value at risk (VaR) figures, stress tests, scenario analyses and ratios on economic capital limit the market risk. Our comprehensive rulebook, in the form of market risk policies and guidelines as well as restrictions on portfolio structure, new products, maturities and minimum ratings, establishes the qualitative framework for market risk management. The market risk strategy lays down the weighting of figures in each segment by reference to their relevance. Thereby allowance is made for the varying impact of the parameters for the management of the segments in line with the business strategy.

Market risk is managed internally at Group level, segment level and in the segment's reporting units. A comprehensive internal limit system broken down to portfolio level is implemented and forms a core part of internal market risk management.

The quantitative and qualitative factors limiting market price risk are determined by the market risk committees by reference to the Group's management of economic capital. The utilisation of these limits, together with the relevant net income figures, is reported daily to the Board of Managing Directors and the responsible heads of the Group divisions. Based on qualitative analyses and quantitative ratios, the market risk function identifies potential future risks, anticipates potential financial losses in collaboration with the finance function, and draws up proposals for further action, which are discussed with the market units. Voting on the proposed measures or exposures takes place in the above-mentioned market risk committee and is subsequently submitted to the Board of Managing Directors for approval.

Risk concentrations are restricted directly with specific limits or are indirectly avoided, for example using stress test limits. In addition, the combination of various conventional risk measures (e.g. VaR, sensitivities) ensures the appropriate management of concentration risks. Furthermore, risk drivers are analysed on a regular basis in order to identify concentrations. The risk management of existing concentrations is also reviewed using situation-driven analyses and, where necessary, supplemented by targeted measures such as limits.

Any limits that are breached are handled in a separate escalation procedure. After a limit breach has been identified, the front office and risk units design adequate countermeasures. If the limit breach cannot be remedied within a reasonable period, it will be escalated by the market risk function to the next hierarchical level.

Regulatory risk measures that are not included in economic risk-bearing capacity are limited and managed separately. These include, for example, stressed VaR and incremental risk charge.

Tradability and measurement of financial instruments

The criteria applicable within the Bank for the allocation of transactions to the trading book or banking book are set as part of a Group-wide policy which implements the regulatory requirements for the allocation of transactions to the trading book with regard to the bank-specific circumstances, particularly also with regard to organisation and the focus of business policy.

Commerzbank has various control processes in place to identify illiquid markets and trading restrictions, which provide indications to determine the procedures to adopt in such cases. In addition to this, the ability to hedge trading book positions and the assessment of the reliability of measuring these trading book positions are subject to regular reviews.

IFRS 13 standardizes the rules for measuring fair value. Under IFRS 13, the fair value of an asset is the amount for which it could be sold between knowledgeable, willing, independent parties in an arm's length transaction. The fair value therefore represents a realisable price.

The fair value of a liability is defined as the price at which the debt could be transferred to a third party as part of an orderly transaction. Furthermore, for the valuation of a debt one's own default risk has to be considered.

The most suitable measure of fair value is the quoted price for an identical instrument in an active market (fair value hierarchy level I). In cases where no quoted prices are available, valuation is based on quoted prices for similar instruments in active markets. In all other cases, fair value is derived using an appropriate valuation model where the data inputs are obtained, as far as possible, from verifiable market sources (fair value hierarchy level II).

Most valuation methods are based on data from verifiable market sources. However, some valuation models use inputs for which sufficient verifiable current market data is not available, and which therefore inherently include a greater level of expert or management judgement. These unobservable inputs may include data that is extrapolated or interpolated, or may be de-rived by approximation to correlated or historical data. Here, to a maximum extent, these inputs are market or third-party inputs and rely as little as possible on expert estimates or company-specific inputs (fair value hierarchy level III).

Valuation models must be consistent with accepted economic methodologies for pricing financial instruments. They must in-corporate all factors that market participants would consider ap-propriate in setting a price. In the Commerzbank Group, standards have been established in the form of internal controls and procedures for the independent verification and validation of all fair values including the creation of a valuation reserve. These controls and procedures are carried out by various units within the independent finance and risk functions, with a central supervisory function being exercised by the Valuation Group within the risk function. The models, inputs and resulting fair values are reviewed regularly by senior management, the finance and the risk function.

The fair value itself is determined in a two-step process. As a first step, the individual fair value components are calculated in accordance with the relevant rules; the second step involves combining the components on a monthly basis in a consolidated fair value report for reporting at Group level.

The independent price verification (IPV) process ensures the correctness of the prices and parameters used in the fair value calculation as a central, independent process for determining and verifying the fair value. The IPV process is based on a risk-oriented approach which takes into account internal factors such as changes in business strategy, the expansion or downsizing of business activities as well as external factors such as developments in markets, products and valuation models. If a price is directly observable, e.g. the stock market price of a share, the products are valued at the bid or offer side, depending on whether they are a long or a short position. However, if a valuation model for determining fair value is applied, the respective input parameters at mid-market are used, e.g. interest rates and im-plied volatilities to value an interest rate option. This results in the positions affected being overvalued because their liquidation or hedging in the market would always be realised at a bid or offer price. Accordingly, "bid-offer reserves" - totaling ½ of the bid-offer spread in relation to the associated position - must be taken into account as liquidation or hedge costs for all positions valued at mid-market. Within the scope of Prudent Valuation, this approach is extended to the so-called close-out cost.

In the event of illiquid products or input parameters the availability of independent market data sources may be restricted. Where sufficient information is available for a solid independent estimate made by experts, a market value uncertainty reserve is set up within the scope of Prudent Valuation. Such estimates are usually based on comparable and available market data (mapping), so the corresponding reserve can be calculated on the basis of the standard deviation of this market data. However, if the applied valuation models use input parameters for which there is no market data or insufficient verifiable market data (see Level III above), a "Day-1 reserve" is set up on the day the transaction is executed. To this end, the profit or loss calculated by the valuation model on the first day of trading (Day1) is set aside and recognised on a pro-rata basis over the term of the transaction or the period during which the relevant market parameters are expected to be unobservable.

Should valuation models show theoretical deficits or be subject to certain restrictions in their practical application, it is necessary to set up model reserves that reflect these uncertainties. Here, a distinction is made between generic model reserves, which relate to all transactions measured using a specific model, and specific model reserves, which affect only individual transactions or particular model combinations. These reserves are usually estimated using a revaluation with alternative models.

In addition, valuation adjustments (summarised under the term xVA) for OTC derivatives have been taken into account. These valuation adjustments include the risk and funding profiles of counterparties and of the bank itself in the valuation. Thus, the credit valuation adjustment (CVA) describes the valuation adjustment of OTC derivatives for the default risk of the counterparty while the debit valuation adjustment (DVA) depicts the adjustment for own default risk. The funding valuation adjustment (FVA) for its part offsets differences in funding costs on account of the incomplete collateralisation of derivative transactions.

Market risk model

Value at Risk

A standardised value at risk model incorporating all positions is used for the internal management of market risk. VaR quantifies the potential loss from financial instruments due to changed market conditions over a predefined time horizon and with a specific probability.

Our VaR market risk model is based on a historical simulation with a one-year interval of historical market data. The historical simulation determines the profit and loss distribution of the current portfolio by means of revaluation using historical changes in market prices and volatility. This is done on the basis of independent market data which is quality-assured on a daily basis and fed into a central market database at a standard defined time. Market data is provided for all relevant positions in the asset classes interest rates, credit spreads, equities, foreign currencies and commodities. This market data takes the form of prices quoted directly on the market or market data such as yield and credit spread curves derived using internal methods. A proxy concept is used if no market data is available for individual exposures. In this case, prices are derived from those for comparable instruments.

For internal management purposes, a confidence level of 97.5% and a holding period of one day are assumed. The value at risk concept makes it possible to compare risks over a variety of business areas. It enables many positions to be aggregated, taking account of correlations between different assets. This ensures a consolidated view of the market risk at all times. A comprehensive internal limit system broken down to portfolio level is implemented and represents an important part of internal market risk management.

The VaR market risk model described above is also used to calculate regulatory required capital. This regulatory capital backing is required for trading book risks and for currency and commodity price risks in the banking book. A confidence level of 99% and a ten-day holding period are used for the regulatory capital adequacy requirement. These assumptions meet the requirements of the Basel Committee and other international standards on the management of market risk. For certain evaluations, such as backtesting, the VaR is also calculated on the basis of a one-day holding period.

Stress test

As the VaR concept gives a prediction of potential losses on the assumption of normal market conditions, it is supplemented by the calculation of stress tests. These stress tests measure the risk to which Commerzbank is exposed, based on unlikely but still plausible events. These events may be simulated using extreme movements on various financial markets. The key scenarios relate to major changes in credit spreads, interest rates and yield curves, exchange rates, share prices and commodities prices. Events simulated in stress tests include all stock prices falling by 15%, a parallel shift in the yield curve or changes to the curve's steepness.

Extensive Group-wide stress tests and scenario analyses are carried out as part of risk monitoring. The Bank-wide stress test calculation is based on a combination of short-term stress test scenarios and scenarios based on macro-economic variables. The stress test framework is completed by portfolio-specific stress tests and ad-hoc scenario analyses.

Stress tests are intended to simulate the impact of crises and extreme market conditions on the Bank's overall market risk position. The impact on the respective components of capital and the income statement is also quantified in these tests.

In order to manage and monitor risks, short-term scenarios are calculated daily, compared against fixed limits and reported to the Board of Managing Directors. The longer-term scenarios are calculated on a monthly basis and discussed in the respective committees.

Model validation

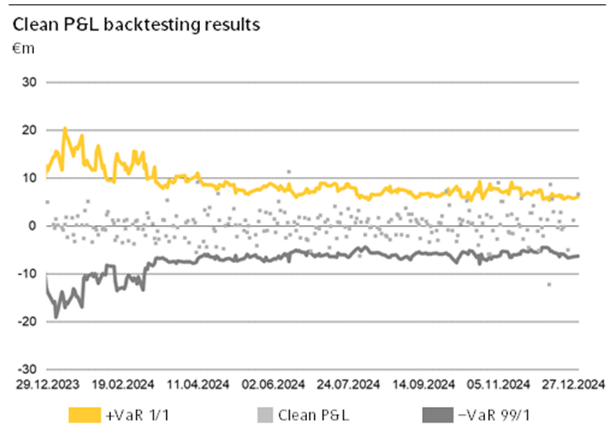
The reliability of the internal model (historic simulation) is monitored in various ways, including by backtesting on a daily basis. The VaR calculated is set against actually occurring changes of the portfolio value (profits and losses). The process draws a distinction between variants „backtesting of hypothetical change of the portfolio value" ("clean P&L") and „ backtesting of actual change of the portfolio value" ("dirty P&L") backtesting. In clean P&L backtesting, exactly the same positions in the income statement are used as were used for calculating the VaR. This means that the profits and losses result only from changes in market prices (hypothetical changes in the portfolio value). In dirty P&L backtesting, by contrast, profits and losses from newly concluded and expired transactions from the day under consideration are also included (actual profits and losses induced by portfolio value changes). Profits and losses from valuation adjustments and model reserves are factored into dirty and clean P&L according to the regulatory requirements.

If the actual loss exceeds the VaR, it is described as a negative backtesting outlier. Analyzing the results of backtesting provides an informative basis for checking parameters and for potential improvement to the market risk model. In the year 2024 two negative Clean-P&L and two negative Dirty-P&L outliers were measured. This was due to market movements in exchange rates and interest rates as well as market distortions in the precious metals market in December 2024 due to impending import duties in the USA

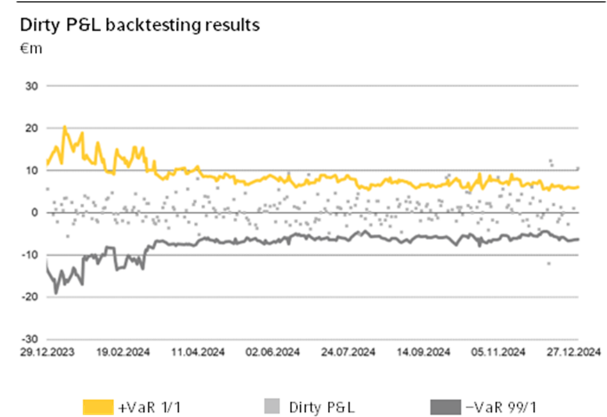
Backtesting is also used by the supervisory authorities for evaluating internal risk models. Negative outliers are classified by means of a traffic-light system laid down by the supervisory authorities.

The above-mentioned negative backtesting outliers for the Commerzbank Group are evaluated according to this approach with the traffic light color green. All negative backtesting outliers at Group level (from both clean P&L and dirty P&L) must be reported to the supervisory authorities, citing their extent and cause.

EU MR4: Comparison of VaR estimates with gains/losses (clean)



EU MR4: Comparison of VaR estimates with gains/losses (dirty)



The individual components of the internal model are regularly validated for their appropriateness for risk measurement. These include the underlying model assumptions and parameters and the proxies used. Validation analyses are planned and carried out based on the validation concept. The scope and frequency of the validations are defined in the validation concept by means of a materiality and risk-oriented prioritisation. The validation planning and progress is regularly presented to the Validation Committee, which discusses and approves the validation results.

The validation results are also reported to the Group Market Risk Committee on a quarterly basis. The identification and elimination of model weaknesses are of particular importance.

Quantitative information on market risks

Pursuant to Article 92 (3) b) and c) CRR, adequate capital must be set aside for market risk positions. Commerzbank uses an internal market risk model to calculate the regulatory capital requirement. This affects both the equity price and interest rate-related risk positions in the trading book as well as the currency positions and commodity positions. The standardised approaches are applied for smaller units in the Commerzbank Group in accordance with the partial use option.

Development of market risk assets in the standard approach

The standard approach is essentially used to include the market risk positions of investments/subsidiaries in the calculation of capital requirements. On 31 December 2024, the standard approach accounted for 19 % of all market risk assets. The risk-weighted assets for market risk positions in the standard approach increased to €1,273m in the year 2024 (previous year €1,021m). The increase is mainly due to increased exchange rate risks at subsidiaries.

Table EU MR1 contains RWA for market risks in the standardized approach according to Article 445 CRR as of 31 December 2024:

EU MR1: Marktrisiko beim Standardansatz

		a
	€m	RWAs
	Outright products	
1	Interest rate risk (general and specific)	362
2	Equity risk (general and specific)	–
3	Foreign exchange risk	702
4	Commodity risk	–
	Options	
5	Simplified approach	–
6	Delta-plus approach	210
7	Scenario approach	–
8	**Securitisation (specific risk)**	**–**
9	**Total**	**1,273**

Market risk in the internal model approach

The internal model accounted for 81% of total market risk weighted assets as of 31 December 2024. Risk weighted assets for market risk positions in the internal model decreased by €3m to €5,282m compared to the reporting date of the previous year .

Table EU MR2-A contains the RWA for market risks based on internal models according to Article 455(e) CRR as of 31 December 2024:

EU MR2-A: Market risk under the internal Model Approach (IMA)

		a	b
	€m	RWAs	Own funds requirements
1	**VaR (higher of values a) and b))**	**700**	**56**
a)	Previous day's VaR (VaRt-1)		20
b)	Multiplication factor (mc) x average of previous 60 working days (VaRavg)		56
2	**sVaR (higher of values a) and b))**	**2,722**	**218**
a)	Latest available SVaR (SVaRt-1))		89
b)	Multiplication factor (ms) x average of previous 60 working days (sVaRavg)		218
3	**IRC (higher of values a) and b))**	**1,817**	**145**
a)	Most recent IRC measure		145
b)	12 weeks average IRC measure		119
4	**Comprehensive risk measure (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**	**43**	**3**
6	**Total**	**5,282**	**423**

The table EU MR2-B below shows the development of RWA by main market risk drivers according to the internal model-based approach (IMA) in the fourth quarter of 2024 according to Article 438(h) CRR.

The increase in RWA in the 4th quarter of 2024 (see Table EU MR2-B) is a result of an expanded bond portfolio in Treasury.

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

		a	b	c	d	e	f	g
	€m	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWA	Total capital requirements
1	**RWA as at the end of the previous reporting period**	**704**	**2,808**	**1,195**	**–**	**59**	**4,766**	**381**
1a	Regulatory adjustment	–	–	–	–	–	–	–
1b	RWA as at the end of the previous reporting period (end of the day)	704	2,808	1,195	–	59	4,766	381
2	Movement in risk levels	−2	−88	637	–	−16	530	42
3	Model updates/changes	−2	3	−16	–	–	−15	−1
4	Methodology and policy	–	–	–	–	–	–	–
5	Acquisitions and disposals	–	–	–	–	–	–	–
6	Foreign exchange movements[1]	–	–	–	–	–	–	–
7	Other	–	–	–	–	–	–	–
8a	RWA at the end of the reporting period (end of the day)	700	2,722	1,817	–	43	5,282	423
8b	Regulatory adjustment	–	–	–	–	–	–	–
8	**RWA as at the end of the current reporting period**	**700**	**2,722**	**1,817**	**–**	**43**	**5,282**	**423**

[1] Changes of RWA which are due to foreign exchange movements are reported under „Movement in risk levels".

Market risk in the trading book

Below, we show how the regulatory market risk ratios of the trading book portfolio developed. Most of Commerzbank's trading book positions derive from the Corporate Clients segment and Treasury division.

The value at risk (10 days 99%) decreased in the year 2024 from €44m to €20m. This is due to crisis scenarios (turbulence around Silicon Valley Bank and Credit Suisse) that are no longer included in the calculation time series.

The market risk profile is diversified across all asset classes, interest rate risk, foreign exchange risk as well as credit spread, commodity and inflation risks. The share of interest rate and credit spread risks in total risk decreased during the course of the year, while the share of currency and commodity risks increased.

Further risk ratios are calculated for regulatory capital adequacy. This includes the calculation of stressed VaR. Stressed VaR is calculated using the internal model on the basis of the VaR method described above. The main difference lies in the market data used to value the assets. Stressed VaR measures the risk in the present position in the trading book by reference to market movements from a specified crisis period in the past. The crisis observation period used for this is checked regularly through model validation and approval processes and adjusted where necessary. The crisis observation period remained the same in the course of the year.

The stressed VaR increased by €22m in the course of 2024 to €89m. The rise compared to the previous year resulted mainly from the expansion of a bond portfolio in the Treasury trading book. A further contribution to increasing the Stressed VaR comes from the Corporate Customer segment.

In addition, the incremental risk charge and the equity event VaR figures quantify the risk of deterioration in creditworthiness and event risks in trading book positions.

Equity event VaR is conceptually part of the historical simulation taking into account empirical equity events over long observation periods. It is a component in the regulatory VaR calculation and included in the values of the following table EU MR3.

The incremental risk charge is based on the credit VaR model with historical data for rating migration and default probabilities and for recovery factors. The model shows current gains and losses on positions in the event of rating changes. In addition, in calculating the incremental risk charge, assumptions are made regarding liquidity (average regrouping/liquidity horizon). These liquidity horizons are set on a portfolio-specific basis, taking into account market structure and activity and concentrations of positions. The incremental risk charge increased from €76m compared to the end of 2023 to €145m. The increase is due to the expansion of a bond portfolio in the Treasury.

Commerzbank does not have an internal model for correlation trading activities.

Table EU MR3 shows the market risks in the trading book as per Article 455 d) CRR as of 31 December 2024:

EU MR3: IMA values for trading portfolios

	€m	a
	VaR (10 day 99%)	
1	Maximum value	61
2	Average value	23
3	Minimum value	14
4	Period end	20
	sVaR (10 day 99%)	
5	Maximum value	93
6	Average value	72
7	Minimum value	59
8	Period end	89
	IRC (99.9%)	
9	Maximum value	149
10	Average value	100
11	Minimum value	79
12	Period end	145
	Comprehensive risk measure (99.9%)	
13	Maximum value	-
14	Average value	-
15	Minimum value	-
16	Period end	-

addMR1: Incremental Risk Charge by sub-portfolio

Sub-portfolio	IRC[1] €m	Average regrouping horizon | months
Corporate Customers	49	8.1
Treasury	140	9.8

[1] Excluding diversification effects between sub-portfolios.

Market liquidity risk

The market liquidity risk is the risk of the Bank not being able to liquidate or hedge risky positions in a timely manner, to the desired extent and on acceptable terms as a result of insufficient liquidity in the market.

Market liquidity risk is taken into account in Commerzbank's risk-bearing capacity concept by scaling the value at risk to one year, i.e. the implicitly recognised liquidation period. Additional valuation adjustments for market liquidity risk are also reflected in the calculation of the risk coverage capital.

Interest rate risk in the banking book

Interest rate risk is one of the most significant financial risks posed by banking operations. This includes in particular the risk of value adjustments as a result of interest rate fluctuations over time. The maturity of interest rate positions and their refinancing structure are fundamental factors in the management of interest rate risks. In commercial business, the modelling of interest rate risk includes assumptions on early repayments and on investor behaviour when deposits are open-ended. The risk of a flattening or steepening in the yield curve is also covered. Interest rate risks may also arise if positions are closed as a result of hedging transactions with a different pricing type to the underlying transaction (basis risks). Interest rate risks relate to Commerzbank's banking book and trading book. The combined position of both books results in Commerzbank's overall interest rate risk.

Strategy and organisation

The interest rate risk in the Commerzbank Group's banking book primarily results from commercial business. Interest rate risks arise here if interest rate positions in customer business are not hedged or are only partially hedged. Interest rate risks also arise from the investment models used by the ALCO (Group Asset Liability Committee), which comprise in particular the investment and/or refinancing of products without contractually fixed interest rates, e.g. for equity capital, savings and sight deposits.

In the Commerzbank Group, interest rate risk in the banking book is the responsibility of Group Treasury within the scope of the business strategy. In addition to the positions of the central Group Treasury division, the treasury activities of branches and all subsidiaries are also taken into consideration.

Treasury's main tasks include the management of the balance sheet structure and of liquidity risks. The aim is to generate a positive interest margin from interest income and refinancing expenses. This gives rise to interest rate risks if positions are not refinanced with matching maturities and matching currencies.

Management

Commerzbank jointly manages interest rate risk from both the trading and banking book, as well as managing this risk separately for the trading book and banking book. This is done strategically by means of risk policies and operationally by means of appropriate limit systems. The risks are consolidated in central risk management. Central risk management is supplemented by a risk management unit for Treasury within the market risk function.

Interest rate risks in the banking book are managed in line with the business strategy by means of maturity- and currency-congruent refinancing and the use of interest rate derivatives. For example, interest rate swaps with sufficient market liquidity enable a prompt response to management measures. However, some products without fixed maturities, such as sight and savings deposits or equity capital, are available to the Bank in the long term. Here the Bank uses appropriate models to manage interest rate risks and stabilise earnings performance. Our models are regularly monitored.

Quantitative information on interest rate risks in the banking book

The measurement of interest rate risk is completely integrated into the Bank's daily measurement and monitoring of risk. As with the measurement of trading book risks, risks in the banking book are also quantified using the value at risk method. Stress tests and scenario analyses are also calculated on a daily and monthly basis. The stress test calculations as mentioned above are used for this purpose. This standardised procedure is intended to ensure transparency of interest rate risks in both the trading and banking book.

A further control variable for interest rate risks in the banking book is interest rate sensitivities. These indicate how interest income varies following a change in interest rates, for example of one basis point. Interest rate sensitivities are also monitored on a daily and monthly basis. This monitoring takes place at both portfolio and segment level as well as for the Commerzbank Group. For management purposes, interest rate sensitivities are limited to the various maturity bands at both Group and segment level. The main focus is on interest rate sensitivities relating to long maturity periods.

To manage its commercial business Commerzbank uses interest rate risk models for the illustration of customer behavior risk on the asset side (early repayments of mortgage loans and consumer loans) and on the liabilities side (deposits without a fixed term).

Deposits are modeled using replication portfolios, depending on the product, segment and legal entity. The replication portfolios are intended to reflect the economic maturity of the deposit and ensure stable returns.

An economically expected repayment profile is derived for fixed-interest mortgage loans and consumer loans. Interest rate risk management is then operated on this basis.

The impact of an interest rate shock on the economic value of the Group's banking books is simulated monthly in compliance with regulatory requirements (according to Commission Delegated Regulation (EU) 2024/856/953). In accordance with the Banking Directive, the Federal Financial Supervisory Authority (BaFin) and the European Central Bank (ECB) have prescribed – amongst others – six scenarios for sudden and unexpected changes in interest rates (parallel- as well as rotation scenarios under consideration of a lower interest rate limit) to be used by all banks, which have to report on the results of this stress test every quarter.

On this basis, the scenario „Parallel Up“ would give a potential loss of €2,840m as of 31 December 2024 (€3,510m as of 30 June 2024) and in the scenario „Parallel down“ a potential economic gain of €1,524m as of 31 December 2024 (€1,627m as of 30 June 2024).

In addition, Commerzbank calculates and reports the ΔNII (Net Interest Income) in accordance with regulatory requirements.

In principle, Commerzbank should not be classified as an institution with an increased interest rate risk, since neither the negative changes in present value nor the maximum loss from the 12-month net interest income in relation to core capital do not exceed the regulatory limits.

For the reporting period, the average fixed-interest term allocated to the replicating portfolios for sight and savings deposits is 2.18 years. Commerzbank uses 10 years as the longest fixed-interest term.

EU IRRBB1: Impact of supervisory interest rate shock scenarios as of 31 December 2024

		a	b	c	d
Supervisory shock scenarios		**Changes of the economic value of equity**		**Changes of the net interest income**	
€m		**Current period**	**Last period**	**Current period**	**Last period**
1	Parallel up	−2,840	−3,510	232	197
2	Parallel down	1,524	1,627	−627	−557
3	Steepener	−335	−333		
4	Flattener	−500	−820		
5	Short rates up	−1,159	−1,512		
6	Short rates down	590	772		

E. Liquidity risk

We define liquidity risk in a narrower sense as the risk that Commerzbank will be unable to meet its payment obligations on a day-to-day basis. In a broader sense, liquidity risk describes the risk that future payments cannot be funded for the full amount, in the required currency or at standard market conditions, as and when they are due.

Risk management

Strategy and organisation

The Board of Managing Directors adopts the business strategy and the Bank's risk tolerance, which is associated with it. Liquidity risk tolerance is then operationalised by defining the liquidity reserve period and the limit framework. In order to ensure an appropriate liquidity risk management process, the Board of Managing Directors delegates certain competences and responsibilities in connection with the Group-wide liquidity risk strategy to the risk and treasury functions.

The Asset Liability Committee (ALCO) is responsible for limiting, analysing and monitoring liquidity risk and for strategic liquidity positioning. ALCO is supported by various subcommittees in this.

Risk management

Commerzbank uses a wide range of tools to manage and monitor liquidity risks on the basis of its internal liquidity risk model. The stress scenario within the Bank that underlies the model and is relevant for management purposes allows for the impact of both a bank-specific stress event and a broader market crisis. Binding regulatory requirements are an integral component of the management mechanism.

Group Treasury is responsible for the Group's liquidity management operations. Group Treasury is represented in all major locations of the Group in Germany and abroad and has reporting lines into all subsidiaries.

Commerzbank manages its global liquidity centrally using cash pooling. This approach ensures liquidity resources are used efficiently and that this occurs across all time zones, as Group Treasury units are located in Frankfurt, London, New York and Singapore.

Additional information on this subject can be found in the section "Funding and liquidity of the Commerzbank Group" in the Annual Report 2024 from page 315.

Liquidity risk is monitored on the basis of the Bank's own liquidity risk model by the independent risk function.

The Bank has established early warning indicators for the purpose of managing liquidity risk. These ensure that appropriate steps can be taken in good time to secure long-term financial solidity.

Risk concentrations can lead to increased outflows of liquidity, particularly in a stress situation, and thus to increased liquidity risk. They can, for example, occur with regard to maturities, large individual creditors or currencies. By means of ongoing monitoring and reporting, emerging risk concentrations in funding can be recognised in a timely manner and mitigated through suitable measures.

This is also applicable for payment obligations in foreign currencies. In addition, the Bank also mitigates a concentration by continuously using broadly diversified sources of funding, particularly diverse customer deposits and capital market instruments.

Commerzbank also ensures that it monitors foreign exchange risks and fulfils the currency matching requirements for highly liquid assets and net liquidity outflows.

In the event of a market-driven and/or idiosyncratic liquidity crisis, the liquidity contingency plan provides for certain measures which, depending on the nature of the crisis, can be initiated either through Treasury's extended authority to act or through the recovery process of the recovery plan. The liquidity contingency plan is an independent part of emergency planning and upstream of the recovery plan. Both the liquidity contingency plan and the recovery plan at Commerzbank are updated at least once a year, whereas the individual liquidity emergency measures are checked regularly during the year for plausibility. The liquidity contingency plan also defines a clear allocation of responsibilities for the processes to be followed in emergency situations and gives details of any action that may need to be taken.

The internal regulations and the models used are reviewed at least once a year and regularly reviewed by the internal audit, the public auditor and the supervisory authority (ECB).

Information on the encumbrance of assets

The following disclosure is made pursuant to Article 100 in conjunction with Article 443 CRR, taking account of the recommendation of the European Systemic Risk Board on the funding of credit institutions (ESRB, 2012/2) and the harmonized disclosure requirements of the European Banking Authority (EBA/ITS/2020/04). According to the related guidelines of the European Banking Authority (GL/2014/03), an asset should be treated as encumbered if it has been pledged or is subject to any form of arrangement to secure, collateralise or credit-enhance any on-balance-sheet or off-balance-sheet transaction from which it cannot be freely withdrawn. Assets pledged that are subject to any restrictions in withdrawal, such as assets that require prior approval before withdrawal or replacement by other assets, should be considered encumbered.

In addition, the quality indicator (Extremely) High Quality Liquid Assets is reported for encumbered and unencumbered assets, collateral received, and own debt securities issued. Assets are classified as level 1 and level 2 in accordance with the requirements of delegated Regulation (EU) 2015/61 with regard to liquidity coverage requirement for Credit Institutions. Level 1 and level 2 assets are shown aggregated.

The Commerzbank Group offers a wide range of standardised and customer-specific financial services for private, corporate, public-sector and institutional customers. The main triggers for the encumbrance of the Bank's assets are therefore as follows:

- supplementing the funding of the Bank's lending business through covered bonds (particularly Pfandbriefe) and securitisations;
- securities lending and repo transactions to fund the Bank's securities business;
- derivatives business and associated posting of collateral;
- provision of collateral for third-party funds lent by development banks for assets eligible for development assistance.

OTC derivatives transactions are concluded based on internationally standardised master agreements such as the ISDA Master Agreement or the German Master Agreement for Financial Futures. The collateralisation under these agreements, in some cases stipulated by EU regulations and in others determined in accordance with the wishes of the parties, is fundamentally based on customary and bilaterally negotiated collateralisation arrangements. These arrangements in the derivatives business usually involve the collateralisation of the respective obligation from the totality of all transactions between the parties under a master agreement through the transfer of title over the collateral to the buyer of protection.

In contrast, the master agreements for securities lending and securities repurchase transactions usually do not require additional collateralisation because collateralisation is already an inherent component of the transaction. Commerzbank, in its capacity as a recipient of collateral, regularly has the right to realise or pledge such collateral provided that it returns equivalent securities when the transaction is concluded. As well as fulfilling the requirements of the German Pfandbrief legislation, covered bonds issued by the core bank must also meet the more stringent overcollateralisation requirements of the rating agencies. The overcollateralisation of covered bonds in programmes that are being wound down has been reduced to the requirements of the Pfandbrief legislation and disclosed publicly.

There are Pfandbriefe not externally issued yet which can be used amongst others for permanent ECB facilities.

In secured finance business, besides transactions in euros, there are no relevant foreign currency liabilities.

The table below contains information on encumbered and unencumbered assets of the Commerzbank Group according to CRR. The group of consolidated companies under CRR is not significantly different from the consolidated assets in accordance with the liquidity requirements under Part Six of EU Regulation 575/2013.

For the calculation of the figures published here, the median of the past four quarters in 2024 was used.

EU AE1: Encumbered and unencumbered assets

	€m	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
		010	030	040	050	060	080	090	100
010	**Assets of the reporting institution**	**82,593**	**24,291**			**494,505**	**134,383**		
030	Equity instruments	231	–	231	–	4,967	1,692	4,967	1,692
040	Debt securities	29,809	24,291	29,847	24,317	73,662	33,846	72,468	32,216
050	of which: covered bonds	10,551	7,826	10,551	7,826	5,483	5,483	5,469	5,469
060	of which: securitisations	897	–	878	–	27,234	–	27,230	–
070	of which: issued by general governments	12,276	11,560	12,326	11,583	19,656	18,404	18,653	17,183
080	of which: issued by financial corporations	16,214	11,582	16,197	11,582	44,939	14,019	44,390	13,703
090	of which: issued by non-financial corporations	846	675	846	675	5,679	842	6,038	750
120	Other assets	51,809	–			414,558	98,845		

More than 50% of the unencumbered other assets may also be used to provide security or collateral. Assets that may not be encumbered include, in particular, loans secured by deposited securities, derivatives without collaterals and non-financial assets.

Other assets mainly include loans and advances other than loans on demand of around €340,902m (thereof: €50,961m encumbered).

Pursuant to Article 443 CRR the breakdown of collateral received and own debt securities issued was as follows of 31 December 2024:

EU AE2: Collateral received and own debt securities issued

	€m	Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
		010	030	040	060
130	Collateral received by the disclosing institution	70,640	60,873	30,095	12,490
140	Loans on demand	–	–	722	–
150	Equity instruments	0	–	374	33
160	Debt securities	70,640	60,873	29,205	12,437
170	of which: covered bonds	3,358	2,378	9,198	6,144
180	of which: securitisations	2,600	–	6,672	–
190	of which: issued by general governments	55,277	52,710	5,831	2,869
200	of which: issued by financial corporations	14,041	7,343	21,916	9,349
210	of which: issued by non-financial corporations	1,458	767	1,458	420
220	Loans and advances other than loans on demand	–	–	–	–
230	Other collateral received	–	–	–	–
240	Own debt securities issued other than own covered bonds or securitisations	–	–	440	–
241	Own covered bonds and securitiation issued and not yet pledged			9,532	–
250	Total collateral received and own debt securities issued	153,626	85,838		

Pursuant to Article 443 CRR the liabilities associated or secured with encumbered assets were as follows at of 31 December 2024:

EU AE3: Sources of encumbrance

	€m	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
		010	030
010	Carrying amount of selected financial liabilities	108,926	140,909

There are no material encumbrances of assets that are not related to recognised liabilities.

Based on median values, a slight increase of the balance sheet sum has caused an increase in the encumbrance of assets compared to the previous year.

The information above relates to the consolidated assets of Commerzbank Group. As a result, no transactions carried out within the Group affect the information on encumbrance.

Liquidity risk model

A key component of liquidity risk management is the daily calculation of the liquidity gap profile. The liquidity gap profile shows the deterministic or stochastic inflows and outflows expected in the future on a given reporting date and across all portfolios. This forms the basis for calculating liquidity requirements or excess liquidity per maturity band. This also includes modelling the proportion of customer deposits that will be permanently available, known as the core deposit base.

The liquidity gap profile is also used to set the issuance strategy of the Commerzbank Group, which is operationalised by the Group Treasury division. The Group Finance division is responsible for calculating and allocating liquidity costs on the basis of the liquidity gap profile, which are then incorporated in the management of the segments' business activities.

Based on the methodology of the liquidity gap profile, management mechanisms such as recovery and early warning indicators are limited and monitored accordingly. The liquidity gap profile is limited in all maturity bands. The Group limits are broken down into individual Group units and currencies. The internal liquidity risk model is complemented by the regular analysis of additional adverse, reverse and historic stress scenarios.

More information on the current developments can be found in the section "Funding and Liquidity of the Commerzbank Group" in the Management Report of the Annual Report 2024 on pages 315 et seq.

Quantification and stress testing

Commerzbank uses a wide range of tools to manage and monitor liquidity risks on the basis of its internal liquidity risk model. In addition to internal economic considerations, liquidity risk modelling also factors in the binding regulatory requirements under the Capital Requirements Regulation (CRR) and the requirements of the Minimum Requirements for Risk Management (MaRisk). Commerzbank incorporates this within its liquidity risk framework, thereby quantifying the liquidity risk appetite established by the full Board of Managing Directors.

The stress scenarios within the Bank that underlie the model and are relevant for management purposes allow for the impact of both a bank-specific stress event and a broader market crisis. The Commerzbank-specific idiosyncratic scenario simulates a stress situation arising from a rating downgrade of two notches, whereas the market-wide scenario is derived from experience of the subprime crisis and simulates an external, market-wide shock. The main liquidity risk drivers of both scenarios are a markedly increased outflow of short-term customer deposits, above-average drawdown of credit lines, extensions of lending business regarded as commercially necessary, the need to provide additional collateral for secured transactions and the application of higher risk discounts to the liquidation values of assets.

As a complement to the individual scenarios, the Bank also simulates the impact on the liquidity gap profile (net liquidity position) of a scenario that combines idiosyncratic and market-specific effects. The liquidity gap profile is shown for the whole of the modelling horizon across the full spectrum of maturities and follows a multi-level concept. This allows for a nuanced presentation of deterministic and modelled cash flows in existing business on the one hand and the inclusion of prolongations on the other.

The table below shows the liquidity gap profile after application of the respective stress scenarios for periods of one and three months. Significantly more liquidity flows out in a combined scenario compared with the individual scenarios. As at end-2024, in the one-month and three-month periods, the combined stress scenario leaves net liquidity of €25.3bn and €26.1bn respectively.

addLIQ: Liquidity gap profile in the stress scenarios

Net liquidity in the stress scenario | €bn		31.12.2024	31.12.2023
Idiosyncratic scenario	1 month	36.0	34.7
	3 months	38.6	32.2
Market-wide scenario	1 month	40.8	35.7
	3 months	41.7	30.9
Combined scenario	1 month	25.3	27.0
	3 months	26.1	22.2

Liquidity reserve

Significant factors in the liquidity risk appetite include the reserve period, the size of the liquidity reserve portfolio held to compensate for unexpected short-term liquidity outflows, and the limits in the various maturity bands. As the liquidity reserve portfolio consists of highly liquid assets, it functions as a buffer in stress situations. The liquidity reserve portfolio is funded in line with the liquidity risk appetite in order to ensure that it is kept at the required size throughout the entire reserve period stipulated by the Board of Managing Directors. A part of this liquidity reserve is held in a separate stress liquidity reserve portfolio managed by Group Treasury to cover liquidity outflows should a stress event occur and to ensure solvency at all times. The amount of the stress liquidity reserve portfolio is checked and, if necessary, adjusted as part of the daily liquidity risk calculation. The Bank also holds an intraday liquidity reserve portfolio. The total value of this portfolio was €6.1bn as at year-end 2024.

The liquidity reserves in the form of highly liquid assets consist of the following three components as of 31 December 2024:

addLIQ2: Liquidity reserves from highly liquid assets

Liquidity reserves from highly liquid assets €bn	31.12.2024	31.12.2023
Highly liquid assets	133.9	134.3
of which level 1	117.5	124.4
of which level 2A	14.8	9.2
of which level 2B	1.6	0.8

As at the end of 2024, the Bank had highly liquid assets of €133.9bn.

Liquidity ratios

Throughout the 2024 financial year, Commerzbank's internal liquidity ratios, including the regulatory liquidity coverage ratio (LCR), were above the limits set at least annually by the Board of Managing Directors. The same is true of compliance with the survival period calculation set down by MaRisk.

The LCR is calculated as the ratio of liquid assets to net liquidity outflows under stressed conditions. It is used to measure whether a bank has a large enough liquidity buffer to independently withstand any potential imbalance between inflows and outflows of liquidity under stressed conditions over a period of 30 calendar days.

The Commerzbank has significantly exceeded the required minimum quota for the Liquidity Coverage Ratio (LCR) of 100% with an average of 134.7% over the last three month-end values of 2024. The average of the last twelve month-end values also significantly exceeded the minimum quota, reaching 142.1%.

The Bank has established corresponding limits and early warning indicators to ensure the LCR minimum requirements are met. In accordance with the regulatory requirements, the Board of Managing Directors and Group Treasury are informed about the liquidity risk status by means of daily and monthly reporting.

Additional information on the LCR can be found in the "Funding and liquidity of the Commerzbank Group" section of the Group management report on pages 315 et seq.

Liquidity Coverage Ratio

The liquidity coverage ratio (LCR) is the regulatory minimum liquidity ratio. It is a measure of the near-term solvency of the Bank under a predetermined stress scenario. Based on the requirements of the Basel Committee, the EU Commission set out the legal foundation for the LCR in the Capital Requirements Regulation (CRR) and in Regulation (EU) No. 575/2013, in conjunction with Delegated Regulation EU/2015/61 (D-VO).

The ratio itself is defined as the relationship between high quality liquid assets (HQLA) and net liquidity outflows (NLOs) within a 30-day period. Commerzbank monitors the LCR as part of its daily liquidity risk calculation.

The Bank has established internal early warning indicators for the purpose of managing liquidity risk. These ensure that appropriate steps can be taken in good time to secure long-term financial solidity. Risk concentrations can lead to increased outflows of liquidity, particularly in a stress situation. They can, for example, occur with regard to maturities, large individual creditors or currencies. By means of ongoing monitoring and reporting, emerging risk concentrations in funding can be recognised in a timely manner and mitigated through suitable measures. This also applies to payment obligations in foreign currencies. The Bank also mitigates concentrations through the continuous use of the broadly diversified sources of funding available to it, particularly in the form of diverse customer deposits and capital market instruments.

Commerzbank manages its global liquidity centrally using cash pooling. This approach ensures liquidity resources are used efficiently across all time zones, as Commerzbank Treasury units are located in Frankfurt, London, New York and Singapore.

Further information on liquidity risk management and internal models can be found in the Management Report of the Annual Report 2024 in the chapter “Funding and liquidity of the Commerzbank Group” from page 315 as well as in the chapter ‘Liquidity risk’ in the risk report of the annual report form page 364.

Liquidity Requirements

As required by Article 451a (2) CRR, Table EU LIQ1 below shows the calculation of the LCR for the previous four quarters. The averages of the 12 previous month-end values of the liquid assets and their cash inflows and outflows and finally the liquidity buffer and the liquidity coverage ratio are calculated for each quarter and can be found in the tables below. The values are rounded to a full-million amount in euros and are presented on a consolidated basis for the Commerzbank Group.

EU LIQ1: Quantitative information of LCR – unweighted

		a	b	c	d
	€m | %	Total unweighted value (average)			
EU 1a	Quarter ending on	31.3.2024	30.6.2024	30.9.2024	31.12.2024
EU 1b	Number of data points used in the calculation of averages	12	12	12	12
High-quality liquid assets					
1	Total high-quality liquid assets (HQLA), after application of haircuts in line with Article 9 of regulation (EU) 2015/61				
Cash Outflows					
2	Retail deposits and deposits from small business customers, of which:	169,302	175,027	179,665	183,092
3	Stable deposits	115,927	119,055	121,326	123,207
4	Less stable deposits	42,348	44,983	47,296	48,935
5	Unsecured wholesale funding	141,718	145,419	148,124	150,594
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	30,916	27,029	23,001	21,481
7	Non-operational deposits (all counterparties)	110,208	117,588	124,393	128,015
8	Unsecured debt	593	802	729	1,098
9	Secured wholesale funding				
10	Additional requirements	83,506	82,878	81,789	81,685
11	Outflows related to derivative exposures and other collateral requirements	5,997	5,870	5,782	5,634
12	Outflows related to loss of funding on debt products	257	261	192	71
13	Credit and liquidity facilities	77,253	76,747	75,815	75,980
14	Other contractual funding obligations	3,133	3,301	3,402	3,466
15	Other contingent funding obligations	108,533	108,997	109,386	110,338
16	Total cash outflows				
Cash Inflows					
17	Secured lending (e.g. reverse repos)	51,097	53,238	55,649	55,965
18	Inflows from fully performing exposures	22,828	23,538	24,036	24,109
19	Other cash inflows	3,406	3,411	3,366	3,500
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)				
EU-19b	(Excess inflows from a related specialised credit institution)				
20	Total cash inflows	77,330	80,187	83,051	83,575
EU-20a	Fully exempt inflows	–	–	–	–
EU-20b	Inflows subject to 90% cap	–	–	–	–
EU-20c	Inflows subject to 75% cap	71,815	74,498	77,772	78,930
Total Adjusted Value					
EU-21	Liquidity buffer				
22	Total net cash outflows				
23	Liquidity coverage ratio (%)				

EU LIQ1: Quantitative information of LCR – weighted

		a	b	c	d
	€m | %	Total weighted value (average)			
EU 1a	Quarter ending on	31.3.2024	30.6.2024	30.9.2024	31.12.2024
EU 1b	Number of data points used in the calculation of averages	12	12	12	12
High-quality liquid assets					
1	Total high-quality liquid assets (HQLA), after application of haircuts in line with Article 9 of regulation (EU) 2015/61	128,577	135,237	140,346	138,862
Cash Outflows					
2	Retail deposits and deposits from small business customers, of which:	10,827	11,336	11,749	12,051
3	Stable deposits	5,796	5,953	6,066	6,160
4	Less stable deposits	5,030	5,383	5,682	5,890
5	Unsecured wholesale funding	71,107	73,612	75,600	77,522
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	7,709	6,738	5,732	5,351
7	Non-operational deposits (all counterparties)	62,805	66,072	69,139	71,073
8	Unsecured debt	593	802	729	1,098
9	Secured wholesale funding	9,441	9,278	9,354	7,922
10	Additional requirements	16,863	17,013	17,140	17,285
11	Outflows related to derivative exposures and other collateral requirements	5,517	5,430	5,370	5,249
12	Outflows related to loss of funding on debt products	257	261	192	71
13	Credit and liquidity facilities	11,090	11,322	11,578	11,965
14	Other contractual funding obligations	2,470	2,587	2,648	2,703
15	Other contingent funding obligations	3,887	3,937	3,901	4,149
16	Total cash outflows	114,594	117,762	120,391	121,633
Cash Inflows					
17	Secured lending (e.g. reverse repos)	2,133	2,450	2,738	3,266
18	Inflows from fully performing exposures	16,248	16,707	17,046	17,191
19	Other cash inflows	3,375	3,381	3,340	3,476
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)	–	–	–	–
EU-19b	(Excess inflows from a related specialised credit institution)	–	–	–	–
20	Total cash inflows	21,756	22,537	23,124	23,933
EU-20a	Fully exempt inflows	–	–	–	–
EU-20b	Inflows subject to 90% cap	–	–	–	–
EU-20c	Inflows subject to 75% cap	21,756	22,537	23,124	23,933
Total Adjusted Value					
EU-21	Liquidity buffer	128,577	135,237	140,346	138,862
22	Total net cash outflows	92,838	95,225	97,268	97,700
23	Liquidity coverage ratio (%)	138.3%	141.9%	144.3%	142.1%

The average quarterly LCR values have been consistently high. As at each of the reporting dates, Commerzbank considerably surpassed the required minimum ratio of 100%. The composition of the highly liquid assets available to cover the liquidity outflows in the reporting period is set out below:

addLIQ3: Highly liquid assets in accordance with EU/2015/61

Average of the last 12 month-end values €m	31.3.2024	30.6.2024	30.9.2024	31.12.2024
Total	**128,577**	**135,237**	**140,346**	**138,862**
thereof: Level 1	119,666	124,639	128,256	124,935
thereof: Level 2A	8,328	9,753	11,001	12,556
thereof: Level 2B	583	844	1,088	1,372

Commerzbank also reports the LCR in US dollars and Polish zloty (PLN), as these are deemed to be significant foreign currencies under the CRR. In addition, the Bank ensures that foreign-exchange risk is monitored as well as limited and managed using an internal model.

When calculating the LCR, the Bank takes into account the liquidity inflows and outflows for derivatives over the next 30 days. When standardised master agreements are involved, the liquidity inflows and outflows are calculated on a net basis. Commerzbank also takes into account further items that could lead to additional outflows of liquidity. These items include variation margins for changes in the value of securities pledged as collateral and, in the event of a possible deterioration in credit rating, additional collateral furnished because of adverse market scenarios for derivatives transactions. For other contingent liabilities, since June 2019 Commerzbank has used additional outflows in accordance with Article 23 of Commission Delegated Regulation (EU) 2015/61 (D-VO).

In addition, there are no other items in the LCR calculation at Commerzbank that are not included in the LCR disclosure report but are considered relevant to the liquidity profile.

Net Stable Funding Ratio

Based on Regulation (EU) 2019/876 of 20 May 2019 (amendment of Regulation (EU) 575/2013) the Net stable funding ratio (NSFR) is the regulatory defined Structural liquidity ratio and was introduced as of 30 June 2021.

It sets the requirement of stable refinancing as a ratio of the amount of the available stable refinancing (ASF) and the amount of the required stable refinancing (RSF) over a one-year horizon.

The quota itself is defined as the ratio of the weighted available stable refinancing and the necessary weighted stable refinancing. The minimum quota is 100%.

The NSFR of 31 December 2024 underlines the sound financial situation of the Commerzbank Group. It reflects the customer-oriented business model with a high contribution to the ASF from customer deposits. The majority of the RSF is attributable to the credit business and the bulk of the ASF is attributable to customer deposits.

Table EU LIQ2 shows the information on the Net Stable Funding Ratio as of 31 December 2024 according to Article 451a (3) CRR. These include items of the available stable funding as well as items of the required stable funding.

EU LIQ2: Net Stable Funding Ratio

		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
€m		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
Available stable funding (ASF) Items						
1	Capital items and instruments	33,089	–	2	7,150	40,239
2	Own funds	33,089	–	2	5,748	38,837
3	Other capital instruments		–	–	1,402	1,402
4	Retail deposits		179,537	1,474	3,815	173,216
5	Stable deposits		128,695	1,148	2,759	126,110
6	Less stable deposits		50,842	326	1,056	47,107
7	Wholesale funding:		239,575	8,954	54,439	126,506
8	Operational deposits		27,069	–	–	1,679
9	Other wholesale funding		212,505	8,954	54,439	124,827
10	Interdependent liabilities		2,348	1,198	8,851	–
11	Other liabilities:	–	12,232	150	18,111	18,186
12	NSFR derivative liabilities	–				
13	All other liabilities and capital instruments not included in the above categories		12,232	150	18,111	18,186
14	Total available stable funding (ASF)					358,148
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					7,660
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		3	10	33,602	28,573
16	Deposits held at other financial institutions for operational purposes		370	–	–	185
17	Performing loans and securities:		118,143	20,921	216,698	211,886
18	Performing securities financing transactions with financial customerscollateralised by Level 1 HQLA subject to 0% haircut		44,645	762	4,931	5,312
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		28,395	5,371	18,554	23,201
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		35,502	8,350	73,588	138,479
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		1,128	992	14,967	55,899
22	Performing residential mortgages, of which:		3,142	3,724	70,061	–
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		2,651	3,290	56,825	–
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		6,460	2,714	49,564	44,894

Teil 2

		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
€m		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
25	Interdependent assets		2,348	1,198	8,851	–
26	Other assets		31,493	449	16,086	20,619
27	Physical traded commodities				234	199
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		592	–	4,121	4,006
29	NSFR derivative assets		1,322			1,322
30	NSFR derivative liabilities before deduction of variation margin posted		7,783			389
31	All other assets not included in the above categories		21,796	449	11,731	14,703
32	Off-balance sheet items		108,271	18,126	73,538	15,183
33	**Total RSF**					**284,106**
34	**Net Stable Funding Ratio (%)**					**126.1**

F. Operational risk

Based on the Capital Requirements Regulation (CRR), Commerzbank defines operational risk (OpRisk) as the risk of loss resulting from the inadequacy or failure of internal processes, people and systems or from external events. This definition includes, among other things, legal risk, human resources risk or tax risk, as well as product risk, conduct risk and risks in the area of environment, social and governance (ESG). In this definition the focus is not on strategic or reputational risk. In view of their increased economic significance, compliance risk, third party risk and ICT risk are managed as separate risk types. Losses from compliance risks, third party risk and ICT risks are incorporated into the model for determining the economic capital required for operational risks.

Risk management

Strategy and organisation

Within Commerzbank, OpRisk and governance issues of the Internal Control System (ICS) are closely connected in terms of methodology and are continuously being enhanced. This is because many OpRisk cases are closely linked with failures in the control mechanisms. A properly functioning ICS thereby helps to reduce or avoid losses from operational risks and thus to low-er the amount of economic capital required to cover operational risks in the medium to long term. Conversely, the operational risk management systems enable the ICS to adapt itself consistently to them. The further development of the ICS structure is an essential aspect of the proactive reduction or prevention of operational risks where possible.

Chaired by the CRO, the Group OpRisk Committee meets at least four times a year and deals with the management of operational risks within the Commerzbank Group. It also acts as the escalation and decision-making committee for key OpRisk topics that span all areas. The Management Boards and/or the Segment Committees with responsibility for operational risk deal with the management of operational risk in the relevant units. They analyze OpRisk issues that affect them, such as loss events, and define subsequent measures or recommend action.

Commerzbank's OpRisk strategy is approved on an annual basis by the Board of Managing Directors after it has been discussed and voted upon in the Group OpRisk Committee. The OpRisk strategy describes the risk profile, key elements of the desired risk culture, its management framework and measures to be taken by Commerzbank to manage operational risk.

OpRisk management is based on three consecutive levels (three lines of defence) which, when taken together, are crucial for reaching the given strategic aims.

Risk management

Commerzbank takes an active approach to managing operational risk, aiming to systematically identify OpRisk profiles and risk concentrations and to define, prioritize and implement risk mitigation measures.

Operational risks are characterized by asymmetric distribution of losses. This means that most of the losses are relatively small, while isolated losses with a very low probability of occurrence have the potential to be large and devastating. This makes it necessary, not only to limit high loss potential but also to proactively manage losses that can be expected to occur frequently.

To do this, Commerzbank has set up a multi-stage system that brings together the defined limits on economic capital (risk capacity) and those set for operative risk management during the year (risk appetite/risk tolerance), complemented by rules on the transparent and conscious acceptance and approval of individual risks (risk acceptance).

OpRisk management includes an annual evaluation of the Bank's ICS key controls and a risk scenario assessment. Furthermore, OpRisk loss events are subjected to ongoing analysis and to ICS backtesting on an event-driven basis if relevant. Lessons learned activities are carried out after all material loss events.

A structured, centralized and decentralized reporting system ensures that the management of the Bank and its segments, members of the Group OpRisk Committee and the supervisory bodies are informed regularly, promptly and fully about operational risk. Detailed OpRisk reports are produced quarterly. They contain changes in OpRisk losses, the segments' main loss events, current risk analyses, changes in the capital requirement and the status of measures implemented. Operational risks are also part of the regular risk reporting process to the Board of Managing Directors and to the Supervisory Board's Risk Committee.

OpRisk capital requirements

Since the fourth quarter of 2021 Commerzbank has been measuring regulatory capital using the standardised approach (SA), while economic capital for operational risks is measured using a dedicated internal model (OpRisk ErC model).

Standardised approach – Pillar I

The standardised approach is applied throughout the Group. The calculation principle for this is the three-year average of the so-called "relevant indicator". This is calculated on the basis of regulatory income statement items (in particular net interest income, net commission income, net trading income and other operating income). The "relevant indicator" is broken down into eight different business areas and multiplied by different risk weightings. On January 1, 2025, the CRR III came into force. A new standardized approach will be introduced, which will be applicable for the first time on March 31, 2025.

OpRisk ErC Model – Pillar II

The ErC model determines a capital charge based on quantitative methods, which is supplemented by qualitative components. The internal model used for this corresponds to the previous advanced measurement approach (AMA).

Quantitative components

The OpRisk ErC model's quantitative components include internal and external OpRisk loss data along with mathematical/statistical modelling.

Group-wide internal OpRisk loss data is collected mandatory from a starting threshold of €10,000 in a Group-wide loss database. As the internally calculated loss data history cannot always reflect extreme OpRisk events adequately, external OpRisk events are also be factored into the OpRisk ErC model. For this purpose, relevant external loss data from the Operational Riskdata eXchange Association (ORX), Genf, an international data consortium is used. For mathematical/statistical modelling, the data is grouped by combinations of business line, event category and region. Loss frequency is modelled on the basis of internal loss data, while distribution is modelled on the basis of internal and external loss data.

Qualitative components

Qualitative methods (risk scenario assessment and business environment and control system) are used to complement the information from the quantitative model components.

The risk scenario assessment (RSA) is an ex-ante risk assessment of operational risks. Based on expert opinions and in accordance with the requirements of the Capital Requirement Regulation (CRR), they serve to identify exceptional but plausibly possible risk events which could jeopardise the Bank's existence or severely affect its results and incorporate these into modelling.

The business environment and control (BEC) system provides incentives to reduce operational risk and improve risk management. Business environment and internal control factors are shown in the OpRisk model in the form of add-ons and reductions to regulatory and economic OpRisk capital requirements. The BEC system takes into account the following qualitative OpRisk elements:

- Internal control system (ICS): As part of the annual ICS review, the company-wide ICS control mechanism is evaluated in terms of its functionality. To ensure that the internal control system factors are properly represented, the ICS as a BEC subject area consists of three components: ICS self-assessment (assessment by the units carrying out the controls), ICS testing (independent review by internal audit) and ICS documentation (modelling status in the Bank's process model).
- Human resources risk: The human resources risk report prepared by the Group Human Resources division takes into account current areas of human resources activity and presents risk information on the basis of set criteria.
- IT risk: The IT risk report prepared by the Group Cyber Risk and Information Security division brings together data relating to IT risk in the areas of IT security and incidents. The data cover the four IT security targets: confidentiality, integrity, availability and transparency. In addition, an assessment of the adequacy and implementation of emergency plans will be included in the BEC.
- Key risk indicators (KRIs): KRIs are used to manage operational risk proactively by means of early warning signals.
- OpRisk management: The OpRisk & ICS department evaluates the active OpRisk management of the material units on the basis of a uniform list of criteria. Information on the progress made towards processing audit findings is also included in the BEC system.
- Top-level adjustments (TLAs): TLAs are only used in well-founded exceptional cases to establish a risk buffer for extraordinary changes in the OpRisk environment and include this in the OpRisk capital requirement calculation at short notice.

Table EU OR1 shows the operational risk own funds requirements and risk-weighted exposure amounts in accordance with Articles 446 and 454 CRR as of 31 December 2024 as well as the relevant indicators:

EU OR1: Operational risk own funds requirements and risk-weighted exposure amounts

		a	b	c	d	e
	Banking activities	**Relevant indicator[1]**			**Own funds requirements**	**Risk exposure amount**
	€m	**2022**	**2023**	**2024**		
1	Banking activities subject to basic indicator approach (BIA)	–	–	–	–	–
2	Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	10,721	11,916	12,048	1,927	24,093
3	Subject to TSA:	10,721	11,916	12,048		
4	Subject to ASA:	–	–	–		
5	Banking activities subject to advanced measurement approaches AMA	–	–	–	–	–

[1] At the time of the calculation of the relevant indicator, some underlying information is only provisional and the current value is therefore provisional. As a result, after final calculation, the previous year's figure shown here differs from last year's publication.

Stress testing and validation

As an integral part of risk management and the risk-bearing capacity concept, stress tests for operational risk are carried out on a regular basis. As a basis for the stress methodology, consistently the standard approach is used to determine the regulatory amount and the OpRisk ERC model is used to determine the economic amount. Regular validation is carried out to ensure the ongoing adequacy of the OpRisk framework and the methods used. The validation carried out in 2024 has confirmed its appropriateness.

Outlook

The Commerzbank framework for operational risk management is continuously reviewed and further developed. At present, the focus is on supporting the strategic measures of Commerzbank, the further development of the OpRisk ErC model and the integration of ESG aspects into risk management.

Sub-risk types of operational risk

The risks listed below are the sub-risk types of operational risk included in Commerzbank's risk inventory.

Legal risk

Legal risk primarily arises for the Commerzbank Group when the Bank's claims cannot be enforced for legal reasons or when claims can be made against the Bank because the underlying law was not observed or has changed since a transaction was concluded.

The operation of banking and financial services transactions that are subject to regulatory provisions may also result in legal risk. This risk may also take the form of orders or sanctions issued or imposed by one or more authorities whose supervision Commerzbank is subject to anywhere in the world. Legal risk also arises in realised losses or provisions due to or in connection with court cases brought against Commerzbank (passive proceedings). Cases brought by Commerzbank (active proceedings) generally represent a credit risk rather than an operational risk, so the risk of loss is already taken into account through write-downs. However, the costs of legal action (court and lawyers' costs) for active proceedings are classified as legal risk.

Organisation

Within Commerzbank, the functional management of legal risk throughout the Group is the responsibility of Group Legal as the second line of defence. All legal staff at the various Group Legal locations including the foreign branches as well as the legal staff of the legal departments of the domestic and foreign subsidiaries are as legal risk managers operationally responsible for the

identification and management of the Group-wide legal risk within Commerzbank.

Risk management

The task of the Group's legal risk managers is to detect legal risks and all losses potentially resulting from them at an early stage, to highlight possible solutions that might avoid or minimise such losses, and to play an active part in reaching decisions concerning legal risks. They must ensure that they are always up to date with all legal changes or new findings within their area of responsibility and inform the business units affected about the impact on legal risk and any action that needs to be taken as a result.

The legal risk managers are responsible for arranging or adjusting legal provisions and look after and monitor new and ongoing court proceedings.

In the case of passive proceedings, provisions are recognised on the basis of the risk assessment carried out by the responsible legal risk manager. To determine the amount of the provisions for the claim, the legal risk manager makes the best possible estimate of the probable loss (in cash / cash outflow) from the proceedings. The provisions for the claim must be recognised in the amount of this expected loss if the outflow of resources is probable. The legal risk manager must review the probability of occurrence and the expected loss in the event of new findings, particularly after each significant stage of the proceedings, and adjust the provisions for the claim accordingly. In the case of active proceedings, provisions are usually only recognised for the expected court and lawyers' costs.

Group Legal provides information about all major court proceedings and risk trends in a quarterly litigation report. This report is sent to the Bank's management, the supervisory authority and the bank's auditors. The Risk Committee of the Supervisory Board receives an annual litigation report.

Operational and organisational risk

Through its written rules of procedure, Commerzbank has a defined framework for its organisational structure and processes. These rules are based on legal requirements, including the Minimum Requirements for Risk Management of Credit Institutions (MaRisk), section AT5 Organisational guidelines, and on Commerzbank's strategy and constitution.

The rules for the organisational structure include uniform and binding minimum requirements for the Bank's structure and they thereby allocate responsibilities clearly. The core elements are the assignment of responsibilities for the Board of Managing Directors, the business objectives with the descriptions of the tasks of the corporate units, and the administrative cost approval authorities for the different management levels.

For organisational processes, standards are set for the creation, regular updating, approval and documentation of instructions and processes as well as the systems to be used.

Regular reviews of up-to-date status are carried out for both components. The managers responsible for risk are involved through approval processes and are thus informed about any changes in risks.

This creates overall certainty for the work of all standard-setting functions and employees.

Human resources risk

The internal, management-oriented interpretation of this definition at Commerzbank AG includes the following elements in human resources risk.

Adjustment risk: Adjustment risk results when organisational and operational circumstances change (for example, restructuring, changes in management culture, qualification needs), these changes impact employees' scope of responsibilities and therefore require a greater willingness to change on the part of the staff.

Motivation risk: Motivation risk arises when demotivating factors are not eliminated and employees do not adequately perceive motivating factors such as management or remuneration. The effects (such as withheld performance by employees) can have a direct impact on the working environment and the organisation's productivity.

Departure risk: Departure risk takes into account the consequences of undesired employee departures (for example, if an employee resigns voluntarily), particularly when high performers are involved.

Supply risk: Supply risk reflects the consequences of insufficient staffing (for example, positions budgeted for but unfilled, inadequate development of young staff) and the resulting consequences (operating bottlenecks, increased workload, lower productivity and illness).

Strategy and organisation

Employees are a key resource for Commerzbank. With this in mind, all managers have a basic responsibility to keep an eye on the human resources risk within their own area of responsibility and to deal with any undesirable developments, if necessary with the involvement of Group Human Resources (GM-HR). Human resources risk is additionally and systematically managed by GM-HR with the aim of identifying, assessing and managing any changes in the risk situation, such as through the use of selected personnel tools.

The Group division GM-HR is the responsibility of the Group Human Resources division head, who reports directly to the member of the Board of Managing Directors responsible for human resources (CHRO).

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Risk management

The strategic guidelines from the overarching Group risk strategy apply without limitation to human resources risk. The operational risk sub-risk strategy, as part of the overall risk strategy of Commerzbank, sets the risk strategy framework and contains a detailed description of human resources risk management in addition to strategic and organisational elements. In this context, GM-HR prepares a human resources risk report for Commerzbank AG and its largest subsidiaries every six months for the attention of the Board of Managing Directors in order to assess adjustment risk, motivation risk, departure risk and supply risk based on defined criteria and to identify current risk-relevant areas where action is needed.

Adjustment risk is countered through selected internal and external training, continuing education and change measures. Steps are taken to ensure that the qualification levels of our employees keep pace with the current requirements, that guidance is provided for structural changes and that our employees can fulfil their duties and responsibilities. The potential for a loss of expertise is countered with training aimed at reskilling and upskilling as well as the elaboration of a sustainable human resources development plan.

Motivation risk is captured by GM-HR by means of regular employee surveys. These enable us to respond swiftly to potential changes in employees' level of corporate loyalty and to initiate adequate measures. This includes the development of incentive systems to recognise individual achievements as well as measures for employee development and the reassignment of more demanding tasks to top performers.

With regard to departure risk, great care is taken to avoid lasting disruptions to operational processes caused by the absence or departure of employees. GM-HR monitors staff turnover on a regular basis from both a quantitative and a qualitative perspective. Another risk-mitigating measure is agreement on mutual consent for social plan instruments to prevent unwanted departures in the context of downsizing measures.

Supply risk is countered by appropriate staffing in quantitative and qualitative terms. The aim in this is to ensure that the internal operating requirements, business activities and prevailing strategy of Commerzbank AG can be implemented. In addition to strengthening the employer brand, this also includes modernising the recruitment process in Germany and at international locations. These steps can help ensure that an appropriate number of employees with the required qualifications are available.

Tax risk

Tax risk consists of the following components: the risk of submitting erroneous[1], incomplete or late tax returns, internally calculated tax returns and mandatory notifications of tax-relevant details/ information, or infringement against disclosure, reporting, notification or cooperation obligations.

This may result in the following costs: penalties for late execution and late payment surcharges due to non-compliance with statutory deadlines, interest expenses for back taxes and penalties in the form of coercive penalty payments or late payment surcharges for non-adherence to cooperation, documentation, archiving and retention periods (Principles for the proper keeping and storage of books, records and documents in electronic form and for data access; GoBD).

Tax risk also includes: fines or penalty interest arising from administrative and criminal tax offences, additional charges due to avoidable double taxation (e.g. including the same information in different tax contexts), avoidable tax/interest expenses or non-refund of taxes due to non-filing or improper filing of applications or examination of tax assessments, and additional expenses due to tax estimates.

In view of the above-mentioned tax risks and the zero-tolerance approach to criminal tax offences and to aiding and abetting criminal and administrative tax offences, Commerzbank has set up a Tax Compliance Management System (TCMS), which is continually analysed and optimised by the specialised GM-TAX Tax Compliance Management unit in collaboration with various units inside and outside GM-TAX.

Commerzbank reports known tax risks resulting from criminal tax offences quarterly to the Bank-wide Anti-Fraud & Corruption Committee (BAFCC) for Commerzbank AG including material foreign branches and relevant subsidiaries.

[1] In the case of errors, it must be determined whether it was possible to evaluate/recognise the error as such at the time the tax return or notification was submitted. If legal regulations have been undeniably misinterpreted, incorrect information has been deliberately provided or existing procedures have not been followed, this must be viewed as erroneous. If there is a justifiable different interpretation of a legal regulation that leads to an adjustment as part of a tax audit, this is not construed as an error within the meaning of operational risk.

G. Other material risks

The risks listed below are, with the exception of ESG risks, the other significant risks according to the risk inventory of Commerzbank. ESG risks are considered as a horizontal risk driver and are presented separately in Annex 4.

Compliance risk

Compliance risk falls within the definition of operational risk. Commerzbank acknowledges and understands the existence of inherent compliance risk in areas of its business that are subject to the risk of abuse by financial criminals. Compliance risk in this context comprises risks relating to money laundering, terrorist financing, sanctions/embargoes, markets compliance and other punishable actions (such as fraud, bribery and corruption), as well as consideration of human rights and environmental risks in accordance with the German Supply Chain Due Diligence Act (LkSG).

In order to actively promote a compliance culture in the Bank, the Board of Managing Directors of Commerzbank AG has laid down and communicated corresponding values in the Code of Conduct.

Organisation

Group Compliance is led by the Divisional Board member for Group Compliance, who reports directly to the Board of Managing Directors. Pursuant to Sec. 87 (5) of the German Securities Trading Act (WpHG) and BT 1.1 MaComp (Minimum Requirements for the Compliance Function), the Divisional Board member for Group Compliance is both the Group's Compliance Officer and, under Sec. 25 h (7) of the German Banking Act (KWG) and Sec. 7 and 9 of the German Anti-Money Laundering Act (GwG), the Anti-Money Laundering Officer, or Group Anti-Money Laundering Officer for the Group. The Divisional Board member for Group Compliance also assumes the role as Human Rights Officer (HRO) according to the German Supply Chain Due Diligence Act (LkSG).

Group Compliance is responsible for:

A. The five types/areas of compliance risk:
1) anti money laundering / fighting terrorist financing
2) sanctions and embargoes
3) punishable actions such as fraud, bribery and corruption
4) markets compliance
5) consideration of human rights and environmental risks in accordance with the LkSG

as well as

B. Further responsibilities:
1) coordination of the requirements under MaRisk section 4.4.2 ("MaRisk compliance function") and
2) independent implementation of internal special investigations with compliance relevance.

Risk management

To prevent compliance risks, Commerzbank has implemented security systems and controls for its transactions, customers, products and processes. These procedures for ensuring compliance with material legal provisions and requirements are referred to in their entirety as a compliance management system (CMS). Commerzbank's CMS is based on international market standards and the regulatory requirements in the various countries which are relevant for its business activities. Commerzbank is constantly developing its CMS in order to meet its responsibilities and address the growing complexity and increasing regulatory requirements.

Reputational risk

Reputational risk is the risk that stakeholders may lose confidence in Commerzbank or that its reputation may be damaged as a result of negative events in its business activities. Commerzbank's stakeholder groups include in particular the public and the media, non-governmental organisations and its customers. In the present-day competitive environment, a company's reputation is becoming more and more important. The main factor determining this is how companies handle environmental or social risks in their core business (intrinsic reputational risks). Companies are judged not only on the basis of people's personal experiences of them, but also on reports reaching the public, especially through the media. Reputational risk therefore goes hand in hand with communication risk.

Strategy and organisation

All employees and managers have a fundamental duty to protect and reinforce Commerzbank's good reputation as a significant element of its enterprise value. The segments and significant subsidiaries bear direct responsibility for reputational risk resulting from their particular business activity. Managing intrinsic reputational risk means in particular identifying and reacting to potential environmental and social risks at an early stage, thereby reducing any potential communication risk or even preventing it completely.

The Reputational Risk Management department is part of the central Group Communications division of the Commerzbank Group and focuses on intrinsic reputational risk that may directly lead to reputational damage among stakeholder groups. The department maintains close links with the relevant front office units.

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Management of intrinsic reputational risk is the responsibility of the Chairman of the Board of Managing Directors. It is a component of Commerzbank's Group risk strategy. Reputational Risk Management's tasks include identifying, evaluating and addressing intrinsic reputational risk in systematic processes at an early stage and suggesting or implementing appropriate measures (early warning function).

Downstream (i.e. secondary) reputational risks that result from, for example, loan defaults or IT disruptions do not fall within Reputational Risk Management's scope: they are instead indirectly and automatically taken into account through regular management of the relevant primary risk type (following the causation principle). If downstream risks materialise, they can indirectly lead to reputational damage.

According to the risk inventory, reputational risk is one of the main non-quantifiable risk types in the Commerzbank Group. These must be limited and monitored in accordance with the Group risk strategy through a sub-risk strategy using suitable qualitative guidelines. Thus, the reputational risk management sub-risk strategy gives specific shape to the Group risk strategy through strategic management that is based on three main pillars:

- Firstly, strategic management of the intrinsic reputational risk aims to prevent reputational damage from arising from socially or environmentally questionable transactions, products and customer relationships. To this end, Commerzbank has created the clear governance structures described in this sub-risk strategy.
- Secondly, expected economic implications of reputational damage (lower business volumes) are factored directly into business planning and multi-year planning.
- Thirdly, the risk-bearing capacity analysis implicitly takes into account possible effects of reputational risks materialising unexpectedly in business risk or operational risk.

The global functional lead for managing intrinsic reputational risk in the Commerzbank Group lies with Group Communications/Public Affairs/Reputational Risk Management.

The strategy aims to ensure:

- overall management of intrinsic reputational risk, as well as:
  - the consideration of environmental risk aspects considered material (currently greenwashing),
  - annual scenario analysis of the reputational aspects of ESG (environmental, social and governance) risk,
- explicit integration of sustainability criteria into banking business,
- internal measures to raise the awareness of managers and employees for intrinsic reputational risk and the associated corporate responsibility,
- informing management through reputational risk reporting.

Management

Intrinsic reputational risks are essentially managed by the Reputational Risk Management department using a qualitative approach. As part of a structured process, transactions, products and customer relationships in connection with sensitive areas are assessed with reference to environmental and social risks on a qualitative five-point scale. This assessment can contain conditions and in some cases a negative verdict, which could lead to a rejection. In addition to the qualitative assessment of intrinsic reputational risk, an annual scenario-based ICAAP materiality analysis is used to quantitatively assess the impact of ESG risk on reputational risk and to ensure appropriate ICAAP consideration via business risk.

The sensitive areas regularly and comprehensively analysed in Reputational Risk Management include armaments exports, and transactions and customer relationships relating to power generation and commodities extraction. Commerzbank's attitude towards these areas is laid down in positions, guidelines and the ESG framework that are binding for all employees. Commerzbank's Reputational Risk Management department regularly observes and analyses new environmental and social issues and informs the relevant parts of the Bank about these, if necessary. The reputational risks identified and addressed by the department are incorporated into the quarterly reputational risk report – part 1: review of and outlook on critical issues; part 2: high and major intrinsic reputational risks (sustainability issues) – which is prepared for the Board of Managing Directors and the Risk Committee of the Supervisory Board.

Information and communication technology risk (ICT risk)

ICT risk includes cyber risk (e.g. the risk of cyber attacks), IT risk (e.g. the risk of a data centre outage), IT-dependent information security risk (e.g. the risk of data leakages) and elements of third party risk (e.g. the risk of data processing failures). Risk management prioritises risk mitigation measures based on the magnitude of the potential negative impact on business processes and pays particular attention to digital resilience.

ICT risk is managed by the Group Risk Management – ICT & Information Security division (GRM-CRIS), which is overseen by the Group Chief Information Security Officer (Group CISO). The ICT risk management framework has been certified in accordance with ISO 27001. The Supervisory Board and the Board of Managing Directors are kept informed about the current risk profile through the security report.

The three lines of defence principle is followed to avoid conflicts of interest between the standard setters and the implementing entities.

GRM-CRIS acts as the standard setter (second line of defence) for ICT risk, which means that it:

- defines and manages Commerzbank's internal standards in the form of policies and guidelines consisting of controls and requirements;
- monitors the completeness and effectiveness of controls; and
- manages ICT risk.

A review of the responsibilities of the first and second lines of defence for managing ICT risk is currently underway and will be completed in the second quarter of 2025.

The current profile for information security risk is characterised by the following issues:

Geopolitical tensions over the Ukraine war remain high. The Russia-Ukraine war continues to harbour a risk of attacks by state actors on critical infrastructure and resulting collateral effects on the Bank.

Ransomware is an established attack vector in organised cyber crime and is a threat in particular to SMEs. With regard to distributed-denial-of-service (DDoS) attacks, we are observing an increasing shift from the network to the application level. Steps have already been initiated to ensure improved protection from these threats by means of the agreed packages of capital investment and associated measures.

The Bank has safeguards in place to protect itself adequately from attacks and to respond appropriately based on ICT threat analyses.

Business risk

Business risk is the risk of negative effects on the achievement of Commerzbank's projected results with a one-year risk horizon and the Bank's medium to long-term strategic goals, for example as a result of changes in the market or competitive environment, capital market requirements, regulatory/political factors or the inadequate implementation of the Group strategy (primary risk drivers).

Strategy and organisation

On the basis of external and internal factors, the Board of Managing Directors sets out a sustainable business strategy describing the major business activities and steps required to meet the targets.

The aim in managing and monitoring ongoing business risk is to make a prediction about possible adverse deviations in the development of the operating results from the planned figures over a 12-month time horizon and thus to take the volatility of the underlying income and expenses into account when planning business activities. The aim of medium to long-term business strategy risk management, on the other hand, is the appropriate implementation of Group strategy in order to achieve the announced business goals and, if necessary, early adjustment of the business strategy if changes in the environment become apparent.

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Risk management

To ensure proper implementation of the Group strategy to achieve the business targets, strategic controls are carried out through regular monitoring of quantitative and qualitative targets in the Group and the segments. The Bank has various instruments at its disposal to make deviations between actual performance and planned performance transparent at an early stage and to initiate countermeasures to limit business risk – including regular reporting on the earnings situation for the Group and the segments, including monitoring KPIs and early warning indicators. Based on ongoing observations of the German and international market and competitive environment as well as the requirements of the regulator and the capital markets, the main changes and developments that are visible in the medium to long term are continuously analysed and the necessary measures are derived from this to ensure the Bank's long-term success. Strategy implementation is checked and tracked on an ongoing basis; this includes in particular regular monitoring of progress made with respect to the implementation of the delivery portfolio defined for the "Moving forward" strategy.

From an economic perspective, the management of business risk is closely linked to internally defined capital ratio requirements. The fulfilment of these requirements and the way in which business risk is taken into account when placing a limit on the risk-bearing capacity ratio ensure that sufficient capital backing is available at all times (risk coverage potential). If it becomes necessary to make adjustments to Commerzbank's risk appetite and/or initiate capital measures, this is done in line with general risk governance under the Group risk strategy. In the normative perspective, business risk is implicitly taken into account through the SREP P2G and P2R requirements as well as various scenario formats with a time horizon of up to three years.

Responsibility for strategic corporate management and for managing business risk as part of achieving the planned results lies with the Board of Managing Directors. Specific business policy decisions also require authorisation from the Supervisory Board's Risk Committee. In addition, all major initiatives and projects are decided by the Board of Managing Directors.

Physical asset risk

Physical asset risk is understood to be the risk that arises from

- the negative change in market values of Group properties that have already been recognised as assets in the next 12 months with a corresponding charge to the income statement,
- properties that may be recognised on the Group's balance sheet owing to contractually guaranteed obligations in the nature of options for certain dates and fixed redemption prices for investors and accordingly may have a negative impact on the income statement.

Physical asset risk results from real estate used for business purposes and from the business activities of Commerz Real.

Strategy and organisation

Physical asset risk is classified as a material risk type for Commerzbank and is included as a quantifiable risk in determining the economic capital requirement and thus directly in the risk-bearing capacity calculation. In the normative perspective of the ICAAP, physical asset risk is taken into account as part of the scenario analyses.

The physical asset risk resulting from real estate used for business purposes is managed through the following risk categories, among others: risk from the market environment, risk for business activities and risk from legal proceedings. The need for cost-effective provision of adequate premises for the Bank is factored into the desired risk structure as a key consideration. The multi-year planning for premises costs adopted in each case acts as a guide for mapping the financial opportunities and risks within the real estate portfolio. Commerz Real's physical asset risk results from directly held assets, assets from majority equity holdings, assets from minority equity holdings and outstanding residual values as well as tenant loans from real estate leasing contracts. The central asset classes are ships, real estate and infrastructure. Sustainably achievable cash flow is the central risk driver.

Risk management

When managing and controlling physical asset risk, a distinction is made between two different classes:

1. real estate used for business purposes
2. physical asset risk at Commerz Real

For the sake of completeness, the first class also includes property-related risks that arise from the perspective of a real estate operator and that go beyond the scope of the physical asset risk.

The Group value for physical asset risk is calculated each quarter and reported regularly in the Group Risk & Capital Monitor.

At Group level, physical asset risk is restricted overall by an economic limit, which is set and regularly monitored as part of the setting of economic limits under the Group risk strategy. If the limit is exceeded, defined escalation mechanisms under the Group risk strategy apply.

Third-party risk (TPR)

Commerzbank uses external providers, services and suppliers of goods to support its business operations and achieve its strategic objectives. Such relationships with third parties can benefit Commerzbank by reducing its costs, improving its performance, optimising its staffing levels, increasing its competitiveness, giving it access to specialist expertise and providing distribution channels. However, its dependence on relationships with third parties entails risks that need to be identified, assessed and managed. Failure to manage these risks may expose it to financial loss, litigation or other damage or may even impair its ability to maintain existing customer relationships or develop new ones.

TPR is a new material risk type which consists of the following three sub-risk types:

- supplier risk resulting from relationships with specific suppliers or cooperation partners, regardless of the type of service provided;
- outsourcing risk resulting from outsourcing critical business processes or IT services that are integrated into a bank's core operations and could result in a significant disruption to the bank's services; and
- other third-party risk resulting from services that are not directly involved in a bank's core business or supply chains and whose failure would not affect the bank's core business.

In 2024, the existing outsourcing risk assessment approach was developed into a holistic approach to risk management for all third-party risks, beginning in 2025.

Model risk

Model risk is the risk of incorrect management decisions based upon an inaccurate depiction of reality by the models used. With regard to the causes of model risk we distinguish between model risk from exceeding model boundaries and model risk from model errors (manual errors in model development/implementation). In line with the focus of the Group risk strategy, namely to ensure that the Bank has adequate capital and liquidity, the models for assessing risk-bearing capacity (capital requirements under the Basel framework and economic capital requirements, respectively) and liquidity resources are central for risk management.

Model risk constitutes a material but non-quantifiable type of risk. Therefore, a qualitative management approach is applied: The basic principles of model risk management are the identification and avoidance of model risks and appropriate consideration of known model risks (e.g. through conservative calibration or consideration of margins of conservatism or model reserves). Model risks that are unknown and hence cannot be mitigated are accepted as an inherent risk in the complexity of the Commerzbank business model. In respect of the governance of model risk management, requirements relating to model validation, model development and model changes are established.

The war in Ukraine and its geopolitical impact as well as the economic secondary effects from the coronavirus pandemic pose challenges for the risk models used. These factors are taken into account in ongoing management of model risks and in particular in regular validation work.

The strategically relevant credit risk models (PD, LGD, CCF for private and corporate customers, PD for banks and for renewable energy project financing) are currently being fundamentally revised. In this context, from Commerzbank`s point of view, high standards in model development and initial validation play a major role.

List of the annexes

The annexes to the document contain the following topics and are available separately on the Commerzbank Disclosure Report website (Commerzbank AG – Disclosure Report):

Annex 1: Outline of the differences in the scopes of consolidation (entity by entity)

Annex 2: Disclosure of information on the indicators of global systemic importance pursuant to Article 441 CRR

Annex 3: Corporate governance information pursuant to Article 435 (2) CRR

Annex 4: Information on ESG according to Article 449a CRR

Annex 5: Remuneration information pursuant to Article 450 CRR

Annex 6: Main features of issued capital instruments as of 31 December 2024

Annex 7: Overview- Compliance with CRR requirements

List of abbreviations

ABS	Asset-backed Securities
AC	Amortised Cost
ALCO	Group Asset Liability Committee
AMA	Advanced Measurement Approach
ASF	Available Stable Funding
AUC	Area under the curve
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht / Federal Financial Supervisory Authority
BEC	Business Environment and Control System
CCF	Credit Conversion Factor
CCR	Counterparty Credit Risk
CR	Credit Risk
CRD	Capital Requirements Directive
CRM	Credit Risk Mitigation
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
CVaR	Credit Value at Risk
EaD	Exposure at Default
EBA	European Banking Authority
ECB	European Central Bank
EEPE	Effected Expected Positive Exposure
EL	Expected Loss
ErC	Economically required Capital
FINREP	Financial Reporting
FVOCI	Fair Value through Other Comprehensive Income
FVTPL	Fair Value through P&L
GL	Guideline
GWG	German Anti-Money Laundering Act
HGB	Handelsgesetzbuch/German Commercial Code
HRO	Human Rights Officer
IAA	Internal Assessment Approach
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Internal Control System
ICT	Informations and Communikation technology
IFRS	International Financial Reporting Standards
IMA	Internal Model Approach
IMM	Internal Model Method
IPV	Independent Price Verification
IRBA	Internal Ratings Based Approach
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
ITS	Implementing Technical Standards
KRI	Key Risk Indicators
KWG	Kreditwesengesetz / German Banking Act
LCR	Liquidity Coverage Ratio
LCRE	Low Credit Risk Excemption
LECL	Lifetime Expected Credit Loss
LGD	Loss Given Default
LkSG	German Supply Chain Due Diligence Act

MaRisk	Mindestanforderungen an das Risikomanagement/ Minimum Requirements for Risk Management
MDA	Maximum Distributable Amount
MR	Market Risk
NPE	Non-performing Exposure
OpRisk	Operational Risk
OR	Operational Risk
ORX	Operational Riskdata eXchange Association, Genf
P&L	Profit & Loss
PD	Probability of Default
RBC	Risk-bearing capacity
RSA	Risk Scenario Assessment
RSF	Required Stable Funding
RTS	Regulatory Technical Standards
RW	Risk weight
RWA	Risk-weighted Assets
SACR	Standardised Approach to Credit Risk
SEC	Securitisations
SFT	Securities Financing Transactions
SME	Small and medium-sized enterprises
SREP	Supervisory Review and Evaluation Process
STS	Simple, transparent, standardised
sVaR	stressed Value-at-Risk
TCMS	Tax Compliance Management System
TLA	Top Level Adjustment
TPR	Third-Party-Risiko
VaR	Value-at-Risk
WpHG	German Securities Trading Act

Disclaimer

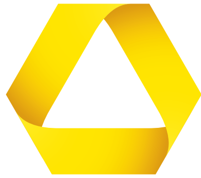
Commerzbank's internal risk measurement methods and models which form the basis for the calculation of the figures shown in this report are state-of-the-art and based on banking sector practice. The risk models produce results appropriate to the management of the Bank. The measurement approaches are regularly reviewed by risk control and internal audit and the German and European supervisory authorities. Despite being carefully developed and regularly monitored, models cannot cover all the influencing factors that have an impact in reality or illustrate their complex behaviour and interactions. These limits to risk modelling apply particularly in extreme situations. Supplementary stress tests and scenario analyses can only show examples of the risks to which a portfolio may be exposed in extreme market situations. However, stress testing all imaginable scenarios is not feasible. Stress tests cannot offer a final estimate of the maximum loss should an extreme event occur.

The interpretations with regard to CRR/CRD rules and Securitisation Regulation are still ongoing. Therefore requirements for adjustment may occur due, for example, to modified interpretations in the course of the Q&A-process with EBA or due to new binding Technical Standards or guidelines. Against this background we will continue to refine our methods and models in line with the interpretation of the rules. Thus, our measures may not be comparable with previously published measures and our competitors' measures published may differ from ours.

This Disclosure Report contains forward-looking statements on Commerzbank's business and earnings performance, which are based upon our current plans, estimates, forecasts and expectations. The statements entail risks and uncertainties, as there are a variety of factors that influence our business and to a great extent lie beyond our sphere of influence. Above all, these include the economic situation, the state of the financial markets worldwide and possible loan losses. Actual results and developments may, therefore, diverge considerably from our current assumptions, which, for this reason, are valid only at the time of publication. We undertake no obligation to revise our forwardlooking statements in the light of either new information or unexpected events.

The German version of this Report is the authoritative version.

For ease of reading only the masculine form is used to refer to people. This always refers to people of any gender identity.



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