

**COMMERZBANK**

The bank at your side



**Disclosure Report as at 30 June**

**2020**

in accordance with the Capital Requirements Regulation (CRR)

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# Introduction

## Commerzbank

Commerzbank is a leading international commercial bank with branches and offices in nearly 50 countries. Commerzbank has one of the densest branch networks in Germany. The Bank serves around 11.5 million private and small-business customers nationwide and over 70,000 corporate clients, multinationals, financial service providers, and institutional clients worldwide. Its Polish subsidiary mBank S.A. has around 5.7 million private and corporate customers, predominantly in Poland, but also in the Czech Republic and Slovakia.

A detailed description of the structure and organisation of Commerzbank Group is given in the Annual Report 2019.

## Objective of the Disclosure Report

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) No. 575/2013 – the Capital Requirements Regulation (CRR) – and the guidelines on the disclosure requirements under Part Eight of Regulation (EU) No. 575/2013 – EBA/GL/2016/11 – as at 30 June 2019. The tables defined according to the EBA guidelines and integrated into the report are indicated by the table names provided with the prefix EU.

The EBA has published the final ‘Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis’ (EBA/GL/2020/07) on 2 June 2020. The disclosure of the tables required therein is to be made every six months during the reference period 30 June 2020 to 31 December 2021. The tables included in the report are identified by the given table names with the prefix COV.

## Scope

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 controlled companies.

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 responsibilities are additionally defined in separate documents.

Commerzbank is one of the largest institutions in Germany and with its consolidated balance sheet total it is regularly well above the 30 billion Euro limit relevant for the annual disclosure. Hence, Commerzbank has implemented the reporting requirements during the period from Q2 2015 on and discloses the quarterly and semi-annually required information as appropriate.<sup>1</sup>

## Waiver rule pursuant to Article 7 CRR

According to the waiver rule pursuant to Article 7 CRR, the supervision of individual institutions within a banking group domiciled in Germany can, under certain circumstances, be replaced by the consolidated supervision. Within Commerzbank Group, comdirect bank AG continues to make use of the waiver rule. The same applies to Commerzbank AG as the parent institute. For more information, please refer to the Disclosure Report as at 31 December 2019.

<sup>1</sup> See EBA/GL/2014/14, title V (18).

# Equity capital, capital requirement and risk-weighted assets (RWA)

## Capital structure

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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.

More details on the composition of Commerzbank's equity capital can be found in the Disclosure Report 2019 as well as in the Notes of the Annual Report 2019. Commerzbank does not apply the transitional arrangements set out in article 473a CRR as well as the new transitional regime for the OCI (other comprehensive income) filter for central governments. Information on capital, capital ratios and leverage ratio reflect the full impact of the IFRS 9 introduction.

Information on the issued capital instruments of Commerzbank Group according to Article 437 (1) b) and c) CRR are given on the Commerzbank website in the section Debt holder information/Capital instruments.

Further information on our leverage ratio according to Article 451 CRR is given in note (40) (Regulatory capital requirements) and note (41) (Leverage ratio) of the Interim Report as at 30 June 2020, which is published on our website.

Information on liquidity risk and the liquidity coverage ratio (LCR) according to the guideline on LCR disclosure – EBA/GL/2017/01 – can be found in the Interim Report as at 30 June 2020 in the sections “Funding and liquidity”, “Liquidity risk” and in Note (42) (Liquidity Coverage Ratio) of the appendix.

The composition of the regulatory capital and the capital ratios as at 30 June 2020 are as follows:

## CAP1: Equity structure (basis: EU 1423/2013)

Line		A: Amount on the day of disclosure
€m		
<b>Common Equity Tier 1 capital: instruments and reserves</b>		
1	Capital instruments and the related share premium accounts	18,444
1a	thereof: subscribed capital	1,252
1b	thereof capital reserve	17,192
2	Retained earnings	9,897
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	85
3a	Funds for general banking risk	0
4	Amount of qualifying items referred to in Art, 484 (3) and the related share premium accounts subject to phase out from CET1	0
5	Minority interests (amount allowed in consolidated CET1)	728
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	0
<b>6</b>	<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	<b>29,155</b>
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>		
7	Additional value adjustments (negative amount)	-226
8	Intangible assets (net of related tax liability) (negative amount)	-2,636
10	Deferred tax assets subject to future profit ratio excluding those arising from temporary differences (net of related tax liability where the conditions in Art, 38 (3) are met) (negative amount)	-403
11	Fair value reserves related to gains or losses on cash flow hedges	-48
12	Negative amounts resulting from the calculation of expected loss amounts	-63
13	Any increase in equity that results from securitised assets (negative amount)	0
14	Cumulative gains and losses due to changes in own credit risk on fair valued liabilities	-186
15	Defined benefit pension fund assets (negative amount)	-57
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-4
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0
18	Direct and indirect 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)	0
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)	0
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	-70
20b	thereof: qualifying holdings outside the financial sector (negative amount)	0
20c	thereof: securitisation positions (negative amount)	-70
20d	thereof: free deliveries (negative amount)	0
21	Deferred tax assets subject to future profit ratio and arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Art, 38 (3) are met) (negative amount)	-196
22	Amount exceeding the 15% threshold (negative amount)	0
23	thereof: 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	0
25	thereof: deferred tax assets subject to future profit ratio and arising from temporary differences	0
25a	Losses for the current financial year (negative amount)	-114
25b	Foreseeable tax charges relating to CET1 items (negative amount)	0
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	0
27a	Other CET1 capital elements or deductions	-87
<b>28</b>	<b>Total regulatory adjustments to Common Equity Tier 1 (CET1) capital</b>	<b>-4,091</b>
<b>29</b>	<b>CET1 capital</b>	<b>25,064</b>

Line €m		A: Amount on the day of disclosure
<b>Additional Tier 1 (AT1) capital: instruments</b>		
30	Capital instruments and the related share premium accounts	2,126
31	thereof: classified as equity under applicable accounting standards	2,126
32	thereof: classified as liabilities under applicable accounting standards	0
33	Amount of qualifying items referred to in Art, 484 (4) and the related share premium accounts subject to phase out from AT1	452
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in line 5) issued by subsidiaries and held by third parties	110
35	thereof: instruments issued by subsidiaries subject to phase out	0
<b>36</b>	<b>Additional Tier 1 (AT1) capital before regulatory adjustments</b>	<b>2,688</b>
<b>Additional Tier 1 (AT1) capital; regulatory adjustments</b>		
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	0
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0
39	Direct and indirect 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)	0
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	0
42	Qualifying Tier 2 deductions that exceed the Tier 2 capital of the institution (negative amount)	0
<b>43</b>	<b>Total regulatory adjustments to Additional Tier 1 (AT1) capital</b>	<b>0</b>
<b>44</b>	<b>Additional Tier 1 (AT1) capital</b>	<b>2,688</b>
<b>45</b>	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>27,752</b>
<b>Tier 2 capital: instruments and provisions</b>		
46	Capital instruments and the related share premium accounts	4,797
47	Amount of qualifying items referred to in Art, 484 (5) and the related share premium accounts subject to phase out from Tier 2	152
48	Qualifying own funds instruments included in consolidated Tier 2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	269
49	thereof: instruments issued by subsidiaries subject to phase out	0
50	Credit risk adjustments	0
<b>51</b>	<b>Tier 2 capital before regulatory adjustments</b>	<b>5,218</b>
<b>Tier 2 capital: regulatory adjustments</b>		
52	Direct and indirect holdings by an institution of own Tier 2 instruments and subordinated loans (negative amount)	-30
53	Holdings of the Tier 2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0
54	Direct and indirect holdings of the Tier 2 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)	0
55	Direct and indirect holdings of the Tier 2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	0
<b>57</b>	<b>Total regulatory adjustments to Tier 2 capital</b>	<b>-30</b>
<b>58</b>	<b>Tier 2 capital</b>	<b>5,188</b>
<b>59</b>	<b>Total capital (TC = Tier 1 + Tier 2)</b>	<b>32,940</b>
<b>60</b>	<b>Total risk-weighted assets</b>	<b>187,051</b>
<b>Capital ratios and buffers</b>		
61	Common Equity Tier 1 ratio (as a percentage of total risk exposure amount)	13.4
62	Tier 1 ratio (as a percentage of total risk exposure amount)	14.8
63	Total capital ratio (as a percentage of total risk exposure amount)	17.6

Line €m		A: Amount on the day of disclosure
64	Institution specific buffer requirement (CET1 requirement in accordance with Art. 92 (1) (a) plus capital conservation and countercyclical buffer <sup>2</sup> requirements, plus systemic risk buffer, plus systemically important institution (G-SII or O-SII) buffer expressed as a percentage of risk exposure amount)	8.5
65	thereof: capital conservation buffer requirement	2.5
66	thereof: countercyclical buffer requirement	0.0
67	thereof: systemic risk buffer requirement	0
67a	thereof: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	1.5
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.9
<b>Amounts below the thresholds for deduction (before risk weighting)</b>		
72	Direct and indirect holdings by the institution of capital instruments 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)	397
73	Direct and indirect holdings by the institution of the CET1 instruments of relevant financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	244
75	Deferred tax assets subject to future profit ratio, arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Art. 38 (3) are met)	2,526
<b>Applicable caps on the inclusion of provisions in Tier 2</b>		
76	Credit risk adjustments included in Tier 2 in respect of exposures under the standard approach (before application of cap)	0
77	Cap on inclusion of credit risk adjustments in Tier 2 under the standardised approach	261
78	Credit risk adjustments included in Tier 2 in respect of exposures subject to the internal ratings-based approach (before application of cap)	0
79	Cap on inclusion of credit risk adjustments allowable in Tier 2 related to exposures subject to internal ratings-based approach	757
<b>Capital instruments subject to phase-out arrangements</b>		
80	Current cap for CET1 instruments subject to phase-out arrangements	0
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	0
82	Current cap on AT1 instruments subject to phase out arrangements	452
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-233
84	Current cap on Tier 2 instruments subject to phase out arrangements	152
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	-175

## Connection between balance-sheet and regulatory positions

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The reconciliation between the Group's equity reported in the balance sheet and the equity reported for regulatory purposes is shown in the table CAP2 below.



## CAP2: Reconciliation of equity as reported in the balance sheet with regulatory capital (EU 1423/2013 / Art. 437 a CRR)

Position €m	Equity IFRS (Phase in) <sup>1</sup>	Equity FINREP <sup>2</sup>	Equity COREP <sup>3</sup>
Subscribed capital	1,252	1,252	1,252
Capital reserve	17,192	17,192	17,192
Retained earnings	9,975	9,958	9,898
Silent participations	0	0	0
Actuarial profits/losses current year	351	351	351
Changes due to the revaluation of own credit risk	90	90	90
Revaluation reserve	-76	-67	-67
Valuation of cash flow hedges	48	48	48
Currency translation reserve	-347	-339	-339
Distributable profit/loss from previous year (after suspension of retained earnings)	0	0	0
Distributable profit/loss from current year	-96	-96	-96
Non-controlling interests	1,242	1,238	1,238
Additional equity components <sup>4</sup>	2,126	2,126	0
<b>Equity as shown in balance sheet</b>	<b>31,758</b>	<b>31,753</b>	<b>29,568</b>
<b>Equity as shown in balance sheet without additional equity components</b>	<b>29,632</b>	<b>29,628</b>	<b>29,568</b>
Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities			-110
Cumulative gains and losses due to changes in own credit risk on fair valued liabilities			-76
Correction to non-controlling interests (minority)			-510
Goodwill			-1,521
Intangible assets			-1,115
Surplus in plan assets			-57
Deferred tax assets from loss carryforwards			-403
Shortfall due to expected loss			-63
Prudential valuation			-226
First loss positions from securitisations			-70
Deferred tax assets from temporary differences which exceed 10 % threshold			-196
Unrecognised gains			-17
Others			-139
<b>Common Equity Tier 1 after deductions<sup>5</sup></b>			<b>25,064</b>
<b>Hybrid capital</b>	<b>961</b>	<b>961</b>	<b>961</b>
Eligible issues <sup>4</sup>			2,126
Not eligible issues			0
Capping due to Art. 471 CRR			-233
Others, especially hedge accounting, interests, agio, disagio			-167
<b>Additional Tier 1 before deductions</b>			<b>2,688</b>
Deduction of Additional Tier 1 capital (AT1)			0
<b>Additional Tier 1 after deductions</b>			<b>2,688</b>
Subordinated capital	7,243	7,243	7,243
Decreased offsetting in the last 5 years of residual maturity			-1,670
Not eligible non-controlling interests			-99
Allowance of capped AT1			58
Others, especially hedge accounting, interests, agio, disagio			-344
<b>Tier 2 before deductions</b>			<b>5,188</b>
Deduction of Tier 2 capital			0
<b>Tier 2 after deductions</b>			<b>5,188</b>
<b>Own funds</b>	<b>37,837</b>	<b>37,832</b>	<b>32,940</b>

<sup>1</sup> Equity as shown in balance sheet. <sup>2</sup> Financial reporting, equity as shown in balance sheet, regulatory group of consolidated companies.

<sup>3</sup> Common solvency ratio reporting, regulatory capital (with transitional provisions). <sup>4</sup> AT 1 issue which is equity as shown in balance sheet and which is taken into account as Additional Equity Tier 1 according to CRR. <sup>5</sup> This information includes the consolidated profit attributable to Commerzbank shareholders for regulatory purposes.

## 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.

### Capital requirements by risk type

Of the overall capital requirement 77.5% 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 148 (5) 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 6.6% 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 (1.9% of total capital requirement). Commerzbank treats these positions in accordance with the recognition hierarchy according to the change in own funds requirements (Regulation (EU) No 2017/2401). Capital deduction items of securitisations directly reduce the liable equity and thus are not included in the capital requirements.

Pursuant to Article 92 (3) b) and c) CRR, adequate capital must be set aside for market risk positions. As at 30 Juni 2020, capital requirements here are 4.1% 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 standardised approaches are applied for smaller units in Commerzbank Group in accordance with the partial use option.

To calculate the capital adequacy requirement for operational risks, Commerzbank uses the advanced measurement approach (AMA). This risk category accounts for 9.7% of the total capital requirements.

## EU OV1: Overview of RWAs

€m		Risk weighted assets (RWAs)		Capital requirements	
Article in CRR		30.06.2020	31.03.2020	30.06.2020	
	1	Credit risk (excluding CCR)	144,990	140,426	11,599
438 (c) (d)	2	Of which the standardised approach	19,635	19,987	1,571
438 (c) (d)	3	Of which the foundation IRB (FIRB) approach	0	0	0
438 (c) (d)	4	Of which the advanced IRB (AIRB) approach	125,355	120,438	10,028
438 (d)	5	Of which equity IRB under the simple risk-weighted approach or the IMA	0	0	0
107, 438 (c) (d)	6	CCR (counterparty credit risk)	12,358	13,261	989
438 (c) (d)	7	Of which mark to market	1,912	2,180	153
438 (c) (d)	8	Of which original exposure	0	0	0
	9	Of which the standardised approach	0	0	0
	10	Of which internal model method (IMM)	6,255	6,748	500
438 (c) (d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	273	21	22
438 (c) (d)	12	Of which CVA	3,919	4,311	313
438 (e)	13	Settlement risk	4	28	0
449 (o) (i)	14	Securitisation exposures in the banking book (after the cap)	3,496	4,096	280
	15	Of which approach based on internal ratings (SEC-ERBA)	817	1,532	65
	16	Of which the standardised approach (SEC-SA)	698	706	56
	17	Of which approach based on external ratings (SEC-ERBA)	1,982	1,859	159
	18	Of which internal assessment approach (IAA)	0	0	0
438 (e)	19	Market risk	7,591	7,207	607
	20	Of which the standardised approach	929	966	74
	21	Of which IMA	6,662	6,242	533
438 (e)	22	Large exposures	0	0	0
438 (f)	23	Operational risk	18,056	18,178	1,444
	24	Of which basic indicator approach	0	0	0
	25	Of which the standardised approach	0	0	0
	26	Of which advanced measurement approach	18,056	18,178	1,444
437 (2), 48, 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	556	596	44
	<b>28</b>	<b>Total</b>	<b>187,051</b>	<b>183,792</b>	<b>14,964</b>

Risk-weighted assets (RWA) were €187.1bn as at 30 June 2020, €3.3bn above the previous quarter's level. The increase is mainly due to higher RWA for credit risks and is primarily driven by volume growth and a change in portfolio quality (mainly driven by Covid-19-related credit rating migration effects).

The overviews of the trend 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.

## A. Credit risk (CR)

Credit risk (default risk from credit risk, CR) 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 material sub-risk types of credit default risk, issuer risk, country and transfer risk, dilution risk and reserve risk. The default risk from counterparty credit risk is shown separately in the section on counterparty credit risk in this report.

### 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 following Table EU CR3 provides an overview of the scope of use of credit risk mitigation techniques by asset class. Most of the positions in column c are secured by mortgage liens.

For details on the application of credit risk mitigation techniques in Commerzbank's IRBA and SACR portfolios please refer to the Disclosure Report as at 31 December 2019.

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. Here, the credit equivalent amounts are determined as expected future exposure through the simulation of various market scenarios, taking netting and collateral into account.

For securities repurchase agreements, lending and comparable transactions involving securities or goods, the exposures are determined in accordance with Article 283 and Article 273 (2) CRR on the basis of an internal model method, too. Guarantees and credit derivatives are taken into account 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.

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

€m	a	b	c	d	e
	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1 Central governments or central banks	31,281	1,869	299	1,116	293
2 Institutions	35,253	7,713	1,464	4,060	120
3 Corporates	185,213	42,918	14,870	11,357	492
4 thereof SMEs	7,289	6,201	2,630	600	0
5 thereof specialised lending	14,953	6,429	4,706	76	0
6 thereof other	162,971	30,288	7,534	10,682	492
7 Retail	52,202	96,226	67,591	790	0
8 thereof secured by mortgages / SMEs	65	936	765	5	0
9 thereof secured by mortgages / non-SMEs	4,055	82,157	59,469	1	0
10 thereof qualifying revolving	13,723	0	0	0	0
11 thereof other / SME	11,778	2,828	856	739	0
12 thereof other / non-SMEs	22,582	10,305	6,502	44	0
13 Equity exposures IRB	0	0	0	0	0
14 Other non-credit obligation assets	15,762	0	0	0	0
<b>15 Total IRB approach</b>	<b>319,711</b>	<b>148,725</b>	<b>84,224</b>	<b>17,322</b>	<b>905</b>
16 Central governments or central banks	79,211	367	0	0	0
17 Regional governments or local authorities	16,702	0	0	0	0
18 Public sector entities	5,412	71	2	55	0
19 Multilateral development banks	820	0	0	0	0
20 International organisations	496	0	0	0	0
21 Institutions	1,653	0	0	0	0
22 Corporates	6,801	817	294	172	0
23 thereof SMEs	401	100	3	37	0
24 Retail	8,630	384	203	6	0
25 thereof SMEs	28	7	6	0	0
26 Secured by mortgages on immovable property	0	2,313	2,313	0	0
27 thereof SMEs	0	1	1	0	0
28 Exposures in default	183	42	5	2	0
29 Items associated with particularly high risk	273	0	0	0	0
30 Covered bonds	0	0	0	0	0
31 Claims on institutions and corporates with a short-term credit assessment	11	0	0	0	0
32 Collective investment undertakings	2,480	0	0	0	0
33 Equity exposures	887	0	0	0	0
34 Other exposures	2,894	0	0	0	0
<b>35 Total SACR</b>	<b>126,453</b>	<b>3,995</b>	<b>2,819</b>	<b>235</b>	<b>0</b>
<b>36 Total</b>	<b>446,164</b>	<b>152,720</b>	<b>87,042</b>	<b>17,558</b>	<b>905</b>
37 of which loans	226,901	135,741	81,783	13,883	466
38 of which debt securities	49,350	1,388	0	562	403
39 of which defaulted positions	1,415	1,060	753	218	0

## 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 Commerzbank Group use the IRBA approach. Hence they may 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 and EU CR7 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 amount to €6.7bn and do not have any creditworthiness risks and thus are not relevant for the management of default risks. Table EU CR6 also does not include

mBank S.A. positions of €2.1bn 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 Commerzbank Group as at 30 June 2020 and are therefore not part of table EU CR10.

Securitisation exposures in the IRBA are not included in the following tables; they are presented in detail in the Disclosure Report as at year-end. Counterparty default risks are shown in the section counterparty credit risks in the present report.

The impact of credit derivatives used for credit risk mitigation on the amount of RWA of credit risk in the IRBA portfolio at 30 June 2020 comes to less than 0.8% (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:

- As required by EBA guideline EBA/GL/2016/11 on disclosure requirements, credit risk and counterparty credit risk are presented separately in the Disclosure Report.
- Some transactions are not included in risk-weighted assets (RWA) for regulatory purposes but are included in the EaD of the Annual Report and Risk Report, respectively.
- 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.

## EU CR6: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	
	PD scale	Original on-balance-sheet gross exposure €m	Off-balance-sheet exposures pre-CCF €m	Average CCF %	EaD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity years <sup>1</sup>	RWAs €m	RWA-density %	EL €m	Value adjustments and provisions €m
Zentralstaaten oder Zentralbanken	0.00 to < 0.15	29,399	670	42.9	33,008	0.08	367	24.96	0.6	2,459	7	7	
	0.15 to < 0.25	211	35	40.1	392	0.18	11	70.13	3.1	266	68	1	
	0.25 to < 0.50	400	103	35.6	604	0.32	20	57.67	2.2	401	66	1	
	0.50 to < 0.75	459	173	32.0	172	0.58	9	83.14	4.2	312	181	1	
	0.75 to < 2.50	208	115	34.5	178	1.32	28	96.65	1.3	336	189	2	
	2.50 to 10.00	347	238	34.8	150	6.16	55	93.19	1.9	504	337	9	
	10.00 to < 100.00	407	340	18.7	153	44.63	42	8.61	1.4	64	42	3	
	100.00 (default)	47	0	0.0	1	100.00	2	20.00	4.0	0	0	0	
<b>Subtotal</b>	<b>31,477</b>	<b>1,675</b>	<b>38.0</b>	<b>34,658</b>	<b>0.32</b>	<b>512</b>	<b>26.92</b>	<b>0.7</b>	<b>4,343</b>	<b>13</b>	<b>23</b>	<b>2.7</b>	
Institutions	0.00 to < 0.15	17,011	2,908	54.0	21,542	0.06	1,501	30.62	3.1	4,109	19	4	
	0.15 to < 0.25	2,209	789	43.1	2,488	0.19	143	41.18	2.2	1,067	43	2	
	0.25 to < 0.50	5,640	2,034	43.0	5,833	0.33	297	37.42	2.0	2,923	50	7	
	0.50 to < 0.75	3,000	696	44.5	3,059	0.58	108	44.59	3.0	2,761	90	8	
	0.75 to < 2.50	3,048	1,164	45.4	2,613	1.30	307	39.70	1.1	2,108	81	13	
	2.50 to 10.00	2,409	1,521	46.2	1,927	3.75	286	37.30	1.0	1,980	103	24	
	10.00 to < 100.00	277	331	46.6	206	43.95	69	18.62	1.0	186	91	15	
	100.00 (default)	9	0	0.0	7	100.00	10	72.83	1.0	0	0	5	
<b>Subtotal</b>	<b>33,603</b>	<b>9,442</b>	<b>47.8</b>	<b>37,674</b>	<b>0.68</b>	<b>2,662</b>	<b>34.42</b>	<b>2.6</b>	<b>15,134</b>	<b>40</b>	<b>77</b>	<b>80.3</b>	
Corporates TOTAL	0.00 to < 0.15	19,785	33,170	40.3	31,997	0.05	4,414	40.29	2.3	8,038	25	11	
	0.15 to < 0.25	16,833	28,850	34.4	28,931	0.19	3,795	33.11	2.6	14,336	50	25	
	0.25 to < 0.50	24,050	34,070	37.9	36,831	0.34	5,684	36.41	2.2	18,444	50	49	
	0.50 to < 0.75	12,453	12,872	38.8	16,833	0.59	3,346	38.31	2.0	10,577	63	39	
	0.75 to < 2.50	18,828	14,332	35.1	20,446	1.23	7,106	37.44	2.0	16,200	79	99	
	2.50 to 10.00	4,765	2,492	40.2	5,104	4.70	3,948	34.59	1.6	5,769	113	91	
	10.00 to < 100.00	1,754	656	34.4	1,980	20.02	1,063	10.40	2.0	1,869	94	127	
	100.00 (default)	2,281	510	30.8	2,329	100.00	1,213	59.23	1.4	1,495	64	1,420	
<b>Subtotal</b>	<b>100,748</b>	<b>126,953</b>	<b>40.3</b>	<b>144,451</b>	<b>2.86</b>	<b>30,271</b>	<b>40.64</b>	<b>2.4</b>	<b>76,728</b>	<b>53</b>	<b>1,860</b>	<b>1,894.8</b>	
Corporates, thereof SMEs	0.00 to < 0.15	579	1,027	42.4	983	0.08	380	40.79	2.4	196	20	0	
	0.15 to < 0.25	791	708	34.4	985	0.21	388	33.11	2.6	287	29	1	
	0.25 to < 0.50	1,525	1,212	37.9	1,893	0.35	867	38.79	2.3	802	42	3	
	0.50 to < 0.75	869	653	41.9	1,052	0.62	557	39.31	2.3	589	56	3	
	0.75 to < 2.50	2,384	1,297	45.0	2,821	1.39	1,926	39.70	2.1	2,081	74	16	
	2.50 to 10.00	1,371	493	43.2	1,484	4.74	1,062	39.57	2.1	1,544	104	28	
	10.00 to < 100.00	317	71	42.2	319	22.09	186	40.42	2.1	543	170	28	
	100.00 (default)	416	65	33.3	425	100.00	243	66.10	1.5	336	79	269	
<b>Subtotal</b>	<b>8,253</b>	<b>5,525</b>	<b>40.9</b>	<b>9,963</b>	<b>6.23</b>	<b>5,607</b>	<b>40.07</b>	<b>2.2</b>	<b>6,378</b>	<b>64</b>	<b>347</b>	<b>288.1</b>	

<sup>1</sup> For retail, this parameter is not included in the RWA calculation, therefore – according to EBA/GL/2016/11 – no details are given here for retail.

## EU CR6\_cont.: IRB approach – Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	
	PD scale	Original on-balance-sheet gross exposure €m	Off-balance-sheet exposures pre-CCF €m	Average CCF %	EaD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity years <sup>1</sup>	RWAs €m	RWA density %	EL €m	Value adjustments and provisions €m
Corporates, thereof specialised lending	0.00 to < 0.15	6,436	677	42.3	6,722	0.05	540	41.33	4.2	1,559	23	1	
	0.15 to < 0.25	1,343	364	45.5	1,495	0.22	123	39.11	3.6	644	43	1	
	0.25 to < 0.50	2,988	520	49.9	3,231	0.34	332	36.41	3.7	1,604	50	4	
	0.50 to < 0.75	1,202	335	61.0	1,393	0.61	204	47.62	3.5	1,190	85	4	
	0.75 to < 2.50	2,329	405	57.9	2,538	1.38	255	39.65	3.4	2,291	90	13	
	2.50 to 10.00	698	147	43.8	758	4.84	120	34.59	3.2	835	110	11	
	10.00 to < 100.00	1,068	411	42.4	1,242	66.95	107	10.40	2.2	529	43	66	
	100.00 (default)	363	38	47.4	381	100.00	116	59.23	3.5	180	47	212	
<b>Subtotal</b>	<b>16,427</b>	<b>2,897</b>	<b>48.6</b>	<b>17,760</b>	<b>7.38</b>	<b>1,737</b>	<b>38.43</b>	<b>3.7</b>	<b>8,832</b>	<b>50</b>	<b>313</b>	<b>263.4</b>	
Corporates, thereof other	0.00 to < 0.15	12,769	31,466	40.3	24,292	0.09	3,502	40.29	2.3	6,282	26	9	
	0.15 to < 0.25	14,698	27,778	41.6	26,451	0.19	3,287	45.76	2.7	13,404	51	23	
	0.25 to < 0.50	19,537	32,338	41.1	31,707	0.35	4,500	39.73	2.2	16,038	51	42	
	0.50 to < 0.75	10,381	11,884	38.8	14,388	0.59	2,589	38.31	2.0	8,798	61	32	
	0.75 to < 2.50	14,115	12,630	35.1	15,086	1.23	4,931	37.44	2.0	11,829	78	70	
	2.50 to 10.00	2,695	1,853	40.2	2,862	4.70	2,769	38.07	1.6	3,390	118	51	
	10.00 to < 100.00	369	174	34.4	418	20.02	773	37.71	2.0	797	191	32	
	100.00 (default)	1,503	407	30.8	1,524	100.00	854	64.80	1.4	979	64	940	
<b>Subtotal</b>	<b>76,068</b>	<b>118,531</b>	<b>40.1</b>	<b>116,728</b>	<b>1.88</b>	<b>23,008</b>	<b>41.02</b>	<b>2.2</b>	<b>61,518</b>	<b>53</b>	<b>1,200</b>	<b>1,343.3</b>	
Retail	0.00 to < 0.15	46,418	18,243	49.3	60,657	0.04	1,988,093	17.05		2,072	3	9	
	0.15 to < 0.25	16,730	4,082	51.1	19,569	0.19	410,105	16.33		1,823	9	9	
	0.25 to < 0.50	23,546	6,503	53.0	28,153	0.35	444,502	17.32		4,200	15	26	
	0.50 to < 0.75	8,926	2,852	52.8	11,151	0.60	206,083	18.66		2,654	24	20	
	0.75 to < 2.50	10,906	3,083	54.9	12,984	1.23	545,199	18.58		4,713	36	54	
	2.50 to 10.00	4,516	829	54.5	5,004	4.22	315,352	19.07		3,028	61	84	
	10.00 to < 100.00	1,240	78	58.5	1,269	19.02	110,413	18.76		1,163	92	85	
	100.00 (default)	1,320	54	0.0	1,329	100.00	90,778	35.10		1,093	82	662	
<b>Subtotal</b>	<b>113,602</b>	<b>35,723</b>	<b>76.0</b>	<b>140,117</b>	<b>1.59</b>	<b>4,101,436</b>	<b>27.66</b>		<b>20,747</b>	<b>15</b>	<b>949</b>	<b>897.9</b>	
Total	0.00 to < 0.15	112,613	54,991	40.3	147,205	0.04	2,176,399	17.05	0.0	16,678	11	30	
	0.15 to < 0.25	35,982	33,757	34.4	51,380	0.18	439,399	16.33	0.0	17,492	34	37	
	0.25 to < 0.50	53,635	42,710	35.6	71,421	0.32	479,212	17.32	0.0	25,968	36	83	
	0.50 to < 0.75	24,838	16,594	32.0	31,216	0.58	220,023	18.66	0.0	16,305	52	67	
	0.75 to < 2.50	32,990	18,694	34.5	36,221	1.23	566,261	18.58	0.0	23,357	64	168	
	2.50 to 10.00	12,036	5,081	34.8	12,184	3.75	325,720	19.07	1.0	11,281	93	207	
	10.00 to < 100.00	3,678	1,404	18.7	3,608	19.02	114,057	8.61	1.0	3,284	91	230	
	100.00 (default)	3,657	564	0.0	3,666	100.00	94,471	20.00	1.0	2,588	71	2,087	
<b>Total (all portfolios)</b>	<b>279,430</b>	<b>173,794</b>	<b>48.1</b>	<b>356,899</b>	<b>1.88</b>	<b>4,133,367</b>	<b>33.56</b>	<b>1.3</b>	<b>116,952</b>	<b>33</b>	<b>2,910</b>	<b>2,875.7</b>	

<sup>1</sup> For retail, this parameter is not included in the RWA calculation, therefore – according to EBA/GL/2016/11 – no details are given here for retail.



## EU CR6\_Retail: IRB approach – Retail's Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	
	PD scale	Original on-balance-sheet gross exposure €m	Off-balance-sheet exposures pre-CCF €m	Average CCF %	EaD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity years <sup>1</sup>	RWAs €m	RWA-density %	EL €m	Value adjustments and provisions €m
Retail	0.00 to < 0.15	46,418	18,243	49.3	60,657	0.04	1,988,093	17.05		2,072	3	9	
	0.15 to < 0.25	16,730	4,082	51.1	19,569	0.19	410,105	16.33		1,823	9	9	
	0.25 to < 0.50	23,546	6,503	53.0	28,153	0.35	444,502	17.32		4,200	15	26	
	0.50 to < 0.75	8,926	2,852	52.8	11,151	0.60	206,083	18.66		2,654	24	20	
	0.75 to < 2.50	10,906	3,083	54.9	12,984	1.23	545,199	18.58		4,713	36	54	
	2.50 to 10.00	4,516	829	54.5	5,004	4.22	315,352	19.07		3,028	61	84	
	10.00 to < 100.00	1,240	78	58.5	1,269	19.02	110,413	18.76		1,163	92	85	
	100.00 (default)	1,320	54	0.0	1,329	100.00	90,778	35.10		1,093	82	662	
<b>Gesamt</b>	<b>113,602</b>	<b>35,723</b>	<b>76.0</b>	<b>140,117</b>	<b>1.59</b>	<b>4,101,436</b>	<b>27.66</b>		<b>20,747</b>	<b>15</b>	<b>949</b>	<b>897.9</b>	
...secured by mortgages / SMEs	0.00 to < 0.15	133	7	85.2	137	0.11	1,006	30.22		9	6	0	
	0.15 to < 0.25	174	17	93.4	190	0.19	1,362	33.88		20	11	0	
	0.25 to < 0.50	252	13	103.9	263	0.35	1,384	31.46		41	15	0	
	0.50 to < 0.75	104	7	127.2	112	0.63	622	30.31		25	22	0	
	0.75 to < 2.50	174	15	151.4	196	1.31	1,094	34.30		80	41	1	
	2.50 to 10.00	56	7	124.0	64	4.22	386	35.37		52	82	1	
	10.00 to < 100.00	27	0	510.1	28	23.35	182	31.19		37	134	2	
	100.00 (default)	34	0	0.0	34	100.00	243	57.21		72	212	15	
<b>Subtotal</b>	<b>953</b>	<b>66</b>	<b>114.9</b>	<b>1,024</b>	<b>4.69</b>	<b>6,279</b>	<b>33.26</b>		<b>337</b>	<b>33</b>	<b>20</b>	<b>17.9</b>	
...secured by mortgages / non-SMEs	0.00 to < 0.15	38,876	1,124	93.8	39,930	0.06	301,151	17.05		1,144	3	4	
	0.15 to < 0.25	13,463	345	95.8	13,793	0.20	119,485	16.33		960	7	5	
	0.25 to < 0.50	18,082	541	98.6	18,615	0.36	118,080	17.32		2,088	11	12	
	0.50 to < 0.75	6,063	289	99.6	6,351	0.60	36,159	18.66		1,112	18	7	
	0.75 to < 2.50	5,016	198	99.1	5,213	1.23	29,587	18.58		1,446	28	12	
	2.50 to 10.00	1,510	26	98.7	1,535	4.82	10,882	19.07		977	64	14	
	10.00 to < 100.00	413	4	100.7	417	20.10	3,681	18.76		435	104	15	
	100.00 (default)	448	1	84.1	449	100.00	4,418	35.10		443	98	127	
<b>Subtotal</b>	<b>83,871</b>	<b>2,529</b>	<b>96.2</b>	<b>86,304</b>	<b>0.96</b>	<b>623,214</b>	<b>17.34</b>		<b>8,604</b>	<b>10</b>	<b>196</b>	<b>188.1</b>	
...qualifying revolving	0.00 to < 0.15	139	11,332	76.5	8,804	0.04	1,533,081	59.51		157	2	2	
	0.15 to < 0.25	39	528	76.9	445	0.19	113,504	58.50		29	6	1	
	0.25 to < 0.50	79	501	76.7	463	0.36	120,123	58.59		49	11	1	
	0.50 to < 0.75	54	206	76.0	210	0.62	56,983	58.82		35	16	1	
	0.75 to < 2.50	198	384	76.0	490	1.38	138,778	59.42		148	30	4	
	2.50 to 10.00	117	111	76.0	201	4.58	63,886	59.98		143	71	6	
	10.00 to < 100.00	35	13	75.7	45	20.05	22,964	61.31		70	155	5	
	100.00 (default)	17	5	76.0	20	100.00	7,460	67.02		13	63	12	
<b>Subtotal</b>	<b>677</b>	<b>13,080</b>	<b>76.5</b>	<b>10,678</b>	<b>0.49</b>	<b>2,056,779</b>	<b>59.44</b>		<b>643</b>	<b>6</b>	<b>32</b>	<b>34.2</b>	

<sup>1</sup> For retail, this parameter is not included in the RWA calculation, therefore – according to EBA/GL/2016/11 – no details are given here for retail.

## EU CR6\_Retail\_cont.: IRB approach – Retail's Credit risk exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	
	PD scale	Original on-balance-sheet gross exposure €m	Off-balance-sheet exposures pre-CCF €m	Average CCF %	EaD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity years <sup>1</sup>	RWAs €m	RWA density %	EL €m	Value adjustments and provisions €m
...other / SME	0.00 to < 0.15	280	1,337	49.3	925	0.11	11,735	49.04		94	10	0	
	0.15 to < 0.25	493	1,740	51.1	1,328	0.20	26,130	49.51		215	16	1	
	0.25 to < 0.50	1,060	2,302	53.0	2,139	0.36	48,646	49.50		508	24	4	
	0.50 to < 0.75	755	871	52.8	1,125	0.63	24,812	46.00		344	31	3	
	0.75 to < 2.50	2,106	1,321	54.9	2,630	1.24	62,372	46.14		1,064	40	15	
	2.50 to 10.00	1,314	455	54.5	1,470	4.94	46,544	43.49		780	53	32	
	10.00 to < 100.00	407	47	58.5	414	19.02	17,196	36.02		266	64	28	
	100.00 (default)	359	38	38.8	365	100.00	14,534	67.93		213	58	236	
	<b>Subtotal</b>	<b>6,773</b>	<b>8,111</b>	<b>52.3</b>	<b>10,397</b>	<b>5.46</b>	<b>251,960</b>	<b>47.49</b>		<b>3,484</b>	<b>34</b>	<b>320</b>	<b>278.0</b>
...other / non-SME	0.00 to < 0.15	6,991	4,443	86.4	10,861	0.06	323,136	33.56		669	6	2	
	0.15 to < 0.25	2,561	1,452	86.4	3,813	0.20	174,966	36.64		599	16	3	
	0.25 to < 0.50	4,074	3,145	82.6	6,672	0.35	184,963	42.17		1,515	23	9	
	0.50 to < 0.75	1,951	1,479	94.0	3,352	0.61	97,980	42.14		1,138	34	8	
	0.75 to < 2.50	3,413	1,165	90.4	4,456	1.32	326,983	39.27		1,975	44	23	
	2.50 to 10.00	1,519	230	90.7	1,733	4.46	199,730	40.59		1,075	62	31	
	10.00 to < 100.00	358	13	81.3	365	21.38	68,857	43.50		355	97	34	
	100.00 (default)	462	10	50.4	460	100.00	66,591	62.59		353	77	271	
	<b>Subtotal</b>	<b>21,328</b>	<b>11,937</b>	<b>86.8</b>	<b>31,715</b>	<b>2.31</b>	<b>1,438,677</b>	<b>38.37</b>		<b>7,679</b>	<b>24</b>	<b>382</b>	<b>379.7</b>

<sup>1</sup> For retail, this parameter is not included in the RWA calculation, therefore – according to EBA/GL/2016/11 – no details are given here for retail.

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

€m		a	b
		Pre-credit derivatives RWAs	Actual RWAs
<b>1</b>	<b>Exposures under FIRB</b>	<b>0</b>	<b>0</b>
2	Central governments or central banks	0	0
3	Institutions	0	0
4	Corporates - SMEs	0	0
5	Corporates - specialised lending	0	0
6	Corporates - other	0	0
<b>7</b>	<b>Exposures under AIRB</b>	<b>126,426</b>	<b>125,355</b>
8	Central governments or central banks	4,923	4,343
9	Institutions	14,966	15,136
	Corporates	79,117	78,456
10	thereof SMEs	6,378	6,378
11	thereof specialised lending	10,557	10,557
12	thereof other	62,181	61,520
	Retail	20,747	20,747
13	thereof secured by mortgages / SMEs	337	337
14	thereof secured by mortgages / non-SMEs	8,604	8,604
15	thereof qualifying revolving	643	643
16	thereof other / SME	3,484	3,484
17	thereof other / non-SMEs	7,679	7,679
18	Equity IRB	0	0
19	Other non-credit obligation assets	6,673	6,673
<b>20</b>	<b>Total</b>	<b>126,426</b>	<b>125,355</b>

## EU CR10: IRB (specialised lending)

€m		a	b	c	d	e	f
Regulatory categories	Remaining maturity	Specialised lending					
		On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
- Category 1	Less than 2.5 years	49	1	50%	50	25	0
	Equal to or more than 2.5 years	16	0	70%	16	11	0
- Category 2	Less than 2.5 years	449	265	70%	530	371	2
	Equal to or more than 2.5 years	1,304	43	90%	1,310	1,176	10
- Category 3	Less than 2.5 years	27	6	115%	29	33	1
	Equal to or more than 2.5 years	86	2	115%	87	100	2
- Category 4	Less than 2.5 years	0	0	250%	0	0	0
	Equal to or more than 2.5 years	4	0	250%	4	9	0
- Category 5	Less than 2.5 years	10	0	-	36	0	18
	Equal to or more than 2.5 years	60	0	-	81	0	41
- Total	<b>Less than 2.5 years</b>	<b>535</b>	<b>272</b>		<b>644</b>	<b>429</b>	<b>21</b>
	<b>Equal to or more than 2.5 years</b>	<b>1,469</b>	<b>45</b>		<b>1,498</b>	<b>1,297</b>	<b>54</b>

Table EU CR8 below shows the changes in the RWA of credit risk exposures in the IRBA portfolio of Commerzbank Group between 31 March 2020 and 30 June 2020. The increase in RWA in the second quarter of 2020 is mainly due to volume growth ('asset size') and a change in the quality of the portfolio ('asset quality',

mainly influenced by Covid-19-related credit rating migration effects). Counter-rotating reductions, in particular due to exchange rate changes ('foreign exchange movements') and a RWA relief due to regular expiration of maturities ('maturity effects'), reduce the RWA increase.

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

€m	a	b
	Risk weighted assets (RWAs)	Capital requirements
<b>1 RWA at previous quarter end</b>	<b>120,438</b>	<b>9,635</b>
2 Asset size	5,468	437
3 Asset quality	1,286	103
4 Model updates	-163	-13
5 Methodology and policy	0	0
6 Acquisitions and disposals	0	0
7 Foreign exchange movements	-444	-36
8 Collateral effects	61	5
9 Duration effects	-1,244	-100
10 Others	-48	-4
<b>11 RWAs as at the end of the reporting period</b>	<b>125,355</b>	<b>10,028</b>

## Credit risk and credit risk mitigation in the SACR

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. Here, Commerzbank uses the standard mapping of external credit assessments to the relevant credit quality steps as 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.

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. 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 in accordance with Article 444 (e) CRR.

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

Exposure classes €m	a		b		c		d		e		f	
	Exposures before CCF and CRM				Exposures post CCF and CRM				RWAs and RWA density			
	On-balance- sheet amount	Off-balance- sheet amount	On-balance- sheet amount	Off-balance- sheet amount	On-balance- sheet amount	Off-balance- sheet amount	RWAs	RWA density	RWAs	RWA density		
1	Central governments or central banks	79,526	52	83,732	362	633	0.8%					
2	Regional government or local authorities	15,750	953	16,556	111	585	3.5%					
3	Public sector entities	5,080	403	5,835	238	192	3.2%					
4	Multilateral development banks	820	0	820	0	0	0.0%					
5	International organisations	496	0	496	0	0	0.0%					
6	Institutions	1,642	11	1,671	3	310	18.5%					
7	Corporates	5,623	1,995	5,196	723	4,894	82.7%					
8	Retail	5,123	3,891	4,919	194	3,832	74.9%					
9	Secured by mortgages on immovable property	2,305	9	2,305	4	824	35.7%					
10	Exposures in default	216	9	210	1	249	118.0%					
11	Exposures associated with particularly high risk	273	0	273	0	410	150.0%					
12	Covered bonds	0	0	0	0	0	0.0%					
13	Institutions and corporates with a short-term credit assessment	11	0	11	0	2	20.0%					
14	Collective investment undertakings	2,480	0	2,480	0	623	25.1%					
15	Equity	887	0	887	0	1,221	137.6%					
16	Other items	2,820	74	2,820	74	6,417	221.8%					
17	<b>Total</b>	<b>123,051</b>	<b>7,397</b>	<b>128,211</b>	<b>1,709</b>	<b>20,191</b>	<b>15.54 %</b>					

## EU CR5: Standardised approach – Credit risk (post CCF and CRM) by exposure class and risk weight

Exposure classes €m	Risk weight																Total	Of which unrated	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
1 Central governments or central banks	83,530	0	0	0	57	0	288	0	0	47	0	172	0	0	0	0	0	84,094	76,146
2 Regional government or local authorities	14,575	0	0	0	1,555	0	525	0	0	12	0	0	0	0	0	0	0	16,667	15,382
3 Public sector entities	5,139	0	0	0	919	0	12	0	0	2	0	0	0	0	0	0	0	6,073	6,005
4 Multilateral development banks	820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	820	278
5 International organisations	496	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	496	496
6 Institutions	223	40	0	0	1,331	0	72	0	0	7	0	0	0	0	0	0	0	1,674	1,273
7 Corporates	0	0	0	0	86	1	1,904	0	0	3,917	10	0	0	0	0	0	0	5,918	3,643
8 Retail	0	0	0	0	0	0	0	0	5,113	0	0	0	0	0	0	0	0	5,113	5,113
9 Secured by mortgages on immovable property	0	0	0	0	0	2,222	84	0	0	0	3	0	0	0	0	0	0	2,309	2,309
10 Exposures in default	0	0	0	0	0	0	0	0	0	135	76	0	0	0	0	0	0	211	211
11 Exposures associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	273	0	0	0	0	0	0	273	273
12 Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Institutions and corporates with a short-term credit assessment	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11	0
14 Collective investment undertakings	1,210	0	0	0	0	0	0	0	0	33	0	0	0	0	1,237	0	0	2,480	2,480
15 Equity	0	0	0	0	0	0	0	0	0	665	0	222	0	0	0	0	0	887	887
16 Other items	3	0	0	0	0	0	0	0	0	540	0	2,351	0	0	0	0	0	2,894	2,894
<b>17 Total</b>	<b>105,996</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>3,960</b>	<b>2,223</b>	<b>2,886</b>	<b>0</b>	<b>5,113</b>	<b>5,358</b>	<b>362</b>	<b>2,745</b>	<b>0</b>	<b>0</b>	<b>1,237</b>	<b>0</b>	<b>0</b>	<b>129,920</b>	<b>117,389</b>

## Loan loss provisions for default risks

The following 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 first half of 2019 and 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 and €500 in the individual business).

Commerzbank's criterion for the definition of defaulted claims is the definition of a default in accordance with Article 178 CRR in conjunction with the associated EBA Guideline and ECB Regulation. Pursuant to section 315a.1 of the German Commercial Code, Commerzbank Group issues consolidated financial statements based on International Financial Reporting Standards (IFRS). 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 is structured by risk exposure class (table EU CR1-A), industry (table EU CR1-B) and geography (table EU CR1-C). The following definitions are used:

- Pursuant to the criteria of the EBA (most recently confirmed in EBA/OP/2017/02), specific credit risk adjustments include the following positions:
  - 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).

- There are no general credit risk adjustments pursuant to the EBA's definition mentioned above.
- The column accumulated write-offs is the balance of write-ups and write-downs.

The country clusters selected in table EU CR1-C match the classification by geographical area used for internal purposes. They are unmodified and base upon the materiality threshold as described in the Disclosure Report as at 31 Dezember 2019, Appendix 4.

The gross carrying value of the defaulted risk positions is at €4.6bn as at 30 June 2020 (December 2019: €4.0bn). Further information on this is given in the Interim Report as at 30 June 2020 in the chapter "Default risk". 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.

The tables EU CR1-D to EU CR1-F fulfil the requirements from the EBA guidelines published on 17th December 2018 on the disclosure of non-performing and forbore exposures (EBA/GL/2018/10) and replace the former tables CR1-D and CR1-E. Deviating from tables EU CR1-A, EU CR1-B and EU CR1-C, they also include positions of the IFRS category FVPL. 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 tables COV1 to COV3 are requirements from the 'Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis' (EBA/GL/2020/07) published by the EBA on 2 June 2020. They provide an overview of the loans and advances granted by Commerzbank in conjunction with the EBA-compliant moratoria, COVID-19 forbore measures and the newly applicable public guarantee systems.

## EU CR1-A: Credit quality of exposures by exposure class and instrument

€m		a	b	c	d	e	f	g
		Gross carrying values of defaulted exposures	non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
1	Central governments or central banks	47	33,106	3	0	0	-4	33,150
2	Institutions	9	43,037	80	0	10	-10	42,966
3	Corporates	2,606	227,161	1,636	0	532	472	228,130
4	thereof SMEs	446	13,297	253	0	147	21	13,490
5	thereof specialised lending	503	21,171	293	0	94	1	21,382
	thereof other	1,657	192,693	1,091	0	290	450	193,259
6	Retail	1,355	147,951	878	0	350	57	148,428
8	thereof secured by mortgages / SMEs	34	984	17	0	7	1	1,001
9	thereof secured by mortgages / non-SMEs	444	85,951	183	0	18	7	86,212
10	thereof qualifying revolving	21	13,736	34	0	0	3	13,723
12	thereof other / SME	392	14,487	273	0	154	18	14,606
13	thereof other / non-SMEs	464	32,793	371	0	171	27	32,886
14	Equity exposures IRB	0	0	0	0	0	0	0
	Other non-credit obligation assets	101	15,662	0	0	0	0	15,762
<b>15</b>	<b>Total IRB approach</b>	<b>4,117</b>	<b>466,916</b>	<b>2,596</b>	<b>0</b>	<b>892</b>	<b>515</b>	<b>468,437</b>
16	Central governments or central banks	0	79,592	14	0	0	1	79,578
17	Regional governments or local authorities	0	16,704	1	0	0	0	16,703
18	Public sector entities	0	5,483	0	0	0	-1	5,483
19	Multilateral development banks	0	820	0	0	0	0	820
20	International organisations	0	496	0	0	0	0	496
21	Institutions	0	1,653	0	0	0	0	1,653
22	Corporates	0	7,630	12	0	5	-1	7,617
23	thereof SMEs	0	502	2	0	5	-2	501
24	Retail	0	9,061	47	0	5	-20	9,014
25	thereof SMEs	0	36	2	0	0	-5	34
26	Secured by mortgages on immovable property	0	2,315	2	0	0	0	2,313
27	thereof SMEs	0	1	0	0	0	0	1
28	Exposures in default <sup>1</sup>	488	0	263	0	66	17	225
29	Items associated with particularly high risk	0	273	0	0	0	0	273
30	Covered bonds	0	0	0	0	0	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	11	0	0	0	0	11



## EU CR1-A\_cont.: Credit quality of exposures by exposure class and instrument

		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
	€m	defaulted exposures	non-defaulted exposures					
32	Collective investment undertakings	0	2,480	0	0	0	0	2,480
33	Equity exposures	0	887	0	0	0	0	887
34	Other exposures	0	2,894	0	0	0	0	2,894
<b>35</b>	<b>Total SACR</b>	<b>488</b>	<b>130,299</b>	<b>339</b>	<b>0</b>	<b>75</b>	<b>-4</b>	<b>130,448</b>
<b>36</b>	<b>Total</b>	<b>4,604</b>	<b>597,216</b>	<b>2,936</b>	<b>0</b>	<b>967</b>	<b>511</b>	<b>598,884</b>
37	of which loans	3,836	361,382	2,576	0	914	521	362,642
38	of which debt securities	0	50,765	27	0	0	-7	50,738
39	of which off-balance-sheet exposures	309	41,061	126	0	0	11	41,244

<sup>1</sup> According to EBA-Q&A\_2017\_3481, for the gross carrying values of the first column „a“ of exposures in default (in line 28) in application of Art. 112(j) CRR, the original asset class should be named in addition. To keep the consistency of the table in regard of totals formation under column „g: net values“ or in line 35 „Total SACR“, the required assignment is given below as follows:

The gross carrying values of the exposures in default (row 28) in SACR in the value of €488m with a value of €312m evolved from positions in the asset class „corporates“ (line 22) and with a value of €175m from the asset class „retail“ (line 24) in the SACR.

## EU CR1-B: Credit quality of exposures by industry or counterparty types

		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
	€m	defaulted exposures	non-defaulted exposures					
1	Production and manufacturing industry	1,616	115,549	818	0	271	85	116,348
2	Energy and water supply	73	23,950	21	0	24	-17	24,002
3	Wholesale and retail trade; repairs	486	31,737	507	0	176	268	31,716
4	Transport and telecommunication	222	18,433	88	0	12	17	18,568
5	Other financial industry and insurances	208	34,444	169	0	99	-21	34,483
6	Banks	46	77,289	85	0	4	-1	77,249
7	Other financial industry and insurances	252	24,931	67	0	17	2	25,116
8	Real estate activities	535	37,442	326	0	157	210	37,651
9	Public administration and defence, compulsory social security	47	101,190	30	0	0	-10	101,207
10	Private households	1,104	130,320	815	0	190	7	130,608
11	Others	16	1,931	10	0	16	-30	1,937
<b>12</b>	<b>Total</b>	<b>4,604</b>	<b>597,216</b>	<b>2,936</b>	<b>0</b>	<b>967</b>	<b>511</b>	<b>598,884</b>

## EU CR1-C: Credit quality of exposures by geography

€m		a	b	c	d	e	f	g
		Gross carrying values of defaulted exposures	non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
1	Western Europe	2,921	454,830	1,761	0	886	394	455,990
2	thereof							
	Germany	2,256	340,851	1,514	0	816	380	341,593
3	Switzerland	48	12,667	10	0	1	1	12,705
4	Great Britain	73	24,461	7	0	2	-13	24,527
5	Italy	30	16,896	28	0	0	-7	16,897
6	France	91	15,090	15	0	15	7	15,166
7	Netherlands	180	8,262	29	0	19	-6	8,413
8	Spain	13	8,632	7	0	4	3	8,639
9	Others	230	27,970	150	0	28	31	28,050
10	Middle and Eastern Europe	1,338	54,601	962	0	69	49	54,977
11	thereof							
	Poland	1,209	43,283	861	0	57	54	43,631
12	Others	128	11,318	101	0	12	-5	11,346
13	North America	27	36,485	13	0	2	3	36,499
14	thereof							
	Kanada	0	6,050	2	0	0	2	6,048
15	USA	27	30,383	11	0	2	2	30,399
16	Asia	162	40,242	150	0	0	57	40,253
17	thereof							
	China	2	4,617	5	0	0	0	4,614
18	Japan	0	22,656	1	0	0	0	22,655
19	Others	160	12,969	144	0	0	57	12,985
20	Latin America	98	6,293	22	0	10	7	6,369
21	Other regions	59	4,765	27	0	0	1	4,796
22	<b>Total</b>	<b>4,604</b>	<b>597,216</b>	<b>2,936</b>	<b>0</b>	<b>967</b>	<b>511</b>	<b>598,884</b>

## EU CR1-D: Ageing of past-due exposures

€m		a	b	c	d	Gross carrying values							l
		Performing Portfolio			Non-performing Portfolio								
			Of which performing or past due <=30 days	Of which past due >30 days and <=90 days		Thereof repayment unlikely and not past due or past due <= 90 days	Of which past due >90 days and <=180 days	Of which past due > 180 days and <= 1 year	Of which past due > 1 year and <= 2 years	Of which past due > 2 year and <= 5 years	Of which past due > 5 year and <= 7 years	Of which past due > 7 years	
<b>1</b>	<b>Loans and advances</b>	<b>310,343</b>	<b>309,772</b>	<b>570</b>	<b>3,932</b>	<b>1,699</b>	<b>328</b>	<b>475</b>	<b>628</b>	<b>502</b>	<b>126</b>	<b>173</b>	<b>3,885</b>
2	Central banks	4,985	4,985	0	0	0	0	0	0	0	0	0	0
3	Central governments	16,790	16,790	0	47	47	0	0	0	0	0	0	47
4	Credit institutions	37,530	37,439	91	9	2	0	0	3	1	2	2	9
5	Other financial corporations	35,515	35,461	55	16	10	0	0	4	1	0	0	16
6	Non-financial corporations	102,975	102,645	330	2,666	1,318	221	266	386	255	89	131	2,662
7	thereof SMEs	24,629	24,559	70	915	313	74	121	176	116	40	75	911
<b>8</b>	<b>Households</b>	<b>112,547</b>	<b>112,452</b>	<b>95</b>	<b>1,194</b>	<b>322</b>	<b>107</b>	<b>209</b>	<b>236</b>	<b>245</b>	<b>36</b>	<b>40</b>	<b>1,151</b>
9	Debt securities	81,400	81,399	0	3	3	0	0	0	0	0	0	3
10	Central banks	0	0	0	0	0	0	0	0	0	0	0	0
11	Central governments	42,530	42,530	0	0	0	0	0	0	0	0	0	0
12	Credit institutions	17,646	17,646	0	0	0	0	0	0	0	0	0	0
13	Other financial corporations	14,425	14,425	0	3	3	0	0	0	0	0	0	3
14	Non-financial corporations	6,798	6,798	0	0	0	0	0	0	0	0	0	0
<b>15</b>	<b>Off-balance-sheet exposures</b>	<b>182,614</b>			<b>495</b>								<b>495</b>
16	Central banks	0			0								0
17	Central governments	1,565			0								0
18	Credit institutions	9,067			0								0
19	Other financial corporations	10,236			10								10
20	Non-financial corporations	129,743			463								463
21	Households	32,003			21								21
<b>22</b>	<b>Total exposure<sup>1</sup></b>	<b>648,962</b>	<b>465,777</b>	<b>571</b>	<b>4,430</b>	<b>1,702</b>	<b>328</b>	<b>475</b>	<b>628</b>	<b>502</b>	<b>126</b>	<b>173</b>	<b>4,383</b>

<sup>1</sup> This includes about €75bn Central bank balances and sight deposits (columns a and b).

## EU CR1-E: Non-performing and forborne exposures

€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	g	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures		
		Of which defaulted	Of which impaired						
	a	b	c	d	e	f	g	h	
1	Loans and advances	1,720	1,155	1,109	1,064	-39	-386	923	416
2	Central banks	0	0	0	0	0	0	0	0
3	Central governments	0	37	37	37	0	-1	36	36
4	Credit institutions	8	1	1	1	0	0	6	0
5	Other financial corporations	6	11	11	11	0	-3	7	1
6	Non-financial corporations	1,325	884	879	838	-30	-330	588	266
7	Households	380	223	180	177	-10	-52	287	113
8	Debt securities	0	0	0	0	0	0	0	0
9	Loan commitments given	390	150	150	150	-6	-45	39	17
10	<b>Total exposure</b>	<b>2,111</b>	<b>1,305</b>	<b>1,258</b>	<b>1,214</b>	<b>-46</b>	<b>-431</b>	<b>963</b>	<b>433</b>

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

€m		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 Portfolio – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non-performing exposures
		thereof Stage 1	thereof Stage 2		thereof Stage 2	thereof Stage 3		thereof Stage 1	thereof Stage 2		thereof Stage 2	thereof Stage 3				
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o		
<b>1</b>	<b>Loans and advances</b>	<b>310,343</b>	<b>298,716</b>	<b>11,628</b>	<b>3,932</b>	<b>0</b>	<b>3,932</b>	<b>668</b>	<b>251</b>	<b>417</b>	<b>2,029</b>	<b>0</b>	<b>2,029</b>	<b>476</b>	<b>144,496</b>	<b>982</b>
2	Central banks	4,985	4,985	0	0	0	0	0	0	0	0	0	0	0	4,509	0
3	Central governments	16,790	16,671	119	47	0	47	2	2	1	1	0	1	0	619	46
4	Credit institutions	37,530	35,611	1,920	9	0	9	34	14	20	3	0	3	0	15,682	3
5	Other financial corporations	35,515	35,488	27	16	0	16	4	4	1	14	0	14	2	22,773	2
6	Non-financial corporations	102,975	98,303	4,672	2,666	0	2,666	333	142	191	1,501	0	1,501	328	33,489	573
7	thereof SMEs	24,629	23,005	1,624	915	0	915	112	56	56	470	0	470	165	10,183	193
8	Households	112,547	107,658	4,890	1,194	0	1,194	294	90	205	510	0	510	146	67,425	359
<b>9</b>	<b>Debt securities</b>	<b>81,400</b>	<b>80,649</b>	<b>751</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>54</b>	<b>36</b>	<b>19</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>
10	Central banks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Central governments	42,530	41,789	741	0	0	0	43	25	18	0	0	0	0	0	0
12	Credit institutions	17,646	17,646	0	0	0	0	3	3	0	0	0	0	0	0	0
13	Other financial corporations	14,425	14,425	0	3	0	3	2	2	0	3	0	3	0	0	0
14	Non-financial corporations	6,798	6,789	9	0	0	0	6	6	0	0	0	0	0	0	0
<b>15</b>	<b>Off-balance-sheet exposures</b>	<b>182,614</b>	<b>180,216</b>	<b>2,398</b>	<b>495</b>	<b>0</b>	<b>495</b>	<b>237</b>	<b>147</b>	<b>89</b>	<b>141</b>	<b>0</b>	<b>141</b>		<b>8,827</b>	<b>85</b>
16	Central banks	0	0	0	0	0	0	0	0	0	0	0	0		220	0
17	Central governments	1,565	1,440	126	0	0	0	0	0	0	0	0	0		475	0
18	Credit institutions	9,067	9,057	9	0	0	0	43	43	0	0	0	0		1,593	0
19	Other financial corporations	10,236	10,178	57	10	0	10	4	4	0	0	0	0		470	3
20	Non-financial corporations	129,743	128,095	1,649	463	0	463	147	82	65	137	0	137		4,607	81
21	Households	32,003	31,446	557	21	0	21	42	18	24	4	0	4		1,462	1
<b>22</b>	<b>Total exposure<sup>1</sup></b>	<b>648,962</b>	<b>634,186</b>	<b>14,776</b>	<b>4,430</b>	<b>0</b>	<b>4,430</b>	<b>959</b>	<b>433</b>	<b>525</b>	<b>2,174</b>	<b>0</b>	<b>2,174</b>	<b>476</b>	<b>153,323</b>	<b>1,067</b>

<sup>1</sup> This includes about €75bn Central bank balances and sight deposits (columns a and b).

Since the outbreak of the Corona pandemic, Governments and institutions are intervening on an unprecedented scale, providing liquidity, support and assistance programmes. Both in the Private and Small-Business Customers segment and in the Corporate Clients segment, around €1bn of KfW loans (entrepreneur/start-up loans and rapid loans) were drawn by our customers as at 30 June 2020. In addition, around 32,500 cus-

tomers were granted deferrals on the same date, of which around 90% were under private moratoria. Overall, the quality of the portfolios has remained stable.

The following table provides an overview of the credit quality of loans and advances to which the moratoria on credit repayments apply in the context of the COVID-19 crisis. This affects a total of around €8,5bn. Less than 1% of the loans are in non-performing status.

#### COV1: Information on loans and advances subject to legislative and non-legislative moratoria

€m	Gross carrying values							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying values	
	Performing Portfolio				Non-performing Portfolio			Performing Portfolio				Non-performing Portfolio				
	a	b	c	d	e	f	g	h	i	j	k	l	m	n		o
1	Loans and advances subject to moratorium	8,517	8,442	127	1,148	76	30	32	59	44	2	27	15	3	3	29
2	of which: Households	4,116	4,108	52	483	8	1	4	26	23	1	14	2	1	1	4
3	of which: Collateralised by residential immovable property	3,126	3,121	25	385	5	0	2	9	8	0	6	1	0	0	2
4	of which: Non-financial corporations	4,401	4,332	75	665	68	28	28	34	21	1	12	13	2	2	25
5	thereof SMEs	1,482	1,440	46	250	42	16	16	16	10	1	6	7	2	2	6
6	of which: Collateralised by commercial immovable property	1,327	1,293	50	318	35	11	11	15	6	0	4	9	1	1	12

The distribution of loans across the sectors is largely uniform. A substantial part of the loans to which Moratoria was granted is in the mBank's portfolio. Details of the loans granted there can be found in the mBank Pilar 3 Report as of 30 June 2020, on pages 43 - 47 and in Note 3 in the 'Consolidated Financial Statements for the first half of 2020'.

In the first six months of 2020, burdens due to the coronavirus pandemic amount to €-315m, of which €-154m are top-level adjustments (see note 26 and risk report page 20 ff. in the Commerzbank Interim Report as of 30 June 2020 for more detailed information).

The following table shows the breakdown of loans and advances by residual maturity of the moratorium, which is subject to a legislative and non-legislative moratorium. The majority (approx. 90%) of the terms is up to six months. The domestic exposure affected by the deferrals is less than 0.5% of the total portfolio. In the case of private customers,

around 5% of the exposure of all instalment loans resulted in a deferral of the payment. In the residential mortgage portfolio, around 2% received a deferral agreement. The transport sector (including tourism) is the most affected among corporate customers.

#### COV2: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria

	a	b	c	d	e	f	g	h	i						
										Number of obligors	Gross carrying values				
											Of which: legislative moratoria	Of which: expired	Residual maturity of moratoria		
<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year											
1	Loans and advances for which moratorium was offered	107,924	8,809												
2	Loans and advances subject to moratorium (granted)	104,630	8,689	524	509	5,747	1,733	86	392	221					
3	of which: Households		4,233	309	319	3,643	246	21	2	2					
4	of which: Collateralised by residential immovable property		3,215	243	236	2,785	174	17	1	2					
5	of which: Non-financial corporations		4,455	216	190	2,103	1,487	66	390	219					
6	thereof SMEs		1,506	33	131	747	565	30	32	3					
7	of which: Collateralised by commercial immovable property		1,329	78	112	713	467	28	8	0					

As can be seen from the table below, almost €1,5bn of new loans were granted, which are subject to a public guarantee scheme. More than 90% of these were allocated to corporate customers. Less than 0.5% of the new loans are non-performing in line with the EBA definition. In most cases, the terms of the new loans and advances are between two and five years.

The most affected industries are manufacturing, wholesale and retail. At the same time, there was a decline in the need for credit, as companies benefited from lower spending (for example short-time work) and subsidies from the federal government.

#### COV3: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis

€m		a	b	c	d
		Gross carrying values	Maximum amount of the guarantee that can be considered	Gross carrying values	
		of which: forborne	Public guarantees received	Inflows to non-performing exposures	
1	Newly originated loans and advances subject to public guarantee schemes	1,489	160	1,344	2
2	of which: Households	105			0
3	of which: Collateralised by residential immovable property	2			0
4	of which: Non-financial corporations	1,381	159	1,244	2
5	thereof SMEs	924			2
6	of which: Collateralised by commercial immovable property	33			0

Table EU CR2-A below shows the total credit risk adjustments and changes therein in the first half of 2020. Claims under the IFRS categories AC and FVOCI and their corresponding loan loss provisions are included in the table. Increases and decreases, respectively, for estimated loan losses are given on a net basis (position 2/3).

The table EU CR2-B shows the changes in the stock of defaulted and impaired loans and debt securities. Claims under the IFRS categories AC and FVOCI and their corresponding loan loss provisions are included in the table.

The chapter on Default risk of the Interim Report as at 30 June 2020 provides more details on this.

#### EU CR2-A: Changes in the stock of general and specific credit risk adjustments

€m	a	b
	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
<b>1 Balance as of 31 December 2019</b>	<b>2,518</b>	<b>0</b>
2/3 Increases due to amounts set aside / decreases due to amounts reversed for estimated loan losses during the period	502	0
4 Decreases due to amounts taken against accumulated credit risk adjustments	-207	0
5 Transfers between credit risk adjustments	238	0
6 Impact of exchange rate differences	-29	0
7 Business combinations, including acquisitions and disposals of subsidiaries	0	0
8 Other adjustments	0	0
<b>9 Balance as 30 June 2020</b>	<b>3,023</b>	<b>0</b>
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	0	0
11 Specific credit risk adjustments directly recorded to the statement of profit or loss	-12	0

#### EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities

€m	a
	Gross carrying value defaulted exposures
<b>1 Balance as of 31 December 2019</b>	<b>3,848</b>
2 Loans and debt securities that have defaulted or impaired since the last reporting period	1,430
3 Returned to non-defaulted status	-89
4 Amounts written off	-253
5 Other changes	-414
<b>6 Balance as 30 June 2020</b>	<b>4,522</b>



## B. Counterparty credit risk (CCR)

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.

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).

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 creditwor-

thiness. 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.<sup>1</sup>

The derivative positions shown in the tables below do not include securitisation positions as defined in the CRR; these are described in each case in detail in the Disclosure Report as at year-end. This means that interest rate and currency swaps or credit derivative transactions entered into with special-purpose securitisation companies are not included.

<sup>1</sup> 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).

## Information on regulatory methods

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

€m	a	b	c	d	e	f	g
	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EaD post CRM	RWAs
1	Mark to market approach	2,244	797			3,110	1,576
2	Original exposure	0				0	0
3	Standardised approach	0			1.4	0	0
4	IMM (for derivatives and SFTs)			14,370	1.4	14,395	6,195
5	Of which securities financing transactions			1,998	1.4	2,049	577
6	Of which derivatives and long settlement transactions			12,372	1.4	12,346	5,618
7	Of which from contractual cross-product netting			0	1.4	0	0
8	Financial collateral simple method (for SFTs)					0	0
9	Financial collateral comprehensive method (for SFTs)					3,596	318
10	VaR for SFTs					0	0
11	<b>Total</b>						<b>8,090</b>

### EU CCR2: CVA (credit value adjustments) capital charge

€m	a	b
	Exposure value	RWAs
1	Total portfolios subject to the advanced method	3,749
2	(i) VaR component (including the 3x multiplier)	896
3	(ii) SVaR component (including the 3x multiplier)	2,853
4	All portfolios subject to the standardised method	170
EU4	Based on the original exposure method	0
5	<b>Total subject to the CVA capital charge</b>	<b>3,919</b>

## EU CCR8: Exposures to CCP (central counterparties)

€m		a	b
		EaD post CRM	RWAs
<b>1</b>	<b>Exposures to QCCPs (total)</b>		<b>350.0</b>
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	3,278	76.8
3	(i) OTC derivatives	864	28.5
4	(ii) Exchange-traded derivatives	826	16.5
5	(iii) SFTs	1,588	31.8
6	(iv) Netting sets where cross-product netting has been approved	0	0.0
7	Segregated initial margin	0	
8	Non-segregated initial margin	0	0.0
9	Prefunded default fund contributions	403	273.2
10	Alternative calculation of own funds requirements for exposures		0.0
<b>11</b>	<b>Exposures to non-QCCPs (total)</b>		<b>0.0</b>
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	0	0.0
13	(i) OTC derivatives	0	0.0
14	(ii) Exchange-traded derivatives	0	0.0
15	(iii) SFTs	0	0.0
16	(iv) Netting sets where cross-product netting has been approved	0	0.0
17	Segregated initial margin	0	
18	Non-segregated initial margin	0	0.0
19	Prefunded default fund contributions	0	0.0
20	Unfunded default fund contributions	0	0.0

## Information by regulatory risk-weighting approach

### EU CCR4: IRB approach – CCR exposures by portfolio and PD scale

	PD scale	a EaD post CRM €m	b Average PD %	c Number of obligors	d Average LGD %	e Average maturity <sup>1</sup> years	f RWAs €m	g RWA density
Central governments or central banks	0.00 to < 0.15	309	0.05	29	72.96	1.7	82	26.5%
	0.15 to < 0.25	61	0.20	6	100.00	3.1	71	115.4%
	0.25 to < 0.50	30	0.29	9	50.71	0.5	14	46.7%
	0.50 to < 0.75	0	0.56	2	100.00	1.7	0	150.7%
	0.75 to < 2.50	50	1.96	6	100.00	1.7	122	243.6%
	2.50 to < 10.00	1	6.74	8	100.00	1.1	5	351.9%
	10.00 to < 100.00	1	46.83	6	100.00	1.0	3	501.4%
	100.00 (Default)	0	0.00	0	0.00	0	0	0.0%
	<b>Subtotal</b>	<b>453</b>	<b>0.37</b>	<b>66</b>	<b>78.27</b>	<b>1.8</b>	<b>297</b>	<b>65.5%</b>
Institutions	0.00 to < 0.15	3,140	0.06	282	46.89	3.4	1,296	41.3%
	0.15 to < 0.25	202	0.21	67	47.91	1.5	96	47.6%
	0.25 to < 0.50	917	0.36	120	51.47	2.4	727	79.2%
	0.50 to < 0.75	150	0.64	34	55.41	1.2	144	95.9%
	0.75 to < 2.50	254	1.32	94	52.66	1.6	297	117.0%
	2.50 to < 10.00	83	4.96	59	51.91	2.7	160	193.7%
	10.00 to < 100.00	41	22.29	23	46.80	3.6	97	238.5%
	100.00 (Default)	0	0.00	0	0.00	0.0	0	0.0%
	<b>Subtotal</b>	<b>4,786</b>	<b>0.48</b>	<b>679</b>	<b>48.47</b>	<b>2.9</b>	<b>2,816</b>	<b>58.8%</b>
Corporates TOTAL	0.00 to < 0.15	2,922	0.06	799	39.27	2.2	730	25.0%
	0.15 to < 0.25	3,534	0.18	493	40.10	2.1	1,337	37.8%
	0.25 to < 0.50	1,684	0.31	846	41.13	2.1	889	52.8%
	0.50 to < 0.75	670	0.60	485	40.65	1.7	442	66.0%
	0.75 to < 2.50	627	1.11	850	43.93	2.3	625	99.7%
	2.50 to < 10.00	128	4.16	355	43.11	2.2	225	175.7%
	10.00 to < 100.00	43	21.29	61	38.31	3.0	90	208.5%
	100.00 (Default)	8	100.00	25	34.63	1.5	4	51.8%
	<b>Subtotal</b>	<b>9,616</b>	<b>0.52</b>	<b>3,913</b>	<b>41.50</b>	<b>2.3</b>	<b>4,343</b>	<b>45.2%</b>
Corporates, thereof SMEs	0.00 to < 0.15	317	0.06	177	55.93	4.3	116	36.7%
	0.15 to < 0.25	159	0.23	69	53.75	4.5	110	69.2%
	0.25 to < 0.50	104	0.31	138	59.24	4.3	86	83.0%
	0.50 to < 0.75	33	0.63	104	59.80	2.8	36	106.9%
	0.75 to < 2.50	74	1.55	300	54.69	3.3	90	121.8%
	2.50 to < 10.00	17	4.16	164	52.64	2.2	26	146.4%
	10.00 to < 100.00	1	47.00	20	43.83	3.0	1	147.8%
	100.00 (Default)	3	100.00	8	34.63	2.9	1	24.2%
	<b>Subtotal</b>	<b>709</b>	<b>0.88</b>	<b>980</b>	<b>55.79</b>	<b>4.1</b>	<b>467</b>	<b>65.8%</b>
Corporates, thereof specialised lending	0.00 to < 0.15	0	0.00	0	0.00	0.0	0	0.0%
	0.15 to < 0.25	0	0.00	0	0.00	0.0	0	0.0%
	0.25 to < 0.50	0	0.00	0	0.00	0.0	0	0.0%
	0.50 to < 0.75	0	0.00	0	0.00	0.0	0	0.0%
	0.75 to < 2.50	0	0.00	0	0.00	0.0	0	0.0%
	2.50 to < 10.00	0	0.00	0	0.00	0.0	0	0.0%
	10.00 to < 100.00	0	0.00	0	0.00	0.0	0	0.0%
	100.00 (Default)	0	0.00	0	0.00	0.0	0	0.0%
	<b>Subtotal</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0.0</b>	<b>0</b>	<b>0.0%</b>

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

## EU CCR4\_cont.: IRB approach – CCR exposures by portfolio and PD scale

	PD scale	a EaD post CRM €m	b Average PD %	c Number of obligors	d Average LGD %	e Average maturity <sup>1</sup> years	f RWAs €m	g RWA density
Corporates, thereof other	0.00 to < 0.15	2,605	0.09	622	39.27	2.2	614	23.6%
	0.15 to < 0.25	3,374	0.18	424	40.10	2.1	1,227	36.3%
	0.25 to < 0.50	1,580	0.31	708	41.13	2.1	803	50.8%
	0.50 to < 0.75	637	0.60	381	40.65	1.7	407	63.9%
	0.75 to < 2.50	553	1.11	550	43.93	2.3	535	96.7%
	2.50 to < 10.00	111	5.41	191	43.11	3.4	200	180.4%
	10.00 to < 100.00	43	21.29	41	38.31	4.0	89	209.7%
	100.00 (Default)	5	100.00	17	54.74	1.5	4	67.0%
	<b>Subtotal</b>	<b>8,907</b>	<b>0.49</b>	<b>2,933</b>	<b>40.36</b>	<b>2.2</b>	<b>3,877</b>	<b>43.5%</b>
Retail	0.00 to < 0.15	127	0.04	2148	47.08		8	6.2%
	0.15 to < 0.25	10	0.19	205	45.61		2	18.3%
	0.25 to < 0.50	12	0.35	260	45.72		3	28.1%
	0.50 to < 0.75	5	0.63	128	47.39		2	35.7%
	0.75 to < 2.50	7	1.08	250	46.38		3	48.0%
	2.50 to < 10.00	7	3.87	240	48.30		5	71.7%
	10.00 to < 100.00	3	25.95	22	42.51		3	114.2%
	100.00 (Default)	0	100.00	14	64.21		0	62.5%
	<b>Subtotal</b>	<b>170</b>	<b>1.15</b>	<b>3,267</b>	<b>48.10</b>		<b>26</b>	<b>15.4%</b>
Total	<b>0.00 to &lt; 0.15</b>	<b>6,497</b>	<b>0.04</b>	<b>3,258</b>	<b>39.27</b>	<b>1.0</b>	<b>2,116</b>	<b>32.6%</b>
	<b>0.15 to &lt; 0.25</b>	<b>3,807</b>	<b>0.18</b>	<b>771</b>	<b>40.10</b>	<b>1.0</b>	<b>1,505</b>	<b>39.5%</b>
	<b>0.25 to &lt; 0.50</b>	<b>2,644</b>	<b>0.29</b>	<b>1,235</b>	<b>41.13</b>	<b>0.5</b>	<b>1,633</b>	<b>61.8%</b>
	<b>0.50 to &lt; 0.75</b>	<b>825</b>	<b>0.56</b>	<b>649</b>	<b>40.65</b>	<b>1.0</b>	<b>589</b>	<b>71.3%</b>
	<b>0.75 to &lt; 2.50</b>	<b>937</b>	<b>1.08</b>	<b>1,200</b>	<b>43.93</b>	<b>1.0</b>	<b>1,047</b>	<b>111.7%</b>
	<b>2.50 to &lt; 10.00</b>	<b>219</b>	<b>3.87</b>	<b>662</b>	<b>43.11</b>	<b>1.1</b>	<b>395</b>	<b>180.3%</b>
	<b>10.00 to &lt; 100.00</b>	<b>87</b>	<b>21.29</b>	<b>112</b>	<b>38.31</b>	<b>1.0</b>	<b>193</b>	<b>221.2%</b>
	<b>100.00 (Default)</b>	<b>8</b>	<b>100.00</b>	<b>39</b>	<b>34.63</b>	<b>1.5</b>	<b>4</b>	<b>51.9%</b>
	<b>Total (all portfolios)</b>	<b>15,024</b>	<b>0.51</b>	<b>7,925</b>	<b>44.90</b>	<b>2.5</b>	<b>7,482</b>	<b>49.8%</b>

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

## EU CCR4\_cont.: IRB approach – CCR exposures by retail sub-portfolio and PD scale

	a	b	c	d	e	f	g
PD scale	EaD post CRM €m	Average PD %	Number of obligors	Average LGD %	Average maturity <sup>1</sup> years	RWAs €m	RWA density
Retail	0.00 to < 0.15	127	0.04	2,148	47.08	8	6.2%
	0.15 to < 0.25	10	0.19	205	45.61	2	18.3%
	0.25 to < 0.50	12	0.35	260	45.72	3	28.1%
	0.50 to < 0.75	5	0.63	128	47.39	2	35.7%
	0.75 to < 2.50	7	1.08	250	46.38	3	48.0%
	2.50 to < 10.00	7	3.87	240	48.30	5	71.7%
	10.00 to < 100.00	3	25.95	22	42.51	3	114.2%
	100.00 (Default)	0	100.00	14	64.21	0	62.5%
<b>Subtotal</b>	<b>170</b>	<b>1.15</b>	<b>3,267</b>	<b>48.10</b>		<b>26</b>	<b>15.4%</b>
...secured by mortgages / SMEs	0.00 to < 0.15	0	0.00	0	0.00	0	0.0%
	0.15 to < 0.25	0	0.00	0	0.00	0	0.0%
	0.25 to < 0.50	0	0.00	0	0.00	0	0.0%
	0.50 to < 0.75	0	0.00	0	0.00	0	0.0%
	0.75 to < 2.50	0	0.00	0	0.00	0	0.0%
	2.50 to < 10.00	0	0.00	0	0.00	0	0.0%
	10.00 to < 100.00	0	0.00	0	0.00	0	0.0%
	100.00 (Default)	0	0.00	0	0.00	0	0.0%
<b>Subtotal</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>		<b>0</b>	<b>0.0%</b>
...secured by mortgages / non-SMEs	0.00 to < 0.15	0	0.00	0	0.00	0	0.0%
	0.15 to < 0.25	0	0.00	0	0.00	0	0.0%
	0.25 to < 0.50	0	0.00	0	0.00	0	0.0%
	0.50 to < 0.75	0	0.00	0	0.00	0	0.0%
	0.75 to < 2.50	0	0.00	0	0.00	0	0.0%
	2.50 to < 10.00	0	0.00	0	0.00	0	0.0%
	10.00 to < 100.00	0	0.00	0	0.00	0	0.0%
	100.00 (Default)	0	0.00	0	0.00	0	0.0%
<b>Subtotal</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>		<b>0</b>	<b>0.0%</b>
...qualified revolving	0.00 to < 0.15	0	0.00	0	0.00	0	0.0%
	0.15 to < 0.25	0	0.00	0	0.00	0	0.0%
	0.25 to < 0.50	0	0.00	0	0.00	0	0.0%
	0.50 to < 0.75	0	0.00	0	0.00	0	0.0%
	0.75 to < 2.50	0	0.00	0	0.00	0	0.0%
	2.50 to < 10.00	0	0.00	0	0.00	0	0.0%
	10.00 to < 100.00	0	0.00	0	0.00	0	0.0%
	100.00 (Default)	0	0.00	0	0.00	0	0.0%
<b>Subtotal</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>		<b>0</b>	<b>0.0%</b>
...other / SMEs	0.00 to < 0.15	5	0.10	105	48.16	1	9.7%
	0.15 to < 0.25	6	0.20	164	54.13	1	17.9%
	0.25 to < 0.50	7	0.35	228	55.15	2	25.7%
	0.50 to < 0.75	5	0.63	121	53.47	2	35.2%
	0.75 to < 2.50	6	1.21	234	54.85	3	47.6%
	2.50 to < 10.00	2	4.99	100	55.63	1	66.1%
	10.00 to < 100.00	0	25.95	14	58.78	0	102.2%
	100.00 (Default)	0	100.00	14	64.21	0	62.5%
<b>Subtotal</b>	<b>30</b>	<b>0.98</b>	<b>980</b>	<b>53.46</b>		<b>9</b>	<b>29.9%</b>
...other / non-SMEs	0.00 to < 0.15	121	0.04	2,043	47.08	7	6.0%
	0.15 to < 0.25	4	0.19	41	45.61	1	19.0%
	0.25 to < 0.50	5	0.41	32	45.72	2	31.0%
	0.50 to < 0.75	0	0.66	7	47.39	0	42.0%
	0.75 to < 2.50	1	1.08	16	46.38	0	51.1%
	2.50 to < 10.00	5	3.87	140	48.30	4	73.7%
	10.00 to < 100.00	3	52.08	8	42.51	3	114.8%
	100.00 (Default)	0	0.00	0	0.00	0	0.0%
<b>Subtotal</b>	<b>139</b>	<b>1.18</b>	<b>2,287</b>	<b>46.94</b>		<b>17</b>	<b>12.2%</b>

<sup>1</sup> Parameter is not subject to the RWA calculation for retail business.

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

€m	a		b	
		Risk weighted assets (RWAs)		Capital requirements
<b>1</b>	<b>RWAs as at the end of the previous reporting period</b>	<b>6,748</b>		<b>540</b>
2	Asset size	-728		-58
3	Asset quality	277		22
4	Model updates	-4		-0
5	Methodology and policy	0		0
6	Acquisitions and disposals	0		0
7	Foreign exchange movements	-38		-3
8	Other	0		0
<b>9</b>	<b>RWAs as at the end of the reporting period</b>	<b>6,255</b>		<b>500</b>

## EU CCR3: Standardised approach – CCR exposures by regulatory portfolio and risk weight

Exposure classes   €m	Risk weight												Total	Of which unrated
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Other			
1 Central governments or central banks	3,835	0	0	0	0	0	0	0	0	0	0	0	3,835	3,835
2 Regional governments or local authorities	943	0	0	0	2	0	0	0	0	0	0	0	945	945
3 Public sector entities	154	0	0	0	101	0	0	0	0	0	0	0	255	255
4 Multilateral development banks	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Institutions	3	1,112	143	0	402	151	0	0	17	0	0	0	1,828	1,499
7 Corporates	0	2,022	0	0	21	45	0	0	359	0	0	0	2,447	2,375
8 Retail	0	0	0	0	0	0	0	16	0	0	0	0	16	16
9 Durch Immobilien besichert	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Exposures in default	0	0	0	0	0	0	0	0	0	0	1	0	1	1
11 Items associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Collective investment undertakings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 Equity exposure	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 Other items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>17 Total</b>	<b>4,935</b>	<b>3,134</b>	<b>143</b>	<b>0</b>	<b>525</b>	<b>196</b>	<b>0</b>	<b>16</b>	<b>376</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>9,327</b>	<b>8,925</b>

## Further information on counterparty credit risk

### EU CCR5-A: Impact of netting and collateral held on exposure values

€m	a	b	c	d	e
	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1 Derivatives	224,353	192,426	31,927	19,028	12,899
2 SFTs (securities financing transactions)	126,829	120,602	6,226	817	5,410
3 Cross-product netting	0	0	0	0	0
<b>4 Total</b>	<b>351,182</b>	<b>313,029</b>	<b>38,153</b>	<b>19,844</b>	<b>18,309</b>

### EU CCR5-B: Composition of collateral for exposures to CCR

€m	a		b		c		d		e		f				
	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	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	
1 Cash	414	20,329	1	23,567					287					3,133	
2 Sovereign Bonds	0	1,808	0	2,887					560					1,844	
3 Other Bonds	0	673	0	444					2,111					1,616	
4 Equities	0	0	0	0					85					10	
5 Other collateral	0	0	0	0					0					0	
<b>6 Total</b>	<b>414</b>	<b>22,810</b>	<b>1</b>	<b>26,898</b>					<b>3,043</b>					<b>6,603</b>	

### EU CCR6: Credit derivatives exposures

€m	a		b		c	
	Credit derivative hedges				Other credit derivatives	
	Protection bought		Protection sold			
1 Notionals						
2 Single-name credit default swaps			3,563		370	9,994
3 Index credit default swaps			25		0	10,563
4 Total return swaps			0		0	1,713
5 Credit options			0		0	0
6 Other credit derivatives			0		0	0
<b>7 Total notionals</b>			<b>3,588</b>		<b>370</b>	<b>22,270</b>
<b>8 Fair values</b>						
9 Positive fair value (asset)			88		42	1,092
10 Negative fair value (liability)			31		9	301



## C. Market risk (MR)

Market risk is the risk of 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 would be reflected in the revaluation reserve or in hidden liabilities/reserves.

Details on risk management in the market risk area, in particular on strategy and organisation, risk control and fungibility and valuation of financial instruments, are given in Commerzbank's Disclosure Report as at 31 December 2019. Also, the internal model (historical simulation) which Commerzbank uses to perform VaR and stress test calculations, is described here.

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 profits and losses. The process draws a distinction between "clean P&L" and "dirty P&L" backtesting. In the former, 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.

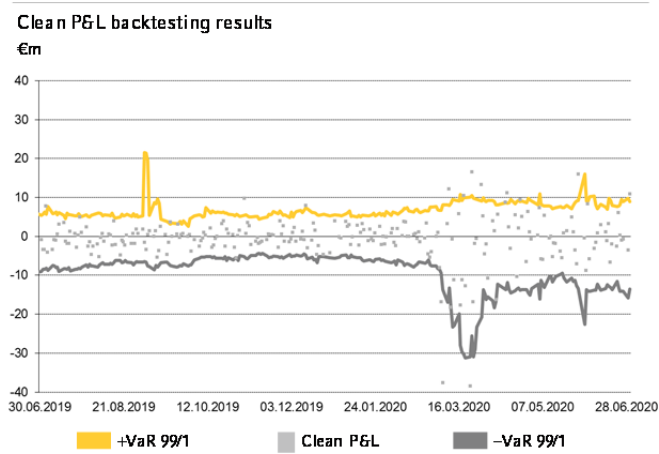
If the resulting loss exceeds the VaR, it is described as a negative backtesting outlier. Analysing the results of backtesting provides an informative basis for checking parameters and for potentially improving the market risk model. In the period from 30 June 2019 to 30 June 2020 three negative clean P&L and two negative dirty P&L outliers were recognised. The outliers are all linked to exceptionally strong market movements in response to the Corona crisis, which, by their very nature, could not be predicted by historically calibrated VaR models. The P&L underlying market movements observed these days exceeded in part significantly the historical fluctuation margin in the 1-year period to be explained in the historical simulation.

It was verified that none of the observed backtesting outliers were caused by model weaknesses. In this context, it was investigated to what extent during the Corona crisis exceptional market movements were observed through the model and thus are reflected in the regulatory capital. For example, a capital buffer was created for the significant future-forward-basis volatility observed

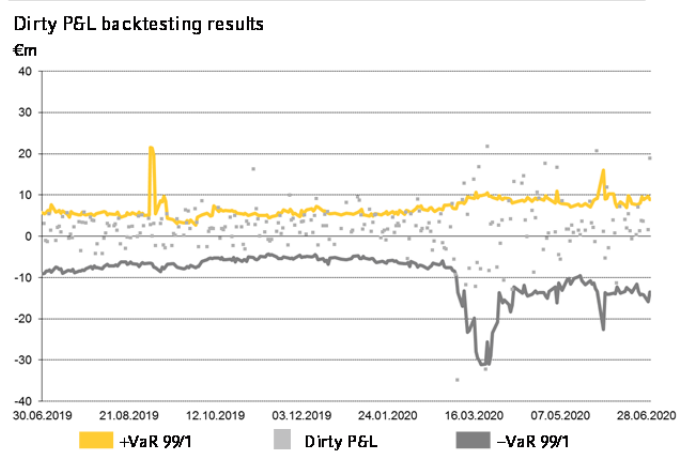
since the Corona pandemic erupted as of Q2 2020 in order to take this effect sufficiently into account in regulatory capital. This capital buffer is calibrated regularly.

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. 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)



It will be examined whether, due to the temporary facilities allowed by the ECB, the corona-related backtesting outliers no longer need to be taken into account. However, this would not currently affect the capital requirements, as three backtesting outliers do

not create a surcharge on the capital requirements. In the Corona crisis on three days in March, there were negative backtesting outliers. The outliers were driven by various factors, such as extended credit spreads, cross-currency base spreads and fluctuations in interest rates, equity and currency rates, and extended future-forward basis spreads for precious metals.

Further information on the validation of the individual components of the internal model as well as on the further processing of the outcome in the respective committees are given in the Disclosure Report as at 31 December 2019.

## 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 into the calculation of capital requirements. As at 30 June 2020, the standard approach accounts for 12% of total market risk assets. The risk-weighted assets for market risk positions in the standard approach decreased by €77m to €929m in the first half-year of 2020 and was mainly caused by the sale of the equity division.

### EU MR1: Market risk under the standardised approach

€m		a	b
		RWAs	Capital requirements
Outright products			
1	Interest rate risk (general and specific)	387	31
2	Equity risk (general and specific)	0	0
3	Foreign exchange risk	522	42
4	Commodity risk	0	0
Options			
5	Simplified approach	0	0
6	Delta-plus method	16	1
7	Scenario approach	0	0
8	Securitisations (specific risk)	0	0
9	Collective investment undertakings	4	0
10	<b>Total</b>	<b>929</b>	<b>74</b>

### Market risk in the internal model approach

As at 30 June 2020, the internal model approach accounted for 88% of all market risk assets. The risk-weighted assets for market risk positions in the internal model approach increased by €420m to €6,662m in the second quarter of 2020. The following table EU MR2-B gives information on the drivers of the development in RWAs.

The increase in line 7 (others) comes from the introduction of a buffer for precious metals future forward base spreads (see also section Backtesting), where market volatility was particularly high in the context of the Corona crisis. The buffer is calibrated regularly.

## EU MR2-A: MR under the Internal Model Approach (IMA)

€m		a	b
		RWAs	Capital requirements
<b>1</b>	<b>VaR (higher of values a) and b))</b>	<b>2,392</b>	<b>191</b>
a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		54
b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		191
<b>2</b>	<b>sVaR (higher of values a) and b))</b>	<b>3,708</b>	<b>297</b>
a)	Latest sVaR (Article 365(2) of the CRR (SVaRt-1))		102
b)	Average of the sVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		297
<b>3</b>	<b>IRC (higher of values a) and b))</b>	<b>562</b>	<b>45</b>
a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		40
b)	Average of the IRC number over the preceding 12 weeks		45
<b>4</b>	<b>Comprehensive risk measure (higher of values a), b) and c))</b>	<b>0</b>	<b>0</b>
a)	Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)		0
b)	Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		0
c)	8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio (Article 338(4) of the CRR)		0
<b>5</b>	<b>Others</b>	<b>0</b>	<b>0</b>
<b>6</b>	<b>Total</b>	<b>6,662</b>	<b>533</b>

## EU MR2-B: RWA flow statements of market risk exposures under the Internal Model Approach (IMA)

€m		a	b	c	d	e	f	g
		VaR	SVaR	IRC	Comprehensive risk measure	Others	Total RWAs	Total capital requirement
<b>1</b>	<b>RWAs at previous quarter end</b>	<b>1,644</b>	<b>3,977</b>	<b>621</b>	<b>0</b>	<b>0</b>	<b>6,242</b>	<b>499</b>
1a	Regulatory adjustment	0	0	0	0	0	0	0
1b	RWAs at previous quarter end (end of day)	1,644	3,977	621	0	0	6,242	499
<b>2</b>	<b>Movement in risk levels</b>	<b>278</b>	<b>-269</b>	<b>-82</b>	<b>0</b>	<b>0</b>	<b>-73</b>	<b>-6</b>
3	Model updates/changes	0	0	23	0	0	23	2
4	Methodology and policy	0	0	0	0	0	0	0
5	Acquisitions and disposals	0	0	0	0	0	0	0
6	Foreign exchange movements <sup>1</sup>	0	0	0	0	0	0	0
7	Others	470	0	0	0	0	470	38
8a	RWAs at the end of the reporting period (end of day)	2,392	3,708	562	0	0	6,662	533
8b	Regulatory adjustment	0	0	0	0	0	0	0
<b>8</b>	<b>RWA at the end of the reporting period</b>	<b>2,392</b>	<b>3,708</b>	<b>562</b>	<b>0</b>	<b>0</b>	<b>6,662</b>	<b>533</b>

<sup>1</sup> Changes of RWA which are due to foreign exchange movements are reported under „Movement in risk levels“.

**Market risk in the trading book**

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

The VaR (10 day 99%) increased from €18m to €44m over the first half-year of 2020. This is due to the strong market movements in the context of the Corona crisis, which have led to new extreme scenarios in the VaR calculation. The market risk profile is diversified across all asset classes.

The stressed VaR increased over the first half-year of 2020 by €19m to €101m. The higher value at the period end was primarily owing to exposure changes in the treasury. The incremental risk charge increased from €14m to €24m.

**EU MR3: IMA values for trading portfolios**

	€m	a
<b>VaR (10 day 99%)</b>		
1	Maximum value	99
2	Average value	39
3	Minimum value	15
4	Period end	44
<b>sVaR (10 day 99%)</b>		
5	Maximum value	115
6	Average value	87
7	Minimum value	65
8	Period end	101
<b>IRC (99.9%)</b>		
9	Maximum value	59
10	Average value	26
11	Minimum value	13
12	Period end	24
<b>Comprehensive risk capital charge (99.9%)</b>		
13	Maximum value	-
14	Average value	-
15	Minimum value	-
16	Period end	-

# Appendix

## Supplement to equity structure (CAP1)

Line	(B) Reference to article in the regulation (EU) Nr. 575/2013
1	26 (1), 27, 28, 29
1a	EBA list 26 (3)
1b	EBA list 26 (3)
2	26 (1) (c)
3	26 (1)
3a	26 (1) (f)
4	486 (2)
5	84
5a	26 (2)
6	
7	34, 105
8	36 (1) (b), 37
10	36 (1) (c), 38
11	33 (1) (a)
12	36 (1) (d), 40, 159
13	32 (1)
14	33 (1) (b)
15	36 (1) (e), 41
16	36 (1) (f), 42
17	36 (1) (g), 44
18	36 (1) (h), 43, 45, 46, 49 (2) & (3), 79
19	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) - (3), 79
20a	36 (1) (k)
20b	36 (1) (k) (i), 89 - 91
20c	36 (1) (k) (ii), 243 (1) (b), 244 (1) (b), 258
20d	36 (1) (k) (iii), 379 (3)
21	36 (1) (c), 38, 48 (1) (a)
22	48 (1)
23	36 (1) (i), 48 (1) (b)
25	36 (1) (c), 38, 48 (1) (a)
25a	36 (1) (a)
25b	36 (1) (l)
27	36 (1) (j)
28	
29	
30	51, 52
31	
32	
33	486 (3)
34	85, 86
35	486 (3)
36	
37	52 (1) (b), 56 (a), 57

Line	(B) Reference to article in the regulation (EU) Nr. 575/2013
38	56 (b), 58
39	56 (c), 59, 60, 79
40	56 (d), 59, 79
42	56 (e)
43	
44	
45	
46	62, 63
47	486 (4)
48	87, 88
49	486 (4)
50	62 (c) & (d)
51	
52	63 (b) (i), 66 (a), 67
53	66 (b), 68
54	66 (c), 69, 70, 79
55	66 (d), 69, 79
57	
58	
59	
60	
61	92 (2) (a)
62	92 (2) (b)
63	92 (2) (c)
64	CRD 128, 129, 130, 131, 133
65	
66	
67	
67a	
68	CRD 128
72	36 (1) (h), 45, 46, 56 (c), 59, 60, 66 (c), 69, 70
73	36 (1) (i), 45, 48
75	36 (1) (c), 38, 48
76	62
77	62
78	62
79	62
80	484 (3), 486 (2) & (5)
81	484 (3), 486 (2) & (5)
82	484 (4), 486 (3) & (5)
83	484 (4), 486 (3) & (5)
84	484 (5), 486 (4) & (5)
85	484 (5), 486 (4) & (5)

## List of abbreviations

AMA	Advanced Measurement Approach	IMA	Internal Model Approach
AC	At Cost	IMM	Internal Model Method
CCF	Credit Conversion Factor	IRBA	Internal Ratings Based Approach
CRD	Capital Requirements Directive	KFW	Kreditanstalt für Wiederaufbau
CRR	Capital Requirements Regulation	LECL	Lifetime Expected Credit Loss
CVA	Credit Value Adjustments	LGD	Loss Given Default
EaD	Exposure at Default	OCI	Other Comprehensive Income
EBA	European Banking Authority	PD	Probability of Default
ECL	Expected Credit Loss	RWA	Risk Weighted Assets
EEPE	Effective Expected Positive Exposure	SACR	Standard Approach to Credit Risk
FVOCI	Fair Value through Other Comprehensive Income	SFT	Securities Financing Transaction
FVPL	Fair Value through Profit or Loss	SME	Small and medium-sized enterprises
IRC	Incremental Risk Charge	sVaR	stressed Value-at-Risk
IAS	International Accounting Standards	VaR	Value-at-Risk
IFRS	International Financial Reporting Standards		

## 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 are 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, 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 IV rules are still ongoing. Therefore requirements for adjustment may occur e.g. due 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.

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