COMMERZBANK

Disclosure Report 2014

Disclosure in accordance with the Capital Requirements Regulation as at 31 December 2014

The bank at your side

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

Introduction

Commerzbank

Commerzbank Aktiengesellschaft is Germany's second largest bank and one of its leading banks for private and corporate customers. Our customers have one of the densest networks of any private-sector bank in Germany at their disposal. Commerzbank serves a total of around 15 million private customers and 1 million business and corporate customers worldwide. Commerzbank aims to continue strengthening its position as market leader in the private and corporate customer segments in Germany.

The focus of our activities is on the four core segments: Private Customers, Mittelstandsbank, Central & Eastern Europe and Corporates & Markets. The Bank has merged all activities in commercial real estate and ship financing, in addition to public financing, into the Non-Core Assets (NCA) run-off segment. The core segments are each overseen by a member of the Board of Managing Directors; responsibility for NCA is divided between two Board members.

All staff and management functions are contained in Group Management: Group Audit, Group Communications, Group Compliance, Group Development & Strategy, Group Finance, Group Human Resources, Group Investor Relations, Group Legal, Group Treasury and the central risk functions. The support functions are provided by Group Services. These include Group Banking Operations, Group Markets Operations, Group Information Technology, Group Organisation & Security, Group Delivery Centre and Group Excellence & Support. The staff, management and support functions are combined in the Others and Consolidation division for reporting purposes.

On the domestic market, Commerzbank Aktiengesellschaft is headquartered in Frankfurt am Main, from where it manages a nationwide branch network through which all customer groups are served. Its major German subsidiaries are comdirect bank AG, Commerz Real AG and Hypothekenbank Frankfurt AG. Outside of Germany, the Bank has 6 material subsidiaries, 23 operational foreign branches and 35 representative offices in 53 countries and is represented in all major financial centres, such as London, New York, Tokyo, Hong Kong and Singapore. However, the focus of the Bank's international activities is in Europe.

A detailed description of Commerzbank Group is given in the Annual Report 2014. Information regarding the remuneration system of Commerzbank is laid down in the Remuneration Report 2014 as well as in the section Remuneration Report in the Annual Report 2014.

Objective of the Disclosure Report

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

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

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

In this report Commerzbank Aktiengesellschaft as the ultimate parent company of the regulated banking group is complying with the disclosure requirements of Article 431 – 455 of the regulation (EU) No. 575/2013 – Capital Requirements Regulation (CRR) as at the reporting date 31 December 2014.

An overview of the structure of risk reporting in the Annual Report and Disclosure Report 2014 may be found in table 56 in the appendix to this document.

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 companies controlled by the ultimate parent company.

In accordance with the materiality principle set out in Article 432 (1) CRR, this disclosure relates to the largest entities within Commerzbank Group. This enables the focus to be placed on the information that is most material. Subsidiaries classified as material during the annual risk inventory are included in the Disclosure Report according to a uniform definition of materiality throughout the Group. In addition, at least 95% coverage of the capital adequacy requirements of the entire Commerzbank Group must be achieved with these companies. This applies for default risks and also for market and operational risks. If this is not the case, other subsidiaries will be brought into the group of consolidated companies in order of exposure.

In accordance with this definition of materiality, the following companies – as in last year's report - are included in the Disclosure Report 2014 alongside Commerzbank Aktiengesellschaft:

- mBank S.A.,
- comdirect bank AG,
- Commerz Real AG,
- Erste Europäische Pfandbrief- und Kommunalkreditbank AG in Luxembourg (EEPK) and
- Hypothekenbank Frankfurt AG.

These six companies account for at least 95% of the Commerzbank Group's total capital adequacy requirement. The 95% condition is also met in each case for the individual types of risk.

The information in this Disclosure Report generally relates to the six consolidated entities listed above. Where this is not the case (e.g. with regard to the capital structure), it is explicitly stated. All entities are fully consolidated both from a supervisory perspective and in accordance with IFRS.

In the context of the disclosure requirements (Article 431 (3) in the 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 Basle framework. The appropriateness and practicality of the institute's disclosure practice has to be verified regularly. 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 defined in addition in separate documents.

The Enhanced Disclosure Task Force (EDTF) has published a number of fundamental principles and recommendations for improved reporting across all areas of risk management. Commerzbank has largely taken these recommendations into account in this Disclosure Report and in the Annual Report 2014. For individual topics the scope and timing of implementation are still being reviewed.

So far, the Disclosure Report is being updated and published on a yearly basis. According to regulatory requirements, further publications will be released throughout the year.

Waiver rule pursuant to Article 7 CRR

Under the waiver rule pursuant to Article 7 CRR in conjunction with section 2a.1 KWG, subsidiary companies in a banking group may apply for exemption from the requirements of Article 6 (1) CRR. This is on condition, among other things, that both the parent company and subsidiary have their registered office in Germany and the subsidiary is included in the supervision on a consolidated basis of the parent company.

Exemption is also on condition that there is no material practical or legal impediment to the transfer of own funds, that the parent company guarantees the commitments entered into by the subsidiary, the risk evaluation, measurement and control procedures of the parent company cover the subsidiary, and the parent company holds more than 50% of the voting rights in the subsidiary and can therefore exercise a dominant influence over the subsidiary[1].

Hypothekenbank Frankfurt AG and comdirect bank AG have made use of the waiver rule since 2008. Both companies are – for instance by virtue of the risk management carried out at Group level (in line with MaRisk) – fully integrated into the internal processes and risk management of Commerzbank Aktiengesellschaft as the ultimate parent company of the banking group. This applies in particular to the methods used, risk management, monitoring of operations, management and reporting. Commerzbank Aktiengesellschaft holds 100% of the voting rights in Hypothekenbank Frankfurt AG and guarantees its commitments towards third parties (through letters of comfort). In addition, Commerzbank Aktiengesellschaft holds 81.3% of the voting rights in comdirect bank AG and guarantees its commitments towards third parties (through letters of comfort).

According to Article 7 CRR in conjunction with section 2a. 1 KWG, parent companies within the group of companies consolidated for regulatory purposes that have their registered office in Germany are also entitled to this exemption. The opportunity this offers for Commerzbank Aktiengesellschaft as the ultimate parent company of the Commerzbank Group to be exempted from the requirements at single entity level has been utilised since 2007. Commerzbank Aktiengesellschaft is integrated into the Commerzbank Group's management system, and there are no material, practical or legal impediments to the transfer of own funds to Commerzbank Aktiengesellschaft.

Utilisation of the waiver rule was reported at the outset to BaFin and the Bundesbank with evidence of compliance with the requirements and is subsequently monitored and documented on occasion.

[1] Under Article 7 (1) d) CRR, a dominant influence means either having a majority of voting rights or having the right to appoint a majority of the members of the management body of the subsidiary.

Equity capital

Capital structure

The regulations on the definition of capital and capital requirements changed in the European Union at the beginning of 2014. The main new European supervisory regulations are set out in the Capital Requirements Directive (CRD) IV and the Capital Requirements Regulation (CRR), which, unlike the CRD IV Directive, has direct legal effect for all European banks. This legislation is supplemented at national level in Germany by further provisions in the German Banking Act (KWG), CRR and other codifications. In addition Implementing Technical Standards (ITS) and Regulatory Technical Standards (RTS) are intended to provide transparency about the regulation of particularly complex matters. The new regulations reduce the eligibility of regulatory capital components, provide for additional deductions from capital, generally increase the capital requirements and ultimately set higher minimum requirements for banks' capital adequacy. To ensure that all these requirements do not take effect on a single date, certain parts of these new rules are subject to defined phase-in rules.

Common Equity Tier 1 (CET 1) capital consists largely of subscribed capital plus reserves and non-controlling interests. Adjustments to this figure may be necessitated by any number of causes, for example goodwill, intangible assets, write-downs of assets (if assets are not valued cautiously enough in the regulator's view), shortfalls due to the comparison of expected losses with the provisions recognised for them and the correction of tax loss carryforwards. Adding Additional Tier 1 capital (AT1), which can contain subordinated debt instruments with certain conditions, produces Tier 1 capital. Tier 2 capital consists largely of subordinated debt instruments which are not eligible as Additional Tier 1 capital. The eligibility of these capital components has been reduced.

Commerzbank seeks to achieve the following objectives in managing its capital:

- adherence to the statutory minimum capital requirements at Group level and in all companies included in the regulatory Group,
- ensuring that the planned capital ratios are met, including the new ECB/EBA requirements,
- provision of sufficient reserves to guarantee the Bank's freedom of action at all times,
- strategic allocation of Tier 1 capital to business segments and divisions in order to exploit growth opportunities.

The financial crisis made the importance of adequate CET1 capital levels for banks become an issue of increasing public concern. At Commerzbank Tier 1 capital has always been a key management target. The Bank's specifications for the capital ratios far exceed the minimum statutory requirements. The Bank's risk-bearing capacity and market expectations play an important role in determining the internal capital ratio targets. For this reason Commerzbank has stipulated minimum ratios for regulatory capital. In accordance with this, Commerzbank has set itself the goal of achieving a CET1 ratio of 10.0% of risk-weighted assets by the end of 2016 (after fully implementing the transitional arrangements under the Capital Requirements Regulation (CRR) and the German Banking Act (KWG), i.e. on a "fully loaded" basis). CET1 capital is allocated via a regular process which takes account of the Bank's strategic direction, profitable new business opportunities in the core business of each banking department as well as risk-bearing capacity issues.

All measures relating to the Bank's capital are proposed by the Bank's central Asset Liability Committee and approved by the Board of Managing Directors, subject to the authorisation granted by the annual general meeting. During the past year Commerzbank met the minimum statutory capital requirements as well as the requirements of the ECB and EBA at all times. All of the proposed new regulations are still subject to change. Large parts of the proposed ITS and RTS are still outstanding. Consequently all figures for risk-weighted assets, capital and capital ratios reflect Commerzbank's current understanding of the regulations.

For a comprehensive overview of the Group's available equity, the tables 1 to 5 include the whole regulatory basis of consolidation. The equity capital is the basis for the calculation of the equity capital adequacy as reported to the Bundesbank.

Details on the issued capital instruments of Commerzbank Group according to Article 437 (1) b) and c) CRR are given on the internet pages of Commerzbank.

The composition of the regulatory equity capital and the equity capital ratios are shown in the following table:

Table 1: Equity structure[1]

Line		A: Amount on the day of disclosure	C: Residual amount[2]
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	17,066	0
1a	thereof subscribed capital	15,928	
2	Retained earnings	10,071	
3	Accumulated other comprehensive income (and other reserves)	–1,388	s. line 26a
5	Minority interests (amount allowed in consolidated CET1)	744	–356
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	264	
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**26,759**	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	–469	
8	Intangible assets (net of related tax liability) (negative amount)	–2,236	–822
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	–128	–511
11	Fair value reserves related to gains or losses on cash flow hedges	246	
12	Negative amounts resulting from the calculation of expected loss amounts	–385	–442
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	–20	–151
15	Defined benefit pension fund assets (negative amount)	–57	–227
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	–16	–52
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	–360	
20c	thereof: securitisation positions (negative amount)	–360	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	–89	–355
26	Regulatory adjustments applied to CET1 in respect of amounts subject to pre-CRR treatment	1,928	
26a	Regulatory adjustments applied to Common Equity Tier 1 in respect of unrealised profits/losses according to Article 467, 468	1,928	
26a.1	thereof: possible filter for unrealised losses	706	
27	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	0	
27a	CET1 capital elements or deductions - other	–49	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1) capital**	**–1,635**	
29	**Common Equity Tier 1 (CET1) capital**	**25,123**	
Additional Tier 1 (AT1) capital: instruments			
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	935	
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**935**	
Additional Tier 1 (AT1) capital; regulatory adjustments			
41	Regulatory adjustments applied to additional Tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in regulation (EU) No.575/2013 (i.e. CRR residual amounts)	–935	
41a	Residual amounts deducted from additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of regulation (EU) No.575/2013	–935	
41a.2	thereof: intangibles	–822	
41a.3	thereof: shortfall of provisions to expected losses	–111	
41a.4	thereof: direct holdings of own CET1 instruments	–1	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**–935**	
44	**Additional Tier 1 (AT1) capital**	**0**	
45	**Tier 1 capital (T1 = CET1 + AT1)**	**25,123**	

Line		A: Amount on the day of disclosure	C: Residual amount[2]
Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	6,345	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from Tier 2	246	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	126	−11
49	thereof: instruments issued by subsidiaries subject to phase out	11	
51	**Tier 2 (T2) capital before regulatory adjustments**	**6,717**	
Tier 2 (T2) capital: regulatory adjustments			
52	Direct and indirect holdings by an institution of own Tier 2 instruments and subordinated loans (negative amount)	−34	0
56	Regulatory adjustments applied to Tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in regulation (EU) No.575/2013 (i.e. CRR residual amounts)	−331	
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of regulation (EU) No.575/2013	−331	
56a.1	thereof: shortfall of provisions to expected losses	−331	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**−364**	
58	**Tier 2 (T2) capital**	**6,353**	
59	**Total capital (TC = T1 + T2)**	**31,476**	
59a	RWA in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in regulation (EU) No.575/2013 (i.e. CRR residual amounts)	917	
59a.1	thereof: items not deducted from CET1 (Regulation (EU) No.575/2013 residual amounts)	562	
59a.1.1	thereof: deferred tax assets that rely on future profitability net of related tax liability	511	
59a.1.2	thereof: indirect holdings of own CET1 instruments	51	
59a.3	thereof: items not deducted from T2 items (Regulation (EU) No.575/2013 residual amounts)	0	
59a.3.1	thereof: indirect holdings of own T2 instruments	0	
60	**Total risk-weighted assets**	**215,178**	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	11.7	
62	Tier 1 (as a percentage of total risk exposure amount)	11.7	
63	Total capital (as a percentage of total risk exposure amount)	14.6	
64	Institution specific buffer requirement (CET1 requirement in accordance with Article 92 (1) a) plus capital conservation and countercyclical buffer requirements plus systemic risk buffer, plus the systemically important institution (G-SII or O-SII) buffer, expressed as a percentage of risk exposure amount)	4.5	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	7.3	
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital of relevant entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	725	
73	Direct and indirect holdings by the institution of the CET1 instruments of relevant entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	296	
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	2,521	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	405	
79	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach	818	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
82	Current cap on AT1 instruments subject to phase out arrangements	1,807	
84	Current cap on T2 instruments subject to phase out arrangements	608	

[1] Lines 1b-c, 3a, 4, 4a, 9, 13, 17-19, 20, 20b, 20d, 22-25, 26a.2-b, 30-32, 33a,34, 35, 37-40, 41a.1, 41a.5-a.7, 41b-c, 42, 47a, 50, 53-55, 56a.2-a.3, 56b-d, 59a1.3-a1.4, 59a.2, 59a.3.2-a3.3, 65-67, 69-71, 74, 76,78, 80, 81, 83 and 85 are not applicable or not existing for Commerzbank Group and therefore not shown due to clarity.
[2] Amounts underlying regulations prior to (EU) No. 575/2013 or mandatory residual amounts according to regulation (EU) No. 575/2013.

The following table shows the changes in equity components in the period under review:

Table 2: Statement of changes in equity

Capital | €m	CET1	Additional Tier 1	Tier 2	Total Capital
Own funds as at 31.12.2013	**25,582**	**0**	**8,435**	34,017
Regulatory result capable of being adapted	264			264
Changes in good will and intangible assets	–112			–112
IAS 19 effects	–256			–256
Changes in DTA	–217			–217
Changes in minority interests	–123			–123
Changes in allowances shortfall	–12			–12
Other effects	–4			–4
Changes in CET1 total	**–459**			**–459**
Changes AT1 capital instruments (grandfathering)		115		115
Changes in deduction of AT1 capital elements charged		–115		–115
Changes in AT1 total		**0**		**0**
Changes in T2 instruments			–2,236	–2,236
Changes in allowances shortfall			153	153
Changes in T2 total			**–2,083**	**–2,083**
Own funds as at 31.12.2014	**25,123**	**0**	**6,353**	**31,476**

For Commerzbank as a banking group as defined in section 10a KWG and Article 11 CRR the capital relevant to the determination of regulatory capital is based on the consolidated financial statements under IFRS. To reconcile the requirements for regulatory capital with the slightly different amounts reported in the financial statements, capital as determined under IFRS was adjusted with the aid of so-called prudential filters. The prudential filters are used in accordance with the Consolidated Financial Statements Reconciliation Regulation.

Starting 2014, supervisory authorities will enforce new, higher capital requirements. In accordance with the Capital Requirements Directive (CRD IV), Capital Requirements Regulation (CRR) and the German CRD-IV Implementation Law, significantly stricter standards will apply to banks' minimum capitalisation. The new regulations contain transitional provisions under which the minimum capital requirements can be satisfied on a step-by-step basis. The Bank has already integrated these future requirements in its internal capital planning.

The reconciliation of the Group's equity reported in the balance sheet with regulatory capital was as follows:

Table 3: Reconciliation of equity as reported in the balance sheet with regulatory capital

Position €m	Equity IFRS (Phase in)[1]	Equity FINREP[2]	Equity COREP[3]
Subscribed capital	1,139	1,139	1,139
Capital reserve	15,928	15,928	15,928
Retained earnings	10,684	10,638	10,638
Silent participations	0	0	0
Actuarial profits/losses current year	– 565	– 565	– 565
Revaluation reserve	– 957	– 956	– 956
Valuation of cash flow hedges	– 246	– 246	– 246
Currency translation reserve	– 193	– 187	– 187
Distributable profit/loss from previous year (after suspension of retained earnings)	0	0	0
Distributable profit/loss from current year	264	236	236
Non-controlling interests	906	879	879
Equity as shown in balance sheet	**26,960**	**26,866**	**26,866**
Effects from debit valuation adjustments			– 38
Correction of revaluation reserve			906
Correction to cash flow hedges reserve			246
Correction to phase-in (IAS 19)			1,022
Correction to non-controlling interests (minority)			– 135
Goodwill			– 2,090
Intangible assets			– 969
Surplus in plan assets			– 57
Deferred tax assets from loss carryforwards			– 128
Shortfall due to expected loss			– 496
Prudential valuation			– 469
Own shares			– 17
First loss positions from securitisations			– 360
Advance payment risks			0
Deduction of offset components of Additional Tier 1 capital (AT1)			935
Deferred tax assets from temporary differences which exceed the 10% threshold			– 89
Others and rounding			– 5
CET1			**25,123**
Hybrid capital	1,110	1,110	1,110
Not eligible issues			– 123
Others, especially hedge accounting, interests, agio, disagio			– 52
Additional Tier 1 before deductions			**935**
Deduction of offset components of additional core capital (AT1)			– 935
Additional Tier 1 after deductions			**0**
Subordinated capital	11,249	11,249	11,249
Decreased offsetting in the last 5 years of residual maturity			– 3,030
Not eligible non-controlling interests			– 1,119
Others, especially hedge accounting, interests, agio, disagio			– 416
Tier 2 before deductions			**6,684**
Shortfall due to expected loss			– 331
Tier 2 after deductions			**6,353**
Own funds	**39,319**	**39,225**	**31,476**

[1] Equity as shown in balance sheet.
[2] Financial reporting, equity as shown in balance sheet, regulatory group of consolidated companies.
[3] Common solvency ratio reporting, regulatory capital.

Capital requirements

The capital requirements set out below relate to the Commerzbank Group and include details of the requirements relating to the material consolidated units included in this Disclosure Report. 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 81% relates to default risk positions. These include balance sheet, off-balance sheet and derivative positions, as well as advance payment risk positions. Of the total capital requirement for default risks, around €1.1bn relates to the trading book. 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. For investments entered into prior to 1 January 2008, Commerzbank has opted to apply grandfathering. These investment positions are temporarily excluded from the IRBA and treated in accordance with the SACR rules. They are given a risk weighting of 100%. The CRR also allows items to be permanently exempted from the IRBA. Since 31 December 2009, Commerzbank applies the partial use option pursuant to section 70 sentence 1 no. 9b SolvV and Article 150 CRR, respectively, and is using the SACR permanently to all investment positions which are not under the above-mentioned temporary grandfathering option.

Securitised positions in the banking book as well as counterparty risk positions from market value hedges in connection with securitisations also fall under the category of default risk positions subject to a capital requirement. Commerzbank treats these according to the IRBA and SACR rules for securitised positions. Capital deduction items of securitisations directly reduce the liable equity and thus are not included in the capital requirements.

In addition to default risk adequate capital must also be set aside for market risk positions pursuant to Article 92 (3) b) and c) CRR. 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. The standardised approaches are applied for smaller units in the Commerzbank Group and for the total of currency positions and commodity positions in accordance with the partial use option.

To calculate the capital adequacy requirement for operational risks, Commerzbank uses the advanced measurement approach (AMA).

Table 4: Capital requirements and risk weighted assets by risk type

€m	31.12.2014		31.12.2013	
	Capital requirements	Risk weighted assets	Capital requirements	Risk weighted assets
Default risks				
Standardised Approach to Credit Risk (SACR)	**2,104**	**26,300**	**1,346**	**16,821**
Central governments or central banks	28	353	5	60
Regional or local authorities	47	588	11	141
Public sector bodies	36	446	51	644
Multilateral development banks	0	0	0	0
International organisations	0	0	0	0
Banks	129	1,607	95	1,191
Companies	651	8,139	591	7,381
thereof: SMEs	35	440		
Retail banking	86	1,077	208	2,602
thereof: SMEs	18	219		
Exposures secured by real estate property	55	681	56	696
thereof: SMEs	2	27		
Defaulted positions	56	698		
Particularly high risk positions	74	920	91	1,132
Covered debt instruments	2	27	4	53
Banks/companies with short-term external rating	0	0		
Investment fund shares	414	5,172	176	2,203
Other exposures	527	6,589	58	719
Advanced approach (IRBA)	**10,926**	**136,579**	10,421	130,261
Central governments or central banks	396	4,949	412	5,144
Banks	2,298	28,722	1,889	23,607
Companies	6,678	83,479	6,718	83,974
thereof special funding	2,229	27,859		
thereof SMEs	481	6,008		
Retail banking	1,344	16,797	1,235	15,438
Secured by real estate property	777	9,718	636	7,952
thereof SMEs	13	161		
Qualified revolving	51	635	55	684
Other	515	6,444	544	6,803
thereof SMEs	188	2,356		
Other non-loan based assets	211	2,633	168	2,097
Securitisation risks	**249**	**3,112**	**247**	**3,093**
Securitised positions IRBA	129	1,612	247	3,093
thereof resecuritisations	5	67	36	454
Securitisation positions SACR	120	1,499	0	0
thereof resecuritisations	2	19	0	0
Investment risks	65	807	137	1,707
Investments with method continuation (Grandfathering)	18	230	76	945
Standardised Approach	19	232	19	239
Temporarily or permanently excluded from IRBA exposures	28	345	42	523
Processing risk	**0**	**1**	**0**	**0**
Contribution to default fund	**1**	**8**	**0**	**0**
Non-material entities	541	6,764	569	7,118
Total default risk	**13,885**	**173,563**	**12,720**	**159,000**

Table 4 continued: Capital requirements and risk weighted assets by risk type

€m	31.12.2014		31.12.2013	
	Capital requirements	Risk weighted assets	Capital requirements	Risk weighted assets
Market risks in the trading book	**744**	**9,298**	**694**	**8,675**
Standardised Approach	**39**	**486**	**57**	**707**
Interest rate risk	26	323	35	439
thereof general price risk	22	274	31	384
thereof specific price risk	4	49	4	55
Specific price risk securitisations in trading book	1	13	1	14
Currency risk	11	142	19	234
Equity risk (general price risk)	0	5	0	4
Equity risk (specific price risk)	0	4	1	16
Commodity risk	0	0	0	0
Correlation Trading Portfolio	0	0	0	0
Internal model approach	**705**	**8,812**	**632**	**7,897**
CVA	**778**	**9,729**	**0**	**0**
Advanced	704	8,795	0	0
Standard	75	934	0	0
Non-material entities	82	1,028	6	71
Total market risk	**1,604**	**20,055**	**694**	**8,675**
Operational risks	**1,725**	**21,560**	**1,833**	**22,913**
Base indicator approach (BIA)	0	0	0	0
Standardised Approach	0	0	0	0
Advanced Measurement Approach (AMA)	1,720	21,503	1,811	22,633
Non-material entities	5	56	22	280
Supervisory capital requirements	**17,214**	**215,178**	**15,247**	**190,588**

The following table shows the development of risk-weighted assets in the course of the year under review for Commerzbank Group overall. In doing so the main risk drivers are given for each risk type.

Table 5: Change in risk-weighted assets in the course of the year

Risk weighted assets €bn	31.12.2014	Changes in risk weighted assets	31.12.2013
Credit risk	**173.6**	**14.6**	**159.0**
Volume effects		7.0	
Default/Recovery		–2.8	
PD/Rating		3.9	
Collaterals/recovery factor		–5.9	
Others[1]		12.4	
Market risk	**20.1**	**11.4**	**8.7**
Market risk (primary)		0.9	
VaR		0.1	
Stressed VaR		0.6	
Incremental Risk		0.2	
Other differences		0.0	
CVA Risk Capital Charge		10.5	
Operational risk	**21.6**	**–1.4**	**22.9**
Loss data and risk scenario assessment		–2.2	
Business Environment & Control System		0.1	
Other differences		0.7	
Total risk-weighted assets	**215.2**	**24.6**	**190.6**

[1] Primarily effects due to switching to Basel 3.

The risk-weighted assets (phase-in) for the whole Group according to CRR/CRD IV amounted to €215.2bn as at 31 December 2014, compared with €190.6bn as at the end of 2013 according to Basel 2.5.

The rise in risk-weighted assets for credit risk comprises in particular the growth in the Core Bank in line with the strategy, the planned reduction in NCA and the increase resulting from currency exchange rate changes (recognised under "volume effects").

In addition, the switch to the new CRR/CRD IV framework generally leads to a rise in credit RWA (recognised under "Other").

With the switch to the new CRR/CRD IV framework, RWA for the CVA Risk Capital Charge were included for the first time in 2014. As at year-end, these amounted to €10.5bn and were allocated to market risk.

Risk-oriented overall bank management

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

Risk statement

The fundamental aim of the business model is to position Commerzbank as a leading, fair and competent bank for private and corporate clients. Accordingly, our portfolio is clearly dominated by default risks, which account for 75% of economically required capital, with market risk accounting for just under 20%. Our two main markets, Germany and Poland, in turn account for some 55% of the credit exposure. In line with our strategy of targeted growth in the Core Bank coupled with portfolio reduction in the Non Core Assets (NCA) segment, the Core Bank now accounts for the lion's share of default risk at over 80%. In 2016, we aim to achieve a return on equity after taxes of over 10% in the core business. The Core Bank's cost/income ratio is to be cut to around 60% in the process. In NCA, our target is to reduce the CRE and ship finance portfolios to €20bn by the end of 2016. With regard to our leverage ratio we have set ourselves a target of around 4% by the end of 2016.

Commerzbank's business model, defined as part of the business strategy, is embedded as a set of objectives in the overall risk strategy. This takes into account exogenous factors, such as risks from the macroeconomic environment, and endogenous factors, in particular the results of the annual risk inventory. In the risk inventory process, all economically significant quantifiable and unquantifiable risks arising from our business activities are assessed in terms of their materiality for risk management. For all material risk types, corresponding sub-risk strategies are drawn up for the purposes of further detailed treatment and operationalisation.

Risk appetite refers to the maximum risk, in terms of both the amount and structure, that the Bank is willing and able to incur in pursuing its business objectives, without exposing itself to existential threats (risk tolerance). The guiding principle regarding risk appetite is to ensure that the Commerzbank Group has sufficient liquidity and capital resources on a sustained basis. Risk appetite does not encompass unavoidable threats that, in extreme cases, could jeopardise the continued existence of the institution, such as the default of Germany, Poland, several of the other big EU countries, or the USA.

Risk appetite is quantified in terms of risk limits and escalation mechanisms for liquidity and capital management, and by means of comprehensive early warning systems. Limits and guidelines are broken down across the risk types, segments and portfolios. They form an integral part of ongoing management and monitoring. In addition, regular portfolio-specific stress tests are also carried out. Our liquidity management is based on the liquidity gap profile, which determines the expected future available net liquidity from positions both on and off the balance sheet over time subject to various scenario assumptions. In addition, under Basel 3 the leverage ratio is used as a new and non-risk sensitive indicator of indebtedness. Compliance with economic risk-bearing capacity requirements and the regulatory capital ratios is reviewed by means of an early warning system in both a forecast scenario and an adverse scenario. This is based on a gone concern approach aimed at protecting unsubordinated lenders. The approach is supplemented by scenarios aimed at ensuring the institution's continuing existence (going concern perspective).

Our Core Tier 1 ratio is 11.7% under the transitional rules, or 9.3% with the full application of Basel 3. We are aiming to increase the ratio to above 10% by the end of 2016. The risk-bearing capacity (RBC) ratio of 172% (target: >100%) comfortably meets risk-bearing capacity requirements. Loan loss provisions were reduced by more than one-third year-on-year to stand at €1.144bn in 2014. We expect loan loss provisions to be around this level again in 2015.

Comprehensive, prompt, transparent and methodically adequate risk measurement is vital for ensuring that Commerzbank Group has sufficient liquidity and capital resources on a permanent basis. Our business and risk strategy is made measurable, transparent, and controllable by the processes used. The risk measurement methods and models that we use comply with the latest common banking industry standards and are regularly reviewed by risk control, internal audit, our external auditors and the German and European supervisory authorities. The processes ensure that our risk-bearing capacity is maintained on a lasting basis. We consider our risk management methods and processes to be appropriate and effective.

Risk management organisation

Risk Management in Commerzbank is an overarching bank mission and follows the principle of the “three lines of defence”. Each unit (segments and functions) forms the first line of defence within its framework of operative responsibility. For credit, market and liquidity risk the responsibility for the second line of defence lies with the Chief Risk Officer (CRO). The CRO is responsible for implementing the Group’s risk policy guidelines laid down by the Board of Managing Directors, and for the controlling of operational risks. For other risks (e.g. IT risks or legal risks) the responsibility for the second line of defence is located predominantly outside the risk function. The third line of defence is comprised of internal and external control bodies (e.g. internal audit and external auditors).

The CRO is responsible for the risk controlling and regularly reports to the Board of Managing Directors and the Risk Committee of the Supervisory Board on the risk situation within the Group.

The responsibilities within the risk function are split between Credit Risk Management Core Bank, Credit Risk Management Non-Core Assets (NCA), Intensive Care, Market Risk Management and Risk Controlling and Capital Management. In the Core Bank segments, credit risk management is separated into a performing loan area and Intensive Care, while in the NCA segment it has been merged into a single unit across all rating classes. All divisions have a direct reporting line to the CRO. The heads of these five risk management divisions together with the CRO make up the Risk Management Board within Group Management.

The Board of Managing Directors has sole responsibility for fundamental strategic decisions. The Board of Managing Directors has delegated the operational risk management to committees. Under the relevant rules of procedure, these are the Group Credit Committee, the Group Market Risk Committee, the Group OpRisk Committee and the Group Strategic Risk Committee, which decides on risk issues of an overarching nature. The CRO chairs all these committees and has the right of veto. In addition, the CRO is a member of the Asset Liability Committee.

The Chairman of the Board of Managing Directors (CEO) bears responsibility for controlling risks related to the Bank’s business strategy, reputational risks and legal risks. The Chief Financial Officer (CFO) assumes responsibility for controlling compliance risk with particular regard to investor protection, insider trading guidelines and money laundering. The Chief Operating Officer (COO) is responsible for monitoring personnel and IT risks.

Further details on risk management organisation can be found in the Annual Report 2014.

Risk strategy and risk management

The overall risk strategy, together with the business strategy, defines the strategic risk management guidelines for the development of Commerzbank’s investment portfolio. Furthermore, the risk appetite is set as the maximum risk that the Bank is prepared and able to accept while following its business objectives without exposing itself to existential threats over and above the risks inherent in the business. The guiding idea is to ensure that the Group holds sufficient liquidity and capital. Based on these requirements, suitable limits for the risk resources capital and liquidity reserve available to the Group are defined. The overarching limits of the overall risk strategy are consistent with the restructuring indicators of the recovery plan.

Banks’ core functions as transformers of liquidity and risk result in inevitable threats that can in extreme cases endanger the continued existence of the institution. For Commerzbank, in view of its business model, these inherent existential threats include e.g. the default of Germany, Poland, one or more of the other major EU countries (France, Italy, Spain or the UK) or the long-term default of the USA. Others include a deep recession lasting several years with serious repercussions for the German economy, the collapse of the financial markets, the collapse of global clearing houses or a bank run. These existential threats are taken on board deliberately in the pursuit of the business targets. It may be necessary to adjust the business model and hence the business and risk strategies if the Board of Managing Directors’ assessment of these threats to Commerzbank changes substantially.

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

As part of the planning process, the Board of Managing Directors decides the extent to which the risk coverage potential of the Group should be utilised. On that basis, individual types of risk are limited in a second stage. A capital framework is allocated to the management-relevant units through the planning process. Compliance with limits and guidelines is monitored during the year, and adjustments are made where required. In addition, further qualitative and quantitative early warning indicators are established in the overall risk strategy and recovery plan. Potential negative developments can be identified at an early stage with the help of these indicators.

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

By establishing adequate risk management and controlling processes, we provide for the identification, assessment, management, monitoring and communication of substantial risks and related risk concentrations. Therefore we ensure that all Commerzbank-specific risk concentrations are adequately taken into account. A major objective is to ensure early transparency regarding risk concentrations, and thus to reduce the potential risk of losses. We use a combination of portfolio and scenario analyses to manage and deal with Commerzbank-specific inter-risk concentrations. Stress tests are used to deepen the analysis of risk concentrations and, where necessary, to identify new drivers of risk concentrations. Management is regularly informed about the results of the analyses.

Under the "three lines of defence" principle, protecting against undesirable risks is an activity that is not restricted to the risk function. Each unit (segment or function) forms the first line of defence within its area of operational responsibility and is responsible for identifying and managing risks within it while complying with the prescribed risk standards and policies. In particular, the front office forms the first line of defence in all business decisions and has to take risk aspects into account in reaching them. The second line of defence for each type of risk lays down standards for appropriate management of risks of that type, monitors this and ensures the application of such standards, and analyses and evaluates the risks. The risk function forms the second line of defence against credit and market risks associated with business decisions. Particularly for credit risk, this includes the involvement in the credit decision process through means of a second vote. Units outside the risk function (Group Compliance and Group Finance) also operate as the second line of defence for certain risk types. The third line of defence is made up of internal and external control bodies (e.g. internal audit and external auditors).

Under the previous provisions of the Remuneration Ordinance for Institutions (Institutsvergütungsverordnung), every year Commerzbank identified those employees who have a material impact on Commerzbank's overall risk profile (risk takers). These risk takers are identified on the basis of their function within the organisation (including management level) and their function-related activities that have a potential influence on the Bank's overall risk profile. Due to their particular importance for the Bank's overall results, special regulations apply to these employees for measuring their performance and determining their variable remuneration. The EU Delegated Regulation, which specifies qualitative and appropriate quantitative criteria for identifying categories of staff whose professional activities have a material impact on an institution's risk profile, entered into force on 26 June 2014. As a result, more Commerzbank employees were identified as risk takers.

Information in relation to the remuneration system of Commerzbank Group according to Article 450 CRR can be found in the Remuneration Report within the Annual Report 2014 and in the separate Remuneration Report on the internet pages of Commerzbank.

The strategy for the selection of members of the Board of Managing Directors as well as the diversity strategy for the selection of members of the Board will be determined by the Supervisory Board of Commerzbank Aktiengesellschaft in its meeting in September 2015. The diversity strategy for the selection of members of the Board of Managing Directors – which is to be considered in context with the general selection strategy – is covered by the act on equal participation of woman and man in leading positions in private and public sector companies. The German Bundestag has ruled this act on 4 March 2015 and it was adopted by the German Bundesrat on 27 March 2015. The act will soon take effect after publication in the German Federal Gazette. Implementing the new requirements, Commerzbank's Supervisory Board also complies with the requirements of Article 435 (2) b) and c) CRR. Additional information on corporate governance according to Article 435 (2) CRR are provided in the Annual Report 2014 (Corporate Governance Report) and on the internet pages of Commerzbank.

Information on the indicators of global systemic importance according to Article 441 CRR is given in a separate disclosure on the internet pages of Commerzbank.

Risk-bearing capacity and stress testing

Risk-bearing capacity analysis is a key part of overall bank management and Commerzbank's Internal Capital Adequacy Assessment Process (ICAAP). The purpose is to ensure that sufficient capital is held for the risk profile of Commerzbank Group at all times.

Commerzbank monitors risk-bearing capacity using a gone concern approach which seeks primarily to protect unsubordinated lenders. This objective should be achieved even in the event of extraordinarily high losses from an unlikely extreme event. The gone concern analysis is supplemented here by elements aimed at ensuring the institution's continuing existence (going concern perspective).

When determining the economically required capital, allowance is made for potential unexpected fluctuations in value. Where such fluctuations exceed forecasts, they must be covered by the available economic capital to absorb unexpected losses (economic risk coverage potential). The quantification of the economic risk coverage potential is based on a differentiated view on the accounting values of assets and liabilities and involves economic valuations of certain balance sheet items.

The capital requirement for the risks taken is quantified using the internal economic capital model. When assessing the economic capital required, allowance is made for all the types of risk at Commerzbank Group that are classified as material and quantifiable in the annual risk inventory. The economic risk approach therefore also comprises risk types that are not included in the regulatory requirements for banks' capital adequacy. It also reflects diversification effects incorporating all types of risk. The confidence level of 99.91% in the economic capital model is in line with the underlying gone concern assumptions and ensures that the economic risk-bearing capacity concept is internally consistent. The quantifiable risks in the economic capital model can be divided into default risk, market risk, operational risk and (although not shown separately in the table below) business risk, property value change risk, investment portfolio risk and reserve risk. Business risk is the risk of a potential loss resulting from discrepancies between actual income and expense and the respective budgeted figures. Business risk is considered as a deductible amount in risk coverage potential. Investment portfolio risk indicates the risk of an unexpected fall in the value of unlisted investments, while property value change risk is the risk of an unexpected fall in the value of owned property (especially real estate). Reserve risk is the risk of additional charges being incurred on the portfolio of loans already in default through the creation of additional loan loss provisions. Allowance is made for the above risks when considering risk-bearing capacity by means of a risk buffer. The results of the risk-bearing capacity analysis are shown using the risk-bearing capacity ratio (RBC ratio), indicating the excess of the risk coverage potential in relation to the economically required capital.

The risk-bearing capacity is monitored and managed monthly at Group level. Risk-bearing capacity is deemed to be assured as long as the RBC ratio is higher than 100%. In 2014, the RBC ratio was consistently above 100% and stood at 172% on 31 December 2014. The RBC ratio remained stable at a high level over the course of the year.

Table 6: Group's risk-bearing capacity

Risk-bearing capacity Group | €bn	31.12.2014	31.12.2013
Economic risk coverage potential[1]	**28**	**29**
Economically required capital[2]	**16**	**16**
thereof for credit risk	12	12
thereof for market risk	3	4
thereof for operational risk	2	2
thereof diversification between risk types	−2	−2
RBC ratio[3]	**172%**	**179%**

[1] Including potential deductible amounts for business risk.
[2] Including property value change risk, risk of unlisted investments and reserve risk.
[3] RBC ratio = economic risk coverage potential/economically required capital (including risk buffer).

Commerzbank uses macroeconomic stress tests to review the risk-bearing capacity in the event of assumed adverse changes in the economic environment. The scenarios on which they are based take into account the interdependence in development between the real and financial economies and extend over a time horizon of at least two years. They are updated quarterly and approved by the Asset Liability Committee (ALCO). The scenarios describe an extraordinary but plausible adverse development in the economy, focusing in particular on portfolio priorities and business strategies of relevance to Commerzbank. The simulation is run monthly using the input parameters of the economic capital requirements calculation for all material and quantifiable risk types. It reflects the forecast macroeconomic situation. In addition to the capital required, the profit and loss calculation is also subjected to a stress test based on the macroeconomic scenarios. Based on this, changes in the risk coverage potential are simulated. In the same way as the RBC ratio is incorporated into Commerzbank's limit system, explicit limits on risk-bearing capacity are set as an early warning system in the stressed environment. The ongoing monitoring of the limit for the unstressed and stressed RBC ratio is a key part of internal reporting. Defined escalations are triggered if the limit is breached.

In addition to the regular stress tests, so-called reverse stress tests are implemented annually at Group level. Unlike regular stress testing, the result of the simulation – a sustained threat to the Bank – is determined in advance. The aim of the analysis process in the reverse stress test is to improve the transparency of Bank-specific risk potential and interactions of risk by identifying and assessing extreme scenarios and events. On this basis, for instance, action fields in risk management including the regular stress tests can be identified and taken into account in the ongoing development efforts.

Specific risk management

Default risk

Default risk refers to the risk of losses due to defaults by counterparties. For Commerzbank, the concept of default risk embraces not only the risks associated with defaults on loans, but also counterparty and issuer risks as well as country and transfer risk.

Risk management

Strategy and organisation
The credit risk strategy is derived from the overall risk strategy and is the partial risk strategy for default risks. It forms a central anchor point for the Group-wide management of default risk and is embedded in the ICAAP process of the Commerzbank Group. As such, it makes an important contribution to maintaining the risk-bearing capacity.

It describes the strategic areas of action and gives an overview of the important management concepts in credit risk management – particularly for the management of the most important risk concentrations.

The credit risk strategy is a link between the Bank's overall risk management across all risk types and the operationalisation of default risk management. It relies on quantitative and qualitative management tools that take account of the specific requirements of the Core Bank and the NCA portfolio.

Quantitative management is carried out using clearly defined economic and regulatory indicators at Group, segment and portfolio level. The aim is to ensure an adequate portfolio quality and granularity in addition to risk-bearing capacity.

Qualitative management guidelines in the form of credit policies define the target business of the Bank. At the level of individual transactions, they regulate the transaction type with which the risk resources provided are to be used. These credit policies are firmly embedded in the credit process: transactions which do not meet the requirements are escalated through a fixed competence regulation.

In organisational terms, credit risk management in the Core Bank differs from risk management in the NCA segment. In the Core Bank, based on the separation of responsibility by the performing loan area on the one hand and Intensive Care on the other, discrete back-office areas are responsible for operational credit risk management on a portfolio and an individual case basis.

All credit decisions in the performing loan area are risk/return decisions. The front and back office take joint responsibility for risk and return from an exposure, with the back office having primary responsibility for the risk, and the front office for the return. Accordingly, neither office can be overruled in its primary responsibility in the lending process.

Higher-risk Core Bank customers are handled by specialist Intensive Care areas. The customers are moved to these areas as soon as they meet defined transfer criteria. The principal reasons for transfer to Intensive Care areas are criteria relating to number of days overdrawn, together with event-related criteria such as rating, insolvency, third-party enforcement measures or credit fraud. This ensures that higher-risk customers can continue to be managed promptly by specialists in defined standardised processes.

In the NCA segment, by contrast, there is no separation of responsibilities between the performing loan area and Intensive Care. Credit risk management here has been merged into one unit across all rating classes.

The aim is to fully wind down all the assets grouped in this segment in a way that preserves value. To this end, EaD-based guidelines have been established and an asset management programme has been implemented. This is carried out through regular asset planning and is based on a risk matrix for Commercial Real Estate and Deutsche Schiffsbank. The parts of the portfolio shown within the risk matrix serve as a guideline for differentiated risk management within the overarching portfolio reduction mandate. The main aim here is to prioritise the winding down or mitigation of those parts of the portfolio and individual loans for which the capital requirement is particularly high. Opportunities for selling sub-portfolios in a way that preserves value may also be used to free up capital as part of the systematic portfolio reduction.

For business in Public Finance, the reduction is primarily through regular maturities of assets. Market opportunities that arise are used in a targeted way for the sale of individual assets. The transfer of assets to the Core Bank is also regularly reviewed for the purposes of liquidity management.

Risk management

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

The ratios and measures required for the operational process of risk management are based on overarching Group objectives. They are enhanced at downstream levels by sub-portfolio and product specifics. Risk-based credit approval regulations focus manage¬ment attention in the highest decision-making bodies on issues such as risk concentrations or deviations from the risk strategy.

Management of economic capital commitment

Economic capital commitment is managed in order to ensure that Commerzbank Group holds sufficient capital. With this object in view, all risk types in the overall risk strategy for economically required capital (ErC) are given limits on a Group-wide basis, with, in particular, an ErC-limit for credit risks being specified. Due to the systematically restricted options for reducing default risk on a short-term basis, it is important to take account of expected trends in credit risk (medium-term and long-term) in order to remain within limits. For this reason, medium-term forecast values of capital ratios play a key role in ongoing management. When updating forecasts, it has to be ensured that keeping to them results in limits being met. At segment and business area level, deviations from the forecast are monitored and adjustments made when necessary. There is no cascaded limit concept for credit risk below Group level, i.e. the Group credit limit is not allocated to segments or business areas.

Management of risk concentrations

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

A uniform definition based on "all-in" is used to manage bulk risk. The all-in concept comprises all customer credit lines approved by the Bank in their full amount – irrespective of the loan utilisation to date.

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

Country risk management

The Group's country risk calculation records both transfer risks and region-specific event risks defined by political and economic events which impact on the individual economic entities of a country. Country risks are managed and limited on the basis of loss at default at country level. Country exposures which are significant for Commerzbank due to their size and exposures in countries in which Commerzbank holds significant investments in comparison to the GDP of those countries are handled by the Strategic Risk Committee on a separate basis.

Loan portfolio model

The quantification of default risks takes place through a group-wide loan portfolio model in combination with internally developed rating systems. The risk parameters probability of default (PD), exposure at default (EaD[1]) and loss given default (LGD) are determined for every credit risk position. This enables the relevant expected loss to be calculated for each individual position.

[1] Economic EaD: Expected exposure amount taking into account a potential (partial) drawing of open lines and contingent liabilities that will adversely affect risk-bearing capacity in the event of default. For Public Finance securities the nominal is reported as EaD.

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

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

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

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

Rating architecture

A key component of Commerzbank's rating architecture is the use of single point of methodology rating procedures, which takes advantage of a central suite of computation kernels. This uniform process architecture not only facilitates risk management and monitoring but also lowers the risk of rating arbitrage within Commerzbank Group. In turn, the rating processes are in turn embedded in rating systems. In addition to the conventional methods of creditworthiness and risk assessment, these comprise all the processes for data collection, calculating ratings and monitoring and management.

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

The table below shows the rating processes used in the IRBA and their main elements as of the reporting date.

Table 7: IRBA rating procedure

Scope	Procedure	Hard facts	Soft facts	Overruling
Banks	RFI-BANK	▪	▪	▪
Countries	R-SCR	▪	▪	▪
Municipalities/federal states	R-LRG	▪		▪
Corporate customers	COSCO/R-CORP	▪	▪	▪
Financial Institutions (NBFI)	NBFI	▪	▪	▪
Private customers	CORES	▪		
Commercial real estate	RS-CRE	▪[1]	▪	▪
Renewable energies	RS-REN	▪	▪	▪
Structured finance	RS-CFD	▪	▪	▪
Ship financing	RS-SHP	▪	▪	▪
ABS transactions (sponsors)	IAA	▪	▪	

[1] The calculated figures may be adjusted by the analyst.

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

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

Overruling is a downstream area of analysis where there is a further opportunity for the analyst to assess circumstances separately based on his or her personal judgement. The system result can hereby be adjusted upwards or downwards. The relevant reason for the decision is documented. Overruling should particularly be used when there are strongly fluctuating developments (e.g. market changes) such that an adequate assessment of a company's situation based on the analysis of statistical information (e.g. annual financial statements) is not sufficient to give a future-oriented

probability of default. Due to the degree of freedom this gives the rating process, overruling is subject to strict standards and regular monitoring.

The Commerzbank rating method comprises 25 rating classes for loans not in default (1.0 to 5.8) and five default classes (6.1 to 6.5). The Commerzbank master scale allocates a non-overlapping range of probabilities of default that are stable over time to each rating class. The rating methods are validated and recalibrated annually so that they reflect the latest projection based on all actual observed defaults. The default ranges assigned to the ratings are the same for all portfolios and remain stable over time. This ensures internal comparability consistent with the master scale method. For the purpose of guidance, the Commerzbank master scale also shows external ratings. However, a direct reconciliation is not possible, because external ratings of different portfolios show fluctuating default rates from year to year.

Commerzbank master scale

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

Commerzbank has defined an implementation plan for the successive transition of the SACR portfolios into the IRBA. As at 31 December 2014, Commerzbank has an AIRB coverage ratio at Group level of 95.3%, exceeding the AIRB exit threshold of 92% under section 10 of the Solvency Regulation (in the version applicable as at 1 January 2014). For loans and receivables that are not covered by the procedures approved by the supervisory authorities for the IRBA, the standardised approach for credit risk (SACR) applies, under which flat risk weightings are to be used or risk weightings are to be based on external assessments of the borrower's creditworthiness.

Risk parameters

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

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

The LGD is primarily determined by the expected proceeds from collateral and unsecured portions of loans. Proceeds from collateral are modelled via recovery rates representing a discount on the previously defined market value. The recovery rate depends on the characteristics of the collateral. For instance, when modelling for properties, the collateral is differentiated by property type and location. To determine the proceeds on unsecured portions of loans, the focus is primarily on the characteristics of the customer and the transaction.

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

Both the internal and regulatory requirements of the CRR are taken into account when developing statistical models for estimating EaD and LGD. Discussions with experts from back office and debt workout departments play an important role when validating the results and identifying relevant factors. In instances where there is only a small number of historical default or collateral utilisation cases, the empirical analyses are supplemented with expert assessments. All of the models are regularly validated and recalibrated on the basis of the new findings. Empirically-based LGD and EaD parameters are used in all important internal processes at Commerzbank. The suitability of the models was verified by the Bundesbank and the BaFin as part of the inspection prior to the granting of authorisation for the advanced IRBA.

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

Validation

Pursuant to section 147 ff. SolvV and Article 185 CRR, all risk classification procedures are subject to a regular validation and calibration of parameters. Risk Management, which is independent of the front office units, is responsible for preparing the validation reports. Any particular irregularities and necessary changes are presented to the Bank's Strategic Risk Committee for approval. Regular monitoring of procedures is an additional system control element. To check the quality of the rating procedures, Internal Audit regularly reviews the methods and processes used and inspects validation and monitoring methods.

Detailed validation concepts are defining which analyses have to be carried out rotationally for the rating systems as well as for EaD and LGD models. In addition special topics can be scheduled during a model validation phase. All of the analysis results are grouped and evaluated using a traffic-light system. If the standards and limits that have been defined in the validation concept are not met, the specific causes must be established. Concrete steps must then be defined along with a timetable for implementing them. These steps may include, for instance, measures to improve data quality or a revision of the process in question.

Generally a distinction is made between quantitative and qualitative reviews of the models. Data quality aspects and statistical analyses are of specific interest in the quantitative validation. This involves comparing the model forecasts with the reality over the course of the assessment period. The quality of the forecasts is verified using statistical methods. Assessing the discriminatory power of rating procedures may involve using Gini coefficients, concordance indices and hit rate analyses, for instance. The calibration of procedures may be checked using various statistical tests, such as the Spiegelhalter or binomial test.

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

- **Default/non-default rating procedure:** In default/non-default models, ratio selection, parameter estimates and calibration are mainly based on internal default periods. A check is therefore made during validation to ascertain whether the internally measured default rates tally with the predicted probabilities of default. Discriminatory power is also checked by calculating the AUC value, and the Gini coefficient respectively.
- **Shadow rating procedure:** The classic back-testing methods used for default/non-default models cannot normally be applied to portfolios with very few defaults. Consequently, back-testing in shadow rating procedures relies very heavily on comparisons with external ratings. Comparing the Bank's internal ratings with those of external agencies (Standard & Poor's, Moody's and Fitch Ratings) gives indications of how the Bank's credit rating estimates should be classified in relative terms. For this benchmarking, contingency tables, for example, are produced, variances analysed and the correlation coefficient determined according to Spearman. A benchmarking analysis is naturally only useful or possible if a large number of external ratings are available. If this is not the case, pseudo discriminatory power values, for example, can be calculated using either external or final internal ratings.
- **Hybrid models:** Hybrid models are basically mixtures of default/non–default models and shadow rating procedures. In some low-default portfolios, an internal data history has had time to develop. While this alone is not sufficient to develop a default/non-default model and corresponding validation, the available data history is yet being incorporated for validation or development purposes. The validation techniques of default/non-default models and shadow rating procedures are combined in these procedures.
- **Cash flow-based procedures:** In rating procedures for special funding, the customer's credit rating derives principally from the cash flows generated by the rating object. Typically, the rating procedures are therefore based on cash flow simulations using stochastic processes. The procedures are normally used in low default and low number respectively portfolios for which only very few external benchmarks exist. The models are therefore causally produced and often calibrated using expert knowledge. Direct comparisons of the predicted PDs with realised default rates and discriminatory power analyses using the AUC are not normally very meaningful due to the low number of defaults. The statistical testing of EaD and LGD predictions of these models are likewise difficult. Key elements of the validation of these procedures are descriptive analyses of the input data and comparisons of the cash flows and volatilities predicted by the users with actual cash flows.
- **Wholly expert-based PD procedures:** No external target criterion is available for these procedures and there are no cash flow simulations. Calibration is based wholly on expert knowledge. Validation is therefore very heavily reliant on expert know-how, as is the development. For the validation, the results produced by the procedure in particular are compared with the expert opinion, e.g. by evaluating the overruling pattern.
- **EaD and LGD models:** On the basis of additional default and loss data in-sample and out-of-sample tests are carried out through statistical backtests. In this context the validity of existing parameter differentiations and the discriminatory power of the applied risk factors have always to be analysed. Data quality and the representativeness of observations for future loss events are also important subjects of analyses.

The following table gives an overview of the quantitative validation procedures used for the individual rating procedures:

Table 8: Validation of IRBA rating procedures

	PD-Validation		EaD-/LGD-Validation	
Rating process	**Methodology**	**Data history** Years	**Methodology**	**Data history** Years
RFI-BANK	Shadowrating, Default/Non-Default	5	Calibrated empirically	16
R-SCR	Shadowrating	5	Calibrated empirically	16
R-LRG	Shadowrating	9	Expert-based	–
COSCO/R-CORP	Shadowrating, Default/Non-Default	5	Calibrated empirically	16
NBFI	Expert-based, Shadowrating	5	Expert-based	–
CORES	Default/Non-Default	5	Calibrated empirically	16
RS-CRE	Default/Non-Default, Shadowrating	5	Calibrated empirically	8
RS-CFD	Cashflow Simulation	5	Cashflow Simulation	8
RS-REN	Cashflow Simulation	5	Cashflow Simulation	8
RS-SHP	Cashflow Simulation	5	Cashflow Simulation	11
ABS IAA	IAA-Methods[1]	–	IAA-Methods[1]	–

[1] For internal classification procedure for securities see page 48.

Qualitative validation is carried out in cooperation with the users of the risk models and particularly takes procedural conditions into consideration. This includes compliance of the procedures with regulations, overruling analyses and the general user acceptance. For EaD and LGD procedures the precise technical implementation of parameters in all using systems has to be verified. Asset Quality Reviews established in the back office also guarantee a continuously reliable data quality and the implementation of the model true to the process. By way of example the monthly reporting of rating coverage to the Board of Managing Directors ensures that the portfolios are valued using up-to-date and valid rating analyses.

The validations carried out in 2014 were largely unremarkable. In particular, the validation of the rating procedure for natural persons showed, for the second year running, a significant overestimate of the default rate and the same high level of discriminatory power as previously. The procedure was therefore recalibrated, with a five-year period as the basis. Otherwise, the ongoing model updating process led to only slight changes in the rating procedure. The table below summarises the validation results for all separately calibrated AIRB parameters and sub-models under the different procedures, i.e. PD, LGD and EAD. It shows the cases in which the tolerance limits set by the corresponding validation concepts were exceeded, thereby making adjustments necessary.

At the end of 2014/beginning of 2015, the adjustments were implemented in the productive systems. Altogether, the measures are expected to result in a rise in RWA of less than €0.3bn. This will feed through fully over the course of 2015.

Table 9: Validation results

	PD		LGD		EaD	
Validation	**Number**	**EaD in %**	**Number**	**EaD in %**	**Number**	**EaD in %**
Adequate	42	76	283	93	23	99
Too conservative – adjustment necessary	3	24	12	2	4	1
Too progressive – adjustment necessary	0	0	25	5	3	0
Total	**45**	**100**	**320**	**100**	**30**	**100**

Risk mitigation

At Commerzbank, risk mitigation takes the form of guarantees, collateral and netting.

The collateral mainly takes the form of mortgages on owner-occupied and rented residential properties, mortgages on commercial properties and various forms of guarantees. The ship finance portfolio is mostly backed by ship mortgages.

Within the scope of IRBA assessments, processes for offsetting collateral instruments were recognised; in particular this includes financial collateral, guarantees, credit derivatives, life insurances, mortgage liens in the land register and other real collateral.

In the IRBA, the Bank takes account of credit risk mitigating effects arising from the receipt of eligible guarantees (guarantees/sureties, credit default swaps, comparable claims on third parties) by using the risk parameters (PD and LGD) of the guarantor. Under the SACR, the Bank uses the risk weightings laid down by the supervisory authority.

As part of the assessment of their declaration of liability, all guarantors are essentially subject to a review of their creditworthiness and rating in accordance with the sector and business to which they belong. The aim of the creditworthiness review is to establish a guarantor's maximum ability to pay.

An overview of the main types of guarantors and credit derivatives' counterparties, broken down by rating classes, is given in the following two tables:

Table 10: Guarantors and credit derivatives' counterparties by main type and rating classes (IRBA)

IRBA Exposure €m	Rating 1 (0.00-0.08%)	Rating 2 (0.08-0.68%)	Rating 3 (0.68-3.10%)	Rating 4 (3.10-9.35%)	Rating 5 (9.35-99.99%)	Rating 6 (100%)	Total
Public sector, defence and social security	2,929	1,007	75	0	0	0	4,011
Banks and financial institutions	1,124	550	68	0	2	0	1,744
Insurance companies	603	532	1	0	0	0	1,137
Industries	151	883	132	10	15	0	1,191
Other service companies	32	240	172	29	3	0	475
Private households	78	71	10	3	0	0	163
Other	2	4	0	1	0	0	7
Total IRBA	**4,918**	**3,287**	**459**	**42**	**20**	**0**	**8,727**

Table 11: Guarantors and credit derivatives' counterparties by main type and rating classes (SACR)

SACR | Exposure €m	AAA	AA	A	BBB+	BB+	n.a.	Total
Public sector, defence and social security	136	5,038	3	0	0	0	5,177
Banks	45	189	0	18	0	0	252
Other	0	0	0	0	1	78	79
Total SACR	**182**	**5,226**	**3**	**18**	**1**	**78**	**5,509**

In accordance with the CRR, the quality of the collateral received is subject to rigorous review and is continuously monitored. In particular, this includes establishing the legal enforceability of the collateral and ensuring that it is valued regularly and managed appropriately. The recoverability of the collateral instruments is reviewed after reaching a certain threshold on a regular basis during the term of a loan as part of the regular credit processing. Depending on the collateral type, this usually takes place annually, but may be at shorter intervals. Positive correlations between the creditworthiness of the borrower and the value of the collateral or guarantee are established in the lending process and collateral instruments affected are not offset. Processing the collateral for corporate customers is in the exclusive responsibility of the risk function's collateral management.

The Bank carries out collateral concentration analyses for all lending collateral (physical and personal collateral). Various aspects such as collateral category, borrower's rating class and regional allocation of the collateral are examined. With reference to these aspects, the Board of Managing Directors is kept informed on a regular basis of the development of the collateral pool and possible anomalies/concentrations.

In addition to the listing of principles for the use of collateral, the valuation and management (processing) of collateral are governed by universally applicable standards and collateral-specific instructions (guidelines, manuals, descriptions of processes, IT instructions, legally validated standard contracts and samples).

The standards established to hedge against or mitigate the risks of loans, which also take account of the regulatory requirements of CRR, include:

- Legal and operational standards for documentation and data collection as well as valuation standards (each commitment to be analysed at least once a year).
- Standardisation and updating of the collateral valuation are ensured by: laying down valuation processes, prescribing standardised valuation methods, parameters and defined discounts for collateral, clearly defining responsibilities for the processing and valuation process, as well as the requirements for revaluations at regular intervals.
- Other standards for taking account of specific risks, e.g. operational risks, correlation and concentration risks, maturity date and duration risks, market price change risks (e.g. due to currency fluctuations), country risks, legal risks or risks of changes in the law, environmental risks and risks of insufficient insurance cover.

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

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

Quantitative information on default risks

Commerzbank Group's IRBA portfolio

The IRBA portfolio of all Commerzbank Group companies included in this Disclosure Report is shown below, broken down into the relevant IRBA asset classes. The structuring of the rating classes corresponds to the Commerzbank internal management via the PD master scale. These have been grouped into five main classes for reasons of clarity. Rating class 6 comprises borrowers in default according to IRBA regulations, whereby the IRBA definition of default is also used for internal purposes. The risk parameters PD and LGD are calculated as exposure-weighted averages; the same also applies to the average risk weighting (RW).

The IRBA exposure value refers to the risk exposure values to be defined according to Article 166 CRR. These represent the expected amounts of the IRBA position that will be exposed to a risk of loss. The risk exposure value for off-balance sheet default risk exposures is calculated by weighting using a conversion factor.

Commerzbank Aktiengesellschaft, Hypothekenbank Frankfurt AG, mBank S.A. and comdirect bank AG use the advanced IRB approach. They may therefore use the 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.

In tables 12 to 16, only portfolios which fall under the scope of application of the IRBA and are rated with a rating process that has been approved by the supervisory authority are shown. Positions in the asset class other non-loan-related assets are not listed. These assets amounting to €2.6bn do not have any creditworthiness risks and are therefore not relevant for the management of default risks. Furthermore, mBank S.A. positions in the amount of €1.7bn are not included; they are subject to the IRBA slotting approach. Securitisation positions in the IRBA are presented separately in the securitisations section in this chapter.

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

- For derivative positions, there are differences in definitions between the exposures reported in the Annual Report and the regulatory figures presented in this 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 presented in this Disclosure Report relate to six entities within the Commerzbank Group considered important for disclosure. By contrast, the figures in the Annual Report relate to all companies that have to be consolidated according to IFRS.

All of the IRBA exposures are presented as follows:

Table 12: IRBA exposures (EaD) by rating class – on-balance and off-balance

		Investment Grade		Non-Investment Grade			Default	
Asset class €m		**Rating 1 (0.00-0.08%)**	**Rating 2 (0.08-0.68%)**	**Rating 3 (0.68-3.10%)**	**Rating 4 (3.10-9.35%)**	**Rating 5 (9.35-99.99%)**	**Rating 6 (100%)**	**Total**
Central governments or central banks	EaD	19,792	18,636	5,243	1,746	1,248	0	46,665
	LGD %	12.9	10.7	10.8	3.9	3.1	74.2	11.2
	PD %	0.0	0.4	1.5	6.0	28.8	100.0	1.3
	RW %	4.0	12.9	25.5	12.8	14.6	60.7	10.6
	RWA	790	2,412	1,339	224	182	0	4,949
Institutions	EaD	25,477	28,842	9,024	3,036	549	332	67,260
	LGD %	38.2	37.5	35.2	25.4	14.4	63.6	36.8
	PD %	0.0	0.3	1.6	6.5	17.2	100.0	1.3
	RW %	20.6	44.8	83.4	85.7	76.4	0.0	42.7
	RWA	5,243	12,932	7,527	2,601	419	0	28,722
Corporates	EaD	15,985	83,336	27,267	8,310	5,718	9,071	149,687
	LGD %	37.7	36.9	35.1	31.8	29.4	40.4	36.3
	PD %	0.1	0.3	1.4	5.7	32.0	100.0	8.0
	RW %	17.6	45.2	81.2	117.2	140.9	21.0	55.0
	RWA	2,820	37,636	22,149	9,738	8,059	1,901	82,303
thereof specialised lending	EaD	3,143	10,377	8,267	5,694	4,628	6,061	38,169
	LGD %	36.1	31.1	31.1	31.1	28.2	33.4	31.5
	PD %	0.0	0.3	1.5	5.9	33.9	100.0	21.3
	RW %	17.0	43.9	83.4	121.4	135.8	24.9	69.9
	RWA	535	4,552	6,892	6,914	6,283	1,510	26,686
thereof SMEs	EaD	1,418	5,348	3,909	797	359	620	12,452
	LGD %	35.0	33.0	34.1	32.4	32.1	57.6	34.7
	PD %	0.0	0.3	1.5	5.2	19.1	100.0	6.5
	RW %	14.2	35.3	67.2	91.2	131.1	14.7	48.3
	RWA	202	1,890	2,628	727	471	91	6,008
Retail	EaD	24,831	45,569	15,288	3,328	1,712	1,621	92,349
	LGD %	29.9	24.8	30.0	30.2	28.9	49.5	27.7
	PD %	0.0	0.3	1.3	5.3	20.3	100.0	2.7
	RW %	2.6	12.7	35.0	60.0	97.7	80.9	18.2
	RWA	657	5,804	5,355	1,996	1,674	1,312	16,797
Total	**EaD**	**86,087**	**176,384**	**56,822**	**16,420**	**9,227**	**11,023**	**355,962**
	LGD %	**29.9**	**31.1**	**31.8**	**27.6**	**25.0**	**42.4**	**30.9**
	PD %	**0.0**	**0.3**	**1.4**	**5.8**	**28.5**	**100.0**	**4.5**
	RW %	**11.0**	**33.3**	**64.0**	**88.7**	**112.0**	**29.2**	**37.3**
	RWA	**9,510**	**58,785**	**36,369**	**14,559**	**10,334**	**3,213**	**132,772**

Table 13: IRBA exposures (EaD) in retail banking by rating classes – on-balance and off-balance

		Investment Grade		Non-Investment Grade			Default	
Asset class €m		**Rating 1 (0.00-0.08%)**	**Rating 2 (0.08-0.68%)**	**Rating 3 (0.68-3.10%)**	**Rating 4 (3.10-9.35%)**	**Rating 5 (9.35-99.99%)**	**Rating 6 (100%)**	**Total**
Retail banking	**EaD**	**24,831**	**45,569**	**15,288**	**3,328**	**1,712**	**1,621**	**92,349**
	LGD %	**29.9**	**24.8**	**30.0**	**30.2**	**28.9**	**49.5**	**27.7**
	PD %	**0.0**	**0.3**	**1.3**	**5.3**	**20.3**	**100.0**	**2.7**
	RW %	**2.6**	**12.7**	**35.0**	**60.0**	**97.7**	**80.9**	**18.2**
	RWA	**657**	**5,804**	**5,355**	**1,996**	**1,674**	**1,312**	**16,797**
Secured by mortgages on immovable property, excluding SMEs	EaD	13,560	28,258	7,697	1,246	790	666	52,217
	LGD %	20.4	22.6	24.6	21.8	22.6	38.5	22.5
	PD %	0.0	0.3	1.2	5.2	21.2	100.0	2.1
	RW %	2.7	13.2	35.8	75.9	126.6	115.4	18.3
	RWA	373	3,719	2,752	946	1,000	768	9,557
Secured by mortgages on immovable property, SMEs	EaD	349	728	400	70	28	5	1,580
	LGD %	17.4	16.3	13.9	13.7	12.9	17.8	15.8
	PD %	0.0	0.3	1.4	5.1	17.4	100.0	1.3
	RW %	1.8	6.2	16.7	36.0	54.7	43.0	10.2
	RWA	6	46	67	25	15	2	161
Qualifying revolving	EaD	5,284	1,680	721	149	57	12	7,904
	LGD %	59.7	59.8	60.0	60.2	58.9	54.9	59.7
	PD %	0.0	0.2	1.4	5.2	16.3	100.0	0.6
	RW %	1.6	7.5	31.4	77.8	142.7	0.0	8.0
	RWA	86	125	226	116	81	0	635
Other, excluding SMEs	EaD	4,441	11,677	3,387	886	419	588	21,398
	LGD %	22.5	22.6	33.1	33.6	33.2	51.8	25.7
	PD %	0.0	0.3	1.3	5.2	20.0	100.0	3.7
	RW %	3.2	12.0	39.0	56.2	82.7	64.4	19.1
	RWA	142	1,404	1,320	498	346	379	4,088
Other, SMEs	EaD	1,197	3,225	3,083	977	419	350	9,251
	LGD %	37.6	35.9	35.0	34.5	33.3	66.6	36.7
	PD %	0.0	0.3	1.5	5.4	19.5	100.0	5.8
	RW %	4.2	15.8	32.1	42.0	55.2	46.6	25.5
	RWA	50	510	990	411	231	163	2,356

The following two tables solely show off-balance sheet IRBA-positions:

Table 14: IRBA exposures (EaD[1]) for off-balance sheet transactions by rating class – unutilised lending commitments

		Investment Grade		Non-Investment Grade			Default	
Asset class €m		Rating 1 (0.00-0.08%)	Rating 2 (0.08-0.68%)	Rating 3 (0.68-3.10%)	Rating 4 (3.10-9.35%)	Rating 5 (9.35-99.99%)	Rating 6 (100%)	Total
Central governments or central banks	Total sum	3,357	748	304	98	389	0	4,896
	Ø CCF (%)	45	43	45	48	46	45	45
	EaD	1,541	399	124	44	148	0	2,256
	Ø EaD	26	14	7	3	8	0	11
Institutions	Total sum	545	909	172	132	124	0	1,881
	Ø CCF (%)	42	47	46	45	50	0	46
	EaD	329	494	71	34	19	0	948
	Ø EaD	29	21	21	10	15	0	19
Corporates	Total sum	10,196	52,263	9,248	873	459	170	73,208
	Ø CCF (%)	43	46	47	49	46	41	45
	EaD	4,485	23,631	4,058	365	195	67	32,801
	Ø EaD	37	14	7	4	2	2	10
thereof specialised lending	Total sum	739	617	382	118	208	26	2,089
	Ø CCF (%)	49	50	48	51	49	55	49
	EaD	365	312	185	57	103	14	1,036
	Ø EaD	58	6	6	2	3	1	11
thereof SMEs	Total sum	431	1,520	888	131	37	18	3,025
	Ø CCF (%)	42	44	49	48	49	51	47
	EaD	182	681	432	64	17	9	1,385
	Ø EaD	1	3	1	1	0	1	1
Retail	Total sum	11,695	9,335	3,527	473	89	26	25,145
	Ø CCF (%)	66	67	65	58	54	44	63
	EaD	7,771	6,237	2,284	269	47	11	16,619
	Ø EaD	0	1	0	0	0	0	0
thereof secured by mortgages on immovable property, SMEs	Total sum	8	33	18	1	0	0	60
	Ø CCF (%)	100	100	100	100	100	100	100
	EaD	8	33	15	1	0	0	57
	Ø EaD	0	4	1	0	0	0	1
thereof secured by mortgages on immovable property, excluding SMEs	Total sum	902	2,076	849	45	6	1	3,879
	Ø CCF (%)	100	98	99	99	92	51	96
	EaD	899	2,050	845	45	6	0	3,845
	Ø EaD	0	1	0	0	0	0	0
thereof qualified revolving	Total sum	7,775	2,261	595	84	14	1	10,730
	Ø CCF (%)	66	63	61	60	56	48	60
	EaD	5,185	1,438	363	51	8	0	7,045
	Ø EaD	0	0	0	0	0	0	0
thereof other SMEs	Total sum	1,442	2,959	1,477	246	50	17	6,192
	Ø CCF (%)	45	48	47	47	45	33	46
	EaD	651	1,404	688	113	22	6	2,884
	Ø EaD	1	1	0	1	0	0	0
thereof other, excluding SMEs	Total sum	1,568	2,006	589	96	18	8	4,284
	Ø CCF (%)	64	65	63	62	62	67	63
	EaD	1,027	1,313	372	59	11	5	2,787
	Ø EaD	1	0	0	0	0	0	0
Total	**Total sum**	**25,794**	**63,255**	**13,250**	**1,576**	**1,060**	**195**	**105,130**
	Ø CCF (%)	**59**	**61**	**60**	**59**	**57**	**54**	**59**
	EaD	**14,126**	**30,761**	**6,536**	**713**	**409**	**79**	**52,624**
	Ø EaD	**17**	**8**	**5**	**3**	**3**	**1**	**6**

[1] EaD is calculated from the assessment basis, CCFs, collateral deposits and withdrawals, and substitution effects.

Table 15: IRBA exposures (EaD[1]) for off-balance sheet transactions by rating class – other unutilised off-balance sheet assets[2]

		Investment Grade		Non-Investment Grade			Default	
Asset class €m		**Rating 1 (0.00-0.08%)**	**Rating 2 (0.08-0.68%)**	**Rating 3 (0.68-3.10%)**	**Rating 4 (3.10-9.35%)**	**Rating 5 (9.35-99.99%)**	**Rating 6 (100%)**	**Total**
Central governments or central banks	Total sum	1,647	2,486	1,336	1,531	1,151	0	8,151
	Ø CCF (%)	45	41	40	42	33	20	40
	EaD	740	1,094	543	534	304	0	3,216
	Ø EaD	4	5	4	8	19	0	8
Institutions	Total sum	777	2,969	2,288	2,878	653	23	9,587
	Ø CCF (%)	51	41	46	45	46	63	46
	EaD	606	1,301	1,018	1,216	286	14	4,442
	Ø EaD	27	7	4	73	19	3	25
Corporates	Total sum	4,020	16,519	3,767	580	432	255	25,572
	Ø CCF (%)	24	38	25	30	26	25	29
	EaD	1,099	6,354	863	153	97	59	8,627
	Ø EaD	14	15	1	1	1	2	5
thereof specialised lending	Total sum	201	308	133	22	52	73	789
	Ø CCF (%)	47	38	28	40	31	21	35
	EaD	116	128	35	10	14	15	318
	Ø EaD	29	4	1	1	0	4	5
thereof SMEs	Total sum	246	804	308	92	37	53	1,540
	Ø CCF (%)	21	25	28	29	30	29	27
	EaD	66	196	80	18	8	13	381
	Ø EaD	0	1	0	0	0	1	0
Retail	Total sum	205	452	228	47	18	21	971
	Ø CCF (%)	26	26	26	26	34	35	28
	EaD	57	119	60	12	5	7	260
	Ø EaD	0	0	0	0	0	0	0
thereof secured by mortgages on immovable property, SMEs	Total sum	0	0	0	0	0	0	0
	Ø CCF (%)	0	0	0	0	0	0	0
	EaD	0	0	0	0	0	0	0
	Ø EaD	0	0	0	0	0	0	0
thereof secured by mortgages on immovable property, excluding SMEs	Total sum	0	0	0	0	0	0	0
	Ø CCF (%)	0	0	0	0	0	0	0
	EaD	0	0	0	0	0	0	0
	Ø EaD	0	0	0	0	0	0	0
thereof qualified revolving	Total sum	0	0	0	0	0	0	0
	Ø CCF (%)	0	0	0	0	0	0	0
	EaD	0	0	0	0	0	0	0
	Ø EaD	0	0	0	0	0	0	0
thereof other SMEs	Total sum	143	373	191	42	15	16	780
	Ø CCF (%)	24	24	25	26	33	36	27
	EaD	37	88	47	11	4	6	193
	Ø EaD	0	0	0	0	0	0	0
thereof other, excluding SMEs	Total sum	62	80	37	5	3	5	191
	Ø CCF (%)	32	37	32	25	37	31	33
	EaD	20	31	13	1	1	2	67
	Ø EaD	0	0	0	0	0	0	0
Total	**Total sum**	**6,648**	**22,427**	**7,619**	**5,036**	**2,254**	**298**	**44,281**
	Ø CCF (%)	**36**	**35**	**32**	**34**	**34**	**32**	**34**
	EaD	**2,503**	**8,869**	**2,484**	**1,915**	**693**	**81**	**16,545**
	Ø EaD	**10**	**8**	**2**	**12**	**6**	**1**	**7**

[1] EaD is calculated from the assessment basis, CCFs, collateral deposits and withdrawals, and substitution effects. [2] Securities lending and repurchase transactions are not included.

The following table shows the scope of the credit risk mitigation effects of financial collateral, guarantees, credit derivatives, mortgage liens and life insurances under the IRBA. Besides the collateral in the SACR, some physical and other collateral which is only eligible for recognition under the IRBA, is also offset. In the table below, financial collateral and IRBA collateral are shown separately from the guarantees.

Table 16: Total collateralised IRBA exposures (EaD)[1]

Asset class €m	Financial collateral	Guarantees	Life insurances	Credit derivatives	Mortgage liens	Other IRBA-collateral[2]	Total
Central governments or central banks	380	238	0	0	0	0	619
Institutions	1,910	2,187	0	0	30	53	4,179
Corporates	3,572	5,569	154	316	14,168	3,753	27,533
thereof specialised lending	155	0	0	0	9,251	0	9,406
thereof SMEs	515	683	68	0	2,497	618	4,380
Retail	1,863	342	1,290	0	42,531	224	46,251
Secured by mortgages on immovable property	708	33	966	0	31,395	1	33,103
thereof SMEs	46	27	41	0	972	1	1,087
Qualifying revolving	0	0	0	0	0	0	0
Other	1,155	310	324	0	11,136	223	13,147
thereof SMEs	211	242	66	0	1,121	219	1,859
Other non credit-obligation assets	0	0	0	0	0	0	0
Total 2014	**7,725**	**8,336**	**1,445**	**316**	**56,730**	**4,030**	**78,582**
Total 2013	**10,579**	**10,765**	**208**	**885**	**56,531**	**10,410**	**89,377**

[1] For reasons of materiality, secured investment positions have not been presented.
[2] Exposures secured by mortgage liens on residential and commercial property do not form an asset class of their own under the IRBA. They are therefore shown under other IRBA collateral. Mortgage liens in the land register also fall into this category.

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

Table 55 in the Appendix contains an overview of the credit risk parameters PD and LGD by relevant geographical location (countries in which Commerzbank has been authorised or has a branch or a subsidiary).

Commerzbank Group's SACR portfolio

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 Fitch Ratings for the use of external ratings.

Where an external credit rating is available for a position, that credit rating is used to determine the risk weighting. Where two or more external credit ratings are available for one position, the risk weighting is assigned in accordance with the provisions of Article 138 CRR.

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

External ratings for positions in local currency are not used to derive risk weightings for foreign currency exposures.

SACR portfolio by risk weightings The risk weightings determined by external ratings or flat risk weightings and the allocations of the exposures to these risk weightings are shown below. The table shows the SACR exposures (EaD) before and after credit risk mitigation techniques (CRMT) according to part 3 title II chapter 4 CRR.

Table 17: Exposures in the Standard Approach to Credit Risk – before credit risk mitigation techniques

Asset class €m	0%	2%	10%	20%	35%	50%	75%	100%	150%	250%	Other RW	Total
	Risk weightings (RW)[1]											
Central governments or central banks	42,193	0	0	138	0	365	0	0	0	0	0	42,696
Regional gov. or local authorities	34,133	0	0	1,155	0	680	0	0	0	0	0	35,968
Public-sector entities	11,666	0	0	1,611	0	264	0	70	0	0	0	13,611
Multilateral development banks	511	0	0	0	0	0	0	0	0	0	0	511
International organisations	522	0	0	0	0	0	0	0	0	0	0	522
Institutions	726	1,491	0	5,007	0	1,353	0	31	0	0	0	8,608
Corporates	0	717	0	3,776	0	2,277	0	8,197	864	0	0	15,831
thereof SMEs	0	0	0	0	0	0	0	589	0	0	0	589
Retail	0	0	0	0	0	0	1,870	0	0	0	0	1,870
thereof SMEs	0	0	0	0	0	0	470	0	0	0	0	470
Secured by mortgages on immovable property	0	0	0	0	1,054	510	5	57	0	0	0	1,626
thereof SMEs	0	0	0	0	0	0	0	0	0	0	0	0
Defaulted positions	0	0	0	0	0	0	0	264	358	0	0	622
Particularly high risk exposures	0	0	0	0	0	0	0	0	614	0	0	614
Covered bonds	0	0	30	94	0	11	0	0	0	0	0	135
Collective investm. undertakings[2]	1,355	0	7	20	0	10	0	1,393	0	0	6,184	8,975
Other items	73	0	0	14	0	0	0	284	0	2,521	0	2,891
Equity exposures	0	0	0	0	0	0	0	542	0	106	0	648
Total 2014	**91,178**	**2,208**	**37**	**11,815**	**1,054**	**5,471**	**1,875**	**10,836**	**1,835**	**2,628**	**6,184**	**135,128**

[1] No positions in RW 70%. [2] Total: including €6m capital deduction.

Table 18: Exposures in the Standard Approach to Credit Risk – after credit risk mitigation techniques

Asset class €m	0%	2%	10%	20%	35%	50%	75%	100%	150%	250%	Other RW	Total
	Risk weightings (RW)[1]											
Central governments or central banks	44,728	0	0	204	0	625	0	0	0	0	0	45,557
Regional gov. or local authorities	34,553	0	0	1,239	0	680	0	0	0	0	0	36,472
Public-sector entities	12,037	0	0	1,556	0	250	0	10	0	0	0	13,852
Multilateral development banks	511	0	0	0	0	0	0	0	0	0	0	511
International organisations	522	0	0	0	0	0	0	0	0	0	0	522
Institutions	730	1,491	0	4,670	0	1,226	0	30	0	0	0	8,148
Corporates	0	717	0	3,202	2	341	0	6,655	456	0	0	11,374
thereof SMEs	0	0	0	0	0	0	0	465	0	0	0	465
Retail	0	0	0	0	0	0	1,528	0	0	0	0	1,528
thereof SMEs	0	0	0	0	0	0	384	0	0	0	0	384
Secured by mortgages on immovable property	0	0	0	0	1,054	510	5	56	0	0	0	1,625
thereof SMEs	0	0	0	0	45	27	0	0	0	0	0	72
Defaulted positions	0	0	0	0	0	0	0	242	304	0	0	546
Particularly high risk exposures	0	0	0	0	0	0	0	0	614	0	0	614
Covered bonds	0	0	30	94	0	11	0	0	0	0	0	135
Collective investm. undertakings[2]	1,355	0	7	20	0	10	0	1,393	0	0	6,184	8,975
Other items	73	0	0	14	0	0	0	284	0	2,521	0	2,891
Equity exposures	0	0	0	0	0	0	0	542	0	106	0	648
Total 2014	**94,508**	**2,208**	**37**	**10,998**	**1,057**	**3,654**	**1,533**	**9,211**	**1,374**	**2,628**	**6,184**	**133,398**

[1] No positions in RW 70%. [2] Total: including €6m capital deduction.

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

To determine the SACR exposure before credit risk mitigation techniques, the nominal value before credit risk mitigation is multiplied by the respective SACR conversion factor in accordance with Article 111 CRR. The risk exposure after credit risk mitigation techniques corresponds to the value of the exposure reduced by the amount of the collateral value taking into account the conversion factors. For the SACR exposure, in contrast to the IRBA, the valuation allowances based on each of the positions are deducted. The risk weightings' column other shows the exposures derived from SACR investment units for which the look-through-approach has been applied by the investment company.

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 risk weighting class to that of the guarantor. However, this shift only takes place if the risk weighting of the guarantor is lower than that of the borrower. This is why the exposure before CRMT for assets guaranteed by central governments and central banks for example is less than after CRMT. This can be seen in the table under the 0% risk weighting.

Past due positions are shown with a risk weighting of 150%. Depending on the valuation allowances based on them (SLLP, Port LLP impaired) or the collateral, this may lead to a shift to lower risk weighting classes.

The following table shows the scope of the credit risk mitigation effects of financial collateral, guarantees, life insurances, credit derivatives and mortgage liens and under the SACR. The effectively secured exposures, i.e. taking into consideration all of the relevant haircuts for the collateral, are allocated to the SACR asset class. In taking financial collateral into account as a credit-risk mitigating technique, Commerzbank generally uses the comprehensive method as defined under Articles 223 to 228 CRR. The risk exposure value for the default risk position is reduced by the value of the financial collateral. For smaller entities the basic method pursuant to Article 222 CCR is used in parallel.

Table 19: Collateralised SACR exposures[1]

Asset class €m	Financial collateral	Guarantees	Life insurances	Credit derivatives	Mortgage liens	Total
Central governments or central banks	0	0	0	0	0	0
Regional governments or local authorities	2	0	0	0	0	2
Public-sector entities	0	130	0	0	0	130
Institutions	655	26	0	0	0	681
Corporates	1,906	5,222	11	0	316	7,454
thereof SMEs	14	70	8	0	31	124
Retail	275	56	11	0	653	995
thereof SMEs	3	38	5	0	41	86
Secured by mortgages on immovable property	0	1	0	0	587	588
thereof SMEs	0	0	0	0	0	0
Defaulted positions	2	74	0	0	62	138
Total 2014	**2,841**	**5,509**	**23**	**0**	**1,617**	**9,989**
Total 2013	**3,040**	**5,030**	**10**	**0**	**1,729**	**9,808**

[1] For reasons of materiality, secured investment positions have not been presented.

The secured positions shown under mortgage liens are the exposures that are allocated to the SACR asset class exposures secured by mortgage liens. For the purposes of comparability with the figures shown under the IRBA, this asset class is not presented separately and the exposures secured by mortgage liens are instead classified by the respective asset class of the borrower.

Overarching portfolio analyses

This section provides an overview of the total portfolio containing default risks with an assessment basis amounting to €540bn as at 31 December 2014.

We show the sum of SACR and IBRA positions with their assessment basis (risk exposure value), as defined in Article 111 ff. and 151 ff. CRR. The IRBA assessment basis for loans represents the amount claimed by the customer. Unlike the volume of assets determined in accordance with IFRS accounting standards, valuation allowances are not deducted. Off-balance sheet positions relate to the amount committed to but not yet claimed by the customer. A weighting with the conversion factor does not take place. For securities, the IRBA assessment basis is determined from the highest value of the acquisition costs or the sum of the carrying amount and default risk-related write-downs. For derivative positions, the credit equivalent amount as defined in Article 271 ff. CRR is applied. The SACR assessment basis is calculated using the IFRS carrying value of the positions giving consideration to the write-downs of the last approved annual financial statement. The assessment basis includes all positions subject to credit risks regardless of whether the positions are listed in the banking or the trading book.

Effectively securitised positions are not included in the tables below. In accordance with Articles 243 and 244 CRR, positions are deemed to be effectively securitised if there has been an effective and operative transfer of risk. This applies regardless of whether these are traditionally or synthetically securitised positions. Securitisation positions arising from Group companies included in this Disclosure Report acting as investors or sponsors have also not been shown. Due to their particular significance, these are shown in the separate chapter on securitisations.

Other non-loan-related assets and other items, respectively, are only listed when they are characterised as claims. These are mainly cash items in the process of collection and accrued items. Other non-loan-related assets which are largely formed through tangible assets as well as other positions which are not characterised as claims are not included in the following tables. Only positions exposed to credit risks are shown.

The selected country cluster correspond to the geographical classification of the assessment basis used for internal purposes.

Table 20: Assessment basis by country cluster (independent of segment classification)

Asset class €m	Germany	Western Europe (without Germany)	Eastern Europe	Asia, Africa, Oceania	North and South America	Other	Total
SACR							
Central governments or central banks	4,532	25,189	9,426	83	180	0	39,410
Regional governments or local authorities	25,453	9,789	401	0	1,414	0	37,057
Public-sector entities	11,855	659	39	148	1,004	0	13,704
Multilateral development banks	0	0	0	0	0	342	342
International organisations	0	0	0	0	0	522	522
Institutions	5,156	2,232	493	204	514	371	8,969
Corporates	4,452	8,286	3,810	51	2,460	0	19,059
thereof SMEs	118	4	495	0	0	0	617
Retail	3,852	61	783	10	5	0	4,712
thereof SMEs	159	0	325	0	0	0	485
Secured by mortgages on immovable property	998	36	596	2	1	0	1,633
thereof SMEs	47	0	26	0	0	0	73
Defaulted positions	305	25	286	22	354	0	991
Positions of particularly high risk	614	0	0	0	0	0	614
Covered bonds	0	124	11	0	0	0	135
Collective investment undertakings	3,979	3,702	159	259	876	0	8,975
Other items	2,373	101	91	0	0	0	2,565
Total SACR	**63,568**	**50,204**	**16,095**	**779**	**6,807**	**1,235**	**138,687**
IRBA							
Central governments or central banks	849	1,881	1,180	2,163	3,860	1,891	11,824
Institutions	11,325	29,348	5,149	18,575	10,030	2	74,429
Corporates	111,133	62,484	12,618	10,877	14,263	0	211,375
thereof specialised lending	19,492	14,369	3,206	2,686	1,607	0	41,360
thereof SMEs	13,500	607	1,458	91	134	0	15,789
Retail	90,136	915	9,979	316	184	0	101,530
Secured by mortgages on immovable property	46,700	468	6,500	110	86	0	53,864
thereof SMEs	1,592	10	0	1	4	0	1,607
Qualifying revolving	11,378	107	18	49	36	0	11,588
Other	32,058	339	3,461	158	62	0	36,078
thereof SMEs	11,811	83	1,183	46	14	0	13,137
Other loan-independent assets	1,367	39	522	0	0	2	1,931
Total IRBA	**214,809**	**94,668**	**29,448**	**31,931**	**28,337**	**1,895**	**401,089**
Total 2014	**278,377**	**144,872**	**45,543**	**32,710**	**35,144**	**3,130**	**539,777**

The breakdown by sector is based on a system used internally and relates to the systematic of the Federal Statistical Office.

Table 21: Assessment basis by sector

Asset class €m	Financial services	Manufacturing industry[1]	Public sector[2]	Other services[3]	Private households	Other	Total
SACR							
Central governments or central banks	4,423	0	34,716	70	200	0	39,410
Regional governments or local authorities	0	0	36,435	610	0	12	37,057
Public-sector entities	4,962	123	7,893	640	23	62	13,704
Multilateral development banks	31	0	311	0	0	0	342
International organisations	0	0	522	0	0	0	522
Institutions	6,437	113	269	850	1,048	253	8,969
Corporates	8,730	3,030	541	6,159	517	81	19,059
thereof SMEs	46	152	0	202	209	8	617
Retail	24	84	0	558	4,012	35	4,712
thereof SMEs	2	33	0	46	396	8	485
Secured by mortgages on immovable property	42	80	0	658	849	3	1,633
thereof SMEs	0	13	0	24	34	1	73
Defaulted positions	29	142	52	586	169	12	991
Positions of particularly high risk	613	0	0	0	0	0	614
Covered bonds	135	0	0	0	0	0	135
Banks/companies with short-term external rating	0	0	0	0	0	0	0
Collective investment undertakings	8,462	0	0	513	0	0	8,975
Other items	0	9	2,521	24	10	0	2,565
Total SACR	**33,888**	**3,582**	**83,262**	**10,668**	**6,829**	**459**	**138,687**
IRBA							
Central governments or central banks	5,622	0	3,773	2,429	0	0	11,824
Institute	70,167	872	2,425	830	0	134	74,429
Corporates	19,043	102,596	407	86,886	1,427	1,016	211,375
thereof specialised lending	3,162	8,956	0	29,029	163	50	41,360
thereof SMEs	402	6,511	0	8,080	454	343	15,789
Retail	1,117	7,193	1	19,220	73,463	536	101,530
Secured by mortgages on immovable property	627	1,162	0	7,220	44,689	165	53,864
thereof SMEs	33	100	0	827	605	43	1,607
Qualifying revolving	0	0	0	0	11,588	0	11,588
Other	490	6,031	1	12,000	17,185	372	36,078
thereof SMEs	171	5,179	1	6,512	1,023	250	13,137
Other non credit-obligation assets	34	93	8	953	843	0	1,931
Total IRBA	**95,983**	**110,753**	**6,614**	**110,318**	**75,733**	**1,687**	**401,089**
Total 2014	**129,872**	**114,335**	**89,876**	**120,986**	**82,562**	**2,146**	**539,777**

[1] Including water supply.
[2] Public sector, defence and social security.
[3] Amongst others commerce, transport, corporate and personal related services.

The breakdown according to residual term is based on maturity. Overnight receivables include call and overnight transactions and credit lines that can be terminated at any time.

Table 22: Assessment basis by time to maturity

Asset class | €m	Due on demand	>1 day to 3 months	>3 months to 1 year	>1 year to 5 years	Over 5 years	Total
SACR						
Central governments or central banks	3,166	715	1,449	13,466	20,614	39,410
Regional governments or local authorities	1,813	802	1,263	7,663	25,516	37,057
Public-sector entities	111	890	4,453	4,261	3,989	13,704
Multilateral development banks	0	7	20	35	280	342
International organisations	0	0	20	357	146	522
Institutions	2,545	1,508	1,071	2,039	1,806	8,969
Corporates	1,652	1,873	1,799	3,108	10,626	19,059
thereof SMEs	16	13	47	146	395	617
Retail	3,142	50	117	263	1,140	4,712
thereof SMEs	34	5	10	45	390	485
Secured by mortgages on immovable property	4	21	37	171	1,400	1,633
thereof SMEs	1	4	1	19	47	73
Defaulted positions	245	76	75	367	229	991
Particularly high risk positions	0	0	0	0	613	614
Covered bonds	0	0	41	94	0	135
Banks/companies with short-term external rating	0	0	0	0	0	0
Collective investment undertakings	594	0	0	0	8,381	8,975
Other items	34	0	0	0	2,531	2,565
Total SACR	**13,307**	**5,942**	**10,345**	**31,824**	**77,270**	**138,687**
IRBA						
Central governments or central banks	3,649	760	572	2,712	4,131	11,824
Institutions	15,264	9,333	17,308	17,650	14,873	74,429
Corporates	50,504	22,268	25,345	69,981	43,276	211,375
thereof specialised lending	3,766	2,177	4,641	13,920	16,856	41,360
thereof SMEs	4,231	2,130	2,006	2,551	4,872	15,789
Retail	24,552	1,595	5,715	8,096	61,573	101,530
Secured by mortgages on immovable property	297	277	2,729	4,149	46,411	53,864
thereof SMEs	5	9	48	191	1,354	1,607
Qualifying revolving	11,557	24	5	2	0	11,588
Other	12,697	1,293	2,982	3,945	15,162	36,078
thereof SMEs	8,111	805	990	1,905	1,326	13,137
Other non credit-obligation assets	994	0	0	522	415	1,931
Total IRBA	**94,962**	**33,957**	**48,940**	**98,962**	**124,268**	**401,089**
Total 2014	**108,269**	**39,899**	**59,285**	**130,786**	**201,538**	**539,777**
Total 2013	**118,523**	**41,045**	**54,947**	**131,950**	**173,397**	**519,861**

Default risks arising from derivative positions

In addition to market risks, derivative positions also give rise to default risks when a claim arises against the counterparty in the form of positive market values.

Commerzbank also looks at the so-called wrong way risk. This occurs when a counterparty's exposure and credit quality are negatively correlated. Wrong way risk is therefore an additional risk source, as the exposure is generally measured independently from the counterparty's creditworthiness.

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

Table 23: Positive replacement values by risk type before/after netting/collateral

	Replacement values	
Risk type | €m	**2014**	**2013**
Interest rate risk	168,981	154,961
Currency risk	16,784	12,553
Equity risk	1,654	1,868
Precious metal risk	208	121
Commodity price risk	1,927	352
Credit derivatives	2,447	1,908
Collateral	23,280	13,722
Replacement values before netting/collateral	**215,281**	**185,485**
Nettable value	178,684	158,584
Eligible collateral	– 15,008	8,664
Replacement values after netting/collateral	**51,605**	**18,237**

The positive market values listed in the table are the expenses which would be incurred by the Bank to replace the contracts originally concluded with transactions of an equivalent financial value. From the Bank's point of view, a positive market value thus indicates the maximum potential counterparty-specific default risk. The positive market value is understood as a replacement expense in the regulatory sense. The amounts shown in the table reflect the positive replacement values before taking related collateral into account and before exercising offsetting agreements. The replacement values are broken down according to risk types in the contracts involved. The collateral provided for derivative positions is shown as a separate risk type as it cannot be allocated to other specific risk types.

The replacement values arising from equity risk relate to the derivative default risk positions from financial instruments of risk type equity pursuant to Article 4 (50) c) CRR and do not take the rules for embedded derivatives pursuant to IAS 39 into account. Listed derivatives are not included in the disclosure, as they are processed via central counterparties on a daily basis. By contrast, OTC derivatives are included. The proportion of derivatives processed via a central counterparty was 45% as at the end of the year.

In order to minimise both the economic and the regulatory credit risk arising from these instruments, Commerzbank concludes master agreements (bilateral netting agreements) such as the 2002 ISDA Master Agreement or the German Master Agreement for Financial Futures with the respective business partners. By means of such bilateral netting agreements, the positive and negative fair values of the derivatives contracts included under a master agreement can be offset against one another and the future regulatory risk add-ons for these products can be reduced. This netting process reduces the credit risk to a single net claim on the contracting party (close-out netting).

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

Similar to the master agreements are the collateral agreements (e.g. collateral annex for financial futures contracts, credit support annex), which Commerzbank concludes with its business associates to secure the net claim or liability remaining after netting (receipt or provision of collateral). As a rule, this collateral management reduces credit risk by means of prompt – mostly daily or

weekly – measurement and adjustment of the customer exposure. The – mostly cash – collateral and netting opportunities shown in the aforementioned table reduce the exposure to counterparties to €51,605m (2013: €18,237m).

The basis for determining the offset amounts for the default risk from derivative positions is not the positive market values but instead the credit equivalent values. To determine the assessment basis of derivative default risk positions, Commerzbank uses the internal model method (IMM) pursuant to Article 283 ff. CRR and the market valuation method pursuant to Article 274 CRR.

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

In applying the internal model method, the EaD is defined per counterparty as the product of the alpha factor and the calculated effective expected positive exposure E*. Risks that are not taken into account when determining E*, correlation risks for example, are included in the capital adequacy calculation through the alpha factor. Banks can either estimate the alpha factor themselves or use the supervisory value of 1.4. Commerzbank does not estimate its own alpha factor, preferring instead to use the supervisory value to calculate exposure at default.

The credit equivalent values for the counterparty default risk from derivative positions – including exchange-traded derivatives – used to determine the (net) assessment basis amounted to €13,677m at the end of 2014 using the market valuation method and €26,334m using the internal model method. Credit equivalent values effectively correspond to the exposures of on-balance sheet default risk positions as a credit conversion factor of 100% is applied to derivative positions.

All operative units, branches and subsidiaries are, subject to compliance with the regulations, authorised to use credit derivatives to hedge credit risks in loan portfolios (i.e. purchase of hedges). This allows them to hedge credit risks with a credit derivative without having to sell or assign the loan.

Table 24: Breakdown of credit derivative business in the banking and trading book

	Banking book		Trading book	
Type of credit derivative Nominal value | €m	**Buy position**	**Sell position**	**Buy position**	**Sell position**
Credit Default Swap	4,796	3,410	40,461	42,614
Total Return Swap	0	0	4,404	0
Total 2014	**4,796**	**3,410**	**44,865**	**42,614**
Total 2013	**4,268**	**3,578**	**47,184**	**43,774**

Contractual agreements that oblige Commerzbank to provide additional collateral to its counterparties in the event of a downgrading of its own rating are governed in the Credit Support Annexes which are established as part of the netting master agreements for the OTC derivative business.

The counterparty ratings (from Standard & Poor's, Moody's and Fitch Ratings) are automatically uploaded on a daily basis via interfaces with Reuters, Telerate or Bloomberg into the collateral management system, which can simulate downgrade scenarios if necessary. This makes it possible to carry out an advance analysis of the potential effects on the collateral amounts. Commerzbank regularly reviews these collateral amounts as part of its stress test assuming a simultaneous two-notch downgrade by the three big rating agencies.

The results of this stress test are shown in the table below:

Table 25: Additional contractual obligations

Additional contractual obligations | €m	31.12.2014
Contractual derivative outflows and margin calls	584
thereof collateralised interest rate derivatives	100
thereof uncollateralised interest rate derivatives	484
Other contractual outflows and margin calls	33
Total	**617**

As a part of the new regulatory requirements of Basel 3, Commerzbank Group additionally calculated in 2014 the capital requirements for credit value adjustments (CVA risk) according to Article 381 ff. CRR. For the portfolios of Commerzbank Aktiengesellschaft, CVA risk is calculated by use of the advanced method according to Article 383 CRR with a sensitivity based approach. For the Group's subsidiaries the Standardised approach according to Article 384 CRR is applied. As at 31 December 2014 there were no eligible hedges according to Article 386 CRR. The capital requirements for CVA-risk accounted for €778m (€9,729m RWA) as at 31 December 2014.

Loan loss provisions for default risks

The responsibility for processing non-performing loans for the Core Bank lies with Group Intensive Care, whereas Group Risk Management – Credit Risk NCA is responsible for the Non-Core Assets segment. These two areas bring together the specific expert knowledge needed to support customers undergoing restructuring and to successfully process default commitments including collateral realisation.

The lending risks reported under the IFRS category LaR are taken into account by forming specific loan loss provisions (SLLP), portfolio loan loss provisions (PLLP) and general loan loss provisions (GLLP) for on- and off-balance sheet loan assets on the basis of the rules and regulations according to IAS 37 and 39.

When determining loan loss provisions, the fundamental criteria include whether the claims are in default or not and whether the claims are insignificant (exposure up to €3m) or significant (exposure over €3m).

All claims which are in default under the Basel regulations are defined as in default or non-performing. The following events are decisive in determining the default of a customer:

- Imminent insolvency (over 90 days past due).
- The Bank is assisting in the financial rescue/restructuring measures of the customer with or without restructuring contributions.
- The Bank has demanded repayment of its claim.
- The customer becomes insolvent.

A portfolio loan loss provision or allowance, respectively (PLLP impaired) is recognised for non-significant defaulted claims on the basis of internal parameters. For significant defaulted claims, the net present value of the expected future cash flows is used to calculate both specific loan loss provisions and specific valuation allowances (SLLP). The cash flows include both the expected payments and the expected proceeds from realising collateral and other recoverable cash flows. The loan loss provision is equal to the difference between the claim amount and the net present value of all the expected cash flows. The calculation of the general loan loss provision (GLLP and PLLP non-impaired) for on-balance sheet and off-balance sheet transactions takes place at the level of each individual transaction using internal default parameters (PD, LGD) and taking the LIP factor into account (LIP = loss identification period). Country risks are not accounted for separately under IFRS but are included for the purposes of the SLLP calculation in the individual cash flow estimates and given a lump-sum value in the LGD parameters when calculating portfolio loan loss provisions.

Impairment tests are also performed for securities classified as available for sale (AfS) and loans and receivables (LaR) if the fair value is below the amortised acquisition costs due to the credit rating. At each balance sheet date, it will be reviewed whether there is objective evidence (trigger event) of impairment and whether this case of loss would impact on the expected cash flows. The trigger event will be reviewed on the basis of the creditworthiness of the borrower/issuer or the issue rating, e.g. for Pfandbriefe (mortgage bonds) and ABS transactions. Trigger events may include:

- Past due/default in payments of interest or principal on the part of the issuer/borrower.
- Restructuring of the debt instrument due to significant financial difficulties on the part of the issuer (of a security) or debtor (of a loan).
- Increased probability of a restructuring procedure.
- Increased probability of insolvency.

The trigger events are operationalised through a combination of rating and fair value changes. To achieve this, the individual securities are split into three groups (listed and unlisted equity instruments and debt instruments) that form the basis for further individual impairment reviews. If trigger events are found, an impairment affecting the income statement is made and the corresponding claim is deemed to be non-performing. For AfS positions, if no trigger event is found but the fair value is below the amortised acquisition cost, the revaluation reserve is charged. The impairment amount is determined from the difference between the amortised acquisition cost and the fair value.

The total amount of the loan loss provisions, insofar as they relate to claims on the balance sheet, is deducted from the respective balance sheet items. Provision for risks in off-balance-sheet business – guarantees, endorsement liabilities, lending commitments – is shown as other provisions for specific/portfolio risks in lending business.

In accordance with the Group's write-down policy, impaired positions are written down to the net present value of the claim two years after the notice of termination using existing loss provisions and valuation allowances (SLLPs/PLLPs impaired). Amounts recovered on claims written down are recognised in the income statement.

The tables below on loan loss provisions show the total amount of non-performing claims or those past due in the IFRS categories LaR (loans) including the related loan loss provisions with the corresponding write-downs grouped by sector and country of residence of the respective borrower.

Past due loans refer to all loans that are in arrears by at least one day up to 90 days and are not defined as loans in default under consideration of the minimum threshold (2.5% of the limit or €100).

The table below sets the on-balance and off-balance sheet total claims from non-performing and past due claims against the loan loss provisions, net allocations and direct write-downs. The following definitions are used here:

- SLLP on-balance is the sum of specific loan loss provisions for significant claims, determined on the basis of individual cash flow estimates.
- PLLP impaired on-balance is the sum of portfolio loan loss provisions for insignificant non-performing claims, determined on the basis of internal risk parameters per portfolio.
- SLLP and PLLP impaired off-balance is the total sum of provisions for significant and insignificant off-balance sheet claims. These provisions are determined in the same way as for on-balance sheet claims.
- GLLP/PLLP non impaired (NI) on-/off-balance) is the sum of general loan loss provisions relating to past due claims.

The net additions column shows the net position from additions and reversals of loan loss provisions for on-balance and off-balance sheet transactions. This does not include direct write-downs and recoveries on written-down assets. These are shown separately in the columns Direct write-up/-downs and Recoveries on written-down assets.

Table 26: Non-performing and past-due loans by sector

Sector €m	Non-performing loans	SLLP on-balance (SCRA)	PLLP impaired on-balance (SCRA)	SLLP+PLLP impaired off-balance (SCRA)	Direct write-up/-downs
Agriculture and forestry	29	5	6	0	0
Fisheries	0	0	0	0	0
Mining and quarrying of stone	43	18	0	0	0
Manufacturing industry	1,658	879	98	51	61
Energy and water supply	158	58	3	2	4
Construction	429	185	31	10	2
Trade, maintenance and repair of motor vehicles and consumer goods	763	334	86	11	23
Hotels and restaurants	56	10	9	0	6
Transport and communication	3,027	1,356	15	17	122
Banking and insurance	725	386	8	1	1
Real estate[1]	3,205	811	68	8	105
Public sector[2]	1	0	0	0	1
Education and training	10	1	2	0	1
Health, veterinary and social work	138	39	8	0	2
Other public and personal service activities	206	54	23	1	8
Private households	1,132	35	423	2	55
Non-profit organizations	11	0	2	0	0
Total 2014	**11,592**	**4,170**	**782**	**104**	**390**
Total 2013	**14,671**	**4,888**	**823**	**126**	**476**

[1] Including the rental of movable property and business service deliveries. [2] Including defence and social security

Table 26 continued: Non-performing and past-due loans by sector

Sector €m	Past due loans	GLLP/PLLP NI on-/off-balance for past due loans	Net additions	Recoveries on written-down assets
Agriculture and forestry	7	0	2	0
Fisheries	0	0	7	0
Mining and quarrying of stone	1	0	6	0
Manufacturing industry	626	3	125	48
Energy and water supply	101	0	19	0
Construction	54	1	32	0
Trade, maintenance and repair of motor vehicles and consumer goods	351	2	96	9
Hotels and restaurants	15	0	– 4	0
Transport and communication	401	9	622	4
Banking and insurance	1,229	5	– 10	24
Real estate[1]	348	3	– 15	11
Public sector[2]	18	0	0	0
Education and training	7	0	0	0
Health, veterinary and social work	40	1	2	0
Other public and personal service activities	75	1	6	51
Private households	560	13	20	81
Non-profit organizations	2	0	0	0
Total 2014	**3,836**	**37**	**909**	**227**
Total 2013	**3,391**	**45**	**1,441**	**229**

[1] Including the rental of movable property and business service deliveries. [2] Including defence and social security.

Commerzbank bases its definition of the total sum of non-performing and past due claims on its accounting. Pursuant to section 315a.1 of the German Commercial Code, the Commerzbank Group issues consolidated financial statements based on International Financial Reporting Standards (IFRS). For this reason, the book values according to IFRS are applied for the total amount of non-performing and past due claims. Credit risk mitigation techniques which can mitigate risks for the purposes of determining the capital requirement are not relevant for the determination of the claim amount for accounting procedures.

The total non-performing and past due claims amount to €15.4bn, of which €11.6bn is attributable to the default portfolio (non-performing loans) and €3.8bn is attributable to past due loans. In addition to the loan loss provisions presented below, collateral value is also held against the total non-performing claims, which is taken into account accordingly in the calculation of the SLLP, PLLP and GLLP. The amounts recovered from written-down claims amounting to €227m are booked as income in the loan loss provisions.

Table 27: Non-performing and past-due loans by country cluster

Country cluster €m	Non-performing loans	SLLP on-balance	PLLP impaired on-balance (SCRA)	SLLP+PLLP impaired off-balance (SCRA)	Direct write-up/ -downs	Past due loans	GLLP/PLLP NI on-/off-balance for past due loans
Germany	6,020	2,119	483	84	294	1,751	16
Western Europe (excl. Germany)	2,881	1,148	9	4	89	278	4
Central and Eastern Europe	1,451	389	286	6	0	677	13
North and South America	723	262	2	2	6	298	0
Asia	198	10	3	0	0	290	1
Other	319	243	1	9	0	542	2
Total 2014	**11,592**	**4,170**	**782**	**104**	**390**	**3,836**	**37**
Total 2013	**14,671**	**4,888**	**823**	**126**	**476**	**3,391**	**45**

The breakdown by country cluster reflects Commerzbank Group's focus on Germany and selected markets throughout Europe. This means that the vast majority of the loan loss provisions are attributable to borrowers based in these regions.

The table below only shows the development of loan loss provisions relating to the lending business. Only claims or loan commitments under the IFRS category LaR and their corresponding loan loss provisions are included in the table. Details on the development of the loan loss provisions can be found in the Annual Report 2014.

Table 28: Development of loan loss provision in 2014

Type of provision €m	Opening balance	Additions	Reversals	Utilisation	Exchange rate changes	Other changes	Closing balance
SLLP on-balance (SCRA)	4,888	1,700	848	1,702	157	−25	4,170
PLLP impaired on-balance (SCRA)	823	374	155	240	−2	−19	782
SLLP+PLLP impaired off-balance	126	55	85	0	2	6	104
GLLP/PLLP NI on/off-balance	918	194	283	0	2	−15	816
Total	**6,755**	**2,323**	**1,370**	**1,941**	**158**	**−53**	**5,872**

The realised losses over the entire period are compared below with the calculated expected losses of the non-defaulted portfolio at the end of the period. Losses incurred in the lending business refer to direct write-downs (net of write-ups) and the utilisation of valuation allowances for claims classified as IRBA positions according to CRR. Amounts recovered on written-down claims reduce the realised loss.

Table 29: Expected and realised losses 2014

		Realised loss				
Asset class **€m**	**Expected loss as at 31.12.**	**Total**	**thereof utilisation of risk provision**	**thereof direct write-downs**	**thereof write-ups**	**thereof recoveries on written-down assets**
Central governments or central banks	29	0	0	0	0	0
Banks	147	2	2	0	0	0
Companies	960	1,346	1,194	160	1	7
thereof SMEs	61	0	0	0	0	0
thereof specialised lending	649	1,021	947	79	0	5
thereof other	251	325	246	81	1	1
Retail	252	223	171	60	1	7
thereof SMEs	67	0	0	0	0	0
thereof secured by mortgages on immovable property	97	76	69	13	0	7
thereof qualifying revolving	20	1	1	0	0	0
thereof other	68	146	100	47	1	0
Total 2014	**1,388**	**1,571**	**1,366**	**220**	**2**	**13**
Total 2013	**1,384**	**1,318**	**1,229**	**136**	**6**	**41**

Table 30: Expected and realised losses since 2012

	2014		2013		2012	
Asset class €m	**Expected loss as at 31.12.**	**Realised loss**	**Expected loss as at 31.12.**	**Realised loss**	**Expected loss as at 31.12.**	**Realised loss**
Central governments or central banks	29	0	27	0	26	0
Banks	147	2	133	–17	128	3
Companies	960	1,346	979	1,159	1,024	487
thereof SMEs	61	0				
thereof specialised lending	649	1,021				
thereof other	251	325				
Retail	252	223	246	176	178	192
thereof SMEs	67	0				
thereof secured by mortgages on immovable property	97	76				
thereof qualifying revolving	20	1				
thereof other	68	146				
Total	**1,388**	**1,571**	**1,384**	**1,318**	**1,356**	**682**

Deviating from the Annual Report, the expected loss amounts reported in this Disclosure Report do not include SACR or securitisation positions. Also, due to the change to SACR (permanent partial use pursuant to Article 150 CRR) in 2009, the asset class investments is not shown here.

Investments in the banking book

Investment risks or shareholder risks are potential losses arising from the provision of equity capital to investments as a result of a fall in their value. They can be caused by general market fluctuations or company-specific factors.

Composition of investments
Commerzbank's portfolio of holdings is broken down in accordance with its significance to business policy. The bulk of the investments held as financial assets (banking book) and all holdings in consolidated companies are designed to further the Bank's business objectives by supporting business lines/segments in the Bank (segment-supporting investments) or by having a strategic management or service function for the Group as a whole (other strategic investments).

There are also other non-strategic investments, some of which are allocated to the Non-Core Assets segment. A divestment concept is applied here, the aim of which is to optimise Commerzbank's market value, capital and income statement under appropriate market conditions.

Risk management
The investment risks are managed centrally as part of the ongoing management and monitoring of Commerzbank's holdings by the Group Development & Strategy department and locally by the segments. The central monitoring is primarily concentrated on the non-strategic investments, while the strategic investments that form part of the Bank's core business are controlled on a decentralised basis by the Commerzbank segments responsible for them. The strategic investments are mainly majority holdings.

Under the "three lines of defence" principle, aimed at protecting against undesirable risks and set out by Commerzbank in the overall risk strategy, the respective operational segments responsible therefore represent the first line of defence for investment risks, while Development & Strategy, as the area responsible for investment risk strategy, represents the second line.

Valuation of investments for regulatory purposes
Commerzbank Group and accordingly the group companies included in the disclosure report are, as IRBA banks as defined in Article 147 CRR, generally obliged to value investments in accordance with the IRBA rules. For investments entered into prior to 1 January 2008, Commerzbank has opted to apply grandfathering. These investment positions are temporarily excluded from the IRBA and treated in accordance with the SACR rules. They are given a risk weighting of 100%. The CRR also allows items to be permanently exempted from the IRBA. Since 31 December 2009 Commerzbank applies the partial use option pursuant to section 70 sentence 1 no. 9b SolvV and Article 150 CRR and is using the SACR permanently to value all investment positions which are not under the above-mentioned temporary grandfathering option. Investments that are associated with particularly high risk according to the definition under Article 128 CRR, such as private equity investments or venture capital investments, are recognised in the corresponding SACR asset class.

Valuation and accounting principles
Investments and shares in the banking book comprise equity instruments classified as available for sale (AfS) and those reported in the financial statements as fully consolidated or using the equity method are also included. Therefore all equity instruments not held in the trading portfolio are accounted for in this category.

Investments classified as AfS are reported at their fair value if it is available. Differences between historic costs and fair value are reported as equity capital not affecting net income. Not listed or listed but not traded equity instruments are reported at their historic costs if their fair value is not reliably determinable.

Listed investments are continuously monitored with regard to their market price development. External analysts' opinions and share price forecasts (consensus forecasts) are included in the risk assessment. The listed holdings are monitored by means of impairment tests carried out at least quarterly by Group Finance in accordance with the impairment policy and tested for any significant qualitative or quantitative indicators (trigger events) of impairment. As soon as there are any indications of significant or lasting impairment, unrealised losses are written down.

Risks arising from unlisted holdings are subject to regular monitoring involving a database-supported year-end valuation, a monitoring of trigger events to each balance sheet reporting date and special monitoring of investments classified as critical. Various valuation methods (e.g. capitalised earnings value, net asset value, and liquidation value) are used to quantify the risks, depending on the book value, status (e.g. active, inactive or in liquidation) and type of business activity (e.g. operational, property holding company or holding) of the investment. If the intention is to sell the investment, it will be written down, if necessary, to a lower expected selling price; appreciation in value would be reported as revaluation reserve without net income effects. With companies valued using the equity method, the valuation is equal to the proportionate IFRS equity capital.

Quantitative information on investments

This section covers investments as defined in Article 112 p) CRR. This means that only equity investments that are not consolidated for regulatory purposes but relate to the companies covered by this report are shown. The definition of an investment in CRR is wider than the usual accounting definition. For example, shares in limited companies (GmbHs), profit-sharing certificates with equity characteristics, promissory notes and derivative positions whose underlying is an investment position have to be classified as investments for regulatory purposes. Classical forms of investments nevertheless make up the majority of this CRR asset class.

The table below shows the book value and fair value of the investment instruments under IFRS as reported in the financial statements for the investment groups relevant to the Group's objectives and strategy.

Table 31: Valuation of investment instruments

	Book value (IFRS)		Fair value		Market value (listed positions)	
Investment group | €m	**2014**	**2013**	**2014**	**2013**	**2014**	**2013**
Segment-supporting investments	**400**	**347**	**403**	**332**	**59**	**40**
thereof listed positions	56	55	59	40	59	40
thereof unlisted positions	344	292	344	292		
Other strategic investments	**27**	**27**	**27**	**27**	**0**	**0**
Other investments	**154**	**297**	**154**	**297**	**0**	**3**
thereof listed positions	0	3	0	3	0	3
thereof unlisted positions	154	294	154	294		
Funds and certificates	**67**	**1,037**	**67**	**1,037**	**30**	**33**
thereof listed positions	30	26	30	26	30	26
thereof unlisted positions	37	0	37	0		
thereof unassigned	0	1,012	0	1,012	0	7
Investments total	**648**	**1,709**	**651**	**1,693**	**89**	**76**

For listed positions the market value is given as well. For listed investments the book value under IFRS equals their historic costs. Differences between book value under IFRS and fair value of listed investments result from the revaluation reserve.

For unlisted companies the book values under IFRS are used as fair value. Special purpose vehicles (SPVs) are not shown as they are not investments pursuant to regulatory definitions. The positions shown under Other strategic investments as well as Funds and certificates are unlisted positions. All unlisted positions are classified as adequately diversified investment portfolios.

Shares in investment funds are allocated to the investment group funds and certificates if the precise composition of the investment fund is not known and an average risk weighting supplied by the investment company is not used for capital adequacy purposes. Only shares in investment funds that invest wholly or partly in investment instruments are relevant. Shares in investment funds that are solely invested in fixed-income securities (e.g. bond funds) are not reported here.

Table 32: Realised and unrealised profits/losses from investment instruments

		Unrealised revaluation profit/loss		
€m	Realised profit/loss from sale/liquidation	Total	thereof accounted for in CET1 capital	thereof accounted for in Tier 2 capital
2014	–1	41	41	0
2013	65	54	0	24

Securitisations

Securitisation process

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

› **Originator** Parts of the Bank's own loan portfolio are placed selectively on the capital markets through securitisation transactions. The transfer of the credit risk is mainly by means of synthetic securitisations where the portfolio is hedged through financial guarantee contracts. In October 2014, a securitisation of Mittelstand loans (CosMO Finance II – 1) in the amount of €1bn was repaid. As at the reporting date of 31 December 2014, out of the outstanding securitisations by Commerzbank Aktiengesellschaft, risk exposures of €4.2bn (securitised volume €4.4bn) were retained. By far the largest portion of these exposures (€4.1bn) consists of senior tranches that are nearly all rated good or very good. As at the reporting date, the Commerzbank Group's securitisation transactions placed on the capital markets and used to free up regulatory capital were as follows:

Table 33: Securitisation transactions with regulatory capital relief

Securitisation programme[2]	Type[1]	Securitisation pool	Maturity	Issue currency	Current volume | €m
CoSMO Finance II–2	S	Companies	2022	EUR	2,000
Coco Finance II–1	S	Companies	2022	EUR	2,000
CB MezzCAP	T	Companies	2036	EUR	70
CoTrax Finance II–1	S	Institutions	2021	USD	362
Total Commerzbank AG					4,432
Provide Gems 2002–1	S	RMBS	2048	EUR	100
Semper Finance 2006–1	S	CMBS	2084	EUR	250
Semper Finance 2007–1	S	CMBS	2046	EUR	18
Total Hypothekenbank Frankfurt AG					**368**
Total					**5,790**

[1] S = synthetic, T = True Sale.
[2] Securitisation of own customer receivables.

In the reporting year, due to the structure of the transactions, Commerzbank did not hold any securitisation exposures for which additional capital was required as a result of an investor share to be taken into consideration by the originator under Articles 256 and 265 of the CRR. In addition, in recent years Commerzbank has issued the own-asset securitisations Rügen Eins (initial volume of receivables €1.6bn), TS Lago One (initial volume of receivables €15bn) and SME Commerz SCB GmbH (initial volume of receivables €1.5bn) that are not eligible to free up regulatory capital. Where Commerzbank cooperated with rating agencies in connection with originator securitisation transactions (both synthetic and true sale), the agencies in question were Standard & Poor's, Moody's and Fitch Ratings. The assets securitised by Commerzbank Aktiengesellschaft belong to the Bank and derive from its lending business with the Mittelstand, from business with large customers, and from trade finance transactions with banks. In the case of Hypothekenbank Frankfurt AG's originator securitisation transactions, the underlying securitised assets are commercial real estate loans and private residential mortgages. As part of the overall management of the Bank, the Commerzbank Group is constantly reviewing opportunities to securitise its own assets. This process is primarily influenced by the market conditions prevailing at any one time. The placement of further synthetic securitisations of corporate loans is planned for the first half of 2015.

› **Sponsor** By securitising their own portfolios of receivables, i.e. selling their receivables on a non-recourse basis, Commerzbank's customers are able to tap alternative sources of funding on the capital markets. Structuring, arranging and securitising these receivables portfolios, particularly those of customers in the Mittelstandsbank and Corporates & Markets segments, is a key component of the structured finance product range. Typically special purpose vehicles (purchasing entities) are established to manage these assets. The purchases of receivables are funded primarily by the issue of short-term commercial papers (CP) under the Bank's asset-backed commercial paper (ABCP) programme Silver Tower (conduit). The commercial papers issued are rated by the rating agencies Standard & Poor's, Moody's and Fitch Ratings. As sponsor, the Bank is responsible for structuring and, as a rule, purchasing and refinancing the transactions. Commerzbank provides the special purpose entities with liquidity facilities so that they have access to short-term liquidity. These liquidity facilities are counted in full when determining the risk-weighted exposures. The mainly high diversified portfolios of receivables generally derive from customers' working capital, such as trade receivables

and car, machinery and equipment leases. The receivables portfolios therefore reflect the differing businesses of those selling the receivables. The volume in the Silver Tower conduit was reduced by €0.2bn to €3.4bn in 2014. The securitisation exposures deriving from the strategic conduit Silver Tower largely consist of liquidity facilities and back-up lines. The conduit “Beethoven” was concluded as scheduled in August 2014.

› **Investor** The Commerzbank Group invests under both its regulatory trading book as well as its banking book in securitisation positions. The Bank's internal credit risk strategy provides limited scope for entering into new securitisation positions provided that the risk profile of each securitisation position is subjected to a differentiated analysis and documentation. This allows transaction risk drivers that may impact directly or indirectly on the securitised position's risk content to be taken into account.

Risk Management

The internal processes for monitoring the risk profile of securitisation positions are based on the provisions of Article 406 and 408 of the CRR and on the principles of the Minimum Requirements for Risk Management (MaRisk) as amended. They apply equally to all securitisation exposures, irrespective of whether they are part of the regulatory trading or banking book, or whether Commerzbank acts as the originator, sponsor or investor.

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

› **Originator** The credit process for loans to customers does not distinguish between loans which the Bank will securitise at a later date and those for which it will continue to assume the risk. If the Bank retains securitisation exposures from its own securitisations, these remain subject to an ongoing credit process. The credit process is the same as that applying to investor positions. The amount retained in securitisation transactions in accordance with Article 405 of the CRR is reviewed regularly and is published in the Investor Report. A potential placement risk for Commerzbank’s transactions is completely accommodated, as the receivables are included in full in the Bank’s risk and capital management process up until the actual risk transfer by means of securitisation and placement.

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

› **Investor** Strict internal guidelines must be followed when acquiring a new securitisation position. Such positions are subject to a specific internal credit process that also ensures that the specific requirements for securitisation positions regarding due diligence and regarding retention under Articles 405-406 of the CRR are met. In the credit process applied to the Bank’s securitisation portfolio, the risk profile of the securitisation positions is analysed continuously or as circumstances require. In preparing a credit assessment, at the level of the individual tranche a securitisation-specific rating system is used which has been developed internally within the Bank, while external standard models are also applied. In the case of resecuritisations, the analysis relates not just to the securitisation exposures contained in the pool but also covers the underlying portfolios on a risk basis (look through principle). As with securitisation exposures, the ranking of the individual tranches contained in the pool within a securitisation structure are taken into account in this analysis, as are the specific features of the asset classes and of the different jurisdictions, in order to generate the expected aggregate cash flow. The results are then used to model the entire waterfall structure at the level of the resecuritisation.

Commerzbank takes into account not only the original default risk of the securitised receivables, but also secondary risks, such as market value risk, liquidity risk, refinancing risk, legal risk and operational risk. These directly or indirectly affect default risk. This process looks, for example, at the performance reports for the securitised receivables, changes in external ratings and movements in the market value of the securitisation exposures.

When determining market risk, changes resulting from interest rates, foreign currency rates or credit spreads, among others, are taken into account in order to calculate the future cash flows of each tranche. In addition, the combination of various conventional risk measures (for example, VaR, volatilities) ensures the appropriate management of market risk concentrations at Group level.

Liquidity risk refers in this context to the risk that Commerzbank will be unable to meet its payment obligations on a day-to-day basis. Liquidity risks from ABS transactions are modelled conservatively in the internal liquidity risk model. Firstly, a worst case assumption is made that Commerzbank has to take on the entire funding of the Silver Tower conduit. Secondly, the Bank’s holdings of securitisation transactions only qualify as liquid assets if they are eligible for rediscount at the European Central Bank. These positions are only included in the liquidity risk calculation after applying conservative discounts. This applies in particular to the Bank's own securitisation transactions, TS Lago One and Rügen Eins. With regard to the Silver Tower conduit, it is not only assumed that external refinancing of the conduit will be replaced by Commerzbank on expiry, but also that additional drawdowns on credit lines by clients of the conduit will have to be refinanced by Commerzbank.

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

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

Valuation of securitisations for regulatory purposes

Securitisation positions in the banking book In 2014, Commerzbank applied both the regulations of the advanced IRBA and those of the SACR for regulatory purposes. The introduction of the CRR (Basel-3-accord) on 1 January 2014 led thereby to an extended application of the SACR.

› **Originator** The ratings-based approach is used for externally rated securitisation exposures that have been retained from the Commerzbank Group's own securitisation transactions. Capital is held against synthetic securitisation tranches that have been placed on the market based on the risk weighting of the party providing the collateral. Counterparties to the hedging instruments used (financial guarantees, credit derivatives) are institutional investors, such as international financial institutions whose collateral deposits with banks are backed by very good creditworthiness. For the majority of transactions the supervisory formula approach (SFA) is used and capital deductions are made for only one other single securitisation positions due to a lack of external ratings. The requirements of Article 256(7) of the CRR regarding the investor shares that have to be considered by the originator do not apply due to the structure of the Commerzbank Group’s transactions.

› **Sponsor** The majority of sponsor transactions have to be allocated to the conduit business. Only in a few cases Commerzbank holds other sponsor positions. Under the internal assessment approach (IAA), ABS rating systems certified by the supervisory authority are used for the Silver Tower conduit sponsored by Commerzbank. In 2014, we applied our own rating systems to the Silver Tower conduit for the following classes of receivables: Trade receivables, car finance and leasing, equipment leasing and consumer lending. The rating systems are developed in accordance with the stipulations of regulatory requirements, independently of the market side by Commerzbank’s risk function. In accordance with the CRR, the methodology follows the guidelines of the rating agencies Standard & Poor’s, Moody’s and Fitch Ratings. The systems were certified at the outset by BaFin and the Bundesbank. They are subject to a regular review by the supervisors and internal audit. In addition, the internal assessment approach is subject to an annual validation by Commerzbank's risk function.

The various internal assessments take account of all features of the securitised receivables portfolio identified by the rating agencies as significant risk drivers as well as the specific structuring characteristics of the securitisation exposure. Other quantitative and qualitative risk components that are regarded as material by Commerzbank are also included in the assessment. These include, in particular, seller risks and qualitative risk drivers that are evaluated via structured qualitative questionnaires. The result of the rating process is a tranche-specific rating derived from the quantitative and qualitative results of the assessment approach. Depending on the specific approach used, this rating is based on the probability of default or expected loss (EL) of the securitised tranche. No external ratings from the above-mentioned rating agencies are available for the securitisation exposures subject to the internal assessment approach. The results of the internal assessment approach are used to determine regulatory capital requirements. They are also used within the internal capital model, in portfolio monitoring and in setting limits (ICAAP processes).

The approaches to modelling probability of default or expected loss (EL) for securitisation tranches differ depending on the type of securitised asset class. For the asset classes trade receivables, car finance and leasing, equipment leasing and consumer lending, a range of different stress factors used by the rating agencies are applied, depending on the main risk drivers for the relevant transactions. These are, for example, stress factors on concentration risks, default risks, dilution risks and interest rate risks. Quantitative and qualitative modelling components devised by the Bank are also used. When calculating loss buffers, stress factors are determined individually for different securitised asset types on the basis of the risk profiles of the securitisation transactions. In addition, in two cases the practice of making a capital deduction where no applicable external rating is available is used. The supervisory formula approach (SFA) is only used in one single case.

› **Investor** For investor positions, external ratings are generally available, which lead to the ratings-based approach (RBA) being applied. Commerzbank takes account of all available external ratings from the three rating agencies Standard & Poor's, Moody's and Fitch Ratings, nominated by Commerzbank Aktiengesellschaft. It does so irrespective of the type of receivables securitised and the type of securitisation exposure. The EIF (European Investment Fund) has provided a bilateral, directly-enforceable and irrevocable guarantee for a part of Hypothekenbank Frankfurt International S.A.'s investor positions. The underlying assets of the guaranteed securitisation exposures are loans to small and medium-sized companies from various European countries. The guarantee is taken into account in the calculation of RWAs by substituting the risk weighting of the EIF for the risk weighting of the securitisation. In only a few cases a capital deduction as a result of the lack of an applicable external rating is used.

Companies which are consolidated within the Commerzbank Group for regulatory purposes may, as part of the Group-wide business and risk strategy, on occasion act as investors in securitisation transactions in which the Bank is acting as sponsor or originator. Commerzbank Aktiengesellschaft and Hypothekenbank Frankfurt International S.A. currently hold securitisation exposures from securitisation transactions, acting in the role of sponsor or originator. All retentions or repurchases of securitisation exposures from the Bank's own transactions with recognised regulatory risk transfer and securitisation exposures from transactions where Commerzbank has acted as sponsor are subject to the calculation of the regulatory capital requirement. In the case of transactions without recognised regulatory risk transfer, the regulatory capital requirement is determined for the securitised portfolio.

Securitisation exposures in the trading book As of 31 December 2014, the majority of securitisation positions included in the trading book are hedged against performance-induced market risks by means of credit default swaps and total return swaps with counterparties of good credit quality in addition to securitisations allocated to the correlation trading book. The capital adequacy requirements are determined by application of Articles 337 and 338 CRR.

Accounting and measurement policies

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

› **Originator** If the special purpose vehicle is consolidated as part of the Commerzbank Group, no further derecognition test is carried out under IAS 39 rules. The asset is not derecognised in this case. If the special purpose vehicle does not have to be consolidated, in true sale securitisations the possible derecognition of the securitised asset from the balance sheet is assessed. Following an assessment of the risks and rewards of ownership as the primary derecognition criterion and the control concept as the secondary derecognition criterion (IAS 39.15 ff.), a derecognition or partial derecognition (continuing involvement) is reported where appropriate. In the case of synthetic securitisations, the underlying assets remain on the balance sheet. As with securitised assets in true sale securitisations that are not derecognised, they are reported in their original IFRS category. These assets continue to be accounted for in accordance with the rules for this IFRS category. Where securitised assets are derecognised, any resultant gains or

losses are reported in the income statement. In some cases, the derecognition of assets may lead to the first-time recognition of new exposures, for example bonds issued by special purpose vehicles. Under IFRS these exposures are categorised on the basis of the intention with which the securities were acquired and the type of securities in one of the three IAS 39 categories (held for trading, loans and receivables or available for sale). Please refer to Note 5 to the IFRS consolidated financial statements for a detailed explanation of the classification rules and the related valuation procedures. No securitisation transactions leading to derecognition of assets were carried out in the period under review. As a result, no gains or losses were realised from the sale of assets in connection with securitisation transactions during the reporting period.

The securitising special purpose entities for the following transactions are currently consolidated for accounting purposes: Cosmo Finance II-2 Ltd., Coco Finance II-1 Ltd., Cotrax Finance II-1 Ltd., Rügen Eins GmbH, TS Lago One GmbH and SME Commerz SCB GmbH. However, these entities are not consolidated for regulatory purposes. The securitising special purpose entities for the following transactions are currently not consolidated either for accounting purposes or for the purposes of regulatory capital adequacy requirements: Provide Gems 2002-1, Semper Finance 2006-1 Ltd., Semper Finance 2007-1 GmbH and Glastonbury Finance 2007- plc. If assets are earmarked for securitisation, this has no direct impact on their accounting treatment or measurement within the applicable IFRS categories.

› **Sponsor** Under IFRS the funding entities Silver Tower Funding Ltd. and Silver Tower US Funding LLC are not consolidated under Silver Tower, and nor are any purchasing entities. Also, for regulatory purposes, no purchasing or funding entities are consolidated under Silver Tower. If a beneficiary special purpose entity is not consolidated under IFRS, the liquidity line provided to it is recorded in the Notes to the Annual Report as a contingent liability in its full unutilised amount. Any utilised amount is recognised as a claim in the IFRS category loans and receivables.

› **Investor** Under IFRS, investor positions are categorised on the basis of the intention with which the securities were acquired and the type of securities in one of the three IAS 39 categories (held for trading, loans and receivables or available for sale). For a detailed explanation, please refer to Note 5 in the IFRS consolidated financial statements, which also explains the related valuation procedures. If the securitisation exposures are traded on liquid markets with observable pricing, they are valued on the basis of independent market prices. If a direct measurement at market prices is not possible, the value of the securitisation exposure is determined with the help of valuation models. This involves the application of a discounted cash flow approach, with the cash flows and the other relevant parameters being based on data observable on the market. Moreover, the approach is calibrated with market data for application to similar securitisation structures. In many cases, the prices estimated by external providers are used. There were no significant changes in the methods used to value securitisation positions in the period under review.

Quantitative information on securitisations

Securitisation exposures in the banking book The following information relates to transactions for which risk-weighted exposures are determined in accordance with Article 242-270 of the CRR. This also includes Commerzbank Group's own securitisation transactions for which capital relief is available and made use of for regulatory purposes.

The total volume of all retained or acquired securitisation exposures (on- and off-balance-sheet) was €14.2bn on the reporting date. This amount corresponds to the IRBA and SACR exposure after deducting eligible collateral.

In the following a breakdown of retained or acquired securitisation exposures by exposure type and the regulatory role assumed by Commerzbank is given.

Table 34: Retained or acquired securitisation exposures in the banking book by type of exposure

	Originator		Investor		Sponsor	
€m	IRBA	SACR	IRBA	SACR	IRBA	SACR
Receivables[1]	4,068	0	14	8	0	0
Securities[2]	84	0	1,494	4,735	648	368
Other positions on-balance	0	0	1	0	0	0
Liquidity facilities	1	0	0	0	2,632	0
Derivatives[3]	0	0	22	107	0	0
Other positions off-balance[4]	0	0	6	0	16	38
Total	**4,154**	**0**	**1,536**	**4,851**	**3,295**	**406**

1 For example, drawdowns on liquidity facilities, cash loans, on-balance positions from synthetic transactions etc.
2 ABS, RMBS, CMBS etc.
3 Counterparty risk from market value hedges (interest rate and currency risks).
4 Guarantees etc.

The table below provides a breakdown of the securitisation exposures shown above by type of underlying assets.

Table 35: Retained or acquired securitisation exposures in the banking book by type of asset

	Originator		Investor		Sponsor	
€m	IRBA	SACR	IRBA	SACR	IRBA	SACR
Loans to companies/SMEs	4,150	0	1,120	250	196	0
Commercial real estate	4	0	0	18	0	0
Residential real estate	0	0	32	518	0	0
Consumer loans	0	0	222	3,953	832	260
Securitised positions	0	0	0	28	0	142
Leasing receivables	0	0	78	16	410	0
Trade receivables	0	0	0	0	1,857	0
Other	0	0	84[1]	67	0	4
Total	**4,154**	**0**	**1,536**	**4,851**	**3,295**	**406**

1 Contains €14m film receivables.

Based on the country of the securitised claim, the securitisation exposures originate predominantly from Germany (69%, in 2013: 54%), the USA (8%, in 2013: 32%) and the UK/Ireland (7%, in 2013: 5%).

The next table provides a breakdown of acquired or retained securitisation exposures by risk weighting bands. Risk weightings are ascertained by applying the risk approach applicable to each securitisation exposure as per Article 259 CRR. If a securitisation exposure has an external rating of B+ or worse, the exposure is deducted from Core Tier 1 capital. The capital requirements are determined by the exposure and its risk weighting after taking account of any impairments.

Table 36: Retained or acquired securitisation exposures in the banking book by risk weighting band

IRBA	RBA		IAA		LTA	
Risk weighting band | €m	**Position value**	**Capital requirement**	**Position value**	**Capital requirement**	**Position value**	**Capital requirement**
≤ 10%	806	5	1,686	12	4,049	23
> 10% ≤ 20%	287	3	1,290	19	0	0
> 20% ≤ 50%	32	1	258	6	0	0
> 50% ≤ 100%	6	0	16	1	193	9
> 100% ≤ 650%	96	21	0	0	25	2
> 650% < 1,250%	0	0	0	0	27	20
Total	**1,227**	**31**	**3,250**	**38**	**4,294**	**55**

SACR	RBA		IAA		LTA	
Risk weighting band | €m	**Position value**	**Capital requirement**	**Position value**	**Capital requirement**	**Position value**	**Capital requirement**
≤ 10%	0	0	0	0	0	0
> 10% ≤ 20%	4,330	69	0	0	0	0
> 20% ≤ 50%	94	4	260	10	0	0
> 50% ≤ 100%	131	11	0	0	65	4
> 100% ≤ 650%	49	14	0	0	56	7
> 650% < 1,250%	0	0	0	0	0	0
Total	**4,604**	**97**	**260**	**10**	**122**	**11**

As at 31 December 2014 the value of the securitisation exposures (including resecuritisations) deducted from equity capital was €351m (2013: €856m). After taking account of impairments, the capital deduction amounted to €314m (2013: €364m).

The next table provides a breakdown of acquired or retained resecuritisation exposures by risk weighting bands. The capital requirement values do not consider hedge positions or insurances.

Table 37: Retained or acquired resecuritisation exposures in the banking book by risk weighting band

2014	IRBA		SACR	
Risk weighting band | €m	**Position value**	**Capital requirement**	**Position value**	**Capital requirement**
≤ 10%	0	0	0	0
> 10% ≤ 20%	0	0	0	0
> 20% ≤ 50%	95	3	19	1
> 50% ≤ 100%	0	0	3	0
> 100% ≤ 650%	12	3	4	1
> 650% < 1,250%	0	0	0	0
Total	**108**	**5**	**26**	**2**

The table below shows the outstanding volumes of Commerzbank Group's securitisation transactions. These were originator transactions with recognised regulatory risk transfer or ABCP-funded sponsor transactions.

Table 38: Securitisation assets outstanding

	Originator Traditional		Originator Synthetic		Sponsor ABCP	
€m	2014	2013	2014	2013	2014	2013
Loans to companies/SMEs	71	70	4,361	5,331	284	0
Commercial real estate	0	996	254	218	0	0
Residential real estate	0	0	83	474	0	101
Consumer loans	0	0	0	0	1,055	280
Securitised positions	0	272	0	0	1	0
Leasing receivables	0	0	0	0	415	1,486
Trade receivables	0	0	0	0	1,518	1,438
Other	0	0	0	0	232	0
Total	**71**	**1,338**	**4,699**	**6,023**	**3,505**	**3,304**

On the reporting date, the securitised portfolios included non-performing or past due loans as shown below.

Table 39: Non-performing and past due securitised loans

	Non-performing loans		Past due loans	
€m	2014	2013	2014	2013
Loans to companies/SMEs	48	32	10	11
Commercial real estate	5	9	0	0
Residential real estate	16	25	2	3
Total	**69**	**65**	**12**	**14**

In the period under review the portfolio incurred losses due to originator transactions of Hypothekenbank Frankfurt in the amount of €10m (2013: €13m). We have taken the information on portfolio losses and on impaired and past due claims from the investor reports for the respective underlying transactions.

Securitisation exposures in the trading book The information in this section relates to securitisation exposures in the trading book for which risk-weighted exposure values are determined in accordance with article 337 CRR. This comprises securitisation exposures where Commerzbank acts as sponsor, originator or investor.

The total net exposure of all retained or acquired securitisation positions which are not included in the correlation trading portfolio was €34m at the reporting date, including credit derivative hedges according to article 337 CRR. There are no further off-balance-sheet hedge positions.

The table below shows the retained or acquired securitisation exposures which are not assigned to the correlation trading portfolio.

Table 40: Retained or acquired securitisation exposures in the trading book by type of exposure

	Originator		Investor	
€m	IRBA	KSA	IRBA	KSA
Securities	1	1	0	30
Derivatives	0	0	2	0
Total	**1**	**1**	**2**	**30**

The table below provides a breakdown of the securitisation exposures shown above by type of underlying assets.

Table 41: Retained or acquired securitisation exposures in the trading book by type of asset

	Originator		Investor	
€m	IRBA	KSA	IRBA	KSA
Securitised positions	0	0	0	3
Residential real estate	0	0	0	20
Commercial real estate	0	1	0	0
Loans to companies/SMEs	1	0	2	1
Car finance	0	0	0	5
Other	0	0	0	0
Total	**1**	**1**	**2**	**30**

Based on the country of the securitised claim most of these securitisation exposures originate from the USA.

The table below shows the retained or acquired securitisation exposures in the trading book which are not assigned to the correlation trading portfolio, broken down by risk weighting band. Risk weightings are ascertained by applying the risk approach applicable to each securitisation exposure as per article 337 of the CRR. If a securitisation exposure has an external rating of B+ or worse, the exposure is deducted from Core Tier 1 capital. The capital requirements are determined by the net exposure and by the risk weighting assigned to the position. Table 42 contains SACR exposures only.

Table 42: Retained or acquired securitisation exposures in the trading book by risk weighting band

	RBA		LTA	
Risk weighting band | €m	Position value	Capital requirement	Position value	Capital requirement
≤ 10%	0	0	0	0
> 10% ≤ 20%	1	0	0	0
> 20% ≤ 50%	0	0	0	0
> 50% ≤ 100%	1	0	4	0
> 100% ≤ 650%	0	0	0	0
> 650% < 1,250%	0	0	0	0
Total	**2**	**0**	**4**	**0**

The next table provides a breakdown of the retained or acquired resecuritisation exposures in the trading book which are not assigned to the correlation trading portfolio, broken down by risk weighting band:

Table 43: Retained or acquired resecuritisation exposures in the trading book by risk weighting band

	RBA	
Risk weighting band | €m	**Position value**	**Capital requirement**
≤ 10%	0	0
> 10% ≤ 20%	0	0
> 20% ≤ 50%	20	2
> 50% ≤ 100%	0	0
> 100% ≤ 650%	0	0
> 650% < 1,250%	0	0
Total	**20**	**2**

As at 31 December 2014, the value of the securitisation exposures (including resecuritisations) to be deducted from equity capital and the capital requirement were both €7m (2013: €5m).

The next table provides a breakdown of the originated securitisation exposures in the trading book which are not assigned to the correlation trading portfolio, broken down by type of underlying asset.

Table 44: Market risk positions of securitisation exposures in the trading book

	Originator
	Traditional
€m	**Market value 31.12.2014**
Residential real estate	0
Loans to companies/SMEs	1
Commercial real estate	1
Total	**2**

Market risk

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.

Risk management

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

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

Within the Bank, various market risk committees have been established. In these, segment representatives, along with representatives from the risk function and finance area, discuss current risk positioning issues and decide on appropriate action. Chaired by the risk function, the Group Market Risk Committee, which meets monthly, deals with the Group's market risk position. Discussions centre on the monthly market risk report which is also presented to the Board of Managing Directors for their consideration. The report summarises the latest developments on financial markets, the Bank's positioning and subsequent risk ratios. The Segment Market Risk Committee, which focuses on the trading-intensive Corporates & Markets and Treasury segments, meets once a week. This committee also manages market risks arising from non-core activities (Non-Core Assets).

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

Functional risk management

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

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

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

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

Any limit breaches are dealt with in a separate escalation process. After identifying the limit breach, action is taken by the front office and risk entities to bring the relevant portfolio back within limit. If the limit breach cannot be remedied within a few days, it is escalated by the market risk function with the assistance of the next highest hierarchy level.

Regulatory risk parameters not included in the economic risk bearing capacity are limited and managed separately. These include e.g. stressed VaR and IRC.

Market risk model

Value at Risk

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

Our VaR market risk model is based on an historical simulation with a 1-year interval of historical market data. The historical simulation determines the profit and loss distribution of the current portfolio by means of revaluation using historical changes in market rates, prices and volatility. This is done on the basis of independent market data which is quality-assured on a daily basis and fed into a central market database at a standard defined time. Market data is provided for all relevant positions in our asset classes interest rates, credit spreads, equities, foreign currencies and commodities. This market data takes the form of prices quoted directly on the market or derived market data, such as yield and credit spread curves, derived using internal methods. A proxy concept is used if no market data is available for individual exposures. In this case, prices are derived from those for comparable instruments.

For internal management purposes, a confidence level of 97.5% and a holding period of 1 day are assumed. The value at risk concept makes it possible to compare risks over a variety of business areas, and to aggregate many positions, taking account of correlations between different assets. This ensures a consolidated view of the market risk at all times. A comprehensive internal limit system broken down to portfolio level is implemented and represents an important part of internal market risk management.

The VaR market risk model described above is also used to calculate regulatory required capital. This regulatory capital backing is required for trading book risks and for currency and commodity price risks in the banking book. A confidence level of 99% and a 10-day holding period are used for the regulatory capital adequacy requirement. These assumptions meet the requirements of the Basel Committee and other international standards on the management of market risk. For certain evaluations, such as back-testing and disclosure, the VaR is also calculated on the basis of a 1-day holding period. In order to provide for a consistent presentation of the risk parameters in this report, all figures relating to VaR are based on a confidence level of 99 % and a holding period of 1 day.

Stress test

As the VaR concept gives a prediction of potential losses on the assumption of normal market conditions, it is supplemented by the calculation of stress tests. These stress tests measure the risk to which Commerzbank is exposed, based on unlikely but still plausible events. These events may be simulated using extreme movements on various financial markets. The key scenarios relate to major changes in credit spreads, interest rates and yield curves, exchange rates, share prices and commodities prices. Examples of stress tests include price losses by all equities of 10%, a parallel shift in the yield curve or a change in the steepness of this curve.

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

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

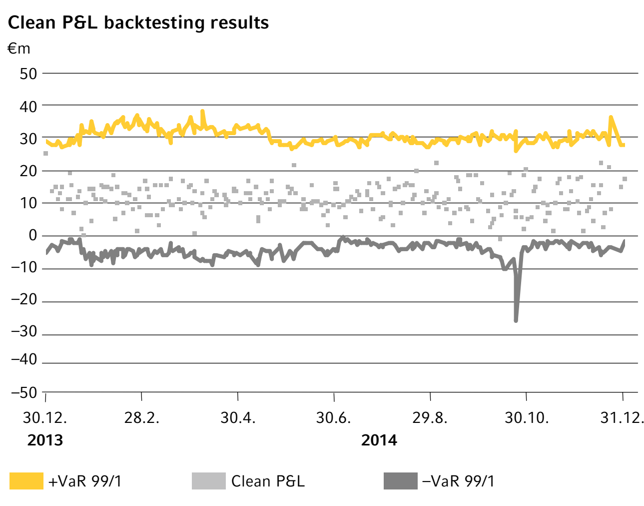
In order to manage and monitor risks, short-term scenarios are calculated daily, compared to fixed limits and reported to the Board of Managing Directors. The longer-term scenarios are calculated on a monthly basis and discussed in the respective committees.

Model validation

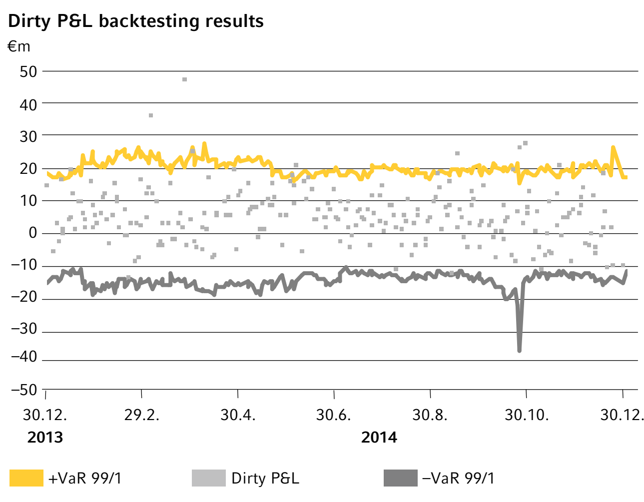
The reliability of the internal model is monitored by back-testing procedures on a daily basis, in which the VaR calculated is set against actually occurring profits and losses. The process draws a distinction between "clean P&L" and "dirty P&L" backtesting. In the former, exactly the same positions in the income statement are used as were used for calculating the VaR, so that the profits and losses result only from the price changes that occurred on the market. In dirty P&L backtesting, by contrast, profits and losses from newly-concluded and expired transactions from the day under consideration are included. If the loss thus arrived at exceeds the VaR, it is described as a negative back-testing outlier.

Analysing the results of backtesting provides guidance for checking parameters and for improving the market risk model. In 2014, we did not find any negative outliers in the clean or dirty P&L backtesting. As such, the results are in line with statistical expectations and confirm the quality of the VaR model. Backtesting is also used by the supervisory authorities for evaluating internal risk models. In this case, negative outliers are classified by means of a traffic-light system laid down by the supervisory authorities. All negative backtest outliers on group level (from both clean P&L and dirty P&L) must be reported to the supervisory authorities, citing their extent and cause.

Clean P&L backtesting results



Dirty P&L backtesting results



The individual components of the internal model are also regularly validated for their appropriateness for risk measurement. These include the underlying model assumptions and parameters and the proxies used. The validation analyses are carried out using a materiality and risk-oriented prioritisation and planning process established by the central Market Risk Model Validation Panel. In addition to the validation of key components of the economic capital model for market risk, the focus of the validation activities in 2014 was on capturing risk for correlation trading and on the portfolio-specific validation for trading book portfolios of interest rate and FX products.

All of the validations performed are reported on a quarterly basis to the Segment Market Risk Committee and the Board of Managing Directors. The identification and elimination of any model shortcomings are of particular importance. These are classified in terms of their impact on VaR and monitored using specific scenario scales. Against this background, model adjustments were implemented in 2014 that have continued to improve the accuracy of risk measurement. This was caused by changed market standards on the proper illustration of interest rate risks when recording maturity-specific basic risk and collateral-specific discounting (OIS).

Valuation of financial instruments

Valuation models must be consistent with accepted economic methodologies for pricing financial instruments. They must incorporate all factors that market participants would consider appropriate in setting a price. At Commerzbank Group, standards have been established in the form of internal controls and procedures for the independent verification and validation of all fair values. These controls and procedures are managed or coordinated by the Independent Price Verification (IPV) Group within the finance function. The models, inputs and resulting fair values are reviewed regularly by Senior Management and the risk function.

The IPV process is founded on a risk-based approach. This also takes into account internal factors such as changes in business strategy, the expansion or downsizing of business activities and external factors such as developments in markets, products and valuation models. The regular independent price testing mainly consists of analysing prices or input parameters and calculating the associated change in fair value and the P&L. Once a price is directly observable, e.g. the settlement price of a future or the stock market price of a share, the products are valued at the bid or offer side, depending on whether they are a long or a short position. However, if a valuation model for determining fair value is applied, the respective input parameters at mid-market are used, e.g. implied volatilities or dividends to value a share option, plus any possible bid-offer reserves.

The IFRS 13, which is to be applied since the financial year 2013, brings together the rules for measuring fair value. Under IFRS 13, the fair value of an asset is the amount for which it could be sold between knowledgeable, willing, independent parties in an arm's length transaction. The fair value therefore represents an exit price.

The fair value of a liability is defined as the price at which the debt could be transferred to a third party as part of an orderly transaction. The fair value of a liability also reflects the own non-performance risk.

The most suitable measure of fair value is the quoted price for an identical instrument in an active market (fair value hierarchy level I). In cases where no quoted prices are available, valuation is based on quoted prices for similar instruments in active markets. Where quoted prices are not available for identical or similar financial instruments, fair value is derived using an appropriate valuation model where the data inputs are obtained, as far as possible, from observable market sources (fair value hierarchy level II).

Most valuation methods are based on data from observable market sources. However, some valuation models use inputs for

which sufficient observable current market data is not available. These valuation methods inherently include a greater level of expert or management judgement. These unobservable inputs may include data that is extrapolated or interpolated, or may be derived by approximation to correlated or historical data. However, such inputs maximise market or third-party inputs and rely as little as possible on expert estimates or company-specific inputs (fair value hierarchy level III).

Quantitative information on market risks

Market risk in the trading book

The development of regulatory market risk ratios in the trading book portfolio is shown below. Commerzbank's trading book positions are mainly in the Corporates & Markets and Treasury business areas.

Over the course of the year, value at risk remained stable at €16m. However, the average for the year, at €15m, was lower than the previous year's figure of €21m.

Table 45: VaR of trading book portfolios (based on regulatory capital requirement)

VaR[1] | €m	2014	2013
Minimum	11	13
Average	15	21
Maximum	37	34
Year-end figure	**16**	**16**

[1] 99% confidence level, holding period 1 day, 254-day history.

The market risk profile is diversified across all asset classes. The dominant asset classes are foreign exchange risks and credit spread risks, followed by interest rate risks. To a lesser extent, value at risk is also affected by equity, commodities and inflation risk.

Further risk ratios are being calculated for regulatory capital adequacy. This includes the stressed VaR calculation, which is based on the internal model and in line with the VaR methodology described above. The main difference lies in the market data used to value the assets. In stressed VaR, the risk of the present position in the trading book is evaluated by reference to market movements from a specified crisis period in the past. The crisis observation period used for this is checked regularly through model validation and approval processes and adjusted where necessary. The last time that an adjustment was required was in the first half of 2012.

Table 46: Stressed VaR of trading book portfolios

VaR[1] | €m	2014	2013
Minimum	19	21
Average	30	33
Maximum	39	45
Year-end figure	**38**	**25**

[1] 99% confidence level, holding period 1 day, 254-day history.

In addition, the incremental risk charge and equity event VaR ratios quantify the risk of deterioration in creditworthiness and event risks in trading book positions. Equity event VaR is conceptually part of the historical simulation taking into account empirical equity events over long observation periods. It is a component in the regulatory VaR calculation and included in the values of table 45.

The incremental risk charge is based on the credit VaR model with historical data for rating migration and default probabilities and for recovery factors. The model shows current gains and losses on positions in the event of rating changes. In addition, in calculating the incremental risk charge, assumptions are made regarding liquidity (average regrouping/liquidity horizon). These liquidity horizons are set on a portfolio-specific basis, taking into account market structure and activity and concentrations of positions. The incremental risk charge as at 31 December 2014 was as follows:

Table 47: Incremental risk charge

IRC | €m	2014	2013
Minimum	132	92
Average	177	123
Maximum	241	155
Year-end figure	**158**	**142**

Table 48: Incremental risk charge by sub-portfolios

Sub-portfolio	IRC[1] €m	Average regrouping horizon months
Corporates & Markets	156	5.6
Treasury	28	12.0

[1] Excluding diversification effects between sub-portfolios.

Stressed VaR increased by €12m year-on-year to €38m, mainly as a result of exposure changes in Treasury. The incremental risk charge increased by €15m to €158m, which was mainly attributable to exposure changes in Corporates & Markets.

Market liquidity risk

In taking steps to ensure economic capital adequacy, Commerzbank also considers market liquidity risk. It is defined as the risk of the Bank not being able to liquidate or hedge risky positions in a timely manner, to the desired extent and on acceptable terms as a result of insufficient liquidity in the market. First, a realistic liquidation profile is determined for each portfolio with reference to its product and risk strategy and on the basis of a corresponding market estimate. This enables portfolios to be classified in terms of their convertibility into cash using a so-called market liquidity factor. The market liquidity factor takes into account the higher volatility of the portfolio's value based on an extended holding period for risk positions that corresponds to the portfolio's liquidation profile. The market risk of every portfolio is then evaluated based on a one-year view and weighted with the market liquidity factor.

At the end of 2014, Commerzbank earmarked €0.1bn in economic capital to cover market liquidity risk in the trading and banking book. Asset-backed securities and structured products in particular showed higher market liquidity risk.

Table 49: Market liquidity VaR

Capital requirement | €m	2014	2013
Minimum	104	174
Average	124	211
Maximum	151	257
Year-end figure	**105**	**187**

Interest rate risk in the banking book

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

Strategy and organisation

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

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

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

Management

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

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

Quantitative information on interest rate risks in the banking book

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

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

For regulatory purposes, the influence of an interest rate shock on the economic value of the banking book is simulated on a monthly basis. The applicable changes in interest rates have been specified by the supervisory authorities at +200 and -200 basis points. As at the end of 2014, the +200 basis point scenario resulted in a potential loss of €1,442m, while the -200 basis point scenario resulted in a potential gain of €751m. These figures include the exposures of Commerzbank Aktiengesellschaft and its significant subsidiaries.

Table 50: Interest rate risk in the banking book by currency

€m	2014		2013	
Interest rate shock	**−200 bp**	**+200 bp**	**−200 bp**	**+200 bp**
EUR	−140	−1,247	390	−1,360
USD	41	8	−61	−12
GBP	657	−220	227	−97
JPY	100	35	−11	−3
CHF	69	13	−11	−27
Other	25	−30	−20	11
Total	**751**	**−1,442**	**514**	**−1,488**

The potential gains and losses are primarily caused by movements in the euro yield curve. The changes in the GBP result are mainly due to hedging activities in respect of credit valuation adjustments (CVAs). Commerzbank manages its interest rate risk on the basis of total bank positions (including the trading book). This has to be kept in mind when assessing the simulation results.

Liquidity risk

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

Risk management

Strategy and organisation

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

The central Asset Liability Committee (ALCO) is responsible for limiting, analysing and monitoring liquidity risk and for strategic liquidity positioning. In this, it is supported by the Liquidity Review Forum (LRF) and the Risk function.

Functional risk management

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

Group Treasury is responsible for the Group's liquidity management operations. Group Treasury is represented in all major locations of the Group in Germany and abroad and has reporting lines into all subsidiaries. Additional information on this subject can be found in the section "Funding and Liquidity of Commerzbank Group" in the Group Management Report. Liquidity risk is monitored on the basis of the Bank's own liquidity risk model by the independent risk function.

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

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

In the event of a liquidity crisis, the emergency plan provides for various measures for different types of crisis that can be launched by the central ALCO. The emergency plan forms an integral part of Commerzbank's recovery plan and is updated annually. It enables a clear allocation of responsibility for the processes to be followed in emergency situations as well as the adequate definition of any action that may need to be taken.

The Bank is looking closely at the central issues arising from regulatory issues, the offsetting of liquidity costs and the management of liquidity risk. In strategic projects we are constantly monitoring the further development of the management tools. In this connection, the range of analysis options available in liquidity risk reporting is being continually expanded.

Information on the encumbrance of assets pursuant to Article 443 CRR can be found in the Annual Report 2014.

Liquidity risk model

In 2014, Commerzbank revised its liquidity risk framework, adapting it to current business and regulatory conditions. Important features of this include the new methodology and parameterisation of the liquidity risk modelling, taking into account regulatory requirements and adjusted limits. The combination of modelling and limits results in the quantitative structuring of our liquidity risk tolerance, which is in line with the overall risk strategy.

The key element of this method is the newly implemented liquidity gap profile. The objective of the liquidity gap profile is the representation of future expected deterministic or stochastic cash in- and outflows as per reporting date and across all portfolios. On this basis liquidity needs or surplus for each spectrum of maturities are determined.

This also comprises the modelling of permanently available parts of customers' deposits, so-called deposit base. The thereof derived issue strategy of the Group is implemented by Group Treasury. Group Finance is responsible for the determination and allocation of liquidity costs, which will be taken into account in the Bank's business management activities.

The liquidity gap profile is shown for the whole of the modelling horizon across the full spectrum of maturities. Thereby the liquidity gap profile follows a multi-level concept. The levels 1 to 5 include deterministic and modelled cash flows of existing business while planned new business is considered in the calculus on levels 6 and 7. Limitation occurs on level 5. The processes of producing and analysing the liquidity gap profile have been significantly improved by redesigning the IT infrastructure. In addition, the management of the regulatory liquidity coverage ratio (LCR) has been integrated into the liquidity risk model. Based on the new methodology of the liquidity gap profile, management mechanisms such as recovery and early warning indicators have been adjusted and supplemented.

Furthermore, hard limits are defined for the time horizon of up to one year, although for time horizons of over a year there are review triggers to limit the liquidity risk in line with our funding capacity. The Group limits are broken down into individual currencies and Group units.

Stress tests

Commerzbank carries out stress tests on an ongoing basis. The parameterisation of the stress scenario is derived from the risk tolerance that is determined in accordance with the overall risk strategy and updated as required. We draw a distinction between bank-specific, general stress scenarios on the one hand and, on the other, scenario combinations that map all relevant projection periods. The aim is to prevent potential liquidity bottlenecks, even under difficult market conditions.

The main liquidity risk drivers underlying the stress scenario are a markedly increased outflow of short-term customer deposits, above-average drawdown of credit lines, extensions of lending business regarded as commercially necessary, the need to provide additional collateral for secured transactions and the application of higher risk discounts to the liquidation values of assets.

The internal liquidity risk model is complemented by the regular analysis of additional inverse stress scenarios. As part of the survival period scenario under MaRisk, an acute collapse of the interbank and capital market in particular is simulated over several days, followed by a further stress phase of up to one month with a moderate recovery in the short-term money market.

These stress scenarios that are relevant for management are also supplemented by additional reverse and adverse scenario analyses which exceed the defined risk tolerance. Reverse stress tests are carried out to establish which events could threaten the survival of the institution. The emphasis here is on "critical reflec-

tion" on the events in question. An adverse scenario portrays a severe deterioration in individual parameters which would not, however, necessarily place the bank's survival under threat.

Operational risk

Based on the Capital Requirements Regulation (CRR), Commerzbank defines operational risk (OpRisk) as the risk of loss resulting from the inadequacy or failure of internal processes, people and systems or from external events. This definition includes legal risks; it does not cover reputational or strategic risks.

Risk management

Strategy and organisation

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

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

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

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

The segments and the management and service units form the first line of defence. They have direct responsibility for identifying and managing operational risk in their areas of responsibility and provide effective and prompt risk management.

The OpRisk & ICS area as the second line of defence provides uniform and binding methods and systems to the Bank's units to help to identify, evaluate and monitor operational risk. These are used throughout the Group, supplemented by tools and regulations of other monitoring functions and used to mitigate operational risk.

Internal and external control bodies, such as the internal auditors, are the third line of defence. They are entrusted with the independent auditing of OpRisk and ICS methodologies and their implementation at Commerzbank.

Functional risk management

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

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

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

OpRisk management includes an annual evaluation of the Bank's ICS and of the risk scenario assessments and OpRisk loss events are subjected to ongoing analysis and to backtesting in the ICS if necessary. Where loss events involve ≥ €1m, lessons learned activities are carried out. External OpRisk events at competitors are also systematically evaluated.

A structured, centralised and decentralised reporting system ensures that the management of the Bank and its segments, members of the OpRisk Committees and the supervisory bodies are informed regularly, promptly and fully about operational risk. OpRisk reports are prepared on a monthly and quarterly basis and form part of the risk reporting process to the Board of Managing Directors and to the Risk Committee of the Supervisory Board. They contain the latest risk assessments of the segments, their main loss events, current risk analyses, changes in the capital requirement and the status of measures implemented.

OpRisk-Model

Commerzbank measures regulatory and economic capital for operational risk using the advanced measurement approach (AMA), which is based on quantitative and qualitative methods. The capital charge determined using quantitative methods is supplemented by qualitative components, in line with the requirements of CRR. The AMA is applied throughout the group. The capital of a subsidiary not included in the AMA is calculated using the outside-AMA.

Quantitative components

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

Group-wide internal OpRisk loss data in line with regulatory requirements is collected from a starting threshold of €5,000 in a Group-wide loss database. As the internally calculated loss data history cannot always reflect extreme OpRisk events adequately, additional external OpRisk events must be factored into the AMA model. For this purpose we use relevant external data from the Operational Riskdata eXchange Association, Zurich (ORX), a data consortium of international banks. For mathematical/statistical modelling, the data is grouped by combinations of business line, event type and region. Loss frequency is modelled on the basis of internal loss data, while distribution is modelled on the basis of internal and external loss data.

A modelling of insurance and alternative OpRisk transfers does not currently take place.

Qualitative components

Qualitative methods (the risk scenario assessment and the business environment and control system) are used to complement the information from the quantitative model components. They aim to establish a uniform qualitative assessment of processes across the entire Group.

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

The business environment and control (BEC) system provides incentives to reduce operational risk and to improve risk management. The impact of business environment and internal control factors on regulatory and economic OpRisk capital is shown in the OpRisk model in the form of capital premiums and discounts. The BEC system takes into account the following qualitative OpRisk elements:

- Internal control system (ICS): As part of the annual ICS review, the company-wide ICS control mechanism is evaluated in terms of its functionality. To ensure that the internal control system factors are properly represented, the ICS as a BEC subject area consists of three components: ICS self-assessment (assessment by the units implementing the controls), ICS testing (independent review by internal audit) and ICS documentation (modelling status in the Bank's process model).
- Human resources risk: The human resources risk report prepared by the Group Human Resources division takes into account current areas of human resources activity and presents risk information on the basis of set criteria.
- IT risk: The IT risk report prepared by the Group Services division brings together data relating to IT risk in the areas of IT changes and incidents, IT security and access management. The data cover the four IT security targets: confidentiality, integrity, availability and transparency.
- Key risk indicators (KRIs): KRIs are used to manage operational risk by means of early warning signals.
- OpRisk management: The OpRisk & ICS area evaluates the active OpRisk management of all units on the basis of a uniform list of criteria. In addition, information on the resolving status of audit findings are included in the BEC system.
- Top-level adjustments (TLAs): TLAs are only used in well-founded exceptional cases in order to establish a risk buffer for extraordinary changes in the OpRisk environment and to include it in the OpRisk capital calculation at short notice. Currently no TLAs are applied.

Stress testing and validation

As an integral part of risk management and the risk-bearing capacity concept, stress tests for operational risk are carried out on a regular basis. As a basis for the stress method, the AMA model is consistently used to determine the capital requirement, with suitable increases in the relevant influencing factors (such as rising losses).

To ensure that the AMA model remains appropriate, the measurement approach is validated on a regular basis. The validation covers both quantitative and qualitative components, as well as their interaction. Individual adjustments were identified during the year and reported to the supervisory authority, which approved them. The regular validation of all AMA components, which took place in the fourth quarter of 2014, confirmed the appropriateness of the model. No need for significant or material additions or changes was identified.

Other risks

In addition to those risks explicitly defined in the CRR, further risk types are also systematically and actively managed within Commerzbank Group. For details on other risks please refer to the Annual Report 2014.

Appendix

Consolidation matrix and material Group entities

While the Commerzbank Group's Annual Report is based on the group of consolidated entities under IFRS definitions, the information in this Disclosure Report relates to the entities consolidated for regulatory purposes.

Subsidiaries or controlled companies for the purposes of IFRS accounting that are not in the financial sector are not consolidated for regulatory purposes. They are, however, consolidated in the Group financial statements under IFRS.

The consolidation matrix (see following table 51) shows the regulatory consolidation categories for the various companies in Commerzbank Group. The material companies included in this Disclosure Report are shown individually in the upper part of the matrix.

The immaterial companies which are of lesser financial significance in accordance with the definition of materiality are shown in the lower part of the matrix.

The classification of the companies is based on section 1 KWG, supplemented by insurance companies and capital investment companies. The Commerzbank Group's investments that are not consolidated for regulatory purposes are not shown.

The Bank's classification includes both universal banks and specialist banks. Financial services institutions include investment companies, holding companies and other financial companies.

The special purpose vehicles that are deemed to be controlled by Commerzbank Aktiengesellschaft under the criteria of IFRS 10 are mainly securitisation vehicles and special funds consolidated under IFRS. 127 special purpose vehicles were consolidated under IFRS at the reporting date; there is currently no requirement to consolidate these vehicles for regulatory purposes.

Material companies of the Commerzbank Group are listed by name in the Company column in the consolidation matrix. The number of subsidiaries as well as investments of material companies which are relevant for regulatory purposes is shown, broken down into segments, by consolidation type in the Consolidation column. There are two types of consolidation for regulatory purposes: full and pro rata. Full consolidation is applied to subsidiaries and pro rata consolidation for qualified minority interests.

To avoid the deduction for investments pursuant to section 10.6 KWG, equity investments in institutions and financial companies may also be voluntarily consolidated on a pro rata basis.

The material entities in the Group – besides Commerzbank Aktiengesellschaft – are the following:

- mBank S.A. was created in 2013 from the merger of BRE Bank, mBank and MultiBank as a modern bank operating in the Direct Banking area. As such, it serves customers in retail, corporate and investment banking in Poland, and in retail banking in the Czech Republic and Slovakia. At the end of 2014, mBank was the fourth-largest bank in Poland according to balance sheet size. The mBank Group includes mBank Hipoteczny S.A. (the leading mortgage bank in Poland).
- comdirect bank AG, a comdirect Group company, is a direct bank and the market leader among Germany's online brokers. comdirect bank AG is a full-service bank and offers all services from one source.
- Commerz Real AG is a provider of leasing and investment solutions, managing assets of €32bn.
- Erste Europäische Pfandbrief- und Kommunalkreditbank AG in Luxembourg (EEPK) is a specialist bank concentrating on public finance. As at 1 September 2014 it was merged with and into Hypothekenbank Frankfurt International S.A. (HFI). Since then HFI operates under the name EEPK.
- Hypothekenbank Frankfurt AG is a specialist bank concentrating on real estate and public finance.

Risk-weighted investments shown in table 52 below are investments that are consolidated under IFRS but not for regulatory purposes. They are allocated to the equity investments asset class under the CRR and are treated like any other investment position in this asset class.

Information on the group consolidation of Commerzbank Aktiengesellschaft is set out in the notes to the Annual Report (online version; Note 104: Ownership interests).

Table 51: Consolidation matrix

Company	Classification according to KWG	No.	Consolidation
Material companies			
Commerzbank AG	Provider of secondary services	14	full
	Financial services institutions	4	full
	Financial companies	30	deduction
		44	full
	Capital investment companies	2	full
	Banks	8	deduction
		1	pro rata
		4	full
	Special purpose vehicles	127	–
comdirect bank AG	Banks	2	full
Commerz Real AG	Financial services institutions	3	deduction
		5	full
	Financial companies	190	deduction
		16	full
	Capital investment companies	2	full
Erste Europäische Pfandbrief- und Kommunalkreditbank AG	Banks	1	full
Hypothekenbank Frankfurt AG	Provider of secondary services	1	full
	Financial companies	10	deduction
		3	full
	Banks	1	full
mBank S.A.	Provider of secondary services	1	full
	Financial services institutions	1	deduction
		3	full
	Financial companies	7	deduction
		3	full
	Banks	2	full
	Insurance companies	2	deduction
Immaterial companies			
	Provider of secondary services	1	pro rata
		9	full
	Financial services institutions	1	full
	Financial companies	16	deduction
		28	full
	Capital investment companies	3	full

Table 52: Investments consolidated under IFRS

Classification according to KWG	No.	Consolidation under IFRS
Provider of secondary services	4	full
Capital investment companies	1	at equity
Other companies	6	at equity
	84	full

Table 53: Addition to table 1 (Equity structure):

B: Reference to article in EU regulation no. 575/2013

Line	B: Reference to article in the directive (EU) Nr. 575/2013
1	26 (1), 27, 28, 29, EBA list 26 (3)
1a	EBA list 26 (3)
1b	EBA list 26 (3)
1c	EBA list 26 (3)
2	26 (1) (c)
3	26 (1)
3a	26 (1) (f)
4	486 (2)
4a	483 (2)
5	84, 479, 480
5a	26 (2)
6	
7	34, 105
8	36 (1) (b), 37, 472 (4)
9	
10	36 (1) (c), 37, 472 (4)
11	33 (a)
12	36 (1) (d), 40, 159, 472 (6)
13	32 (1)
14	33 (b)
15	36 (1) (e), 41, 472 (7)
16	36 (1) (f), 42, 472 (8)
17	36 (1) (g), 44, 472 (9)
18	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)
19	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79, 470, 471 (11)
20	
20a	36 (1) (k)
20b	36 (1) (k) (i), 89 to 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), 470, 472 (5)
22	48 (1)
23	36 (1) (i), 48 (1) (b), 470, 472 (11)
24	
25	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)
25a	36 (1) (a), 472 (2)
25b	36 (1) (l)
26	
26a	
26a.1	467
26a.2	468
26b	481
27	36 (1) (j)
28	
29	
30	51, 52
31	
32	
33	486 (3)
33a	486 (3)
34	85, 86, 480
35	486 (3)
36	
37	52 (1) (b), 56 (a), 57, 475 (2)
38	56 (b), 58, 475 (3)
39	56 (c), 59, 60, 79, 475 (4)
40	56 (d), 59, 79, 475 (4)
41	
41a	472, 472 (3)(a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)
41a.1	472 (3)(a)
41a.2	472 (4)
41a.3	472 (6)
41a.4	472 (8)(a)
41a.5	472(9)
41a.6	472(10)
41.7	472(11)
41b	477, 477 (3), 477 (4) (a)
41c	467, 468, 481
41c.1	467
41c.2	468
41c.3	481
42	56 (e)
43	
44	
45	
46	62, 63
47	486 (4)
47a	483 (4)
48	87, 87, 480
49	486 (4)
50	62 (c) & (d)
51	
52	63 (b) (i), 66 (a), 67, 477 (2)
53	66 (b), 68, 477 (3)
54	66 (c), 69, 70, 79, 477 (4)
55	66 (d), 69, 79, 477 (4)
56	
56a	472, 472 (3)(a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)
56b	475, 475 (2) (a), 475 (3), 475 (4) (a)
56c	467, 468, 481
56c.1	467
56c.2	468
57	
58	

Line	B: Reference to article in the directive (EU) Nr. 575/2013
59	
59a	
59a.1	472, 472 (5), 472 (8) (b), 472 (10) (b), 472 (11) (b)
59a.2	472, 475 (2) (b), 475 (2) (c), 475 (4) (b)
59a.3	477, 477 (2) (b), 477 (2) (c), 477 (4) (b)
60	
61	92 (2) (a), 465
62	92 (2) (b), 465
63	92 (2) (c)
64	CRD 128, 129, 130
65	
66	
67	
67a	CRD 131
68	CRD 128
69	
70	
71	

Line	B: Reference to article in the directive (EU) Nr. 575/2013
72	36 (1) (h), 45, 46, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)
73	36 (1) (i), 45, 48, 470, 472 (11)
74	
75	36 (1) (c), 38, 48, 470, 472 (5)
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)

Table 54: Credit risk parameters by geographical location

	in %	Belgium	China	Germany	France	UK	Hong-kong	Italy	Japan	Luxem-bourg	Nether-lands
Central governments or central banks	LGD	20.91	6.84	15.21	30.00	66.43	13.85	40.00	21.26	20.44	
	PD	0.14	0.08	0.67	1.60	0.07	0.05	0.59	0.22	0.15	
Institutions	LGD	36.82	40.70	33.64	32.70	53.11	58.69	46.46	42.43	42.19	46.64
	PD	0.22	0.46	0.19	0.16	0.16	0.18	1.51	0.11	0.06	0.14
Corporates	LGD	40.33	38.07	35.53	37.72	44.80	33.74	34.10	17.56	32.50	38.24
	PD	1.68	0.82	8.75	4.95	5.51	2.58	11.84	0.98	18.31	14.50
thereof specialised lending	LGD	40.29	27.60	31.54	29.40	40.43	23.54	28.20		34.98	28.40
	PD	10.80	26.05	25.95	14.52	12.04	11.59	22.18		39.26	46.28
thereof SMEs	LGD	40.88	43.78	33.30	42.22	54.19	43.51	81.65	36.40	27.62	21.27
	PD	0.24	0.36	6.17	0.45	2.12	1.78	60.39	100.00	3.10	11.46
Retail	LGD	26.27	36.37	26.87	31.37	10.04	33.25	25.27	33.12	23.74	24.74
	PD	4.30	0.83	2.09	2.16	1.01	1.34	1.24	4.52	4.53	1.40
Secured by mortg. on immov. property, SMEs	LGD			15.84							14.03
	PD			1.33							0.79
Secured by mortg. on immov. property, excluding SMEs	LGD	21.47	29.61	21.60	19.79		27.40	21.43	35.85	24.73	21.70
	PD	4.61	0.29	1.47	2.64		0.42	1.09	8.62	5.59	1.18
Qualifying revolving	LGD	59.58	58.31	59.75	59.66	58.85	59.09	59.33	59.09	58.73	59.16
	PD	0.39	0.49	0.57	0.52	1.89	0.14	0.50	3.48	0.46	1.95
Other, SMEs	LGD	41.51	42.46	36.30	42.21	32.56	41.61	36.18	16.54	33.01	31.88
	PD	1.17	1.58	5.00	0.99	3.09	0.70	1.23	0.58	0.75	1.78
Other, excluding SMEs	LGD	23.00	28.44	22.84	34.12	21.73	27.35	14.00	25.10	15.87	20.50
	PD	5.71	0.54	3.04	2.23	3.15	9.05	1.85	2.34	3.41	1.87
Total	**LGD**	**38.92**	**28.24**	**31.21**	**35.59**	**47.51**	**29.73**	**37.36**	**25.95**	**33.30**	**40.43**
	PD	**1.32**	**0.42**	**4.97**	**2.95**	**3.64**	**0.89**	**8.35**	**0.46**	**15.60**	**10.22**

Table 54 continued: Credit risk parameters by geographical location

	in %	Austria	Poland	Switzer-land	Singa-pore	Slova-kia	Spain	Czech Republic	Hungary	Unit. Arab Emirates	USA
Central governments or central banks	LGD	15.33	21.35	14.75	13.26		45.00	12.94	17.17	17.85	10.00
	PD	0.06	0.14	0.04	0.02		1.76	0.08	0.28	0.16	
Institutions	LGD	41.85	41.52	42.79	45.27	42.09	23.42	41.46	39.42	54.65	26.65
	PD	0.23	0.55	0.25	0.13	0.44	1.37	0.21	1.90	0.36	5.26
Corporates	LGD	37.58	37.96	36.99	38.27	37.39	44.42	38.48	40.88	37.17	35.63
	PD	2.48	5.13	0.62	2.17	13.30	7.56	6.34	2.37	7.06	5.84
thereof specialised lending	LGD	19.02	10.09	6.64	15.99	29.99	44.06	36.58	39.13		44.52
	PD	7.17	0.56	2.96	17.67	54.95	3.98	4.20	2.58		22.86
thereof SMEs	LGD	44.67	43.97	26.31	38.99	13.41	68.71	46.20	43.78	45.09	42.25
	PD	0.82	7.64	0.47	0.35	0.40	33.44	35.74	0.46	1.46	0.42
Retail	LGD	28.10	36.81	27.00	27.85	34.81	30.20	37.00	36.00	23.61	26.67
	PD	1.74	8.06	2.68	0.36	2.56	4.42	5.72	4.92	2.72	1.97
Secured by mortg. on immov. property, SMEs	LGD			14.14			14.57	25.78		1.50	
	PD			0.78			0.74	3.06		0.03	
Secured by mortg. on immov. property, excluding SMEs	LGD	20.69	28.96	24.44	25.01	18.33	16.54	12.08	28.80	23.61	21.80
	PD	1.36	6.35	1.64	0.29	0.09	1.30	2.98	10.48	0.94	1.56
Qualifying revolving	LGD	58.49	60.28	59.06	57.93	61.06	59.67	60.04	60.24	58.08	59.66
	PD	2.28	0.65	1.30	0.14	0.37	0.36	0.37	0.42	0.71	0.47
Other, SMEs	LGD	42.10	52.76	41.46	32.48	36.46	38.34	37.84	42.30	40.01	45.09
	PD	4.02	14.31	1.90	0.67	3.06	3.51	6.10	0.60	19.66	4.54
Other, excluding SMEs	LGD	27.18	53.10	24.42	22.69	37.43	20.99	21.40	26.80	13.52	23.92
	PD	1.61	10.12	5.42	0.28	0.16	11.23	7.34	2.22	6.67	2.78
Total	**LGD**	**40.21**	**39.05**	**34.15**	**29.69**	**37.35**	**29.94**	**32.08**	**30.70**	**35.30**	**28.87**
	PD	**0.99**	**6.83**	**0.53**	**1.35**	**13.05**	**3.27**	**4.64**	**1.46**	**0.73**	**4.76**

Table 55: Average assessment basis in the period under review by asset class

Asset class | €m	31.03.2014	30.06.2014	30.09.2014	31.12.2014	Average 2014
SACR					
Central governments or central banks	56,520	57,750	52,096	39,410	**51,444**
Regional or local authorities	15,653	16,034	19,048	37,057	**21,948**
Public-sector bodies	14,886	16,538	15,909	13,704	**15,259**
Multilateral development banks	31	32	31	342	**109**
International organisations	1,557	1,157	364	522	**900**
Institutions	14,789	22,239	13,070	8,969	**14,767**
Corporates	19,031	20,831	17,915	19,059	**19,209**
thereof SMEs	594	567	673	617	**613**
Retail	7,254	7,409	7,492	4,712	**6,717**
thereof SMEs	1,143	1,128	1,172	485	**982**
Secured by mortgage on immovable property	1,870	1,656	1,562	1,633	**1,680**
thereof SMEs	158	62	62	73	**88**
Defaulted positions	1,441	1,290	1,337	991	**1,265**
Particularly high risk positions	0	0	115	614	**182**
Covered debt instruments	134	133	134	135	**134**
Investment funds	5,015	7,418	7,900	8,975	**7,327**
Other items	1,827	1,824	2,676	2,565	**2,223**
Total SACR	**140,008**	**154,310**	**139,649**	**138,687**	**143,164**
IRBA					
Central governments or central banks	17,579	15,723	12,383	11,824	**14,377**
Institutions	75,130	78,371	76,164	74,429	**76,024**
Corporates	178,026	181,450	208,500	211,375	**194,838**
thereof specialised lending	24,130	24,344	44,815	41,360	**33,662**
thereof SMEs	15,217	14,951	15,063	15,789	**15,255**
Retail	88,028	89,507	97,692	101,530	**94,189**
Secured by mortgage on immovable property	36,961	51,144	52,774	53,864	**48,686**
thereof SMEs	1,423	1,562	1,564	1,607	**1,539**
Qualifying revolving	11,521	11,556	11,602	11,588	**11,567**
Other	39,546	26,808	33,316	36,078	**33,937**
thereof SMEs	12,056	12,163	12,212	13,137	**12,392**
Other loan-independent assets	1,518	2,144	1,665	1,931	**1,815**
Total IRBA	**360,280**	**367,196**	**396,405**	**401,089**	**381,243**
Total 2014	**500,289**	**521,506**	**536,054**	**539,777**	**524,406**

Risk reporting overview

The risk reporting structure as at 31 December 2014 as implemented in the Annual Report, the Disclosure Report and further publications is illustrated in the following table:

Table 56: Risk reporting overview

Topic	Detail	Disclosure report Page	Annual Report Page	Further publications
Equity capital	Capital structure	5–9	268	
	Equity instruments		233–234	Commerzbank homepage
	Capital requirements	10–13	267–271	
Risk-oriented overall bank management	Risk statement	14		
	Risk management organisation	15	110–111	
	Risk strategy and risk management	15–16	111–112	
	Risk parameters		112–113	
	Risk-bearing capacity and stress testing	17–18	113–114	
	Regulatory environment		114–115	
Default risk	Strategy and organisation	18–19	116	
	Risk management	19	116–120	
	Credit risk model	19–26		
	Rating architecture	20–22	119	
	Quantitative information on default risks	26–40	120–132	
	Analysis by segment		123–129	
	Analysis by regulatory approach (IRBA/SACR)	26–37		
	Default risks from derivative positions	38–40		
	Loan loss provisions for default risks	40–44	121–129	
	Investments in the banking book	45–46	208–211	
	Securitisations	47–56	130–131	
Market risk	Strategy and organisation	56–57	133	
	Risk management	57	133–134	
	Market risk model	57–60		
	Quantitative information on market risks	60–61	134–136	
	Interest rate risk in the banking book	61	135–136	
	Market liquidity risk	61	136	
Liquidity risk	Strategy and organisation	62	137	
	Risk management	62	137	
	Quantification and stress testing		137–138	
	Liquidity risk model	63–64		
	Asset encumbrance		335–336	
Operational risk	Strategy and organisation	64	139	
	Risk management	64–65	139–140	
	OpRisk model	65–66		
Other	Legal risk		140–141	
	Reputational risk		141–142	
	Compliance risk		142	
	IT risk		142–143	
	Human resources risk		143	
	Business strategy risk		143–144	
	Model risk		144	
	Corporate governance report		27–30	Commerzbank homepage
	Remuneration		31–47	Commerzbank homepage
	Indicators of systemic importance			Commerzbank homepage

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List of abbreviations

ABCP	Asset-backed Commercial Paper
ABS	Asset-backed Securities
AfS	Available for Sale
ALCO	Asset Liability Committee
AMA	Advanced Measurement Approach
AUC	Area under the curve
BaFin	Federal Financial Supervisory Authority
BEC	Business Environment and Control System
CCF	Credit Conversion Factor
CMBS	Commercial Mortgage-backed Securities
CP	Commercial Paper
CRMT	Credit Risk Mitigation Techniques
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COREP	Common solvency ratio reporting
CRD	Capital Requirements Directive
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
CVaR	Credit Value at Risk
EaD	Exposure at Default
EBA	European Banking Authority
ECB	European Central Bank
EDTF	Enhanced Disclosure Task Force
EEPK	Erste Europäische Pfandbrief- und Kommunalkreditbank AG in Luxemburg, Luxemburg
EL	Expected Loss
ErC	Economically required Capital
FINREP	Financial reporting
GLLP	General Loan Loss Provisions
G-SII	Global Systemically Important Institution
HGB	German Commercial Code
IAA	Internal Assessment Approach
IAS	International Accounting Standards
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Internal control system
IFRS	International Financial Reporting Standards
IMM	Internal model method
IPV	Independent Price Verification
IRBA	Internal Ratings Based Approach
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
ISIN	International Securities Identification Number
ITS	Implementing Technical Standards
KRI	Key Risk Indicators
KWG	German Banking Act
LaD	Loss at Default
LaR	Loans and Receivables
LGD	Loss Given Default
LIP	Loss Identification Period
LTA	Look-through Approach
MaRisk	Minimum Requirements for Risk Management
NBFI	Non-Bank Financial Institution
NCA	Non-Core Assets
NI	Non impaired
OIS	Overnight Index Swap
OpRisk	Operational Risk
ORX	Operational Riskdata eXchange Association, Zurich
O-SII	Other Systemically Important Institution
P&L	Profit & Loss
PD	Probability of Default
PI	Portfolio Impaired
RBA	Ratings Based Approach
RBC ratio	Risk-bearing capacity ratio
RMBS	Residential Mortgage-backed Securities
RTS	Regulatory Technical Standards
RW	Risk weight
RWA	Risk Weighted Assets
SACR	Standardised Approach to Credit Risk
SCRA	Specific Credit Risk Adjustment
SFA	Supervisory Formula Approach
SLLP	Specific Loan Loss Provisions
SMEs	Small and medium-sized enterprises
SolvV	German Solvency Regulation
SPV	Special Purpose Vehicles
TLA	Top Level Adjustment
VaR	Value at Risk

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 and internal audit, external auditors 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. Also some of the related binding Technical Standards are not yet available in their final version. Against this background we will continue to refine our methods and models in line with the interpretation of the rules. Thus, our measures may not be comparable with previously published measures and our competitors' measures published may differ from ours.

This report contains forward-looking statements on Commerzbank's business and earnings performance, which are based upon our current plans, estimates, forecasts and expectations. The statements entail risks and uncertainties, as there is a variety of factors which influence our business and to a great extent lie beyond our sphere of influence. Above all, these include the economic situation, the state of the financial markets worldwide and possible loan losses. Actual results and developments may, therefore, diverge considerably from our current assumptions, which, for this reason, are valid only at the time of publication. We undertake no obligation to revise our forward-looking statements in the light of either new information or unexpected events.

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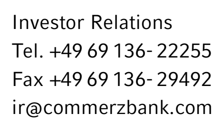

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