

# Disclosure Report 2008

Disclosure according to the German Solvency Regulation (Solvabilitätsverordnung) as of December 31, 2008

# Contents

03	A. Introduction
03	I. Introduction
03	1. Commerzbank Group
03	2. Objectives of the disclosure report
04	II. Implementation of Basel II
05	III. Scope
09	B. Equity capital
09	I. Capital structure
12	II. Capital adequacy requirements
16	C. Risk management process
16	I. Risk strategy
16	II. Risk management organisation
17	III. Risk-taking capability
18	D. Specific risk management
18	I. Credit risk
18	1. Credit risk strategy
18	2. Risk quantification
26	3. Risk Management
30	4. Summary of default risks as of December 31, 2008
32	5. Intensive care/Charges against earnings arising from impairments
36	6. Default risks arising from derivative positions in the Commerzbank Group
39	7. Investments in the banking book
40	8. Securitizations
47	II. Market risk
47	1. Market risk strategy and organization
47	2. Quantification
49	3. Management
49	4. Interest rate risk in the banking book
50	5. Liquidity risk
53	III. Operational risk (OpRisk)
53	1. OpRisk strategy and organization
54	2. Quantification
55	3. Management
56	IV. Other risks
57	List of abbreviations

# A. Introduction

Equity capital

#### I. Introduction

## 1. Commerzbank Group

Commerzbank Aktiengesellschaft is the parent company of a group providing financial services around the world. As a major integrated bank, it is one of Europe's leading financial institutions and the second-largest in Germany. Since its acquisition of Dresdner Bank in January 2009, Commerzbank has grown to become Germany's leading bank for private and corporate customers. Today, the new Commerzbank serves a total of over 14 million private and corporate customers. Commerzbank is an experienced service provider for private and business customers as well as small and mid-sized companies, while also serving numerous large and multinational corporate customers. It aims to be the bank of choice for its key target groups. With some 1,200 branches, the new bank will have the densest branch network of any German bank, and Commerzbank customers will continue to benefit from an increasingly broad and attractive range of products and advisory services. What's more, Commerzbank's clear commitment to the German market makes it an even stronger long-term partner that unites the expertise and know-how of the two predecessor institutions under one roof.

The major domestic subsidiaries of the Commerzbank Group are Eurohypo, comdirect bank and Commerz Real.<sup>1</sup> Outside of Germany the Bank has 25 foreign branches, 28 representative offices and ten significant subsidiaries<sup>2</sup> in 46 countries. The focus of its international activities lies in Europe. The total number of employees in the Group as at the end of 2008 stood at 43,169<sup>3</sup>).

For a more detailed explanation of the Commerzbank Group please refer to the 2008 Annual Report.

# 2. Objectives of the disclosure report

As the parent company of the regulated banking group pursuant to section 10a.1.1 of the German Banking Act (KWG), Commerzbank Aktiengesellschaft is for the first time meeting the disclosure requirements pursuant to section 26a.1 KWG in conjunction with sections 319 to 337 of the German Solvency Regulation (SolvV) as at the reporting date of December 31, 2008.

This report is intended to enable the reader to gain a comprehensive insight into Commerzbank's risk management and current risk profile and, for example, make investment decisions on the basis of this information. In particular, it contains information on:

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

<sup>1</sup> cominvest Asset Management GmbH was formerly another significant subsidiary. It was sold as part of the Dresdner Bank takeover in January 2009. Dresdner Bank was itself a new significant subsidiary until its merger into Commerzbank in May 2009 2 Until the end of 2008 this number was eleven including cominvest Asset Management S.A.

<sup>3</sup> Headcount: including local employees in representative offices, as well as cleaning and kitchen staff, excluding employees on maternity or long-term medical leave.

The report may also be seen as complementary to the annual report, which is primarily designed to meet accounting standards, while this disclosure report focuses on the supervisory perspective.

# II. Implementation of Basel II

#### **Basel II implementation**

Commerzbank has reported its capital position under the new Basel II capital adequacy regulations since January 1, 2008. The first official calculation of the capital adequacy requirement as at March 31, 2008 showed the expected reduction of over 10% in the capital requirement, in spite of the first-time application of the capital adequacy requirement for operational risk. This was confirmation that the quality of our credit portfolios has to date been sound.

For Commerzbank the primary function of internal rating and control procedures is not the compliance with regulatory requirements for certification under the advanced Basel II approach. Rather, these procedures are at the heart of the Bank's credit portfolio management, irrespective of the method of capital adequacy reporting to the regulator. For this reason, in addition to the approval of large parts of our portfolio for IRBA for the first time in 2008, previously approved procedures were revised and improved further. The main aim of these refinements was to achieve more accurate risk forecasts and improve management measures.

One example of this was the upgrading of our overall ratings architecture for corporates. As a result, our new corporates rating system, in place since January 2009, has created a single modular ratings procedure to replace four separate ones for different sizes of corporate customers. The advantages include comparable and consistent valuations irrespective of size, where ratings do not jump because the size of our corporate customers has changed. Apart from improving the discriminatory power of the ratings, a range of internal and external early-warning indicators have also been implemented. Additionally, our LGD models have been refined in favour of stochastic modelling, rather than a deterministic approach based on collateral realisation rates. This takes account of the fluctuations in recoveries in different markets and generates recovery rates for a range of collateral cover levels. As a result there is an incentive to take collateral even where cover exceeds the average recovery rate.

Commerzbank constantly carries out refinements to increase portfolio coverage through modern assessment procedures. We also use improvements in academic research and historic data series to optimize our risk architecture.

#### Capital management under Basel II

The Solvency Regulation (SolvV), which transposed the Basel II Framework into national law, entered into force on January 1, 2007. The Commerzbank Group has opted for the advanced internal ratings based approach (AIRBA). Pursuant to section 338.5 SolvV, it has only been possible to use this for regulatory purposes since January 1, 2008. Pursuant to the transition rule (section 339.10 SolvV), we calculated regulatory capital in 2007 in accordance with Principle I.

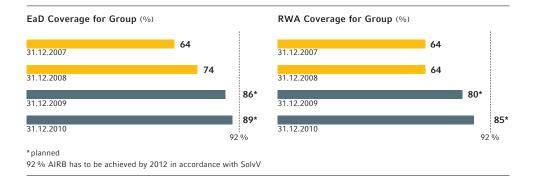
The Solvency Regulation is based on three pillars:

- The first pillar covers the minimum capital adequacy requirements for credit, market and operational risk.
- The second pillar concerns the supervisory review of capital adequacy and risk management.
- · The third pillar stipulates the disclosure requirements in the form of extended trans-

Equity capital

parency rules.

The new Pillar 1 provisions implemented in Germany in the Solvency Regulation include allowing statistical forecast models to be applied to calculating the capital adequacy requirement.



On the balance sheet date, Commerzbank reported three-quarters of its credit portfolio using the Advanced Internal Rating Based (AIRB) procedure and had received the relevant authorization from the supervisory authorities. This means that for these loans and receivables the internal credit rating plus internal estimates of collateral recovery are what determines the regulatory capital requirement. For loans and receivables that are not covered by the procedures approved by the supervisory authorities for the AIRB approach the Basel standardized approach for credit risk (SACR) applies, under which fixed risk weightings are used, based primarily on external estimates of the borrower's credit rating. Commerzbank has submitted a timetable for the gradual migration of the SACR portfolio to the AIRB approach, which is compliant with the regulatory implementation dates pursuant to section 56.1.1 SolvV (no later than 2½ and 5 years after IRBA approval) and the related levels of coverage in the various portfolios. The implementation plan projects implementation being achieved ahead of time

Apart from the revised regulations on credit risk, operational risks also had to be taken into account for the first time under Basel II, for which Commerzbank uses the advanced AMA approach (see section D. III. OpRisk).

Although a reduction in the capital requirement of more than 10 % was achieved at the beginning of 2008, the effect of the risk-sensitive AIRB approach as the financial crisis worsened over the year was an increase in the capital requirement for credit risk. The first procyclical effects were already visible by the end of June in large corporates and banks, asset classes that are closely linked with the capital markets. By year-end, the amount of capital committed to Mittelstand business had also grown.

# III. Scope

The companies consolidated under IFRS and those consolidated for regulatory purposes in the Commerzbank Group are not identical. The companies consolidated for regulatory purposes only include those carrying out banking and other financial business. Pursuant to section 10a of the German Banking Act (KWG), the group comprises one domestic institution (ultimate parent company) and its subsidiary (group) companies. The aim of consolidation for regulatory purposes is to ensure that it is not possible to make multiple use through subsidiary companies in the financial sector of own funds that in fact only exist once. In contrast

to this, the companies consolidated under IFRS comprise all the companies that are controlled by the ultimate parent company. The basis for this report is the group of companies consolidated for regulatory purposes.

In compliance with the materiality principle set out in section 320.1 SolvV, the disclosure requirements relate to the 13 largest reporting entities (including the sub-groups Eurohypo AG, BRE Bank S.A. and Commerz Real AG) within the Commerzbank Group. This makes the disclosure report easier to follow as its scope is restricted to material information. We defined materiality for the purposes of determining the remit of this report such that the entities included in this report had to cover at least 95% of default, market and operational risks, in each case measured in relation to the regulatory capital requirements of the Commerzbank Group. The 13 reporting entities determined to be material for this report cover more than 99% of the default risks and more than 95% of the market and operational risks.

The consolidation matrix below summarizes the regulatory treatment and IFRS consolidation types of the various companies in the Commerzbank Group. The Group entities ("material entities") included in the disclosure report are shown in the upper part of the matrix. Those companies not considered material, which are of secondary financial significance in accordance with our definition of materiality, are shown in the lower part.

There are two types of consolidation for regulatory purposes: "full" and "pro rata". Full consolidation is applied to subsidiaries and pro rata consolidation to qualified minority holdings. There are no qualified minority holdings in Commerzbank at this time. Investments in companies that have to be consolidated pro rata are deducted from regulatory capital. At Commerzbank, however, this only applies to non-material companies. Risk-weighted investments are usually investments that are consolidated for accounting purposes but are not included in the group of consolidated companies for regulatory purposes. They are treated as other investments as defined by the SolvV asset class "investments" and are treated like any other investment item.

The 13 entities included in the disclosure report are fully consolidated, both for regulatory purposes and under IFRS. They represent the largest and most important entities in the Group and are described briefly below:

 $\underline{\text{Eurohypo AG}}$  is the parent company of the Eurohypo sub-group. With retrospective effect as of January 1, 2008, the public finance bank Hypothekenbank in Essen AG was merged with Eurohypo. Eurohypo is Europe's leading institution specializing in real estate and public finance.

 $\underline{\text{comdirect bank AG}}$  is market leader amongst Germany's online brokers with over 1.3 million customers.

BRE Bank S.A. is one of Poland's leading universal banks. The BRE Bank sub-group has several subsidiaries including:

- BRE Leasing Sp. zo.o (one of Poland's leading providers of leasing products)
- Polfactor S.A. (one of Poland's leading providers of factoring products)
- BRE Bank Hpoteczny (Poland's largest mortgage bank)

<u>Commerzbank International S.A.</u> is a bank based in Luxembourg, main business areas are wealth management, corporate banking, treasury, precious metals and custodial.

<u>Commerzbank Zrt.</u> is a major corporate bank in Hungary with emphasis is on a Mittelstand strategy.

Risk management process

List of abbreviations

# **Consolidation Matrix**

			Re	Consolidation		
Classifi- cation	Company/N companies	No. of	Consoli- dation	Deduction method	Risk- weighted investment	method under IFRS
Material co	mpanies					
	Commerzba	ınk AG	full	-	-	full
	Eurohypo A	G (sub-group)	full	-	-	full
	comdirect b	ank AG	full	-	-	full
	BRE Bank S	S.A. ( sub-group)	full	-	-	full
	Commerzba	nk International S.A.	full	-	-	full
	Commerzba	ınk Zrt.	full	-	-	full
Banks	Commerzba	nk (Eurasija) SAO	full	-	-	full
	Commerzba	ink Europe (Ireland)	full	-	-	full
	Joint Stock Bank "Foru	Commercial m"	full	-	-	full
	und Kommi	äische Pfandbrief- unalkreditbank Ischaft in Luxemburg	full	-	-	full
Financial companies		ögensverwaltungs- t mit beschränkter	full	-	-	full
	Commerz R	eal AG ( sub-group)	full	-	-	full
Other companies	COMINVES Managemer		full	-	-	full
Non-materi	ial companies	i				
		5	full	-	-	full
Darelia		1	pro rata	-	-	-
Banks		1	-	yes	-	at equity
		8	-	yes	-	-
Financial se	rvices	2	full	-	-	full
institutions		1	-	yes	-	-
		27	full	-	-	full
	•	1	-	yes	-	at equity
Financial co	mpanies	30	-	yes	-	-
		1	-	-	yes	at equity
		1	-	-	yes	full
Providers of	f	14	full	-	-	full
secondary s	ervices	1	full	-	-	-
		4	full	-	-	full
		2	full	-	-	-
		1	-	yes	-	at equity
Other comp	anies .	2		yes	-	-
outer comp	aiiiC3 -	1	-	-	yes	at equity
		21	-	-	yes	full
		1	-	-	-	at equity
	-	21	_	_	-	full

<u>Commerzbank (Eurasija) SAO</u> has its headquarters in Moscow. Besides providing specialist advice, it mainly provides services in areas such as structured export and trade finance, electronic banking, international and lending business.

<u>Commerzbank Europe (Ireland)</u> is a commercial bank formed in Dublin. Its international financing business includes participation in syndicated loans, bilateral loans and credit derivatives. Other business includes investments in asset-backed securities.

<u>The Joint Stock Commercial Bank "Forum"</u> is one of Ukraine's leading banks and serves some 20,000 corporate and 333,000 private customers.

The focus of its business of <u>Erste Europäische Pfandbrief- und Kommunalkreditbank AG in Luxembourg</u> is on financing the public sector through loans to countries, Länder, municipalities, public-sector companies, institutions and other public-sector entities.

<u>Atlas-Vermögensverwaltungs-Gesellschaft mit beschränkter Haftung</u> is a subsidiary for the purpose of acquiring, managing and disposing of all kinds of assets.

<u>Commerz Real AG</u> is one of the world's largest real estate asset managers and providers of leasing and investment solutions. Its operations focus on the provision of investment products, such as open- and closed-end real estate funds, special real estate funds, REITs and closed-end funds for ships, aeroplanes and renewable energy.

<u>cominvest Asset Management GmbH</u> can look back on many years as asset manager. cominvest Asset Management GmbH has been a wholly owned subsidiary of Allianz Global Investors Deutschland since January 2009.

All details in the disclosure report generally relate only to the 13 group entities included in the disclosure. Where this is not the case (e.g. for the capital structure), this is explicitly stated.

# Waiver according to section 2a (1) of the German Banking Act ("Kreditwesengesetz" or "KWG")

comdirect bank AG and Eurohypo AG are fully incorporated in the internal processes and risk management of Commerzbank AG as the ultimate parent company of the banking group. This applies in particular to the methods used, monitoring of operations, risk management and reporting. With the introduction of the waiver rule pursuant to section 2a.1 KWG, the Group has made use of the option to exempt the two companies at a single-entity level from the requirements of capital adequacy, large loan exposures and internal controlling systems. For Eurohypo AG the requirements for sub-group reporting pursuant to section 10a.14 KWG are also complied with. We also utilized the opportunity offered by section 2a.6 KWG for Commerzbank AG as the ultimate parent company of the Commerzbank Group to be exempted from the requirements at single-entity level. Commerzbank AG is integrated in the Commerzbank Group's group management system; there are no legal or other obstacles preventing the transfer of capital to Commerzbank AG. Commerzbank AG consequently also makes use of the waiver rule pursuant to section 2a.6 KWG. Application of the waiver rule has been reported to the Bundesbank and BaFin together with evidence of compliance with the requirements.

No restrictions on or significant obstacles to the transfer of funds or equity beyond those under German law or EU directives are in place or foreseen within the Commerzbank Group at this time.

List of abbreviations

# B. Equity capital

Equity capital

# I. Capital structure

Equity as reported in the financial statements is based on the provisions of the applicable accounting standards. In the case of the Commerzbank Group these are the International Financial Reporting Standards (IFRS). In contrast, capital for regulatory purposes is determined in accordance with the regulations in the German Banking Act (KWG). Equity capital is relevant for determining the adequacy of regulatory capital. This capital acts as a cushion against default, operational and market risks.

Capital is composed of core capital (Tier I) as defined in section 10.2a KWG, supplementary capital (Tier II) as defined in section 10.2b KWG and Tier III capital as defined in section 10.2c KWG. In the Commerzbank Group core capital, the qualitatively highest-ranking component of capital, mainly consists of subscribed capital, retained earnings and the SoFFin silent participation.

Supplementary capital primarily includes long-term subordinated liabilities as defined in section 10.2b.2 KWG. Tier III capital, viewed as a lower-quality component of capital, consists of short-term subordinated liabilities. Tier III capital may only be used to back market risks and currently amounts to  $\ensuremath{\in} 25 \text{m}$ .

For Commerzbank as a banking group as defined in section 10a KWG the capital relevant to the determination of regulatory capital is based on the carrying values determined in accordance with the national accounting standards set out in the German Commercial Code (HGB). As of December 31, 2008, the Commerzbank Group reported the following components of regulatory capital.

In contrast to the materiality principle that generally applies in this disclosure report, where information is presented in respect of the 13 largest entities within the Commerzbank Group, the above table shows all of the Group's own funds.

In contrast to Note 91 to the annual report, where equity based on IFRS data is reconciled with regulatory capital via so-called prudential filters, the own funds as shown above are determined in accordance with HGB carrying amounts. These own funds form the basis for

# Capital structure

Equity item	€ m
Paid-up capital excl. cumulative preference shares	4,899
Reserves	8,728
Distributable profit, interim profit	0
Participations by silent partners	8,200
Fund for general banking risks <sup>1</sup>	855
Free assets recognized by BaFin	0
Deduction items <sup>2</sup>	-622
of which impairment losses and expected losses <sup>3</sup>	-9
Tier I capital <sup>4</sup>	22,060
Tier II capital <sup>5</sup> und Tier III capital	8,580
of which deduction items <sup>6</sup>	-419
Modified capital <sup>7</sup>	30,640

- 1 Pursuant to sec. 340g HGB;
- 2 Pursuant to sec. 10.2a.2 KWG;
- 3 Pursuant to sec. 10.6a.1 and 2 KWG;
- 4 Pursuant to sec. 10.2a KWG;
- 5 Pursuant to sec. 10.2b KWG after deducting items pursuant to sec. 10.2b.2 KWG;
- 6 Pursuant to sec. 10.2b. 2 KWG;
- 7 Pursuant to sec. 10.1d.1 KWG and eligible Tier III capital pursuant to sec. 10. 2c KWG

determining the level of capital adequacy reported to the Bundesbank. Major differences between the way equity is determined under IFRS and HGB rules are the treatment of goodwill, the revaluation reserve, the valuation of cash flow hedges as well as the special item for general banking risks according to section 340g HGB.

Own funds raised externally are described as equity instruments. Commerzbank uses various instruments to raise and manage its capital. The table below shows the main features of these instruments.

#### Features of equity instruments

	Total volume € m	Nominal amount € m	< 5 years € m	Maturity ≥ 5 years € m	(average) years	Interest ( average) %
Tier 1 (core capital)						
Ordinary shares	1,878	1,877				
Hybrid capital	3,040	3,040			unlimited	5.51
SoFFin silent participation	8,200	8,200				9.00
Tier 2 (supplementary capital)						
Long-term subordinated						
liabilities	10,003	10,069	4,819	5,251	5.16	5.52
Profit-sharing rights	1,098	1,109	995	114	1.57	6.83
Tier 3 capital						
Short-term subordinated liabilit	ies 25	25	25	0	1.08	3.63

The total volume of the respective instruments is calculated from the nominal amount minus any accrued or deferred items. The average interest refers to the respective nominal rate of interest.

Owing to market support activities there may be small differences between the disclosure report and the annual report with respect to profit-sharing rights and long-term subordinated liabilities issued by the Commerzbank Group. The annual report shows net figures for profit-sharing rights and long-term subordinated liabilities, i.e. net of market support positions. The disclosure report gives the gross figures.

Equity instruments are accounted for at amortized cost. Premiums and discounts are recognized under net interest income over the lifetime of the instrument.

# **Ordinary shares**

The subscribed capital (share capital) of Commerzbank Aktiengesellschaft consists of no-parvalue shares, each with an accounting par value of  $\in 2.60$ . The shares are issued in bearer form. Subscribed capital stands at  $\in 1,879$ m before treasury shares are deducted and  $\in 1,878$ m after deduction of treasury shares.

There are no preferential rights or restrictions on the payment of dividends at Commerzbank Aktiengesellschaft. All the shares in issue have been fully paid in.

# Hybrid capital

As the name implies, hybrid financial instruments are a hybrid between debt and equity, making it possible to find an optimal balance between the desire to take on risk and the restriction of entrepreneurial management. Depending on their structure they may qualify as either Tier I or Tier II capital. The Commerzbank Group's hybrid capital qualifies as core (Tier 1) capital. Commerzbank has a call option on all of these instruments. The table below shows the main features of the hybrid equity instruments.

At the end of 2008, the following hybrid equity instruments were in issue:

Equity capital

Issue date	€m	Currency in m		nterest te in %	Maturity date	Callable on
2006	1,000	1,000 EUR	Commerzbank Capital Funding Trust I	5.012	unlimited	12.4.2016
2006	840	800 GBP	Commerzbank Capital Funding Trust II	5.905	unlimited	12.4.2018
2003	600	600 EUR	Eurohypo Capital Funding Trust I	6.445	unlimited	23.5.2013
2006	300	300 EUR	Commerzbank Capital Funding Trust III	5.250	unlimited	12.4.2016
2005	300	300 EUR	Eurohypo Capital Funding Trust II	4.482	unlimited	8.3.2011

## SoFFin participation

The Special Fund for Financial Market Stabilization (SoFFin) provided the Bank with a silent participation of €8.2bn as at December 31, 2008. Interest of 9% p.a. will be paid on this participation, which is eligible in full as Tier 1 capital. Redemption of the silent participation will be at nominal value. In years when a dividend is paid, the interest rate payable on the silent participation will rise. The interest premium to be paid in these cases will be based on the total cash dividend payout. For every approximately €4.4m of cash dividend paid, the interest rate will rise by 0.01 percentage points. Under IFRS the silent participation is stated separately under equity, and the interest paid to SoFFin will be directly set off against equity without affecting the income statement. The costs for 2008 amount to €2m.

## **Subordinated liabilities**

Subordinated liabilities are Tier II capital as defined by section 10.5a KWG. The claims of creditors to repayment of these liabilities are subordinate to those of other creditors. The issuer cannot be obliged to repay the liability before the maturity date. In the event of insolvency or winding-up, subordinated liabilities may only be repaid after the claims of all senior creditors have been met.

At end-2008, the following major subordinated liabilities were outstanding:

Issue date	€m	Currency in m	Issuer	Interest rate in %	Maturity date
2006	1,250	1,250 EUR	Commerzbank AG	4.125	2016
2007	750	750 EUR	Commerzbank AG	5.625	2017
2000	600	600 EUR	Commerzbank AG	6.500	2010
1999	550	550 EUR	Commerzbank AG	4.750	2009
2001	500	500 EUR	Commerzbank AG	6.125	2011
2008	500	500 EUR	Commerzbank AG	6.250	2014

Commerzbank has a call option on €2.5bn of the subordinated liabilities.

# **Profit-sharing rights**

Profit-sharing certificates outstanding form part of the Bank's liable equity in accordance with the provisions of the German Banking Act (Art. 10 (5) KWG). They are directly affected by current losses. Interest payments are made only if the issuing institution achieves a distributable profit. The claims of holders of profit-sharing certificates to a repayment of principal are subordinate to those of other creditors.

At end-2008, the following major profit-sharing certificates were in circulation:

Issue date	€m	Issuer	Interest rate in %	Maturity date
2006	320	Commerzbank AG	6.375	2010
1996	256	Commerzbank AG	7.900	2008
1999	150	Commerzbank AG	6.375	2009

Commerzbank has no call options on all profit-sharing certificates.

# II. Capital adequacy requirements

The capital adequacy requirements and the resulting total/core capital ratios are calculated for all entities that are not exempt from calculating capital adequacy at single-entity level under the waiver rule pursuant to section 2a.1.6 KWG or do not have the obligation to calculate capital ratios. The institutions subject to the waiver are Commerzbank AG, Eurohypo AG and comdirect bank AG, although Eurohypo as a separate sub-group is required to report separately for the Eurohypo Group. In addition, cominvest Asset Management GmbH as an other company, and Atlas-Vermögensverwaltungs-Gesellschaft mbH and Commerz Real AG as financial companies are exempted from the calculation of capital ratios.

Capital ratios

Company	Capital requirement € m	Overall capital ratio	Core capital ratio
Eurohypo AG (sub-group)	6,530	11.55	7.80
BRE Bank S.A. ( sub-group)	1,135	10.03	5.62
Commerzbank International S.A.	453	15.11	7.53
Commerzbank Europe (Ireland)	227	21.00	21.00
Joint Stock Commercial Bank "Forum	" 174	10.52	8.74
Commerzbank (EURASIJA) SAO	142	11.98	10.86
Erste Europäische Pfandbrief- und Ko	mmunal-		
kreditbank Atiengesellschaft in Luxen	nbourg 82	11.95	8.14
Commerzbank Zrt.	66	12.80	10.80

The above table shows that all relevant entities can report an adequate capital base. This applies both to the total and the core capital ratio. The total capital ratio is the ratio of total capital to risk-weighted assets (RWA) for default, market and operational risks. The core capital ratio is the ratio of core (Tier I) capital as defined in section 10.2a KWG to RWA for default, market and operational risks. For the material Group entities not listed in the table, no capital ratios have been calculated, either because of the waiver rule (comdirect bank AG, Commerzbank AG and Eurohypo AG) or because they are not banks (Commerz Real AG subgroup, Cominvest Asset Management GmbH, Atlas Vermögensverwaltungs Gesellschaft mbH). The capital adequacy requirements for the entire Commerzbank Group amount to €18,049m, representing an overall capital ratio of 13.6% and a core capital ratio of 9.8%.

There was no under-capitalization of subsidiaries subject to deduction during the period under review.

Below we show the regulatory capital adequacy calculated for each type of risk and broken down by specific calculation approach. The following capital requirements relate to the 13 material consolidated entities included in the disclosure report and the figures are the same as those

Capital requirement	€ m
Default risks	16,789
of which investments	512
of which securitizations	220
Market risks	374
Operational risks	724
Total capital requirement	17,887

in the reports on capital adequacy submitted to the Deutsche Bundesbank under Pillar 1.

Beyond 90% of the capital requirement relates to default risk exposures as defined in section 9 SolvV. Default risks include balance sheet, off-balance sheet and derivative items. We have opted to use the advanced IRBA for determining regulatory capital. We have also applied the partial use option permitted by the Solvency Regulation. Accordingly there are still portfolios measured in accordance with the rules of the Standardized Approach to Credit Risk (SACR). Assets affected include qualified revolving retail banking assets, such as overdraft facilities and credit card receivables. The partial use option also makes it possible for claims

	€ m
Standardized Approach to Credit Risk (SACR)	6,039
Central governments	48
Regional governments and local authorities	99
Other public-sector bodies	70
International organizations (as defined by SolvV)	0
Banks	451
Multilateral development banks	0
Companies	3,732
Loans backed by real estate	255
Retail banking	787
Debt instruments backed by banks	12
Investment units	99
Other items	199
Overdue items	287
Advanced Approach (AIRB)	10,018
Central governments	148
Banks	1,474
Companies	7,617
Retail banking: Sub-class IRBA exposures secured by mortgage liens	476
Retail banking: Sub-class qualifying revolving IRBA items	0
Retail banking: Other retail business	278
Other non-loan-based assets	25

that are actually IRBA items to be treated in accordance with the provisions of the SACR.

There are no processing risks as defined in section 15 SolvV within the Commerzbank Group; accordingly no capital charge has been calculated for them. The table also does not show the capital requirements for the investments and securitizations asset class. In view of

their special features, these are shown in separate tables below.

The Commerzbank Group and accordingly the group companies included in the disclosure report are, as an IRBA bank as defined in section 71.4 SolvV, obliged to value investments in accordance with the IRBA rules. For investments entered into prior to January 1, 2008, we have opted to apply grandfathering These investment items are temporarily excluded from the IRBA and are valued in accordance with the SACR rules with a risk weighting of 100%. The SolvV also allows items to be permanently excepted from the IRBA. We have not made use of the option for investments which may be excepted on a permanent basis from the IRBA in accordance with section 70, nos. 2, 8 and 9 SolvV.

For the IRBA investments we have opted to use the simple risk weighting pursuant to section 98 SolvV. We use a risk weighting laid down by the supervisory authority which is dependent on whether we are dealing with a listed investment and whether the investment portfolio is sufficiently diversified. There are no investment portfolios managed on the basis of models at Commerzbank at present. Investments under the PD/LGD approach are not shown in the

	€ m
Investments	512
Value of investments carried forward (grandfathering)	37
Market approaches: Simple risk-weighted approach	166
of which listed investments	1
of which unlisted and other investments	85
of which other investment items	80
Standardized Approach to Credit Risk (SACR)	309

table for materiality reasons. Their capital adequacy requirement amounts to €36,000.

Commerzbank Group companies also act as sponsors and investors in securitization tranches. Acting as investor also includes the provision of liquidity facilities for securitization transactions and first loss positions or repurchased tranches from securitizations for which Commerzbank is acting as originator. Securitization items are also included under default risks and must be risk-weighted in accordance with either SACR or IRBA rules. Securitization items arising from initial loss exposures are not included in the capital adequacy require-

	€ m
Market risks	374
Standardized approach	70
of which interest-rate risk	32
of which equity risk	0
of which currency risk	38
of which commodity price risk	0
of which option risk	0
Internal model approach	304

ments under the IRBA as these are deducted directly from capital.

Adequate capital must also be set aside for market risk positions pursuant to section 2.3 SolvV as well as for default risks. An internal model pursuant to section 313 ff. SolvV is used to calculate the regulatory capital requirements for market risk at Commerzbank AG including

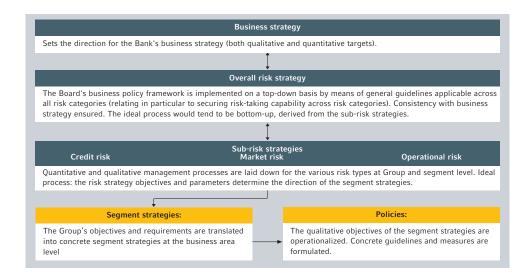
its foreign branches and the Luxembourg subsidiary CISAL. We use the standardized procedures prescribed by the supervisory authority for the other companies. The table alongside shows that a large proportion of the market risks are in Commerzbank AG and CISAL and these are quantified with advanced measurement methods checked and approved by the supervisory authority.

Capital amounting to approx. €753m has to be set aside for the operational risks of the 13 reportable entities. Commerzbank uses an advanced measurement approach (AMA) pursuant to section 278 SolvV throughout the Group to quantify operational risks (cf. also Section D. III. OpRisk).

# C. Risk management process

# I. Risk strategy

Commerzbank's Board of Managing Directors defines risk policy guidelines as part of its established overall strategy for the Commerzbank Group which is reviewed annually (= business and risk strategy, strategic operating conditions for the Group, segments and business areas). The Group's risk strategy consists of various sub-strategies for the main categories of risk. The integration of business and risk strategies is achieved through key parameters (e.g. regulatory and economic capital requirements, exposure at default, expected loss, charges against earnings) which ensure that Commerzbank Group's strategic orientation is in line with its risk management system.



The flow chart shows the interrelationships between the business strategy and the overall risk strategy. The Bank's strategic orientation and its business policies are fed into the overall risk strategy while at the same time the risk-taking capability is a limiting factor for its business strategy.

Commerzbank defines guidelines and limits for risk exposures as part of its overall risk strategy on the basis of an analysis of its risk-taking capability and its business strategy. In addition to limits on risk and capital commitment, the segments are managed by setting targets for each segment's minimum returns, maximum use of the Bank's refinancing, and risk appetite based on the segment's profitability. In addition to limiting risk, the risk strategy is therefore focused on optimizing the risk/reward ratio over the medium term, i.e. strategic asset allocation within the Group and the management of correlation and concentration risks across risk categories.

# II. Risk management organisation

The financial crisis has demonstrated that the professional limitation and management of banking risks are critical factors in our business success. Essential prerequisites for successful risk management are the identification of all significant risks and risk drivers, independent measurement and assessment of these risks against the background of changing macroeconomic and portfolio-specific conditions, and risk/return-oriented management of risks on the basis of

List of abbreviations

these results and assessments as part of a forward-looking risk strategy. We have made considerable progress in this area in the past few years, which should pay off in the dramatically deteriorating environment.

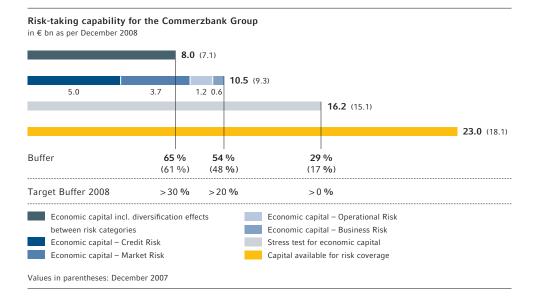
For a more detailed explanation of Commerzbank's risk management organisation please refer to the 2008 Annual Report.

# III. Risk-taking capability

Commerzbank monitors risk-taking capability using the economic capital model. Apart from the risks in the first pillar, these cover all other risks relevant to Commerzbank that can be measured with this concept, such as interest rate risk in the banking book, risk from equity investment stakes, real estate risk, market liquidity risk and business risk. Furthermore, sectoral and regional concentrations and diversification effects of credit risk plus all correlations between the individual risk categories are modelled. Commerzbank also quantifies refinancing risk, focusing on securing cash liquidity rather than cushioning losses with equity capital. As a result, this is not part of the economic capital concept. Unquantifiable risks are subjected to strict qualitative monitoring in compliance with Pillar II of the Basel Accord and Ma-Risk. The 99.95% confidence level we use in the economic model exceeds the 99.90% specified in Pillar 1. A buffer is also required that is quantified using macroeconomic stress tests. The economic capital requirement thus produced is then compared with the capital available for risk coverage.

The capital requirement rose as the year progressed due to worsening parameters and economic forecasts. At the same time, capital available for risk coverage fell due to lower income and demands on capital reserves. The unpredictability of the length and extent of the impending economic downturn prompted us to introduce measures to limit and reduce risk as well as strengthen capital available to cover risk by increasing capital and accepting €8.2bn from SoFFin. As a result of these measures there was an adequate buffer for all three parameters in December 2008, which was still higher than the prior year figure. This meant that the internal limits for risk-taking capability were clearly met.

For a more detailed explanation of Commerzbank's risk-taking capability please refer to the 2008 Annual Report.



# D. Specific risk management

# I. Credit risk

#### 1. Credit risk strategy

The credit risk strategy is derived from the overall risk strategy. It is the central framework for our proactive and anticipatory credit risk management. The primary aim of the credit risk strategy and monitoring of the strategy throughout the year is to secure the Bank's profitability targets on a sustainable basis subject to its risk-taking capability. The credit risk strategy details and operationalizes the quantitative and qualitative guidelines for the Group at Group and segment level. Quantitative guidelines include setting absolute limits for expected loss through EL limits and safeguarding credit quality by setting guideline values for risk density. Furthermore, unexpected losses, bulk risks and concentrations of credit risks are measured and actively managed using an internal credit VaR model. All the above management parameters are an integral part of the credit process and are laid down in the credit authority regulations

Independent risk controlling reports monthly through the Credit Monitor to the Credit Committee and Board of Managing Directors on the utilization of limits and changes in default risk. As part of this reporting, Risk Control regularly formulates recommended actions and proposed decisions to secure the required target risk structure for the portfolio.

# 2. Risk quantification

Default risks are mainly quantified by means of a credit portfolio model used throughout the Group and various rating systems for measuring default risks at debtor and loan level.

#### Credit portfolio model

Using a credit portfolio model enables us to estimate the probability of possible losses in the lending business and so provide key data for managing and monitoring risk. The main output of this model is the credit value at risk (CVaR), which estimates the level of losses under extremely adverse economic scenarios and so represents one of the key variables alongside the expected loss (EL) in the risk monitoring process. Besides the quantitative estimates for the loan portfolio as a whole that can be made with the aid of this model, the most important output is the ability to allocate the overall risk to the individual transactions, customers and business lines in line with the source of the risk.

The credit risk model uses a wide range of data and parameters that are in some cases closely linked to the parameters for Basel II. These are, first, the transaction and customer data containing precise information on the amount of the commitment, the credit rating and the customer's business sector and, second, pure model parameters which provide information on the correlations and, accordingly, the potential diversification effects between various sectors and countries.

The economic capital reported for an individual transaction or for the Bank is in principle comparable to the regulatory capital or risk-weighted assets under Basel II: both are estimates of the potential loss in extreme scenarios. The main difference is that in Basel II the risks arising from all of the individual transactions are added together while the economic capital model allows a deduction for diversification effects but also penalizes bulk risks and concentration effects.

There is a host of risk models, some of which have already become standard for the market. The model currently in production is an in-house state-of-the-art model which, like the CreditMetrics or Moody's KMV model, is based on the asset value approach. A complex Monte Carlo simulation simulates the goodwill of borrowers and borrowing entities and derives changes to a borrower's creditworthiness and default risk from the relevant realizations. The model's high degree of flexibility allows it to track complex portfolio risks such as the risk arising from structured credit products. But the risk-mitigating effects of the Bank's own securitization positions can also be shown correctly with the aid of the credit portfolio model.

Risk management

process

Commerzbank's credit risks are managed at both customer and transaction level as well as at at portfolio level. Default risks are measured using the risk parameters probability of default (PD), exposure at default (EaD) and loss given default (LGD).

The expected and unexpected loss is calculated for each individual default risk with these parameters as a key risk management variable. The expected loss measures the potential loss of a loan portfolio which can be expected within a single year on the basis of historical loss data.

The unexpected loss reflects the default risk above and beyond the expected loss and is backed by regulatory (and economic) capital. Further components of the credit portfolio model include sectoral portfolio management, monitoring and hedging default risks and conducting default risk stress tests.

#### Rating systems and procedures

The use of rating procedures is an essential component of risk evaluation in the Commerzbank Group irrespective of regulatory requirements. The results of the rating analyses are therefore not only used to meet regulatory capital adequacy requirements but also in the front-and back-office credit decision processes, in the internal processes to determine loan loss provisions under IFRS and in the internal measurement of credit value at risk and risk-taking capability.

Rating procedures are one of the main components of rating systems which, as defined in section 60.1 SolvV, comprise all of the methods, processes, controls, data collection and IT systems in addition to the conventional methods of creditworthiness and risk assessment. A rating system may be used for the IRBA if it meets the requirements of section 56 SolvV on a lasting basis and this has been confirmed by the regulator through tests of the model's suitability.

Pursuant to sections 147ff. SolvV rating systems are subject as procedures for estimating risks to regular (e.g. annual) validation and calibration of parameters. Risk Control, which is independent of the front-office units, is responsible for preparing the validation reports for each rating procedure, which are approved by the Group CRO. Regular monitoring of procedures is a further element of system control. Internal Audit carries out an annual review of the rating procedures by inspecting the validation and monitoring measures being used and chekking the methods and processes.

A distinction is made in the validation procedure between quantitative and qualitative reviews of the rating procedures. A fundamental validation concept setting out a standardized inspection process for all rating procedures is the basis for an annual procedure-specific specification sheet, against which the procedure is checked. Internal historic data series are used for the validation measures. These may be supplemented by the purchase of data from external providers (e.g. when analyzing shadow rating procedures). This extensive database makes it possible to assess the stability of the model over time as well as the quality of the rating procedure, for which discriminatory power is a supplementary indicator.

Quantitative validation involves comparing the forecasts for the risk parameters determined in the rating procedures with the outturn at the end of the forecast period/validation cycle. The quality of the forecasts are assessed using statistical methods. For instance, Gini coefficients, concordance indices and hit rates are used to assess the discriminatory power and various statistical tests are carried out to review the calibration. The results of these back tests are evaluated using a traffic-light system (cf. the specification sheet). If standards that have been set are missed by a significant margin, the procedure concerned must be revised once the cause of the failure has been clearly established.

Qualitative validation, also sometimes called a "use test", is carried out in conjunction with the users of the rating procedure and looks at process-related issues in particular.

Asset Quality Review units set up in both front and back offices also guarantee that the quality of the data used for parameter-based risk management is consistently reliable. 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, so that there is a stable foundation for the management measures based on the reports. In addition, this complies with section 56.3 SolvV which sets out an obligation to review ratings on an annual basis.

A good scoring or rating process is characterized by adequate discriminatory power, which means that the methods used must differentiate reliably between "good" and "bad" clients in terms of the Gini coefficient. The results of our scoring and rating processes are the future probability of default (PD) of our borrowers.

Beyond the default risk rating, correctly assessing the severity of the loss is essential for reliable and holistic risk assessment. The severity of a loss is determined firstly by the exposure at default (EaD) and secondly by the loss given default (LGD).

When forecasting EaD unused lines and contingent liabilities are included via credit conversion factors (CCFs). The CCF gives the probability of drawdown in the event of a default within the next 12 months depending on the transaction and the customer.

LGD is mainly determined by the expected proceeds from the sale of collateral and unsecured portions of loans. Proceeds from collateral are modelled via recovery rates representing an appropriate discount on the previously established market value. The recovery rate depends on the characteristics of the collateral, e.g. the type of property and location for real estate collateral. To determine the recovery rate on unsecured portions of loans we look primarily at the characteristics of the customer and the transaction.

The statistical estimates of the CCF and LGD models are based on internal empirical loss data and we use expert knowledge, in particular from the back office and workout departments, to identify potentially relevant factors and check the plausibility of results.

Commerzbank uses a specialized database application (CORPA) to maintain historic data on loan defaults. In the first phase of building up this database data on past defaults which were processed and closed between 1997 and 2005 were laboriously entered manually in the database on the basis of the internal credit files. In the second phase that has been running in parallel since the end of 2005, new defaults are continuously recorded in CORPA in a largely automatic process and are made available for statistical analyses on completion of the processing. The data capture process also involves a large number of manual steps and automatic checking procedures to ensure the quality of the data.

Beside collecting internal data, Commerzbank also participates in various national and international data pooling initiatives to expand the opportunities for modelling. In Germany, the LGD Grading project of the Association of German Pfandbrief Banks (VdP) concentrates on collecting information on sales of property following loan defaults. The current data pool with over 20,000 data points enables a wide range of regional and property-specific analyses. At the international level, the Pan European Credit Data Consortium (PECDC) is the most significant EAD

Equity capital

Specific risk

management

and LGD modelling initiative. There are now 26 European banks working on building up a joint data pool in the project that started in 2004. Commerzbank sits on the PECDC Management and Methodology Committee as representative of the German banks.

Both internal as well as regulatory requirements are taken into account when developing statistical models for estimating EAD and LGD. Discussions with experts with the relevant experience in dealing with cases of defaulting customers play an important role in establishing the plausibility of the results. In areas with a small number of historical default or collateral realization cases the empirical analyses are supplemented with expert estimates. 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 models were successfully tested by the Bundesbank and BaFin as part of the inspection prior to the grant of authorization for the advanced IRBA.

Finally, combining the above components yields the expected loss (EL= EaD\*PD\*LGD) and the loss density or risk density, which is the ratio of EL to EAD (EL in bp of EaD). Both the percentage probability of borrower default (client rating) and the risk density of a loan commitment (credit rating) are assigned to rating classes by using an internal master scale.

The group-wide use of uniform rating processes for each asset class is ensured by Commerzbank's "single point of methodology" rating landscape. This uniform process architecture not only facilitates risk management and monitoring, it also prevents rating arbitrage within the Commerzbank Group.

The table below shows the rating procedures used under the IRBA as of the reporting date and the main elements in each case.

Class	Segment	Procedure	Hard facts	Soft facts	Overruling
Fin. Institutions	Banks	RFI-BNK	•		•
Sovereigns	Countries	R-CR	•	•	•
Sovereigns	Municipalities/federal states	R-LRG	•		•
Corporate	German corporate customers <sup>1</sup>	RC-GER	•	•	•
Corporate	Small corporate customers <sup>1</sup>	RC-NAVI	•	•	•
Corporate	Large corporate customers <sup>1</sup>	RC-LAC	•	•	•
Corporate	International corporate customers <sup>1</sup>	RC-INT	•	•	•
Retail	Private customers	CORES	•		
Spec. Lending	Commercial Real Estate	RS-CRE	[•]		•
Spec. Lending	Structured Finance	RS-CFD	•	•	
Spec. Lending	ABS transaktions (sponsors)	IAA			

<sup>1</sup> will move to a uniform model using the process-based COSCO and R-CORP methods from January 2009

Hard facts refers to system-based information where there is no leeway for interpretation, e.g. data from companies' financial statements, a private individual's income or the age of the documents being used.

Soft facts refers to 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, e.g. an assessment of management or the product quality of the customer being rated.

Overruling is a later stage of analysis when there is a further opportunity for the analyst to assess particular issues based on his or her personal judgement. The system result can be modified upwards or downwards, with the reason for the decision being documented. Overruling can be used in particular whenever there are sharp fluctuations (e.g. on the markets) such that an assessment of a company's situation based on the analysis of backward-looking or static information (e.g. financial statements) is not a sufficient to give a forward-looking probability of default. Because of the degree of freedom this gives in the rating analysis, overruling is subject to strict prerequisites and regular monitoring to prevent misuse.

Commerzbank's master scale (see Annual Report 2008 p. 264) allocates a non-overlapping range of probabilities of default that are stable over time to each rating class. The probabilities of default allocated to the ratings remain stable across all portfolios and over time in order to ensure comparability. As a guide the ratings are shown next to the ranges of external ratings. As the default rates observed with external ratings fluctuate over time, it is not possible to translate directly between the internal and external ratings systems.

# The Commerzbank Group's IRBA loan portfolio

The IRBA portfolio of all the Commerzbank Group companies included in the disclosure report is shown below, broken down into the relevant IRBA asset classes. The structure of the rating classes is equivalent to the Commerzbank internal PD master scale although these have been combined into five main classes to make them easier to understand. Rating class 6 is intended for borrowers that are in default on Basel II definitions, although the regulatory defi-

#### IRBA exposures (EAD) by rating class

					Retail business				
	EAD in € m	Central govern- ments	Banks	Compa- nies	IRBA mortgage exposures	Other retail Iending	Tota		
Investme	nt Grade (	(0-0.68%)							
Rating 1	EAD	10,285	70,949	21,384	277	368	103,263		
(0.00-	LGD	20.1%	22.8%	40.2%	17.7%	45.4%	26.2%		
0.08%)	PD	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%		
	RW	4.5%	10.5%	21.6%	2.3%	6.0%	12.2%		
Rating 2	EAD	4,372	17,839	71,166	25,555	5,078	124,010		
(0.08-	LGD	22.6%	31.2%	41.7%	13.2%	51.6%	34.1%		
0.68%)	PD	0.3%	0.2%	0.3%	0.3%	0.4%	0.3%		
	RW	27.4%	30.7%	53.3%	8.2%	32.1%	39.0%		
Non-Inve	estment G	rade (0.68-99.	99%)						
Rating 3	EAD	154	7,550	36,278	5,054	2,035	51,071		
(0.68-	LGD	27.5%	28.5%	42.7%	19.1%	48.5%	38.5%		
3.10%)	PD	1.6%	1.2%	1.4%	1.3%	1.4%	1.3%		
	RW	75.9%	56.3%	102.0%	26.3%	56.1%	85.9%		
Rating 4	EAD	38	1,010	7,019	1,374	456	9,897		
(3.10-	LGD	16.7%	31.2%	37.1%	17.6%	44.9%	34.1%		
9.35%)	PD	4.6%	5.2%	5.3%	5.4%	5.3%	5.3%		
	RW	59.3%	106.4%	138.2%	57.4%	71.4%	120.4%		
Rating 5	EAD	86	131	3,246	1,015	345	4,823		
(9.35-	LGD	11.0%	23.9%	26.8%	19.8%	41.8%	26.1%		
99.99%)	PD	16.3%	43.8%	30.9%	21.1%	24.8%	28.5%		
	RW	58.6%	107.6%	139.0%	108.9%	99.5%	127.6%		
Default (	100%)								
Deties (	EAD	0	439	5,658	1,415	296	7,808		
Rating 6 (100%)	LGD	63.4%	50.9%	43.8%	31.5%	57.1%	42.5%		
(100%)	PD	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
	RW	21.5%	0.0%	25.3%	43.2%	1.4%	26.2%		
	EAD	14,935	97,918	144,751	34,690	8,578	300,872		
Total	LGD	20.8%	25.0%	41.3%	15.2%	50.0%	32.2%		
	PD	0.2%	0.7%	5.4%	5.3%	5.3%	3.6%		
	RW	12.4%	18.8%	65.8%	17.2%	40.4%	41.5%		

Equity capital

nition 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.

The IRBA exposure (EaD) is the exposure as defined in section 99 SolvV. This differs in a number of ways from the figures in the annual report which are based on accounting regulations. The differences largely reflect the differing accounting standards and definitions used. The EaDs shown in this report are based on the German Commercial Code while the figures published in the annual report are IFRS figures. There are also differences in definitions for derivative items. The positive fair values reported in the annual report differ from the credit equivalent amounts calculated in accordance with regulatory standards, which are usually higher than the positive fair values. There are also some transactions that are not included in the figure for risk-weighted assets (RWA) for regulatory purposes but which are included in the EaD figures in the annual report and risk report. However, the biggest difference is in the number of consolidated companies. The figures reported in this disclosure report relate to 13 entities within the Commerzbank Group, while the figures in the annual report relate to the companies that have to be consolidated under IFRS.

Only the IRBA portfolio is shown. Items in the asset classes of investments and other nonloan-related assets are not listed. The latter assets do not have any creditworthiness-related risks and are therefore irrelevant for the management of default risks. Investments managed

IRBA off-balance sheet exposures (EAD) by rating class

					Retail b	usiness	
		Central governments	Banks	Companies	IRBA mortgage exposure	Other retail lending	Total
		€m	€m	€m	€ m	€ m	€m
Investme	nt Grade (0-0.68%)						
Rating 1	Committed	175	1,178	7,411	9	125	8,898
(0.00-	EAD of Commitment	177	1,365	3,682	9	90	5,323
0.08%)	Commitment-weighted EAD	21	21	50	0	0	40
Rating 2	Committed	735	1,429	24,812	62	1,036	28,074
(0.08-	EAD of Commitment	681	683	13,492	62	614	15,532
0.68%)	Commitment-weighted EAD	45	25	31	0	0	29
Non-Inve	stment Grade (0.68-99.99%	6)					
Rating 3	Committed	12	485	12,831	17	564	13,909
(0.68-	EAD of Commitment	5	228	7,771	17	304	8,325
3.10%)	Commitment-weighted EAD	3	11	67	0	0	62
Rating 4	Committed	2	122	1,751	2	79	1,956
(3.10-	EAD of Commitment	0	56	836	2	38	932
9.35%)	Commitment-weighted EAD	1	5	19	0	0	17
Rating 5	Committed	1	7	1,167	1	46	1,222
(9.35-	EAD of Commitment	1	3	485	1	23	513
99.99%)	Commitment-weighted EAD	0	1	32	0	0	30
Default (1	100%)						
Deffect	Committed	0	0	370	1	6	377
Rating 6 (100%)	EAD of Commitment	0	0	237	1	3	241
(100 /0)	Commitment-weighted EAD	0	0	43	0	0	42
	Committed	925	3,221	48,342	92	1,856	54,436
Total	EAD of Commitment	864	2,335	26,503	92	1,072	30,866
	Commitment-weighted EAD	40	21	43	0	0	39

under the IRBA at Commerzbank are only given the risk weightings laid down by the supervisory authority; as there are no internal estimates, none are shown in the table. Securitization items under the IRBA are shown separately in sub-section 8 of this section. The sub-asset class "qualified revolving retail banking assets" is subject to partial use, i.e. we have decided to measure this sub-asset class in accordance with the SACR rules.

Commerzbank AG, Eurohypo AG and comdirect bank AG use the advanced IRBA and may accordingly also use internal estimates for credit conversion factors (CCF) for regulatory purposes. CCFs are required to assess the probable exposure to commitments that have not yet been drawn down for off-balance sheet transactions. The following table shows the off-balance sheet assets. Weighting them with the appropriate CCF gives the IRBA exposure (EaD) for each commitment. In so doing, techniques for mitigating credit risk in these off-balance sheet items have already been taken into account. Weighting the exposure with the loan commitment after credit risk mitigation techniques gives the commitment-weighted average IRBA exposure (EaD).

#### The Commerzbank Group's SACR loan portfolio

The portfolios currently excluded from the IRBA are measured in accordance with SACR rules as permitted under the partial use provisions. In contrast to the IRBA, the SACR is mainly based on a flat risk weighting or on external weightings. We have nominated the rating agencies Standard & Poor's Ratings Services, Moody's Investors Service and Fitch Ratings to provide the external ratings. This covers items in the SACR asset classes countries, banks, corporates and securitizations. Under the SolvV-compliant algorithm implemented by Commerzbank for transferring ratings of issues to assets, the rating of an issue may be transferred to an asset in the following cases, which do not involve claims on banks:

- An ISIN can clearly be allocated to the asset
   The process is based on section 44 sentences 3 and 4 SolvV. A long-term rating for the
   issue is attributed to the asset via the ISIN. If there is no long-term rating for the issue, a
   short-term rating may only be attributed via the ISIN in the case of claims on companies.
   If there is no short-term rating available either, the asset is treated as if it does not have an
   ISIN (comparable asset).
- The asset does not have an ISIN (comparable assets)

  Comparable assets are defined as issues by the same issuer that have a valid rating in the form of an unsecured long-term foreign-currency rating. The process is based on section 45.2 and 3 SolvV. The rating is applied to all comparable assets which rank higher or pari passu and have an SACR weighting higher than 100%. If the rating cannot be transferred either comparable assets ranking pari passu with an SACR risk weighting <= 100% or lower-ranking comparable assets will be selected or no issue rating will be allocated to the asset.

Access to the agencies' databases is via the internal rating data pool (RDP) using FTP (File Transfer Protocol). The data obtained in this manner on a daily basis is then processed in RDP and fed into the Bank's internal user systems. A major processing stage here involves mapping the agency ID onto the Bank's internal customer number. This one-off mapping process ensures that any data updates by the agencies go into a fully automated process and changes in external ratings do not require any further manual input and are therefore immediately effective in the systems.

We show below the risk weightings determined via external ratings or a flat weighting and the allocation of the exposures to these risk weightings. The figures below show the positions of the Group companies included in the disclosure report whose risk-weighted exposures have been calculated in accordance with the SACR rules. The positions are distributed over

Specific risk

management

#### SACR exposures

Introduction

Risk-weighting band	Assessment basis before CRMT	Assessment basis after CRMT	Exposure
	in € m	in € m	in € m
0%	113,782	124,633	121,590
10%	707	707	707
20%	37,874	33,340	31,353
35%	4,497	4,497	4,483
50%	8,659	8,790	7,798
70%	2,283	2,283	2,283
75%	23,951	23,273	13,114
100%	72,931	63,217	53,578
150%	2,914	2,344	2,270
Total	267,598	263,084	237,176

To reduce risk under the SACR, the Commerzbank Group takes financial collateral and guarantees into account; we shall refer to these again later. Mortgage-backed securities also have the effect of reducing the risk weighting. Since positions secured by real estate now form an asset class of their own under the SACR and so are allocated to special risk-weighting classes, they do not represent collateral in the usual sense. These positions have already been taken into account in the allocation of risk weightings. For this reason, the exposures in the table with an SACR risk weighting of 35% and are identical before and after credit risk mitigation.

The substitution principle under the SACR for guarantees, i.e. the borrower's risk weighting is replaced by that of the guarantor, means a transfer of the guaranteed amount 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.

The risk weighting range up to 70% shows the weighted average of the financial assets included in IRBA investment units which are not equity investments. The accurate risk weighting of these positions is 51.8%. As there is no collateral on these assets the amounts are identical before and after CRMT.

Overdue positions are shown with a risk weighting of 150%. If an overdue position is secured by real estate it may, depending on the individual valuation allowances formed on it (SLLP, Port LLP impaired) lead to a shift to a lower risk weighting class.

No deductions from capital were made for SACR positions of December 31, 2008.

# IRBA investment exposures

In the IRBA there are also risk weightings laid down by the supervisory authority for positions in the sub-asset class of specialized financing transactions and IRBA investments that are measured with the simple risk weighting. These are shown in the table below. However, there are no IRBA specialized financing transactions in the Commerzbank Group; these are dealt with under the partial use rule and risk-weighted in accordance with the SACR rules. For IRBA investments we use the simple risk weighting in accordance with section 98 SolvV. This stipulates a risk weighting of 190% for unlisted investments that are part of a sufficiently diversified portfolio and a risk weighting of 290% for listed investments; all other investments are risk-weighted at 370%. The table also lists other non-loan-related assets which are assigned a flat risk weighting of 100%.

IRBA investment exposures with flat risk weightings

Risk-weighting factor	Assessment basis € m	<b>Exposures</b> € m
100%	315	315
190%	6	6
290%	366	366
370%	272	272
Total	959	959

The Commerzbank Group does not use any credit risk mitigation techniques for its IRBA investment positions with a simple risk weighting.

#### 3. Risk Management

#### **Expected loss limits**

Starting from the risk-taking capability and risk appetite, expected loss limits for credit risks are defined at segment level in order to operationalize the risk appetite. The Board of Managing Directors sets EL limits based on the fundamental risk appetite relationship over the course of the cycle, if necessary adjusting the limit for special factors (as is currently the case with increased capital adequacy requirements due the financial crisis).

The aim of the limit process is to set operational guidelines in such a way that the segments operate in line with the strategic parameters laid down by the Bank as a whole while retaining the greatest degree of freedom.

Besides the segment-specific EL limits, limiting bulk, concentration and country risks is of crucial importance.

# Limiting bulk and concentration risks

The target and benchmark for strategic management of credit risk in the Commerzbank Group is the risk/return-based target portfolio defined in the credit risk strategy, along with the resulting sub-portfolios based on target groups and markets. Concentrations of risk in clusters, countries, target groups and products are limited and actively managed in the light of the special characteristics of each segment. As a central element of risk policy, bulk risks are managed on the basis of economic capital. The main indicators of bulk risks include portfolio granularity and correlation assumptions for segment-specific, sector-specific and country-specific factors.

Borrower units with economic capital consumption of €5m or above are defined as a bulk risk. Borrower units with more than €20m in economic capital consumption are regarded as undesirable over the medium to long term and are systematically reduced, in some cases by using modern financial instruments such as credit default swaps (CDSs). The importance of limiting bulk risks is also indicated by the fact that the Board of Managing Directors has specified in its rules of procedure that unanimous decisions are required for any board-level credit decisions involving economic capital consumption in excess of €10m (based on final take).

Equity capital

List of abbreviations

#### Country risk management

When calculating country risk, Commerzbank measures both transfer risks and the regionspecific political and economic event risks that could potentially affect a country's economic assets. Country risk management includes all the decisions, measures and processes that draw upon the information provided by risk quantification and are intended to influence country portfolio structure in order to attain the business and return targets. Apart from limiting the expected loss at country level, limiting the exposure at default and loss at default will in future play a greater role in the country risk process.

Risk management

process

#### Risk mitigation

At Commerzbank risk mitigation takes the form of guarantees, collateral and netting. The AIRBA process recognizes procedures for offsetting collateral instruments, including in particular financial collateral, mortgage liens in the land register, other real collateral, guarantees and credit derivatives.

In accordance with the Solvency Regulation, the quality of the collateral received is strictly checked and continuously monitored. This includes in particular establishing the legal enforceability of the collateral and ensuring that it is valued regularly and appropriately managed. Above a certain threshold the recoverability of the collateral instruments is reviewed on a regular basis during the term of a loan as part of the regular credit processing depending on the collateral type, usually annually, but at shorter intervals for critical exposures. 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 so affected are not offset.

Following the introduction of the AIRBA, Commerzbank's risk function carried out a review of its internal guidelines and processes for managing collateral with a view to bringing them into line with the regulatory requirements for the use of credit risk mitigation techniques; these were then supplemented or amended as required. Processing of standard collateral (pledges of liquid assets and securities, company guarantees by individuals and individual transfers of title) is the responsibility of specialist teams in Sales; processing of non-standard collateral items is undertaken by the Collateral Management Offices with the assistance of service units in the risk function.

The back office controls and is ultimately responsible under the credit decision and loan handling process for the level of the offset for credit risk mitigating effects when determining the regulatory capital adequacy requirement. In the AIRBA 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, it uses the risk weightings laid down by the supervisory authority.

The Bank has laid down general principles for the use of collateral and has in addition drawn up standards which apply throughout the Group on the valuation and administration of collateral as well as a range of collateral-specific directives (guidelines, manuals, descriptions of processes, IT instructions, legally validated model contracts). The standards set up to hedge or mitigate the risks (of loans), which also take account of the regulatory requirements of the SolvV, include:

- Legal and operational standards for documentation and data as well as valuation standards (each commitment to be analyzed at least once a year)
- Standardization and updating of the collateral valuation are ensured by laying down valuation processes, prescribing standardized valuation methods, parameters and defined dis-

- counts for collateral, a clear allocation of responsibilities for the processing and valuation tasks, as well as requirements for revaluations at regular intervals.
- Other standards for taking account of certain risks, e.g. operational risks, correlation and
  concentration risks, maturity date and duration risks, market risks (e.g. due to currency
  fluctuations), country risks, legal risks and risks of changes in the law, environmental risks
  and risks of insufficient insurance cover (for the collateral).

Commerzbank recognizes guarantees by states, other state entities, banks, supranational organizations and other legal entities in particular as valid guarantors.

As part of the assessment of their declaration of liability, all guarantors are in principle 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 check is to establish a guarantor's MPA (maximum payment ability). The prerequisite for offsetting a guarantee as risk-mitigating under the AIRBA is that the guarantor in question has been assigned a current internal rating. External ratings are used under the SACR.

In the bulk of its subsidiaries the Commerzbank Group uses the market valuation method pursuant to section 18 SolvV for derivative default risks. Close-out netting as defined in section 207 SolvV is used to determine the net assessment basis pursuant to section 211 SolvV. For securities repurchase, lending and comparable transactions involving securities or goods, the net assessment basis is determined in accordance with section 215.1, taking into account any offsetting agreement in accordance with section 209 SolvV and the application of section 215.5 SolvV and sections 155 ff. SolvV. Account is taken of guarantees/credit derivatives via the substitution approach. The double-default procedure as defined in section 86.3 SolvV is not applied.

All operational units, branches and subsidiaries are in principle entitled, provided they comply with all formalities, to use credit derivatives to hedge credit risks in loan portfolios (i.e. buy protection). This gives the units the opportunity to hedge credit risks with a credit derivative without having to sell or assign the loan. This is also another way to achieve an (economic) mitigation of risk and take pressure off regulatory capital.

In compliance with MaRisk, credit decisions are made while taking account of risk/return aspects at branch/credit committee level. The basis for loan approvals are the allocation of responsibilities and the proper implementation of a credit rating under the dual control principle. In the event of a negative vote/rejection on the part of the back office, the front office has the opportunity to instigate a pre-defined escalation process.

# Credit risk mitigation for regulatory purposes

We offset financial collateral, guarantees, mortgage liens and, under the IRBA, also other collateral. The figures for secured exposures are based on the collateral effect permitted for regulatory purposes.

The table shows the credit risk mitigation effects of financial collateral, guarantees, credit derivatives and mortgage liens under the SACR. The effectively secured exposures, i.e. taking into account all the "haircuts" applicable to the collateral item, are classified by SACR asset

In taking financial collateral into account as a technique for mitigating credit risk, Commerzbank uses the comprehensive method as defined in sections 186 to 203 SolvV. This stipulates that the assessment basis for calculating the default risk positions is reduced by the value of the financial security.

Specific risk

management

## Secured SACR exposures

Asset class	Financial collateral	Guarantees	Credit derivatives	Mortgages	Total
	€m	€ m	€m	€m	€m
Central governments	4	9	0	0	13
Regional governments					
and local authorities	0	153	0	0	153
Other public-sector bodies	1	271	0	1	273
International organizations					
(as defined by SolvV)	0	0	0	0	0
Banks	2,972	479	0	0	3 451
Multilateral development banks	0	0	0	0	0
Companies	1,695	10,748	192	3,359	15,994
Retail banking	561	86	0	4,370	5,017
Debt instruments					
backed by banks	0	0	0	0	0
Investment units	0	0	0	0	0
Other items	0	0	0	0	0
Overdue positions	86	53	0	746	885
Investments	0	0	0	0	0
Total	5,319	11,799	192	8,476	25,786

The substitution principle used in offsetting guarantees and credit derivatives leads to a transfer of the guaranteed amount from the asset class of the borrower to the asset class of the guarantor and accordingly to corresponding shifts in the asset classes. However, this shift only takes place when the (SACR) risk weighting of the guarantor is better than that of the borrower.

The secured exposures shown under mortgage liens are the exposures that are allocated to the SACR asset class "Exposures secured by mortgage liens". For the purpose of making the positions comparable with the figures shown under the IRBA, we have not presented this asset class separately and the exposures secured by mortgage liens are instead classified by the respective asset class of the borrowers. That is why exposures secured by real estate are also shown under the SACR asset class "Overdue positions" if there is a substantial delay in payment under the relevant agreement.

Besides the collateral that is also offset under the SACR, some physical and other collateral is only eligible for recognition under the IRBA. We show financial collateral and IRBA collateral separately from the guarantees.

Total IRBA exposures (EAD) secured by financial and other collateral

Asset class	Financial collateral € m	IRBA collateral € m
Central governments	30	0
Banks	10,691	80
Companies	3,363	44,161
Retail banking: Sub-class IRBA exposures secured by mortgage liens	802	25,064
Retail banking: Sub-class qualifying revolv. IRBA exposures	0	0
Retail banking: Other retail lending	316	805
Other non-loan-related assets	0	0
Total	15,202	70,110

The IRBA collateral also includes collateral secured by mortgage liens, i.e. residential and commercial property. Mortgage liens in the land register are also included in this category. The figures shown here are fair values weighted with recovery rates. These recovery rates are based on empirical data and are a component of the LGD models. By definition, the rates cannot exceed 100%; accordingly the figures shown are generally lower than the fair values.

By contrast, we use the so-called PD substitution approach to offset guarantees and credit derivatives – both subsumed as guarantees in SolvV. The protection is therefore not reflected in the LGD as is the case with financial and IRBA collateral but via the substitution of PD.

Total IRBA	exposures	(EAD)	secured	by	guarantees
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Asset class	<b>Guarantees</b> € m	Credit derivatives € m
Central governments	393	0
Banks	1,666	19
Companies	10,232	2,507
Retail banking: Sub-class IRBA exposures secured by mortgage liens	0	0
Retail banking: Sub-class qualifying revolv. IRBA exposures	0	0
Retail banking: Other retail lending	181	0
Other non-loan-related assets	0	0
Total	12,472	2,526

For reasons of immateriality, Commerzbank does not report secured equity investment exposures.

## 4. Summary of default risks as of December 31, 2008

In this section we provide an overview of the default risks applying to our total portfolio of €611bn. For balance sheet items we distinguish between the lending business and fixed-income items (securities). Off-balance sheet assets, such as loan commitments, are shown together with the on-balance-sheet lending business. Loans and commitments are shown separately from securities, as these are positions involving special contractual relationships with customers. This heading also includes securities repo and lending transactions, as these are non-derivative positions without margin calls.

The IRBA assessment basis as defined in section 100 SolvV is used for valuation purposes. In order to make everything as easy as possible for readers to follow, this applies regardless of whether the positions are SACR or IRBA positions.

The IRBA assessment basis for loans is the amount drawn down by the customer. If valuation allowances have been recognized on the receivable due from the customer, these are not deducted – in contrast to the volume of assets determined in accordance with IFRS accounting standards. Off-balance sheet positions relate to the amount committed to the customer. A weighting with the conversion factor is not undertaken to determine the assessment basis. The valuation recognized for securities is the nominal volume. For derivative positions we report the credit equivalent amount as defined in section 17 in combination with sections 18 ff. SolvV. The volume of assets includes all exposures subject to credit risk regardless of whether the positions are held in the banking or the trading book. Collateral received for default risk positions is not taken into account in the valuations reported.

Equity capital

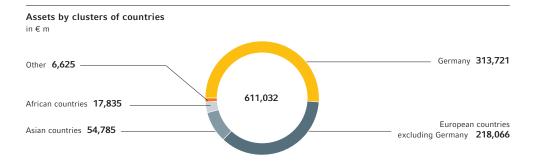
Specific risk

management

31

Positions that are effectively securitized are not included in the tables below. In accordance with section 232 SolvV, exposures are considered to be effectively securitized if there has been an effective transfer of risk. This applies regardless of whether these are traditionally or synthetically securitized positions. Securitization positions arising from Group companies included in the disclosure report acting as investors or sponsors are also not reported. Owing to their special significance, these are shown in a separate Section D.I.8.

Other non-loan-related assets, largely tangible assets, are also not listed in the tables below. The tables only show assets with inherent credit risks. For the same reason, we also do not show any equity investments here, as these by definition merely represent a residual claim on the assets of the company invested in, so that they are not receivables in the narrower sense.



The clusters of countries shown opposite correspond to the geographical classification of assets used internally. International organizations are not treated in accordance with the definitions in the Solvency Regulation but are presented under the system proposed by the Bundesbank.

## Assets by sector

Sector	On-balance-sheet/ off-balance-sheet lending € m	Derivative exposures € m	<b>Securities</b> € m	<b>Total</b> € m
Banking and insurance	103,138	27,375	44,069	174,582
Public sector, defence and social securi	ty 59,418	454	49,869	109,741
Real estate, renting and business activit	ies 90,505	2,363	40	92,908
Private households	75,686	40	0	75,726
Manufacturing industry	65,091	1,859	65	67,015
Transport and communications	22,388	1,127	886	24,401
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	19,688	337	33	20,058
Electricity, gas and water supply	12,360	263	532	13,155
Other community, social and				
personal service activities	10,111	137	788	11,036
Miscellaneous	21,057	481	872	22,410
Total	479,442	34,436	97,154	611,032

The figures confirm the fact that we have focused our business activities on Europe and, in particular, Germany as the core market.

The breakdown by sector is also based on a system used internally by the Bundesbank. The total assets have been broken down by sectors with assets of more than €10bn. Sectors with assets below this level were aggregated under the Miscellaneous item.

#### Assets by maturity date

Maturity date	On-balance-sheet/ off-balance-sheet lending	Derivative exposures	Securities	Total
	€m	€ m	€ m	€ m
Short-term (up to 1 year)	183,867	8,238	14,436	206,541
Medium-term (1 to 5 years)	129,257	14,261	29,624	173,142
Long-term (over 5 years)	166,318	11,937	53,094	231,349
Total	479,442	34,436	97,154	611,032

The breakdown by maturity conforms to the usual definition of short, medium and long term. This demonstrates an even distribution of loans over the various maturity ranges, confirming the strategy we are pursuing.

# 5. Intensive care / Charges against earnings arising from impairments

We take account of the risks in the lending business reported under the IFRS category LaR by forming specific loan loss provisions (SLLP), portfolio loan loss provisions (PortLLP) and general loan loss provisions (GLLP) for both on- and off-balance-sheet loan assets on the basis of the provisions of IAS 39 and IFRS 37.

In determining loan loss provisions, the Bank distinguishes between insignificant (total lending volume of up to €1m with exceptions) and significant assets (lending volume over €1m). For insignificant loan assets with a default rating (PD = 100%), we form a specific portfolio valuation allowance or provision based on internal parameters. For significant assets with a default rating, the calculation of the specific allowance or provision (SLLP) is based on discounted future cash flows. The cash flows take account of both expected payments as well as proceeds from the sale of collateral and other achievable cash flows. The loan loss provision is the difference between the amount of the receivable and the cash value of the total expected cash flow. General loan loss provisions for on- and off-balance sheet business (GLLP) are calculated at the level of each individual transaction, with the calculation again using internal default parameters (PD and LGD) and taking the LIP (loss identification period) factor into account. Country risks are not accounted for separately under IFRS but are included for the purposes of calculating SLLPs through the individual estimates of cash flows or given a flat value in calculating portfolio loan loss provisions (PortLLP impaired/GLLP).

Impairments are also reported for fixed-income securities classified as available for sale (AfS) and loans and receivables (LaR) if the fair value is below amortized cost as a result of a fall in rating. At each reporting date we review if there are objective grounds (a "trigger event") for an impairment and whether this will have an effect on expected cash flows. Trigger events are reviewed on the basis of the rating of the borrower/issuer or of the issue (e.g. for Pfandbriefe, ABS transactions). Trigger events might include:

List of abbreviations

Arrears/default in payments of interest or principal on the part of the issuer/debtor

process

- Restructuring of the debt instrument as a result of substantial financial difficulties on the part of an issuer (of a security) or debtor (in the case of a loan)
- Increased probability of bankruptcy proceedings
- Increased probability of insolvency

As part of the impairment policy for debt instruments in the AfS portfolio, we have operationalized the trigger events with a combination of changes to rating and fair value. To achieve this, the individual securities are clustered into three groups that are the basis for further individual impairment checking. If trigger events are found, an impairment is taken to income. If there is no trigger event but the fair value is below amortized cost a charge is made to the revaluation reserve. The amount of the impairment constitutes the difference between amortized cost and fair value.

The total amount of the provision for possible loan losses, insofar as it relates to claims on the balance sheet, is deducted from the respective balance sheet items. However, provision for risks in off-balance-sheet business – guarantees, endorsement liabilities, lending commitments – is shown as a provision for lending risks.

In accordance with Group write-down policy impaired assets are always written down to the asset's cash value two years after termination by utilizing existing valuation allowances (SLLP / PortLLP impaired). Recoveries on written-down assets are recognized in the income statement.

The reports below on loan loss provisions show the total amount of non-performing or overdue assets drawn down in the IFRS categories LaR or AfS (in the case of fixed-income securities) including the related loan loss provision/write-down broken down by sector and country of registration/residence of the respective borrower.

All loans that are identified as defaults under the Basel II rules are defined as non-performing. The following events are key to determining that a customer is in default:

- Imminent insolvency / overdue for over 90 days
- The bank is assisting in the customer's restructuring with or without contributions towards
- The bank has given notice demanding settlement of its claim
- The customer has been declared insolvent

Assets in the AfS category are also considered as non-performing when there has been an impairment trigger event.

Loans in arrears are defined as those that are overdue for up to 90 days. To prevent an increase in non-performing assets, a computer-aided management system closely monitors these overdue amounts from the first date that they are overdue. For assets in the AfS category, there is no explicit method laid down in an impairment policy for determining if they are in arrears.

To process non-performing commitments, the Bank has set up a separate Group unit, Intensive Care. This unit brings together the expertise needed to assist customers going through a restructuring and to successfully process commitments in default, including realizing any collateral.

The following overview compares the total amount of non-performing or in-arrears assets on and off the balance sheet against existing loan loss provisions together with net additions and direct write-downs.

#### Loans in arrears and non-performing loans by sector

Sector	Total loans in arrears and non-performing loans	SLLP on- balance	PI on- balance	SLLP+PI off- balance	GLLP on/off balance for loans in arrears	Net additions (SLLP/PI)	Write- downs
	€m	€m	€m	€m	€m	€m	€m
Land and forestry	89	42	4	0	0	2	1
Fisheries	2	0	0	0	0	0	0
Mining and quarrying	58	16	0	2	1	12	9
Manufacturing industry	3,607	681	50	55	32	233	40
Electricity, gas and water supply	337	89	1	3	3	-23	1
Construction	720	203	37	33	2	-19	36
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	1,485	317	55	9	7	101	33
Hotels and restaurants	224	77	15	1		-8	10
Transport and communication	849	53	12	20	2	25	2
Banking and insurance	3,942	471	9	1	2	403	253
Real estate, renting and business activities	7,151	1,434	111	91	11	278	295
Public sector, defence and social security	29	0	0	0	0	0	0
Education and training	28	4	2	0	0	0	1
Health, veterinary and social work	196	34	22	0	1	1	4
Other community, social and personal service activities	1,048	263	53	13	3	19	24
Private households	2,877	238	456	4	27	146	76
Non-profit organizations	20	3	1	0	0	-2	0
Total	22,662	3,925	828	232	92	1,170	785
of which securitized positions	609	85	10	0	5	53	2

The following definitions are used here:

SLLP on balance is the sum of specific loan loss provisions for significant non-performing assets as determined by individual cash flow estimates.

PI on balance is the sum of portfolio loan loss provisions (PortLLP impaired) for insignificant non-performing assets as determined on a portfolio basis with the aid of internal risk parameters.

SLLP und PortLLP impaired off balance is the total sum of loan loss provisions for significant and insignificant off-balance sheet assets. The method for determining them is analogous to the one used for determining assets on the balance sheet.

GLLP on/off balance is the sum of general loan loss provisions relating to loans in arrears. Net allocation to SLLP and PortLLP impaired on and off balance shows the net position comprising allocations to and reversals of loan loss provisions for on- and off-balance sheet business. This does not include direct write-downs, which are shown separately under the column headed Direct write-downs.

The total drawdown of non-performing assets and assets in arrears stands at €22.7bn, of which around €12.7bn relates to the non-performing portfolio and around €10bn relates to assets in arrears. In addition to the loan loss provisions shown below, there is always collateral set against the total amounts drawn down which is taken into account when calculating SLLP, PortLLP and GLLP. Recoveries of €35.8m on written-down assets are booked as income in the loan loss provisions and are not allocated to sectors and countries.

List of abbreviations

Loan loss provisions are also formed for synthetically securitized positions with a significant and effective risk transfer, and these are shown in the table. To enhance transparency, they are shown as separate positions – again with breakdown by the different types of valuation allowance.

#### Loans in arrears and non-performing loans by clusters of countries

Clusters of countries	Total non- performing loans and loans in arrears	SLLP on- balance	PI on- balance	SLLP+PI off-balance	GLLP on/off balance for loans in arrears
	€m	€ m	€ m	€ m	€ m
Germany	13,778	2,831	764	69	78
Europe excluding Germany	7,390	769	62	159	12
Asia	612	43	0	0	1
North America	882	282	2	4	1
Total	22,662	3,925	828	232	92

The breakdown by clusters of countries reflects the Commerzbank Group's focus on Germany and selected markets in Europe. This results in the bulk of the loan loss provisions falling on borrowers based in these geographical areas. Besides Germany and Europe, the sum of specific loan loss provisions is significant in North America, which is due to higher defaults as a result of the financial market crisis.

# Loan loss provisions

Type of provision	Opening balance € m	Additions € m	Reversals € m	<b>Utilization</b> € m	Other changes € m	Closing balance € m
SLLP on-balance	5,121	1,824	919	1,022	-1,079	3,925
PI on-balance	43	499	264	510	1,059	828
SLLP+PI off-balance	253	145	116	12	-39	232
GLLP on/ off balance for						
loans in arrears	86	31	24	0	-1	92
Total	5,503	2,499	1,323	1,544	-60	5,077

Changes in loan loss provisions do not take account of direct write-downs. In addition, the table only shows loan loss provisions relating to the lending business and how they have changed, which means that fixed-income securities allocated to the category AfS and, in specific cases, also to LaR, are not taken into account. The column headed Utilization shows the reversal of valuation allowances by making a (partial) write-down. Other changes report adjustments to loan loss provisions resulting from changes in exchange rates and changes in the group of consolidated companies.

As losses incurred in the lending business, direct write-downs and utilization of valuation allowances for assets classified as IRBA positions pursuant to Basel II are taken into account here and compared with the Basel II expected loss for those assets. The amount of EL for the whole book of assets calculated under the AIRBA in the disclosure report is very different from the sum of €1,141m reported as EL in the annual report. This is almost exclusively due to the way loans in default are treated in the disclosure report, which leads to very high figures for EL being reported as a result of the 100% probability of default. The annual report, however, only showed loans not in default in its calculation of EL.

Expected	and	real	1760	losses

Asset class	Expected Loss € m	Realized loss € m
Central governments	6	0
Banks	298	6
Retail lending	3,069	269
Companies	736	871
Total	4,109	1,146

Another difference compared to the annual report is the fact that the expected loss reported here does not include SACR or securitization positions.

## 6. Default risks arising from derivative positions in the Commerzbank Group

Derivative positions give rise both to market risks and default risks if a claim against the counterparty arises in the form of a positive exposure.

The positive or negative fair values listed in the table are the cost which would be incurred by the Bank or the counterparty to replace the contracts concluded originally with business with the same financial value. From the Bank's point of view, a positive fair value thus indicates the maximum potential counterparty-specific default risk. Positive market values are accordingly construed as a replacement expense in the regulatory sense.

# Positive replacement costs

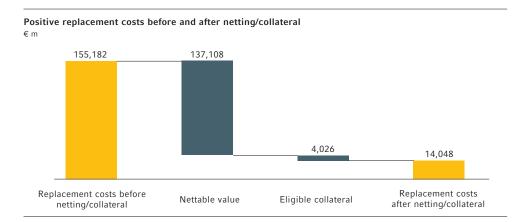
Risk category	Replacement costs before netting/collateral $\in$ m
Interest-rate risk	126,113
Exchange-rate risk	17,542
Equity risk	5,404
Precious metals	256
Commodity price risk	469
Credit derivatives	5,398
Total	155,182

In order to reduce both the economic and the regulatory credit risk arising from these instruments, our Legal Services department concludes master agreements (bilateral netting agreements, such as the 1992 ISDA Master Agreement Multi-currency Cross-Border; German Master Agreement for Financial Futures) with our 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. Through this netting process, the credit risk is limited to a single net claim on the party to the contract (close-out netting).

We use these risk-mitigating techniques for both regulatory reporting and the internal measurement and monitoring of our credit commitments only if we consider them enforceable under the jurisdiction in question, should the business partner become insolvent. We obtain legal opinions from various international law firms in order to verify enforceability.

Equity capital

A total of €155bn in positive fair values arising from derivative positions compares with €137bn of negative fair values covered by netting agreements, and these can be netted out. As the netting agreements relate to all products, we show here the total amount of nettable negative fair values. The positive and negative fair values are shown in the above table, in contrast to the balance sheet, as gross figures.



Similar to the master agreements are the collateral agreements (e.g. Collateral annex for financial futures contracts, Credit support annex), which we conclude with our business partners to secure the residual net claim or liability 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 commitment. The − mostly cash − collateral shown in the table reduces the exposure to counterparties to €14bn. Only collateral whose legal enforceability has been confirmed with a separate legal opinion is offset and shown in the table. Here too, because the offsetting covers all products, the total amount of collateral received is shown.

The fair values arising from equity risk relate to the derivative default risk positions pursuant to section 11 SolvV and do not take account of the rules for embedded derivatives pursuant to IAS 39.

The basis for determining the offset amounts for the default risk from derivative positions are not the positive fair values but instead the credit equivalent amounts. To determine the credit equivalent amounts, we have opted for the market price-based method pursuant to section 18 SolvV, which gives an amount to offset of €34,436m. We determine the credit equivalent amounts by adding replacement costs plus an add-on for increases expected in the future in the current potential replacement cost.

For a number of non-material subsidiaries that are non-trading book banks, we use the maturity-based method pursuant to section 23 SolvV, which produces an amount to offset of €0.5m.

The approach to risk quantification is generally based on a risk simulation which, based in turn on a confidence level of 97.5%, generates future market scenarios and values portfolios on the basis of these scenarios. The credit risk from derivatives is then defined as an exposure vector. Netting and collateral agreements are taken into account in this calculation.

To monitor the default risk arising from derivatives there is a group-wide, real-time credit limit system aggregating all relevant transactions and showing the total risk positions at borrower group level. The system of limits implemented there reflects the aggregated risks of the borrowers. Legal agreements such as netting and collateral agreements are also taken into account. To guarantee adherence to limits, we implement a pre-deal-check functionality and the credit officers responsible also have direct access to all information relevant to risk.

#### The credit derivatives portfolio of the Commerzbank Group

All operational units, branches and subsidiaries are in principle entitled, provided they comply with all formalities, to use credit derivatives to hedge credit risks in loan portfolios (i.e. buy protection). This gives the units the opportunity to hedge credit risks with a credit derivative without having to sell or assign the loan. This is also another way to achieve an (economic) reduction of risk and take pressure off regulatory capital.

The credit decision is made at branch/credit committee level, with responsibility for fixing conditions in line with the market and executing, booking and monitoring the loan then delegated on to the front office. Accordingly, the operations, systems and control platforms used to support the trading books also provide support to branch activities in relation to credit derivatives.

The nominal value of  $\in$ 9.5bn shown for credit derivatives only relates to credit default swaps in the investment portfolio used to reduce the credit risk for larger packages of assets and to minimize the offsetting pursuant to the Solvency Regulation. Credit derivatives that are attributable to the arbitrage business are not included here.

The same applies to available for sale credit derivatives totalling approximately €3.4bn. Investments in credit derivatives on a held-to-maturity basis (seller of protection) enables additional income to be generated in addition to the usual credit transactions. For instance the margin on a CDS for a specific borrower is generally higher than for a loan to the same borrower.

Credit derivatives also enable banks to gain access to a borrower when there are few other instruments available. In situations where too little or no use is being made of credit lines, the loan book manager can enter into a CDS. Equally certain facilities can be terminated and replaced with a CDS in order to obtain a higher margin. CDSs can generally be employed to create synthetic investments with a tailor-made exposure. The positions are generally held until maturity and the income realized throughout the term of the transaction.

Commerzbank invests synthetically in credit risks via credit derivatives. A central Investment Committee has been set up to support the activities in the respective portfolios and to monitor them under terms of clearly defined guidelines and credit limits approved in advance. The limits have been set and approved by the Board of Managing Directors. The Investment Committee is also responsible for the monitoring and support of all future activities connected with credit derivatives in the banking book.

The underlying risk arising from positions as a seller of protection in the banking book tends to increase the size of the balance sheet and must therefore be recognized at full nominal value in Commerzbank's balance sheet system as "Collateral guarantees from CDSs" or "CDS credit debtors". In the Basel II calculation the inclusion of protection seller positions pursuant to section 13 SolvV and section 19 KWG is also mandatory.

Commerzbank is not active in prime brokerage. As a result no nominal figures are shown for it. Contractual agreements that oblige Commerzbank to provide additional collateral to its counterparties in the event of a downgrading of its own rating are covered in the Credit Support Annexes established as part of the netting master agreements for the OTC derivative business.

The counterparty ratings (S&P, Moody's and Fitch) are automatically uploaded on a daily basis via interfaces with Reuters/Telerate/Bloomberg into the collateral management system. In the event of a downgrading of Commerzbank's or a counterparty's rating, we also receive a report with the necessary information on a daily basis.

39

If required, it is possible to generate a report in the collateral management system calculating a downgrade scenario for Commerzbank or a counterparty. This makes it possible to carry out an advance analysis of the potential effects on the collateral levels. The effects of a rating downgrade on the amount of collateral that has to be provided does not influence Commerzbank's risk-taking capability.

### 7. Investments in the banking book

The bulk of the investments held as financial assets (banking book) and all shares in consolidated companies are designed - in addition to the basic intention to earn a profit - to directly and indirectly pursue and attain the strategic and operational objectives of the various divisions of the Bank as well as the overall strategic goals of the Group.

In addition, there are also non-strategic investments in the financial investment portfolio (including in particular the listed investments in the available-for-sale portfolio) that are primarily held - and accordingly also sold - to yield a profit (through participating in capital gains, ongoing dividends etc.).

It should be noted at this point that the investments discussed in this Section are those as defined in sections 25.13 and 78 SolvV. The definition of an investment in the SolvV is wider than the usual accounting definition. Accordingly, share options, certificates and other financial instruments that have the characteristics of an investment are presented below; classical investments nevertheless constitute the bulk of the SolvV asset class. All figures are based on HGB accounting rules.

### Valuations of investments

Investment category	Book value	Fair value	Market value
	€m	€ m	€ m
Segment-supporting investments	2,343	2,343	0
of which unlisted but			
diversified positions	2,343	2,343	0
Investments held to earn capital gains	1,447	1,649	1,522
of which listed positions	1,319	1,522	1,522
of which unlisted but			
diversified positions	1	1	0
of which other investment positions	126	126	0
Other investments	267	267	15
of which listed positions	15	15	15
of which unlisted but			
diversified positions	6	6	0
of which other investment positions	246	246	0
Funds and certificates	628	603	0
Total	4,684	4,862	1,537

The above table shows the value reported in the balance sheet for each of the investments in the investment portfolio, their fair value and, for listed securities, their market price, in each case classified by the objective of the investment. The market price does not differ from the fair value as internal rules stipulate that a security's market price is the yardstick for determining its fair value.

Only unconsolidated investments are shown in relation to the group companies covered by the disclosure report. Special purpose vehicles (SPVs) are not shown due to a lack of cross-shareholdings. At Commerzbank, fair value is only determined for consolidated companies; accordingly the carrying value is shown as the fair value for unlisted companies.

The consolidated companies included in this disclosure report hold seven listed investments, of which five are held with the intention of achieving capital gains. Of the unlisted companies, 295 were acquired with the intention of achieving capital gains. Of these 165 belong to Commerz Real AG. Of the 68 unlisted segment-supporting segments, four belong to Commerz Real AG. Of the other investments, 405 companies relate to Commerz Real AG with a carrying value of €215m.

The segment-supporting investments include goodwill pursuant to section 10a.6.11 KWG of €2,249m.

Funds shown under the investments asset class include the CB CoFonds with a carrying value of €272m at Eurohypo and at Commerzbank AG the CBP fund at €152m and the CICO fund at €204m (both carrying values).

## Realized and unrealized gains / losses on investments

Last year the Group companies covered by the disclosure report sold investments held in the banking book with the intention of achieving capital gains. A gain totalling €159m was earned on the disposals. The gains consist of sales proceeds over and above the HGB carrying values. Write-downs and write-ups taken to income in 2008 are not considered as realized gains or losses.

Set against these is an unrealized loss totalling €151m. This is determined by comparing the HGB carrying values with the fair values. For options an unrealized gain or loss arises from the discounted difference between spot and strike prices and the option premium paid (for long positions) or received (for short positions).

No amounts arising from the unrealized loss have been recognized in Tier I or Tier II capital at Group level.

# 8. Securitizations

Commerzbank is an active market player in securitizations in the three roles provided for in regulatory law, namely as investor, originator and sponsor.

• Investor: The Commerzbank Group uses securitization both as an instrument for risk diversification as well as for targeted portfolio management measures. As part of the bank's internal risk strategy for securitizations, we manage a widely diversified investment portfolio of securitization instruments in accordance with strict quality specifications. They include to a lesser degree investments in liquidity lines of the ABCP programmes of third-party institutions. The aim of these investment portfolios is to diversify risk at the level of the Bank as a whole.

Under IFRS, investor positions are categorized in accordance with the provisions of IAS 39 by the intention pursued for each of the securities acquired. Potential IFRS categories comprise Held for Trading, Loans and Receivables and Available for Sale. Please refer to Note 5 in the IFRS consolidated financial statements for a detailed explanation of the categorization rules and the related valuation systems.

The Commerzbank Group uses the publicly available ratings provided by the three major ratings agencies (S+P, Moody's, Fitch) in relation to the securitization positions it holds both for making decisions on investments and also for calculating capital adequacy requirements.

Risk management process

The activity as originator, i.e. structuring securitization transactions on our own on the basis of the Group's own asset portfolios is focused on Commerzbank AG and Eurohypo. This involves both synthetic as well as true-sale securitization transactions. As part of its activity as originator of securitization transactions, Commerzbank also undertakes work as swap partner and sponsor (granting credit approvals/enhancements).

The table below shows the Commerzbank Group's securitization transactions that are currently in circulation in the capital markets and that we use to free up regulatory capital:

Securitization programme	Type <sup>1</sup>	Securitization pool	Maturity date	Issue currency	Current volume € m
CoCo Finance 2006-1	S	Companies	2016	EUR	4,500
Cosmo 2007-1	S	Companies	2027	EUR	2,000
Cosmo 2008-1	S	Companies	2022	EUR	1,500
CB MezzCAP <sup>2</sup>	Т	Companies	2036	EUR	178
TS Co. mit One <sup>3</sup>	Т	Companies	2013	EUR	198
Total Commerzbank AG					8,376
Provide Gems 2002-1	S	RMBS	2048	EUR	466
Semper Finance 2006-1	S	CMBS	2084	EUR	966
Semper Finance 2007-1	S	CMBS	2046	EUR	710
Glastonbury Finance	Т	CMBS	2047	GBP	371
Opera White Tower	Т	CMBS	2013	EUR	650
Opera Finance Uni-Invest	Т	CMBS	2010	EUR	775
Opera Finance MEPC	Т	CMBS	2012	GBP	493
Opera France One	Т	CMBS	2013	EUR	380
Opera Germany 1	Т	CMBS	2013	EUR	146
Opera Germany 2	T	CMBS	2011	EUR	560
Opera Germany 3	Т	CMBS	2017	EUR	538
Total Eurohypo					6,055
Total Group					14,431

<sup>1</sup> S = synthetic, T = traditional

In IFRS accounting there is first a review of true-sale securitization transactions to establish the extent to which consolidation of the SPV is required under SIC 12. This investigation process is centred on the Commerzbank Group's Accounting Department. This central office is informed in advance of the launch of an SPV. Based on the information submitted, it investigates whether this SPV has to be consolidated. The opinion in respect of consolidation is then submitted to the Board of Managing Directors for approval. If the SPV belongs to the companies consolidated within the Commerzbank Group, there is no further investigation into derecognition, as derecognition does not apply. If the SPV does not have to be consolidated, the derecognition of the securitized assets is reviewed in accordance with the risk/reward approach as the primary derecognition concept and the control

<sup>2</sup> outstanding volume as per investor report of January 26, 2009

<sup>3</sup> outstanding volume as per investor report of December 22, 2008

concept as a subsidiary derecognition concept (IAS 39.15 ff.) and, if appropriate, a (partial) derecognition is reported. When assets are derecognized, any resultant gains or losses are reported in the income statement. If there is no derecognition or only a partial derecognition, the assets underlying the transaction that have not been derecognized continue to be recognized as before under their relevant IFRS category. With synthetic securitizations there is never any derecognition of the underlying assets. These remain in the same IFRS category and are recognized and measured in accordance with the rules applying to them. Currently the SPVs set up for securitization purposes for the following transactions are consolidated: CoCo Finance 2006-1, CoSMO 2007-1, CoSMO 2008-1, CB MezzCAP, TS Co.mit One, Semper Finance 2006-1 and Semper Finance 2007-1.

In connection with (synthetic and true-sale) securitization transactions where Commerzbank AG acts as originator to free up capital and with the assets securitized for this purpose, we have to date cooperated with the rating agencies Fitch, S+P und Moody's. These transactions involve receivables arising from business with the Mittelstand as well as receivables due from major customers, which are securitized. With the transactions where Eurohypo acts as originator, the underlying securitized assets are generally commercial real estate loans. In the latter case these are therefore usually CMBS transactions. The transactions themselves are usually rated by two of the three rating agencies (S+P, Moody's, Fitch).

Sponsor: By means of the "Kaiserplatz" ABCP programme, Commerzbank AG is in a position to offer corporate customers an alternative means of raising funds via the capital markets and can structure a correspondingly extensive product range for this customer segment.

The scope of our activities as sponsor is restricted exclusively to the "Kaiserplatz" ABCP programme, which was launched and is administered by Commerzbank AG. This enables companies to raise short-term funds via the capital markets with, for the most part, trade receivables being purchased over the capital markets to raise funds. The commercial paper issued under the Kaiserplatz ABCP programme has to date been rated by the rating agencies S+P and Moody's.

Pursuant to IFRS, Commerzbank's conduits are consolidated. This involves their assets and liabilities being shown directly in Commerzbank's balance sheet.

Commerzbank is a banking group that applies the regulations of the advanced IRB approach. That is why the regulatory rules stipulated under the IRB approach for securitization positions are applied.

Owing to the strict qualitative requirements of the credit risk strategy for securitizations, the Commerzbank Group's securitization positions are for the most part positions with an external rating in the upper investment grade region. These externally rated securitization positions are treated in accordance with the ratings-based approach (section 257 SolvV). In specific cases, for instance with market value hedging transactions that have absolute prior ranking in the transaction waterfall (interest-rate and/or currency swaps), the opportunity is taken for a rating to be inferred pursuant to section 256 SolvV. Retained first loss positions arising from our own securitization transactions are deducted from capital when own funds requirements are calculated.

For securitization positions that are not rated externally under the "Kaiserplatz" ABCP Programme, Commerzbank uses an internal ratings-based procedure for calculating capital requirements certified by BaFin. This is used correspondingly for the securitization positions arising from our activity as sponsor. It is also used to calculate capital requirements relating to investments in liquidity lines of the ABCP programmes of third-party institutions. Asset-

Equity capital

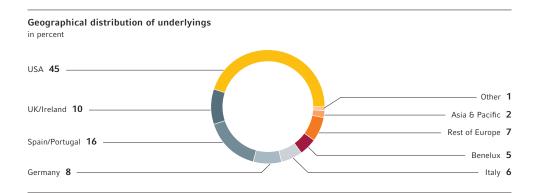
backed commercial paper (ABCP) programmes are offered as part of the securitization business primarily as an alternative form for corporate customers to raise funds. This involves in particular the trade receivables of companies from different sectors being bought and securitized via special-purpose vehicles (SPVs). The SPVs are refinanced through the EUR or USD ABCP market by Kaiserplatz Funding Limited through the issue of ABCP rated A-1/P-1 (by S&P/Moody's). Commerzbank provides the SPVs with various facilities (liquidity lines, guarantees).

Only IRB banks may use the Internal Assessment Approach (IAA) to calculate the level of regulatory capital required for unrated positions in respect of these SPVs and under the current regulatory requirements this approach must be based as closely as possible on the procedures of the recognized rating agencies.

The latter take account, besides the credit (asset) risks inherent in the securitized assets, of the related seller risks, such as dilution, commingling, legal and tax risks. Wherever it makes sense and can be done, risks are quantified. This is achieved by parameterization of loss distributions based on data series of historical losses in the individual risk categories. In addition, any other risk components that can only be quantified with difficulty are assessed with structured scorecards or excluded via checklists. The result of the rating process is a rating mapped on external creditworthiness classes that reflects the expected loss (EL) of the respective position.

For securitization positions which are not rated and for which there is no internal rating based on the internal ratings-based procedure or for which no applicable rating can be inferred, the Supervisory Formula Approach (SFA as defined in section 258 SolvV) is used.

The chart below gives an overview of the regional distribution of the assets underlying the Commerzbank Group's securitization portfolios as of December 31, 2008.



The table below shows the amounts of the Commerzbank Group's securitization transactions in circulation. The main factor behind the amounts shown is the regulatory IRBA assessment basis – regardless of whether the underlyings were originally SACR or IRBA positions. The IRBA assessment basis is usually the same as the current amount of securitized positions in circulation.

As far as the assets securitized as part of the securitization transactions listed are concerned, it is usually direct loans in the corporate or private customer business that are securitized. One exception to this rule is Eurohypo's Glastonbury Finance 2007 transaction. This is a true-sale securitization transaction, whose securitized portfolio of assets consists of CMBS securitization tranches.

#### Outstanding securitized loans

Securitization/loan type	Amount securitized € m
traditional	4,300
of which commercial real estate	4,122
of which loans to companies & SMEs	178
synthetic	10,050
of which loans to companies & SMEs	7,946
of which commercial real estate	1,676
of which residential real estate	428
Total	14,350

The transaction level shown is fundamentally based on the question of whether, from a regulatory perspective, default risks have actually been transferred to third-party investors. A distinction is in turn made with regard to the type of risk transfer. If the assets are held directly by the SPV, this is a true-sale securitization transaction. If the default risks of a reference loan portfolio are being hedged in a securitization transaction, this is a synthetic securitization.

A distinction is also made depending on the type of risk transfer. If the assets are held directly by the SPV, this is a true-sale securitization transaction. If the credit risks of a reference loan portfolio were hedged with a securitization transaction, this is a synthetic securitization.

The headings "True-sale" and "Synthetic" are further broken down by the asset classes of the securitized portfolios.

In addition, Commerzbank AG is sponsor of the "Kaiserplatz" ABCP programme, i.e. Commerzbank AG has approved loan commitments in favour of Kaiserplatz amounting to €1.2bn. As of the reporting date (December 31, 2008), €620m of these approved loan commitments have been drawn down by Kaiserplatz. Furthermore, Commerzbank AG holds €292m of commercial paper issued by Kaiserplatz. To date sponsor positions are not shown in the tables. They are, however, part of the securitization structuring process and generate securitization positions.

Commerzbank AG has also structured a true-sale securitization transaction during the reporting period under review, for which there was no transfer of risk, which is why it does not appear in the table above (TS Lago ONE). Underlying this transaction is a portfolio of some of Commerzbank AG's mortgage loans to private customers. This was structured as a transaction comprising two tranches, of which the senior tranche was pledged to the ECB as part of its open market operations.

As in the tables above, the figures shown in this table are based on the IRBA assessment basis. The table shows the volume of securitized assets categorized as non-performing, the volume in arrears and the losses that have been incurred on securitized assets.

## Securitized loans in arrears and non-performing loans

Securitization portfolio	Non-performing loans € m	Loans in arrears € m	<b>Loss</b> € m
Residential real estate	38	12	0
Commercial real estate	17	10	0
Loans to companies & SMEs	49	314	3
Total	104	336	3

In this context "non-performing assets" mean any assets with an internal rating equivalent to Standard & Poor's long-term C rating. "Assets in arrears" by contrast include all assets that, when viewed on an individual transaction basis, are at least one day overdue. This conservative approach means that the figures also include technical overdrafts. The specific loan loss provisions formed on the securitized portfolios are shown under the heading 2Losses". These definitions are equivalent to those used for risk provisions for standard non-performing assets, assets in arrears and losses in order to ensure comparability. The headings "Non-performing", "In Arrears" and "Loss" are further broken down by the asset types of the securitized portfolios.

Risk management

process

The TS Lago ONE transaction is once again not included in the figures as from a regulatory perspective no risk transfer has taken place in respect of the underlying securitized assets.

#### Securitization exposures retained or purchased by loan type

Loan type	<b>Originator</b> € m	<b>Investor</b> i€ m	<b>Sponsor</b> € m
Residential real estate	1	1,410	
Commercial real estate	1,132	644	
Loans to companies & SMEs	8,143	824	
Consumer credit		55	
Leasing		39	
Collateralized Debt Obligations (CDO)		127	
Trade receivables			48
Other		4,666	1,707
Total	9,276	7,765	1,755

This table lists the securitization exposures held by the Commerzbank Group. The regulatory exposures that are included in the regular reporting to the supervisory authority underlie the amounts shown here. The bases of assessment referred to previously are translated to SACR/IRBA exposures by weighting them with the credit conversion factor. The table above breaks down the securitization positions by type of asset underlying the securitization positions.

In order to further improve the transparency of the securitization positions held by the Commerzbank Group, a further distinction is made in the table below by breaking them down by type of exposure.

## Securitization exposures retained or purchased by type of exposure

Type of exposure	<b>Originator</b> € m	Investor € m	<b>Sponsor</b> € m
Receivables	8,045		
Credit enhancements			376
Securities portfolio	144	7,358	
Other positions on-balance	9	272	868
Liquidity facility		90	509
Off-balance positions from synthetic securitization	1,078		
Other positions off-balance		45	2
Total	9,276	7,765	1,755

The tables below also show the securitization exposures held by the Commerzbank Group but this time broken down by risk-weighting ranges. The exposures are converted into risk-weighted assets via a risk-weighting factor. Multiplying the result by 8% gives the capital adequacy requirement.

#### Securitization exposures retained or purchased by IRBA risk-weighting bands

Risk-weighting band	Exposure € m	Capital requirement € m
100/		
≤ 10%	11,257	57
> 10% ≤ 20%	2,019	26
> 20% \le 50%	1,248	34
> 50% ≤ 100%	515	33
> 100% < 650%	38	13
1250% / capital deduction	304	300
Total	15,381	463

To provide insight into the risk structure of the securitization positions held, they are further broken down into the main risk-weighting ranges underlying the positions. As far as securitization positions with an external rating of B+ or lower are concerned, the Solvency Regulation allows us to make a choice. These positions can either be weighted with a risk weighting of 1,250% when calculating RWA or deducted 50:50 from Tier 1 and Tier 2 capital. In the Commerzbank Group, these positions are deducted 50:50 from Tier 1 and Tier 2 capital.

#### Securitization exposures retained or purchased by SACR risk-weighting bands

Risk-weighting band	Exposure	Capital requirement
	€ m	€ m
> 10% ≤ 20%	3,303	53
> 20% <u>&lt;</u> 50%	113	4
Total	3,416	57

Positions held from the TS Lago ONE transaction do not have to be backed by capital in accordance with the Solvency Regulation as the transaction did not result in any transfer of risk. They are accordingly not included here.

As far as new securitization transactions are concerned that were issued in the course of 2008, these amount to one synthetic securitization transaction by Commerzbank AG, CoSMO 2008-1. This transaction securitized a portfolio of SME loans totalling approximately €1.5bn. Commerzbank AG has utilized the opportunity to recognize capital relief for the securitized portfolio.

The TS Lago ONE transaction that has already been mentioned is once again not included here, although it was issued in 2008, as no transfer of risk took place for the securitized portfolio.

## II. Market risk

### 1. Market risk strategy and organization

Equity capital

#### **Definition**

Market risk covers the risk of losses as a result of changes in market prices (interest rates, spreads, exchange rates, share prices etc.) or in parameters that affect prices such as volatilities and correlations. We also monitor market liquidity risk, which measures the time it takes to close or hedge risk positions to the extent desired.

# Strategy and processes

Particularly in the light of the experiences of recent years and current market expectations, comprehensive rules have been enshrined in the market risk strategy. At their core is the rigorous and consistent management of limits based on the business strategy, risk/return performance and market liquidity of the assets. Group-wide limits for interest rate and credit spread sensitivities have been introduced with the aim of limiting the potential for fluctuation in the revaluation reserve and we have continued to expand monitoring and management based on economic performance. The market risk strategy is rounded off by the ongoing development of the risk function by improving the relevance of the scenario analyses to current market developments.

The key quantitative data for the Commerzbank Group's market risk strategy is derived from the risk-taking capability for market risk laid down in the overall risk strategy and is expressed as economic capital. Based on the target figure for economic capital laid down for each financial year, a corresponding value at risk and stress test limit is derived for the Group as a whole. As part of the planning process this limit is broken down to the individual segments and business areas in line with the business strategy.

Sensitivity limits for credit spreads and interest rates were also introduced in 2008 for the first time. This measure is intended in particular to limit and manage the potential NPV changes in the revaluation reserve. Sensitivity limits restrict the change in the NPV of positions in the event of a change in the yield or credit spread curves by 1 basis point (bp).

The core tasks of risk management are the identification of all significant risks and risk drivers in the Group, the independent measurement and assessment of these risks, and the management of these risks on a risk/return basis within the Commerzbank Group on the basis of these results and estimates.

A very important role is played by holistic risk management by anticipation which is a basic prerequisite for avoiding potential losses in future crises. We intend to consistently build up this approach in future.

## 2. Quantification

#### Value at risk

Commerzbank uses an internal model to calculate the regulatory capital requirements for market risk at Commerzbank AG, its foreign branches and the Luxembourg subsidiary CISAL. The standardized approach is used for all other subsidiaries.

The calculation of market risk is based on a value at risk (VaR) metric. The Bank uses a 1-year historical simulation for general market risk and the variance-covariance method as part of the calculation of credit spread value at risk (CS VaR) for the specific interest rate risk. Normal distribution is assumed in aggregating the two key risk figures. The internal model is based on a holding period of ten days with a confidence level of 99% in compliance with the requirements of the Solvency Regulation.

The CS VaR is calculated in particular for the specific interest rate risk, securities and credit derivatives. The variance-covariance approach applied here involves calculating a covariance matrix based on historical market parameters (in particular bond prices and CDS spreads) over the past year. We are to extend this methodology to incremental and event risks.

The internal model has been checked and approved by the Federal Financial Supervisory Authority (BaFin).

#### VaR of the trading portfolios

	€m
Minimum	27
Median	43
Maximum	151
Year-end figure	96

Over the course of the year market risks in the trading book – measured at a confidence level of 99% and a holding period of ten days – rose sharply by  $\in$ 60.7m to a value at risk (VaR) of  $\in$ 96.3m. This was caused primarily by the sharp rise in market volatility in all asset classes, which accelerated further in the 4th quarter as a result of the heightened uncertainty after the Lehman collapse.

The reference level for value at risk for internal market risk reporting purposes is the 97.5% confidence level and one-day holding period with equally weighted changes. On this basis a comprehensive internal limit system is implemented at Commerzbank down to the lower levels of portfolios.

The internal model's reliability is checked on a daily basis using backtesting methods. This means that the model is examined for differences between the calculated VaR and the actual P&L, thus providing the basis for an assessment of the internal risk model by the supervisory authorities. We talk of a back test outlier if the actual trading loss is greater than the risk forecast by the VaR model.

The results of the backtesting ensure that all parameters are subject to review and the internal model is changed if necessary. In addition, all "failures" are classified under a trafficlight system laid down by the supervisory authorities and reported immediately to the authorities at Group level with details of the scale and cause of the outlier. At year-end there were six failures at Group level.

#### Stress tests

As the VaR metric only provides a forecast on the assumption of "normal" market conditions, it is supplemented by stress tests which simulate possible extreme market movements. Extensive group-wide stress tests and scenario analyses are carried out as part of the risk monitoring process. The aim is to simulate the impact of crises, extreme market conditions and major changes in correlations and volatilities on Commerzbank's overall market risk position. The impact on the various components of comprehensive income – income statement, revaluation reserve and hidden reserves or liabilities – are quantified in this exercise. The stress test calculations throughout the Bank are based on a combination of historical and hypothetical (forward-looking) scenarios for the various asset classes (equities, interest rates, credit spreads and currencies, e.g. 10% falls in share prices, 50 bp parallel shift in the yield curve).

In the wake of the financial crisis, forward-looking scenarios in particular have been regularly enhanced and adjusted for current market developments and expectations.

process

List of abbreviations

# 3. Management

Commerzbank defines its market risk limit for value at risk and stress testing at Group level in top-down terms, based on economic capital required (risk-taking capability). The limits for the individual business areas and portfolios are then allocated on the basis of the achieved and expected risk/return ratio, market liquidity of assets and business strategy. The extent to which limits are utilized is reported by the independent risk control unit on a daily basis to the Board of Managing Directors and business area or department managers.

In the wake of the latest crisis and the related high level of volatility and limited market liquidity, an even tighter management of limits was implemented, in particular for limits for portfolios with high credit spread sensitivity.

In addition, the limits introduced for long-term interest-rate sensitivity were supplemented by sensitivity limits for credit spreads. Both measures are intended in particular to limit and manage the potential NPV changes in the revaluation reserve, including the cover fund portfolios of Public Finance. Sensitivity limits restrict the change in the NPV of positions in the event of a variation in the yield or credit spread curves by 1 basis point (bp).

Overall, a proactive approach to risk analysis and active risk management enabled us to reduce the losses sustained by the Group in 2008. In the wake of the crisis we also reduced trading risks, particularly in credit derivatives (by reducing CDS positions) and equity derivatives (through hedging).

The market risk units continuously monitor the risks and the positions of the business units. To this end, market risk information is generated on a daily basis for all relevant portfolios throughout the Commerzbank Group. In addition to various daily reports for lower portfolio levels, the Flash Risk Report based on provisional VaR figures and the MaRisk report with final risk figures are the main reports generated at Group level. These are then submitted to management and the Board of Managing Directors.

The monthly market and funding risk report gives the Market Risk Committee and the Board of Managing Directors comprehensive information on the most significant developments in market and funding risks on an aggregated basis. It also forms the basis for the quarterly reporting on these issues as part of the internal risk report (Quarterly Risk Report - QRR).

# 4. Interest rate risk in the banking book

# Strategy and organization

The interest rate risk in the Commerzbank Group's banking book is the result primarily of positions taken by central Group Treasury and the treasury activities of branches and subsidiaries. All relevant subsidiaries are included here.

The main responsibilities of Treasury include management of the balance sheet structure and liquidity risk. The aim is to generate a positive net interest margin between interest income and funding expense. Interest rate risks arise if positions are not funded over matching periods or in matching currencies.

# Quantification

Measuring interest rate risks in the banking book is completely integrated into the daily measurement and monitoring of risk by ZMO. Similarly to the measurement of trading book risks, a value at risk is calculated on the basis of the internal model using historical simulation. This is calculated daily on an NPV basis for all interest rate risk-sensitive positions in the banking book including derivatives (e.g. swaps).

Prepayment risk (customers' rights to repay early) and basis risks between swap and government bond market interest rates are included in this calculation. In addition, stress tests and scenario analyses are carried out on a daily and monthly basis depending on the market situation.

The impact of an interest rate shock on the value of the Group's banking book is simulated on a monthly basis for regulatory purposes. This involves a parallel shift of the yield curve of -190 and +130 basis points. The results are applied to regulatory equity capital and may not exceed 20% of this capital. As of December 31, 2008, the bulk of the interest rate positions in the banking book are denominated in euros. A shift in interest rates of -190 basis points leads to a loss of €50m while a shift in interest rates of +130 basis points produces a profit of €77m. We are well below the limit laid down by the regulator.

#### Interest rate risk in the banking book

		€ m
Currency	-190*	130*
GBP – Pound Sterling	40	-15
CHF – Swiss Franc	16	-6
PLN – Zloty	29	-18
USD – US-Dollar	109	-21
JPY – Yen	8	3
EUR – EURO	-278	144
Other	26	-10
Total	-50	77

<sup>\*</sup> Interest rate shock in bp

# Management

Group Treasury centrally manages the interest risk arising from commercial business as well as the Group's liquidity risks. Interest rate risks also arise from the investment models used by the central ALCO (Asset & Liability Committee), which relate in particular to the investment and refinancing of equity capital as well as the investment of savings and sight deposits. The risk are managed in line with the business strategy by means of refinancing over matching terms and in matching currencies and by using derivatives to hedge positions.

In Treasury and ALCO, the interest rate exposure in the banking book was largely stable during 2008.

## 5. Liquidity risk

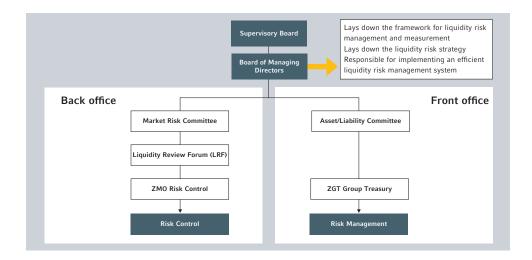
## Strategy and organization

Funding risk refers to the risk that Commerzbank will be unable to meet its current and future payment obligations as and when they fall due (liquidity risk).

In its liquidity risk strategy, the Commerzbank Group focuses on securing the liquidity needed to continue operating even under stress conditions. Core elements of this strategy are, firstly, avoiding structural imbalances in the funding mix in terms of sources and maturities and avoiding rising costs of funds as a result of imbalanced maturity transformation (borrowing short to lend long) and, secondly, imposing strict limits on units in markets in the light of the (liquidity) risk-taking capability against the background of local markets and/or the opportunities to raise funds in foreign currencies.

Equity capital

Commerzbank's liquidity risk is monitored and managed in an organizational structure with a clearly defined separation between front- and back-office functions. Close operational co-operation ensures efficient and prompt management of liquidity risks.



Current emergency planning ensures that in liquidity stress conditions we are able to act promptly and flexibly to safeguard Group liquidity in the event of a general or institution-specific crisis situation. This lays down in particular who is responsible for what and the procedures to be followed, enabling immediate execution of defined measures.

## **Quantification**

## Monitoring of liquidity risk

Ensuring the Commerzbank Group's ability to meet its payment obligations is monitored on the basis of two interlinked concepts:

- Available Net Liquidity (up to one year, quantified via the ANL)
- Stable Funding (> 1 year, quantified via the stable funding ratio)

# Available Net Liquidity concept

With the internally developed liquidity risk measurement approach, the available net liquidity (ANL) for the next twelve months is calculated on the basis of contractual and economic cash flows and compared with disposable assets. The results are then used to produce forecasts for trends in liquidity at different aggregation levels such as currencies, products or business units. In the base case scenario, where the parameters are in line with current market conditions, the Commerzbank Group complied with the Group limit throughout the reporting period. The model is supplemented by extensive stress analyses. These anticipate in particular illiquidity on the markets, the reduced availability of deposits as a source of funding and an increased drawdown of funds by off-balance sheet transactions.

## Limiting liquidity risk

The use of the ANL as a management tool is backed up by the limits imposed within the Group. Setting limits is the responsibility of ZMO and is coordinated with central liquidity management. Setting ANL and currency limits prevents liquidity risks of up to one year being entered into that cannot be closed out in good time.

A top-down approach is used to set limits. This starts with limits at Group level (Level 1) and goes on to set limits for Levels 2 to 4. The limit structure therefore extends to the main subsidiaries and business units and sub-units. As part of the ANL limit currency limits in all currencies must also be adhered to in the various locations (including the Group) in order to limit the funding risk in foreign currencies.

### ANL concept / Disclosure provision in the Liquidity Regulation

Commerzbank's liquidity risk model was subjected to an audit by the Bundesbank on behalf of BaFin in the summer of 2008 with the focus on the Commerzbank Group (excluding Eurohypo) and approved as suitable in principle and ready for certification. We were advised of the final certification and thus the freedom to take advantage of the disclosure provision in the Liquidity Regulation at the end of Phase II of the review, which focused on Eurohypo. The time schedule for the certification of the model is currently being reviewed with BaFin and the Bundesbank in view of the integration of Dresdner Bank.

#### Stable funding

The Commerzbank Group's short-term and medium-term funding relies on an appropriately broad diversification in terms of investor groups, regions and products.

Liquidity management analyzes the structure of the various sources of funding for our liabilities regularly in order to actively manage the funding profile.

Long-term funding is mainly secured by means of structured and non-structured capital market products that may or may not be collateralized, as well as customer deposits. The basis for planning issues in the capital markets is provided by the results of the computations made by our stable funding concept. This identifies the structural liquidity requirement for the Bank's core lending business as well as those assets that cannot be liquidated within one year, and compares these to the liabilities available long-term to the bank (including core customer deposit bases). The aim is to finance the Bank's illiquid assets and core business in terms of volume and maturity as far as possible with long-term liabilities.

We complied at all times throughout the reporting period with the provisions of the Liquidity Regulation ("Liquiditätsverordnung").

## Management

In the light of the worsening crisis, the frequency of reporting to the members of the Board of Managing Directors responsible for risk and Treasury was switched from a weekly to a daily basis in September 2008.

The situation on the money and capital markets as well as the equity repo markets has worsened considerably since the onset of the subprime crisis and reached its nadir in the current systemic financial crisis following on the bankruptcy of Lehman Brothers. There is very little trading of deposits on the interbank market, the market for new issues is at a standstill and the Euribor/Eonia spreads have widened considerably. On the equity repo markets, trading is at much lower levels. However, the coordinated rescue packages by European governments has led to the first tentative signs of a recovery.

In the light of the market situation the stress scenario was perceived to be the relevant one for liquidity management in the reporting period. The stress scenarios were adjusted promptly to the prevailing market situation. To safeguard the Commerzbank Group's liquidity – after liquidity fell below the early warning level and the stress limits – Treasury worked with the central liquidity management team to carry out stress analyses and simulations and produce proposals for action to secure short, medium and long-term liquidity.

The inflow of customer deposits together with ongoing asset disposals and a more efficient use of assets from a liquidity perspective by delivering them as collateral to the ECB compensated for the lack of funding opportunities via longer-term borrowing on the interbank market.

# III. Operational risk (OpRisk)

# 1. OpRisk strategy and organization

# OpRisk strategy

Commerzbank has formulated a separate group-wide risk strategy for the operational risk category (cf. Section C. I.).

The operational risk strategy is approved annually by the Board of Managing Directors after it has been discussed and voted upon by the OpRisk Committee. Management of the various units and entities is responsible for implementing the OpRisk strategy, setting guidelines and issuing instructions on procedures.

By implementing the OpRisk strategy on a group-wide basis, Commerzbank is pursuing the following goals:

- avoiding high OpRisk losses as far as possible (before they materialise) through various proactive measures, so protecting the Bank against material adverse effects.
- minimizing risks to the greatest possible extent (to limit resulting losses) in various ways including the use of risk-mitigating measures (expanding the internal control system, staff training, etc.).
- identifying potential problem areas in the organization of workflows and consequently possible improvements from a cost/benefit perspective.

The OpRisk Committee (OpRiskCo) meets on a monthly basis and deals with the management of operational risks within the Group. The aim is to optimize the expected loss from OpRisk from a cost-benefit perspective and to minimize the potential for unexpected loss. In so doing, OpRiskCo takes an end-to-end view of the processes within the Bank with the aim of recognizing risks in a timely manner. The OpRisk events that came to light in the financial industry during the year under review underline the importance of this particular objective.

# Structure and organization of risk management

Commerzbank defines operational risk as the risk of loss resulting from the inadequacy or failure of internal procedures, systems and people or from external events. This definition includes legal risks; it does not cover reputational risks or strategic risks.

The operational risk organization has a clear allocation of responsibilities and duties, and creates the organization and especially the structures required for effective and targeted operational risk control and management at all hierarchical levels in the Group's segments and in the central Services and Group Management divisions.

The operational risk organization rests on three pillars:

- 1. the operational risk managers who, as staff working in the segments, predominantly within the COO function, support the active management of operational risks;
- 2. the units monitoring the segment-specific operational risks in the segment CRO units;

3. the Corporate Center function in ZMO which is responsible for collecting comprehensive data, establishing methods and producing reports on operational risk and monitoring operational risk throughout the Group.

The operational risk committees draw together the work under these three pillars:

The Group OpRisk Committee chaired by the Group CRO with representatives of the segments and relevant inter-segment functions (e.g. auditing, legal) deals mainly with OpRisk events of significance to the Group as a whole and fundamental methodological issues (see above).

The segment OpRisk committees chaired by the segment CROs deal with segment-specific issues and meet at least once a quarter ahead of the Group OpRiskCo meeting.

Segment OpRisk forums headed by ZMO inform the OpRisk managers of methodological guidelines and changes to the OpRisk framework.

#### 2. Quantification

To quantify operational risks, Commerzbank always uses an advanced measurement approach (AMA) throughout the Group pursuant to section 278 SolvV. The only exceptions to this are AKA Ausfuhrkredit GmbH and Bank Forum in Ukraine. The plan is for Bank Forum to also introduce the AMA; however it will use the Basic Indicator Approach (BIA)¹ during a transitional phase. The same applies to Deutsche Schiffsbank which will be subject to disclosure from 2009 onwards. The capital adequacy requirements for the operational risks of Bank Forum are added on to the AMA capital adequacy figure².

Effective operational risk control requires both quantitative and qualitative methods and instruments, as well as overarching qualitative guidelines and procedures. The instruments employed by Commerzbank support causation-based management of operational risks.

The collection of data on losses throughout the Group in compliance with Basel II and SolvV starts at a threshold of €5,000 and includes a record of all information relevant for insurance purposes (master data, losses incurred and insurance coverage). This ensures that OpRisk and insurance management are more closely linked.

To model the fat tail of the loss distribution – i.e. the financial risk of rare major loss events – Commerzbank uses external loss data from Operational Riskdata eXchange Association, Zurich (ORX) in addition to internal loss data. This data syndicate, which the Bank helped to establish, comprises international banks. This data also enables the Bank to compare its own risk profile with that of other international banks, which provides additional input for managing operational risk.

With the aid of cross-process Quality Self-Assessments (QSAs) the quality of workflows, internal controls and the business environment are systematically evaluated locally and analyzed centrally on the basis of end-to-end processes. The findings are used to identify potential weak spots and represent a major qualitative component in the AMA model.

The quality of the process rating determined through QSA determines the amount of external data taken into account in calculating capital. This is based on the principle that we will tend to have to report fewer losses in future if the processes are good and more if they are less good. In determining how much capital to commit we take account of historical experience of the distribution of losses over time and the likelihood that multiple loss events will occur simultaneously in the course of a year.

<sup>&</sup>lt;sup>1</sup> AKA Ausfuhrkredit GmbH, which is below the materiality threshold, also uses the Basic Indicator Approach, but is not discussed any further in this section for materiality reasons.

 $<sup>^{2}</sup>$  The BIA accounts for less than 0.5% of total capital adequacy requirements.

In addition to the anonymized external data from ORX, we also utilize public data from the Fitch database. This is particularly useful for developing suitable scenario analyses for structured workshops carrying out a risk and control inventory of Commerzbank's main operational risks. An overview of the risks identified and details of significant specific risks are submitted to the OpRisk Committee.

Within Commerzbank, key risk indicators (KRIs) are monitored to provide management with an early warning system in the organizational units. The defined KRIs are aggregated in a status report at the level of the individual units and reported to the OpRisk Committee.

Risks identified in the scenario analyses, the risk situation in the individual units indicated by the defined KRIs and any other operational risk factors (such as active OpRisk management and resolving issues identified by the Audit department) are fed into the calculation of OpRisk capital adequacy requirements using the bonus malus system. An individual bonus or penalty is awarded to each of the units on the basis of defined criteria leading to a premium or a discount on the capital adequacy requirement determined for the respective unit under the AMA model. The sum of the modified amounts at unit level produces the modified capital adequacy requirement for Op Risk at Group level.

By taking into account the expected loss (EL), which is also determined in this way, in the Group's budgeting process, the regulatory capital charge is equal only to the unexpected loss (UL).

Besides the regulatory capital commitment, a figure for the economic capital commitment is also calculated. Both figures come from the same mathematical model and use the same data. The only difference is in the confidence level. Whilst SolvV only requires a confidence level of 99.9%, we base our internal risk assessment on the considerably more conservative figure of 99.95% (cf. Section C III). Because of OpRisk's fat tail, i.e. the very rare occurrence of large losses, the level of economic capital committed for OpRisk as of the end of 2008 amounts to around 50% more than the figure for regulatory purposes.

## 3. Management

Key risk indicators and scenario analyses are used to manage operational risks on an anticipatory basis (cf. Quantification section above).

# Hedging or reducing risk and monitoring the measures taken

Risk strategy is implemented by defining capital and EL limits and the "appetite" for operational risks (top-down approach). Based on risk-taking capability, the annual planning process sets OpRisk limits for the Group, which are monitored by ZMO.

Moreover, the organizational structure ensures that there is anticipatory risk management on a bottom-up basis through the segments. The local risk managers ensure that OpRisk is managed from a cost/benefit perspective at both process and system level.

Major material events are also subject to a special reporting requirement to ZMO and Internal Audit. The quarterly OpRisk Monitor then reports in detail to OpRiskCo on cases that have arisen.

The implementation of risk-mitigating measures, such as the introduction of additional control processes or systemic adjustments, is the responsibility of each segment. If the risks are serious, ZMO carries out an initial assessment of the actions that are planned or have already been carried out. Internal Audit conducts more thorough investigations into the effectiveness of action taken in the segments.

# IV. Other risks

On top of the risk categories explicitly considered in SolvV (see above), the Commerzbank Group also systematically and actively manages a number of additional risk types. For a more detailed explanation of the other risks please refer to the Risk Report of the 2008 Annual Report.

# Disclaimer

# Reservation regarding forward-looking statements

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 are 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.

57

# List of abbreviations

ABCP Asset Backed Commercial Paper

ABS Asset Backed Securities AfS Available for Sale

Advanced Internal Rating Based Approach **AIRBA** 

ALCO Asset Liability Committee

AMA Advanced Measurement Approach/

ANL Available Net Liquidity AOR Asset Quality Review

BaFin Federal Financial Supervisory Authority

BIA Basic Indicator Approach C&M Corporates & Markets CCF Credit Conversion Factor CDO Collateralized Debt Obligation

Credit Default Swap CDS

Central and Eastern Europe CEE CEO Chief Executive Officer CFO Chief Financial Officer

CISAL Commerzbank International S.A. Luxembourg CMBS Commercial Mortgage-Backed Securities

C00 Chief Operating Officer

CORPA Commerzbank loan default database

CP Commercial Paper CRE Commercial Real Estate CRMT Credit Risk Mitigation CRO Chief Risk Officer

CS-VaR Credit Spread-Value-at-Risk

Credit Value at Risk CVaR EAD Exposure at Default ECB European Central Bank

EEPK Erste Europäische Pfandbrief- und Kommunalkreditbank AG, Luxembourg

FΙ **Expected Loss** 

Eonia Euro Overnight Index Average Euribor Euro Interbank Offered Rate FTP File Transfer Protocol

GLLP General Loan Loss Provisions HGB German Commercial Code IAA Internal Assessment Approaches International Accounting Standards IAS

ID Identification

IFD Initiative Finanzstandort Deutschland / Germany as a Financial Centre Initiative

**IFRS** International Financial Reporting Standards

IIF Institute of International Finance IRRA Internal Ratings Based Approach

IRC **Investment Resources Allocation Committee** ISDA International Swaps and Derivatives Association ISIN International Securities Identification Number

KRI Key Risk Indicators

KWG German Banking Act / Kreditwesengesetz

LaR Loans and Receivables
LBO Leveraged Buy-out
LGD Loss Given Default I
LIP Loss Identification Period
LRF Liquidity Review Forum

MaRisk Minimum Risk Management Requirements

MSB Mittelstandsbank

NBFI Non-Bank Financial Institution

ORX Operational Riskdata eXchange Association, Zurich

P&L Profit & Loss

PD Probability of Default

PECDC Pan European Credit Data Consortium

PI Portfolio Impaired

PortLLP Portfolio Loan Loss Provisions

QRR Quarterly Risk Report
QSA Quality-Self-Assessment
RCO Regional Credit Officer
RDP Rating Data Pool

REIT Real Estate Investment Trust

RMBS Residential Mortgage-Backed Securities

RWA Risk Weighted Assets S&P Standard & Poor's

S.A. Sociedad Anónima (Spanish legal form of public limited company)

SACR Standardized Approach to Credit Risk
SAO Russian legal form of a limited company

SFA Supervisory Formula Approach
SIC Standing Interpretations Committee
SLLP Specific Loan Loss Provisions

SoFFin Special Fund for Financial Market Stabilization / Sonderfonds

Finanzmarktstabilisierung

SolvV Solvency Regulation / Solvabilitätsverordnung Sp. z o.o. Polish legal form of private limited company

SPV Special Purpose Vehicle
UL Unexpected Loss

VaR Value at Risk

VdP Association of German Pfandbrief Banks

ZGC Group Compliance ZGT Group Treasury

ZKE Group Strategy and Controlling

ZKK Group Communications

ZMO Group Market and Operational Risk Management
Zrt. Hungarian legal form of a limited company

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