Volksbanken Raiffeisenbanken
cooperative financial network

2011

ANNUAL REGULATORY RISK REPORT OF THE DZ BANK BANKING GROUP

DZ BANK Group

CONTENTS

1. BASIS OF REGULATORY RISK REPORTING

1.1. LEGAL BASIS

The Basel Committee on Banking Supervision has defined internationally accepted standards for the amount of capital that banks need to hold to cover potential risks. It has issued these standards in the form of recommendations on capital adequacy referred to as 'Basel II'. The Solvency Regulation (SolvV) has transposed into German law the minimum European capital adequacy standards prescribed in the Banking Directive (2006/48/EC) and the Capital Adequacy Directive (2006/49/EC), collectively known as the Capital Requirements Directive (CRD), as well as the equivalent requirements of Basel II. SolvV defines in more detail the capital adequacy requirements for institutions laid down in section 10 of the German Banking Act (KWG). SolvV was amended in 2010 in response to the first stage of amendments to Basel II ('revised Basel II') and the package of amendments referred to as 'CRD II', in which parts of revised Basel II were adopted into European Union (EU) law, and came into effect on December 31, 2010. The second part of revised Basel II in the form of a further package of amendments from the EU Commission referred to as 'CRD III' was transposed into German law with an amendment regulation incorporating CRD III into SolvV (Second Regulation to Further Implement the Amended Banking Directive and the Amended Capital Adequacy Directive) on October 26, 2011. The new rules had to be applied by German banks from December 31, 2011.

The DZ BANK banking group's regulatory risk reporting system is based on **section 26a KWG** in conjunction with **sections 319 to 337 SolvV**. This report takes into account the enhanced disclosure requirements resulting from the second phase of the revised Basel II framework. These requirements are mainly reporting obligations relating to credit risk under section 334 SolvV (securitizations in the trading book, re-securitizations in the banking book and in the trading book) and relating to market risk in the trading book under section 330 SolvV (stressed value-at-risk in respect of internal models in accordance with section 313 SolvV, additional default and migration risk, risk arising in connection with fair value changes in the correlation trading portfolio).

1.2. RECOMMENDATIONS BY BANKING REGULATORS

Large parts of the disclosure recommendations made by the Financial Stability Board (FSB) relating to securitization exposures and the leveraged finance portfolio (and that form an integral part of the **Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience** dated April 7, 2008) have been incorporated into SolvV via CRD III.

In April 2010, the Committee of European Banking Supervisors (CEBS) – renamed the European Banking Authority (EBA) on January 1, 2011 – published recommendations for reporting in crisis situations (**'Principles for disclosures in times of stress'**), although it was proposed that these recommendations also be applied even when there is no prevailing economic crisis DZ BANK has implemented key components of these recommendations in both its regulatory risk reporting system and its risk reporting system in accordance with the requirements of commercial law.

1.3. IMPLEMENTATION IN THE DZ BANK BANKING GROUP

Since 2007, the DZ BANK banking group has mainly used the foundation internal ratings-based approach (IRB approach or IRBA) to calculate **the regulatory capital requirements** for credit risk. The regulatory credit risk measurement methods used by DVB are largely based on the advanced IRB approach. The IRB approach is used to calculate the credit risk of the retail businesses of BSH, DG HYP, and TeamBank, although the probability of default (PD) and the loss given default (LGD) are based on accounting estimates. Capital requirements for market risk are predominantly measured by using internal calculation models. The Standardized Approach is used at the banking group level to determine operational risk in accordance with regulatory requirements.

Pursuant to section 319 (2) SolvV, **disclosures** are made by DZ BANK as the parent company of the regulatory banking group, disclosures being aggregated at group level.

DZ BANK's external risk reporting is based on the **disclosure policy** adopted by the Board of Managing Directors, which documents principles and fundamental decisions concerning the methods, organizational structures and IT systems used in risk disclosure and how this is embedded in the group's general financial disclosure and internal risk reporting. By adopting this disclosure policy, the Board of Managing Directors has put in place the necessary risk-related disclosure procedures and has communicated them throughout the DZ BANK Group. The disclosure policy is updated as part of the annual review of the adequacy of the DZ BANK Group's risk disclosure procedures, thereby complying with the requirements of section 26a (1) KWG.

Significant components of the **qualitative regulatory risk reporting requirements** are covered in the report on opportunities and risks associated with forecast development, which forms an integral part of the group management report in the DZ BANK Group's 2011 Annual Report (hereinafter referred to as 'opportunity and risk report'). In this regard, the DZ BANK banking group utilizes the option available under section 320 (1) SolvV. Please therefore refer to the opportunity and risk report for the qualitative disclosures concerned.

The disclosures in the opportunity and risk report generally relate to descriptions of the procedures in the internal risk management system. In contrast, disclosures that are solely of relevance for regulatory purposes are set out in the regulatory risk report. This also applies to additional information relating to the internal risk management system that would otherwise require a significant extension of the scope of the opportunity and risk report because of the level of required detail in the disclosures concerned. Such information includes, in particular, the detailed disclosures on the internal rating systems. The accounting-related disclosures on long-term equity investments and securitizations are included in the regulatory risk report.

As in the procedure adopted for qualitative disclosures, **quantitative disclosures** are generally included in the opportunity and risk report rather than in the regulatory risk report if the disclosures concerned are derived from the internal risk management system. This applies to the disclosures on lending volume in accordance with section 327 SolvV. Again, in the relevant sections, please refer to the opportunity and risk report.

The objective of DZ BANK's pillar 3 reporting is to support comparisons between banks as a prerequisite for achieving market discipline. The disclosure of figures relating to the original requirements of Basel II pillar 3 are therefore provided using the table formats – referred to as 'use cases' – recommended by Deutsche Bundesbank's specialist subcommittee on disclosure requirements. To date, the German regulator has not made any implementation recommendations with regard to the enhanced quantitative reporting requirements arising from revised Basel II. DZ BANK has therefore developed its own formats for this purpose based on the existing use cases.

Corresponding **comparative values** for 2010 have been disclosed on a voluntary basis in addition to the figures disclosed for the year under review, although no prior-year figures have been determined for the disclosures that were required for the first time as at December 31, 2011.

The following quantitative requirements are currently **not relevant** to DZ BANK and the corresponding data has not therefore been included in this risk report:

– Alpha factor defined in section 223 (6) SolvV (disclosure pursuant to section 326 (2) no. 5 SolvV), since no internal DZ BANK banking group models approved by the regulatory authorities were used in 2011 to calculate capital requirements for derivative counterparty risk exposure.
– Securitizations under the early amortization approach (disclosure pursuant to section 334 (2) no. 4 SolvV), since no such securitizations were transacted by the group's companies in the year under review.
– Risk in connection with fair value changes in the correlation trading portfolio as defined in section 318e SolvV (disclosure pursuant to section 330 (5) SolvV) because no internal model approved by the regulatory authorities was available for this portfolio. The capital requirements for these exposures are calculated using the standardized method.

Given that the **FSB recommendations** have been largely incorporated into SolvV and that the DZ BANK banking group has implemented the statutory requirements, the majority of the FSB recommendations have been applied in this risk report.

Disclosures based on the FSB recommendations that have not become part of the enhanced regulatory framework have been scaled back for reasons of materiality and limited to an explanation in the text in place of the tables used previously. Furthermore, these disclosures are no longer included in the regulatory risk report but have been added to the opportunity and risk report because the figures concerned are derived from the internal management system and are only loosely related to the regulatory framework. The disclosures concerned are as follows:

– Breakdown of the collateralized debt obligation (CDO) product category by instrument
– Breakdown of the subprime portfolio by original year of issue
– Volume of assets insured by monoliners
– Lending volume in the leveraged finance portfolio.

DZ BANK satisfies the disclosure requirements under the **German Regulation Governing Remuneration at Institutions (InstitutsVergV)** in a separate report containing disclosures in accordance with sections 7 and 8 InstitutsVergV, which is available in German on DZ BANK's website in the Investor Relations section.

As part of the audit of the **annual financial statements** and in accordance with section 29 (1) sentence 2 KWG, DZ BANK's auditors have audited this risk report with respect to formal procedures, rules on disclosure, and compliance with disclosure requirements. With the exception of those sections that are disclosed within the opportunity and risk report, the content of this report has not been audited.

1.4. RISKS COVERED IN THE REGULATORY RISK REPORT

The regulatory risk report includes the subsidiaries that must be consolidated as part of the DZ BANK banking group for regulatory purposes in accordance with KWG. Further risks arising at subsidiaries that are not consolidated for regulatory purposes are disclosed in detail in the opportunity and risk report at the DZ BANK Group level. This relates especially to the risks to which R+V is exposed.

Regulatory capital adequacy relates to the following risk types: credit risk (including equity risk), market risk, and operational risk. In addition to these risk categories, technical risk of a home savings and loan company, actuarial risk, and business risk are also backed by economic risk capital as part of the internal economic capital management process under the second pillar of Basel II. At the same time, liquidity risk is also taken into account in a separate liquidity-related analysis of risk-bearing capacity.

There are also differences between the economic and regulatory perspectives, as follows:

– When the regulatory capital requirements and the related disclosure requirements are being determined, risk-bearing exposures allocated to the trading book and banking book are treated differently in terms of quantification of the risk. For example, the on-balance sheet and off-balance sheet exposures of the banking book and the counterparty risks arising from derivatives exposure in the banking book and trading book are classified under credit risk. The on-balance sheet exposures in the trading book are treated as market risk exposures and are therefore backed with regulatory capital, whereas for internal management purposes they are treated as issuer risks and classified under credit risk.

– The credit risk exposures reported in this risk report have been determined using the recognition and measurement methods specified by the German Commercial Code (HGB). In the opportunity and risk report, on the other hand, the presentation of the total lending volume is based on the figures from the internal management accounts.

– The economic analysis of interest-rate risk includes the market risks in the banking book for which no capital backing is required for regulatory purposes.

2. SCOPE OF APPLICATION

As part of the DZ BANK financial conglomerate, the DZ BANK banking group is subject to the requirements of section 10b KWG. In this respect it meets the relevant requirements with respect to **financial conglomerates' solvency** and the establishment of an overarching risk management structure.

All companies belonging to the financial conglomerate are integrated into the central risk management system using the principle of materiality pursuant to section 26a (2) no. 1 KWG in conjunction with section 320 (1) SolvV. Materiality is determined on the basis of a concept that also applies to risk reporting under HGB.

The concept takes into account the decision-usefulness of disclosures and the economic viability of preparing reports. It is based on risk-management procedures that meet the requirement for a groupwide risk monitoring system in accordance with section 91 (2) of the German Stock Corporation Act (AktG) and pursuant to section 25a (1) KWG.

The disclosures in this risk report relate to material companies as defined by section 26a (2) no. 1 KWG. Consequently, the regulatory risk report is consistent with the opportunity and risk report, which covers the same companies. The materiality concept does not cover the disclosures on equity structure, capital requirements, or capital ratios. All relevant companies consoli-

FIG. 1 – CONSOLIDATION MATRIX: DIFFERENCES BETWEEN COMPANIES CONSOLIDATED FOR REGULATORY PURPOSES AND THOSE CONSOLIDATED FOR THE PURPOSES OF COMMERCIAL LAW

		Treatment for regulatory purposes				Consolidation under IFRS	
		Consolidation					
Classification	Name (abbreviation)	Full	Pro-rata	Deduction method	Risk-weighted equity investment	Full	Pro-rata
Banks	DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (DZ BANK)	●				●	
	Bausparkasse Schwäbisch Hall AG, Schwäbisch Hall (BSH)	●				●	
	Deutsche Genossenschafts-Hypothekenbank AG, Hamburg (DG HYP)	●				●	
	DVB Bank SE, Frankfurt am Main (DVB)	●				●	
	DZ BANK Ireland plc, Dublin (DZ BANK Ireland)	●				●	
	DZ BANK Polska S.A., Warsaw (DZ BANK Polska)	●					
	DZ PRIVATBANK S.A., Luxembourg-Strassen (DZ PRIVATBANK S.A.)	●				●	
	DZ PRIVATBANK (Schweiz) AG, Zurich (DZ PRIVATBANK Schweiz)	●				●	
	TeamBank AG Nürnberg, Nuremberg (TeamBank)	●				●	
Finance companies	Union Asset Management Holding AG, Frankfurt am Main (Union Asset Management Holding)	●				●	
Financial services institutions	VR-LEASING AG, Eschborn (VR LEASING)	●				●	
Insurance companies	R+V Versicherung AG, Wiesbaden (R+V)				●	●	

dated for regulatory purposes are included in these disclosures to ensure that the key regulatory figures are consistent with the figures reported.

In figure 1 (Disclosures pursuant to section 323 (1) no. 2 SolvV), the financial conglomerate's companies that are material for internal risk management purposes are classified according to the nature of their business, the nature of their treatment for regulatory purposes, and the nature of their consolidation for commercial-law purposes. These companies are classified on the basis of the definitions contained in section 1 KWG.

The material companies are consolidated for both regulatory and commercial-law purposes. Although R+V is fully consolidated for commercial-law purposes, it is not directly subject to banking regulation. Instead, it is factored into the procedure used to determine the DZ BANK banking group's capital adequacy and disclosure requirements pursuant to KWG and SolvV using the risk-weighted carrying amount of DZ BANK's investment in R+V. Furthermore, R+V is included in the cross-sectoral regulatory surveillance of the DZ BANK financial conglomerate at consolidated level within the legal framework applicable to financial conglomerates.

As at December 31, 2011, the following were fully **consolidated for regulatory purposes** pursuant to section 10a KWG together with the companies listed in figure 2: a total of 19 (December 31, 2010: 19) banks, 29 (December 31, 2010: 28) financial services institutions, 7 (December 31, 2010: 8) investment companies, 702 (December 31, 2010: 742) finance companies –

FIG. 2 – INCLUSION OF COMPANIES IN THE DZ BANK GROUP IN QUANTITATIVE REGULATORY DISCLOSURES

Companies	Structure of equity	Capital requirements	Capital ratios	Gross lending volume & allowances for losses on loans and advances	Standardized Approach exposure	IRBA exposure	Collateralized lending volume	Derivative counterparty risk exposure	Securitization exposure and capital requirement	Equity investments in banking book	Value-at-risk in trading book	Interest-rate risk in banking book
DZ BANK	●	●	●	●	●	●	●	●	●	●	●	●
BSH	●	●	●	●	●	●	●		●	●		●
DG HYP	●	●	●	●	●	●	●	●	●	●		●
DVB	●	●	●	●	●	●	●	●		●		
DZ BANK Ireland	●	●	●	●	●	●	●	●	●			●
DZ BANK Polska	●	●	●	●	●		●	●				●
DZ PRIVATBANK S.A.	●	●	●	●	●	●	●	●		●		●
DZ PRIVATBANK Schweiz	●	●	●	●	●							●
TeamBank	●	●	●	●	●	●	●	●		●		●
Union Asset Management Holding	●	●	●		●					●		
VR LEASING	●	●	●	●	●		●	●	●	●		
Other companies of relevance for regulatory purposes	●	●	●	●								
R+V				●								

620 (December 31, 2010: 672) of which were project companies belonging to VR-IMMOBILIEN-LEASING GmbH, Eschborn –, and 10 (December 31, 2010: 11) providers of related services. In addition, 5 banks and 3 finance companies were consolidated on a pro-rata basis, as in 2010. A further investment company that had not been included in 2010 was consolidated as at December 31, 2011 on a pro-rata basis.

DZ BANK is either directly or indirectly the major shareholder in the investments consolidated for regulatory purposes. Most companies are based either in Germany or elsewhere in the European Union. On the reporting date there were **no restrictions on the transfer of funds or capital** as defined in section 323 (1) no. 3 SolvV within the DZ BANK banking group by third-party individuals, private or public-sector companies, supranational organizations, or sovereign states.

DZ BANK has not made use of the **waiver** available under section 2a KWG, which states that – provided certain conditions are met – the regulatory supervision of individual Germany-based institutions within a banking group may be replaced by supervision of the entire banking group (disclosure pursuant to section 323 (4) SolvV).

As was already the case at the end of 2010, there were no subsidiaries in the DZ BANK banking group that had a **capital deficiency** as at December 31, 2011. There is therefore no requirement for disclosure in accordance with section 323 (2) SolvV.

Figure 2 shows how the material group companies are integrated into the quantitative regulatory disclosure procedures of the DZ BANK banking group. These companies are also directly incorporated as management units into the DZ BANK Group's risk management system. The disclosures take into account the effects of intragroup consolidation. In the disclosures on gross lending volume, allowances for losses on loans and advances, and interest-rate risk in the banking book, economic risk management criteria are used to define the management units in terms of the subsidiaries and investees included in the units, whereas the other disclosures are based on the companies consolidated for regulatory purposes. DZ BANK Ireland is the only company that does not have subsidiaries or investees.

3. RISK CAPITAL MANAGEMENT

3.1 ECONOMIC RISK CAPITAL MANAGEMENT

(Disclosure pursuant to section 325 (1) SolvV)

Information on capital adequacy and the management of economic capital is disclosed in section 3.3.2 of the opportunity and risk report.

FIG. 3 – STRUCTURE OF EQUITY

€ million	Dec. 31, 2011	Dec. 31, 2010
Equity instruments		
Paid-up capital and reserves	5,722	5,586
Other Tier 1 capital instruments	2,533	2,540
of which: other Tier 1 capital pursuant to section 10 (4) KWG	2,253	2,260
of which: other Tier 1 capital (fixed term or with redemption incentives)	280	280
Special provisions for general banking risks pursuant to section 340g HGB	3,305	2,704
Deductions from Tier 1 capital pursuant to section 10 (2a) sentence 2 KWG	-313	-288
Deductions from Tier 1 capital pursuant to section 10 (6 and 6a) KWG)	-1,191	-1,334
Total Tier 1 capital pursuant to section 10 (2a) KWG	10,056	9,208
Total Tier 2 capital before capital deductions pursuant to section 10 (2b) KWG)	2,610	3,093
Deductions from Tier 2 capital pursuant to section 10 (6 and 6a) KWG)	-1,191	-1,334
Total Tier 2 capital pursuant to section 10 (2b) KWG and eligible Tier 3 capital pursuant to section 10 (2c) KWG	1,419	1,759
Total modified equity available pursuant to section 10 (1d) KWG and eligible Tier 3 capital pursuant to section 10 (2c) KWG	**11,475**	**10,967**

3.2. CAPITAL

(Disclosure pursuant to section 324 SolvV)

Figure 3 shows the aggregated capital defined in section 10a KWG. The disclosures relate to all the companies in the DZ BANK banking group consolidated for regulatory purposes as at December 31, 2011. The capital of the DZ BANK banking group is calculated under the aggregation and deduction method pursuant to section 10a (6) KWG.

In addition to the paid-up capital and reserves, the special provision for general banking risks in accordance with section 340g HGB, and various deductions, **Tier 1 capital** as at December 31, 2011 included other capital instruments totaling €2,533 million (December 31, 2010: €2,540 million).

These other Tier 1 capital instruments comprised open-ended equity instruments without redemption incentives

FIG. 4 – EQUITY INSTRUMENTS

	Volume					
Issuer	**€ million**	**(Currency) million**	**Interest rate (%)[1]**	**Start date**	**Maturity**	**Terminable by**
DG Funding LLC, New York	386	USD 500	3-M-USD-LIBOR +225 BP	Dec. 23, 1999	Open-ended	Mar. 31, 2012
DZ BANK Capital Funding LLC, Wilmington	300	EUR 300	3-M-EURIBOR +250 BP	Nov. 7, 2003	Open-ended	Feb. 11, 2012
DZ Bank Capital Funding LLC II, Wilmington	500	EUR 500	3-M-EURIBOR +160 BP	Nov. 22, 2004	Open-ended	Feb. 22, 2012
DZ Bank Capital Funding LLC III, Wilmington	350	EUR 350	3-M-EURIBOR +150 BP	Jun. 6, 2005	Open-ended	Jun. 6, 2012
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	50	EUR 50	3-M-EURIBOR +110 BP	Jan. 9, 2006	Open-ended	Jan. 9, 2013
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	100	EUR 100	3-M-EURIBOR +80 BP	Feb. 13, 2006	Open-ended	Feb. 13, 2013
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	10	EUR 10	3-M-EURIBOR +100 BP	Mar. 17, 2006	Open-ended	Mar. 17, 2012
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	100	EUR 100	3-M-EURIBOR +80 BP	Sep. 4, 2006	Open-ended	Sep. 4, 2013
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	50	EUR 50	3-M-EURIBOR +50 BP	Apr. 16, 2007	Open-ended	Apr. 16, 2012
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier	250	EUR 250	12-M-EURIBOR +325 BP Moderate step up from 2018, +425 BP	Sep. 24, 2008	Open-ended	Sep. 24, 2013
DZ BANK Perpetual Funding Private Issuer (Jersey) Limited, St. Helier	290	EUR 290	Initial coupon 12-M-EURIBOR +500 BP, thereafter 3-M-EURIBOR +500 BP	May 29, 2009	Open-ended	Jul. 1, 2014
DZ BANK Perpetual Funding Private Issuer (Jersey) Limited, St. Helier	210	EUR 210	8.884% fixed	May 29, 2009	Open-ended	Jul. 1, 2014
TeamBank (silent holding)	30	EUR 30	7.400% fixed	Oct. 23, 2003	Dec. 31, 2013	Not terminable

1 bp = basis point

with a value of €2,253 million (December 31, 2010: €2,260 million) and other equity instruments amounting to €280 million (December 31, 2010: €280 million).

Figure 4 shows an overview of the features and terms and conditions of the **equity instruments** making up the other Tier 1 capital instruments before taking account of any consolidation positions.

As at December 31, 2011, **Tier 2 capital** before capital deductions pursuant to section 10 (2b) KWG amounted to €2,610 million (December 31, 2010: €3,093 million).

A significant component of the Tier 2 capital was represented by subordinated capital in accordance with sections 10 (5) and 10 (5a) KWG amounting to a total of €2,821 million. Figure 5 provides an overview of the positions, features, and terms and conditions related to this subordinated capital.

DZ BANK compares loan loss allowances at both single-entity and banking group level pursuant to section 105 SolvV by comparing the computed expected losses on the IRBA asset classes of central governments, institutions, corporates and retail business with the amounts recognized in the annual or interim financial statements for actual or potential impairment losses

FIG. 5 – SUBORDINATED CAPITAL PURSUANT TO SECTION 10 (5) AND SECTION 10 (5A) KWG

Issuer	Volume		Interest rate (%)	Start date	Maturity
	€ million	(Currency) million			
DZ BANK	2	EUR 2	5.680–5.770	2003	2012
DZ BANK	381	EUR 381	3.253–7.000/ Euribor +3.5%	1998–2008	2013
DZ BANK	198	EUR 198	4.950–7.500	1995–2009	2014
DZ BANK	224	EUR 224	4.000–6.710	2000–2010	2015
DZ BANK	11	USD 15	3.120–4.600	2010	2015
DZ BANK	201	EUR 201	3.750–6.250	2001–2010	2016
DZ BANK	30	EUR 30	3.250–6.000	2003–2010	2017
DZ BANK	797	EUR 797	3.600–7.400/ Euribor +3.5%	2003–2008	2018
DZ BANK	333	EUR 333	2.433–7.273	1999–2009	2019
DZ BANK	368	EUR 368	3.574–7.150	1997–2010	2020
DZ BANK	10	EUR 10	7.000	2009	2021
DZ BANK	37	EUR 37	4.039–7.250	2003	2023
DZ BANK	10	EUR 10	5.000	2003	2025
DG HYP	6	EUR 6	5.250–6.550	1997–2003	2012
DG HYP	121	EUR 121	4.300–7.000	1999–2003	2013
DG HYP	1	EUR 1	5.020	2003	2015
DG HYP	3	EUR 3	5.680	2003	2018
DG HYP	13	EUR 13	6.500	2001	2021
DG HYP	25	EUR 25	6.610	2002	2022
DG HYP	10	EUR 10	6.140	2003	2023
TeamBank	5	EUR 5	6.000–6.9000	2003	2013
DZ PRIVATBANK S.A.	15	EUR 15	6.000	1999	2019
DVB	2	EUR 2	6.710	2000	2012
DVB	8	EUR 8	5.600–5.690	2003	2013
DVB	10	EUR 10	6.000–6.110	2003	2018

FIG. 6 – CAPITAL REQUIREMENTS (PART 1)

€ million	Dec. 31, 2011	Dec. 31, 2010
1 Credit risk		
1.1 Standardized Approach to credit risk		
Central governments	1	1
Regional governments and local authorities	36	34
Other public-sector entities	4	2
Multilateral development banks	–	–
International organizations	–	–
Institutions	30	47
Covered bonds issued by institutions	2	5
Corporates	823	879
Retail business	251	244
Exposures collateralized by real estate	30	39
Investment fund units	41	29
Other exposure	75	75
Past-due exposure	86	72
Total credit risk under the Standardized Approach	1,379	1,427
1.2 IRB approaches		
Central governments	41	24
Institutions	951	1,062
Corporates	1,902	1,945
Retail business	951	889
of which: mortgage-backed	527	533
qualified revolving	–	–
other	425	356
Other non credit-obligation assets	121	117
Total under IRB approaches	3,966	4,037
1.3 Securitizations		
Securitizations under the Standardized Approach to credit risk	248	–
Securitizations under IRB approaches	288	354
Total securitizations	536	354
1.4 Long-term equity investments		
Long-term equity investments (IRB approaches)	129	63
of which: internal modeling approach	–	–
PD/LGD approach	29	29
simple risk-weighting approach	100	34
exchange-traded equity investments	8	21
equity investments not exchange-traded but part of a diversified portfolio	81	3
other equity investments	11	10
Long-term equity investments exempted from IRB approaches and included in Standardized Approach to credit risk	219	246
Total long-term equity investments	348	309
Total credit risk	6,229	6,127

FIG. 7 – CAPITAL REQUIREMENTS (PART 2)

€ million	Dec. 31, 2011	Dec. 31, 2010
2 Market risk		
Standardized Approach	101	65
of which: interest-rate risk	58	12
of which: general and specific price risk (net interest-rate exposure)[1]	6	
specific price risk for securitization exposures in trading book[1]	21	
specific price risk in correlation trading portfolio[1]	31	
equity price risk	–	–
currency risk	41	53
risk from commodities positions	2	–
other risks	–	–
Internal modeling approach	1,049	255
Total market risk	1,150	320
3 Operational risk		
Operational risk under the Standardized Approach	591	479
Operational risk under AMA	–	–
Total capital requirement	7,970	6,926

1 No prior-year comparative figures are available because the regulations on additional default and migration risk were applied for the first time on October 1, 2011.

FIG. 8 – CAPITAL RATIOS IN THE DZ BANK BANKING GROUP

Companies	Total capital ratio		Tier 1 capital ratio	
	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010
DZ BANK banking group	11.5%	12.7%	10.1%	10.6%
DZ BANK	20.9%	26.7%	12.6%	15.6%
BSH	32.4%	34.2%	24.0%	24.8%
DG HYP	10.2%	10.6%	8.0%	7.6%
DVB (banking group)	17.2%	16.8%	17.2%	16.8%
DZ BANK Ireland	13.3%	16.2%	10.7%	13.4%
DZ BANK Polska (banking group)	13.4%	13.4%	13.4%	13.4%
DZ PRIVATBANK S.A.	20.5%	19.3%	20.4%	15.0%
DZ PRIVATBANK Schweiz	29.5%	27.0%	29.5%	25.2%
TeamBank	14.6%	12.7%	11.4%	8.7%

arising from the risk of counterparty-related losses on these IRBA exposures. DZ BANK classifies the write-down surplus computed at both single-entity and group level as part of Tier 2 capital pursuant to section 10 (2b) no. 9 KWG. This classification is capped at 0.6 percent of the risk-weighted IRBA exposure.

Tier 2 capital included a write-down surplus pursuant to section 10 (2b) no. 9 KWG on the reporting date. Consequently, the allowances for losses on loans and advances recognized for the IRBA exposures in the corporates, institutions, central governments, and retail business asset classes exceeded the expected losses for these exposures. Tier 2 capital also contained the contingency reserves pursuant to section 340f HGB net of prorated goodwill and, as a deduction, 50 percent of the pro-rata deductible carrying amounts of long-term equity investments held by non-consolidated companies as well as securitization exposures with a risk weighting of 1,250 percent.

The **write-down deficits** and the **expected losses** for IRBA exposures pursuant to section 10 (6a) nos. 1 and 2 KWG, half of which are deducted from Tier 1 capital and half from Tier 2 capital, amounted to €6 million as at December 31, 2011 (December 31, 2010: €3 million).

As at December 31, 2011, the DZ BANK banking group did not hold any Tier 3 capital, a situation that was therefore unchanged compared with December 31, 2010.

The DZ BANK banking group's total **regulatory capital** as at December 31, 2011 amounted to €11,475 million (December 31, 2010: €10,967 million). The DZ BANK Group's available **aggregate risk cover** for economic capital management purposes was set at €11,747 million in 2011 (2010: €11,758 million).

The objective of both capital concepts is to ensure capital adequacy; in other words, the relevant capital components act as a cushion in case any unexpected losses arise. The regulatory capital of the DZ BANK banking group is derived from the provisions of KWG. It is based on the carrying amounts recognized under HGB and essentially comprises the capital reported on the balance sheet, hybrid capital instruments, and subordinated liabilities that are modified with respect to various components that are reported on the balance sheet or are relevant for measurement purposes. By contrast, the components of economic capital used to provide aggregate risk cover for the DZ BANK Group are based on International Financial Reporting Standards (IFRS) and include equity as well as hidden reserves. The components of R+V's equity are also included in the economic capital used to provide aggregate risk cover.

3.3. CAPITAL REQUIREMENTS

(Disclosure pursuant to section 325 (2) SolvV)

Figures 6 and 7 show the capital requirements in relation to the risk types of relevance for regulatory purposes (credit risk, market risk, and operational risk). These figures cover all the companies consolidated for regulatory purposes in the DZ BANK banking group.

The difference between the regulatory capital requirement, measured at €7,970 million as at December 31, 2011 (December 31, 2010: €6,926 million), and the economic risk capital requirement, measured at €8,953 million as at December 31, 2011 (December 31, 2010: €8,795 million), is largely attributable to the fact that additional types of risk (technical risk of a home savings and loan company, actuarial risk, and business risk) are backed by capital for the purposes of economic risk capital management, whereas these risks are not backed by capital for regulatory purposes. The higher figures for economic risk capital with respect to market risk and operational risk (which are backed by capital for both economic risk capital management and regulatory purposes) are due to the inclusion of R+V, which is omitted for regulatory purposes. In addition, interest-rate risk in the banking book is included in the calculation of the economic capital requirement for market risk.

The fact that the economic risk capital required for credit risk is much lower than the regulatory capital requirement is largely attributable to more conservative assumptions used in the regulatory approaches to the risk modeling of the credit portfolio. In addition, the inclusion of offsetting agreements and the treatment of collateral differ depending on whether economic risk capital requirements or regulatory requirements are being determined.

Internal risk models are used and diversification effects between the various risk types are extensively recognized for the purposes of economic risk capital management. This gives rise to a more entity-specific risk measurement than is the case with the measurement methods prescribed for regulatory purposes.

3.4. CAPITAL RATIOS

(Disclosure pursuant to section 325 (2) SolvV)

The regulatory capital ratios for the DZ BANK banking group can be seen in figure 8. These ratios illustrate the relationship between risk-weighted exposures and the regulatory capital components in the DZ BANK banking group. The figures disclosed for the group companies are in accordance with the applicable country-specific legislation and do not include the effects of intragroup consolidation.

The capital ratios for the DZ BANK banking group and the individual group companies as at December 31, 2011 were in each case well above the minimum ratios prescribed for regulatory purposes (total capital ratio of 8.0 percent, Tier 1 capital ratio of 4.0 percent), as they were as at December 31, 2010.

4. CREDIT RISK

4.1 OBJECTIVES AND PRINCIPLES OF CREDIT RISK MANAGEMENT

The objectives and principles of credit risk management (disclosure pursuant to section 322 SolvV) are presented in section 4.2 of the opportunity and risk report.

4.2. RATING SYSTEMS

4.2.1. Rating systems for IRBA asset classes

OVERVIEW OF INTERNAL RATING SYSTEMS

(Disclosure pursuant to section 335 (1) no. 1 SolvV)

In 2007 the DZ BANK banking group received official approval from the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) [German Financial Supervisory Authority] to calculate its capital requirements using the foundation IRB approach and the IRB approach for retail business. Figures 9 through 11 show the approved internal rating systems used by the DZ BANK banking group to determine the parameters for calculating its regulatory capital requirements based on the IRB approaches. The overviews cover the rating systems developed and applied by DZ BANK and also made available to BSH, DG HYP, and DVB, as well as those specially customized to the respective business models of BSH and DG HYP.

In addition to the rating systems developed by DZ BANK, DVB uses separate rating systems for aviation (aircraft), aviation (aircraft engines), land transport, shipping (containers), and shipping (vessels) to classify the risks for the asset class of corporates (in the narrow sense of the term). When using DZ BANK's VR rating system for banks, DVB applies its own LGD estimates.

TeamBank uses its consumer-finance rating system to determine the credit ratings for loan exposures in its other retail business asset class. Credit card limits and consumer loans marketed in Austria, which also form part of this asset class, are included in the Standardized Approach to credit risk.

DESCRIPTION OF INTERNAL RATING SYSTEMS

(Disclosure pursuant to section 335 (1) no. 2a SolvV)

Application of the IRB approaches requires the use of internal rating systems to classify the risks of the exposures measured using the IRB approaches and to classify guarantors. Internal rating systems are considered suitable if they meet the minimum requirements for use of the IRB approaches pursuant to section 56 SolvV. Apart from meeting the requirements relating to methodology and process organization, the rating systems must have demonstrated their suitability for classifying existing and new business. Rating systems within the meaning of section 60 (1) SolvV are defined as the sum total of all methods, procedures, monitoring, and control processes, as well as data collection and processing systems that support the measurement of credit risks, the allocation of IRBA exposures to rating categories or risk pools, and the quantification of default and loss estimates for IRBA exposures.

Most of the internal rating systems have been developed as the standard for the entire cooperative financial network by DZ BANK as part of VR Control, a project carried out by the Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e.V., Berlin, (BVR) [National Association of German Cooperative Banks] that also incorporates WGZ Bank AG Westdeutsche Genossenschafts-Zentralbank (based in Düsseldorf), the network's regional banking associations, computing centers, and primary banks. This uniform approach for the entire cooperative network reaps substantial efficiency gains for both the cooperative central institutions and the local cooperative banks. If DZ BANK requires rating systems for specialist segments that go beyond the scope of the rating systems developed for the cooperative network, DZ BANK will develop any such rating systems itself.

The internal rating systems used by the companies in the DZ BANK banking group feature a modular construction; they generally consist of a quantitative module and a qualitative module. When rating systems are developed, various factors affecting credit ratings are identified and initially developed in isolation. The next stage is to take account of interdependencies between individual modules at the level of the overall model. The advantage of this approach is that individual modules of a particular rating system can be revised, for example, in the light of new methodical-conceptual or empirical findings, without any other module being affected by this. This reduces the cost of developing and refining rating systems.

FIG. 9 – RATING SYSTEMS DEVELOPED BY DZ BANK AND THEIR USE BY OTHER COMPANIES IN THE DZ BANK BANKING GROUP

					Asset class										
									Corporates				Retail business		
Rating system	**DZ BANK**	**BSH**	**DG HYP**	**DVB**	**Central governments**	**Institutions**	**Long-term equity investments**	**Securitizations**	**Corporates (in the narrow sense)**	**Small and medium-sized enterprises**	**Specialized financial services**	**Receivables purchased**	**Mortgage-backed**	**Qualified revolving**	**Other**
Acquisition finance	●								●						
Internal Assessment Approach	●							●							
Project finance	●								●						
VR rating (banks)	●	●	●	●		●	●								
VR rating (major corporates)	●						●		●						
VR rating (countries)	●	●	●	●	●										
VR rating (large and medium-sized companies)	●		●				●		●						

The **VR rating system** standardizes rating methods and ensures comparability of rating results within the Volksbanken Raiffeisenbanken cooperative financial network. The VR rating system is differentiated by customer segment and is gradually being extended to cover all relevant customer groups.

The section below presents the main rating systems used by the DZ BANK banking group. These rating systems have been approved by BaFin for the purposes of calculating regulatory capital using the foundation IRB approach. Each of these rating systems differentiates between a total of 25 rating categories; 20 of these categories are for non-defaulting counterparties and 5 are for defaulting counterparties.

The **VR rating for large and medium-sized companies** is applied to the regulatory asset class of corporates (in the narrow sense of the term). This rating system covers the central institution's typical corporate customers that generate revenue of up to €1 billion. It is applied, among other things, to loans jointly extended by companies in the DZ BANK banking group to local cooperative banks or their customers and, in addition, is used by all local cooperative banks in Germany throughout the cooperative network. A characteristic of the VR rating system devised for large and medium-sized companies is the large number of historical data records of defaulting and non-defaulting customers that were collected throughout the cooperative financial network. Given this ideal data scenario, a good/bad analysis was selected as the development method.

The **VR rating for major corporate customers** is used for large domestic and international customers that generate revenue in excess of €1 billion and belong to the asset class of corporates (in the narrow sense of

FIG. 10 – PROPRIETARY RATING SYSTEMS DEVELOPED BY BSH

	Asset class										
					Corporates				Retail business		
Rating system	Central governments	Institutions	Long-term equity investments	Securitizations	Corporates (in the narrow sense)	Small and medium-sized enterprises	Specialized financial services	Receivables purchased	Mortgage-backed	Qualified revolving	Other
Mortgage-backed											
Application score									●		
Conduct score									●		
LGD score									●		
EAD									●		
Not mortgage-backed											
Application score											●
Conduct score											●
LGD score											●
EAD											●

the term). A characteristic of the VR rating system devised for major corporate customers is the small number of defaulting customers. Given this data scenario, the external rating method was selected as the development method. Under this approach, data was collected from many financial years for a large number of externally rated international companies from various sectors.

The **VR rating for banks** is used for the asset class of institutions. This rating system is applied to German and international banks, irrespective of legal structure or size. The external rating method was again chosen as the development method. Under this approach, data was collected from externally rated banks worldwide.

The **VR rating for countries** is used for the asset class of central governments. Given the international orientation of the DZ BANK banking group, the country rating is very important for risk-based management of the group companies' business. The country rating segment is concerned exclusively with credit ratings for central governments and not with credit ratings for central banks, other foreign public-sector entities, or

FIG. 11 – PROPRIETARY RATING SYSTEMS DEVELOPED BY DG HYP

	Asset class										
					Corporates				Retail business		
Rating system	**Central governments**	**Institutions**	**Long-term equity investments**	**Securitizations**	**Corporates (in the narrow sense)**	**Small and medium-sized enterprises**	**Specialized financial services**	**Receivables purchased**	**Mortgage-backed**	**Qualified revolving**	**Other**
VR rating system											
VR rating (developers)							●				
VR rating (closed-end investment funds)							●				
VR rating (investors)					●						
VR rating (property companies)							●				
VR rating (project developers)							●				
VR rating (housing companies)					●						
Rating systems for retail business with customers in employment											
Application score (retail)/Conduct score (retail)									●		
LGD estimate (IRB retail)									●		
Rating systems for retail business with self-employed customers											
Application score (retail)/Conduct score (retail)									●		
LGD estimate (IRB retail)									●		
Specialized real-estate lending (outside Germany)							●				

international institutions. Under this rating system design, which is also based on the external rating method, countries are broken down into industrialized and developing nations. The reasons for this breakdown are the different risk factors and the need for a different interpretation of the factors relevant to credit quality when analyzing industrialized and developing nations' ability and willingness to pay.

The internal rating systems specified below are used exclusively by DZ BANK within the banking group to calculate capital requirements:

– The **project finance rating system** is used to assess complex transport and infrastructure projects. As there are only a small number of external ratings available for project finance and an insufficient number of internal data sets, a combination of ratings by experts, a cash flow simulation, and an external rating method were selected to develop the rating model.

– The **acquisition finance rating system** is used in the provision of funding for acquisitions of companies or parts of companies and majority and minority stakes, independently of the legal structure of each transaction. As there is also an insufficient number of external ratings available for acquisition financing and, similarly, an insufficient quantity of internal data on defaults, a rating method based on the assessments of internal experts was chosen to develop the rating system.

– The **Internal Assessment Approach** is used to measure liquidity lines and credit enhancements that are made available to programs for the purpose of issuing asset-backed commercial paper (ABCP).

APPROVED TRANSITIONAL RULES FOR IRB APPROACHES (PARTIAL USE)

(Disclosure pursuant to section 335 no. 1 SolvV)

Capital requirements for credit risk within the DZ BANK banking group continue to be calculated using both the IRB approaches and the Standardized Approach to credit risk. DZ BANK, BSH, DG HYP, DZ PRIVATBANK S.A., and DZ BANK Ireland mostly use the foundation IRB approach. BSH, DG HYP, and TeamBank use the IRB approach for retail business. In addition, TeamBank uses the Standardized Approach to credit risk for credit card limits and consumer finance business in Austria. Although DVB has been using the advanced IRB approach to report its capital requirements for credit risk since January 1, 2008, it is exempted under section 67 (4) no. 6 SolvV from the calculation of the DZ BANK banking group's cover ratio. The individual IRBA institutions use internal rating systems to cover their main business lines. Only segments that are immaterial in terms of their level of credit risk will continue to use the Standardized Approach to credit risk indefinitely. The other companies use the Standardized Approach to credit risk.

In the foundation IRB approach, the probability of default (PD) is estimated by the institutions themselves, while the loss given default (LGD) is specified by regulators. Loss given default values in the IRB approach for retail business and the advanced IRB approach are also based on the institutions' own estimates. In contrast, the Standardized Approach to credit risk is based exclusively on regulatory risk weightings that are set on the basis of external ratings.

For each IRBA institution there is an implementation plan that ensures compliance with the thresholds prescribed by SolvV. Compliance with these thresholds is one of the preconditions for using the IRB approaches.

USE OF INTERNAL ESTIMATES FOR PURPOSES OTHER THAN CALCULATING RISK-WEIGHTED EXPOSURES UNDER THE IRB APPROACH

(Disclosure pursuant to section 335 (1) no. 2b SolvV)

Internal rating systems are at the heart of credit risk management for companies in the DZ BANK banking group. The credit ratings used for internal management purposes and regulatory reporting purposes are identical. Internal rating systems are used in the following areas:

– The **credit lines** within which counterparties are allowed to engage in lending or trading transactions at risk of default with group companies are partly determined by internal ratings.
– The profit-contribution-based **pre-analysis of loans** carried out by relationship managers in the course

of acquiring new business is based on key cost determinants, i.e. the standard risk costs and economic capital costs involved in covering expected and unexpected losses. Both cost components are based on internal ratings.
- The **level of authority** for decision-makers in trading and back-office units to approve loan applications is also determined by internal ratings.
- When **loans are analyzed ex-post** after a transaction has been closed, the profit contributed by individual transactions, customers, and profit centers is primarily determined (similarly to the pre-analysis of loans) by the standard risk costs and economic capital costs based on internal ratings.
- During the term of a loan, internal rating classes determine the extent to which a **counterparty's financial status is monitored**.
- **Specific loan loss allowances and portfolio loan loss allowances are planned** on the basis of standard risk costs that are determined by internal ratings.
- The risk of unexpected losses is measured using **credit value-at-risk systems** that are based on internal credit ratings and the corresponding default probabilities as well as further risk parameters.
- And finally, internal ratings play a key role in internal **credit risk reporting**.

CONTROL MECHANISMS FOR THE RATING SYSTEMS

(Disclosure pursuant to section 335 (1) no. 2d SolvV)

The internal rating systems used are validated once a year on the basis of internal and external data. Validation consists partly of quantitative analysis aimed at measuring the rating systems' selectivity and stability and at calibrating them. Validation also includes qualitative analysis that tests the use of these rating systems for internal management purposes with respect to their model design and data quality. In addition, pool validation is carried out on the standard rating systems used throughout the cooperative financial network. When pool validation is conducted, the rating-related data of all banks that use the rating system concerned is collected and analyzed in the same way as in the internal bank validation process. If validations reveal any room for improvement, such improvements are made when the rating systems are refined.

The monitoring function also includes checking that the rating systems are being properly used, regularly estimating the risk parameters derived from them, and reviewing these estimates. The findings of these monitoring activities are integrated into the internal reporting system.

The rating systems used by DZ BANK are approved by its Board of Managing Directors. The Board of Managing Directors is regularly informed about the rating systems' integrity and the rating results in the DZ BANK Group's quarterly credit risk report.

At DZ BANK, a dedicated organizational unit in the Group Controlling division is responsible for regularly reviewing the adequacy and integrity of the rating systems used to manage credit risk. In addition, this unit is responsible for ensuring compliance with regulatory requirements in respect of rating systems, for developing and implementing new rating models, and for adapting existing models.

The Internal Audit function is independent of this process and regularly reviews the adequacy of internal rating systems, including compliance with the minimum requirements for using these systems.

Similar arrangements are in place at all relevant companies in the DZ BANK banking group.

PROCESS OF ASSIGNING EXPOSURES AND BORROWERS TO RATING CATEGORIES AND RISK POOLS

(Disclosure pursuant to section 335 (1) no. 3 SolvV)

Every borrower clearly falls into a defined area of a rating system based on industrial sector codes, revenue characteristics and business specifics. As a rule, it is not possible to conduct business that bears a default risk with borrowers who do not have an internal rating. All rating systems are assigned – without any overlaps – to one regulatory asset class. The relevant rating models are used as part of the credit application and approval process to classify the applicant or the guarantor. Every borrower or guarantor must be reclassified at least once a year. All relevant input factors and ratings conducted are saved in the data processing systems so that there is a complete rating history for every customer and every transaction.

4.2.2. Rating systems for asset classes under the Standardized Approach to credit risk

NOMINATED RATING AGENCIES

(Disclosure pursuant to section 328 (1) nos. 1 and 2 SolvV)

The rating agencies Standard & Poor's Ratings Services (Standard & Poor's), Moody's Investors Service (Moody's), and Fitch Ratings Ltd. (Fitch) are used to help determine the capital requirements for all asset classes under the Standardized Approach to credit risk. The ratings of OECD export insurance agencies are also used. Competing external ratings are included in the calculation of risk-weighted exposure in accordance with sections 44 and 45 SolvV.

TRANSFER OF CREDIT RATINGS FROM BOND ISSUES TO ASSETS

(Disclosure pursuant to section 328 (1) no. 3 SolvV)

External credit ratings awarded by recognized rating agencies or export insurance agencies are transferred to assets of the DZ BANK banking group in accordance with the requirements of sections 42 to 47 SolvV. No issuer credit ratings were transferred to similar assets or to assets of equal or higher ranking. This applies to all asset classes under the Standardized Approach to credit risk.

4.3 COLLATERAL MANAGEMENT

(Disclosure pursuant to section 335 (1) no. 2c and section 336 (1) SolvV)

The methods used by the DZ BANK banking group to mitigate credit risk are described in section 4.4.6 of the opportunity and risk report. This section includes disclosures relating to the following:

- Hedging objectives and hedging strategies
- Main types of collateral
- Main types of guarantors and counterparties in credit derivatives
- Procedure for obtaining collateral for traditional lending business and for derivative counterparty risk exposures
- Concentrations of risk arising from credit risk mitigation techniques.

4.4. MANAGING DERIVATIVE COUNTERPARTY RISK EXPOSURE IN THE BANKING BOOK AND TRADING BOOK

(Disclosure pursuant to section 326 (1) SolvV)

The following information on the management of derivative counterparty risk exposure in the banking book and trading book of the DZ BANK banking group can be found in the opportunity and risk report (the relevant section of the opportunity and risk report is shown in parentheses in each case):

- Internal procedure for allocating capital to cover derivative counterparty risk exposures (section 4.4.8)
- Procedure for obtaining collateral (section 4.4.6)
- Procedure for handling correlations of market risk and counterparty risk (section 4.4.5)
- Impact from the amount of collateral that the bank would have to provide in the event of a credit rating downgrade (section 4.4.6).

4.5. RECOGNITION OF ALLOWANCES FOR LOSSES ON LOANS AND ADVANCES

The **policies and procedures governing the recognition of allowances for losses on loans and advances** applicable to the companies in the DZ BANK banking group (disclosure pursuant to section 327 (1) no. 2 SolvV) and other **accounting-related details on credit risk** (disclosure pursuant to section 327 (1) no. 1 SolvV) are described in section 4.4.7 of the opportunity and risk report. The term 'in arrears' mentioned in section 327 (1) SolvV has the same meaning as the term 'past due' as used by the DZ BANK banking group. The expressions 'non-performing' and 'in default' are also used synonymously.

4.6. LENDING VOLUME, ALLOWANCES FOR LOSSES ON LOANS AND ADVANCES, AND LOSSES INCURRED IN LENDING BUSINESS

4.6.1. Notes on quantitative disclosures

Disclosures relating to lending volume, allowances for losses on loans and advances, and losses incurred in lending business are broken down as follows in this risk report:

– Section 4.6.2 presents information on the total lending volume and allowances for losses on loans and advances. This information is based on the DZ BANK Group's internal risk reports, which are submitted to DZ BANK's Board of Managing Directors, although reference is also made to pertinent disclosures included in the opportunity and risk report.
– Sections 4.6.3 and 4.6.5 disclose portions of the total lending volume based on criteria prescribed for regulatory purposes, such as asset classes and risk-weighting bands. These disclosures also include losses in the IRBA credit portfolio.
– Sections 4.6.6 and 4.6.7 include further specific regulatory disclosures relating to collateralized lending volume and derivative counterparty risk exposures.
– Lending volume in connection with securitizations and the losses from such exposures are described in section 7.4 of this risk report. These disclosures are separate from the other disclosures relating to credit risk because securitizations also involve market risk, liquidity risk, and operational risk.

The disclosures on lending volume in the regulatory risk report and the opportunity and risk report required by commercial law differ in terms of the methodology they use in the sense that the internal reports – the basis for opportunity and risk reporting and the disclosures in section 4.6.2 of this regulatory risk report – are based on asset values measured before collateral and after deduction of the recognized allowances for losses on loans and advances, whereas in sections 4.6.3 to 4.6.7 of this regulatory risk report the relevant regulatory exposures are reported as the expected exposure at the time of potential default. In addition, the quantitative disclosures vary between the two risk reports owing to differences in the recognition of conversion factors for extended but undrawn credit lines.

The aggregate lending portfolio presented in section 4.6.2 is comparable with the aggregated regulatory subportfolios shown in figures 12 through 15 and in figure 30. However, the sum totals cannot be fully reconciled to one another because of differences in the definitions of key figures and the methods used to offset collateral. Further discrepancies arise from differences in the entities included in the consolidation and differences in the treatment of long-term strategic equity investments and credit insurance business at R+V.

4.6.2. Gross lending volume and allowances for losses on loans and advances

Disclosures applicable to both regulatory and commercial-law requirements in respect of gross lending volume and allowances for losses on loans and advances are presented in full in the opportunity and risk report. The regulatory requirements and the corresponding requirements under IFRS 7 are presented together. To ensure compliance with the IFRS 7 requirements on the use of the management approach, disclosure of gross lending volume and allowances for losses on loans and advances in the opportunity and risk report is based on the figures that are used for internal management purposes and that form the basis for reports submitted to the Board of Managing Directors.

Basing disclosure on the management approach is consistent with section 327 (2) SolvV in conjunction with the reasons given in SolvV, under which the lending volume and the companies included may be defined according to the criteria applied internally. Because R+V is of material importance to the DZ BANK financial conglomerate, it is included in the presentation of both the gross lending volume and the allowances for losses on loans and advances.

The disclosures on gross lending volume and allowances for losses on loans and advances are set out in sections 4.5 and 4.6 of the opportunity and risk report, as follows:

– **Gross lending volume broken down by main geographical area and asset type** (disclosure pursuant to section 327 (2) no. 2 SolvV) is disclosed in figure 19 ('Lending volume by country group') in section 4.5.5.

– **Gross lending volume broken down by main sector and asset type** (disclosure pursuant to section 327 (2) no. 3 SolvV) is disclosed in figure 18 ('Lending volume by sector, average lending volume') in section 4.5.4.

– **Contractual residual maturities** (disclosure pursuant to section 327 (2) no. 4 SolvV) are disclosed in figure 20 ('Lending volume by residual maturity') in section 4.5.6.

FIG. 12 – EXPOSURES UNDER THE STANDARDIZED APPROACH TO CREDIT RISK AND EXPOSURES SUBJECT TO THE SIMPLE RISK-WEIGHTING METHOD IN THE IRB APPROACH

€ million	Exposures before credit risk mitigation under the Standardized Approach to credit risk		Exposures after credit risk mitigation			
Risk weightings			under the Standardized Approach to credit risk		under the simple risk-weighting method of the IRB approach (long-term equity investments, mortgage-backed securities, and specialized financial services)	
	Dec. 31, 2011	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
0%	111,474	100,719	112,081	102,039	–[1]	211[1]
10%	224	197	224	197		
20%	4,157	5,182	4,078	4,847		
35%	288	287	292	291		
50%	1,196	1,466	1,248	1,631	646[2]	1,090
70%	–	–	4	4	–[1]	1,549[1]
of which: specialized financing with a residual maturity of less than 2.5 years					–	211
75%	4,252	4,193	4,169	4,063		
90% (specialized financial services only)					–	886
100%	14,585	15,446	12,089	13,127		
115% (specialized financial services only)					–	776
150%	888	541	844	492		
190% (long-term equity investments only)					515	18
200%	–	–	–	–		
250% (specialized financial services only)					–	–
290% (long-term equity investments only)					35	93
350%	–	–	–	–		
370% (long-term equity investments only)					38	33
1,250%	–	–	–	–		
Capital deduction	–	–	–	–		
Other risk weightings	843	570	843	570		
Total	**137,907**	128,601	**135,872**	127,261	**1,234**	4,655

1 Specialized financial services only
2 The reported exposure relates solely to mortgage-backed securities (December 31, 2010: €792 million)

– **Non-performing loans and loans in arrears broken down by main sector** (disclosure pursuant to section 327 (2) no. 5 SolvV) are disclosed by means of figure 25 ('Lending volume past due but not impaired, by sector') in section 4.5.11, figure 27 ('Impaired lending volume, by sector') in section 4.5.12, figure 29 ('Allowances for losses on loans and advances, direct impairment losses, by sector – 2011') in section 4.6, and figure 31 ('Provisions for loan commitments and liabilities under financial guarantee contracts and loan commitments, by sector – 2011') in section 4.6.
– **Non-performing loans and loans in arrears broken down by main geographical area** (disclosure pursuant to section 327 (2) no. 5 SolvV) are disclosed by means of figure 26 ('Lending volume past due but not impaired, by country group') in section 4.5.11, figure 28 ('Impaired lending volume, by country group') in section 4.5.12, figure 33 ('Allowances for losses on loans and advances, direct impairment losses, by country group – 2011') in section 4.6, and figure 35 ('Provisions for loan commitments and liabilities under financial guarantee contracts and loan commitments, by country group – 2011') in section 4.6.

FIG. 13 – LENDING VOLUME BROKEN DOWN BY PD CATEGORY (EXCLUDING RETAIL) UNDER THE FOUNDATION IRB APPROACH

	Investment grade			Non-investment grade			Default			Total		
€ million	Exposure		Average risk weighting	Exposure		Average risk weighting	Exposure		Average risk weighting	Exposure		Average risk weighting
Asset class	Total	of which: open loan commitments		Total	of which: open loan commitments		Total	of which: open loan commitments		Total	of which: open loan commitments	
Central governments	3,632	45	10.2%	132	–	112.8%	557	–	–	4,321	46	12.0%
Institutions	47,313	663	20.2%	2,468	3	85.3%	747	–	–	50,528	666	23.1%
Corporates	26,804	6,308	43.7%	7,843	1,213	108.9%	1,821	40	–	36,469	7,560	55.6%
of which: SMEs	–	–	–	–	–	–	–	–	–	–	–	–
specialized financial services	10,165	1,430	37.3%	1,334	120	129.9%	273	5	–	11,772	1,555	46.9%
receivables purchased	78	–	56.3%	87	7	91.4%	2	–	–	167	7	74.0%
Investments exposure	420		83.8%	4		217.3%	2		–	425		84.6%
Total, Dec. 31, 2011	**78,169**	**7,016**		**10,447**	**1,216**		**3,127**	**40**		**91,743**	**8,272**	
Total, Dec. 31, 2010	75,353	6,183		8,922	1,353		2,403	28		86,676	7,564	

The disclosures related to **changes in allowances for losses on loans and advances** (disclosure pursuant to section 327 (2) no. 6 SolvV) are also covered by the abovementioned tables in the opportunity and risk report. The relevant information has not therefore been disclosed separately. Significant discrepancies between the amounts as at December 31, 2011 and the **average values** for the year under review (disclosure pursuant to section 327 (2) no. 1 SolvV) are presented in the opportunity and risk report in section 4.5.3 and in figure 18 ('Lending volume by sector, average lending volume') within section 4.5.4.

4.6.3. Exposure under the Standardized Approach to credit risk

(Disclosure pursuant to section 328 (2) and section 329 (2) SolvV)

Figure 12 shows the exposures assigned to the asset classes under the Standardized Approach to credit risk both including and excluding credit risk mitigation. The table also shows exposures to IRBA investments and to mortgage-backed securities, which are calculated in the IRB approach using the simple risk-weighting method, after credit risks have been mitigated. The classification of transactions in the regulatory risk-weighting categories depends on how the transactions are classified in the regulatory asset classes, on

FIG. 14 – LENDING VOLUME BROKEN DOWN BY PD CATEGORY (EXCLUDING RETAIL) UNDER THE ADVANCED IRB APPROACH

€ million	Investment grade						Non-investment grade					
	Total value of open loan commitments	Exposure			Average LGD	Average risk weighting	Total value of open loan commitments	Exposure			Average LGD	Average risk weighting
Asset class		Total	of which: open loan commitments	Average exposure				Total	of which: open loan commitments	Average exposure		
Central governments	–	–	–	–	–	–	–	–	–	–	–	–
Institutions	–	594	–	–	100.0%	25.0%	–	–	–	–	–	–
Corporates	121	2,689	174	143.6%	12.4%	10.9%	1,389	18,312	1,787	128.7%	4.0%	15.8%
of which: SMEs	–	–	–	–	–	–	–	–	–	–	–	–
specialized financial services	–	–	–	–	–	–	–	–	–	–	–	–
receivables purchased	–	–	–	–	–	–	–	–	–	–	–	–
Investments exposure		–		–	–	–		–		–	–	–
Total, Dec. 31, 2011	**121**	**3,283**	**174**				**1,389**	**18,312**	**1,787**			
Total, Dec. 31, 2010	65	2,662	65				1,947	16,301	1,947			

the credit ratings of borrowers and transactions, and on the collateral provided. The sum total of exposures after credit risks have been mitigated under the Standardized Approach to credit risk arises from the provision of personal collateral for IRBA transactions by counterparties that are rated according to the Standardized Approach to credit risk.

In some cases, the exposures reported after credit risks have been mitigated are larger than exposures before credit risks have been mitigated. This is because exposures where credit risks have been mitigated include exposures reported under the IRB approach that are backed by counterparties, in particular guarantors, that are rated according to the Standardized Approach to credit risk.

4.6.4. Exposure under the IRB approach

Figures 13 through 15 show the IRBA lending volumes for borrowers and transactions that are classified on the basis of internal credit ratings. The internally used rating systems have been unambiguously assigned to one regulatory asset class. The borrowers/transactions are assigned to a credit rating category based on their individual rating in the form of their specific default probability or expected loss. Classification as

Default						Total					
Total value of open loan commitments	Exposure			Average LGD	Average risk weighting	Total value of open loan commitments	Exposure			Average LGD	Average risk weighting
	Total	of which: open loan commitments	Average exposure				Total	of which: open loan commitments	Average exposure		
–	–	–	–	–	–	–	–	–	–	–	–
–	6	–	–	100.0%	–	–	600	–	–	100%	38.9%
14	691	14	100.0%	16.1%	–	1,524	21,693	1,975	129.6%	5.4%	14.7%
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
	–		–	–	–		–		–	–	–
14	**697**	**14**				**1,524**	**22,293**	**1,975**			
36	586	36				2,047	19,549	2,047			

'investment grade', 'non-investment grade', or 'default' is based on the corresponding default probabilities for each rating category on the standardized groupwide VR master scale. This rating scale is shown in section 4.4.1 of the opportunity and risk report under the heading 'Cooperative financial network'.

LENDING VOLUMES BROKEN DOWN BY PROBABILITY OF DEFAULT (PD) CATEGORY (EXCLUDING RETAIL) UNDER THE FOUNDATION IRB APPROACH

(Disclosure pursuant to section 335 (2) nos. 1, 2a, and 2c SolvV)
Figure 13 shows the following key figures:

- The total exposures and, in particular, exposures relating to undrawn loan commitments
- The average risk weighting of each exposure.

The disclosures are based on the IRBA asset classes (central governments, institutions, corporates, and long-term equity investments) and are also broken down by risk category. The exposure for undrawn credit lines is calculated by applying the credit conversion factors to the carrying amount. The average risk weightings reveal borrowers' credit ratings and the extent to which transactions are collateralized.

LENDING VOLUMES BROKEN DOWN BY PROBABILITY OF DEFAULT (PD) CATEGORY (EXCLUDING RETAIL) UNDER THE ADVANCED IRB APPROACH

(Disclosure pursuant to section 335 (2) nos. 1 and 2 SolvV)
Figure 14 comprises the following disclosures:

- The sum total of unutilized loan commitments, which is presented as the carrying amount of open loan commitments shown on the balance sheet
- The total exposures and, in particular, exposures relating to undrawn loan commitments
- The average exposure for undrawn loan commitments
- The average risk weighting of each exposure
- The average loss given default.

The disclosures are again broken down according to the above IRBA asset classes and by risk category.

LOAN UTILIZATIONS AND LOAN COMMITMENTS FOR RETAIL PORTFOLIOS – EL-BASED RETAIL IRB APPROACH

(Disclosure pursuant to section 335 (2) nos. 2 and 3 SolvV)
Figure 15 shows the total exposures for the IRBA asset class of retail business broken down in each case by risk category. The expected loss (EL) categories reflect the range of the expected loss in basis points.

4.6.5. Losses in lending business

ACTUAL LOSSES INCURRED IN LENDING BUSINESS
(Disclosure pursuant to section 335 (2) nos. 4 and 5 SolvV)
The information given in figure 16 relates to the following asset classes: central governments, institutions, corporates (including small and medium-sized enterprises (SMEs), specialized financial services, and purchased receivables that are treated as corporate loans), investments that are backed by capital using individual probabilities of default (PD/LGD approaches), and retail business (broken down into mortgage-backed IRBA exposures, qualified revolving IRBA exposures, and other IRBA exposures).

Calculations of losses presented in figure 16 are based on the carrying amounts recognized under IFRS. Market-price-related write-downs on securities portfolios and long-term equity investments not managed according to their default probabilities are not shown. The information disclosed in the regulatory risk report includes the changes in allowances for losses on loans and advances, provisions for loan commitments, and liabilities from financial guarantee contracts reported in section 4.6 of the opportunity and risk report, as described below:

- Additions of €812 million in 2011 (2010: €958 million) to specific loan loss allowances (including specific loan loss allowances evaluated on a group basis) are offset against reversals of such losses amounting to €639 million (2010: €583 million) and interest income amounting to €36 million (2010: €36 million) for the financial year.

- The difference between directly recognized impairment losses of €100 million (2010: €109 million) and receipts from loans and advances previously impaired amounting to €64 million (2010: €121 million) for the year under review is also recognized.

FIG. 15 – LOAN UTILIZATIONS AND LOAN COMMITMENTS FOR RETAIL PORTFOLIOS – EL[1]-BASED RETAIL IRB APPROACH

€ million	Exposure for EL category 1 (EL = 0 to 30 bp)		Exposure for EL category 2 (EL = 31 to 70 bp)		Exposure for EL category 3 (EL > 70 bp)		Total	
Asset class	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
Mortgage-backed IRBA receivables from retail business	23,943	23,954	2,426	2,449	4,706	4,527	31,075	30,930
Qualified revolving IRBA receivables from retail business	–	–	–	–	–	–	–	–
Other IRBA receivables from retail business	9,341	8,554	1,540	1,783	4,030	3,378	14,911	13,716
Total	**33,284**	**32,508**	**3,966**	**4,232**	**8,736**	**7,905**	**45,986**	**44,645**

1 Expected loss

FIG. 16 – ACTUAL LOSSES IN THE TOTAL CREDIT PORTFOLIO UNDER THE IRB APPROACH

€ million	Losses during the period			
Asset class	**Jan. 1 to Dec. 31, 2011**	**Jan. 1 to Dec. 31, 2010**	**Jan. 1 to Dec. 31, 2009**	**Jan. 1 to Dec. 31, 2008**
Central governments	5	2	–	–
Institutions	9	–	26	221
Corporates	29	117	247	81
Equity instruments	–	–	–	–
Mortgage-backed IRBA receivables from retail business	23	59	69	64
Qualified revolving IRBA receivables from retail business	–	–	–	–
Other IRBA receivables from retail business	-2	99	87	58
Total	**64**	**277**	**429**	**424**

FIG. 17 – LOSS ESTIMATES AND ACTUAL LOSSES IN THE NON-DEFAULTING CREDIT PORTFOLIO UNDER THE IRB APPROACH

€ million	Losses during the period Jan. 1 to Dec. 31, 2011		Losses during the period Jan. 1 to Dec. 31, 2010		Losses during the period Jan. 1 to Dec. 31, 2009	
Asset class	Expected	Actual	Expected	Actual	Expected	Actual
Central governments	2	–	3	2	5	–
Institutions	13	9	11	1	40	10
Corporates	244	111	272	145	196	307
Equity instruments	6	–	5	–	–	–
Mortgage-backed IRBA receivables from retail business	68	22	71	34	86	41
Qualified revolving IRBA receivables from retail business	–	–	–	–	–	–
Other IRBA receivables from retail business	98	59	120	36	104	42
Total	**431**	**201**	**482**	**218**	**431**	**400**

– Finally, additions to provisions for loan commitments and liabilities under financial guarantee contracts and loan commitments of €80 million in 2011 (2010: €75 million) are offset against reversals of these items amounting to €88 million (2010: €99 million).

The sum total of these components constitutes the actual loss incurred by the aggregate portfolio, measured at €165 million for the year under review (2010: €303 million). An actual loss of €64 million (2010: €277 million) for the reporting period was calculated for the IRBA subportfolios shown in figure 16. The loss on the IRBA subportfolios was therefore €101 million lower than the corresponding value for the aggregate portfolio (2010: €26 million).

There was a significant year-on-year reduction in the losses incurred on loans to corporates in the IRBA subportfolio. The losses incurred on IRBA mortgage loans in the retail business were also lower in the year under review than they were in 2010.

LOSS ESTIMATES AND ACTUAL LOSSES IN THE NON-DEFAULTING CREDIT PORTFOLIO UNDER THE IRB APPROACH

(Disclosure pursuant to section 335 (2) no. 6 SolvV)

Figure 17 compares the expected losses with the losses actually incurred during the period January 1 to December 31, 2011 for the following IRBA asset classes: central governments, institutions, corporates (including large companies, SMEs, specialized financial services, and purchased receivables that are treated as corporate loans), long-term equity investments recognized under the PD/LGD approach, and retail business.

The estimate of the expected losses for 2011 relates to the non-defaulting risk-weighted assets in the traditional lending business. Consequently, it does not factor in the expected losses on securities in the banking book or in connection with derivative counterparty risks. The losses shown that have actually been incurred also relate to the exposures that had not yet defaulted at the beginning of the year under review. The definition of 'loss' corresponds to the definition used for figure 16.

FIG. 18 – COLLATERALIZED LENDING VOLUME UNDER THE STANDARDIZED APPROACH TO CREDIT RISK (EXCLUDING SECURITIZATIONS)

€ million	Financial collateral		Life insurance		Guarantees		Total	
Asset class	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
Central governments	1,043	1,117	–	–	–	–	1,043	1,117
Regional governments and local authorities	1	–	–	–	13	8	14	8
Other public-sector entities	76	1	–	–	100	377	176	378
Multilateral development banks	–	–	–	–	–	–	–	–
International organizations	–	–	–	–	–	–	–	–
Institutions	2,104	1,938	–	–	22	29	2,126	1,967
Covered bonds issued by banks	–	–	–	–	–	–	–	–
Corporates	979	813	7	7	1,737	1,981	2,723	2,793
Retail business	1	–	–	–	74	198	75	198
Exposures collateralized by real estate	–	–	–	–	–	–	–	–
Investment fund units	–	–	–	–	–	–	–	–
Long-term equity investments	–	–	–	–	–	–	–	–
Other exposure	–	–	–	–	–	–	–	–
Past-due exposures	2	1	3	2	15	23	19	24
Total	**4,206**	3,870	**10**	9	**1,961**	2,616	**6,176**	6,485

Figure 17 shows that the losses of €201 million actually incurred in 2011 (2010: €218 million) across all asset classes were considerably lower than the expected figure of €431 million (2010: €482 million).

4.6.6. Collateralized lending volume

NOTES ON COLLATERALIZED LENDING VOLUME

Figure 18 and figure 19 cover the volume of assets secured by collateral that is risk-weighted for regulatory purposes, broken down into the IRB approaches and the Standardized Approach to credit risk. The volume of business generated by the collateralized transactions is shown in figures 12 through 15 of this risk report.

The collateralization effect of the guarantees provided by counterparties under the Standardized Approach to credit risk is illustrated in figure 12, which shows a partial shift in the lending volume from higher to lower risk weightings between the table columns that present the total exposure before and after the credit risk had been mitigated under the Standardized Approach. Under the IRB approaches, most of the collateral shown in the table – especially mortgages – is included in the calculation of capital requirements as loss given default (LGD).

FIG. 19 – COLLATERALIZED LENDING VOLUME UNDER THE IRB APPROACH (EXCLUDING SECURITIZATIONS)

€ million	Financial collateral		Life insurance		Other collateral		Guarantees		Total	
Asset class	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010
Corporates	96	229	3	4	26,538	23,165	3,106	2,587	29,741	25,986
Institutions	9,425	8,702	–	–	82	103	534	662	10,041	9,467
Central governments	31	422	–	–	–	–	214	267	245	689
Retail business	–	–	–	–	30,069	29,866	302	441	30,371	30,307
of which: mortgage-backed	–	–	–	–	30,069	29,866	302	441	30,371	30,307
qualified revolving	–	–	–	–	–	–	–	–	–	–
other	–	–	–	–	–	–	–	–	–	–
Long-term equity investments	–	–	–	–	–	–	–	–	–	–
of which: simple risk-weighting approach	–	–	–	–	–	–	–	–	–	–
internal modeling approach	–	–	–	–	–	–	–	–	–	–
PD/LGD approach	–	–	–	–	–	–	–	–	–	–
Other non credit-obligation assets	–	–	–	–	–	–	–	–	–	–
Total	**9,552**	9,353	**3**	4	**56,689**	53,135	**4,156**	3,957	**70,398**	66,449

COLLATERALIZED LENDING VOLUME UNDER THE STANDARDIZED APPROACH TO CREDIT RISK (EXCLUDING SECURITIZATIONS)

(Disclosure pursuant to section 336 no. 2 SolvV)

Figure 18 shows the exposures broken down by asset class under the Standardized Approach to credit risk where such exposures are secured by financial collateral, life insurance, or guarantees. The figures for credit risk mitigation in each case are the regulatory risk-weighted values.

COLLATERALIZED LENDING VOLUME UNDER THE IRB APPROACHES (EXCLUDING SECURITIZATIONS)

(Disclosure pursuant to section 336 no. 2 SolvV)

Figure 19 shows the exposures, broken down by IRBA asset class, that are backed by financial collateral, other IRBA collateral (such as physical collateral) or guarantees. The figures shown for credit risk mitigation in each case are the regulatory risk-weighted values. For certain IRBA assets held by BSH, DG HYP, and DVB, the mortgage-related or real-estate collateral recognized for credit risk mitigation purposes is included in the calculation of capital requirements as loss given default. The table shows the collateralized exposure for these transactions.

4.6.7. Derivative counterparty risk exposure

(Disclosure pursuant to section 326 SolvV)

Figure 20 shows the derivative counterparty risk exposure in the banking book and trading book in the form of positive fair values before and after the risk-weighting of offsetting derivatives exposures and collateral. The derivative counterparty risk is also broken down into the various types of contract.

The disclosures show the aggregated derivative counterparty risk exposure in the banking book and trading book, which has already been disclosed for each regulatory subportfolio in figures 12 through 15. The exposures that are processed directly via a risk-free central counterparty (clearing house) are not included in figure 20. This table therefore only shows over-the-counter (OTC) derivatives as well as listed derivatives that are traded via an intermediary, such as a broker. All derivatives exposures arising from securitizations are disclosed solely in figure 30.

The DZ BANK banking group for the most part uses the regulatory mark-to-market method to calculate the counterparty risk to be disclosed under section 326 (2) no. 2 SolvV. As at December 31, 2011, **counterparty risk** was calculated at €14,027 million (December 31, 2010: €12,437 million). This figure relates to the derivative counterparty risk exposure shown in figure 20 and serves as a basis for measurement under the Standardized Approach to credit risk or the IRB approaches.

The notional amount of credit derivatives, risk-weighted for regulatory purposes and used to hedge derivative counterparty risk exposures, and to be disclosed pursuant to section 326 (2) no. 3 SolvV, was €1,000 million as at December 31, 2011 (December 31, 2010: €658 million).

Figure 21 shows the notional amounts of credit derivatives bought and sold, broken down by type of derivatives. As had been the case at the end of the previous year, no credit derivatives from the intermediary operations of DZ BANK banking group companies were held as at December 31, 2011.

FIG. 20 – DERIVATIVE COUNTERPARTY RISK EXPOSURE, INCLUDING AND EXCLUDING OFFSETTING AGREEMENTS AND COLLATERAL

€ million	Positive replacement values excluding offsetting and collateral		Offsetting opportunities	Eligible collateral	Positive replacement values including offsetting and collateral
Types of contract	Dec. 31, 2011	Dec. 31, 2010			
Interest-rate-related contracts	28,746	21,180			
Currency-related contracts	2,048	1,688			
Equity-/index-related contracts	2,489	2,510			
Credit derivatives	2,136	1,521			
Commodity-related contracts	76	111			
Other contracts	38	2			
Total, Dec. 31, 2011	35,533		28,912	2,686	3,935
Total, Dec. 31, 2010		27,012	22,636	2,050	2,327

FIG. 21 – NOTIONAL AMOUNTS OF CREDIT DERIVATIVES BROKEN DOWN BY TYPE OF USE

€ million	Notional amount arising from use for own portfolio				Notional amount arising from intermediary operations	
	Bought		Sold			
Credit derivatives	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010
Credit default swaps	39,419	40,200	42,679	43,109	–	–
Total return swaps	2,958	2,078	387	375	–	–
Credit-linked notes	3,148	2,931	427	59	–	–
Other	676	–	–	–	–	–
Total	46,201	45,209	43,493	43,543	–	–

5. LONG-TERM EQUITY INVESTMENTS HELD IN THE BANKING BOOK

5.1. MANAGEMENT OF RISKS ATTACHING TO LONG-TERM EQUITY INVESTMENTS HELD IN THE BANKING BOOK

(Disclosure pursuant to section 322 SolvV)

The objectives and principles underlying the management of risks attaching to long-term equity investments held in the banking book and the aims pursued through such investments are described in section 5 of the opportunity and risk report. The accounting policies applied to long-term equity investments held in the banking book are described below.

5.2. ACCOUNTING POLICIES APPLIED TO LONG-TERM EQUITY INVESTMENTS

(Disclosure pursuant to section 332 (1) SolvV)

IAS 39 applies to shareholdings that are neither fully consolidated nor recognized under the equity method. DZ BANK classifies these investments as available-for-sale financial instruments and recognizes them at their fair value in accordance with IAS 39.9. Any fluctuations in fair value arising from the fair value measurement subsequent to initial recognition are taken to other comprehensive income and recognized in the revaluation reserve. If an investment is permanently impaired as defined in IAS 39.58 et seq., an impairment loss is recognized in income. Reversals of im-

FIG. 22 – MEASUREMENT OF EQUITY INSTRUMENTS

€ million	Carrying amount		Fair value		Market value	
Category of equity instrument	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
Investments in banks	**395**	**409**	**406**	**449**		
of which: exchange-traded	122	111	98	136	98	136
not exchange-traded but part of a diversified investment portfolio	272	297	307	313		
other	1	1	1	1		
Investments in finance companies	**24**	**24**	**18**	**24**		
of which: exchange-traded	–	–	–	–	–	–
not exchange-traded but part of a diversified investment portfolio	–	4	–	4		
other	24	20	18	20		
Investments in insurance companies	**2,336**	**1,782**	**2,336**	**1,782**		
of which: exchange-traded	–	–	–	–	–	–
not exchange-traded but part of a diversified investment portfolio	496	3	496	3		
other	1,841	1,779	1,841	1,779		
Investment funds held as long-term equity investments in the banking book	**27**	**109**	**27**	**111**		
of which: exchange-traded	–	6	–	6	–	6
not exchange-traded but part of a diversified investment portfolio	–	103	–	105		
other	27	18	27	18		
Investments in corporates	**579**	**484**	**594**	**498**		
of which: exchange-traded	42	4	43	4	43	4
not exchange-traded but part of a diversified investment portfolio	26	150	26	150		
other	511	330	526	344		
Total	**3,361**	**2,808**	**3,381**	**2,864**		

pairment losses previously recognized in income are taken to other comprehensive income and recognized in the revaluation reserve. The fair value of investments is measured at the end of each month.

The relevant closing share price at the reporting date is used to measure the fair value of publicly traded investments held in the banking book.

The enterprise value of investments that are not publicly traded is determined by discounting their future financial surpluses back to the measurement date. The figure used to determine the discount rate is the return on a risk-free capital market investment. A risk premium is added to this base interest rate to reflect the greater uncertainty about the level of future financial surpluses associated with an investment in shares of the company being measured compared with an investment in a risk-free interest-bearing security. The beta factor is individually determined using an appropriate benchmarking method.

The enterprise values of companies at which a transaction has recently taken place are validated on the basis of the transaction price. If, rather than pursuing any (direct) financial objectives, the company in question focuses on providing services or promoting the public good (for example in the case of guarantee banks), the net asset value of this company as a going concern should be calculated instead. Alternatively, the value of the pro-rata equity available can be used. Real-estate finance companies are subjected to a property-related measurement.

5.3. LONG-TERM EQUITY INVESTMENT EXPOSURES HELD IN THE BANKING BOOK

(Disclosure pursuant to section 332 (2) SolvV)

The equity risk of exposures disclosed in figure 22 distinguishes the carrying amounts under commercial law from the current market value of these exposures. The recognition of unrealized gains and losses on long-term equity investments in the DZ BANK banking group's equity is shown in figure 23.

The regulatory report on investments held in the banking book covers conventional investments as well as securities, derivatives on investment exposures, and investment funds. The DZ BANK banking group recognizes the investment funds held in its banking book using the transparency method and breaks them down into the primary asset classes of the individual investment fund components. These exposures are therefore included in the Standardized Approach to credit risk and IRBA tables rather than the equity risk tables. The equity exposures in the investment funds are classified with a risk weighting of 100 percent under the Standardized Approach to credit risk (see figure 12) and fall into the 'investments exposure' asset class under the IRB approach (see figure 13).

Figure 22 shows the long-term equity investments in the banking book that are risk-weighted (and consequently not consolidated, either in full or on a pro rata basis) or are subject to a capital deduction. These are broken down by groups of equity instrument and various carrying amounts. The classification of investments is based on the financial nature of the equity instrument concerned. The carrying amount is the carrying amount determined in accordance with IFRS. Traded equity investments are defined as equity instruments that are listed on a stock exchange. The market value is

FIG. 23 – REALIZED AND UNREALIZED GAINS AND LOSSES ON EQUITY INSTRUMENTS IN ACCORDANCE WITH IFRS

		Unrealized gains/losses on equity instruments		
€ million	**Realized gains and losses on disposals**	Total amount	of which: amounts recognized in Tier 1 capital	of which: amounts recognized in Tier 2 capital
Dec. 31, 2011	**9**	**20**	**–**	**–**
Dec. 31, 2010	6	56	–	–

defined as the cash settlement price of the investment at the reporting date.

Figure 23 shows the realized and unrealized gains and losses arising from the long-term equity investments held in the banking book in accordance with IFRS. The table only includes equity investments that are risk-weighted (and consequently not consolidated, either in full or on a pro rata basis) or are subject to a capital deduction.

As in 2010, unrealized gains and losses were disregarded for the purposes of determining regulatory capital.

The capital requirement related to equity instrument exposures is included in figure 6. Consequently, no separate disclosure is provided.

6. MARKET RISK

6.1 MANAGEMENT OF MARKET RISK

(Disclosure pursuant to section 322, section 330 (2), and section 333 (1) SolvV)

The following disclosures can be found in the opportunity and risk report:

– Objectives and principles of market risk management, including the management of interest-rate exposure in the banking book (section 6.2)
– Specific information on the internal market risk model (section 6.4.1)
– Specific information on the calculation of interest-rate exposure in the banking book pursuant to section 333 (1) SolvV, including the type of interest-rate exposure, key assumptions made, and frequency of risk measurement (section 6.4.5)

6.2. MARKET RISK EXPOSURE

(Disclosure pursuant to section 330 (1, 1a, 3, and 4) and section 333 (2) SolvV)

The disclosures on the capital requirement for market risk determined under the standardized method in accordance with section 330 (1 and 1a) SolvV are shown in figure 7.

The value-at-risk for portfolios in the trading book, for which the capital requirement is determined using the internal modeling approach in accordance with section 313 SolvV, and the risk amount for potential crises (referred to as stressed value-at-risk) are disclosed in figure 24.

Figure 25 shows the extent of the additional default and migration risk measured in relation to the trading book overall and in relation to the relevant subportfolios as specified in sections 318a to 318d SolvV. This disclosure is made pursuant to section 330 (4) SolvV.

The disclosures on backtesting as required by section 330 (3) no. 2 SolvV can be found in figure 26. The information provided also covers portfolios in the trading book for which the capital requirement is determined using the internal modeling approach in accordance with section 313 SolvV.

FIG. 24 – VALUE-AT-RISK IN THE TRADING BOOK USING THE INTERNAL MODELING APPROACH UNDER NORMAL AND STRESS CONDITIONS

€ million	Value-at-risk at the end of the period under review		Value-at-risk in the reporting period: High		Low		Average	
Value-at-risk scenario	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
Value-at-risk under normal conditions	-21	-18	-22	-59	-11	-15	-15	-31
Value-at-risk under stress conditions[1]	-90		-171		-89		-128	

1 No prior-year comparative figures are available because the regulations on value-at-risk under stress conditions were applied for the first time on October 1, 2011.

The steady fall in value-at-risk up to the summer of 2011 was attributable to the fact that relevant market scenarios from 2010 were no longer included in the one-year historical simulation. The subsequent increase in risk reflected the increasing market volatility against the background of the escalating sovereign debt crisis in Europe and the United States.

Backtesting revealed that on 13 trading days in the year under review the fair value of the portfolio exceeded the forecast risk values in a hypothetical buy-and-hold scenario due to changes in market parameters (the forecasted risk values were exceeded on 7 occasions in 2010). In essence, the increase in the number of days on which risk values were exceeded was caused by exceptionally sharp market fluctuations in connection with the sovereign debt crisis.

The opportunity and risk report's disclosures on value-at-risk and hypothetical changes in fair value comparable with the disclosures in figure 26 (see figure 42 in section 6.5 of the opportunity and risk report) relate to DZ BANK's trading portfolios and therefore reflect the way in which the portfolios are delineated for internal management purposes. Differences in the scope of application have resulted in discrepancies between the values disclosed in the two risk reports.

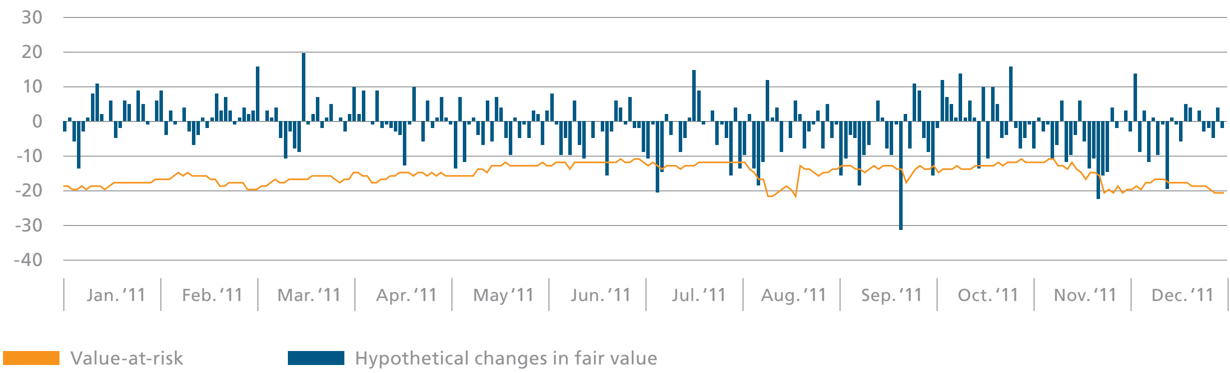
FIG. 25 – ADDITIONAL DEFAULT AND MIGRATION RISK IN THE TRADING BOOK UNDER THE INTERNAL MODELING APPROACH

€ million		Additional default and migration risk in the reporting period			
Trading book portfolio under the internal modeling approach	**Additional default and migration risk as at Dec. 31, 2011**	High	Low	Average	**Average weighted turnover period in months**
Capital markets trading	-182				12
Other	-15				12
Total	**-197**	**-257**	**-195**	**-231**	

1 No prior-year comparative figures are available because the regulations on additional default and migration risk were applied for the first time on October 1, 2011.

FIG. 26 – VALUE-AT-RISK UNDER THE INTERNAL MODELING APPROACH AND HYPOTHETICAL CHANGES IN FAIR VALUE IN THE TRADING BOOK

€ million, 99.00% confidence level, 1-day holding period



Section 333 (2) SolvV requires disclosure of the interest-rate exposure in the banking book. DZ BANK calculates this exposure as a value-at-risk figure at banking group level as part of its internal management of market risk. The DZ BANK banking group's general interest-rate risk in the banking book as determined using the method specified by senior management is disclosed in the opportunity and risk report (see section 6.5 under the header 'Non-trading portfolios' and figure 41). This risk value was reported to the Board of Managing Directors.

7. SECURITIZATIONS

7.1. MANAGEMENT OF SECURITIZATIONS

The management of credit risk associated with securitizations is described in section 4.4.9 of the opportunity and risk report. This description includes the following disclosures:

– Objectives and scope of securitization activities (disclosure pursuant to section 334 (1) nos. 1, 4, 5, and 9 SolvV)
– Causes of risk (disclosure pursuant to section 334 (1) nos. 2 and 3 SolvV)
– Organization, responsibility, and risk reporting (disclosure pursuant to section 334 (1) no. 6 SolvV)
– Risk monitoring and stress tests (disclosure pursuant to section 334 (1) no. 6 SolvV)
– Risk mitigation (disclosure pursuant to section 334 (1) no. 7 SolvV)

In addition to credit risk, the securitization activities of the DZ BANK banking group also give rise to market risk, liquidity risk, and operational risk. These risks form an integral part of the group's standard risk management system. Disclosures related to these risks have been included in the relevant sections of the opportunity and risk report, as follows:

– Market risk management: section 6.4.6 (disclosure pursuant to section 334 (1) no. 3 SolvV)
– Liquidity risk management: section 7.4.1 (disclosure pursuant to section 334 (1) nos. 2 and 3 SolvV)
– Management of operational risk: section 10.4 (disclosure pursuant to section 334 (1) nos. 2, 3, and 7 SolvV)

7.2. REGULATORY TREATMENT OF SECURITIZATIONS

7.2.1. Procedure for determining the risk-weighted exposure

(Disclosure pursuant to section 334 (1) no. 8 SolvV)

Securitization exposures retained in the banking book by companies in the DZ BANK banking group in their capacity as **originators** of synthetic securitizations are backed by capital under the Standardized Approach to credit risk pursuant to sections 238 to 242 SolvV. In addition, exposures relating to residential mortgage-backed securities (RMBSs) that have been retained by originators are reported under the IRB approach because most of the underlying exposures are assigned to IRB asset classes. The IRB procedures used have been approved by BaFin.

When acting as sponsor, the DZ BANK banking group uses the internal classification procedure specified in section 259 SolvV that has been both tested and approved by BaFin to calculate the risk-weighted exposure for securitizations in ABCP programs that do not have an external credit rating. To a lesser extent, the Standardized Approach to credit risk as specified in sections 238 to 242 SolvV and the IRB approach specified in section 257 SolvV are also used to determine the capital requirement for exposures forming part of the group's activities as a sponsor.

Most of the **investor-related exposures in the banking book** are subject to the Standardized Approach to credit risk in accordance with sections 238 to 242 SolvV as well as the look-through approach as specified in section 226 (5) SolvV within the context of the Standardized Approach to credit risk. To a lesser extent, the IRB approach in accordance with section 257 SolvV, the Supervisory Formula Method in accordance with section 258 SolvV, and the Internal Assessment Approach in accordance with section 259 SolvV are also used.

The capital requirements for **investor-related exposures** assigned to the **trading book** are determined using the internal model that has been approved by BaFin for calculating the capital requirements for general and specific market risk. These exposures are factored into the capital requirements for market risk and are therefore not disclosed as credit risk exposures as defined in SolvV.

Since December 31, 2011, it has been a requirement to use the regulatory Standardized Approach for securitizations held in the trading book by the group in its capacity as an investor. The Standardized Approach is based on the securitization risk weightings in the banking book. These exposures are rated for regulatory purposes using the Standardized Approach to credit risk, the IRB approach, and the Supervisory Formula Method with the corresponding rating categories and risk weightings. Securitization exposures with an external rating below the specified minimum thresholds are not weighted but deducted from capital. The minimum thresholds are BB- for Standard & Poor's, Ba3 for Moody's, and BB- for Fitch.

Under the regulatory Standardized Approach, the total of long and short positions is backed by capital. Given the stringent nature of these requirements, banks have been granted an exemption up to December 31, 2013, during which time they only have to provide capital backing for the highest amount (long or short position).

A modified Standardized Approach is available for the correlation trading portfolio in addition to the Standardized Approach. For regulatory purposes, only securitizations and nth-to-default credit derivatives must be allocated to the correlation trading portfolio. Under the modified Standardized Approach, the capital requirement for the correlation trading portfolio is always calculated on the basis of the higher of the eligible amounts for long positions or short positions.

7.2.2. External ratings

(Disclosure pursuant to section 334 (1) no. 11 SolvV)

When transacting securitizations, the DZ BANK banking group uses the classifications prescribed by the rating agencies S&P, Moody's, and Fitch for rating the following regulatory asset classes:

- Receivables from home loans
- Receivables from loans on wholly or partially commercial real estate
- Lease receivables originated or purchased by the DZ BANK banking group
- Receivables from vehicle finance (excluding leases)

Competing external ratings are included in the calculation of risk-weighted exposure in accordance with sections 44 and 45 SolvV. External credit ratings awarded by these recognized rating agencies are transferred to the securitization exposure of the DZ BANK banking group in accordance with the requirements of section 242 et seq. SolvV (under the Standardized Approach to credit risk) and section 255 et seq. SolvV (under the IRB approach).

7.2.3. Internal ratings

(Disclosure pursuant to section 334 (1) no. 12 SolvV)

The Internal Assessment Approach in accordance with section 259 SolvV, which has been tested and approved by the German regulator, is used to determine ratings for liquidity facilities provided for ABCP programs if such facilities have not been rated by external agencies. This arrangement relates solely to the banking book because the companies in the DZ BANK banking group do not have any such exposures in the trading book.

When used to assess risk in accordance with regulatory requirements, the Internal Assessment Approach closely follows the models used by external rating agencies. The procedures used in the Internal Assessment Approach are continuously monitored and adjusted in line with the latest developments to ensure that they are always up to date. Depending on the assets securitized in an ABCP transaction, one of a number of submodels within the Internal Assessment Approach may be used to ensure that the measurement is appropriate to the risk.

Typically, lease receivables or trade receivables may be securitized. The stress factors used to measure the relevant cushions against potential loss and the resulting rating categories are consistent with section 259 SolvV and, as a minimum, are as conservative as those used by external rating agencies. In addition, the Internal Assessment Approach is used for portfolios of individually assessed loans and advances. Likewise, the resulting credit ratings in this case are no less conservative than would be expected from the use of credit portfolio models by external rating agencies. Besides being used for determining capital requirements, the Internal Assessment Approach is also used for the purposes of internal risk management and pricing in the lending business.

The Internal Assessment Approach is comprehensively validated each year. The employees responsible for this task receive extensive training and are familiar with current developments relating to securitization matters. Suitable organizational structures are in place to ensure that front office, back office, and model validation are segregated. Credit procedures and rating models are also subject to regular review by both internal and external auditors.

7.3. ACCOUNTING POLICIES APPLIED TO SECURITIZATIONS

7.3.1. Recognition methods

(Disclosure pursuant to section 334 (1) nos. 10a, b, d, and f SolvV)

The accounting treatment of securitizations does not distinguish between the regulatory categories of banking book and trading book. As required by IAS 39, the DZ BANK banking group's **investor-related exposures** to securities arising from securitizations are either recognized in income as held-for-trading securities, recognized as available-for-sale financial assets at fair value via the revaluation reserve, or recognized as loans and receivables at amortized cost.

Utilized **liquidity facilities** are measured at amortized cost as loans and advances to customers. Undrawn liquidity facilities and loan guarantees are not recognized on the face of the balance sheet; if this gives rise to any imminent risks, provisions are recognized in the amount of the estimated loss in accordance with IAS 37 if they are likely to be utilized and their amount can be reliably estimated. Instruments such as swaps that are used to hedge interest-rate or currency risks are classified as held-for-trading derivatives in accordance with IAS 39 and measured at fair value. Outstanding external funding provided for the consolidated ABCP programs, in the form of asset-backed commercial paper for example, is recognized in other liabilities at amortized cost. Intragroup funding is consolidated in accordance with IAS 27.

DZ BANK is involved as **sponsor** in the CORAL and AUTOBAHN securitizations that are required to be consolidated. Because of the turmoil in the financial markets that has been ongoing since the middle of 2007, the CORAL ABCP program has been resorting to liquidity facilities provided by DZ BANK. The AUTOBAHN ABCP program largely managed to avoid utilizing DZ BANK's liquidity facilities. This is because it took part in a commercial-paper purchasing program set up by the US Federal Reserve Board. The final tranche to be funded in this way expired at the start of May 2009. Since then, market acceptance of this ABCP program has risen so significantly that since the start of October 2009 the ABCP volume of AUTOBAHN has again been fully placed with investors.

FIG. 27 – TOTAL AMOUNT OF SECURITIZATIONS WITH DZ BANK BANKING GROUP AS ORIGINATOR AND SPONSOR

€ million	Synthetic securitizations in the banking book	Securitizations in the banking book
Asset class	**Originator**	**Sponsor**
Exposure reported on the balance sheet		
Receivables from home loans	307	51
Receivables from other retail loans	–	204
Receivables from loans on wholly or partially commercial real estate	1	41
Receivables from corporate loans	–	680
Lease receivables originated or purchased by the DZ BANK banking group	191	450
Receivables from vehicle finance (excluding leases)	–	60
Receivables from CDOs and ABSs	–	70
Re-securitizations	–	–
Other exposure reported on the balance sheet	–	1,390
Total	**498**	**2,946**

As at December 31, 2011, DZ BANK had fully consolidated the special-purpose entities integrated into these ABCP programs (provided they met the requirements of IAS 27 in conjunction with SIC-12) together with their assets and liabilities. The ABCP programs' material assets, liabilities, income, and expense and the resultant opportunities and risks were consolidated by DZ BANK.

Securitized loans relating to **synthetic securitizations** remain on the DZ BANK banking group's books because they do not meet the disposal criteria specified in IAS 39 as no legal rights have been transferred.

By contrast, genuine asset sales – which are known as **true-sale securitizations** – are derecognized from the balance sheet to the extent that the opportunities and risks arising from the asset portfolio have been transferred to the buyer. There are currently no true-sale securitizations that have been originated by a company in the DZ BANK banking group.

7.3.2. Measurement methods

(Disclosure pursuant to section 328 (1) nos. 10c and e SolvV)

Despite the persistent financial crisis, the year under review saw a gradual improvement in transparency regarding tradable prices for asset-backed securities. In mid-2011, the discounted cash flow approach, which relied on an estimated value for liquidity spread, was replaced by an approach based on up-to-date external market data (for example spreads and valuation prices). In addition, the latest weighted average residual maturity is now factored into valuations. This ensures that the valuation of securitizations is market-based.

Synthetic CDOs structured by DZ BANK are valued with a standard Gaussian copula model using externally available market data. This ensures that the calculation of fair value for both securitizations in general and synthetic CDOs in particular is based on appropriate valuation models that use available input data (for example, spread curves) in accordance with Level 2 of the fair value hierarchy.

7.4. SECURITIZATION EXPOSURE AND CAPITAL REQUIREMENT

7.4.1. Total amount of securitized assets

(Disclosure pursuant to section 334 (2) no. 1 and section 334 (4) no. 2 SolvV)

Figure 27 shows the total amount of originated securitizations whose underlying transactions are held on the books of the DZ BANK banking group. The securitizations shown here are all synthetic securitizations in the banking book and reported on the balance sheet. There were no true-sale securitizations in the banking book, neither were there any securitizations of assets associated with market risk exposures in the trading book.

Figure 27 also shows securitizations in the banking book and recognized on the balance sheet that arise as a result of the DZ BANK banking group's activities as a sponsor. There were no sponsor exposures for off-balance-sheet assets.

7.4.2. Impaired securitizations, securitizations in arrears, and losses realized during the reporting period

(Disclosure pursuant to section 334 (4) no. 1 SolvV)

Referring to the receivables and assets in the banking book presented in figure 27, figure 28 shows the portions of the group's own asset securitizations that are past due or at risk of default. These have been differentiated according to the type of securitization. Figure 28 also shows the losses realized as a result of these exposures during the year under review. The definition of 'loss' in this case is the same as the definition used for figure 16.

7.4.3. Securitizations during the reporting period

(Disclosure pursuant to section 334 (2) no. 6 SolvV)

No new securitizations came into effect during 2011.

FIG. 28 – IMPAIRED SECURITIZATIONS, SECURITIZATIONS IN ARREARS, AND LOSSES REALIZED DURING THE REPORTING PERIOD

€ million	Past due and non-performing assets	Losses during the reporting period			
Asset class	**Dec. 31, 2011**	**2011**	**2010**	**2009**	**2008**
Receivables from home loans	4	1	1	–	13
Receivables from other retail loans	–	–	–	–	–
Receivables from loans on wholly or partially commercial real estate	1	–	1	7	3
Receivables from corporate loans	–	–	–	–	–
Lease receivables originated or purchased by the DZ BANK banking group	–	–	3	–	–
Receivables from vehicle finance (excluding leases)	–	–	–	–	–
Receivables from CDOs and ABSs	–	–	–	–	–
Re-securitizations	–	–	–	–	–
Other exposure reported on the balance sheet	–	–	–	–	–
Total	5	1	5	7	16

FIG. 30 – EXPOSURES AND CAPITAL REQUIREMENTS FOR RETAINED OR PURCHASED SECURITIZATIONS

€ million	Banking book					
Regulatory approach	**Securitizations**		**Re-securitizations**		**Total**	
Risk-weighting bands	**Exposure**	**Capital requirement**	**Exposure**	**Capital requirement**	**Exposure**	**Capital requirement**
Standardized Approach	4,690	225	–	–	4,690	225
20%	3,392	54	–	–	3,392	54
50%	520	21	–	–	520	21
100%	353	28	–	–	353	28
350%	422	118	–	–	422	118
1,250%	3	3	–	–	3	3
Standardized Approach, look-through approach	342	20	–	–	342	20
Ratings-based approach	3,796	149	653	30	4,449	179
≤ 10%	1,431	9	–	–	1,432	10
> 10% ≤ 20%	1,176	15	491	8	1,667	23
> 20% ≤ 50%	670	18	87	2	757	20
> 50% ≤ 100%	252	17	23	2	275	19
> 100% ≤ 250%	80	17	23	3	103	20
> 250% ≤ 650%	185	73	22	9	207	82
> 650% ≤ 1,250%	–	–	8	6	8	6
Supervisory Formula Approach	45	13	–	–	45	13
Internal Assessment Approach	3,034	96	20	1	3,054	96
Capital deduction	1,734	1,734	186	186	1,920	1,920
Total	13,642	2,239	859	217	14,501	2,455

FIG. 29 – RETAINED OR PURCHASED SECURITIZATION EXPOSURES

€ million	Banking book			
Securitization exposure	Standardized Approach to credit risk	IRB approach	**Trading book exposures**	**Total**
Exposure reported on the balance sheet				
Receivables from home loans	5,906	1,431	364	7,701
Receivables from other retail loans	77	–	176	253
Receivables from loans on wholly or partially commercial real estate	–	1,971	33	2,004
Receivables from corporate loans	–	482	21	503
Lease receivables originated or purchased by the DZ BANK banking group	27	18	14	59
Receivables from vehicle finance (excluding leases)	36	–	5	41
Receivables from CDOs and ABSs	55	122	–	178
Re-securitizations	–	839	78	918
Other exposure reported on the balance sheet	3	–	–	3
Receivables from conduits and other credit enhancements recognized on the balance sheet	339	780	–	1,120
Total exposure reported on the balance sheet	6,443	5,643	691	12,780
Exposure not reported on the balance sheet				
Liquidity facilities	–	2,271	–	2,271
Derivatives (for example for hedging purposes)	21	90	–	111
Exposures specific to synthetic transactions	–	–	489	489
Re-securitizations	–	20	–	20
Other exposure not reported on the balance sheet	–	11	–	11
Total exposure not reported on the balance sheet	21	2,392	489	2,902
Sum total	**6,464**	**8,035**	**1,180**	**15,682**

Trading book							
Securitizations		**Re-securitizations**		**Total**		**Sum total**	
Exposure	**Capital requirement**	**Exposure**	**Capital requirement**	**Exposure**	**Capital requirement**	**Exposure**	**Capital requirement**
560	17	–	–	560	17	5,251	242
503	8	–	–	503	8	3,896	62
22	1	–	–	22	1	542	22
20	2	–	–	20	2	373	30
12	3	–	–	12	3	434	122
3	3	–	–	3	3	6	6
–	–	–	–	–	–	342	20
53	10	78	3	131	13	4,580	192
16	–	–	–	16	–	1,448	10
1	–	1	–	2	–	1,668	23
19	1	75	2	94	2	850	22
6	–	–	–	6	–	281	19
2	–	–	–	2	–	105	20
–	–	3	1	3	2	210	83
9	9	–	–	9	9	16	14
489	10	–	–	489	10	534	23
–	–	–	–	–	–	3,054	96
–	–	–	–	–	–	1,920	1,920
1,102	**37**	**78**	**3**	**1,180**	**39**	**15,682**	**2,494**

7.4.4. Retained, purchased, off-balance-sheet securitization exposures

(Disclosure pursuant to section 334 (2) no. 2 SolvV)

Figure 29 shows the securitization exposures retained, purchased, or held off balance sheet by the companies of the DZ BANK banking group in their capacity as originator, sponsor or investor, broken down by the type of securitization. Securitization exposure is recognized at its risk-weighted carrying amount. The underlying receivables are classified according to the categories used for internal management purposes.

Following the implementation of an amendment to SolvV, the Standardized Approach to credit risk was used in 2011 to determine the capital requirement for a portion of the securitization exposure for which the IRB approach had previously been used in 2010. This involved a corresponding shift in the securitization exposures shown in figure 29.

7.4.5. Total amount and capital requirement for retained or purchased securitization exposures broken down by the approach used to calculate the capital requirement

(Disclosure pursuant to section 334 (3) no. 1 SolvV)

Figure 30 shows the securitization exposures and the respective capital requirements for the banking book and the trading book. This includes a breakdown by the approach used to calculate the capital requirement and by the risk-weighting band for regulatory purposes.

7.4.6. Securitization exposure and capital deductions

(Disclosure pursuant to section 334 (2) no. 5 SolvV)

Figure 31 shows the securitization exposures to be deducted or to be included with a risk weighting of 1,250 percent in determining the modified available equity in accordance with section 10 (1d) KWG. The figures shown are the exposure carrying amounts. Market risk exposures in the trading book are factored into the table as net interest-rate exposures.

FIG. 31 – CAPITAL DEDUCTIONS FOR SECURITIZATIONS BY ASSET CLASS

€ million

Asset class	Banking book	Trading book	Total
Exposure reported on the balance sheet			
Receivables from home loans	1,491	–	1,491
Receivables from other retail loans	8	–	8
Receivables from loans on wholly or partially commercial real estate	165	–	165
Receivables from corporate loans	–	–	–
Lease receivables originated or purchased by the DZ BANK banking group	16	–	16
Receivables from vehicle finance (excluding leases)	–	–	–
Receivables from CDOs and ABSs	32	–	32
Re-securitizations	186	–	186
Other exposure reported on the balance sheet	1	–	1
Receivables from conduits and other credit enhancements recognized on the balance sheet	8	–	8
Total exposure reported on the balance sheet	1,905	–	1,905
Exposure not reported on the balance sheet			
Liquidity facilities	9	–	9
Derivatives (for example for hedging purposes)	7	–	7
Exposures specific to synthetic transactions	–	–	–
Re-securitizations	–	–	–
Other exposure not reported at the balance sheet	–	–	–
Total exposure not reported on the balance sheet	15	–	15
Sum total	**1,920**	**–**	**1,920**

7.4.7. Re-securitization exposures and collateralization amounts

(Disclosure pursuant to section 334 (3) no. 2 SolvV)

Figure 32 discloses the retained or purchased re-securitization exposures before and after offsetting any collateralization or insurance, together with the extent of collateral provided by guarantors, broken down by guarantor credit rating. Again, the figures shown are the exposure carrying amounts. Market risk exposures in the trading book are factored into the table as net interest-rate exposures.

7.4.8. Total amount of planned securitizations

(Disclosure pursuant to section 334 (2) no. 3 SolvV)

As at December 31, 2011, there were no plans for any securitizations.

FIG. 32 – RE-SECURITIZATION EXPOSURES AND COLLATERALIZATION AMOUNTS

€ million	Banking book	Trading book	Total
Re-securitization exposure before collateralization	915	78	993
Collateralization by guarantee	–	–	–
of which: guarantor with rating of AAA to A	–	–	–
guarantor with rating worse than A	–	–	–
Other collateralization	56	–	56
Re-securitization exposure after collateralization	859	78	937

LIST OF FIGURES

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