



2009

REGULATORY RISK
REPORT OF THE
DZ BANK BANKING GROUP

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1. BASIS OF REGULATORY RISK REPORTING

1.1. LEGAL BASIS AND IMPLEMENTATION IN THE DZ BANK BANKING GROUP

By making recommendations on capital adequacy (Basel II), 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. The Solvency Regulation (SolvV) has transposed into national law the minimum European capital adequacy standards prescribed in the Banking Directive (2006/48/EC) and the Capital Adequacy Directive (2006/49/EC) as well as the equivalent requirements of Basel II. The Solvency Regulation defines in more detail the capital requirements for institutions prescribed in section 10 of the German Banking Act (KWG).

The DZ BANK banking group's regulatory risk reporting is performed in accordance with section 26a KWG in conjunction with sections 319 to 337 SolvV. Furthermore, the disclosure recommendations made in the Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience on April 7, 2008 (FSF disclosure recommendations) with respect to securitizations and leveraged finance are implemented so as to take account of the specific situation of the DZ BANK banking group. The DZ BANK banking group's commercial-law and regulatory risk reporting as at December 31, 2009 also fulfills the main requirements of the 'Principles of Conduct and Best Practice Recommendations' published by the Institute of International Finance in July 2008.

Since 2007 the DZ BANK banking group has mainly been using the foundation internal ratings-based approach (IRB approach or IRBA) and the Standardized Approach to calculate the regulatory capital requirements for **credit risk**. The Standardized Approach to credit risk is also used to calculate **operational risk**. Capital requirements and **market risks** in the trading books are mainly measured according to internal calculation models. Market risks in some of the trading books are measured additionally using the Standardized Approach. The measurement of currency and commodity risks is also carried out using the Standardized Approach. This includes the measurement of currency and commodity risks in the banking books.

This disclosure is performed pursuant to section 319 (2) SolvV by DZ BANK as the parent company of the regulatory banking group and is conducted in aggregated form 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 DZ BANK Group's general financial disclosure and internal risk reporting. By adopting this disclosure policy, the Board of Managing Directors established the necessary risk-related disclosure procedures and 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.

The **figures disclosed** in this report are presented in the table formats – the so-called 'use cases' – recommended by Deutsche Bundesbank's specialist sub-committee on disclosure requirements. The tables' numbering and headings follow these recommendations and are based on the third pillar of Basel II. This ensures that the regulatory risk disclosure procedures used by the DZ BANK banking group meet the relevant international, European and German standards. The figures disclosed are rounded to the nearest whole number. For this reason, the totals given in the tables may differ slightly from a calculation of the sum of the individual values. The **DZ BANK banking group's qualitative regulatory risk reporting** is in large part integrated into the risk report contained in the group management report 2009 (stated in the risk report below). The DZ BANK banking group utilizes the option available under section 320 (1) SolvV and refers readers looking for these qualitative disclosures to the risk report.

1.2. CONCEPT OF REGULATORY RISK REPORTING

Regulatory capital adequacy relates to the risk types of credit risk (including equity risk), market risk and operational risk. In addition to these risk categories, business risk, strategic risk and actuarial risk are also backed by economic risk capital as part of the internal economic capital adequacy process under the second

pillar of Basel II. At the same time, liquidity risk is also taken into account in a separate liquidity-related risk-bearing-capacity analysis, which recognizes interdependencies between the two ‘Capital’ and ‘Liquidity’ steering committees. Further details can be found in the risk report contained in the group management report from page 111 onward (in the chapter entitled ‘Liquidity risk’).

The regulatory risk report covers the subsidiaries that are consolidated as part of the DZ BANK banking group for regulatory purposes under the KWG. Further risks that arise at subsidiaries consolidated for non-regulatory purposes are disclosed in detail in the risk report at the DZ BANK Group level. This relates especially to the risk exposure of R+V Versicherung AG, Wiesbaden.

In addition, the recognition of certain risk categories differs depending on whether economic risk capital requirements or regulatory requirements are being determined. In particular, actuarial risk, business risk and strategic risk are included in the calculation of economic risk capital requirements, although they are

not backed by capital for regulatory purposes. Furthermore, the market risk in the banking book is included in the calculation of economic risk capital requirements, whereas it is not included for regulatory purposes.

The credit risk exposures presented in table groups 5, 6, 7, 8 and 9 of this risk report and the allowances for losses on loans and advances are based on measurement methods and carrying amounts of the German accounting standards (HGB). In the risk report prepared under German commercial law, on the other hand, the presentation of the total volume of loans extended is based on the figures from the DZ BANK banking group’s internal management accounts.

When the regulatory capital requirements and the related disclosure requirements are being determined, risk-bearing exposures that are allocated to the trading book are treated differently from those that are allocated to the banking book in terms of the quantification of their risks. For example, the on-balance sheet and off-balance sheet exposures of the banking book and the counterparty risks arising from derivatives exposures of the banking book and trading book are treated as

FIGURES IN THE RISK REPORTS BROKEN DOWN BY RISK TYPE

Risk types	Regulatory risk report	Commercial-law risk report
Credit risk (including default risk from trading transactions and securitizations)	Lending volumes, regulatory capital requirement, collateral, allowances for losses on loans and advances, loss data	Lending volumes, economic risk capital requirement, collateral for non-performing loans, allowances for losses on loans and advances
Equity risk	Volume of securities in the banking book and conventional investments, regulatory capital requirement	Volume of conventional investments
Market risk	Trading book (including securitizations)	Economic risk capital requirement, upper loss limit, value at risk for total book
	Banking book	
Liquidity risk	Not included	Liquidity up to one year, structural liquidity, funding
Actuarial risk	Not included	Economic risk capital requirement, upper loss limit
Operational risk	Regulatory capital requirement	Economic risk capital requirement, upper loss limit
Strategic risk	Not included	Economic risk capital requirement, upper loss limit

Fig. 1

credit risks. The on-balance sheet exposures of 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 allocated to credit risks. The different treatment of the trading book and banking book also applies to the disclosure of securitization exposures as part of the overall credit portfolio.

Figure (Fig.) 1 compares the information disclosed in both the regulatory and commercial-law risk reports for the various risk types.

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 capital requirements with respect to **financial conglomerates' solvency** and the establishment of overarching risk management systems.

All companies belonging to the financial conglomerate are integrated into the central risk management system for reasons of materiality pursuant to section 26a (2) number 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 the German Commercial Code. The concept takes into account the decision-usefulness of disclosures and the economic

TABLE 1B: CONSOLIDATION MATRIX: DIFFERENCES BETWEEN COMPANIES CONSOLIDATED FOR REGULATORY PURPOSES AND THOSE CONSOLIDATED FOR THE PURPOSES OF COMMERCIAL LAW

Classification	Name (abbreviation)	Treatment for regulatory purposes					
		Consolidation			Risk-weighted investments	Consolidation under IFRS	
		Full	Pro-rata	Deduction treatment		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 International S.A., Luxembourg-Strassen (DZI)	•				•	
	DZ BANK Ireland plc, Dublin (DZ BANK Ireland)	•				•	
	DZ BANK Polska S.A., Warsaw (DZ BANK Polska)	•				•	
	DZ PRIVATBANK (Schweiz) AG, Zurich (DZ PRIVATBANK Schweiz)	•				•	
TeamBank AG Nürnberg, Nuremberg (TeamBank)	•				•		
Investment 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)				•	•	

Fig. 2

viability of preparing reports. It is based on risk management procedures that meet the requirement for a group-wide risk monitoring system, in accordance with section 91 (2) German Stock Corporation Act (AktG) and pursuant to section 25a (1) KWG.

The disclosures in this risk report relate to the material companies pursuant to section 26a(2) number 1 KWG. Consequently, the regulatory risk report is consistent with the risk report contained in the group management report, which covers the same companies. This materiality concept does not apply to Table 2b to 2e on the structure of equity, Table 3b to 3e on capital requirements, Table 3f on capital ratios or Table 10b on capital requirements for market risk under the standardized method. Where relevant, all companies consolidated for regulatory purposes are included in these tables to ensure that these key regulatory figures are identical to the figures reported under Pillar 1.

In Table 1b 'Consolidation matrix/Differences between companies consolidated for regulatory purposes and those consolidated for the purposes of commercial law' (disclosure pursuant to section 323 (1) number 2 SolvV, see Fig. 2) 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 the purposes of commercial law. 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 the KWG and the SolvV through the risk-weighted carrying amount of DZ BANK's investment in R+V. Furthermore, R+V is included in the regulatory surveillance of the DZ BANK financial conglomerate at consolidated level within the legal framework applicable to financial conglomerates.

The following were fully **consolidated for regulatory purposes** pursuant to section 10a KWG on December 31, 2009, together with the companies listed in

Table 1b: a total of 18 (December 31, 2008: 18) banks, 13 (2008: 6) financial services institutions, 9 (2008: 8) investment companies, 799 (2008: 837) finance companies – 716 (2008: 750) of which were project companies belonging to VR-IMMOBILIEN-LEASING GmbH, Eschborn – and 12 (2008: 12) providers of related services. In addition, five banks and three finance companies were consolidated 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) number 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 that certain conditions are met – the regulatory supervision of individual German-based institutions within a banking group may be replaced by supervision of the entire banking group.

As had already been the case at the end of 2008, there were no subsidiaries in the DZ BANK banking group that had a **capital deficiency** on December 31, 2009. Consequently, no disclosure pursuant to section 323 (2) SolvV (Table 1e of the use cases) has been made.

Figure 3 shows how the material group companies are integrated into the DZ BANK banking group's quantitative regulatory risk reporting. These companies are also directly incorporated as management units into the risk management of the DZ BANK Group. These companies are included in such disclosures in a way that reflects any intra-group effects of consolidation. The definition of the management units in the case of subsidiaries and investees is based on economic risk management criteria in Table group 4 and Table 14, while definition in the other tables is based on regulatory consolidation. DZ BANK Ireland is the only company that does not have subsidiaries or investees.

At present the DZ BANK banking group does not meet the following quantitative disclosure requirements:

INCLUSION OF COMPANIES IN QUANTITATIVE REGULATORY DISCLOSURE

Companies	Table 2b to 2e Structure of equity	Table 3b to 3e Capital requirements	Table 3f Capital ratios	Table group 4 Lending volumes and allowances for losses on loans and advances	Table group 5 Standardized Approach exposures	Table group 6 IRBA exposures	Table group 7 Credit risk mitigation	Table group 8 Counterparty risk exposures to derivatives	Table group 9 Securitizations	Table group 13 Equity instruments	Table 14b Interest-rate risk
DZ BANK	•	•	•	•	•	•	•	•	•	•	•
BSH	•	•	•	•	•	•	•	•	•	•	•
DG HYP	•	•	•	•	•	•	•	•	•	•	•
DVB	•	•	•	•	•	•	•	•	•	•	•
DZI	•	•	•	•	•	•	•	•	•	•	•
DZ BANK Ireland	•	•	•	•	•	•	•	•	•	•	•
DZ BANK Polska	•	•	•	•	•	•	•	•	•	•	•
DZ PRIVATBANK Schweiz	•	•	•	•	•	•	•	•	•	•	•
TeamBank	•	•	•	•	•	•	•	•	•	•	•
Union Asset Management Holding	•	•	•	•	•	•	•	•	•	•	•
VR-LEASING	•	•	•	•	•	•	•	•	•	•	•
Other companies of relevance for regulatory purposes	•	•	•	•	•	•	•	•	•	•	•
R+V				•							

Fig. 3

– **Table 8d:** ‘Alpha factor under section 223 (6) SolvV’ (disclosure pursuant to section 326 (2) number 5 SolvV), since no internal models approved by the regulatory authorities are currently being used to calculate regulatory capital adequacy requirements for derivative counterparty risk exposures.

– **Table 9h and 9i:** ‘Securitizations under the early amortization approach’ (disclosure pursuant to section 334 (2) number 5 SolvV), since no such securitizations are currently being transacted.

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 on page 82 of the risk report contained in the group management report (in the section entitled ‘Management of economic capital adequacy’ in the ‘Risk capital management’ chapter).

3.2. CAPITAL

(Disclosure pursuant to section 324 SolvV)

Table 2b to 2e (see Fig. 4) presents the aggregated capital defined in section 10a KWG. These figures relate to all the companies consolidated for regulatory purposes in the DZ BANK banking group as at December 31, 2009. The capital of the DZ BANK banking group is calculated under the aggregation and deduction method pursuant to section 10a (6) KWG.

Tier 1 capital comprised preferred securities worth a total of €2,184 million as well as other components on December 31, 2009 (compared with €1,679 million as at December 31, 2008). The DZ BANK banking group issued a total of 14 (2008: twelve) public offerings of hybrid capital instruments in the form of preferred

securities through subsidiaries specifically established for this purpose. These securities had a total par value of €2,210 million (2008: €1,710 million), were issued from 2003 to 2009 and they each yield interest at prevailing market rates. The preferred securities meet the conditions stipulated by the Basel Committee on Banking Supervision to qualify as Tier 1 capital.

In addition, special provisions amounting to €2,207 million (December 31, 2008: €2,093 million) were recognized in Tier 1 capital for general banking risks pursuant to section 340g HGB. Further Tier 1 capital instruments include dormant capital contributions with a nominal value of €130 million (December 31, 2008: €208 million). The dormant capital contributions met the requirements of section 10 (4) KWG. Deductions under section 10 (2a) sentence 2 KWG, which also formed part of Tier 1 capital, essentially comprised intangible assets and the pro-rata deductible carrying amounts of investments held by non-consolidated companies.

The Tier 2 capital of the DZ BANK banking group amounted to a total of €2,379 million as at December 31, 2009, and included outstanding profit-sharing rights of €834 million (December 31, 2008: €901 million) and subordinated liabilities of €2,568 million (December 31, 2008: €2,246 million), which met the requirements of section 10 (5) KWG and section 5a KWG. Interest is only paid to investors in the profit-participation certificates when a distributable profit is available. In one case, such payment is dependent on the amount of the dividend. The various tranches in the form of registered and bearer profit-participation certificates have original maturity periods of between five and 27 years. Investors cannot redeem the profit-participation certificates prior to their maturity.

Subordinated liabilities were issued as further components of Tier 2 capital in the form of registered and bearer bonds and promissory notes carrying fixed and variable interest rates, which range between 3.75 percent and 8.88 percent. These securities have original maturity periods of between five and 30 years. It is not anticipated that these tranches will be converted into equity or any other form of liabilities.

DZ BANK compares loan loss allowances at both single-entity and group level pursuant to section 105 SolvV by

TABLE 2B TO 2E: STRUCTURE OF EQUITY

€ million	Dec. 31, 2009	Dec. 31, 2008
Equity instruments		
Paid-up capital and reserves	5,493	5,364
Other Tier 1 capital instruments	2,819	2,347
Special provisions for general banking risks pursuant to section 340g HGB	2,207	2,093
Deductions from Tier 1 capital pursuant to section 10 (2a) sentence 2 KWG	-245	-221
Deductions from Tier 1 capital pursuant to section 10 (6) and (6a) KWG	-897	-797
Total Tier 1 capital pursuant to section 10 (2a) KWG	9,377	8,786
Total Tier 2 capital before capital deductions pursuant to section 10 (2b) KWG	3,276	3,468
Deductions from Tier 2 capital pursuant to section 10 (6) and (6a) KWG	-897	-797
Eligible Tier 3 capital pursuant to section 10 (2c) KWG	15	-
Total Tier 2 capital pursuant to section 10 (2b) KWG and eligible Tier 3 capital pursuant to section 10 (2c) KWG	2,394	2,671
Total modified equity available pursuant to section 10 (1d) KWG and eligible Tier 3 capital pursuant to section 10 (2c) KWG	11,771	11,457

Fig. 4

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 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) number 9 KWG. This classification is capped at 0.6 percent of risk-weighted IRBA exposures.

Tier 2 capital included a write-down surplus pursuant to section 10 (2b) number 9 KWG on the reporting date. Consequently, the allowances for losses on loans and advances recognized for the IRBA exposures of the asset classes of corporates, institutions, central governments and retail business exceeded the expected losses for these exposures. Tier 2 capital also contained the contingency reserves pursuant to section 340f HGB net of goodwill and, as a deduction, 50 percent of the pro-rata deductible carrying amounts of investments held by non-consolidated companies.

The write-down deficits and the expected losses for IRBA exposures pursuant to section 10 (6a) number 2 KWG, half of which are deducted from Tier 1 capital and half from Tier 2 capital, amounted to €2 million on December 31, 2009 (December 31, 2008: €4 million).

The DZ BANK banking group held Tier 3 capital worth €15 million at the end of 2009, although it did not hold any such funds at the end of 2008.

The **total regulatory capital** held by the DZ BANK banking group amounted to €11,771 million on December 31, 2009 (December 31, 2008: €11,457 million). The DZ BANK Group's **aggregate risk cover** for the financial year, which is used for economic capital management purposes and disclosed in the risk report contained in the group management report on page 82 (in the section entitled 'Management of economic capital adequacy' in the 'Risk capital management' chapter) amounted to €11,303 million on the relevant reporting date, December 31, 2008 (December 31, 2007: €12,186 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 both from the provisions of the KWG and the requirements of the Basel Committee on Banking Supervision. It is based on the carrying amounts recognized under the German Commercial Code 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 the equity reported on the balance sheet as well as hidden reserves. The various 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)

Table 3b to 3e (see Figs. 5 and 6) shows the capital adequacy amounts in relation to the risk types of relevance for regulatory purposes (credit risk, market risk and operational risk). These figures relate to all the companies consolidated for regulatory purposes in the DZ BANK banking group.

The difference between the regulatory capital requirements (€7,610 million, December 31, 2008: €9,442 million) and the economic risk capital requirement (€8,986 million, December 31, 2008: €9,128 million) measured on December 31, 2009 and disclosed in the risk report contained in the group management report on page 82 (in the section entitled 'Management of economic capital adequacy' in the 'Risk capital management' chapter) is largely attributable to the fact that 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. The two approaches also differ in the weightings they give to collateral and available credit lines.

TABLE 3B TO 3E: CAPITAL REQUIREMENTS (PART 1)

€ million	Dec. 31, 2009	Dec. 31, 2008
1 Credit risk		
1.1 Standardized Approach to credit risk		
Central governments	13	9
Regional governments and local authorities	24	22
Other public-sector entities	2	2
Multilateral development banks	–	–
International organizations	–	–
Institutions	57	114
Covered bonds issued by banks	4	7
Corporates	906	1,530
Retail business	228	212
Exposures collateralized by real estate	39	30
Investment fund units	33	45
Other exposures	91	94
Past due exposures	80	78
Total credit risk under the Standardized Approach	1,477	2,143
1.2 IRB approaches		
Central governments	41	70
Institutions	918	1,235
Corporates	2,014	1,833
Retail business	899	961
of which: mortgage-backed	541	348
qualified revolving	–	–
other	358	613
Other credit-independent assets	114	119
Total under IRB approaches	3,986	4,218
1.3 Securitizations		
Securitizations under the Standardized Approach to credit risk	–	258
Securitizations under IRB approaches	355	181
Total securitizations	355	439
1.4 Investments		
Investments under IRB approaches	58	59
of which: internal modeling approach	–	–
PD/LGD approaches	23	1
simple risk-weighting approach	35	58
of which: exchange-traded investments	21	22
investments that are not exchange-traded but form part of a diversified portfolio	2	–
other investments	12	36
Investments under the Standardized Approach to credit risk	279	280
Total investments	337	339
Total credit risk	6,155	7,139

Fig. 5

TABLE 3B TO 3E: CAPITAL REQUIREMENTS (PART 2)

€ million	Dec. 31, 2009	Dec. 31, 2008
2 Market risk		
Standardized Approach	73	101
of which: interest-rate risk	16	27
equity price risk	–	1
currency risk	57	73
risk from commodities positions	–	–
other risks	–	–
Internal modeling approach	934	1,682
Total market risk	1,007	1,783
3 Operational risk		
Operational risk under the Standardized Approach	448	520
Total for capital requirements	7,610	9,442

Fig. 6

In addition, actuarial risks and strategic risks are only backed with capital for the purposes of economic risk capital management. The higher figures for economic risk capital with respect to credit risk, market risk and operational risk are also due to the inclusion of R+V, which is not included for regulatory purposes. The fact that the economic risk capital required for credit risks is much lower than the regulatory capital requirements is largely attributable to more conservative assumptions used in the regulatory approaches and to the classification of equity risk as a separate risk type.

3.4. CAPITAL RATIOS

(Disclosure pursuant to section 325 (2) SolvV)

The regulatory capital ratios are shown in Table 3f (see Fig. 7) and are calculated based on the home-country legal norms applicable to capital requirements. 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 the relevant German legislation and do not include intra-group effects of consolidation.

The capital ratios for the DZ BANK banking group as a whole and for the individual group companies as at December 31, 2009 were all well above the minimum ratios of 8.0 percent (total capital ratio) and 4.0 percent (Tier 1 capital ratio) prescribed for regulatory purposes.

TABLE 3F: CAPITAL RATIOS IN THE DZ BANK BANKING GROUP

Companies	Total capital ratio		Tier 1 capital ratio	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
DZ BANK banking group	12.4%	9.7%	9.9%	7.4%
DZ BANK	24.7%	15.4%	13.9%	8.8%
BSH	36.8%	33.8%	26.4%	25.4%
DG HYP	9.2%	10.2%	7.0%	7.4%
DVB (banking group)	12.5%	17.2%	12.4%	12.9%
DZI	21.3%	15.8%	19.7%	14.2%
DZ BANK Ireland	12.9%	8.6%	10.6%	7.6%
DZ PRIVATBANK Schweiz	21.1%	16.2%	20.4%	16.2%
DZ BANK Polska (banking group)	13.5%	11.8%	13.5%	11.8%
TeamBank	12.1%	12.2%	8.3%	8.4%

Fig. 7

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 from page 84 onwards in the 'Credit risk' chapter of the risk report contained in the group management report.

4.2. CREDIT RATING SYSTEMS

4.2.1. Credit rating systems for IRBA asset classes

OVERVIEW OF INTERNAL RATING SYSTEMS

(Disclosure pursuant to section 335 (1) number 1 SolvV)

In 2007 the DZ BANK banking group received official approval from the German Financial Supervisory Authority (BaFin) to calculate its capital requirements using the foundation IRB approach and the IRB approach for retail business. Figures 8 to 10 show the internal rating systems covered by this approval that the DZ BANK banking group uses to calculate its regulatory capital requirements based on the IRB approaches. The overviews cover the credit rating systems developed and applied by DZ BANK and also made available to BSH, DG HYP, DZI and DZ BANK Ire-

land as well as those specially customized to the respective business models of BSH and DG HYP.

In 2009, BaFin approved two further rating systems for project and acquisition financing that calculate the capital requirements for DZ BANK's IRB portfolios in the specialized financial services asset class.

In addition to the rating systems developed by DZ BANK, DVB uses separate rating systems for shipping (vessels), land transport (rail and road vehicles) and aviation (aircraft) to classify the risks for the asset class of corporates (in the narrow sense of the term). DZI developed and uses a proprietary credit rating system for guaranteed foreign currency loans, which covers the asset classes 'Other retail business' and 'Corporates' (in the narrow sense of the term). TeamBank uses its consumer-finance rating system to determine the credit ratings for loan exposures in its other retail business.

DESCRIPTION OF INTERNAL RATING SYSTEMS

(Disclosure pursuant to section 335 (1) number 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, control and monitoring 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 that meet the regulatory requirements for the foundation IRB approach are developed as the standard for the entire cooperative financial services network by DZ BANK as part of VR Control, a project carried out by the Federal Association of German Cooperative Banks, Berlin (BVR), that also incorporates WGZ Bank AG Westdeutsche Genossenschafts-Zentralbank (based in Düsseldorf),

CREDIT RATING SYSTEMS DEVELOPED AND APPLIED BY DZ BANK AND USED BY OTHER COMPANIES IN THE BANKING GROUP

Ratingsysteme	Corporates						Asset classes							
	DZ BANK	BSH	DG HYP	DZ BANK Ireland	DZI	Central governments	Retail business			Investment exposures	Corporates			
							Institutions	of which: mortgage-backed	qualified revolving		other	Corporates (in the narrow sense)	SMEs	Specialized financial services
VR rating for banks	•	•	•	•	•		•							
VR rating for countries	•	•	•	•	•	•								
VR rating for major customers	•			•	•						•			
VR rating for large and medium-sized companies	•		•								•			

Fig. 8

PROPRIETARY CREDIT RATING SYSTEMS DEVELOPED BY BSH

Rating systems	Asset classes									
	Central governments	Institutions	of which: mortgage-backed	qualified revolving	other	Investment exposures	Corporates (in the narrow sense)	SMEs	Specialized financial services	Purchased receivables
Mortgage-backed retail business										
Application scoring			•							
Behavior scoring			•							
LGD scoring			•							
Exposure at default (EAD)			•							
Non-mortgage-backed retail business										
Application scoring					•					
Behavior scoring					•					
LGD scoring					•					
Exposure at default (EAD)					•					

Fig. 9

PROPRIETARY CREDIT RATING SYSTEMS DEVELOPED BY DG HYP

	Asset classes									
	Retail business					Corporates				
	Central governments	Institutions	of which: mortgage-backed	Qualified revolving	Other	Investment exposures	Corporates (in the narrow sense)	SMEs	Specialized financial services	Purchased receivables
Rating systems										
VR rating systems										
VR rating for property developers									•	
VR rating for investment funds									•	
VR rating for investors							•		•	
VR rating for special-purpose entities									•	
VR rating for project developers									•	
VR rating for housing associations							•		•	
Rating systems for retail business with employed private customers										
Application scoring for retail business/behavior scoring for retail business			•							
LGD estimate for IRB retail business			•							
Rating systems for retail business with self-employed private customers										
Application scoring for retail business/behavior scoring for retail business			•							
LGD estimate for IRB retail business			•							
Specialized real-estate lending									•	

Fig. 10

the network's regional banking associations, computing centers and local cooperative banks. This uniform approach for the entire cooperative network reaps substantial efficiency gains for both the cooperative central institutions and for 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 con-

struction; 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 and having to be revised. This reduces the cost of developing and refining rating systems.

The **VR rating system** standardizes rating methods and ensures comparability of rating results within the cooperative financial services 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 officially approved by BaFin for the calculation of regulatory capital requirements under the foundation IRB approach. Each of these rating systems is broken down into a total of 25 rating categories; 20 of these categories are for non-defaulting business partners and five are for defaulting business partners.

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 bank-related SME 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 services network. Given this ideal data scenario, a good/bad analysis was selected as the development method.

The **VR rating for large 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 the term). A characteristic of the VR rating system devised for large 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 of all legal forms, irrespective of their 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. The country segment is not concerned with credit ratings for central banks, other foreign public-sector entities or 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 reason for this breakdown is 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 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, cash-flow simulations and an external rating method were selected to develop the rating model.

– The **acquisition finance rating** system is used to finance acquisitions of companies or parts of companies and majority and minority stakes, independently of the statutory framework governing the respective transaction. As there is also an insufficient number of external ratings available for acquisition financing and, similarly, an insufficient quantity of 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 asset-backed money-market paper programs for the purpose of issuing asset-backed commercial paper (ABCP).

APPROVED TRANSITIONAL RULES FOR IRB APPROACHES
(PARTIAL USE)

(Disclosure pursuant to section 335 (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, DZI and DZ BANK Ireland mostly use the foundation IRB approach. BSH, DG HYP and TeamBank use the IRB approach for their retail business. 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) number 6 SolvV from the calculation of the DZ BANK banking group's cover ratio. The individual IRBA institutions use appropriate 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 the Basel Committee on Banking Supervision. Loss given default values in the IRB approach for the 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 risk weightings that are regulated and set independently of external ratings.

For each IRBA institution there is an implementation plan that ensures compliance with the thresholds prescribed by the Solvency Regulation. 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) number 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 business partners are allowed to engage in credit or trading transactions at risk of default with group companies are primarily determined by the internal rating.
- The profit-contribution-based **pre-analysis of loans** carried out by client advisors 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 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 the loan, internal ratings determine the extent to which **credit ratings are 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, last but not least, internal ratings play a key role in internal **credit risk reporting**.

CONTROL MECHANISMS FOR THE RATING SYSTEMS

(Disclosure pursuant to section 335 (1) number 2d SolvV)

The internal rating systems used are extensively validated once a year on the basis of internal data. The validation consists partly of a quantitative analysis aimed at measuring the rating systems' selectivity and stability and at calibrating them. The validation also includes a 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, a pool

validation is carried out on the standard rating systems used throughout the cooperative financial services network. When a 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 the internal bank validation. If validations reveal any room for improvement, such improvements are made when the rating systems are developed and 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 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 for rating systems and also 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) number 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 do business that bears a default risk with borrowers who do not have an internal rating. All rating systems are assigned – without any overlaps – to a

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. Credit rating systems for asset classes under the Standardized Approach to credit risk

APPOINTED RATING AGENCIES

(Disclosure pursuant to section 328 (1) numbers 1 and 2 SolvV)

The rating agencies Standard & Poor's Ratings Services, Moody's Investors Service, and Fitch Ratings Ltd. 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 exposures in accordance with sections 44 and 45 SolvV.

TRANSFER OF CREDIT RATINGS FROM BOND ISSUES TO ASSETS

(Disclosure pursuant to section 328 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 326 (1) number 4, section 335 (1) number 2c and section 336 number 1 SolvV)

The credit risk mitigation techniques used in the DZ BANK banking group are presented from page 89 onward in the section entitled 'Credit risk mitigation' in the 'Credit risk' chapter of the risk report contained in the group management report. This section provides information on 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 conventional lending business and for counterparty risk exposures to derivatives
- Concentrations of risk arising from credit risk mitigation techniques.

4.4. MANAGING COUNTERPARTY RISK EXPOSURES TO DERIVATIVES IN THE BANKING BOOK AND TRADING BOOK

The following information provided pursuant to section 326 (1) SolvV on the management of counterparty risk exposures to derivatives in the banking book and trading book of the DZ BANK banking group can be found in the ‘Credit risk’ chapter of the risk report contained in the group management report (the relevant sections and pages of the report are listed in parentheses):

- A description of the internal capital allocation procedure used to cover counterparty risk arising from counterparty risk exposures to derivatives (section entitled ‘Economic credit portfolio management’, from page 87 onwards)
- A description of the procedures used to obtain collateral (section entitled ‘Credit risk mitigation’, from page 89 onwards)
- A description of how correlations of market risk and counterparty risk are managed (section entitled ‘Management of Concentration and Correlation risks’, from page 90 onwards)
- A description of the consequences of the amount of collateral that DZ BANK would have to provide in the event of a credit rating downgrade (section entitled ‘Credit risk mitigation’, from page 90 onwards).

4.5. MANAGEMENT OF SECURITIZATIONS

4.5.1. Objectives and scope of securitization

(Disclosure pursuant to section 334 (1) SolvV and FSF recommendations)

The DZ BANK banking group uses securitization as a credit portfolio management tool and to optimize its risk/return profile. By originating securitizations that are funded over the long term, DZ BANK aims to free up economic and regulatory capital by transferring risk.

As an originator and sponsor, DZ BANK also uses special-purpose entities (known as conduits) that are refinanced by the issuance of money market-linked asset-backed commercial paper (ABCP). These conduits are predominantly made available to DZ BANK customers who then securitize their own assets by using these companies.

Figure 11 shows the main exposures held by the companies in the DZ BANK banking group as **originator** and **sponsor**. The information disclosed here covers all securitizations in the DZ BANK banking group, including those that are not included as securitizations in the Group’s capital requirements.

In addition to these activities, DZ BANK **arranges** and **distributes** securitizations issued by the DZ BANK banking group and the cooperative financial services network. The local cooperative banks are involved in the form of multi-seller transactions for the DZ BANK banking group. DZ BANK also arranges the VR Circle transactions that are used to share credit risk between the local cooperative banks involved.

4.5.2. Managing credit risk arising from securitizations

(Disclosure pursuant to FSF recommendations)

Exposures to asset-backed securities (ABSs), which for the DZ BANK banking group constitute investor-related exposures within the meaning of the Solvency Regulation, are managed by the relevant group companies and are subject to the groupwide risk management standards. These standards require that ABS investments should be individually analyzed and limited. The structure of transactions is analyzed, a comparison is made between the transactions and the relevant ABS market, and the external credit ratings awarded by the rating agencies are validated as part of a well-established process. Furthermore, all major ABS asset classes are subjected to an annual portfolio analysis process that assesses the macroeconomic and asset-class-specific risks involved. Portfolio risk exposures are reported once a month at the banking group level to the group’s credit management function and to DZ BANK’s Board of Managing Directors; this reporting process covers the banking group’s aggregate risk exposure. This enables the DZ BANK banking group to manage the risks it incurs from structured products by applying a groupwide global limit.

SECURITIZATION EXPOSURES OF THE COMPANIES IN THE DZ BANK BANKING GROUP IN THEIR CAPACITY AS ORIGINATORS AND SPONSORS

Company & transaction	Type of transaction	Role	Purpose of transaction	Type of assets	Volume ¹	Retained exposures	Note
DZ BANK							
DYNASO	Synthetic CDO	Originator	Issuing activity	AAA/AA CLN ² on portfolio of corporate assets	€0.4 billion	Exposure of €0.1 billion in the DZ BANK banking group's own portfolio	n/a
CORAL	ABCP conduit		Generation of commission income	Loans and advances to European corporates and an ABS exposure	€0.8 billion	Commitments of €0.95 billion, €0.8 billion of which has been utilized	Provision of liquidity lines
AUTOBAHN		Sponsor	Generation of commission income	Loans and advances to North American customers	€1.7 billion	Unutilized commitments of €2.45 billion	
DG HYP							
BAUHAUS	Synthetic securitization	Originator	Capital and liquidity management; transfer of risk	Mortgage-backed real-estate loans in German retail business	€0.1 billion	First-loss piece amounting to €13.3 million	First-loss piece fully hedged by third parties
PROVIDE VR					€0.7 billion	First-loss piece amounting to €32.9 million	First-loss piece fully hedged by third parties
PROSCORE VR					€0.3 billion	First-loss piece amounting to €12.4 million	First-loss piece not hedged
VR LEASING							
LEAGUE	Synthetic securitization	Originator	Capital and liquidity management; transfer of risk	Lease receivables from corporates in Germany	€0.2 billion	Credit enhancements amounting to €65.9 million	Non-recourse sale to DZ BANK for securitization purposes
CORAL ³	Lease securitization	Originator		Lease receivables from corporates in Germany	€0.4 billion	Credit enhancements amounting to €15.7 million	Credit enhancements not hedged

Fig. 11

1 Disclosures before consolidation
2 CLNs = credit-linked notes
3 Contained in DZ BANK's CORAL transaction

By conducting economic **stress tests** that meet the minimum requirements for risk management, the DZ BANK banking group analyzes all its securitization exposures to see what would happen if ABS spreads widened to their maximum potential. The spread movements assumed for this purpose are based on the extreme values of multi-year historical time series that include the changes in spreads during 2007 and 2008.

4.5.3. Accounting policies applicable to securitizations

(Disclosure pursuant to section 334 (1) number 5 SolvV)

As required by IAS 39, the DZ BANK banking group's **investor-related exposures** to securities arising from securitizations are either measured and recognized in income as held-for-trading securities, recognized at fair value as available-for-sale financial assets in the revaluation reserve or recognized at amortized cost as loans and receivables. Utilized liquidity facilities are measured at amortized cost as loans and advances to customers. Outstanding 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 conduits, for example in the form of asset-backed commercial paper, is recognized at amortized cost as other liabilities. Intra-group funding is consolidated in accordance with IAS 27.

DZ BANK is involved as **originator** and **sponsor** respectively in the AUTOBAHN and CORAL 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 conduit resorts to liquidity facilities provided by DZ BANK. The AUTOBAHN ABCP conduit managed to avoid utilization of DZ BANK's liquidity facilities completely. 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 refinanced in this way expired at the start of May 2009. Since then the market acceptance of ABCP conduits

has risen so significantly that since the start of October the ABCP volume of AUTOBAHN has again been fully placed with investors. DZ BANK fully consolidated the special-purpose entities integrated into these conduits (provided they met the requirements of IAS 27 in conjunction with SIC-12) together with their assets and liabilities as at December 31, 2009. The ABCP conduits' 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 DZ BANK banking group company.

The continuing financial crisis in 2009 resulted in a persistent lack of transparency as regards pricing indicators, especially for asset-backed securities. Consequently, the fair value of asset-backed securities is determined using a measurement model that is consistent with Level 3 of the fair value hierarchy. The model is designed around the illiquidity of the ABS market and the limited availability of external market measurement data. Under a **discounted cash flow method** recommended by the International Accounting Standards Board Expert Advisory Panel, accurate and appropriate credit and liquidity spreads were used as the input values for the measurement of securitization structures. These values are essentially based on estimates; the initial figures used, especially for liquidity spreads, are the values most recently observed in an active market that are deemed to be reliable given the increase in illiquidity since 2007.

Market liquidity in the ABS segments is continuously monitored using data from external market sources that remains available. In so far as the asset-backed securities to be measured came from a sub-segment for which analysis of indicative bid-ask spreads had revealed

that market liquidity would gradually normalize given no change in the fundamental lack of activity, the price indicators from consensus market data providers were used to calculate the fair value of the respective asset-backed securities using a graduated process.

4.5.4. Procedure for determining the risk-weighted exposures for securitizations

(Disclosure pursuant to section 334 (1) number 4 SolvV)

Securitization exposures retained by companies in the Bank business segment of 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 241 SolvV. In the Real Estate Finance business segment, originator exposures retained for residential mortgage-backed securities (RMBS) are also 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 a **sponsor** the DZ BANK banking group uses the internal classification procedure specified in section 259 SolvV that has been tested and approved by BaFin so that it can calculate the risk-weighted exposures of securitizations for asset-backed commercial paper (ABCP) programs that do not have any external credit rating.

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 the Solvency Regulation. The remaining exposures are assigned to the banking book and are described in chapter 4.7.9. These exposures are rated for regulatory purposes mainly on the basis of the ratings-based approach and the rating categories that it specifies.

4.5.5. Rating agencies used for securitizations

(Disclosure pursuant to section 334 (1) number 6 SolvV)

When transacting securitizations, the DZ BANK banking group uses the classifications prescribed by the rating agencies Standard & Poor's Ratings Services, Moody's Investors Service and Fitch Ratings Ltd for

both originator-related and investor-related exposures. These securitizations relate to assets resulting from retail and corporate credits, to assets under Commercial Mortgage-Backed Securities (CMBSs) and Collateralized Debt Obligations (CDOs) and to exposures to special-purpose entities. Competing external ratings are included in the calculation of risk-weighted exposures in accordance with sections 44 and 45 SolvV. External credit ratings awarded by these recognized rating agencies are transferred to the securitization exposures of the DZ BANK banking group in accordance with the requirements of sections 242 to 244 SolvV.

4.6. RECOGNITION OF ALLOWANCES FOR LOSSES ON LOANS AND ADVANCES

The **policies and procedures governing the recognition of allowances for losses on loans and advances** for the companies in the DZ BANK banking group (disclosure pursuant to section 327 (1) number 2 SolvV) and other **accounting-related information on credit risk** (disclosure pursuant to section 327 (1) number 1 SolvV) are presented from page 91 onwards of the risk report contained in the group management report (in the section entitled 'Management of non-performing exposures' in the 'Credit risk' chapter). 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 'default' are also used synonymously.

4.7. QUANTITATIVE INFORMATION ON CREDIT RISK

4.7.1. Notes on the quantitative disclosure of credit risk

Chapter 4.7 of this risk report deals with disclosure of credit risk in the DZ BANK banking group. Chapter 4.7.2 looks at disclosure of the total lending volume. This is done by 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 made in the risk report contained in the group management report. By contrast, chapters 4.7.3 to 4.7.10 merely disclose portions of the total lending volume which, in the case of information disclosed in accordance with the Solvency Regulation, are based on criteria prescribed for regulatory purposes, such as asset classes and risk-weighting bands.

The disclosures on lending volume differ in terms of the methodology they use in the regulatory and commercial-law risk reports in the sense that the internal reports are based on asset values in the form of the basis of measurement before collateral and after deduction of the recognized allowances for losses on loans and advances, whereas in chapters 4.7.3 to 4.7.7 and in chapter 4.7.9 the relevant exposures are reported as the exposures expected at the time of the potential default. In addition, the quantitative disclosures differ owing to the different recognition of conversion factors for the credit lines granted and outstanding.

The aggregate lending portfolio presented in chapter 4.7.2 is similar to the aggregated regulatory subportfolios shown in Tables 5b, 6d (I), 6d (II), 6d (IV) and 9f. However, the sum totals cannot be fully reconciled to one another owing to the different definitions of key figures and the methods used to recognize collateral. Further discrepancies arise from the different methods used to recognize strategic investments and the volume of R+V's credit insurance.

The securitization and leveraged finance exposures presented in chapters 4.7.8 and 4.7.10 in order to implement the FSF's disclosure recommendations are contained in the aggregate portfolios presented in table group 4 and in the subportfolios presented in table groups 5, 6 and 9.

4.7.2. Gross lending volumes and allowances for losses on loans and advances

Table group 4, which contains multi-approach information on gross lending volumes and allowances for losses on loans and advances, is fully disclosed in the risk report contained in the group management 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 what is known as the Management Approach, disclosure of gross lending volumes and allowances for losses on loans and advances in the risk report contained in the group management report is based on the figures used for internal management purposes, which 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 relevant reasons given in the Solvency Regulation, 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 use cases in table group 4 are presented as follows in the risk report contained in the group management report (the relevant pages of the report are listed in parentheses):

- The information from **Table 4b and 4c**: ‘Gross lending volumes broken down by main geographical area and asset type’ (disclosure pursuant to section 327 (2) numbers 1 and 2 SolvV) is published in the table on lending volumes by country group (page 95).
- The information from **Table 4d** ‘Gross lending volumes broken down by main industry and asset type’ (disclosure pursuant to section 327 (2) number 3 SolvV) is published in the table on lending volumes by industry (page 95).
- The information from **Table 4e** ‘Contractual residual maturities’ (disclosure pursuant to section 327 (2) number 4 SolvV) is disclosed in the table on lending volumes by residual maturity (page 95).
- The information from **Table 4f** ‘Non-performing loans and loans in arrears broken down by main industry’ (disclosure pursuant to section 327 (2) number 5 SolvV) is published in the tables on past due but not impaired lending volumes and collateral broken down by industry (pages 96 and 97), lending volumes and collateral in individually impaired portfolios broken down by industry (page 98), allowances for losses on loans and advances broken down by industry for the financial year 2009 (page 100), and provisions for loan commitments and liabilities arising from financial guarantee contracts and loan commitments broken down by industry for the financial year 2009 (page 101).
- The information from **Table 4g** ‘Non-performing loans and loans in arrears broken down by main geographical area’ (disclosure pursuant to section 327 (2) number 5 SolvV) is presented in the tables on past due but not impaired lending volumes and collateral broken down by country group (pages 96 and 97),

lending volumes and collateral in individually impaired portfolios broken down by country group (page 98), allowances for losses on loans and advances broken down by country group for the financial year 2009 (page 102), and provisions for loan commitments and liabilities arising from financial guarantee contracts and loan commitments broken down by country group for the financial year 2009 (page 103).

Because the contents of **Table 4h** ‘Allowances for losses on loans and advances over time’ (disclosure pursuant to section 327 (2) number 6 SolvV) are covered by Tables 4f and 4g, no separate disclosure is provided.

4.7.3. Exposures under the Standardized Approach to credit risk

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

Table 5b (see Fig. 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, mortgage-backed securities and specialized financial services which are calculated under 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 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.

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.

4.7.4. Exposures under the IRB approaches

Tables 6d (I), 6d (II) and 6d (IV) below 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 a regulatory asset class. The borrowers and transactions are assigned to a credit rating category based on their individual rating in the form of their specific default probability or expected loss. To enable them to be assigned to the appropriate table, the credit rating categories of the various risk classification systems are allocated to the standard groupwide GRC rating categories. The transactions are classified as either 'investment grade', 'non-invest-

ment grade' or 'default' on the basis of the corresponding default probabilities for each credit rating category. These classifications are shown on page 86 of the risk report contained in the group management report (in the section entitled 'GRC rating categories' in the chapter 'Credit risk').

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

(Disclosure pursuant to section 335 (2) numbers 1, 2a and 2c SolvV)

Table 6d (I) (see Fig. 13) discloses the following key figures:

TABLE 5B: EXPOSURES UNDER THE STANDARDIZED APPROACH TO CREDIT RISK AND SUBJECT TO THE SIMPLE RISK-WEIGHTING METHOD

Risk weightings	Exposure before credit risk mitigation under the Standardized Approach to credit risk		Exposures after credit risk mitigation			
	Dec. 31, 2009	Dec. 31, 2008	under the Standardized Approach to credit risk		under the simple risk-weighting method of the IRB approach (investments, mortgage-backed securities and specialized financial services)	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
0%	90,914	100,359	93,339	103,918	192	–
10%	223	323	223	323		
20%	4,335	5,015	3,588	4,112		
35%	342	1	342	402		
50%	1,413	715	1,636	1,268	939 ¹	766
70%					1,129	912
of which: with a residual maturity of less than 2.5 years					305	111
75%	3,914	4,087	3,740	3,446		
90%					690	754
100%	14,796	24,083	13,368	20,831		
115%					810	407
150%	637	935	575	854		
190%					15	1
200%	–	–	–	–		
250%					–	25
290%					89	97
350%	–	–	–	–		
370%					41	118
1,250%	–	–	–	–		
Capital deduction	–	–	–	–		
Total	116,574	135,518	116,811	135,154	3,904	3,080

Fig. 12

¹ Of which €785 million (December 31, 2009: €709 million) relates to investments and mortgage-backed securities and €154 million (December 31, 2009: €57 million) relates to specialized financial services.

- the total exposures and, in particular, the exposures relating to unutilized loan commitments
- the average risk weightings that have been weighted according to their exposures.

The disclosures are based on the IRBA asset classes (central governments, institutions, corporates and investments) and are broken down by risk category. The exposures incurred by outstanding credit lines are 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) numbers 1 and 2 SolvV)

Table 6d (II) (see Fig.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, the exposures relating to unutilized loan commitments

TABLE 6D (I): LENDING VOLUMES BROKEN DOWN BY PD CATEGORY (EXCLUDING RETAIL) UNDER THE FOUNDATION IRB APPROACH

€ million	Investment grade			Non-investment grade			Default			Total		
	Exposure			Exposure			Exposure			Exposure		
Asset classes	Total	of which: open loan commitments	Average risk weighting	Total	of which: open loan commitments	Average risk weighting	Total	of which: open loan commitments	Average risk weighting	Total	of which: open loan commitments	Average risk weighting
Central governments	1,689	235	18.2%	278	7	74.8%	42	–	–	2,009	242	25.7%
Institutions	42,443	945	25.1%	804	8	104.5%	775	–	–	44,022	953	26.1%
Corporates	16,955	5,004	48.8%	9,217	1,361	111.4%	2,172	88	–	28,344	6,453	65.4%
of which: SMEs	–	–	–	–	–	–	–	–	–	–	–	–
of which: specialized financial services	4,404	1,043	40.7%	1,147	151	88.5%	290	21	–	5,841	1,215	48.0%
of which: purchased receivables	75	–	55.3%	104	–	102.7%	9	–	–	188	–	78.9%
Investment exposures	310	–	86.9%	5	–	275.8%	–	–	–	315	–	89.7%
Total, Dec. 31, 2009	61,397	6,184		10,304	1,376		2,989	88		74,690	7,648	
Total, Dec. 31, 2008	85,873	6,297		9,894	1,508		1,874	93		97,641	7,898	

Fig. 13

TABLE 6D (II): LENDING VOLUMES 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 exposure	Average LGD	Average risk weighting	Total value of open loan commitments	Exposure		Average value of exposure	Average LGD	Average risk weighting
Total		of which: open loan commitments	Total					of which: open loan commitments				
Central governments	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	217	2,209	217	100%	12.0%	15.5%	1,218	13,153	1,218	100%	6.4%	26.5%
of which: SMEs	-	-	-	-	-	-	-	-	-	-	-	-
of which: specialized financial services	-	-	-	-	-	-	-	-	-	-	-	-
of which: purchased receivables	-	-	-	-	-	-	-	-	-	-	-	-
Investment exposures	-	-	-	-	-	-	-	-	-	-	-	-
Total, Dec. 31, 2009	217	2,209	217				1,218	13,153	1,218			
Total, Dec. 31, 2008	667	3,503	667				2,822	13,621	2,822			

Fig. 14

TABLE 6D (IV): LOAN UTILIZATIONS AND LOAN COMMITMENTS FOR RETAIL PORTFOLIOS – EL¹-BASED RETAIL IRB APPROACH

€ million	Exposure for EL category 1 (EL = 0 to 30 bp ²)		Exposure for EL category 2 (EL = 31 to 70 bp)		Exposure for EL category 3 (EL > 70 bp)		Total	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Mortgage-backed IRBA receivables from retail business	22,032	22,147	2,310	2,537	3,977	4,036	28,319	28,720
Qualified revolving IRBA receivables from retail business	-	-	-	-	-	-	-	-
Other IRBA receivables from retail business	6,978	6,929	1,569	865	3,346	3,042	11,893	10,836
Total	29,010	29,076	3,879	3,402	7,323	7,078	40,212	39,556

Fig.15

¹ Expected loss
² Basis points

	Default						Total					
	Exposure						Exposure					
	Total amount of open loan commitments	Total	of which: open loan commitments	Average exposure	Average LGD	Average risk weighting	Total amount of open loan commitments	Total	of which: open loan commitments	Average exposure	Average LGD	Average risk weighting
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	1	410	1	100%	15,0%	-%	1,436	1,436	100%	7,4%	24,3%	
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	1	410	1				1,436	15,772	1,436			
	1	100	1				3,490	17,224	3,490			

TABLE 6E: ACTUAL LOSSES IN THE CREDIT PORTFOLIO UNDER THE IRB APPROACH

€ million	Losses during the period January 1 to December 31, 2009	Losses during the period January 1 to December 31, 2008	Change
Asset classes			
Central governments	-	-	-
Institutions	26	221	-195
Corporates	247	81	166
Equity instruments	-	-	-
Mortgage-backed IRBA receivables from retail business	69	64	5
Qualified revolving IRBA receivables from retail business	-	-	-
Other IRBA receivables from retail business	87	58	29
Total	429	424	5

Fig. 16

TABLE 6F: LOSS ESTIMATES AND ACTUAL LOSSES IN THE NON-DEFAULTING CREDIT PORTFOLIO UNDER THE IRB APPROACH

€ million Asset classes	Losses during the period January 1 to December 31, 2009		Losses during the period January 1 to December 31, 2008	
	Expected	Actual	Expected	Actual
Central governments	5	–	10	–
Institutions	40	10	18	220
Corporates	196	307	183	92
Equity instruments	–	–	–	–
Mortgage-backed IRBA receivables from retail business	86	41	127	21
Qualified revolving IRBA receivables from retail business	–	–	–	–
Other IRBA receivables from retail business	104	42	94	42
Total	431	400	432	375

Fig. 17

- the average exposures incurred by open loan commitments
- the average risk weightings that have been weighted according to their exposures
- the average loss given default.

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

The Basel capital requirements for Table 6d (III) ‘Unutilized loan commitments and risk-weighted exposures for each portfolio under the advanced IRB approach’ are covered by Table 6d (II) pursuant to section 335 (2) number 2d SolvV. Table 6d (III) is therefore not disclosed separately.

LOAN DRAWDOWNS AND LOAN COMMITMENTS FOR RETAIL PORTFOLIOS: RETAIL IRB APPROACH BASED ON EXPECTED LOSSES

(Disclosure pursuant to section 335 (2) numbers 2 and 3 SolvV)

Table 6d (IV) (see Fig. 15) shows the total exposures that are based on the IRBA asset class of retail business and are broken down in each case by risk category.

ACTUAL LOSSES FOR THE OVERALL CREDIT PORTFOLIO UNDER THE IRB APPROACH

(Disclosure pursuant to section 335 (2) numbers 4 and 5 SolvV)

The information given in **Table 6e** (see Fig. 16) relates to the asset classes of central governments, institu-

tions, corporates (including small and medium-sized enterprises (SMEs), specialized financial services and purchased receivables that are treated as corporate assets), 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 the losses presented in Table 6e are based on the carrying amounts recognized under the German Commercial Code. Market-price-related impairment losses on securities portfolios and investments not managed according to their default probabilities are not shown. The information disclosed in the regulatory risk report takes account of the allowances for losses on loans and advances and the loan-loss provisions reported from page 100 onward in the risk report contained in the group management report for the year to December 31, 2009, as described below:

- Additions of €979 million (December 31, 2008: €818 million) to specific loan loss allowances (including specific loan loss allowances evaluated on a group basis) are offset against reversals of such losses (€463 million, December 31, 2008: €330 million) and interest income (€37 million, December 31, 2008: €18 million) for the financial year.

- In addition, a provision is recognized for the difference between direct impairment losses (€134 million, December 31, 2008: €69 million) and amounts received for directly impaired assets (€40 million, December 31, 2008: €21 million) during the reporting period.
- Finally, additions of €125 million (December 31, 2008: €33 million) to provisions for loan commitments, liabilities under financial guarantee contracts and loan commitments are offset against reversals of €72 million (December 31, 2008: €56 million).

The sum total of these components constitutes the actual loss incurred by the aggregate portfolio, which amounted to €626 million in 2009 (December 31, 2008: €495 million). An actual loss of €429 million (2008: €424 million) is reported for the IRBA sub-portfolios shown in Table 6e for the reporting period. The difference of €197 million (2008: €71 million) between the two losses is attributable to the Standardized Approach portfolios held in the DZ BANK banking group.

The picture varies considerably from one asset class to another. For example, the loss incurred in the asset class of institutions was largely attributable to the financial

market turmoil that had been ongoing since the middle of 2007 and continued, albeit less severely, during the course of the financial year. This situation was exacerbated by the default of several banks. By contrast, the expected losses for corporate and private customers (mortgage-backed IRBA assets in retail business and other IRBA retail assets) far exceeded the losses actually incurred. The losses sustained only rose slightly compared to the corresponding period of the previous year, despite the continuing impact of the financial crisis.

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

(Disclosure pursuant to section 335 (2) number 6 SolvV)

Table 6f (see Fig. 17) compares the expected losses with the losses actually incurred during the period January 1 to December 31, 2009 for the IRBA asset classes of central governments, institutions, corporates (including large companies, small and medium-sized enterprises (SMEs), specialized financial services and purchased receivables that are treated as corporate assets), investments recognized under the PD/LGD approach, and retail business.

The estimate of the expected losses for 2009 relates to the non-defaulting risk-weighted assets in the Bank's conventional lending business. Consequently, it does

TABLE 7B: COLLATERALIZED EXPOSURES UNDER THE STANDARDIZED APPROACH TO CREDIT RISK (EXCLUDING SECURITIZATIONS)

€ million	Financial collateral		Guarantees		Total	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Central governments	1,759	3,219	–	–	1,759	3,219
Regional governments and local authorities	75	–	–	–	75	–
Other public-sector entities	–	–	100	4	100	4
Multilateral development banks	–	–	–	–	–	–
International organizations	–	–	–	–	–	–
Institutions	930	749	10	471	940	1,220
Covered bonds issued by banks	–	–	–	–	–	–
Corporates	775	1,636	1,763	2,012	2,538	3,648
Retail business	–	–	246	314	246	314
Exposures collateralized by real estate	–	–	–	–	–	–
Investment fund units	–	–	–	–	–	–
Investments	–	–	–	–	–	–
Other exposures	–	–	–	–	–	–
Past due exposures	–	–	20	15	20	–
Total	3,539	5,604	2,139	2,816	5,678	8,420

Fig. 18

TABLE 7C: COLLATERALIZED EXPOSURES UNDER THE IRB APPROACH (EXCLUDING SECURITIZATIONS)

€ million	Financial collateral		Other collateral		Guarantees		Total	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Asset classes								
Corporates	184	432	18,772	16,197	2,347	2,286	21,303	18,915
Institutions	3,041	9,673	105	3	460	318	3,606	9,995
Central governments	181	1,749	–	16	322	2,415	503	4,180
Retail business	–	–	26,758	26,156	683	879	27,441	27,035
of which: mortgage-backed	–	–	26,758	26,156	683	879	27,441	27,035
qualified revolving	–	–	–	–	–	–	–	–
other	–	–	–	–	–	–	–	–
Investments	–	6	–	–	–	–	–	6
of which: simple risk-weighting approach	–	6	–	–	–	–	–	6
internal modeling approach	–	–	–	–	–	–	–	–
PD/LGD approaches	–	–	–	–	–	–	–	–
Other credit-independent assets	–	–	–	–	–	–	–	–
Total	3,406	11,860	45,635	42,372	3,812	5,898	52,853	60,131

Fig. 19

not factor in the expected losses on securities in the banking book or on counterparty risks arising from derivatives. The presented losses that have actually occurred also relate to the exposures that had not yet defaulted at the beginning of the reporting period. The definition of 'loss' corresponds to the definition used for Table 6e.

Table 6f shows that the losses actually incurred in 2009 (€400 million, December 31, 2008: €375 million) at the level of the DZ BANK banking group and across all asset classes were €31 million (December 31, 2008: €57 million) lower than the expected losses of €431 million (December 31, 2008: €432 million).

The picture varies considerably from one asset class to another. For example, the loss incurred in the asset class of institutions was largely attributable to the financial market turmoil that had been ongoing since the middle of 2007 and continued, albeit less severely, during the course of the financial year. This situation was exacerbated by the default of several banks. By contrast, the expected losses for corporate and private customers (mortgage-backed IRBA assets in retail business and other IRBA retail assets) far exceeded the losses actually incurred. The losses sustained only rose slightly com-

pared to the corresponding period of the previous year, despite the continuing impact of the financial crisis.

4.7.5. Collateralized exposures

NOTES ON COLLATERALIZED EXPOSURES

The risk report contained in the group management report presents the collateral provided for transactions with less-than-impeccable credit ratings in the tables showing past due but not impaired lending volumes and collateral broken down by industry and by country group and showing lending volumes and collateral in portfolios with specific loan loss allowances broken down by industry and by country group. The presentation of collateral in the risk report contained in the group management report thus describes a totally separate portfolio segment and cannot be compared with the information disclosed for regulatory purposes. The quantitative information on collateral given in the two risk reports differs slightly owing to the different methods used by IAS/IFRS and the Solvency Regulation to determine the impairment of hedging instruments.

Tables 7b and 7c cover the volume of assets backed 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 busi-

ness generated by the collateralized transactions is shown in Table 5b and in table group 6 of this risk report. The collateralization effect of the guarantees provided by counterparties under the Standardized Approach to credit risk is illustrated in Table 5b, which shows the partial shift in lending volumes from higher to lower risk weightings between the table columns that present the total exposures both 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 the loss given default (LGD).

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

(Disclosure pursuant to section 336 (2) SolvV)

Table 7b (see Fig. 18) shows the exposures, broken down by asset class under the Standardized Approach to credit risk, that are backed by financial collateral or

guarantees. The mitigation of credit risk is presented in each case together with the exposures that are risk-weighted for regulatory purposes.

COLLATERALIZED EXPOSURES UNDER THE IRB APPROACHES (EXCLUDING SECURITIZATIONS)

(Disclosure pursuant to section 336 (2) SolvV)

Table 7c (see Fig. 19) shows the exposures, broken down by IRBA asset class, that are backed by financial collateral, other IRBA collateral (real estate, equipment, etc.) or guarantees. The mitigation of credit risk is presented in each case together with the exposures that are risk-weighted for regulatory purposes. For certain IRBA assets belonging to BSH, DG HYP or DVB, the mortgage-related or real-estate collateral recognized for credit risk mitigation purposes is included in the calculation of capital requirements as the loss given default. The table shows the collateralized exposure for these transactions.

TABLE 8B (I): COUNTERPARTY RISK EXPOSURES TO DERIVATIVES 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
	Dec. 31, 2009	Dec. 31, 2008			
Types of contract					
Interest-related contracts	21,006	21,471			
Currency-related contracts	1,648	3,460			
Equity- and index-related contracts	2,237	3,459			
Credit derivatives	1,477	4,237			
Commodity-related contracts	49	32			
Other contracts	1	1			
Total, Dec. 31, 2009	26,418		21,648	1,474	3,296
Total, Dec. 31, 2008		32,660	26,385	2,377	3,898

Fig. 20

TABLE 8B (II): WEIGHTED COUNTERPARTY RISK IN RELATION TO COUNTERPARTY RISK EXPOSURES TO DERIVATIVES AND BROKEN DOWN BY THE APPROACH USED

€ million	Exposure under the original-maturity method	Exposure under the mark-to-market method	Exposure under the standardized method	Exposure under the internal model
Counterparty risk exposure, Dec. 31, 2009	–	12,074	–	–
Counterparty risk exposure, Dec. 31, 2008	–	14,777	–	–

Fig. 21

4.7.6. Counterparty risk exposures to derivatives in the banking book and trading book

(Disclosure pursuant to section 326 SolvV)

Table 8b (I) (see Fig. 20) shows the counterparty risk exposures to derivatives in the banking book and trading book in the form of positive replacement values before and after the risk-weighting of offsetting derivatives exposures and collateral. The counterparty risk arising from derivatives is also broken down into the various types of contract.

The table contains the aggregated counterparty risk exposures to derivatives in the banking book and trading book, which are already disclosed for each regulatory subportfolio level in Tables 5b, 6d (I), 6d (II) and 6d (IV). The exposures that are processed directly via a risk-free central counterparty (clearing house) are not included in Table 8b (I). This table therefore shows over-the-counter (OTC) derivatives as well as deriva-

tives that are traded via an intermediary – such as a broker – and listed on a stock exchange. All derivatives exposures arising from securitizations are disclosed in Table 9f.

Table 8b (II) (see Fig. 21) shows the weighted counterparty risk in the form of the measurement basis for the Standardized Approach to credit risk and for the IRB approaches in relation to the counterparty risk exposures to derivatives presented in Table 8b (I). Disclosures are broken down into the regulatory mark-to-market method – which is used by trading book institutions and by some non-trading book institutions – and the original-maturity method, which is used by the remaining non-trading book institutions.

Table 8b (III) (see Fig. 22) shows the notional amount of credit derivatives risk-weighted for regulatory purposes and used to hedge counterparty risk exposures to

derivatives. This notional amount was €968 million on December 31, 2009 (December 31, 2008: €1,413 million).

Table 8c (see Fig. 22) shows the notional amounts of credit derivatives bought and sold, which are categorized by the type of derivative. As had been the case at the end of the previous year, no credit derivatives from the DZ BANK banking group companies' intermediary operations were held on December 31, 2009.

4.7.7. Securitization of the DZ BANK banking group's own assets

TOTAL AMOUNT OF SECURITIZED ASSETS

(Disclosure pursuant to section 334 (2) number 1 SolvV)

Table 9d (see Fig. 23) shows the total amount of originated securitizations whose underlying transactions are kept on the books of the DZ BANK banking group. The securitizations shown here are all synthetic; there are no conventional securitizations (also known as true-sale securitizations).

IMPAIRED SECURITIZATIONS, SECURITIZATIONS IN ARREARS, AND LOSSES REALIZED DURING THE REPORTING PERIOD

(Disclosure pursuant to section 334 (2) number 2 SolvV)

Referring to the receivables and assets presented in Table 9d in the context of non-performing securitization exposures, Table 9e (see Fig. 24) shows the portions of the DZ BANK banking group's own asset securitizations that are past due or at risk of default. These have been differentiated according to the type of securitization. The table also presents the losses realized as a result

TABLE 8C: NOTIONAL AMOUNTS OF CREDIT DERIVATIVES BROKEN DOWN BY TYPE OF USE

€ million	Notional amount arising from use for own credit portfolio			
	Bought		Sold	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Credit derivatives				
Credit default swaps	46,433	49,507	49,618	59,054
Total return swaps	4,673	5,459	348	355
Credit-linked notes	1,159	2,399	3,374	16
Other	–	–	–	–
Total	52,265	57,365	53,340	59,425

Fig. 22

TABLE 9D: TOTAL AMOUNT OF ASSET SECURITIZATIONS

€ million	Synthetic securitizations	
	Dec. 31, 2009	Dec. 31, 2008
Asset classes		
Receivables from home loans	690	881
Receivables from wholly or partially commercial real-estate loans	268	345
Loans and advances to corporates (including SMEs)	–	–
Receivables from the DZ BANK banking group's own and purchased leased assets	678	792
Receivables from vehicle finance (excluding leases)	–	–
Receivables from other retail business (e.g. credit cards and student loans)	–	–
Receivables from CDOs and ABSs	–	–
Total	1,636	2,018

Fig. 23

TABLE 9E: IMPAIRED SECURITIZATIONS, SECURITIZATIONS IN ARREARS, AND LOSSES REALIZED DURING THE REPORTING PERIOD

€ million	Past due and non-performing securitizations		Losses during the reporting period	
	Dec. 31, 2009	Dec. 31, 2008	2009	2008
Asset classes				
Receivables from home loans	6	34	–	13
Receivables from wholly or partially commercial real-estate loans	81	15	7	3
Loans and advances to corporates (including SMEs)	–	–	–	–
Receivables from the DZ BANK banking group's own and purchased leased assets	–	–	–	–
Receivables from vehicle finance (excluding leases)	–	–	–	–
Receivables from other retail business (e.g. credit cards and student loans)	–	–	–	–
Receivables from CDOs and ABSs	–	–	–	–
Total	87	49	7	16

Fig. 24

of these exposures during the reporting period. The applied definition of 'loss' corresponds to the definition used for Tables 6e and 6f.

SECURITIZATIONS TRANSACTED DURING THE REPORTING PERIOD (Disclosure pursuant to section 334 (2) number 6 SolvV)

In 2009 the DZ BANK banking group incorporated its own leased assets and purchased leased assets worth €261 million (December 31, 2008: €455 million) into securitizations, as shown in Table 9j of the use cases. As in 2008, no gains or losses were realized on these transactions.

4.7.8 Securitization exposures of the DZ BANK banking group portfolio

(Disclosure pursuant to FSF recommendations)

The volume of securitizations as at December 31, 2008, differs from the volume disclosed in the 2008 regulatory risk report because derivative exposures were added, resulting in an increase in the 2008 volume from €24.4 billion to €24.8 billion. This also resulted in some changes to the values for 2008 in the following disclosures. The portfolio information presented in figures 26 to 30 is based on the market-related fair value of exposures at the relevant reporting date.

The remaining volume of securitizations at risk in the books of the DZ BANK banking group amounted to

€16.1 billion on December 31, 2009 (December 31, 2008: €20.1 billion). The December 31, 2008 amount was reduced by €4.0 billion in 2009 (reduction in 2008: €5.1 billion), partly as a result of repayments. On the reporting date the DZ BANK banking group also had receivables of €4.1 billion (December 31, 2008: €4.7 billion) from special-purpose entities, most of which were owed by affiliated ABCP conduits. Given that the DZ BANK banking group's total lending volume amounted to €311.7 billion (2008: €349.1 billion), its securitization exposures of €20.2 billion (2008: €24.8 billion) constituted a significant subportfolio that was actively managed.

In 2009 the protection facility offered by the Federal Association of German Cooperative Banks, Berlin, (BVR) provided a guarantee to insure securities portfolios held by the DZ BANK banking group against default. The insured securities had a total par value of €911 million on December 31, 2009. The DZ BANK banking group continues to underwrite the credit risk of an adequate first-loss piece for the guaranteed securitization exposures. The exposures concerned are presented in the figures listed above according to their fair values, without consideration for the hedging effect. They are recognized with a zero weighting in the regulatory capital requirements and therefore help free up regulatory capital.

CHANGES IN THE COMPOSITION AND VALUE OF THE SECURITIZATION PORTFOLIO

€ million	Fair value on Jan. 1, 2009 before changes in composition and value	Changes in composition due to purchases, sales, redemptions and exchange-rate fluctuations	Changes in value	Fair value on Dec. 31, 2009 after changes in composition and value
Asset classes				
Receivables from retail credits	13,524	-2,246	-574	10,704
of which: RMBSs	12,671	-1,887	-580	10,204
of which: assets classified as subprime	1,926	-228	-429	1,269
of which: assets classified as Alt-A	530	-79	-83	368
Receivables from corporate credits ¹	1,156	-399	-6	751
Receivables from CMBs	3,164	-226	-24	2,914
Receivables from CDOs	2,238	-277	-222	1,739
Exposures to conduits ²	4,734	-579	-34	4,121
Total, Dec. 31, 2009	24,816	-3,727	-860	20,229
Total, Dec. 31, 2008	31,648	-5,482	-1,350	24,816

¹ Including receivables from purchased leased assets with a fair value of €468 million on Jan. 1, 2009 and of €263 million on Dec. 31, 2009
² Including reported receivables from conduits, especially ABCP conduits, and liquidity facilities provided for ABCP conduits

Residential mortgage-backed securities (RMBSs) continued to account for 63 percent of investor-related exposures on December 31, 2009. Figure 25 shows the changes in the value of this portfolio as a result of **value adjustments** and changes to the composition of the portfolio over the course of 2009. The portfolio lost €860 million (2008: €1.35 billion) in value as a result of the ongoing market turmoil between January 1 and December 31, 2009. As things stand, these value adjustments largely constitute fluctuations in market value that can recover by the time the securitization exposures reach their maturity date.

For US-based exposures secured by residential real estate, lending institutions have broken their subportfolios down into the categories 'Prime', 'Subprime' and 'Alt-A' for credit rating and collateral purposes. The DZ BANK banking group defines subprime borrowers as those with scores of less than 640 points based on the standard FICO credit-scoring system used to assess mortgage customers in the United States. Borrowers with FICO scores of between 640 and 700 points are rated Alt-A. Customers with FICO scores of more than 700 points are classified as prime exposures. In addition to their FICO scores mortgage exposures on the borderline between risk bands are also classified on the basis of other key figures such as their loan-to-value ratios.

Figures 26 and 27 on pages 34 and 35 show the DZ BANK banking group's securitization exposures broken down by their external **credit rating**, as awarded by recognized rating agencies, and by their **region**

of origin. The most conservative credit scores of the credit rating agencies approved by section 41 SolvV are used to establish external credit ratings. Despite the rating downgrades seen during the year under review, the credit quality of the DZ BANK banking group's portfolio was still rated either 'good' or 'very good' as at December 31, 2009. The vast majority of its securitization exposures continued to be classified in its top internal rating category (GRC rating group I), as they had been at the end of 2008. On December 31, 2009, the DZ BANK banking group held €1.3 billion (December 31, 2008: €1.9 billion) worth of mortgage-backed real-estate loans that are classified in the US subprime segment. Of these exposures, 29 percent (December 31, 2008: 56 percent) were rated AA or better. Value adjustments of €429 million (2008: €750 million) were recognized on subprime exposures in 2009.

The 'not rated' category comprises synthetic portfolio purchases that do not have an external credit rating and which have accounts receivable from UK and Irish debtors. Synthetic portfolio purchases amounted to €74 million as at December 31, 2009 (December 31, 2008: €129 million).

Fifty-seven percent (December 31, 2008: 53 percent) of the borrowers in the aggregate portfolio were from European countries, especially the United Kingdom, Ireland, Spain, the Netherlands and Germany. Thirty-three percent (December 31, 2008: 54 percent) were domiciled in the US. Credit default insurance has been provided for the underlying transactions of almost all RMBS receivables based in Australia.

CREDIT QUALITY OF THE SECURITIZATION PORTFOLIO

€ million	AAA		AA+ to AA-		A+ to A-	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Asset classes						
Receivables from retail credits	7,236	10,531	1,500	1,364	481	607
of which: RMBSs	6,880	9,754	1,404	1,323	455	583
of which: assets classified as subprime	85	522	284	550	43	190
of which: assets classified as Alt-A	6	218	39	79	13	91
Receivables from corporate credits ¹	503	983	75	32	76	7
Receivables from CMBs	1,622	2,575	394	332	399	228
Receivables from CDOs	716	1,685	574	175	146	150
Exposures to conduits ²	486	1,175	1,179	829	1,842	1,738
Total	10,563	16,949	3,722	2,732	2,944	2,730

¹ Including receivables from purchased leased assets amounting to €263 million (December 31, 2008: €468 million)

² Including reported receivables from conduits, especially ABCP conduits, and liquidity facilities provided for ABCP conduits

Fig. 26

GEOGRAPHICAL COMPOSITION OF THE SECURITIZATION PORTFOLIO BROKEN DOWN BY COUNTRY OF UNDERLYING ASSET

€ million	Germany		British Isles		Spain		Netherlands	
	Dec. 31, 2009	Dec. 31, 2008						
Asset classes								
Receivables from retail credits	109	173	1,912	2,527	2,192	2,662	1,465	1,694
of which: RMBSs	72	119	1,906	2,517	2,089	2,433	1,436	1,662
of which: assets classified as subprime	–	–	35	–	–	–	3	–
of which: assets classified as Alt-A	–	–	–	–	–	–	–	–
Receivables from corporate credits ¹	139	190	27	22	70	136	14	27
Receivables from CMBs	266	287	686	723	78	89	128	135
Receivables from CDOs	6	7	25	32	16	16	40	36
Exposures to conduits ²	1,499	1,100	–	–	–	–	–	–
Total	2,019	1,757	2,650	3,304	2,356	2,903	1,647	1,892

¹ Including receivables from purchased leased assets amounting to €263 million (December 31, 2008: €468 million)

² Including reported receivables from conduits, especially ABCP conduits, and liquidity facilities provided for ABCP conduits

Fig. 27

	BBB+ to BB-		CCC+ to C-		Not rated		Total	
	Dec. 31, 2009	Dec. 31, 2008						
	535	793	843	130	109	99	10,704	13,524
	513	782	843	130	109	99	10,204	12,671
	292	538	557	126	8	–	1,269	1,926
	56	138	243	4	11	–	368	530
	84	134	–	–	13	–	751	1,156
	490	29	–	–	9	–	2,914	3,164
	197	133	50	38	56	57	1,739	2,238
	475	836	65	27	74	129	4,121	4,734
	1,781	1,925	958	195	261	285	20,229	24,816

	Italy		Rest of EU		United States		Australia		Other countries		Total	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008						
	790	1,137	896	730	1,893	2,703	1,314	1,655	133	244	10,704	13,524
	684	913	852	681	1,761	2,538	1,286	1,606	118	202	10,204	12,671
	–	–	3	–	1,228	1,926	–	–	–	–	1,269	1,926
	–	–	–	–	368	530	–	–	–	–	368	530
	273	450	107	150	3	4	29	42	89	135	751	1,156
	114	164	273	291	1,079	1,135	137	130	153	210	2,914	3,164
	69	61	386	453	1,179	1,547	10	78	8	8	1,739	2,238
	–	–	35	1	2,446	3,469	–	–	141	164	4,121	4,734
	1,246	1,812	1,697	1,625	6,600	8,858	1,490	1,905	524	760	20,229	24,816

**BREAKDOWN OF CDO PRODUCT CATEGORY BY
PORTFOLIO INSTRUMENT**

€ million		
Instruments	Dec. 31, 2009	Dec. 31, 2008
ABS of ABS	70	129
Commercial real estate	271	426
Corporates (including bank bonds and loans)	1,398	1,683
Total	1,739	2,238

Fig. 28

**BREAKDOWN OF SUBPRIME PORTFOLIO BY
ORIGINAL YEAR OF ISSUE**

€ million		
Year of origin	Dec. 31, 2009	Dec. 31, 2008
Prior to 2005	199	222
2005	383	647
2006	481	751
2007	206	307
2008	–	–
2009	–	–
Total	1,269	1,927

Fig. 29

MONOLINERS' RATING

€ million		
Monoliners' rating	Dec. 31, 2009	Dec. 31, 2008
AA or better	69	324
A	–	205
Worse than A	392	161
Total	461	690

Fig. 30

Figure 28 shows the securitization exposures in the CDO product category, most of which were also rated as having a good or very good credit quality. Figure 29 shows the receivables in the DZ BANK banking group's subprime portfolio, broken down by the year in which the transactions were originally issued. Figure 30 shows the credit ratings for securitizations, especially RMBS securities, where credit default insurance has been obtained from monoliners, based on Standard & Poor's Ratings Services' credit scores.

4.7.9. Securitization exposures in the banking book**RETAINED AND PURCHASED SECURITIZATION EXPOSURES**

(Disclosure pursuant to section 334 (2) number 3 SolvV)

Table 9f (see Fig. 31) shows the securitization exposures retained or purchased by the companies of the DZ BANK banking group in their capacity as originator, sponsor or investor, broken down by the type of underlying receivable in each case. The securitization exposures are recognized at their carrying amounts. The classification of the underlying receivables is based on the categories used for internal management purposes.

The securitization exposures were recognized for the most part according to the IRB approach as at December 31, 2009, although both the Standardized Approach to credit risk and the IRB approach were still largely used in equal measure for the period ended December 31, 2008. The change is a result of the so-called 'inheritance doctrine' used by DZ BANK and according to which entities of the DZ BANK banking group must always recognize their investor securitization exposures in line with the IRBA if an IRBA rating system is available for these exposures within the banking group and has been approved by the regulator. Germany's financial services regulator (BaFin) has approved the use of the inheritance doctrine.

**TOTAL AMOUNT AND CAPITAL REQUIREMENTS FOR RETAINED
OR PURCHASED SECURITIZATION EXPOSURES BROKEN DOWN
BY RISK-WEIGHTING BAND**

(Disclosure pursuant to section 334 (2) number 4 SolvV)

Table 9g and 9i (I) (see Fig. 32) shows the securitization exposures in the banking book and the relevant capital requirements, which are broken down by regulatory risk-weighting bands.

TABLE 9F: RETAINED AND PURCHASED SECURITIZATION EXPOSURES

€ million	Standardized Approach exposures		IRBA exposures		Total	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Securitization exposures						
Exposures reported on the balance sheet						
Receivables from home loans	–	7,921	7,766	2,156	7,766	10,077
Receivables from wholly or partially commercial real-estate loans	–	163	1,640	1,532	1,640	1,695
Receivables from corporate credits	3	223	1,120	1,063	1,123	1,286
Receivables from the DZ BANK banking group's own and purchased leased assets	–	338	192	4	192	342
Receivables from vehicle finance (excluding leases)	–	182	123	–	123	182
Receivables from other retail business (e.g. credit cards and student loans)	–	364	581	–	246	364
Receivables from CDOs and ABSs	–	98	636	598	636	696
Credit enhancements	62	9	865	814	1,273	823
Other exposures reported on the balance sheet	–	24	–	–	–	24
Total exposures reported on the balance sheet	65	9,322	12,923	6,167	12,988	15,490
Exposures not reported on the balance sheet						
Liquidity facilities	–	–	2,679	3,259	2,679	3,259
Derivatives (e.g. interest-rate currency swaps to hedge transactions)	14	32	86	127	100	159
Exposures specific to synthetic transactions	–	–	–	–	–	–
Other exposures not reported on the balance sheet	–	–	1	–	1	–
Total exposures not reported on the balance sheet	14	32	2,766	3,386	2,780	3,418
Sum total	79	9,354	15,689	9,553	15,768	18,907

Fig. 31

TABLE 9G AND 9I (I): TOTAL AMOUNTS AND CAPITAL REQUIREMENTS OF RETAINED AND PURCHASED SECURITIZATION EXPOSURES BROKEN DOWN BY RISK-WEIGHTING BAND

€ million	Exposures		Capital requirements under Standardized Approach to credit risk		Capital requirements under the IRB approach	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Risk-weighting bands						
≤ 10%	7,247	3,498	–	–	45	22
> 10% ≤ 20%	4,309	11,620	–	127	55	50
> 20% ≤ 50%	1,417	1,334	–	12	40	26
> 50% ≤ 100%	1,265	1,457	–	31	86	70
> 100% ≤ 650%	376	305	–	75	124	12
> 650% ≤ 1,250% / capital deduction	1,154	693	62	474	1,092	219
Total	15,768	18,907	62	719	1,442	399

Fig. 32

SECTORAL COMPOSITION OF THE LEVERAGED FINANCE PORTFOLIO BROKEN DOWN BY INDUSTRY OF UNDERLYING ASSET

€ million	Chemical industry		Engineering industry		Automotive industry		Services	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Exposures reported on the balance sheet	286	512	113	120	115	116	102	303
Exposures not reported on the balance sheet	25	18	52	25	19	14	29	43
Total	311	530	165	145	134	130	131	346

Fig. 33

GEOGRAPHICAL COMPOSITION OF THE LEVERAGED FINANCE PORTFOLIO BROKEN DOWN BY COUNTRY OF UNDERLYING ASSET

€ million	Germany		Netherlands		Rest of EU		United States		Other		Total	
	Dec. 31, 2009	Dec. 31, 2008										
Exposures reported on the balance sheet	377	392	87	485	448	357	93	101	108	112	1,113	1,447
Exposures not reported on the balance sheet	86	91	25	19	61	61	32	23	2	7	206	201
Total	463	483	112	504	509	418	125	124	110	119	1,319	1,648

Fig. 34

4.7.10. Leveraged finance

(Disclosure pursuant to FSF recommendations)

Of all the companies in the DZ BANK banking group, only DZ BANK engages in leveraged finance on a significant scale. DZ BANK classifies mergers & acquisitions and related types of financing that involve an above-average level of gearing ('leverage') as leveraged finance transactions. These primarily include acquisition finance, especially for affiliated companies whose credit ratings essentially depend on the cash flows expected to be generated by the acquired companies:

- leveraged buyouts by financial sponsors
- recapitalization and refinancing of acquisitions
- management buyouts and management buyins

DZ BANK also arranges and underwrites this type of acquisition finance.

The portfolio presented in Figures 33 and 34 reflects the gross lending volume of leverage finance transactions, which is based on carrying amounts and does not include credit risk mitigation techniques or value adjustments. The loan commitments granted by DZ BANK in this business segment totaled €1.32 billion as at December 31, 2009 (December 31, 2008: €1.65 billion). Of this total, loans amounting to €1.1 billion (December 31, 2008: €1.45 billion) had already been utilized and outstanding loan commitments came to approximately €206 million (December 31, 2008: €201 million). The leveraged finance portfolio was hedged by credit derivatives and guarantees worth €109 million at the balance sheet date (December 31, 2008: €309 million). The exposures in the portfolio reveal a broad sectoral diversification, with over 80 percent relating to companies based in the European Union. In 2009, impairment losses amounting to €127 million were recognized in the portfolio.

Electronics		Transport		Other sectors		Total	
Dec. 31, 2009	Dec. 31, 2008						
62	5	95	78	340	263	1,113	1,447
18	12	6	8	57	81	206	201
80	67	101	86	397	344	1,319	1,648

5. RISKS ATTACHING TO INVESTMENTS HELD IN THE BANKING BOOK

5.1. MANAGEMENT OF RISKS ATTACHING TO INVESTMENTS IN THE BANKING BOOK

(Disclosure pursuant to section 332 SolvV)

The objectives and principles used to manage the risks attaching to investments in the banking book and the objectives pursued through such investments are described on page 104 in the 'Equity risk' chapter of the risk report contained in the group management report. The measurement and accounting methods applied to investments held in the banking book are explained below.

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 equity and recognized in the revaluation reserve. If the fair value of the investments is permanently impaired as defined in IAS 39.58 et seq., this impairment loss is recognized in income. Reversals of impairment losses previously recognized in income are taken to equity 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 owing to the risk of investing in shares of the company being measured rather than investing 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.

5.2. QUANTITATIVE INFORMATION ON RISKS ARISING FROM INVESTMENTS HELD IN THE BANKING BOOK

(Disclosure pursuant to section 332 SolvV)

Notes on the regulatory disclosure of equity risks
 The equity risk of exposures disclosed in Table 13b and 13c distinguishes the carrying amounts under the German Commercial Code from the current market value of these exposures. The recognition of unrealized gains and losses from investment exposures in the DZ BANK banking group's equity is shown in Table 13d and 13e.

The regulatory report on investments held in the banking book covers conventional investments as well

TABLE 13B AND 13C: MEASUREMENT OF EQUITY INSTRUMENTS

€ million	Carrying amount		Fair value		Market value	
	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008
Categories of equity instruments						
Investments in banks	378	156	388	152		
of which: exchange-traded	85	31	85	31	85	31
not exchange-traded but part of a diversified investment portfolio	282	124	292	120		
other	11	1	11	1		
Investments in finance companies	28	72	25	65		
of which: exchange-traded	–	35	–	28	–	28
not exchange-traded but part of a diversified investment portfolio	–	30	–	30		
other	28	7	25	7		
Investments in insurance companies	1,777	1,594	1,777	1,594		
of which: exchange-traded	–	–	–	–	–	0
not exchange-traded but part of a diversified investment portfolio	3	1,594	3	1,594		
other	1,774	–	1,774	–		
Investment funds held as investments in the banking book	121	89	133	86		
of which: exchange-traded	–	6	6	6	–	6
not exchange-traded but part of a diversified investment portfolio	103	82	109	79		
other	18	1	18	1		
Investments in corporates	752	242	753	234		
of which: exchange-traded	1	8	1	8	1	8
not exchange-traded but part of a diversified investment portfolio	17	139	16	131		
other	734	95	736	95		
Total	3,056	2,153	3,076	2,131		

Fig. 35

TABLE 13D AND 13E: REALIZED AND UNREALIZED GAINS AND LOSSES ON EQUITY INSTRUMENTS
 ACCORDING TO IFRS ACCOUNTING STANDARDS

€ million	Unrealized gains and losses on equity instruments			
	Realized gains and losses from sales and processing	Total amount	of which: amounts recognized in Tier 1 capital	of which: amounts recognized in Tier 2 capital
Dec. 31, 2009	10	-20	-	-
Dec. 31, 2008	7	-22	-	-

Fig. 36

as securities, derivatives on investment exposures and investment funds that are not recognized under the so-called transparency method. The DZ BANK banking group recognizes the investment funds held in its banking book under the transparency method and breaks them down into the primary asset classes of the individual investment fund components. The disclosure of these exposures is not included in the equity risk tables, but is listed in the Standardized Approach to credit risk and IRBA tables. The equity exposures in the investment funds are classified with a risk weighting of 100 percent under the Standardized Approach (Table 5b) and fall into the 'investment exposure' asset class under the IRBA (Table 6d (I)).

Table 13b and 13c (see Fig. 35) presents the investment amounts in the banking book that are risk-weighted and, consequently, are not fully or proportionately consolidated or are subject to a capital deduction. These are broken down by groups of equity instruments and various carrying amounts. The classification of in-

vestments is based on the financial nature of the equity instrument concerned. The carrying amount corresponds to the book value determined under IFRS. Traded investments are defined as equity instruments that are listed on a stock exchange. The market value is defined as the cash settlement price of the investment at the reporting date.

Table 13d and 13e (see Fig. 36) shows the realized and unrealized gains and losses arising from the investments held in the banking book in accordance with IFRS accounting standards. The table only includes investments that are risk-weighted and, consequently, are not fully or proportionately consolidated or are subject to a capital deduction. The table also discloses those unrealized gains and losses that were included in the DZ BANK banking group's regulatory capital.

The contents of Table 13f, 'Equity instruments with their capital requirements' are shown in Table 2b to 2e. Consequently, no separate disclosure is provided.

6. MARKET RISK

6.1. MANAGEMENT OF MARKET RISK

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

The following disclosed information can be found in the risk report contained in the group management report from page 104 onward (in the chapter entitled 'Market risk'):

- objectives and principles of market risk management, including the management of interest-rate exposure in the banking book
- specific information on the DZ BANK banking group's internal market risk model
- specific information on calculating interest-rate exposure
- the type of interest-rate exposure in the banking book, the corresponding key assumptions and the frequency of risk measurement.

6.2. QUANTITATIVE INFORMATION ON MARKET RISK

(Disclosure pursuant to sections 330 and 333 (2) SolvV) tables 10 and 14b of the use cases)

The information disclosed pursuant to section 330 SolvV (Table 10b on capital requirements for market risk under the standardized method) is contained in Table 3b to 3e. Consequently, no separate disclosure is provided.

DZ BANK calculates the interest-rate exposure in the banking book as the value at risk for the purposes of internal market risk management. For this reason the disclosure does not follow the format of **Table 14b** on the use cases, but is given as a single risk figure. This meets the requirements of section 333 (2) SolvV, which states that the interest-rate exposure must be disclosed under the method used by the company's management to measure risk. The interest-rate exposure in the banking book of the DZ BANK banking group amounted to €6 million on December 31, 2009 (December 31, 2008: €11 million). This figure was reported to the Board of Managing Directors.

7. OPERATIONAL RISK

(Disclosure pursuant to section 322 and 331 (1) SolvV)

The objectives and principles of operational risk management are presented from page 119 onward in the chapter entitled 'Operational risk' in the risk report contained in the group management report. For the purposes of determining regulatory capital requirements, the potential loss arising from operational risk is estimated using the Standardized Approach specified by the Solvency Regulation.

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