

# Disclosure report in accordance with the German Solvency Regulation

as of 31 December 2011.

# Contents.

1	Fundamentals	4
2	Risk management (section 322 SolvV)	5
3	Scope (section 323 SolvV)	6
4	Equity (sections 324 and 325 SolvV)	9
5	General counterparty risk (section 327 SolvV)	17
6	Counterparty risk in the CRS approach (section 328 SolvV)	24
7	Counterparty risk in the IRB approach (section 335 SolvV)	26
8	Credit risk minimization techniques (section 336 SolvV)	37
9	Derivative counterparty risks (section 326 SolvV)	41
10	Securitizations (section 334 SolvV)	45
11	Equity investments in the banking book (section 332 SolvV)	55
12	Market price risk (section 330 SolvV)	58
13	Interest rate risk in the banking book (section 333 SolvV)	63
14	Operational risk (section 331 SolvV)	65
	Glossary	66
	Index of tables	69

# 1 Fundamentals.

The Basel Committee on Banking Supervision has defined internationally applicable standards for the capital adequacy of banks and the associated disclosure requirements in the Basel capital standards recommendation (Basel II) which are translated into national law primarily in the German Solvency Regulation (SolvV). The aim of these disclosure requirements is to increase transparency with regard to the bank's own processes for capital and risk measurement and to improve market discipline. The implementation of Capital Requirements Directive III (CRD III) in German law as of 31 December 2011 expanded the requirements for disclosure of securitizations, in particular resecuritizations, as well as for market price risks through the capital adequacy requirement of the stressed VaR.

Landesbank Baden-Württemberg (LBBW) applies the Internal Ratings-Based Approach (basic IRB approach) approved by the German Federal Financial Supervisory Authority (BaFin) for establishing capital backing for counterparty risk from the main receivables classes. Capital backing for general interest rate risk, general equity price risk and associated option price risks are determined on the basis of an internal market price risk model also approved by the supervisory authorities.

LBBW prepares the disclosure report in aggregate form at Group level in its role as a parent company. In terms of qualitative disclosures, LBBW utilizes the opportunity to refer to other disclosure reports, to the extent that the information therein is already disclosed in the context of other publicity requirements.

The disclosure report is published on the internet as an independent report alongside the annual financial statements and management report for LBBW in accordance with HGB and the annual report for the LBBW Group in accordance with IFRS, which also includes the risk report. By publishing the FSB report, LBBW also addresses the key disclosure recommendations from the Financial Stability Forum (Financial Stability Board – FSB). The remuneration report required in accordance with the Remuneration Ordinance for Institutions (Institut-Vergütungsverordnung) is also published on the LBBW homepage.

# 2 Risk management.

## (section 322 SolvV)

The risk management system is determined by the Board of Managing Directors and the Risk Committee in the risk strategies consistent with the business strategy.

In the Group risk strategy, risk strategy guidelines which apply Group-wide and across all risk categories are determined via risk tolerance. This strategy is defined by determining the fundamental conditions for risk strategy, strategic limits, liquidity risk tolerance and the guidelines for risk management and must be adhered to within the scope of all business.

In addition, the risk strategies document the current and target risk profile of LBBW, specify customer-, product- and market-specific guidelines and create the framework for medium-term planning together with the business strategy. The operative implementation of these guidelines is accompanied by variance analyses, business area dialogs, monthly earnings analyses, as well as strategic and operative limit systems.

Specific strategies were adopted for all of the material types of risk to which the LBBW Group is exposed.

The risk strategies listed below apply to the relevant areas of risk pursuant to section 322 SolvV:

The LBBW Group's credit risk strategy and credit regulations deal with all provisions for dealing with lending business in a responsible and risk-oriented way. Similarly, they also provide a risk-adequate framework for dealing with the market dynamic in a flexible and customer-oriented manner. Credit decisions are made in a system of graded competencies which are regulated in the Bank's decision-making systems.

The market price risk strategy documents the market price risk-specific strategic specifications in the LBBW Group. It describes the activities which involve market price risks and the underlying strategies for all relevant organizational units and material subsidiaries.

It specifies in particular an aware and controlled way of dealing with these risks in order to use the opportunities involved strategically. Interest rate risks are managed at the LBBW Group as part of market price risks.

The objective of the OpRisk strategy is to establish the LBBW Group's basic policy for dealing with operational risks in an appropriate and responsible way. It defines, for all business activities, the necessary basic conditions for a uniform system throughout the Group for identifying, assessing, managing, monitoring and communicating about operational risks.

In general, the LBBW Group ensures that risk strategies are created and developed properly through appropriate structural and procedural regulations. These are documented in the organization guidelines of the divisions and the subsidiaries.

The structure and organization of the risk management, the management information system, the main features of hedging/minimizing risks, as well as the strategies and processes for credit, market price and operational risks, can be found in the following chapters.

# 3 Scope.

## (section 323 SolvV)

Unless otherwise indicated, all disclosures in this report relate to the regulatory basis of consolidation of the LBBW Group in accordance with section 10a KWG as at the reporting date of 31 December 2011.

Differences from the IFRS basis of consolidation arise above all with regard to the following aspects:

- Special-purpose vehicles (SPVs) that are controlled by LBBW in line with the criteria of SIC 12 (Standing Interpretations Committee) are consolidated in accordance with IFRS, but are not included in the regulatory basis of consolidation, as they do not meet the requirements for classification as a subsidiary in accordance with section 1 (7) KWG or carry out business activities relevant to KWG. However, the capital requirements arising from the risks of special-purpose vehicles are determined for regulatory purposes at the LBBW Group by means of the financial links between LBBW and these SPVs.
- Companies outside the financial sector are also consolidated in the IFRS consolidated financial statements if it is possible to exercise control in accordance with IFRS. However, these companies do not form part of the regulatory basis of consolidation.
- Conversely, companies which do not meet the consolidation criteria in accordance with IFRS or are not consolidated due to being of minor significance are also included in the basis of consolidation in accordance with KWG.

The option in line with section 2a KWG, whereby individual institutions can be excluded if organizational and procedural requirements of certain regulations for equity funding and reportability at an institution level are fulfilled (waiver regulation), is not used within the LBBW Group.

There are no limitations or other significant obstacles to carrying forward funds or liable equity capital to be taken into account in the LBBW Group.

As at the reporting date of 31 December 2011, no subsidiary that was deducted from the liable equity capital of LBBW Group was undercapitalized.

In the following table, the main companies included in the regulatory basis of consolidation are classified according to the type of business and its regulatory treatment and are shown alongside their classification in the basis of consolidation under IFRS. Both scopes of consolidation also include a large number of additional companies, which are not listed due to their low materiality. These companies have been classified in line with the definitions in section 1 KWG.

Description	Name	Regulatory treatment			Consolidation in accordance with accounting standard		
		Consolidation		Deduction method	Risk-weighted equity investments	Full	Accounted for using the equity method
		Full	Proportional				
<b>Banks</b>	Landesbank Baden-Württemberg	X				X	
	LBBW Bank CZ a.s.	X				X	
	LBBW Immobilien GmbH	X				X	
	LBBW Luxemburg S. A.	X				X	
	LBBW México	X					
	MKB Mittelrheinische Bank GmbH	X				X	
	Vorarlberger Landes- und Hypothekbank AG			X		X	
<b>Financial services institutions</b>	ALVG Anlagenvermietung GmbH	X				X	
	LHI Leasing GmbH	X				X	
	SüdFactoring GmbH	X				X	
	SüdLeasing GmbH	X				X	
<b>Investment companies</b>	LBBW Asset Management Investmentgesellschaft mbH	X				X	
<b>Financial enterprises</b>	BW Capital Markets Inc.	X					
	BWK GmbH Unternehmensbeteiligungsgesellschaft		X			X	
	CFH Beteiligungsgesellschaft mbH	X				X	
	Dresden Fonds GmbH	X					
	LBBW Asset Management (Ireland) plc	X				X	
	LBBW Dublin Management GmbH	X				X	
	LBBW Equity Partners GmbH & Co. KG	X					
	LBBW Pensionsmanagement GmbH	X					
	LBBW Venture Capital GmbH	X				X	
	LRP Capital GmbH	X				X	
	SL Financial Services Corporation	X					
	Süd Beteiligungen GmbH	X				X	
	Süd KB Unternehmensbeteiligungsgesellschaft mbH	X				X	
	SüdImmobilien GmbH	X					
	Süd-Kapitalbeteiligungs-Gesellschaft mbH	X				X	
	SüdLeasing España E.F.C.S.A.	X					

Description	Name	Regulatory treatment			Consolidation in accordance with accounting standard		
		Consolidation		Deduction method	Risk-weighted equity investments	Full	Accounted for using the equity method
		Full	Proportional				
<b>Providers of related banking services</b>	Financial ServiceS GmbH	X					
	LBBW Grundstücksverwaltungsgesellschaft mbH & Co. KG Objekt Am Hauptbahnhof Stuttgart	X					
	LBBW Grundstücksverwaltungsgesellschaft mbH & Co. KG Objekt Pariser Platz Stuttgart	X				X	
	LG Grundstücksanlagen-Gesellschaft mbH & Co. KG - Immobilienverwaltung -	X					
	Stuttgarter Aufbau Bau- und Verwaltungs-Gesellschaft mbH	X					
<b>Other companies</b>	Baden-Württemberg L-Finance N.V.				X	X	
	Landesbank Baden-Württemberg Capital Markets plc				X	X	

Figure 1: Regulatory basis of consolidation (section 323 [1] no. 2 SolvV).

# 4 Equity.

(sections 324 and 325 SolvV)

## Equity structure.

to the regulatory basis of consolidation of LBBW as of 31 December 2011.

The following table shows combined equity as defined in accordance with section 10a KWG. Disclosures relate

EUR million	
Paid-in capital	2 584
Capital reserve	6 910
Other retained reserves	281
Reserves for general banking risks in accordance with section 340g HGB	480
Further Tier 1 capital components	4 439
of which other capital in accordance with section 10 (4) KWG	186
of which other capital in accordance with section 10 (2a) no. 10 in conjunction with section 64m KWG	4 008
of which differences in assets	245
Deductible in accordance with section 10 (2a) clause 2 KWG	- 206
Deductible in accordance with section 10 (6) and (6a) KWG	- 652
<b>Total Tier 1 capital in accordance with section 10 (6a) KWG</b>	<b>13 836</b>
Total Tier 2 capital before capital deductible in accordance with section 10 (2b) KWG	4 645
Deductible from Tier 2 capital in accordance with section 10 (6) and (6a) KWG	- 652
Retained Tier 3 capital in accordance with section 10 (2c) KWG	723
<b>Total Tier 2 capital in accordance with section 10 (2b) KWG and retained Tier 3 capital in accordance with section 10 (2c) KWG</b>	<b>4 716</b>
<b>Total modified available equity in accordance with section 10 (1d) KWG and retained Tier 3 capital in accordance with section 10 (2c) KWG</b>	<b>18 552</b>
of which	
shortfall and expected loss amounts for IRBA positions in accordance with section 10 (6a) nos. 1 and 2 KWG	708

Figure 2: Regulatory equity (section 324 [2] SolvV).

The LBBW Group's Tier 1 capital consists of paid-in capital, capital reserves, other retained reserves (including minority interests), reserve for general banking risks in accordance with section 340g HGB and other Tier 1 capital components. The other Tier 1 capital components include silent partners' contributions and, to a lesser extent, Tier 1 capital components from consolidated subsidiaries.

A contract on contributions made by silent partners fulfils the requirements for other capital as per section 10 (4) KWG without exception. The other contracts are subject to portfolio protection in line with section 64m

in conjunction with section 10 (2a) no. 10 KWG. None of the contractual conditions of silent partners' contributions includes a step-up clause or other repayment incentives.

Most silent partners' contributions are provided with a permanent duration. The owners of LBBW in turn hold the majority of these. There is an option to terminate these after ten years in accordance with the individual contracts, but this can only be exercised subject to the approval of BaFin. Some of the permanent capital contributions are denominated in foreign currency (USD 500 million). Temporary capital contributions by



silent partners are held by insurance companies and savings banks. The original duration of these contracts is between 10 and 30 years.

Depending on the original issuing bank, silent partners' contributions participate in the net loss or accumulated loss by reducing silent partners' contributions commensurate to the proportion of other equity components contributing to the loss in the respective financial year. In the event of insolvency or liquidation, silent partners' contributions are repaid only after all non-subordinated liabilities are satisfied.

Hybrid capital in the form of preference shares also counts towards Tier 1 capital. These were issued by two foreign subsidiaries and are available to the LBBW Group as Tier 1 capital. Preference shares have an indefinite duration and feature a step-up clause which, depending on the respective issue, was or will be used after ten years. After ten years, LBBW has the right to terminate, which must also be approved by BaFin. The terms of these securities satisfy the requirements of the Basel Committee on Banking Supervision.

Intangible assets fully deductible from the Tier 1 capital, the carrying amounts of the investments (half of which is to be deducted) and other capital components from unconsolidated banks and financial enterprises are included in deductible items in accordance with section 10 (2a) KWG. Expected loss amounts for IRBA items, as well as pre-settlement risks in accordance with section 10 (6a) KWG, are also included.

The Tier 2 capital of LBBW includes liabilities arising from profit participation rights which meet the requirements for capital pursuant to section 10 (5) KWG, as well as longer-term subordinated liabilities in accordance with section 10 (5a) KWG.

Depending on the original issuing bank, profit participation rights participate in the net loss or accumulated loss by reducing capital generated by

profit participation certificates commensurate with the proportion of other equity components contributing to the loss in the respective financial year. In the event of insolvency or liquidation, profit participation rights are repaid only after all non-subordinated creditors and subordinated liabilities are satisfied. The original duration of the participation certificates structured as bearer instruments or registered securities is between 10 and 20 years.

In the case of insolvency or liquidation, longer-term subordinated liabilities are repaid only after all non-subordinated creditors have been satisfied. In contrast with liabilities under profit participation rights, these do not play a part in any net loss for the year or accumulated loss. The original duration of longer-term subordinated liabilities structured as bearer instruments or registered securities is between 10 and 40 years.

Profit participation rights and longer-term subordinated liabilities with a remaining maturity of less than two years and that have a Tier 3 clause, are recognized as Tier 3 capital. The Tier 3 clause requires that principal and interest payments do not have to be made on the corresponding notes if this were to cause the equity of a bank or the banking group to no longer fulfill the respective applicable legal requirements pursuant to sections 10 and 10a KWG.

Modified available capital in accordance with section 10 (1d) KWG is calculated by finding the difference between the total expected loss amounts, consisting of all IRB approach items for the central governments, banks, corporates and retail business receivables classes, and the provision for losses on loans and advances recognized for these items, consisting of valuation adjustments and provisions. If there is a valuation allowance surplus, this may be recognized as Tier 2 capital. Conversely, if there is a valuation allowance deficit, this is to be deducted equally from Tier 1 and Tier 2 capital. Expected loss amounts for

IRBA equity investments are to be deducted equally from Tier 1 and Tier 2 capital.

As at the reporting date of 31 December 2011, the shortfall in valuation adjustments was defined largely by the sovereign debt crisis. Expected losses increased substantially due to the rating downgrades of Greece, in particular.

The shortfall will be reduced by the approval of the annual financial statements through the newly-created impairments and provisions that are already recognized in equity in the income statement.

Furthermore, pre-settlement risks in the context of trading book securities, foreign currency and commodity transactions must be recognized as capital withdrawal items if the consideration has not yet been effectively paid five business days after maturity.

#### **Presentation of key changes in the 2011 financial year.**

A net loss for the year was reported in the 2009 financial year, which led to silent partners' contributions and liabilities under profit participation rights participating in the loss by means of a capital reduction. Following a partial replenishment in the 2010 financial year, net income under HGB is being used in the 2011 financial year for full replenishment of silent partners' contributions and liabilities under profit participation rights to the nominal value in accordance with the contractual conditions.

Due to the requirements on Tier 1 capital components that will be changed in the future as part of Basel III, discussions are being held with the owners regarding the conversion or reinforcement of silent partners' contributions within the scope of forward-looking capital planning.

#### **Internal equity management.**

Capital management at LBBW is designed to ensure solid capitalization within the LBBW Group. In order to guarantee adequate capital from various perspectives, the Bank analyzes capital ratios and structures from both a regulatory as well as an economic capital perspective.

LBBW's capital management system is embedded in the overall bank management process, strategies, rules, monitoring mechanisms and organizational structures of the LBBW Group.

The Asset Liability Committee (ALCo) prepares, amongst other things, decisions for the Board of Managing Directors and supports it in ensuring the adequacy of the capital resources and structure, as well as in the definition and compliance with target figures. Resolutions are then passed by the Board of Managing Directors as a whole.

#### **Regulatory management.**

The regulatory equity management of the LBBW Group is based on the requirements of the KWG, the SolvV as well as those arising in the future from the Basel III Accord or the European Capital Requirements Regulation I (CRR I).

Actual developments, forecast and scenario calculations are monitored regularly in order to ensure that these solvency ratios are always observed. Stress tests are also carried out on a regular basis in order to analyze extreme situations. In future, Basel III and the European capital adequacy framework will lead to stricter capital requirements in terms of both quality and quantity. LBBW Group is preparing to meet these future capital requirements by defining internal targets above all for the Common Equity Tier 1 capital

ratio (ratio of Tier 1 capital excluding hybrid capital to risk items<sup>1</sup>).

Regulatory capital allocation is carried out during the planning process integrated on an annual basis (with a five-year planning horizon) and is monitored regularly by the Group's Board of Managing Directors.

### **Economic management.**

LBBW ensures risk-bearing capacity by means of a Group-wide compilation of risks across all major types of risk and subsidiaries, and the comparison of this with the capital required for economic purposes (aggregate risk cover).

At LBBW, aggregate risk cover (corresponds to risk coverage potential as per MaRisk) denotes the equity restricted according to economic criteria which is available for the coverage of unexpected potential losses. In addition to consolidated equity (as per IFRS including revaluation reserves), subordinated debt, realized gains and losses (IFRS) and hidden liabilities are considered components of aggregate risk cover. Since December 2011, extensive conservative deductible items are also included in aggregate risk cover due to regulatory requirements.

Economic capital is calculated as a uniform risk measure at the highest level. This is deemed to constitute the amount of economic capital necessary to cover the risk exposure resulting from LBBW's business. In contrast with the capital stipulated by regulatory bodies, this therefore represents the capital backing required from LBBW's point of view for economic purposes, calculated using the Bank's own risk models. It is quantified for credit, market price, real estate, development, investment and operational risk, and is in principle expressed by value-at-risk (VaR) at a confi-

dence level of 99.95% and with a holding period of one year. Other risks are quantified using simplified processes.

The upper risk limit for economic capital represents the upper limit for all relevant quantifiable types of risk throughout the Group.

It reflects LBBW's maximum willingness to take risks and was set well below the total resources available to cover risks in line with the conservative principle of risk tolerance. It therefore offers scope for an additional buffer against risks arising from unforeseeable stress situations. Based on the upper risk limit for economic capital, limits are derived on the one hand for various types of risk that are directly quantifiable:

- credit risks  
(including counterparty and country risks)
- market price risks
- operational risks
- real estate risks
- development risks
- investment risks

The liquidity risks are managed and limited separately through the quantitative and procedural regulations determined in the liquidity risk tolerance.

<sup>1</sup> Total capital charges for counterparty, market price and operational risks.

On the other hand, an additional limit is derived for other risks that are not quantifiable within the framework of a model approach:

- strategic risks
- business performance risks
- reputation risks
- pension risks
- own credit rating risks
- model risks
- dilution risks
- fund placement risks

There is a defined escalation process for high utilization of limits and for exceeding limits.

#### **Capital requirements.**

Capital requirements for counterparty risks are reported in accordance with the receivables classes specified for the credit risk standard approach (CRSA) or those specified for the internal ratings-based approach (IRB approach).

In the case of capital backing for securitization transactions, a distinction is also drawn between CRSA and IRB securitizations.

The capital requirements for loans that were extended before 1 January 2007 and have been given privileged status pursuant to section 64h (1) KWG are reported in the CRSA and have a risk weight of 0%. These generally consist of loans to governments.

The capital requirements for investments which were acquired before 1 January 2008 are exempt from the application of the IRB approach in accordance with section 338 (4) SolvV (grandfathering regulation) until 31 December 2017 and may continue to be reported in the CRS approach with a risk weight of 100%.

Investment items acquired after this date are backed according to the internal rating, if a rating is available. Otherwise, the simple risk-weighting approach is applied with the corresponding fixed risk weight.

The capital requirements for market price risks relating to the general interest rate risk and equity risk as well as the associated option price risks of the LBBW (Bank) are calculated using the internal model approved by BaFin. Since 31 December 2011, this also includes the capital backing for the stressed VaR. Other market price risks are calculated according to the standard procedure.

Capital backing for operational risks is calculated using the standard approach.

The following table summarizes the capital requirements in terms of the risk types that are relevant under the regulatory framework (counterparty risk, market price risk and operational risks).

EUR million	Equity requirements
<b>1 Counterparty risks</b>	
<b>1.1 Credit Risk Standard Approach (CRSA)</b>	
Central governments	0
Regional governments and non-central public sector entities	11
Other public sector	6
Multilateral development banks	0
International organizations	0
Banks	45
Covered bonds issued by banks	0
Corporates	953
Retail business	532
Items secured by real estate	215
Investment units	0
Other items	79
Past due items	74
<b>Total CRSA</b>	<b>1 915</b>
<b>1.2 Internal Ratings Based approach (IRB approach)</b>	
Central governments	282
Banks	681
Corporates	3 579
Retail business	0
of which secured with real estate liens	0
of which qualified, revolving	0
of which other	0
Other assets not relating to credit	154
<b>Total IRB approach</b>	<b>4 696</b>

EUR million	Equity requirements
<b>1.3 Securitizations</b>	
Securitizations under CRSA	127
of which resecuritizations	1
Securitizations under IRB approach	199
of which resecuritizations	84
<b>Total securitizations</b>	<b>326</b>
<b>1.4 Risks from equity investment exposures</b>	
Equity investments under IRB approach	188
of which model-driven	0
of which PD/LGD approach	14
of which simple risk weight approach	174
of which exchange-traded	4
of which not exchange-traded but sufficiently diversified	135
of which other	35
Equity investments under CRSA	48
of which interests held with method continuation/grandfathering	37
<b>Total equity investments</b>	<b>236</b>
<b>Total counterparty risks</b>	<b>7 173</b>
<b>2 Market price risks</b>	
Standard method	455
of which interest rate risks	371
of which general and specific price risks to net interest position	355
of which securitization positions with specific price risk in trading book	16
of which specific price risk in correlation trading portfolio	0
of which share price risks	5
of which currency risks	73
of which risks from commodity positions	6
of which other positions	0
Approach in accordance with Internal Model Method	557
<b>Total market price risks</b>	<b>1 012</b>
<b>3 Operational risks</b>	
Basic indicator approach	0
Standard approach	429
Advanced measurement approach	0
<b>Total operational risks</b>	<b>429</b>
<b>Total equity requirements</b>	<b>8 614</b>

Figure 3: Capital requirements (section 325 [2] no. 1 to 4 SolvV).

### Capital ratios.

The following table shows the regulatory capital ratios for the LBBW Group, the LBBW (Bank) and the consolidated significant subsidiary banks. The ratios were calculated in accordance with the provisions of SolvV.

in %	Total ratio in accordance with SolvV	Tier 1 capital ratio
<b>LBBW Group</b>	<b>17.2</b>	<b>12.9</b>
LBBW (Bank)	19.3	14.5
LBBW Bank CZ a.s.	13.9	13.9
LBBW Luxemburg S.A.	28.2	28.2
MKB Institut	17.0	9.7

**Figure 4:** Capital ratios (section 325 [2] no. 5 SolvV).

The capital ratios for the LBBW (Bank) and the subsidiary banks are determined on the basis of the respective bank reporting, whereas the corresponding capital ratios for the LBBW Group are derived from consolidated reporting.

# 5 General counterparty risk.

(section 327 SolvV)

The following quantitative information on general reporting requirements for counterparty risk is disclosed on the basis of the management approach. This means that LBBW Group's risk situation is reported based on this data, according to which internal risk management and internal reporting to the Board of Managing Directors and the executive bodies is also carried out. The internal view of risk differs in some cases from the balance sheet reporting and regulatory approach. Key reasons for differences between internal and external financial reporting are different bases of consolidation and, in some cases, different definitions of the business volume.

As well as LBBW the following subsidiaries relevant in terms of counterparty risk are included in the basis of consolidation for internal reporting purposes:

- LBBW Luxemburg S.A.
- SüdLeasing Gruppe



### Breakdown of credit volume by region, industry and residual term.

The following tables (5 to 7) show the main credit risk exposure categories of the LBBW Group, broken down by region, industry and residual term.<sup>1</sup> The »Derivative financial instruments« column includes, in particular, the nominal volume of credit derivatives (CDS sell protection, single names and baskets).

From a full-year perspective, the credit volume<sup>2</sup> was reduced by EUR 15 billion to EUR 455 billion. Excluding the favorable market value trend of interest rate derivatives, the decline in credit volume would have been much more pronounced. This is also highlighted by the EUR 22 billion reduction in loans, commitments

and other non-derivative instruments as well as the offsetting rise in derivative instruments (see figure 5). The increase in derivative financial instruments has slightly increased the credit volume with banks. The corporate portfolio contracted slightly. The significant decline in public-sector lending is attributable in particular to the reduction in credit volume in Western Europe (see figure 6).

The following table shows the credit volume, broken down by region and type of loan.<sup>3</sup>

EUR million				
Regions	Loans, commitments and other non-derivative off-balance-sheet assets	Securities	Derivative financial instruments	Total
Germany	194 396	57 986	30 858	283 240
Western Europe	37 640	25 824	66 957	130 421
Eastern Europe	3 514	621	2 687	6 822
Asia/Pacific	3 223	611	679	4 513
North America	12 442	4 295	9 331	26 068
Latin America	2 299	900	36	3 235
Africa	62	41	131	234
Other	237	222	101	560
<b>Total</b>	<b>253 813</b>	<b>90 499</b>	<b>110 780</b>	<b>455 092</b>

Figure 5: Credit volume by region (section 327 [2] no. 1 and 2 SolvV).

<sup>1</sup> Rounding differences of +/- one unit may arise in the tables due to computational reasons.

<sup>2</sup> The credit volume is shown below, not considering credit risk reduction methods.

<sup>3</sup> In order to maintain consistency with presentation elsewhere, in this report division by region is based on the domicile principle and is thus alternative to the allocation using the country of domicile principle in accordance with the country limit system as mentioned in the annual report.

The following table shows the credit volume, broken down according to internal risk-oriented industry category and type of loan.

EUR million				
Industries	Loans, commitments and other non-derivative off-balance-sheet assets	Securities	Derivative financial instruments	Total
<b>Financial institutions</b>	<b>98 521</b>	<b>59 718</b>	<b>73 654</b>	<b>231 894</b>
Savings banks and Landesbanks	53 498	26 119	3 955	83 572
Private banks	14 424	17 524	59 806	91 754
Other banks	4 384	5 060	6 911	16 355
Financial services (excluding banks and insurance companies)	26 214	11 015	2 983	40 212
<b>Companies and organizations, self-employed private individuals, sole proprietorships</b>	<b>103 892</b>	<b>3 819</b>	<b>19 308</b>	<b>127 019</b>
Automotive	11 450	817	3 257	15 524
Construction	7 438	13	713	8 165
Cross-industry manufactured goods	4 272	44	417	4 733
Healthcare	3 958	2	324	4 284
Commercial real estate (CRE)	18 485	833	774	20 091
Foodstuffs trade and other non-cyclical consumer goods	4 709	66	1 340	6 115
Transport and logistics	5 284	438	532	6 254
Insurance	1 930	813	2 310	5 053
Utilities	8 158	196	1 719	10 073
Housing	6 982	12	137	7 131
Other broadly diversified industries	31 225	587	7 785	39 596
<b>Public sector</b>	<b>31 293</b>	<b>26 961</b>	<b>17 622</b>	<b>75 876</b>
<b>Employed private individuals</b>	<b>20 108</b>	<b>0</b>	<b>195</b>	<b>20 303</b>
<b>Total</b>	<b>253 813</b>	<b>90 499</b>	<b>110 780</b>	<b>455 092</b>

Figure 6: Credit volume by industry (section 327 [2] no. 1 and 3 SolvV).

The »Other broadly diversified industries« category groups together industries with a share of less than 3% in the credit volume in comparison with companies.

The following table shows the credit volume, broken down according to contractual residual term and type of loan.

EUR million				
Remaining maturities	Loans, commitments and other non-derivative off-balance-sheet assets	Securities	Derivative financial instruments	Total
Due on demand	29 569	0	0	29 569
< 1 year	55 599	32 371	16 172	104 142
up to 5 years	65 430	46 900	49 221	161 551
> 5 years	94 454	10 501	45 387	150 342
No information	8 761	727	0	9 487
<b>Total</b>	<b>253 813</b>	<b>90 499</b>	<b>110 780</b>	<b>455 092</b>

Figure 7: Credit volume by residual term (section 327 [2] no. 1 and 4 SolvV).

#### Definitions on loan loss provision.

Information on procedures applied in the recognition of loan loss provision is disclosed in the »Credit risks« chapter in the risk report within the group management report and in the »Loan loss provision« chapter in the notes to the consolidated financial statements.

LBBW distinguishes between two types of commitment where there has been a default on payment:

A transaction is defined as »past due to a significant extent« when the committed credit facility (including a minimum limit) is exceeded. This is the case when there are arrears in the form of unpaid interest or principal and other receivables for more than five days.

A transaction is considered as »non-performing« when

- a write-down has been created (this is the case when there is an objective indication of an impairment) or
- a default rating was given in accordance with section 125 SolvV

and the above criteria are not canceled out by a current recovery report. A loan that is past due or non-performing is reported as »non-performing«.

### Non-performing and past due loans by region and industry.

The following tables show non-performing and past due loans, and the reporting date balances for loan loss provision and changes therein, during the 2011 financial year.<sup>1</sup>

The following table shows non-performing and past due loans, broken down by region.

EUR million					
Regions	Total utilization from non-performing loans (with write-down requirement)	Past due loans (without write-down requirement)	Specific valuation allowances	Portfolio valuation allowances	Provisions
Germany	4 377	36	1 950	122	120
Western Europe	2 147	0	309	26	8
Eastern Europe	111	4	50	10	1
Asia/Pacific	82	11	27	15	76
North America	1 364	0	246	32	6
Latin America	183	0	47	4	1
Africa	0	1	0	0	0
Other	1	0	1	0	25
<b>Total</b>	<b>8 265</b>	<b>52</b>	<b>2 630</b>	<b>210</b>	<b>237</b>

Figure 8: Non-performing and past due loans, broken down by region (section 327 [2] no. 5 SolvV).

<sup>1</sup> Rounding differences of +/- one unit may arise in the following tables due to computational reasons.

The following table shows non-performing and past due loans, broken down by internal risk-oriented industry category.

EUR million									
Sectors	Total utilization from non-performing loans (with write-down requirement)	Past due loans (without write-down requirement)	Specific valuation allowances	Portfolio valuation allowances	Provisions	Net additions/reversals of specific/ portfolio allowances/provisions	Impairments	Recoveries on loans previously written off	Impairments/reversals of impairment losses on investment securities
<b>Financial institutions</b>	<b>992</b>	<b>11</b>	<b>339</b>	<b>38</b>	<b>78</b>	<b>79</b>	<b>35</b>	<b>0</b>	<b>8</b>
Savings banks and Landesbanks	0	0	1	1	0	0	0	0	0
Private banks	221	11	174	6	2	8	8	0	4
Other banks	94	0	2	9	75	69	0	0	3
Financial services (excluding banks and insurance companies)	677	0	163	23	1	1	26	0	2
<b>Companies and organizations, self-employed private individuals, sole proprietorships</b>	<b>6 258</b>	<b>18</b>	<b>2 158</b>	<b>139</b>	<b>155</b>	<b>-87</b>	<b>30</b>	<b>9</b>	<b>250</b>
Automotive	511	0	218	13	8	-75	1	0	1
Construction	633	4	276	13	25	3	2	0	0
Cross-industry manufactured goods	130	1	51	5	2	-4	1	0	0
Healthcare	117	0	51	4	1	-3	2	0	0
Commercial real estate (CRE)	2 410	4	496	44	8	-60	2	0	0
Foodstuffs trade and other non-cyclical consumer goods	149	0	50	4	17	20	0	2	0
Transport and logistics	545	1	68	15	1	0	1	0	238
Insurance	50	0	17	1	17	15	0	0	-1
Utilities	28	0	19	4	2	0	0	0	0
Housing	292	0	114	0	18	2	2	0	0
Other broadly diversified industries	1 394	8	798	37	56	15	18	7	12
<b>Public sector</b>	<b>647</b>	<b>19</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>514</b>
<b>Employed private individuals</b>	<b>367</b>	<b>4</b>	<b>130</b>	<b>25</b>	<b>3</b>	<b>-24</b>	<b>13</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>8 265</b>	<b>52</b>	<b>2 630</b>	<b>210</b>	<b>237</b>	<b>-31</b>	<b>78</b>	<b>9</b>	<b>773</b>

Figure 9: Non-performing and past due loans, broken down by industry (section 327 [2] no. 5 Solv).

## Development of provision for credit losses.

The following table shows the change in provision for credit losses in the 2011 financial year.

EUR million						
	Opening balance 1 Jan. 2011	Additions	Reversals/ unwinding	Utilization	Exchange rate-related and other changes	Closing balance 31 Dec. 2011
Specific valuation allowances	3 433	528	640	662	-29	2 630
Portfolio valuation allowances	254	137	179	2	0	210
Provisions	123	178	55	10	0	237
<b>Total</b>	<b>3 810</b>	<b>843</b>	<b>874</b>	<b>674</b>	<b>-29</b>	<b>3 077</b>

**Figure 10:** Development of provision for credit losses (section 327 [2] no. 6 SolvV).

The portfolio of provision for credit losses was reduced year-on-year by EUR 733 million. This was the result mainly of lower additions (reduced by EUR 603 million compared with 2010).

There is a difference between the risk costs recognized in the annual financial statements under IFRS (provision for credit losses) and the net amount from additions and reversals recognized in the table above.

This results from reversals from unwinding (discounting interest income for one year in accordance with IFRS) which are included in this disclosure report in the »Reversals« column but are not included in the risk costs pursuant to IFRS. In addition, there is differing recognition for the whole development of risk provisioning due to the fact that the basis of consolidation is not the same (see page 17).

# 6 Counterparty risk in the CRS approach.

(section 328 SolvV)

In order to calculate regulatory capital requirements according to the credit risk standard approach, only external credit rating assessments from the following ratings agencies are consulted:

- Standard & Poor's Ratings Services
- Moody's Investors Service
- FitchRatings Ltd.
- Euler Hermes Rating GmbH

These are applied on a standardized basis for all relevant CRSA receivables classes.

If a position-based external rating does not exist for a receivable in CRSA, this is considered unrated. For items that are not rated (with the exception of those for which there is an effective short-term credit rating assessment in accordance with section 45 (1) SolvV), the Bank must assign an effective credit rating assessment by means of comparable receivables.

Under section 45 (2) SolvV, comparable receivables are receivables which must be assigned to a CRSA item from the same borrower and for which there is a usable issue rating from a ratings agency nominated by the Bank. The grade of the comparable receivable must be taken into account when deriving the credit rating assessment to be used.

In the LBBW, potential further (comparable) receivables from the same borrower which have a usable issue rating are calculated mechanically using customer-related information. Using the stipulated selection criteria, the reporting software will then allocate a rating to a previously unrated receivable, if available.

## **Total exposure amounts under the CRS and IRB approach calculated using the simple risk-weighting method.**

The following table shows the exposure amounts by risk-weighting based on external ratings or fixed regulatory flat-rate weightings.

For the CRSA, exposure amounts are presented before and after credit risk minimization effects from collateral. Due to collateral, there may be both a change within the risk weight classes and a decrease in the volume of the exposure amounts.

IRB approach items with a fixed risk weight are also reported in figure 11. These are exposure amounts for equity investments, for items secured with real estate liens and for special-purpose finance.

Accordingly, items in the equity investments receivables class which are not traded on the stock exchange and are part of a sufficiently diversified portfolio in accordance with section 98 SolvV are reported with a risk weight of 190%. Equity investments traded on the stock exchange are recognized with a risk weight of 290% and all other equity investments with a risk weight of 370%. An item secured with real estate liens in accordance with section 85 (5) SolvV is given the alternative risk weight of 50%. Special-purpose finance in accordance with section 97 SolvV is recognized at risk weights of between 0% and 115% or of 250%, depending on the remaining term and risk weight class.

EUR million			
Risk weight	Total exposure amounts before credit risk minimization under CRSA	Total exposure amounts after credit risk minimization under CRSA	IRB approach (equity investments, items secured by real estate liens and special purpose finance)
0%	79 568	91 412	140
10%	2	2	
20%	4 238	4 408	
35%	6 980	6 987	
50%	723	873	2 031
70%	0	377	432
75%	9 343	8 862	
90%			322
100%	33 947	13 081	
115%			398
150%	605	517	
190%			890
200%	0	0	
250%			36
290%			16
350%	0	0	
370%			119
1 250%	25	0	
Capital deduction	0	0	
Other risk weights	116	116	
<b>Total</b>	<b>135 547</b>	<b>126 635</b>	<b>4 384</b>

**Figure 11:** Total exposure amounts under the CRSA and IRB approach exposure amounts subject to the simple risk-weighting method (section 328 [2] and 329 Solv).



# 7 Counterparty risk in the IRB approach.

(section 335 SolvV)

Since 1 January 2008, LBBW has been granted approval for the basic IRB approach by BaFin for both the Bank and the entire LBBW Group. Since then, regulatory capital backing has been based on the following rating systems in line with the IRB approach:

- banks
- country and transfer risks
- insurance companies
- project finance
- corporates
- international real estate finance
- Sparkassen-Immobilien­geschäftsRating
- DSGVO-Haftungsverbund
- Sparkassen-StandardRating
- specific special rating classes
- IAA procedure for measuring securitizations
- leasing
- leveraged finance

For all other portfolios of the LBBW (Bank) and all other companies included in the regulatory basis of consolidation of the LBBW Group (with the exception of LBBW Luxemburg S.A.) which do not yet use the IRB approach, the CRSA is used temporarily.

By the end of 2012, all materially significant portfolios and subsidiaries will be measured according to the IRB approach. There is an approved implementation plan for the transition of these portfolios to the IRB approach for both the LBBW Group and the LBBW (Bank).

LBBW applies the regulation on portfolio business eligible for exceptions in accordance with to section 68 (3) SolvV for private construction financing entered into before 1 November 2006 and the option of portfolio protection for equity investments in accordance with section 338 (4) SolvV. Accordingly, capital backing for these positions is calculated in accordance with the rules applicable to the CRSA.

## Description of the internal rating procedures.

The internal rating procedures of LBBW can basically be divided into two categories:

- Scorecard-based rating procedure  
A scorecard procedure is a standardized valuation procedure. The development of this procedure consists of the valuation of quantitative and qualitative factors and is supplemented by the inclusion of liability relationships. Finally, transferals and warning signals are included in the rating result.
- Simulation-based rating procedure  
In contrast to a scorecard-based rating procedure, which estimates the probability of default on the basis of the current status of factors, a simulation-based rating generates scenarios for the future net cash development of, for example, a project finance company (SPV). This process analyzes the entire term of the exposure and its structure. In addition, the simulation also includes macroeconomic scenarios (e. g. interest and exchange rates) if relevant.

The following table gives a detailed overview of the various rating procedures.

Business area	Subgroup	Rating/ assessment procedure	Methodology
<b>Private and investment customers</b>	<b>Private loans</b>	For liabilities > EUR 500 thousand (of which unsecured > EUR 250 thousand): basic RKV, in future Sparkassen Kundenscoring (SKS)	Expert-based procedure
	<b>Employed natural persons with private construction finance</b>	Sparkassen Kundenscoring, previously: claim and portfolio scoring for construction finance	Scorecard-based rating procedure
	<b>Private customers with main cash flow from renting and leasing</b>	Segment real estate compact rating in Sparkassen-Immobilien-geschäftsRating	Simulation-based rating procedure
<b>Corporate customers</b>	<b>Basic customers</b>	Sparkassen-StandardRating plus customer compact rating (CCR) (liability between EUR 50 thousand and EUR 250 thousand)	Scorecard-based rating procedure
	<b>Business customers</b>		
	<b>Corporate customers</b>		
	<b>Leasing customers</b>	Scoring of leasing customers	Scorecard-based rating procedure
	<b>Corporate customers/ key accounts</b>	Rating for corporates	Scorecard-based rating procedure
	<b>Non-profit organizations</b>	Basic RKV	Expert-based procedure
<b>Project and special-purpose finance</b>	<b>National commercial real estate</b>	Sparkassen-Immobilien-geschäftsRating	Simulation-based rating procedure
	<b>International commercial real estate</b>	Rating for international commercial real estate (ICRE), if necessary, RKV for special purpose finance	Simulation-based rating procedures
	<b>Open-ended real estate funds</b>	Rating for open-ended real estate funds, switch to Sparkassen-Immobilien-geschäftsRating planned	Scorecard-based rating procedure
	<b>Aircraft finance</b>	Airlines: rating for corporates	Scorecard-based rating procedure
		SPC: rating for aircraft finance	Simulation-based rating procedure
		if necessary, RKV for special purpose finance	Scorecard-based rating procedure
	<b>Other project finance</b>	Rating for project finance	Simulation-based rating procedure
		RKV for special purpose finance	Scorecard-based rating procedure
<b>SPC real estate leasing</b>	Rating for leasing refinancing	Simulation-based rating procedure	
<b>Leveraged finance</b>	Rating for leveraged finance	Scorecard-based rating procedure	

Business area	Subgroup	Rating/ assessment procedure	Methodology
<b>Wholesale</b>	<b>Banks</b>	Rating for banks	Scorecard-based rating procedure
		Rating for DSGVO-Haftungsverbund	Simulation-based rating procedure
	<b>Insurance companies</b>	Rating for insurance companies	Scorecard-based rating procedure
	<b>Leasing companies</b>	Rating for leasing companies	Scorecard-based rating procedure
	<b>Securitization items against own ABCP programs</b>	Internal Assessment Approach for securitizations for ABCP program Weinberg	Simulation-based rating procedure
	<b>Other securitization transactions</b>	RKV for ABS	Simulation-based rating procedure
	<b>National administrative authorities/public sector loans</b>	Rating inheritance	n/a
	<b>International administrative authorities</b>	Rating for international administrative authorities	Scorecard-based rating procedure
	<b>Municipal corporations (KNU)</b>	Sparkassen-StandardRating	Scorecard-based rating procedure
		Corporates rating	Scorecard-based rating procedure
		Basic RKV	Expert-based procedure
	<b>Sovereigns &amp; transfer risks</b>	Rating for country and transfer risks	Scorecard-based rating procedure
	<b>Government supported enterprises (GSE)</b>	RKV for government supported enterprises	Scorecard-based rating procedure
	<b>Funds (individual funds)</b>	Rating procedures for funds	Scorecard-based rating procedure
<b>Corporate items</b>	<b>Holding/group structures</b>	Basic RKV	Expert-based procedure
	<b>Strategic equity investments</b>	Suitable rating in each case (bank equity investments with bank rating etc.), provided there is no reason to forego a rating	Subject to procedure
		Otherwise basic RKV	Expert-based procedure

Figure 12: Internal rating procedures of LBBW (section 335 [1] no. 2a SolvV).

All rating procedures produce a result in terms of a one-year probability of default in the local currency (local currency PD). The transfer risk which is sometimes present is taken into account in foreign currency (foreign currency PD). Using the master scale used uniformly within the Savings Banks Finance Group,

these probabilities of default are translated into a rating class. The master scale differentiates between a total of 18 rating classes, the first of which is divided into eight further subclasses. Rating classes 16 to 18 represent default classes.

		LBBW rating master scale	Probability of default
Creditworthiness classes	Investment Grade	1(AAAA)	0.00%
		1(AAA)	0.01%
		1(AA+)	0.02%
		1(AA)	0.03%
		1(AA-)	0.04%
		1(A+)	0.05%
		1(A)	0.07%
		1(A-)	0.09%
	Speculative Grade	2	0.12%
		3	0.17%
		4	0.26%
		5	0.39%
		6	0.59%
		7	0.88%
		8	1.32%
Default classes	9	1.98%	
	10	2.96%	
	11	4.44%	
	12	6.67%	
	13	10.00%	
	14	15.00%	
	15	20.00%	
	16	100.00%	
	17	100.00%	
	18	100.00%	

Figure 13: LBBW rating master scale (section 335 [1] no. 2a SolvV).

#### **Further use of internal estimates.**

The internal rating procedures of LBBW are key instruments in the credit process and credit risk management. As a component of the credit application and the foundation for calculating competency levels, the rating results are incorporated into the lending process. The rating results are also used to determine the credit risk strategy, define support intensity and calculate the standard risk costs.

The ratings form a basis for the overall bank management instruments of portfolio management, capital allocation, stress tests and risk-bearing capacity and influence the calculation of impairment in line with IFRS.

#### **Control mechanisms for the rating systems.**

Within LBBW, responsibility for the rating systems lies with the credit risk controlling department. Credit risk controlling plays the role of the counterparty risk monitoring unit and is responsible in particular for the design, selection, introduction, ongoing monitoring and performance of rating systems.

The majority of rating procedures at LBBW were developed within the scope of joint projects, whose further cooperation was put on a legal and organizational footing by forming Sparkassen Rating und Risikosysteme GmbH, Berlin (SR) and RSU Rating Service Unit GmbH & Co. KG, Munich (RSU). SR is responsible for processes for companies and business clients, private customers and commercial real estate financing. All other jointly developed processes are regularly maintained and developed further as appropriate by RSU. LBBW's employees support these activities.

The rating systems of LBBW are subject to a regular maintenance process, the central element of which is conducted under the guidance of RSU or SR (this

activity was outsourced in line with section 25a KWG and presented accordingly). The database consists of the pooled data of RSU (pooled data for Landesbanks) and SR (pooled data from Landesbanks and savings banks).

The core element of the maintenance process is the annual validation, the central task of which is backtesting, benchmarking and checking the model design and data quality. The results are presented to a working group responsible for independently reviewing the validation and ensuring the consistency of the methods used for all processes in all modules. In validation, the rating procedure and its parameter estimates are either confirmed or adjusted and optimized as necessary. Before introducing modified procedures, LBBW performs a test to ensure representativeness. In turn, this ensures that the rating procedures are also accurate and valid for the LBBW portfolio and can therefore be applied without restriction. In addition, the correct use of rating systems is checked by rating controlling at LBBW.

#### **Process of allocating items or borrowers to rating classes or risk pools.**

The receivable classes are calculated at a system level located downstream from the operating posting systems. As a rule, each transaction included in an IRB approach portfolio is allocated to a receivable class. Allocation is usually based on the rating procedure used. If a clear allocation using the rating procedure is not possible, receivables classes are distinguished further on the basis of additional information, such as customer group allocation or transaction-specific information such as collateral. The rating procedures used for each class of receivable and their scope are described below. Allocation is an essential element of capital backing.

**Central governments receivables class.**

Country and transfer risks are measured using a special rating procedure at LBBW. The key points are the economic situation, the political environment and the domestic and foreign economic trends of the respective territory. The rating procedure for country and transfer risk is used to classify receivables from obligors assigned to the »central governments« IRBA receivables class in line with section 74 SolvV.

**Banks receivables class.**

The rating procedure for banks classifies all obligors which are assigned to the »banks« IRBA receivables class in line with section 75 SolvV. The aim of rating procedures for banks is to measure their global risks of default. In terms of content, their use is limited to rating items that mostly perform typical banking transactions (material interpretation of the term »bank«). Thus, bank holdings, home savings and loan associations, state finance agencies, financial and finance companies and financial service providers should also be rated with the banks module regardless of their legal form if they mostly perform typical banking transactions. Similarly, institutions that do not have a banking license but effectively mostly perform typical banking activities are rated using the rating procedure for banks. Furthermore, only rating items that are subject to regulation and therefore operate in a regulated environment are rated.

**Corporates receivables class.**

The rating systems for corporate clients classify obligors assigned to the »corporates« IRBA receivables class in line with section 80 SolvV. A substantial portion of this portfolio is subject to the corporates rating. Large domestic customers with consolidated sales of more than EUR 100 million and all international corporate clients are rated using the corporates rating. Domestic borrowers with sales of less than EUR 100 million are rated with the savings bank standard rating and can be included in the »corporates« receivables class under certain conditions.

Also, banks assessed with the rating procedure for insurance companies are assigned to this class.

The aim of the rating for insurance companies is to measure the risks of default for insurance companies. For this purpose, »insurance companies« also include companies that generate most of their income from typical insurance transactions, which also includes bancassurance providers.

**Corporates receivables class:  
special-purpose finance subclass.**

The rating systems for special-purpose finance clients classify obligors also assigned to the »corporates« IRBA receivables class in line with section 81 SolvV. They are a subclass of the corporates receivables class.

Ratings for project finance are usually based on the net cash or on the user/recipient of the project results. Compared with other special-purpose finance, project finance is distinguished by the fact that net cash is generated from a narrowly defined activity and not several business concepts in parallel.

Real estate lending business where the loan is served only from income in the form of rental, lease or disposal proceeds arising from the financed item is also assigned to the special-purpose finance subclass. The rating procedure developed for this is based on the total international commercial real estate finance business if the property being financed is located abroad.

The scope of the rating procedure for aircraft financing includes both the financing of a special-purpose vehicle (SPV) and granting direct loans to airlines relating to the financed item (direct loan relating to item, known as virtual SPV). All financing in rating procedure's scope of application for aircraft financing belongs to the special-purpose finance receivables class.

**Equity investments receivables class.**

Equity investments are processed in a special organizational unit. Depending on the type of equity investment, the same rating procedures can be used as for the receivables classes stated above. System allocations and product numbers ensure that these can be clearly identified and thus assigned to the above receivables classes or the equity investments receivables class. In addition, some equity investments are measured using the standard approach in the context of grandfathering (portfolio protection) (see »Capital requirements«, page 13).

**Retail business receivables class.**

Receivables due to LBBW which are assigned to retail business are not yet measured according to the IRB approach.

LBBW applies the regulation on portfolio business eligible for exceptions for private construction financing. LBBW is targeting authorization to use self-estimated loss ratios (IRB Retail).

**Exposure amounts by probability of default classes in the IRB approach.**

The following table shows the following key figures, based on the receivables classes recognized in the IRB approach – central governments, banks, corporates and equity investments – and broken down by risk class.

- The total exposure amounts and the exposure amounts for unutilized credit commitments
- Average probabilities of default (PDs)
- Average risk weights
- The total exposure amounts weighted with the respective average risk weights

EUR million					
Receivables class	Exposure amounts		Average PD in %	Average risk weight in %	Exposure amount weighted with risk weight
		of which outstanding credit commitments			
<b>PD classes 1(AAAA) – 1(A-)</b>					
0.00% to ≤ 0.10%					
Central governments	53 768	3 402	0.01	2.65	1 425
Banks	39 988	88	0.05	9.82	3 928
Corporates	19 238	2 338	0.06	19.10	3 675
of which small- and medium-sized enterprises (SMEs)	1 456	65	0.07	15.76	230
of which special purpose finance	3 490	55	0.06	21.07	735
of which purchased receivables	0	0	0.00	0	0
Equity investments	205	0	0.02	73.67	151
<b>Total</b>	<b>113 199</b>	<b>5 828</b>			<b>9 179</b>
<b>PD classes 2 – 5</b>					
0.11 % to ≤ 0.47%					
Central governments	370	0	0.21	33.62	124
Banks	11 098	14	0.18	24.77	2 749
Corporates	29 984	4 310	0.22	42.52	12 750
of which small- and medium-sized enterprises (SMEs)	1 758	131	0.24	37.04	651
of which special purpose finance	5 193	213	0.24	44.38	2 304
of which purchased receivables	0	0	0.00	0	0
Equity investments	9	0	0.13	95.13	8
<b>Total</b>	<b>41 461</b>	<b>4 324</b>			<b>15 631</b>
<b>PD classes 6 – 10</b>					
0.48% to ≤ 3.62%					
Central governments	286	0	1.83	102.81	294
Banks	2 495	10	0.88	49.36	1 231
Corporates	20 861	1 543	1.29	96.87	20 208
of which small- and medium-sized enterprises (SMEs)	2 481	127	1.38	86.76	2 153
of which special purpose finance	5 382	322	1.42	104.53	5 626
of which purchased receivables	0	0	0.00	0	0
Equity investments	5	0	1.88	326.63	15
<b>Total</b>	<b>23 647</b>	<b>1 553</b>			<b>21 748</b>



EUR million					
Receivables class	Exposure amounts		Average PD in %	Average risk weight in %	Exposure amount weighted with risk weight
		of which outstanding credit commitments			
<b>PD classes 11 - 15</b>					
3.63% to ≤ 99.99%					
Central governments	838	0	10.05	200.94	1 684
Banks	305	4	9.21	199.01	607
Corporates	3 312	72	8.76	179.54	5 946
of which small- and medium-sized enterprises (SMEs)	349	6	7.67	139.55	486
of which special purpose finance	1 512	23	8.74	187.53	2 836
of which purchased receivables	0	0	0.00	0	0
Equity investments	0	0	0.00	0	0
<b>Total</b>	<b>4 455</b>	<b>76</b>			<b>8 237</b>
<b>PD classes 16 - 18</b>					
100 % (default)					
Central governments	1 175	6	100.00	-	0
Banks	264	0	100.00	-	0
Corporates	5 407	104	100.00	-	0
of which small- and medium-sized enterprises (SMEs)	292	2	100.00	-	0
of which special purpose finance	1 816	48	100.00	-	0
of which purchased receivables	0	0	0.00	-	0
Equity investments	0	0	0.00	-	0
<b>Total</b>	<b>6 846</b>	<b>110</b>			<b>0</b>
<b>Total</b>					
Central governments	56 437	3 408	2.12	6.25	3 527
Banks	54 150	116	1.51	15.73	8 515
Corporates	78 802	8 367	7.64	54.03	42 579
of which small- and medium-sized enterprises (SMEs)	6 336	331	5.65	55.55	3 520
of which special purpose finance	17 393	661	11.72	66.13	11 501
of which purchased receivables	0	0	0.00	0.00	0
Equity investments	219	0	0.07	79.75	174
<b>Total</b>	<b>189 608</b>	<b>11 891</b>			<b>54 795</b>

**Figure 14:** Total credit volume by credit rating assessment (not including Retail) in the IRB approach (section 335 [2] no. 1, 2a and 2c SolvV).

### Actual losses incurred in the lending business.

The following table shows actual losses incurred in the lending business reported in accordance with SolvV using the IRB approach (including banking book securities, but not including securitizations that form a separate receivables class within SolvV, and including

derivatives). Actual losses are defined as the total of direct write-downs and additions and reversals of specific valuation allowances/provisions less recoveries on loans and advances already written off.

Receivables classes	Actual losses in the lending business (including securities and derivatives)		Change
	in the period 1 Jan. 2011 to 31 Dec. 2011	in the period 1 Jan. 2010 to 31 Dec. 2010	
Central governments	756	11	745
Banks	6	12	-6
Corporates	214	460	-246
Equity investments	26	15	11
Retail business	0	0	0
of which qualified, revolving	0	0	0
of which residential real estate loans	0	0	0
of which other	0	0	0
<b>Total</b>	<b>1 002</b>	<b>498</b>	<b>504</b>

Figure 15: Actual losses in the lending business (section 335 [2] no. 4 SolvV).

2011 was a very positive year for the corporates receivables class. Actual losses incurred in the lending business declined by half year-on-year. The default rates fell further and were somewhat lower than the long-term mean in 2011.

The central government receivables class was burdened by the sovereign crisis in 2011 and the Greek default led to significant losses.

### Expected and actual losses incurred in the traditional lending business.

The following table compares the expected and actual losses for transactions reported under the IRB approach in accordance with SolvV in the 2011 reporting year. The information relates only to the traditional lending business (not including trading book securities, securitizations or derivatives) for the respective receivables classes in the IRB approach.

Actual losses are defined as the total of direct write-downs and additions and reversals of specific valuation allowances/provisions less recoveries on loans and advances already written off. The expected loss (EL) is calculated according to the IRB approach and only includes the lending business with a probability of default (PD) of less than 100% as at 1 January 2011.

The ongoing new rating of customers for whose transactions capital backing has previously been

calculated in line with the requirements of the CRSA due to a lack of internal rating, has led to a reclassification of the transactions from the CRSA into the IRB approach. This increases the expected losses for transactions reported using the IRB approach. Rating classifications that have changed since the previous year continue to influence the expected loss.

EUR million						
Losses in traditional lending business (excluding securities in the banking book and derivatives)						
Receivables classes	Period 1 Jan. 2011 to 31 Dec. 2011		Period 1 Jan. 2010 to 31 Dec. 2010		Period 1 Jan. 2009 to 31 Dec. 2009	
	Expected loss (EL)	Actual loss	Expected loss (EL)	Actual loss	Expected loss (EL)	Actual loss
Central governments	0	0	1	0	1	9
Banks	17	1	15	1	21	23
Corporates	458	170	441	443	294	263
Equity investments	17	10	1	3	3	2
Retail business	0	0	0	0	0	0
of which qualified, revolving	0	0	0	0	0	0
of which residential real estate loans	0	0	0	0	0	0
of which other	0	0	0	0	0	0
<b>Total</b>	<b>492</b>	<b>181</b>	<b>458</b>	<b>447</b>	<b>319</b>	<b>297</b>

Figure 16: Expected and actual losses in the traditional lending business (section 335 [2] no. 6 SolvV).

# 8 Credit risk minimization techniques.

## (section 336 SolvV)

### **Process of controlling and recognizing credit risk minimization techniques.**

Control is effected in line with the specifications of the Bank's regulations on the types of collateral permitted and the carrying amounts. In order to include collateral in the calculation of capital adequacy, LBBW has implemented the regulatory requirements in collateral management.

### **Presentation of the main types of collateral.**

Taking costs and benefits into consideration, all types of collateral can be used to reduce credit risk, though fungible collateral with sustained value is preferred.

Collateral primarily includes traditional forms of collateral, such as real estate liens, guarantees, sureties, securities, pledges, assignments, and transfers by way of security. LBBW aims to achieve risk-adequate collateralization depending on the type of product, intended use, maturity and repayment terms.

At present, the following collateral is considered to reduce the required capital charge in the context of the SolvV:

- guarantees, particularly warranties and sureties
- real estate secured by real estate liens (already included in the receivables classification where relevant)
- registered liens (aircraft)
- securities
- life insurance companies
- cash contributions (in own or third-party custody)
- export credit insurance companies

At LBBW, guarantees/warranties from domestic and foreign local authorities and banks, as well as guarantees from state export credit insurers are of particular significance. These usually consist of guarantors with investment grade credit ratings.

In addition to conventional collateral in the lending business, LBBW also utilizes various risk-reducing hedging instruments for trading and capital markets business for regulatory purposes. It mainly uses:

- financial collateral for securities
- eligible guarantees and credit derivatives
- netting agreements for derivatives plus collateral agreements (in accordance with section 9)

Credit derivatives are concluded mainly with banks that have very good credit ratings overall.

The main hedging instruments used at LBBW are also employed for regulatory purposes as they satisfy the requirements of eligible credit risk-reducing techniques.

The subsidiaries of LBBW do not apply any risk minimization techniques that go beyond those of the LBBW (Bank).

### **Measuring and managing the collateral used.**

Credit collateral is entered in the collateral management system (SIM) with all relevant information and is updated on an ongoing basis. The internal processes and systems in place ensure that collateral is only used for weighting if it meets all the requirements of SolvV.

The procedures for measuring and managing the collateral eligible under SolvV are compiled in the Bank's regulations. Collateral is measured on the basis of appraisals prepared by recognized experts or on the basis of conservative, internal principles, or – in the case of guarantees – on the basis of the guarantor's credit rating assessment.

Values are calculated and carrying amounts are reviewed by the back office divisions.

Collateral is measured on its acceptance. It is reviewed regularly during the term of the loan for any changes in value and remeasured when necessary. Regardless of this, collateral is checked for impairment immediately if negative information becomes known. If there is a significant positive correlation between the value of an item of collateral and the borrower providing the collateral, the calculated collateral value is of no significance for the credit decision.

The decision as to whether or not the transaction can be concluded without measurable collateral is made in line with the assignment of approval authorities.

In order to minimize legal risks, the legal department has developed a large number of its own contract forms and sample contracts, or has approved them for use by the business areas of LBBW after examining them. Legal enforceability is ensured at all times and general legal conditions are monitored on an ongoing basis.

Credit derivatives with a hedging effect are essentially charged as guarantees for regulatory purposes. The procedure for recognizing a credit derivative as collateral is set out accordingly in the internal provisions. One exception to charging credit derivatives as a guarantee is on-balance sheet forms of credit derivative; such as own credit-linked note issues as the protection purchaser, which are charged as cash hedging, i. e. as financial collateral.

### **Management of concentration risks in the credit and collateral portfolio.**

In measuring the risk arising from collateral, LBBW distinguishes between collateral in conventional lending business and collateral in trading business.

LBBW's collateral portfolio in the conventional lending business is broken down into personal collateral, balances and securities, as well as real estate as the main hedging instrument. Options exist for evaluating real estate, e. g. according to region or type of use. The collateral portfolio is regularly presented in management reporting and includes LBBW's largest collateral providers.

Concentrations of collateral in capital markets business are limited by a restrictive collateral policy. Individual and portfolio risks (e. g. those in relation to repo and securities lending transactions) are regularly monitored by means of a steering committee within trading. Guarantees and credit derivatives are concluded with counterparties with strong credit ratings and are charged at the corresponding individual limits. Concentrations of collateral in the case of OTC derivatives are prevented by only accepting cash collateral or first class sovereign bonds. In addition, timely measurement of collateral contributes to risk limitation.

**Total amount of secured exposure amounts  
(not including securitization).**

The following table shows the exposure amounts by CRSA receivables classes secured by financial collateral, life insurance or guarantees (including warranties and credit derivatives).

EUR million			
Receivables class	Financial collateral	Life insurance	Guarantees
Central governments	61	0	0
Regional governments	0	0	0
Other public sector	3	0	5
Multilateral development banks	0	0	0
International organizations	0	0	0
Banks	3 785	0	1
Covered bonds issued by banks	0	0	0
Corporates	4 426	332	14 800
Retail business	95	182	211
Items secured by real estate	0	0	0
Investment units	0	0	0
Investments	0	0	0
Other items	25	0	0
Past due items	1	8	6
<b>Total</b>	<b>8 396</b>	<b>522</b>	<b>15 023</b>

**Figure 17:** Total amount of the secured exposure amounts under CRSA (not including securitization) (section 336 no. 2 SolvV).

The following table shows the exposure amounts by receivables classes as per the IRB approach secured by financial collateral, other/physical collateral, life insurance or guarantees (including warranties and credit derivatives).

EUR million				
Receivables class	Financial collateral	Other/ physical collateral	Life insurance	Guarantees
Central governments	497	0	0	1 767
Banks	25 465	0	0	1 085
Corporates	4 633	9 750	225	3 926
Retail business	0	0	0	0
of which qualified, revolving	0	0	0	0
of which residential real estate loans	0	0	0	0
of which other	0	0	0	0
Equity investments	0	0	0	0
of which simple risk weight approach	0	0	0	0
of which model-driven	0	0	0	0
of which PD/LGD approach	0	0	0	0
Other assets not relating to credit	0	0	0	0
<b>Total</b>	<b>30 595</b>	<b>9 750</b>	<b>225</b>	<b>6 778</b>

**Figure 18:** Total amount of the secured exposure amounts under IRB approach (not including securitization) (section 336 no. 2 SolvV).

# 9 Derivative counterparty risks.

(section 326 SolvV)

## **Capital allocation on the basis of economic capital.**

LBBW limits derivative positions at the client level. Capital allocation is carried out on the basis of economic capital. However, derivative positions are not limited separately. Limiting is carried out in line with the generally applicable processes for limiting counterparty risks – see section 4 »Economic capital management«.

## **Risk reduction measures.**

At LBBW, risk reduction measures in connection with derivative counterparty risk items are applied through the conclusion of master netting agreements and the hedging of OTC derivatives.

The procedure for concluding and managing master agreements for OTC derivative netting and collateral agreements is stipulated in the internal regulations of the Bank and the working instructions of the responsible back office. Netting for OTC derivatives has been used for equity and interest rate derivatives since 2002, since 2004 for currency derivatives and since 2009 for credit derivatives.

Furthermore, derivative transactions (with the exception of credit derivatives) are concluded with savings bank customers via an intermediary procedure, which are guaranteed by the intermediary savings bank.

## **Impact of a rating downgrade on the collateral amount.**

In the majority of cases, the agreements concluded do not provide for an increase in collateral in the event of an LBBW rating downgrade. However, a gradual increase in collateral is provided for in the event of a downgrade of LBBW for some individual counterparties.

## **Loan loss allowances.**

Credit risks for derivative transactions are recognized by means of a credit valuation adjustment used in addition to the market valuations. This applies both for HGB and for IFRS.

## **Correlation between market price risks and credit risks.**

Market price risks and credit or counterparty risks are pooled using economic capital within the Group-wide economic capital limit.

The economic capital of the various types of risk is aggregated taking correlations into account. Correlation assumptions between market price risks and credit risks are based on a time series analysis that covers an eight-year period and observing the changes in value generated on the basis of LBBW's present portfolio. A conservative premium is applied to the correlation.



### Derivative counterparty risk items and netting positions.

The following table shows the derivative counterparty risk items in the form of the positive market values (corresponds to the potential replacement costs before add-on in accordance with section 19 SolvV) before and after charging derivative netting positions and collateral, broken down by types of contract.

The increase in interest rate-related contracts is largely due to the positive market development of interest rate development. This is attributable in particular to lower interest rates on capital markets in the financial year.

EUR million				
Type of contract	Positive replacement costs before netting and collateral	Netting opportunities	Eligible collateral	Positive replacement costs after netting and collateral
Interest rate-related contracts	61 923			
Currency-related contracts	6 632			
Share/index-related contracts	584			
Credit derivatives	1 068			
Commodity-linked contracts	126			
Other contracts	22			
<b>Total</b>	<b>70 355</b>	<b>60 633</b>	<b>2 142</b>	<b>7 580</b>

Figure 19: Positive replacement costs before and after charging netting agreements and collateral (section 326 [2] SolvV).

Unlike in the annual report, transactions are classified here according to the definition of market risk positions in SolvV.

The following table shows the counterparty risks of the derivative counterparty risk items to be taken into account in the form of the exposure amount after credit risk minimization (credit conversion factor [CCF]) generally not taken into consideration for derivatives) for the respective method used. LBBW uses the market measurement method for this.

EUR million				
	Accrual method	Mark-to-market method	Standard method	Internal model
Counterparty default risk positions	0	21 193	0	0

**Figure 20:** Counterparty default risk (section 326 [2] SolvV).

The following table shows the nominal value of credit derivatives eligible for regulatory purposes, which are used for the purpose of hedging credit risks in the banking book.

EUR million	
	Nominal value of hedging
Credit derivatives (protection buyer)	2 441

**Figure 21:** Nominal value of credit derivatives for the purpose of hedging credit risks in the banking book (section 326 [2] SolvV).

The following table shows the nominal values of the credit derivatives bought and sold for LBBW's own credit portfolio, broken down by type of credit derivative. Credit derivatives from brokering activities were not used by LBBW in 2011.

EUR million		
Type of contract	Nominal value from use of own credit portfolio	
	Bought	Sold
Credit default swaps	25 640	36 222
Total return swaps	1 000	1 375
Credit linked notes	2 099	278
Other	0	0
<b>Total</b>	<b>28 739</b>	<b>37 875</b>

Figure 22: Nominal value of credit derivatives by type of use (section 326 [2] SolvV).

Unlike in the annual report, transactions are classified here according to the definition of market risk positions in SolvV.

# 10 Securitizations.

## (section 334 SolvV)

LBBW holds securitization exposures in its portfolio from its role as investor, sponsor and originator.

LBBW did not enter into any new business as an investor in the area of securitization in 2011. It was decided to run down the credit substitute business as part of the restructuring of LBBW. This decision will lead to further gradual contraction of the securitization portfolio in the next few years.

LBBW still has exposure to the following products by virtue of its activities in recent financial years: residential mortgage-backed securities (RMBS), collateralized debt/loan obligations (CDO/CLO), commercial mortgage-backed securities (CMBS) and other asset-backed securities (ABS). In addition, LBBW also has exposure to synthetic CDOs, where firstly, protection is bought and sold on different parts of the capital structure in the context of relative value strategies; and secondly, from a risk/return point of view, investments are made in selected parts of the capital structure.

The securitization positions in which LBBW is invested are generally rated by at least one or usually two recognized rating agencies (Standard & Poor's, Moody's or Fitch Ratings) and mostly have a good to first-class rating.

LBBW acts as a sponsor and/or arranger of securitization programs in the context of customer transactions, offering the customers innovative, capital market-oriented financing alternatives. In this context, LBBW can be a party to a securitization as an investor, if necessary.

In its role as sponsor and/or arranger of customer transactions, LBBW continued to support high net-worth SME's in Germany in particular in 2011 too. For this reason, this securitization segment is not impacted by the Bank's plans to scale back its operations in this area and is to be expanded further as part of the target customer orientation. The objective here is to exploit

the cross-selling potential with existing customers and to employ this form of financing selectively for attracting new customers, maintaining a balanced risk/reward ratio at LBBW all the while.

As part of its securitization programs, LBBW provides the appropriate special-purpose vehicles »Weinberg Funding« and »Weinberg Capital« with liquidity facilities, as well as swap lines if necessary, in addition to its role as a service provider. LBBW also acts as security trustee for these SPVs.

Among its services, LBBW handles the structuring, administration and coordination of customer transactions. It also manages the bank accounts of the SPVs at LBBW. Furthermore, LBBW acts as a dealer for the euro commercial paper of the Weinberg program.

The liquidity risks undertaken in connection with providing pledges for liquidity facilities are compiled quarterly at LBBW by Liquidity Controlling. The appropriate work instructions and credit risk strategy standards have been established to minimize the operational risks (particularly as administrator for Weinberg).

These securitization positions, for which LBBW maintains risk-weighted securitization values in its role as sponsor and/or arranger, are predominantly rated using the Internal Assessment Approach (IAA). The liquidity facilities are managed in the banking book. If LBBW has also acquired commercial papers as trading book positions for its securitization program, it applies the regulations of section 255 (3) SolvV. The commercial paper of the multi-seller conduit »Weinberg« is either issued as Euro Commercial Paper (issuer: Weinberg Capital Ltd., Dublin) or, since 2011, as US Commercial Paper (issuer: Weinberg Capital Ltd., Dublin with Weinberg Capital LLC, Delaware, as co-issuer). The commercial paper is rated by rating agencies Moody's and Fitch Ratings.

As an originator, LBBW has been actively involved with the ABS transactions »Entry« (securitization of borrower's note loan), »Prime« (securitization of mezzanine profit participation rights under the name SmartMezzanine) and »S-Fix« (securitization of corporate loans) since 2006. LBBW's functions here also included service provider (for »Entry« and »S-Fix« only), loan provider (for »Prime« only) and swap counterparty (in all cases) in 2011. Due to the financial market crisis, acquisition services for the »Entry« and »Prime« securitization programs were suspended at the end of 2008. No more new assets were generated for placement purposes.

All of the »Entry« tranches were already placed in the market in 2006 and are rated by rating agencies Moody's and Fitch Ratings.

The »S-Fix« tranches were assumed in full by LBBW in its banking book, whereby the senior tranche can be pledged as collateral to the Bundesbank for the purposes of ECB repo transactions. The senior and mezzanine tranches are rated by rating agency Moody's and, since 2011, by Fitch Ratings as well.

In connection with the »Prime« securitization transaction, LBBW also continues to hold risk-weighted securitization positions in its portfolio in its role as originator. These include a working capital loan (in a senior position), a sub-loan, and a 47.5% capital investment in limited liability capital (both first-loss positions). Some of these positions are rated by Standard & Poor's and some remain unrated.

With the implementation of CRD III, securitizations held in the trading book and resecuritization positions must be backed with higher risk weights as of the balance sheet date on 31 December 2011.

### **Presentation of the procedures for determining exposure amounts.**

With the exception of retail underlying tranches, true sale investor positions are recognized as securitization positions in the IRB approach. Retail underlying tranches (such as credit cards) are recognized as CRSA securitization positions.

In the IRB approach, the Bank almost exclusively uses the rating-based approach for its investment portfolio and only uses the derived credit rating assessment occasionally. In the CRSA, the relevant paragraphs are applied for CRSA securitization items.

The majority of investments is classified as high quality and granular and almost exclusively had at least one rating from a recognized rating agency on acquisition. If no available external rating is available, the Bank uses the regulatory formula approach. Synthetic investor positions are also predominantly classified using this approach. In the case of unrated CRSA securitization positions, section 243 (2) SolvV (risk concentration rate) is applied.

The liquidity lines and swaps provided as part of the ABCP program are measured using the Internal Assessment Approach (IAA). LBBW developed and introduced appropriate models for the measurement of trading receivables and interest-bearing receivables for this purpose in 2008.

If LBBW purchases commercial paper (CP) from its own ABCP program, this is classified as an overlapping position in accordance with section 253 (5) SolvV. This means that the risk items are covered by the risk weightings of the securitization liquidity facilities provided by LBBW in accordance with section 255 (3) SolvV. In originator activities, risk transfers are demonstrated in line with section 232 SolvV.

### **Accounting policies for securitizations.**

In its role as an originator for »Entry« and »Prime« securitization transactions, LBBW acquired promissory note receivables and profit participation certificates up to fall 2008 as part of a regulated process and initially took these onto its own balance sheet. Receivables generated in this way were already sold on to the »Entry« and »Prime« SPVs at the end of 2006. By performing true sale transactions, LBBW ensures that it retains neither the rights nor obligations. Therefore, under HGB (IDW RS HFA 8) and IFRS 39.20a, assets are no longer recognized on the LBBW balance sheet. However, assets that are still generated after this time and are not securitized are still recognized on the LBBW balance sheet as corresponding receivable items.

By creating a receivables pool for these securitizations on the market, the transactions had no effect on net income/loss.

By way of contrast, in the case of the »S-Fix« securitization transaction, an economic risk transfer did not take place in accordance with HGB (IDW RS HFA 8) and IFRS 39.20a, as LBBW still holds all securitization tranches. The assets in question are therefore still recognized on the balance sheet. However, the ABS tranches acquired and the corresponding liabilities are deducted from the IFRS consolidated balance sheet due to the consolidation of the SPV.

The securitization products acquired as an investor (mainly ABS, CDO/CLO, RMBS, CMBS) are usually banking book portfolios. At the time of their acquisition the products are assigned to the held for trading, fair value option, available-for-sale or loans and receivables categories under IAS 39.9 in line with their documented purpose and measured accordingly (for more information on IFRS accounting see also item 7 in the notes »Financial instruments«). Under HGB, acquired securitization products are classified as

securities measured in the trading portfolio, the liquidity reserve and the portfolio as non-current assets (for information on HGB accounting see also the notes to the 2011 LBBW separate financial statements, »Accounting policies«).

### **HGB accounting.**

Trading portfolio securities are measured at fair value, adjusted for the risk discount in line with section 340e (3) HGB (VaR or value at risk) and for the creation of special items for general banking risks in accordance with section 340g and section 340e (4) HGB. Gains and losses on remeasurement and realization are shown under net income from the trading portfolio. Current gains and losses are included in net interest income.

Liquidity reserve securities are measured in line with the strict principle of lower of cost or market and write-downs are reversed as required. Gains and losses on remeasurement and realization are shown under amortization and write-downs and income from reversals of write-downs on specific securities. Current gains and losses are included in net interest income.

Securities treated as fixed assets are measured in line with the moderated principle of lower of cost or market and write-downs are reversed as required. Gains and losses on remeasurement and realization are shown under amortization and write-downs and income from reversals of write-downs on securities treated as fixed assets. Current gains and losses are included in net interest income.

### **IFRS accounting.**

Financial instruments classified as held for trading or using the fair value option are measured at fair value. Gains and losses on remeasurement and realized gains and losses are recognized under net trading income or net income from fair value option financial instruments. Current gains and losses are included in net interest income.

Financial instruments assigned to the available for sale category are measured at fair value. Gains and losses on remeasurement are reported in equity (revaluation surplus). In the event of impairment or disposal, gains and losses on remeasurement are reported in income under net income from investment securities. Current gains and losses are included in net interest income.

Financial instruments assigned to the loans and receivables category are measured at amortized cost. In the event of impairment, the amount is reported in income under net income from investment securities. Current gains and losses are included in net interest income.

In assessing whether securitization products include separable, embedded derivatives or synthetic structures, LBBW distinguishes between

- non-separable cash structures, in which the backing receivables and/or securities are solely in the portfolio of the SPV issuing the securitization products and
- separable synthetic structures, where the credit risk of a portfolio of assets is mainly transferred by way of a derivative to an SPV that is not the direct owner of the portfolio.

With synthetic structures, the embedded derivatives are measured separately from the respective host contract if the securitization product as a whole has not already been assigned to the fair value option. Combinations of cash structures and synthetic structures are treated as synthetic structures for accounting purposes.

At present, LBBW predominantly uses indicative prices provided by external market data providers in fair value measurement. For some securitization products, models are used for measurement purposes.

### **Risk shield.**

Based on the agreement dated 26 June 2009, LBBW arranged risk protection with the state of Baden-Württemberg in the form of a guarantee structure with effect from 30 June 2009. GPBW GmbH & Co. KG, a guarantee company of the state of Baden-Württemberg, granted LBBW a guarantee in the total amount of EUR 12.7 billion to hedge losses on set reference assets. EUR 6.7 billion of this guarantee relates to an ABS portfolio of the Group that had an original nominal value of EUR 17.6 billion, and EUR 6.0 billion to a junior loan from LBBW in the same amount to Sealink Funding Ltd (Sealink). Sealink is a special-purpose vehicle to which LBBW transferred certain risky structured ABS when it acquired the former Landesbank Sachsen AG.

LBBW bears the first loss on the ABS portfolio up to an amount of EUR 1.9 billion. All further losses are initially absorbed by the guarantee. Should further losses occur after the guarantee has been utilized in full, these in turn are borne by LBBW. The first loss was recognized in full on the balance sheet as of 31 December 2011.

### Presentation of securitized receivables.

The provisions of SolvV apply to the information provided in the following tables. These may differ from the presentation for securitization positions shown in other reports.

LBBW did not undertake any securitization activities during the 2011 reporting period. Consequently, there were also no gains or losses realized in this respect.

Of the total amount of securitized receivables of EUR 102 million for which LBBW acts in the role of originator, EUR 9.0 million are non-performing (rating-dependent) and past due securitized receivable amounts. Since a part of the receivables rated non-performing continue, as contractually agreed, to service the interest and repayments of loans (that have not reached final maturity), additional recovery proceeds are expected until the receivables mature.

The receivables effectively securitized by LBBW in its role as originator include notes receivable and profit participation rights. These are securitized receivables which have been transferred to the »Prime« special-purpose vehicle on the balance sheet and in full. By performing true sale transactions, LBBW ensures that it retains neither the rights nor obligations. Synthetic securitizations without a transfer of receivables were not conducted.

The reported sponsor activities relate to transactions with the SPVs »Weinberg Funding« and »Weinberg Capital«, to which LBBW provides liquidity facilities and, if necessary, swap lines.

The following tables 23 and 24 do not include the receivables of the »S-Fix« transaction that were securitized in its role as originator, since an economic risk transfer did not take place in relation to »S-Fix« (see page 47). The following table shows the receivables effectively securitized by LBBW as originator and its sponsor activities.

EUR million							
Type of securitized receivable	Originator positions			Sponsor activities			
	Banking book			Banking book	Trading book	Total	Total
	Tradi-tional	Synthetic	Total				
Receivables							
from residential construction loans	0	0	0	0	0	0	0
from total or partial commercial real estate loans	0	0	0	0	0	0	0
from corporates (including SMEs)	102	0	102	1 072	0	1 072	1 072
from own and purchased lease receivables	0	0	0	916	0	916	916
from car financing (excl. leasing)	0	0	0	335	0	335	335
from other retail business	0	0	0	0	0	0	0
from CDO and ABS	0	0	0	0	0	0	0
Credit enhancement measures	0	0	0	0	0	0	0
Resecuritizations	0	0	0	0	0	0	0
<b>Total</b>	<b>102</b>	<b>0</b>	<b>102</b>	<b>2 323</b>	<b>0</b>	<b>2 323</b>	<b>2 323</b>

Figure 23: Total amount of outstanding securitized receivables and securitization transactions in which LBBW took part in its role as originator or sponsor (section 334 [2] no. 1 SolvV).



The following table comprises both retained securitization positions from own receivables securitized by the Bank as originator and securitization positions in connection with third-party receivables (sponsor/investor). Retained and purchased securitization positions are broken down according to the underlying SolvV approach, how they are reported in the banking or trading book, and by the type of securitized receivable.

EUR million			
Securitization positions	Banking book		Trading book
	Exposure amounts under CRSA	Exposure amounts under the IRB approach	
Receivables	2 436	1 096	
from residential construction loans	1 778	690	0
from total or partial commercial real estate loans	189	78	0
from corporates (including SMEs)	159	223	0
from own and purchased lease receivables	13	23	0
from car financing (excl. leasing)	23	4	0
from other retail business	211	1	0
from CDO and ABS	63	77	0
Resecuritizations	16	12 128	0
of which guarantee portfolio	0	11 144	0
Credit enhancement measures	0	177	0
Other balance sheet items	0	0	0
<b>Total balance sheet items</b>	<b>2 452</b>	<b>13 401</b>	<b>0</b>
Liquidity facilities	110	2 230	0
Derivatives	4	20	0
of which resecuritizations	0	9	0
Positions specifically for synthetic transactions	0	0	0
Other off-balance-sheet items	0	0	25
<b>Total off-balance-sheet items</b>	<b>114</b>	<b>2 250</b>	<b>25</b>
<b>Total</b>	<b>2 566</b>	<b>15 651</b>	<b>25</b>

Figure 24: Total amount of retained or purchased securitization positions (section 334 [2] no. 2 SolvV).

The guarantee portfolio includes securities from various types of securitization positions.

The following table shows the respective exposure amounts and capital backing for securitizations, broken down by approach used, by risk-weighting bands, and by banking or trading book, securitization or resecuritization.

EUR million	Banking book						Trading book					
	Securitizations		Resecuritizations		Total		Securitizations		Resecuritizations		Total	
	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement
<b>Standard approach</b>												
20%	406	6	0	0	406	6	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	4	0	0	0	4	0	0	0	0	0	0	0
100%	12	1	0	0	12	1	0	0	0	0	0	0
225%	0	0	4	1	4	1	0	0	0	0	0	0
350%	31	9	0	0	31	9	0	0	0	0	0	0
650%	0	0	0	0	0	0	0	0	0	0	0	0
1250%	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>453</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>457</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Look-through approach</b>												
≤ 10%	0	0	0	0	0	0	0	0	0	0	0	0
> 10 % ≤ 20 %	1 674	27	0	0	1 674	27	0	0	0	0	0	0
> 20 % ≤ 50 %	107	4	12	0	119	4	0	0	0	0	0	0
> 50 % ≤ 100 %	228	18	0	0	228	18	0	0	0	0	0	0
> 100 % ≤ 250 %	0	0	0	0	0	0	0	0	0	0	0	0
> 250 % ≤ 650 %	38	11	0	0	38	11	0	0	0	0	0	0
> 650 % ≤ 1250 %	49	49	0	0	49	49	0	0	0	0	0	0
<b>Total</b>	<b>2 096</b>	<b>109</b>	<b>12</b>	<b>0</b>	<b>2 108</b>	<b>109</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

EUR million	Banking book						Trading book					
	Securizations		Resecuritized		Total		Securizations		Resecuritized		Total	
	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement	Exposure amount	Equity requirement
<b>Ratings-based approach</b>												
≤10%	903	6	0	0	903	6	0	0	0	0	0	0
> 10% ≤20%	98	1	2	0	100	1	0	0	0	0	0	0
> 20% ≤50%	95	2	13	0	108	2	0	0	0	0	0	0
> 50% ≤100%	59	3	0	0	59	3	0	0	0	0	0	0
> 100% ≤250%	24	5	0	0	24	5	0	0	0	0	0	0
> 250% ≤650%	96	34	22	7	118	41	0	0	0	0	0	0
> 650% ≤1250%	30	23	0	0	30	23	0	0	0	0	0	0
<b>Total</b>	<b>1 305</b>	<b>74</b>	<b>37</b>	<b>7</b>	<b>1 342</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Regulatory formula approach</b>												
≤10%	0	0	0	0	0	0	0	0	0	0	0	0
> 10% ≤20%	0	0	12 100 *)	76	12 100 *)	76	0	0	0	0	0	0
> 20% ≤50%	0	0	0	0	0	0	0	0	0	0	0	0
> 50% ≤100%	0	0	0	0	0	0	0	0	0	0	0	0
> 100% ≤250%	0	0	0	0	0	0	0	0	0	0	0	0
> 250% ≤650%	0	0	0	0	0	0	0	0	0	0	0	0
> 650% ≤1250%	0	0	0	0	0	0	25	16	0	0	25	16
<b>Total</b>	<b>0</b>	<b>0</b>	<b>12 100</b>	<b>76</b>	<b>12 100</b>	<b>76</b>	<b>25</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>16</b>
<b>Internal Assessment Approach</b>												
≤10%	238	2	0	0	238	2	0	0	0	0	0	0
> 10% ≤20%	1 287	15	0	0	1 287	15	0	0	0	0	0	0
> 20% ≤50%	581	17	0	0	581	17	0	0	0	0	0	0
> 50% ≤100%	103	9	0	0	103	9	0	0	0	0	0	0
> 100% ≤250%	0	0	0	0	0	0	0	0	0	0	0	0
> 250% ≤650%	0	0	0	0	0	0	0	0	0	0	0	0
> 650% ≤1250%	0	0	0	0	0	0	0	0	0	0	0	0
Capital deduction	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2 209</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>2 209</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>6 063</b>	<b>242</b>	<b>12 153</b>	<b>84</b>	<b>18 216</b>	<b>326</b>	<b>25</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>16</b>

\*) Includes guaranteed portfolio.

**Figure 25:** Total amount of retained or purchased securitization positions and capital requirements, broken down by approach used and by risk-weighting band (section 334 [3] no. 1 SolvV).

The following table illustrates the securitization positions with a risk weighting of 1250% by type of receivable. LBBW has no securitizations in its portfolio subject to an allowance for corporate equity (ACE) in accordance with section 10 (1d) in conjunction with section 10 (6a) KWG.

EUR million	Resecuritization positions with risk weighting of 1250%	
	Banking book	Trading book
<b>Securitization positions</b>		
Receivables	25	0
from residential construction loans	15	0
from total or partial commercial real estate loans	0	0
from corporates (including SMEs)	0	0
from own and purchased lease receivables	0	0
from car financing (excl. leasing)	0	0
from other retail business	0	0
from CDO and ABS	10	0
Resecuritizations	0	0
Credit enhancement measures	5	0
Other balance sheet items	0	0
<b>Total balance sheet items</b>	<b>30</b>	<b>0</b>
Liquidity facilities	0	0
Derivatives	0	0
Positions specifically for synthetic transactions	0	0
Other off-balance-sheet items	0	0
<b>Total off-balance-sheet items</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>30</b>	<b>0</b>

Figure 26: Total of securitization positions when a securitization risk weighting of 1250% is applied (section 334 [2] no. 5 SolvV).

The following table shows the collateralized resecu-  
 rization positions before and after collateralization.  
 The guarantors for LBBW's resecuritization positions  
 all have top ratings, without exception.

EUR million		
Type of collateral	Banking book	Trading book
Resecuritization positions before collateralization <sup>*)</sup>	19 969	0
Collateralization using guarantees	15 139	0
of which guarantors with AAA to A ratings	15 139	0
of which guarantors with ratings below A	0	0
Collateralization using other positions	0	0
Resecuritization positions after collateralization	4 830	0

<sup>\*)</sup> Before collateralization by the state of Saxony and the state of Baden-Württemberg.

**Figure 27:** Total of retained or purchased resecuritization positions before and after calculating in the hedging transactions (section 334 [3] no. 2 SolvV).

# 11 Equity investments in the banking book.

(section 332 SolvV)

LBBW distinguishes between its own strategic investment business and its commercial investment business. In line with risk and return considerations, the former serves to help the Bank achieve its operating policy, thus strengthening the market position of LBBW in terms of target customers and key products. By outsourcing market, staff and operating functions from subsidiaries and equity holdings, this allows for the ideal utilization of market potential. On the other hand, as an independent business area, the commercial investment business provides a range of products/ services, particularly for the small- and medium-sized customers of LBBW, and includes credit-equivalent or credit-substituting commitments aimed at generating risk-adequate margins.

The same profitability requirements generally apply for LBBW's own strategic investment business and its commercial investment business as for its front office divisions.

In addition to the equity investments that are consolidated for regulatory purposes or deducted from liable equity capital (see section 3 Scope, figure 1), LBBW also has further equity investments in its banking book with capital backing in the context of the IRB or CRS approach (grandfathering regulation).

On the date of acquisition, the equity investments – if not consolidated and not deducted from liable equity capital – are measured at cost in line with IFRS provisions and subsequently at fair value. For listed companies, the respective market price as of the balance sheet date is used for valuation. For non-listed companies, the fair value is calculated on the basis of available multi-year planning with the help of an earnings power model in line with the provisions of the Institut der Wirtschaftsprüfer (IDW). In special cases, valuations are made using alternative procedures based on real estate, portfolio or transaction values. In the event that no valuation procedure can be used in an individual case, then this is valued at amortized cost.

For regulatory purposes, LBBW distinguishes when using the IRB approach between investment positions that are part of a portfolio managed in terms of probability of default (PD/LGD method) and those handled using the simple risk weighting method. Investment positions that were already held before 1 January 2008 are measured in line with CSR in the context of grandfathering (portfolio protection) (see »Capital requirements«, page 13).

## Carrying amounts of investment instruments in the banking book.

The following table is broken down by type of investment item and the extent to which they can be traded for investment items which are not consolidated and are not deducted from liable equity and shows both the balance sheet value and the fair value. For listed companies the fair value is always equivalent to the market capitalization. If a fair value has not been calculated for internal or external purposes, then the carrying amount is used.

EUR million			
Groups of investment instruments	Carrying amount in accordance with HGB	Fair value	Stock market value
<b>Equity investments in banks</b>	<b>140</b>	<b>140</b>	<b>0</b>
of which exchange-traded	0	0	0
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	140	140	0
<b>Equity investments in financial services institutions</b>	<b>0</b>	<b>0</b>	<b>0</b>
of which exchange-traded	0	0	0
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	0	0	0
<b>Equity investments in other companies</b>	<b>497</b>	<b>572</b>	<b>192</b>
of which exchange-traded	156	192	192
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	341	380	0
<b>Subsidiaries - banks</b>	<b>7</b>	<b>7</b>	<b>0</b>
of which exchange-traded	0	0	0
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	7	7	0
<b>Subsidiaries - financial services institutions</b>	<b>0</b>	<b>0</b>	<b>0</b>
of which exchange-traded	0	0	0
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	0	0	0
<b>Subsidiaries - other companies</b>	<b>633</b>	<b>632</b>	<b>4</b>
of which exchange-traded	4	4	4
of which not exchange-traded, but part of a sufficiently diversified investment portfolio	629	628	0
<b>Total</b>	<b>1 277</b>	<b>1 351</b>	<b>196</b>

Figure 28: Carrying amounts of investment positions in the banking book (section 332 no. 2 SolvV).

The following table reports realized and unrealized gains and losses from banking book investment business for the reporting period and in accordance with IFRS accounting.

EUR million	
<b>Realized gains (+) and losses (-) from sale/liquidation</b>	<b>342</b>
<b>Unrealized gains (+) and losses (-) from investment instruments</b>	<b>74</b>
of which amounts recognized under SolvV:	<b>0</b>
in Tier 1 capital	0
in Tier 2 capital	0

**Figure 29:** Realized and unrealized gains/losses from investment positions (section 332 no. 2 SolvV).



# 12 Market price risk.

(section 330 SolvV)

LBBW defines market price risks as potential losses resulting from unfavorable changes in market prices. This includes share prices, interest rates, exchange rates, credit spreads and commodity prices as well as volatility or correlations as market parameters.

The market risk positions of LBBW are measured daily in the Group Risk Control division on a mark-to-market basis. Business results are calculated on the basis of this. Market price risks are quantified using a value-at-risk approach, which is supplemented by sensitivity measurements and stress tests. The risk indicators are accompanied by corresponding portfolio limits, which are used to limit market price risks.

The regulatory requirement to implement a stressed value-at-risk concept and thereby undergo an observation period representing a »period of significant financial stress« resulted from the Basel Committee's revisions to the Basel II market risk framework published in July 2009. LBBW implemented the concept in September 2011 and integrated it in overall bank management and the calculation of risk-bearing capacity. The stress VaR is calculated weekly for the observation period relevant to the SolvV portfolio. A second calculation is carried out for the periods relevant to the Group. This figure is incorporated into the calculation of free aggregate risk cover.

## **Internal model in accordance with the German Solvency Regulation.**

At LBBW, the value-at-risk (VaR) from market price risks is calculated at a confidence level of 99% and a holding period of ten days. A 95% confidence level and a one-day holding period are applied for internal Bank management purposes. This calculation is based on a procedure involving a traditional Monte Carlo simulation. In most cases, the simulation enables LBBW

not only to simply approximate market-induced value fluctuations but to measure them fully, even for complex transactions. Historical time series for the preceding 250 days are weighted equally in covariance estimates. LBBW's market risk model is also used for subsidiaries of the Group that are integrated in Group-wide standardized management based on the value-at-risk risk indicator.

Capital backing using LBBW's internal risk model is based on the so-called »SolvV portfolio«. This consists of all trading book positions excluding investment funds. Capital backing is undertaken for general interest rate and share price risks as well as the associated option price risks in this portfolio.

At LBBW, market price risks are consistently measured in the trading book as well as in the banking book using the same VaR methodology. Trading portfolios and the strategic position of the banking book can be affected by potentially detrimental developments in market interest rates. In addition to parallel shifts and the tilt of yield curves, basis risks that arise due to relative movements of various interest rate markets in relation to each other are included in risk calculations. Basis risks are very strongly dependent on the correlation of the underlying yield curves.

Credit spread risks from securities are measured with the general and issuer-specific risk. For this purpose, the transactions of the trading book and the banking book that are sensitive to creditworthiness are mapped onto rating- and industry-dependent yield curves. This is carried out for all transactions executed through the trading systems (in particular fixed-income securities). The issuer-specific risk is calculated using the spread (and the spread volatility) of individual names.

In the course of the financial market crisis, credit spread risks have become an important part of LBBW's market price risk. The multi-index model formerly used to determine the credit risk spreads from credit derivatives was replaced in May 2011 by assigning the reference debtors to CDS sector curves. The allocated CDS sector curves are displaced for the general interest rate risk, the residual terms for the specific risk.

Equity risks, along with foreign exchange and commodity risks, are less significant for LBBW than interest rate and spread risks. The latter also include risks from precious metals and currency portfolios, which LBBW holds to only a limited degree.

#### **Backtesting and validation.**

The VaR value calculated by the risk model represents a statistical forecast of expected portfolio losses from market price risks over the respective time periods. In order to verify the suitability of the model, it is necessary to test the quality of forecasts. This is carried out as part of a regular validation process using various validation and analysis procedures. The first step is to perform backtesting. In concrete terms, this process involves counting the number of times VaR is exceeded by actual portfolio value changes as the result of changes in market data (so-called outliers). The SolvV portfolio, which comprises the trading portfolios, for which capital adequacy for general share price and interest rate risks is measured using the internal risk model, did not show any outliers. This means that no additional equity is required for model outliers for regulatory purposes.

As well as backtesting, further quantitative validation procedures are used and the risk model is assessed on a qualitative basis. This includes a discussion of the model design, resulting in particular in model risks being identified. Such model risks are examined, e. g.

in the area of stochastic risk modeling. The forecast quality of a VaR model also depends on the quality of measurement methods in place within the risk model. Market data ultimately constitute a key factor in the success of VaR forecasts. This is entered into the measurement models and is thus a key factor in determining the quality of the simulated portfolio measurements. In addition, the future risk conduct (volatility and correlations) for the individual market factors is derived from the price histories for these factors.

Model risks are measured with regard to their materiality and are entered into the release planning for the risk model subject to the need for action. Model changes are carried out according to the model change policy and communicated to the supervisory authorities.

#### **Stress tests.**

Stress testing is used to examine how the value of the portfolio changes under extreme market conditions. Historical and synthetic (self-defined) scenarios are established in LBBW's risk system. Synthetic scenarios mainly refer to selected market factor groups (such as interest shifts, share shifts) or stress testing of basis risks (e. g. of different yield curves). Historical scenarios have been generated from data analyzes of market shocks, with stress tests for the financial crisis and the European sovereign debt crisis having been specifically added to the scenarios in question. These scenarios are applied to the portfolio on a weekly basis together with the specified market data changes, and changes in present value are reported as the stress test value.

Sovereign and financial market scenarios are hugely important to LBBW at present. With the »Lehman crisis« and the »Sovereign crisis« scenarios, the historical market data changes triggered by the insolvency of Lehman Brothers in fall 2008 and the changes observed following the European sovereign crisis are included in stress testing. In this process, the market data for

the observed period were analyzed and implemented in the respective scenario.

The most significant stress values for the LBBW Group up to 31 December 2011 are shown in the following table.

---

**Lehman crisis of fall 2008**

---

10-day spread increase in bond and CDS sector  
(shift in all yield curves up to - 313/ +358 bps, historic displacement in CDS spreads)

Shares - 24%, share volatility + 40%

---

**Sovereign crisis in summer 2011**

---

10-day spread increase in government and financial sectors  
(shift in financial curves up to + 200 bps, government curves up to + 471 bps; displacement in CDS spreads up to + 618 bps)

---

**Figure 30:** Stress test scenarios (section 330 [2] no. 1 c SolvV).

### Measurement of trading book positions.

LBBW measures its trading book positions at market prices which are obtained on a daily basis from sources independent of trading and are quality assured specially or which are supplied by the trading units and examined in Risk Control. Risk Control also has consistent standards and processes to carry out an independent price verification (IPV) process, in which trading prices are monitored on an independent basis.

The providers of market data used include Reuters, Bloomberg, MarkIT and UBS. If the data are not directly observable on the market, then LBBW uses measurement models which include the parameters derived from market prices. As a result of the prudence principle, measurement provisions for model risks have also been recognized.

### Capital requirements for market risk positions.

The following table shows the capital requirements for market risk positions broken down by type of risk:

EUR million	Capital requirement	
	Standard method	Internal model <sup>1)</sup>
Interest rate risks	371	459
of which general price risk to net interest position	1	459
of which specific price risk to net interest position	354	0
of which securitization positions with specific price risk in trading book	16	0
of which specific price risk in correlation trading portfolio	0	0
Share price risks	5	98
Currency risks	73	0
Risks from commodity positions	6	0
Other risks	0	0
<b>Total</b>	<b>455</b>	<b>557</b>

\*Since 31 December 2011 including stress VaR.

**Figure 31:** Capital requirements for market risk positions (section 330 [1] Solv).

The following table illustrates the normal VaR and the stress VaR of the trading book (99%/ten days) by risk type at Bank level.

EUR million								
Trading book portfolios according to internal model	Normal VaR in reporting period				Stress VaR in reporting period			
	Normal VaR at end of reporting period	Highest value	Lowest value	Average value in reporting period	Stress VaR at end of reporting period	Highest value	Lowest value	Average value in reporting period
Interest rate risks	47	63	24	40	100	113	76	92
Equity risks	9	13	3	7	24	27	13	22
Currency risks	4	11	1	3	3	7	3	4
<b>Total trading book</b>	<b>51</b>	<b>64</b>	<b>29</b>	<b>44</b>	<b>118</b>	<b>131</b>	<b>86</b>	<b>108</b>

Figure 32: Overview of VaR for portfolios in the trading book (section 330 [3] no. 1 Solv).

The following chart shows a comparison between the potential risk amounts calculated daily at the close of business with a holding period of one working day and the changes in value of the SolvV portfolio calculated at the close of business.

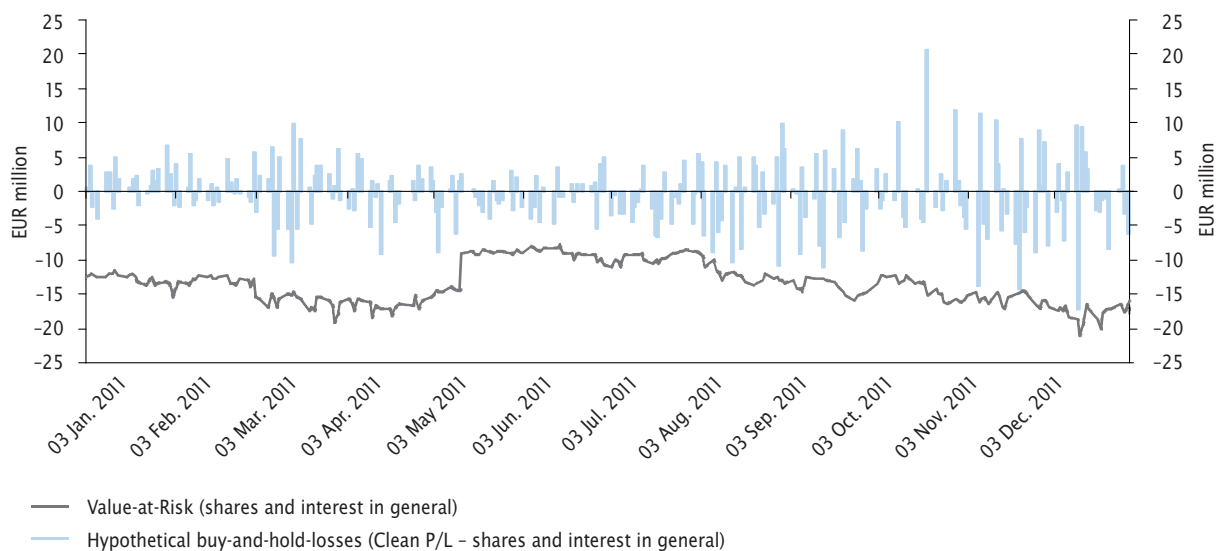


Figure 33: Trading book value-at-risk according to Internal Model Method and hypothetical buy-and-hold losses (section 330 [3] no. 2 Solv).

# 13 Interest rate risk in the banking book.

(section 333 SolvV)

As a rule, all new customer commitments are refinanced on a matched-maturity basis within a narrow time frame. On the basis of this operating policy strategy at LBBW, further strategic positions are entered into by the Group's Board of Managing Directors; these are focused on current market events. These items include risks in the form of cash flow incongruities (structural risks), risks from leveraging interest rate gaps between individual market segments (basic risk) and options risks from financial transactions entered into.

## **Quantification.**

All relevant interest-bearing and/or interest-sensitive positions in the banking book are included in measurement in accordance with LBBW's own procedures for measuring interest rate risks. All those related to individual transactions and/or portfolios are measured daily, with margin or retail-oriented business entered in calculations in the form of aggregated items when the portfolio is up-dated monthly.

For variable-rate transactions with private and corporate customers (particularly deposits), records made on grounds of conduct are taken into account by using the

deposit base theory in conjunction with the concept of moving averages. Effects from potential early loan repayments are incorporated into the model by means of synthetic options in the context of BaFin interest rate shock calculations.

Interest rate risks are measured daily on the basis of a Monte Carlo simulation. Here, changes in the value of the banking book as a whole or even for individual portfolios are specified for each currency using randomly selected interest rate scenarios. Together with the confidence level, the distribution arising from this serves to determine the VaR (confidence level of 95% and holding period of one trading day). The VaR subsequently indicates a potential loss which with 95% probability will not be exceeded within one day of trading.

In addition to daily reporting, further stress and worst-case scenarios are calculated on a weekly basis and made available for further analysis. All scenarios help to show the future effects of extreme events on the financial markets which are not sufficiently presented in the VaR normal impact event on the respective book. Extreme historic market fluctuations and self-defined scenarios are used in this respect.

### Interest rate risks in the banking book.

From a regulatory viewpoint, the effect of the interest rate shock on the economic value has to be disclosed in the banking book. This involves a parallel shift in the yield curve by +200 basis points (rising interest) upwards and by -200 basis points (falling interest) downwards. In line with section 24 (1) no. 14 KWG, a negative change in present value of more than 20% of regulatory own funds must be reported to the supervisory authorities. The change in value calculated on a daily basis in the LBBW Group remained below this reportable threshold throughout the 2011 reporting year.

The following table shows the changes in net present value, broken down into the main currencies.

Currency	Change in present value due to interest rate shock	
	Positive interest rate shock +200 basis points	Negative interest rate shock -200 basis points
CHF	0	0
EUR	452	-452
GBP	5	-5
JPY	0	0
USD	44	-44
<b>Total</b>	<b>501</b>	<b>-501</b>

Figure 34: Interest rate risks in the banking book (section 333 [1] SolvV).

# 14 Operational risk.

(section 331 SolvV)

In accordance with regulatory requirements, operational risks are defined as »the risk of losses arising due to the unsuitability or failure of internal processes and systems, people, or due to external events«. This definition also includes legal risks. Strategic risk and reputation risk do not form part of operational risks.

LBBW has a comprehensive system for the management and controlling of operational risks. In accordance with the dual overall strategy, the decentralized management of operational risks is the responsibility of the specialized divisions. An independent, centralized organizational unit within Group Risk Control is tasked with further developing methods and tools.

One of the main goals of management and control activities is to identify operational risks at an early stage and to reduce or avoid the resulting losses by implementing the appropriate measures. Various tools are used to identify and assess the risk situation. As well as the internal and external incident database, the risk inventory (self-assessment and scenario analysis) and the analysis of risk indicators, the management of measures also play an important role in the management of operational risks. An OpVaR model is used for the Bank's risk-bearing capacity.

For regulatory purposes, the standard approach is used to determine the capital requirement. As of 31 December 2011, the capital requirement totaled EUR 429 million.

More detailed information on operational risks can be found in the risk report.



# Glossary.

## A

### **ABCP – Asset-Backed Commercial Paper**

Tradable commercial paper (CP) whose interest and principal payments are backed by underlying assets (usually a receivables pool). As a rule, they are issued by a special-purpose vehicle (SPV) as part of a securitization.

### **ABS – Asset Backed Security**

Tradable securities whose payments of interest and principal are backed by underlying assets (usually a receivables pool). As a rule, they are issued by a special-purpose vehicle (SPV) as part of a securitization.

## B

### **Backtesting**

A procedure for monitoring the quality of value-at-risk models. Potential losses estimated using the VaR approach are tested over an extended period retrospectively to see whether they were exceeded significantly more often than might be expected according to the applied confidence level.

## C

### **CCF – Credit Conversion Factor**

Indicates the part of the credit commitment that will be utilized by the borrower relating to the period of one year and an expected default of the currently unutilized facility.

### **CDO – Collateralized Debt Obligation**

ABSs secured with a pool of various securities, particularly loans and other securitized debt instruments.

### **CDS – Credit Default Swap**

Financial instrument for assuming the credit risk from a reference asset (e. g. security or loan). The protection buyer pays a premium to the protection seller and receives a settlement payment or the reference asset if a credit event agreed in advance occurs.

### **CLN – Credit-Linked Note**

Bonds with a repayment amount dependent on certain contractually agreed credit events (e. g. default of reference asset).

### **CLO – Credit Loan Obligation**

Asset-backed security secured by corporate loans.

### **CMBS – Commercial Mortgage-Backed Security**

Financing secured by commercial real estate lien generally issued by a special-purpose vehicle (SPV) as part of a securitization.

### **Confidence Level**

Probability that a potential loss will not exceed an upper loss limit defined using the value-at-risk method.

### **CP – Commercial Paper**

Short-term debt instruments with maturities of up to 365 days (Euro Commercial Paper – ECP) or 270 days (US Commercial Paper – USCP) issued in the money market by issuers with first-class credit ratings.

### **CRSA – Credit Risk Standard Approach**

Capital backing is determined by means of allocating external ratings to risk weights issued on a fixed basis by the supervisory authorities, or, if there are no external ratings, using fixed risk weights.

## E

### **EAD – Exposure At Default**

Amount of the outstanding receivable at the time of default – synonym: exposure amount.

### **EL – Expected Loss**

For transactions with capital backing calculated in accordance with the IRB approach, an expected loss must be determined. Calculation takes place using the formula:  $EL = EAD * PD * LGD$ .

## F

### **Fair Value**

The amount for which a financial instrument could be exchanged between knowledgeable, willing parties in an arm's length transaction.

## I

### **IAA – Internal Assessment Approach**

This internal measurement procedure is used for calculating the capital requirements of securitization positions which were issued by ABCP SPVs and have no external rating.

### **IMM – Internal Model Method**

Method used to determine the regulatory capital charges for market risk positions, based on an internal model approved by BaFin.

### **IRBA – Internal Ratings Based Approach**

The calculation of capital backing, approved by the supervisory authorities, using the internal ratings based approach allows banks to estimate for themselves the parameters of credit risks. In the case of the basic IRB approach, the probability of default (PD) is estimated internally, while for the advanced IRB approach, the credit conversion factors (CCF) and loss given default (LGD) are also estimated internally.

### **IFRS – International Financial Reporting Standards**

IFRS comprise the International Financial Reporting Standards themselves as well as the previous International Accounting Standards (IAS) and interpretations of the International Financial Reporting Interpretations Committee (previously the Standing Interpretations Committee, SIC), as well as the standards and interpretations issued by the International Accounting Standards Board (IASB).

## L

### **LGD – Loss Given at Default**

Loss ratio at default of debtor in relation to the amount in default. With the basic IRB approach, the LGDs are specified; in the case of the advanced IRB approach, the LGDs are estimated by the bank itself.

## O

### **OTC – Over The Counter**

»Over the counter« describes the trading of financial instruments outside organized standardized markets.

## P

### **PD – Probability of Default**

Indicates the probability of a debtor defaulting within one year, i. e. being unable to fulfill its obligations.

## R

### **Rating (external)**

Standardized credit rating on a security or debtor assigned by independent rating agencies.

### **RMBS – Residential Mortgage-Backed Security**

Financing secured through private residential property generally issued by a special-purpose vehicle (SPV) as part of a securitization.

## S

### **Securitizations**

Tranching of counterparty risks as part of a legal transfer of receivables and securities, as well as tranching of counterparty risks as part of synthetic transactions (CDS).

### **SIC – Standing Interpretations Committee**

Predecessor committee to the IFRIC (International Financial Reporting Interpretations Committee) in operation since 2001. The purpose of the committee is to publish interpretations of IFRS and IAS accounting standards.

### **SPV – Special-Purpose Vehicle**

SPVs or special-purpose vehicles are constructions designed to fulfill a narrowly and precisely defined business purpose whose managements typically have little or no decision-making authority of their own after the vehicle is formed. In most cases, their business policy defined in the Articles of Association or similar contractual agreements cannot be modified afterwards. Normally, SPVs have little equity, and as a rule this equity is not contributed by the company for whose benefit the SPV does business (the initiator).

### **Stress Testing**

A method that attempts to model the loss effects of extreme events.

## V

### **VaR - Value-at-Risk**

The VaR identifies the maximum possible loss that may occur within a predefined period and based on confidence levels regarding assumed changes in market parameters. This statistical measurement is used to compare market risks in LBBW Group's different portfolios.

### **Volatility**

Price fluctuations of a security or a currency or the band of fluctuation of interest rates.

# Index of tables.

Figure 1: Regulatory basis of consolidation (section 323 [1] no. 2 SolvV)	7 – 8
Figure 2: Regulatory equity (section 324 [2] SolvV)	9
Figure 3: Capital requirements (section 325 [2] no. 1 to 4 SolvV)	14 – 15
Figure 4: Capital ratios (section 325 [2] no. 5 SolvV)	16
Figure 5: Credit volume by region (section 327 [2] no. 1 and 2 SolvV)	18
Figure 6: Credit volume by industry (section 327 [2] no. 1 and 3 SolvV)	19
Figure 7: Credit volume by residual term (section 327 [2] no. 1 and 4 SolvV)	20
Figure 8: Non-performing and past due loans, broken down by region (section 327 [2] no. 5 SolvV)	21
Figure 9: Non-performing and past due loans, broken down by industry (section 327 [2] no. 5 SolvV)	22
Figure 10: Development of provision for credit losses (section 327 [2] no. 6 SolvV)	23
Figure 11: Total exposure amounts under the CRSA and IRB approach exposure amounts subject to the simple risk-weighting method (section 328 [2] and 329 SolvV)	25
Figure 12: Internal rating procedures of LBBW (section 335 [1] no. 2a SolvV)	27 – 28
Figure 13: LBBW rating master scale (section 335 [1] no. 2a SolvV)	29
Figure 14: Total credit volume by credit rating assessment (not including Retail) in the IRB approach (section 335 [2] no. 1, 2a and 2c SolvV)	33 – 34
Figure 15: Actual losses in the lending business (section 335 [2] no. 4 SolvV)	35
Figure 16: Expected and actual losses in the traditional lending business (section 335 [2] no. 6 SolvV)	36
Figure 17: Total amount of the secured exposure amounts under CRSA (not including securitization) (section 336 no. 2 SolvV)	39
Figure 18: Total amount of the secured exposure amounts under IRB approach (not including securitization) (section 336 no. 2 SolvV)	40
Figure 19: Positive replacement costs before and after charging netting agreements and collateral (section 326 (2) SolvV)	42
Figure 20: Counterparty default risk (section 326 [2] SolvV)	43
Figure 21: Nominal value of credit derivatives for the purpose of hedging credit risks in the banking book (section 326 [2] SolvV)	43
Figure 22: Nominal value of credit derivatives by type of use (section 326 [2] SolvV)	44

Figure 23: Total amount of outstanding securitized receivables and securitization transactions in which LBBW took part in its role as originator or sponsor (section 334 [2] no. 1 SolvV)	49
Figure 24: Total amount of retained or purchased securitization positions (section 334 [2] no. 2 SolvV)	50
Figure 25: Total amount of retained or purchased securitization positions and capital requirements, broken down by approach used and by risk-weighting band (section 334 [3] no. 1 SolvV)	51 - 52
Figure 26: Total of securitization positions when a securitization risk weighting of 1250% is applied (section 334 [2] no. 5 SolvV)	53
Figure 27: Total of retained or purchased resecuritization positions before and after calculating in the hedging transactions (section 334 [3] no. 2 SolvV)	54
Figure 28: Carrying amounts of investment positions in the banking book (section 332 no. 2 SolvV)	56
Figure 29: Realized and unrealized gains/losses from investment positions (section 332 no. 2 SolvV)	57
Figure 30: Stress test scenarios (section 330 [2] no. 1c SolvV)	60
Figure 31: Capital requirements for market risk positions (section 330 [1] SolvV)	61
Figure 32: Overview of VaR for portfolios in the trading book (section 330 [3] no. 1 SolvV)	62
Figure 33: Trading book value-at-risk according to Internal Model Method and hypothetical buy-and-hold losses (section 330 [3] no. 2 SolvV)	62
Figure 34: Interest rate risks in the banking book (section 333 [1] SolvV)	64

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