

# Landwirtschaftliche Rentenbank Group

**Disclosure report pursuant to 26a KWG  
as of December 31, 2012**



rentenbank

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## 1. Disclosure pursuant to 26a German Banking Act (Kreditwesengesetz, KWG)

The Regulation governing the capital adequacy of institutions, groups of institutions and financial holding groups (German Solvency Regulation – SolvV) of December 14, 2006 was published in the Federal Law Gazette (Volume 2006, Part I No. 61, p. 2926 et seq.) on December 20, 2006 and came into force on January 1, 2007. The Solvency Regulation transposes European minimum equity capital requirements stipulated in the Banking Directive (2006/48/EC) and the Capital Adequacy Directive (2006/49/EC) and the corresponding equivalent requirements of the Basel Capital Accord ("Basel II") into national law.

Pursuant to Section 26a KWG, financial institutions must publish, on a regular basis, qualitative and quantitative information about equity, capital adequacy as well as risks assumed and risk management procedures followed, and must have in place formal procedures and rules to fulfill their disclosure requirements within the context of implementing Chapter 5 ("Disclosure by credit institutions") of Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions. Further details regarding disclosure in terms of content and procedures are governed by Part 5 of the Solvency Regulation due to the close connection with capital requirements, with Chapter 1 containing general provisions regarding the scope of application, Chapter 2 describing general requirements regarding the information to be disclosed, and Chapter 3 including qualifying requirements for the use of particular instruments or methodologies.

Landwirtschaftliche Rentenbank has published its disclosure report since December 31, 2008 on an annual basis in accordance with 26a KWG. It complies with its disclosure obligations within the scope of this report. Individual aspects of the disclosures are also included in the group management report and the consolidated financial statements. The structure of the disclosure report is based on the order of the paragraphs of section 5 (disclosure) of the Solvency Regulation. Disclosure obligations that are not listed are not applicable to Rentenbank.

The Rentenbank is the controlling company of the group of institutions within the meaning of Section 10a (1) Sentence 1 KWG. Disclosure is made on a group-level.

In accordance with the principle of materiality set out in Section 320 (1) SolvV, it was determined within the framework of the definition of materiality that the disclosures do not include subsidiaries which account for less than 1% in the Group's total assets or the Group's net income, respectively, and whose risk situation is negligible for the Group given their business approach. In addition to Rentenbank, the disclosures also include the consolidated subsidiaries.

## 2. Scope of application (Section 323 SolvV)

Rentenbank is a public law institution directly accountable to the German federal government with its registered office, in Frankfurt am Main. It operates no branch offices.

The consolidated financial statement of Rentenbank for fiscal year 2012, aside from Rentenbank as the Group's parent company, also includes its two subsidiaries, LR Beteiligungsgesellschaft mbH, Frankfurt/Main, (LRB) and DSV Silo- und Verwaltungsgesellschaft mbH, Frankfurt/Main, (DSV). There are no differences between the scope of consolidation under IFRS and the regulatory scope of consolidation.

As a promotional bank for the agricultural sector and rural areas, Rentenbank provides funds for a variety of investment projects.

The range of products is geared towards production business in the agricultural and forestry sectors, wine-growing and horticulture sectors as well as in aquaculture and fish farming. Funds are also provided for projects in the food industry and other upstream and downstream companies as well as investments in renewable energies and projects for rural development.

The following companies are fully consolidated:

Description	Name	Regulatory / IFRS
Banks	Landwirtschaftliche Rentenbank, Frankfurt am Main	X / X
Finance companies	LR Beteiligungsgesellschaft mbH, Frankfurt am Main	X / X
	DSV Silo- und Verwaltungsgesellschaft mbH, Frankfurt am Main	X / X

The business activity of LR Beteiligungsgesellschaft mbH (LRB) is the administration of equity investments and possibly the execution of new investments as part of the funding contract. The business activities of DSV Silo- und Verwaltungsgesellschaft mbH encompass the settlement of pension obligations and the administration of its financial assets, which consist of financial investments and short-term cash deposits.

Two companies, the Getreide-Import-Gesellschaft mbH, Frankfurt/Main, and the Deutsche Bauernsiedlung – Deutsche Gesellschaft für Landentwicklung (DGL) GmbH, Frankfurt/Main, were not included in the consolidated financial statements due to their minor significance for the assessment of the Group's financial position, cash flows, and profit or loss. The interests held in these companies are reported in "Financial Investments".

As a result of the small percentage of interests held in subscribed capital, the remaining companies were not required to be consolidated (regulatory/IFRS). A detailed list of unconsolidated companies, which are shown as equity investments in the consolidated financial statements, is shown in Section 7.1, together with subscribed capital and the share of ownership.

### 3. Risk Management (322 SolvV)

All material risks are concentrated in Rentenbank and are managed by Rentenbank on a group-wide basis. The business activities of subsidiaries are strictly limited. The Rentenbank has issued a comfort letter to LR Beteiligungsgesellschaft mbH. Subsidiaries are funded exclusively within the group. The office furniture and equipment as well as equipment to be used by employees are provided by Rentenbank.

The Group's corporate objective, derived from the legal mandate, is to promote the agricultural sector and rural areas on a sustainable basis. The Group's business activities are directed towards achieving this goal. In this context, care must be taken to ensure that the Group is able to fulfill this promotional mandate at all times. The Group's risk

structure is substantially defined by the general framework established by the Law and the Statutes of Rentenbank.

Based on the company objective derived from the relevant laws and regulations, the Board of Managing Directors determines the Group's sustainable business strategy. It is defined above all by its promotional mandate and the measures to fulfill this mandate. In addition, targets are set for the relevant business areas, as well as measures to achieve these.

Business strategies are presented by segment. The segments break down into "Promotional Business," "Capital Investment" and "Treasury Management."

The segment "Promotional Business" includes the promotional lending and securitized lending businesses as well as funding the Group. As part of the promotional lending business, Rentenbank grants special promotional loans as well as standard promotional loans, e.g., in the form of promissory note loans. The transactions predominantly are conducted with other banks. Securitized lending includes investments in securities in order to secure the Bank's liquidity and to invest liquid funds. Accordingly, and in particular, they serve to satisfy banking regulatory requirements regarding liquidity management. The Group is not exposed to securities or receivables with structured credit risks such as asset-backed securities or collateralized debt obligations.

The "Capital Investment" segment includes investments of balance sheet equity and long-term provisions.

Short-term liquidity and short-term interest rate risk are hedged and managed in the "Treasury Management" segment.

### 3.1 Organization of risk management processes

#### 3.1.1 Risk management

Risks resulting from business operations are identified, limited and managed on the basis of risk-bearing capacity calculations using a risk management system implemented for such purposes. For this purpose, the whole Board of Managing Directors has established a risk strategy as well as sub-strategies based on this risk strategy. The strategies are reviewed at least annually and adjusted by the whole Board of Managing Directors if necessary.

A significant component of the risk management system is the implementation, management and monitoring of limits that are based on the risk-bearing capacity. The risk-bearing capacity concept is for ensuring that the risk covering potential is sufficient to cover all material risks. The risk-bearing capacity concept is based on the going concern approach.

Within the framework of a risk inventory, the Group analyzes which risks may have a material effect on its financial position, capitalization, results of operations or the liquidity situation. The risk inventory serves as the basis for assessing the materiality of risks.

Risk management functions are primarily performed by the Treasury, Promotional Business, Financial Institutions and Collateral & Equity Investments divisions. The Risk Manual of the Board of Managing Directors provides a comprehensive overview of all risks in the Group on the basis of the risk management and controlling processes.

Appropriate potential risk scenarios are used as part of the planning process for the future net asset position, financial position and operating result. Target-performance deviations are analyzed as part of a monthly report. Capital planning targets are set for the coming ten years. Risk-bearing capacity is planned on the basis of a three-year forecast.



The inclusion of companies with new products, business types, sales channels or new markets requires the performance of a "New Product Process" (NPP). Within the scope of the NPP, the organizational units involved analyze the risk level, the processes and the main consequences for risk management.

### 3.1.2 Risk controlling

From an organizational perspective, risk controlling is part of the Finance and Financial Institutions divisions. In the Finance area, risk control comprises the regular monitoring of the limits determined by the whole Board of Managing Directors as well as reporting on market price risks, liquidity risks, operational risks and risk-bearing capacity based on risk level and regulatory requirements. The Financial Institutions division monitors the limits defined for credit risks and is responsible for reporting on credit risks, taking into account risk aspects and regulatory requirements. The whole Board of Managing Directors and the Accounting or Credit Committee established by the Advisory Board will be informed on the risk situation at least once every quarter.

If material risk-relevant information or transactions become known, and in the event of non-compliance with the Minimum Requirements for Risk Management (MaRisk), the whole Board of Managing Directors, Internal Audit department and the relevant heads of divisions or departments concerned must be notified immediately in writing. Information that is material in terms of risk is forwarded instantaneously by the Board of Managing Directors to the Advisory Board.

The instruments used for risk management and monitoring are reviewed and updated on an ongoing basis.

### 3.1.3 Internal audit

The Internal Audit department of Rentenbank acts at the Group level, performing the function of a Group Audit department. Since none of the Group's companies has its own Internal Audit department, the Group Audit department conducts the necessary activities.

The Group Audit department reports directly to the whole Board of Managing Directors of Rentenbank. It conducts its activities independently and on its own. The whole Board of Managing Directors is authorized to order additional audits to be performed. The chairman of the Advisory Board and the chairman of the Accounting Committee may request information directly from Internal Audit.

On the basis of risk-based review planning, the Group Audit department generally reviews and assesses all of the Group's activities and processes, including risk management and its internal controlling system, on a risk-based and process-independent basis.

## 3.2 Risk categories – Material individual risks

All material risks of the Group are identified and monitored to detect any concentration risks in the context of the risk inventory, the NPP as well as the daily monitoring activities.

Appropriate precautions have been taken for risks that are not classified as material, i.e. that are of lesser significance for the Group. The precautionary measures are generally documented in operational and organizational instructions.

### 3.2.1 Credit risk

#### Definition

The granting of loans and the associated assessment and assumption of credit risk is an essential element of business activities.

Credit risk is defined as the risk of a potential loss as a result of default or deterioration in the credit quality of business partners.

The credit risk subsumes credit default risk, which comprises counterparty risk, issuer risk, country risk, structural risk, collateral risk and equity investment risk as well as settlement and replacement risk.

The issuer, counterparty, and original country risk refer to the potential loss due to defaults or deterioration in the credit quality of business partners (counterparties/issuers/countries), taking into account the marked-to-market value of collateral. The derivative country risk results from the general economic and political situation of the country in which the debtor is located. Structural risks (i.e., cluster risks) are risks resulting from the concentration of the lending business on regions, sectors or borrowers. Collateral risk is the risk that results from insufficient recovery value of credit collateral during the loan term or a mispricing of collateral. Investment risk is the risk of a loss due to negative performance in the portfolio of equity investments.

The scope of the Group's business activities is largely defined by the Law and Statutes. Accordingly, loans for the promotion of the agricultural sector and rural areas in general are currently granted only to banks in the Federal Republic of Germany or in another EU country, as well as in Norway (since 2011), that are engaged in business activities with enterprises in the agricultural sector and who carry out their related upstream or downstream activities or activities in rural areas. Accordingly, the lending business of Rentenbank is, for the most part, limited to the refinancing of banks and other interbank business. In addition, general promotional transactions may also be concluded with the German federal states. The special promotional loans are limited to Germany as an investment area. Accordingly, the lending business of Rentenbank is, for the most part, limited to the refinancing of banks and other interbank business. The credit risk related to the ultimate borrower is generally assumed by the borrower's bank. Since, in the case of special promotional loans, the receivable due from the ultimate borrower is assigned to Rentenbank, a decline in the value of the collateral provided by the ultimate borrower to the principal bank directly impacts the collateralized transaction. Risks related to the ultimate borrower are therefore part of the collateral risk.

Within the framework of the Rentenbank Law and Statutes, the Bank may enter into any transactions directly related to the performance of its responsibilities. This also includes the purchase of receivables and securities as well as transactions in the context of Treasury Management and Group risk management.

Rentenbank enters into risks in corporate banking only in the direct lending business and in the syndicated lending business. There were no new commitments in this segment during 2012.

As part of the Agricultural Risk Capital Fund, the range of promotional activities also comprises the possibility to provide equity capital to suitable companies in the agricultural sector (up to a limit of €100 million) in order to support established, creditworthy companies by acquiring minority shareholdings. No transactions have been made in the fund to date.

For the purpose of diversifying credit risks, the bank has intensified its lending business with the German federal states.

The divisions Promotional Business and Treasury are responsible for new business with regard to promotional loans, depending on the type of transaction. The Treasury division is responsible for the purchase of securities and promissory note loans as part of the general promotional business and treasury management as well as new business with regard to money market funding and derivatives. Derivatives are only entered into as hedging instruments for existing or expected market price risks and only with business partners in EU or OECD countries. Transactions are only concluded with business partners where we have an existing collateral agreement.

### Organization

The whole Board of Managing Directors of the bank decides the credit risk strategy on an annual basis and presents this strategy to the Credit Committee of the Advisory Board for its information.

Credit risk monitoring and controlling are conducted on the basis of uniform principles and do not depend on the type of business from which these risks result. The Financial Institutions division formulates a uniform credit risk strategy and is responsible for its implementation. It manages also credit risks. In addition, its responsibilities also include analyzing credit risks, establishing internal rating categories, creating templates for credit approvals, preparing the back office function (or risk management) vote and the ongoing monitoring of credit risks. The Treasury division as the front office is involved in the credit business workflow.

In accordance with MaRisk, certain tasks have to be performed outside of the front office. These so-called back office functions are performed by the Promotional Business, Financial Institutions as well as Collateral & Equity Investments divisions. The divisions issue the independent second vote for credit decisions, process transactions and evaluate collateral. They are also responsible for intensified loan management as well as for the management of non-performing loans. Any necessary measures are agreed upon in cooperation with the whole Board of Managing Directors. The responsibility for the processes rests with the Board Member responsible for back office functions.

The Financial Institutions division monitors credit risks on the individual borrower and overall loan portfolio levels and is responsible for risk reporting on credit risks. It is also responsible for methodological development, quality assurance, and monitoring the procedures used to identify and quantify credit risk. The functional and organizational separation of risk controlling, and the Financial Institutions and Collateral & Equity Investments divisions, from the Treasury and Promotional Business divisions assures independent risk assessment and monitoring. The management and monitoring of credit risks is assured for individual transactions at the borrower level, as well as at the borrower unit level and the level of the overall loan portfolio. Within the framework of the management or monitoring of the overall loan portfolio, the loan portfolio is subdivided by various features, with transactions that have similar structures being pooled in product groups.

### Credit assessment

The bank's internal rating categories, which are determined on the basis of internal credit ranking while taking external ratings into consideration, are a key risk management instrument for credit risks, as reflected in the limit system.

The credit ranking is implemented by the back office function within the Financial Institutions division. Individual business partners or types of transactions are allocated to 20 rating categories using an internally established procedure. The ten best rating categories AAA to BBB- are used for business partners with few risks ("Investment Grade"). Also introduced were seven rating categories (BB+ to C) for latent or





heightened risks and three rating categories (DDD to D) for non-performing loans and counterparties already in default.

The credit ranking is carried out at least once per year within the context of the review of the counterparties' financial situation, based on annual financial statements or annual reports. In addition to key performance indicators, the analysis also takes into account so-called "soft factors", the ownership background of the company and additional supporting data such as membership in a protection scheme or state liability support. If available, credit ratings from external rating agencies are also used.

For certain transaction types, such as mortgage bonds, collateral is included as an additional assessment criterion. Furthermore, country risks are evaluated separately as a structural risk relevant to the bank. Current information concerning negative financial data or a deterioration of the economic perspectives of a business partner also may trigger a review of a business partner's credit ranking based on early warning indicators and, if necessary, an adjustment of the limit. The internal risk classification procedure is continuously developed and monitored annually.

The consequences of the international financial crisis are also reflected in the changes of the financial situation of the Group's counterparties. Some individual counterparties have been classified as commitments with latent risk. At the same time, the average credit quality of the whole Group's overall loan portfolio can still be classified as good, not in the least due to the high quality of new business.

#### Quantification of credit risk

The credit risk strategy and the risk-bearing capacity concept are risk management instruments aimed at achieving a good credit quality for the overall loan portfolio.

Rentenbank's creditworthiness category system forms the basis for measuring credit default risks with the help of statistical procedures. In order to determine the potential for default, historical probabilities of default as published by external rating agencies are used. The Group does not have historical internal default probability rates, due to the negligible number of defaults in the past decades. The calculations are made at the end of each month. In order to assess credit risks, a standard scenario (annual, potential default related to utilization) is supplemented by stress scenarios (annual, potential default related to internally granted limits, assuming deterioration of credit quality, lower recovery rates, as well as increased probabilities of default). Based on its business model, the Group places its focus on interbank business. This results in a material concentration risk. A specific risk amount (risk buffer) is set aside for these sector-related concentration risks.

In accordance with the risk-bearing capacity concept set out in the Risk Manual, credit risks are allocated a certain portion of the risk covering potential. Internally established limits are monitored daily to ensure compliance at all times.

The stress scenarios also take country-specific effects into account and focus on concentration risks within the loan portfolio. In additional extreme scenarios, the default of the borrower units or foreign exposures that are the largest based on risk exposure level (taking into account loss rates), as well as the default of all exposures classified as elevated potential risks, is assumed. The potential default determined on the basis of these extreme scenarios is used to measure risk concentrations and does not have to be backed by risk covering potential using the going concern approach. Priority is given in this context to the critical reflection of the results and the derivation of possible actions required (for example in the form of limit reductions or intensified risk monitoring). In addition, the effects of current developments on risk covering potential may be examined on the basis of additional stress scenarios on an as-needed basis.



### Limitation and reporting

Risk assumption and risk limitation are the key elements of managing credit risk. Risk limitation ensures that the risk actually assumed is in line with the risk strategy determined in the Risk Manual and the Group's risk-bearing capacity. Within this context, limitation takes place, both at the borrower level and at the borrower unit level, as well as at the level of the overall loan portfolio. The basis for limitation is the credit risk strategy from which strategy-consistent sub-limits are derived.

An overall upper limit is set for all counterparty limits based on the proportion of the risk covering potential made available for credit risks. In addition, specific country-based credit and transfer limits have been established, as well as an upper limit for unsecured facilities, an upper limit for the corporate lending business and a product limit for the securities business.

A limit system governs the level and the structure of all credit risks. Limits are recorded for all borrowers, issuers, and counterparties that are sub-divided into groups according to product and maturity. Rentenbank's internal risk classification procedure represents the central basis for decisions related to the definition of limits. The internal limits granted to a particular business partner are determined on the basis of its current economic situation and the resulting credit quality. In addition, an overall upper limit for each borrower unit has been established, the utilization of which is determined depending on the individual types of business transactions. Furthermore, for particular types of business or limits a certain minimum credit quality is required.

All limits are monitored on a daily basis by the responsible back office function. The utilization of the limits within the context of money market and promotional loan transactions as well as equity investments is measured on the basis of the relevant carrying amounts. For the securitized lending, the level of utilization of the limits is calculated on the basis of current market prices and, in the case of derivatives, the positive fair values of derivative portfolios, taking into account any cash collateral received. Limit reserves are used as a buffer for market price fluctuations. The Board Member responsible for back office functions receives a daily report on the risk-relevant limits as well as their utilization. The whole Board of Managing Directors is informed promptly if limits are exceeded.

Rentenbank has concluded collateral agreements with all counterparties with whom it enters into derivative transactions. These agreements secure the positive fair values from derivatives exceeding contractually agreed allowance amounts and minimum transfer amounts with cash deposits denominated exclusively in Euro. In return, the bank undertakes to provide cash deposits denominated in Euro to the counterparties in the case of negative fair values, if these exceed the corresponding allowance and minimum transfer amounts. The collateral agreements reduce the utilization of limits and thus the credit risks, the related cover requirements and the utilization of limits for large loan exposures.

At the end of each quarter, the Financial Institutions division (back office function) prepares a credit risk report for the whole Board of Managing Directors and the Credit Committee of the Advisory Board based on the MaRisk guidelines. Among other things, the report includes quantitative and qualitative information about the performance of the overall loan portfolio, which is monitored on the basis of structural features such as rating categories, collateral, size classes and maturities. In addition, the report includes statements concerning the extent of limits granted internally, new business development, direct business with companies, equity investments, the development of potential defaults from credit risks, new products, new markets, new distribution channels, new countries and large loan exposures.



Comparisons with previous years, changes and comments to these changes, and the performance of counterparties that are subject to special monitoring measures or with potential risk are also included.

### 3.2.2 Market price risks

#### Definition

Market price risk occurs in the form of interest rate risks, spread risks, foreign exchange risks and other price risks. It takes into account potential losses related to items held in its own portfolio as a result of changing market prices.

#### Organization

The bank, as a sub-entity of the Group, does not maintain a trading book according to Section 2 (11) KWG. Open positions from transactions in the banking book are only entered into to a limited degree.

The objective of risk management is the qualitative and quantitative assessment and control of market price risks. Risk controlling quantifies market price risks, monitors limits and prepares reports. The Operations department controls the market conformity of concluded transactions.

#### Quantification of market price risks

##### *Interest rate risks*

The Group limits interest rate risk largely by hedging transactions recorded on the balance sheet through hedges using derivatives. Derivatives are entered into on the basis of micro or macro hedge relationships.

Gains or losses from maturity transformation are realized from cash deposits and, to a lesser extent, from the promotional lending business. Gains or losses from maturity transformation result only from short-term open positions because individual positions in the promotional business are not hedged at the same time due to their low volumes.

Value-at-risk (VaR) is calculated daily in relation to "money market business" for information purposes. A forecast is made of the maximum potential valuation loss arising from market effects, assuming a probability of occurrence of 99% and a holding period of ten days. The scenarios used are based on historical data. The factors influencing portfolio valuation are concentrated on the interest rate curves for interbank loans (deposit/swap curve) and derivatives (EONIA swap curve).

##### *Spread risks*

Changes to market parameters in the form of spread premiums on the deposit/swap curve, in particular cross-currency basis swap spreads (CCY basis swap spreads), basis swap spreads and credit spreads, have a direct effect on the measurement of existing positions and influence risk covering potential. The potential effects of spread risks on the measurement result are simulated using scenario analysis and are covered with the risk covering potential within the scope of the risk-bearing capacity analysis.

The spread risk would only then materialize if the buy-and-hold strategy is breached or if a business partner defaults. This is ruled out on the liability side, because there is no realistic scenario in which Rentenbank would have to buy back liabilities. Regardless of this fact, these measurement results are also taken into account in the consolidated statement of comprehensive income as well as in the risk-bearing capacity calculations.



*Foreign currency risk*

As a rule, foreign currency risks and other price risks are eliminated from transactions recorded on the balance sheet by means of hedging transactions. Open currency positions result from fractional amounts, but only to a very small extent.

There was no material risk to be identified for any currency.

*Standard scenarios*

Potential market price fluctuations are assumed for purposes of the standard scenario. For all open interest rate-sensitive transactions related to the portfolios "money market business" and "promotional business" present value sensitivity is calculated daily, assuming a positive parallel shift in the yield curves with a 95% probability of occurrence, and it is compared with the relevant limits.

*Stress scenarios*

In order to be able to estimate risks arising from extreme market developments, additional scenarios of interest rate changes for the "money market business" and "promotional business" portfolios are calculated regularly, as well as on an ad hoc basis. Under the monthly stress scenario, we do not assume a parallel shift of the interest rate curve, as in the standard scenario, but a non-parallel shift within the framework of two distinct scenarios.

Potential risk premiums and risk discounts on the interbank market for "money market business" are simulated to determine spread risks. In the "promotional business," we calculate an increase of the CCY-basis swap spreads and of the basis swap spreads as well as a reduction of the credit spreads. Correlation effects are included in the aggregation of specific risks.

An occurrence probability of 99% is assumed.

Limitation and reporting

The interest-rate risks from open positions may not exceed the established risk limits. Compliance with the limits is monitored daily and reported to the whole Board of Managing Directors. Sensitivity, scenario and VaR analyses, as well as back-testing processes are part of risk management and risk control. The Accounting Committee of the Advisory Board is informed about the results of the risk analyses on a quarterly basis as part of the overall Risk Report.

Back testing

The procedures for assessing market price risks and the market parameters underlying the standard and stress scenarios are validated at least annually.

The scenario parameters in "money market business" and the "promotional business" are validated daily using historical interest rate trends.

The quality of the VaR model is reviewed daily using a back testing procedure. As part of this procedure, potential measurement gains and losses arising from market effects are compared with the VaR.

The results from the daily scenario analyses for monitoring interest rate risks on the level of the entire bank are validated on a quarterly basis using a model based on present values.

### 3.2.3 Liquidity risk

#### Definition

Liquidity risk is the risk of not meeting current or future payment obligations without restrictions, or of being unable to raise the required funds under the expected terms and conditions.

Market liquidity risk specifically refers to the risk that assets may not be sold, i.e., liquidated, at all, not immediately, or only at a loss.

#### Monitoring and control

The liquidity risks resulting from the bank's open cash balances are limited by a value, defined by the whole Board of Managing Directors, that is based on the funding opportunities available. The Finance division monitors liquidity risks daily and reports the results to the whole Board of Managing Directors and the responsible divisions.

Instruments available for managing the short-term liquidity position are interbank funds, securitized money market funding, ECP issues, and open-market transactions with the Deutsche Bundesbank. In addition, securities may be purchased for liquidity management purposes and funds may be borrowed with terms of up to two years via the Euro Medium Term Note (EMTN) program, loans, global bonds, or domestic capital market instruments.

In order to limit short-term liquidity risks, the liquidity requirements must not exceed the relevant freely available funding potential for a period of up to two years. In accordance with MaRisk, there are sufficient, sustainable highly liquid liquidity reserves to be able to meet any short-term funding requirements of at least one week and to cover any additionally required funding requirements from stress scenarios if needed.

For the purpose of calculating medium and long-term liquidity, expected cash inflows and outflows for the coming 15 years are compared on a quarterly basis with a limit for the time bands from 2 to 15 years. The negative cumulative cash flows may not exceed this limit.

The adequacy of the stress tests as well as the underlying assumptions and procedures to assess liquidity risks are reviewed at least once annually.

Pursuant to the risk-bearing capacity concept, no liquidity risks have been taken into account, since the Group has sufficient cash funds, and its triple A ratings, amongst other factors, enable it to obtain any additionally required cash funds on the interbank markets or, in case of market disruptions, from Eurex Clearing AG (securitized money market funding) and from the Deutsche Bundesbank (collateralized loans / Pfandkredite)

#### Stress scenarios

Stress scenarios are intended to examine the effects of unexpected events on the liquidity position. The main liquidity scenarios are an integral part of the internal controlling model, and they are calculated and monitored on a monthly basis. The scenario analyses take into account price declines in securities, simultaneous draw-downs of all irrevocable credit commitments, defaults by major borrowers and the utilization of cash collateral from collateral agreements, due to an increase in the negative fair values of derivative portfolios or a decrease in the positive fair values of derivative portfolios. This scenario mix is used to simulate the simultaneous (combined) occurrence of bank-specific and market-based stress scenarios. Stress tests are also performed on an ad hoc basis in the event of risk-related events.



### Liquidity ratio pursuant to the German Liquidity Regulation

Pursuant to regulatory requirements (German Liquidity Regulation, Liquiditätsverordnung), weighted cash is compared with the weighted payment obligations with matching maturities on a daily basis. Moreover, these indicators are also calculated for future reporting dates within the framework of an extrapolation.

### Reporting

The whole Board of Managing Directors is provided daily with a short-term liquidity projection and monthly with the liquidity risk report, which include information about short and long-term liquidity as well as the results of the scenario analyses and the determination of the liquidity cushion in accordance with MaRisk. The Accounting Committee of the Advisory Board is informed on a quarterly basis.

### 3.2.4 Operational risk

#### Definition

Operational risk refers to risks arising from non-working or defective systems or processes, human failure or external events. Operational risks include, among others, legal risks, and other risks from fraud, risks from outsourcing, operating risks, and event or environmental risks. They do not include entrepreneurial risks such as transaction risks, regulation and reputational risks.

#### Organization

The Group manages operational risk through various measures that it applies to eliminate the cause of the risk, to control the risk, or to limit damage. These measures include organizational precautions (e.g. separation of trading and settlement units as well as of front and back office operations, principle of dual control), detailed procedural instructions, and qualified personnel.

Legal risks from business transactions are reduced by the Group by using standardized contracts, as far as possible. The legal department is consulted at an early stage for this purpose.

Based on a hazard analysis pursuant to Section 25c KWG, risks from violations of law or other criminal acts that may endanger the Group's assets are identified, and actions to optimize fraud prevention are established. Compliance with general and bank-specific requirements for an effective fraud prevention organization is analyzed within fraud-relevant subject areas.

Risks from outsourcing are generally recorded under operational risks. A distinction is made between significant and insignificant outsourcing based on a standardized risk analysis. Significant outsourcing is specifically incorporated in risk management and risk monitoring by means of decentralized outsourcing controlling.

Operating risks as well as event-related or environmental risks are identified on a Group-wide basis and are managed and monitored based on materiality aspects.

The Group has an IT security officer and an IT security program. The IT security officer monitors the confidentiality, availability and integrity of information processing and storage systems. He or she is involved in all IT incidents.

An emergency manual describes the procedures to be followed as part of disaster prevention measures and in the event of an actual disaster. Further emergency plans govern the procedures that are to be used for potential business disruptions. The outsourcing of time-critical activities and processes is also included in these plans.



### Quantification of operational risk

Operational risks are quantified as part of the risk-bearing capacity concept, using a process based on the basic indicator approach. The factors underlying the standard and stress scenarios were determined based on business volume.

#### *Incident reporting database*

All incidents of the Group are systematically collected and analyzed in an incident reporting database. All current incidents and near-incidents are recorded on a decentralized basis by the relevant operational risk officers. Operational risks are managed in the individual business areas so that, based on this decentralized approach, the measures to prevent and limit risks are primarily the responsibility of the individual organizational units. The analysis and aggregation of incidents as well as the methodological development of the instruments used is part of risk controlling.

#### *Self-assessment*

The Bank regularly carries out self-assessments. The goal of such a self-assessment is to benefit from knowledge that is necessary in order to identify and evaluate risks in the business units in which they materialize. Workshops are held at least once annually, during which significant potential operational risk scenarios for all material business processes are identified based on a company-wide process map, and then assessed with respect to amount and frequency of incidents and reduced if applicable by additional preventive measures.

#### *Risk indicators*

Risk indicators for impending losses have been developed in order to be able to react early to changes in the Group's risk profile. This permits appropriate measures to be taken in order to address the risk. Their effectiveness is directly reflected in the development of the indicators. Risk controlling is currently developing a system to monitor risk indicators using as a starting point the information gathered as part of the self-assessment or other form of risk analysis. Plans call for preparing a corresponding report in the first quarter of 2013 for the first time and submitting it to the whole Board of Managing Directors as well as senior management.

### Limitation and reporting

The limit for operational risks is determined using a modified basis indicator approach. Reports are prepared on a quarterly basis and submitted to the whole Board of Managing Directors, the Advisory Board and senior management.

### 3.2.5 Regulatory and reputational risk

#### Definition

Regulatory risks refer to the risk that a change in regulatory environment could have a negative impact on the business operations or operating result of the Group. In addition, there is a risk that regulatory requirements will be insufficiently fulfilled.

Reputational risks are threats from damage to the Group's reputation that could have negative economic effects.

#### Monitoring and control

Regulatory risks may impair Rentenbank's business model based on the statutory promotional mandate. Without national and European legal frameworks – in particular for promotional loans – sustainable support for the agricultural sector and rural areas would



not be possible. Bases for the business model include, for example, low risk in the lending business as well as stable results of operations, financial position and net assets. Rentenbank will also satisfy additional regulatory requirements imposed on financial institutions, e.g., from Basel III and CRD (Capital Requirements Directive) IV regulations, according to projections that have already been made.

Reputational risks can, inter alia, endanger Rentenbank's ability to obtain funding. However, appropriate funding opportunities are available based on the triple A rating. Rentenbank's statutory promotional mandate and the associated special form of liability (institutional liability) assumed by the Federal Government represent significant factors in being awarded this triple A rating.

Regulatory and reputational risks may negatively affect new business and therefore have a negative impact on margins. They are managed via inclusion in the various scenarios used for purposes of revenue planning. In addition to the monthly target/actual comparisons in the profit and loss accounts, the risks are also monitored via entries in the incident reporting database and in the self-assessments that have been conducted.

#### Reporting

The Advisory Board Management Committee discusses revenue planning. The whole Board of Managing Directors and the Accounting Committee of the Advisory Board are informed on a quarterly basis of significant incidents and material risks identified in the self-assessments.

## 4. Own funds (324, 325, 330, 331 SolvV)

### 4.1 Own funds structure

The Group's regulatory capital was determined pursuant to the provisions of Sections 10 and 10a of the German Banking Act (Kreditwesengesetz, KWG). Pursuant to the option set out in Section 10a (7) KWG, we did not use the IFRS consolidated financial statements as the basis. The calculation of the amount of the own funds was made in accordance with Section 64h (4) KWG using the aggregation method, on the basis of the German Commercial Code (Handelsgesetzbuch, HGB) financial statements of the Group companies. Accordingly, there are differences in the amounts reported for the following items from both the IFRS consolidated financial statements and the HGB financial statements. Under the aggregation method, the own funds of the companies included in the consolidated financial statements are not consolidated, but aggregated, while the carrying amounts of the equity investments are deducted. Own funds comprise liable capital – consisting of core capital and supplementary capital.



The composition of the Group's aggregated regulatory capital as of December 31, 2012 on the basis of the HGB values is shown in the following table:

	Dec. 31, 2012	Dec. 31, 2011
	€ million	€ million
- Subscribed capital	176	176
- Disclosed reserves	882	842
- Fund for general bank risks	1 884	1 304
- Intangible assets	-15	-6
- Losses carried forward	-13	-12
<b>Core capital (Tier I)</b>	<b>2 914</b>	<b>2 304</b>
- Subordinated liabilities	765	823
- Other components	79	406
<b>Supplementary capital (Tier II)</b>	<b>844</b>	<b>1 229</b>
<b>Total own funds</b>	<b>3 758</b>	<b>3 533</b>
<b>Own funds for the large exposure limit in the overall business</b>	<b>3 758</b>	<b>3 533</b>

The subscribed capital of € 176 million consists of basic capital of the Rentenbank in the amount of € 135 million, which was provided by the agricultural and forestry sector of the Federal Republic of Germany between 1949 and 1958. An amount of € 848 million (€ 811 million) of disclosed reserves totaling € 882 million (€ 842 million) is attributable to the principal (Hauptrücklage) and guarantee reserves (Deckungsrücklage), which are recognized pursuant to 2 (3) sentence 2 of the Law Governing the Landwirtschaftliche Rentenbank.

As of December 31, 2012, the subordinated liabilities amounted to € 765 million (€ 823 million on the basis of HGB valuation). The associated interest rates amount to up to 5.0% for maturities until April 21, 2036. The subordinated liabilities are structured as promissory note loans, loan agreements and bearer securities issued in the form of global certificates. All subordinated liabilities met the requirements for inclusion as liable capital pursuant to 10 (5a) Sentence 2 KWG and do not provide for early repayment or conversion. The capping limit (50% of core capital) was not broken as at the reporting key date.

The carried-forward losses as reported under HGB are attributable to the subsidiary DSV and result from impairment losses in previous years.

## 4.2 Adequacy of own funds

For purposes of computing risk-bearing capacity, various risk scenarios are used to compare the total sum of the capital charges resulting from the Group's credit, market price, and operational risks with a portion of the aggregate risk covering potential. Liquidity, reputational and regulatory risks are not included, in accordance with the risk-bearing capacity concept. Due to their peculiar nature, they are not included because they cannot be usefully limited through risk covering potential. Instead, these risk categories are taken into consideration as part of their risk strategy within the risk management and controlling process.

The risk-bearing capacity concept is based on the going concern approach. An observation period of one year is established for this purpose.

The going concern approach assumes that business operations of the company will continue.

In the event of the occurrence of the conservatively established stress scenarios with a probability of occurrence of 99%, there must still be available sufficient capital components to meet the regulatory capital requirements pursuant to the German Solvency Regulation (Solvabilitätsverordnung, SolvV) of currently 4% (core capital ratio) and 8% (total capital ratio).

The risk covering potential is derived from the consolidated figures in accordance with IFRS.

	Dec. 31, 2012 € million	Dec. 31, 2011 € million
Available operating result	240,0	240,0
+ Retained earnings (proportionately)	74,0	116,0
<b>= Risk covering potential 1</b>	<b>314,0</b>	<b>356,0</b>
+ Retained earnings (proportionately)	1.978,8	2.206,1
- own credit effect	16,8	147,4
+ Revaluation reserve	-179,6	-763,5
- hidden liabilities from securities belonging to category "HTM"	8,1	76,4
<b>= Risk covering potential 2</b>	<b>2.088,3</b>	<b>1.574,8</b>
+ Retained earnings (principal reserve, guarantee reserve)	500,0	0,0
+ Subscribed capital	135,0	135,0
+ Subordinated liabilities	924,4	912,3
<b>= Risk covering potential 3</b>	<b>3.647,7</b>	<b>2.622,1</b>

Risk covering potential 1 amounts to € 314 million (compared with € 356 million in 2011); which included the available operating result of € 240 million (compared with € 240 million in 2011). The available operating result can be derived from the plan result under IFRS calculated using a conservative approach. The lower of the two plan results is applied. An amount of € 74 million (compared with € 116 million in 2011) of retained earnings was allocated to risk covering potential 1.

Global limits for credit risk and market price risk are based on the allocation of the risk covering potential to the credit, market price, and operational risk types. This can be broken down as follows:

	Dec. 31, 2012		Dec. 31, 2011	
	€ million	%	€ million	%
Credit risk	260,0	82,8	260,0	73,1
Market price risk	19,0	6,1	61,0	17,1
Operational risk	35,0	11,1	35,0	9,8
<b>Total risk limit</b>	<b>314,0</b>	<b>100,0</b>	<b>356,0</b>	<b>100,0</b>
<b>Risk covering potential 1</b>	<b>314,0</b>	<b>100,0</b>	<b>356,0</b>	<b>100,0</b>

In view of the persisting financial crisis, the Group again used an unchanged amount of € 260 million from risk covering potential 1 to cover credit risks as of December 31, 2012.

Risk covering potential 2 is not allocated to the individual risk types. It functions as a global limit and amounted to € 2,088 million as of the reporting date (€ 1,575 million).

A proportional share of retained earnings, subscribed capital and subordinated liabilities of risk covering potential 3 are available in order to fulfill the regulatory capital ratios according to the going concern approach. Thereby the risk covering potential is modified according to the regulatory requirements.

Risk-bearing capacity is monitored using the "liquidity approach" as part of an additional cycle of control. Creditor protection is the primary focus under the "liquidity approach". Under this approach, all hidden reserves and liabilities are taken into consideration in the risk covering potential. Subsequently, there must be sufficient risk covering potential available in order to be able to cover the effects from the conservative stress scenarios. For credit, market and operational risks, liquidation or extreme scenarios with a probability of 99.99% are simulated. These scenarios are quantified using strict risk measures and parameters based on infrequent loss events. This management unit primarily serves to observe and critically reflect results.

Credit, market price, liquidity and operational risks were also subjected to an inverse stress test. In contrast to the regular stress tests, inverse stress tests focus the analysis on the viability of credit institutions. The starting point is a maximum loss to be borne, derived from the Group's risk covering potential. Inverse stress tests may be designed especially for credit risks. The scenarios assumed have a low probability of occurrence.

In addition, the effects of an economic downturn on risk-bearing capacity are assessed.

#### 4.2.1 Equity capital requirements for credit risks and for equity exposures

The Credit Risk Standardized Approach (CRSA) is used for all exposure classes to determine the regulatory equity capital requirements arising from credit risks.

Specific risk weightings, as prescribed by the German regulatory authority, apply for equity capital requirements for credit risk. The risk weight for the exposure classes "Central governments" and "Corporates" depends on the external rating. The risk weight of the "Institutions" class depends on the external rating of the country of domicile.

The following table shows the equity capital requirements from the credit risk under CRSA by exposure class as of December 31, 2012 compared to the previous year:

	Dec. 31, 2012 € million	Dec. 31, 2011 € million
- sovereigns	14	21
- Institutions	802	858
- Corporates	8	23
- Equity exposures	14	14
- Covered bonds issued by credit institutions	186	118
- Other items	2	2
<b>Capital requirements for credit risk</b>	<b>1 026</b>	<b>1 036</b>

#### 4.2.2 Equity capital requirements for market risks

In order to determine the equity capital requirements for foreign currency risks, we calculate the total currency exposure, which amounted to € 0.3 million as of December 31, 2012 (€ 0.3 million), based on the standardized approach).

There are no commodity, trading book or other market risk exposures. Rentenbank does not use its own risk models.

#### 4.2.3 Equity capital requirements for operational risks

In the year under review, the exposure to operational risks was determined for regulatory purposes using the basic indicator approach in accordance with Sections 270 and 271 SolvV. Equity capital requirements for operational risk amounted to € 41 million as of December 31, 2012 (€ 36 million).

#### 4.2.4 Equity capital requirements and capital ratios

The Group's overall equity capital requirements were as follows as of December 31, 2012 compared to the previous year:

	Dec. 31, 2012 € million	Dec. 31, 2011 € million
Risk-weighted assets	12 827	12 958
Capital requirements		
- Credit risk	1 026	1 036
- Market risk	0	0
- Operational risk	41	36

The following overview shows the total capital and core capital ratios for the Group and Rentenbank as of December 31, 2012 compared to the previous year:

	Dec. 31, 2012 in %	Dec. 31, 2011 in %
Total capital ratio		
Landwirtschaftliche Rentenbank (Group)	28,2	26,4
Landwirtschaftliche Rentenbank (Institution)	27,5	25,7
Core capital ratio		
Landwirtschaftliche Rentenbank (Group)	21,9	17,2
Landwirtschaftliche Rentenbank (Institution)	21,3	16,7

## 5. Credit risks (Section 326 to 329 and 336 SolvV)

The following tables present the credit risk exposures as of December 31, 2012, separately by region, sectors, and maturities, without taking credit risk mitigation techniques into account. Loans include outstanding commitments and other off-balance-sheet items from the lending business.

The figures presented refer to the gross carrying amount in accordance with IFRS 7.B9, which corresponds to the carrying amount of the relevant balance sheet item in the IFRS consolidated financial statements. Contingent liabilities were reported at nominal amounts.

## 5.1 Gross lending volumes by exposure classes

Gross lending volume in € million	Loans	Financial investments	Derivative financial instruments
<b>Total</b>	57 523	22 589	7 486

## 5.2 Gross lending volumes by exposure classes and regions

	Loans		Financial investments		Derivative financial instruments	
	€ million	%	€ million	%	€ million	%
<b>Gross lending volume</b>						
Germany	54 772	95,2	5 707	25,3	1 424	19,0
Europe	2 751	4,8	16 844	74,5	5 091	68,0
OECD countries	0	0,0	38	0,2	971	13,0
<b>Total</b>	<b>57 523</b>	<b>100,0</b>	<b>22 589</b>	<b>100,0</b>	<b>7 486</b>	<b>100,0</b>

## 5.3 Gross lending volumes by exposure classes and sectors

	Loans		Financial investments		Derivative financial instruments	
	€ million	%	€ million	%	€ million	%
Private-sector banks/other banks	8 955	15,6	1 510	6,7	840	11,2
Foreign banks	2 752	4,8	16 000	70,8	5 303	70,8
Public-sector banks	30 439	52,9	3 320	14,7	260	3,5
Cooperative banks	9 924	17,3	274	1,2	235	3,1
Central banks	800	1,4				
Non-banks	4 653	8,1	1 485	6,6	848	11,3
<b>Total</b>	<b>57 523</b>	<b>100,0</b>	<b>22 589</b>	<b>100,0</b>	<b>7 486</b>	<b>100,0</b>

## 5.4 Gross lending volumes by exposure classes and maturities

	Loans		Financial investments		Derivative financial instruments	
	€ million	%	€ million	%	€ million	%
< 1 year	9 771	17,0	4 014	17,8	1 834	24,5
1 year - 5 years	17 620	30,6	14 065	62,3	3 756	50,2
> 5 years to unspecified maturity	30 132	52,4	4 509		1 897	
<b>Total</b>	<b>57 523</b>	<b>100,0</b>	<b>22 589</b>	<b>80,0</b>	<b>7 486</b>	<b>74,7</b>

## 5.5 Provision for loan losses

As of each balance sheet date, there is an evaluation of whether there is any objective evidence that interest and principal payments may not be made in the full amount as agreed. This is assessed primarily using the following criteria:

- Arrears related to interest or principal payments of more than 90 days
- Significant downgrade in the internal rating system or
- inclusion in the group of noteworthy exposures subject to monitoring

The assessment of the materiality aspect of a downgrade and the criteria for the classification as a noteworthy exposure are subject to judgment. The criteria for monitoring credit risks and for credit ranking are set out in detail in the Group Management Report.

*Financial assets of the "designated as at fair value" category:*

A separate impairment review is not performed for financial assets of the "designated as at fair value" category as these securities are measured at fair value, and any impairment losses are already taken into account in the fair value and recognized in profit or loss.

*Receivables and financial assets measured at (amortized) purchase cost:*

Rentenbank assesses the recoverability for significant single exposures and securities as well as for exposures of insignificant amounts on an individual basis. If there is objective evidence of impairment, the valuation allowance is determined based on the difference between the carrying amount and the present value of expected cash flows. The expected cash flows are determined based on qualified estimates that take into account the financial condition of the counterparty as well as the realization of collateral and additional supporting data, such as membership in a protection scheme or liability mechanisms provided by the government. The discount factor used for fixed-interest loans, advances and securities is the original effective interest, while the current effective interest is used for variable-interest loans, advances and securities and the current market return of a comparable financial asset for equity investments measured at cost.

In accordance with IFRS, impairments resulting from payment defaults are only determined for losses already incurred, but not for losses anticipated in the future. The Group generally extends credit almost exclusively via other banks. Any potential losses are timely identified due to the publication requirements of banks. Therefore, valuation allowances are not required to be recognized on portfolio level.

*Financial assets of the category "available for sale" that are measured at fair value:*

If objective evidence suggests that financial investments are impaired, such impairment is calculated as the difference between amortized cost and the current fair value. The loss calculated in this manner is recorded as an adjustment to the revaluation reserve for securities belonging to the "available for sale" category in the results of Financial Investments.

If the reasons for an impairment of debt instruments no longer apply, then the impairment loss has to be reversed through profit or loss.

The item "provision for loan losses/promotional contribution" in the profit and loss statement in particular includes the discounting of future expenses for special promotional loans for the program loans (additions to promotional contribution) as well as their amortization over the remaining term.



The risk covering potential as at December 31, 2012, compared to the prior year, is as follows:

	Jan. 1 to Dec. 31, 2012 € million	Jan. 1 to Dec. 31, 2011 € million	Change in € million
Expenses for additions to promotional contribution	74,9	68,5	-3,2
Income from amortization of promotional contribution	54,1	48,6	4,5
Impairment and write-offs of loans and advances	0,0	0,1	0,1
Reversal of portfolio valuation allowance	0,0	3,8	1,5
Recoveries on loans and advances previously written off	0,1	0,6	-19,7
<b>Provisions for losses/promotional contribution</b>	<b>20,7</b>	<b>15,6</b>	<b>10,6</b>

Loans are extended to banks or other borrowers with top credit quality for the most part. Recoveries on loans and advances previously written off amounted to € 0.1 million (€ 0.6 million) and refer to loans and advances to banks previously written off.

## 5.6 Exposure amounts with risk weights prescribed by regulatory authorities

In the context of the determination of the equity capital requirements for credit risk exposures under CRSA, Rentenbank only uses external ratings by Moody's Investors Service in the exposure classes "Corporates", "Institutions" and "Central Governments".

The risk weight for covered bonds issued by financial institutions which are included in the assets portfolio is determined in accordance with 32 in conjunction with 31 SolvV.

The following table shows the amount of the credit risk exposures, before and after collateral, of the regulatory risk weights applicable under CRSA as of December 31, 2012.

Risk weights in %	Total amount of receivable outstanding	
	before credit risk mitigation € million	after credit risk mitigation € million
0	16 702	23 723
10	7 506	7 506
20	52 792	45 862
50	3 336	3 502
100	1 500	1 243
<b>Total CRSA</b>	<b>81 836</b>	<b>81 836</b>

Due to substitution effects, exposure amounts with originally higher risk weights are reported in exposures with a risk weight of 0%. Therefore, the sum total of the exposure amounts does not change.

## 5.7 Derivative credit risk exposures and netting positions

Derivatives are only entered into to hedge existing or expected market price risks and only with business partners from EU or OECD countries with top credit quality.

Rentenbank has concluded collateral agreements with all counterparties with which it enters into derivative transactions. These agreements provide for cash deposits denominated exclusively in Euro to secure the positive fair values from derivatives exceeding the contractually agreed allowance amounts and minimum transfer amounts, which depend on the credit quality. In return, the bank undertakes to provide cash deposits denominated in Euro in the case of negative fair values, if these exceed the corresponding allowance and minimum transfer amounts. The interest applied to the collateral provided and accepted is the EONIA swap rate. Interest payments are made on a monthly basis.

As of December 31, 2012, the counterparty credit risk exposure from all derivative transactions amounted to € 5,525 million (credit equivalent value) (€ 7,139 million). This exposure is determined using market price-based replacement cost pursuant to Section 18 SolvV. Netting arrangements are exclusively used for derivatives. The use of netting options from standardized netting arrangements as well as netting arrangements generally accepted by regulatory authorities with essentially all counterparties leads to a reduction of positive fair values.

The following overview shows the positive fair values from derivative transactions as of December 31, 2012, before and after application of netting arrangements and eligible collateral in accordance with 326 (2) No. 1 SolvV:

	in € million
<b>Positive replacement values before netting and collateral (positive fair values)</b>	<b>7 486</b>
Netting arrangements	1 961
<b>Credit equivalent amount</b>	<b>5 525</b>
Eligible collateral	4 646
<b>Positive replacement values after netting and collateral (Credit equivalent amount after collateral)</b>	<b>879</b>

The positive fair values before netting and before collateral arrangements in the amount of € 7,486 million consist of interest rate contracts of € 2,816 million, foreign exchange contracts of € 4,667 million, and equity/index-related contracts of € 3 million. The Bank does not conclude credit derivatives, such as credit default swaps (CDS).

The limitation of derivative risk exposures per counterparty is conducted within the scope of the processes for controlling and monitoring counterparty-based credit risks.

The correlations included in the scenarios for credit and market price risks are taken into account as a risk-mitigating effect. The option of taking into account interdependencies/correlation effects between the risk types, is not used. The aggregation of the capital requirements relating to the individual risk types is conducted on the basis of a conservative correlation assumption of +1.

The allowance amounts granted to Rentenbank relating to collateral agreements are based on Rentenbank's triple A ratings and are linked to the so-called maintenance obligation (Anstaltslast) of the German government in favor of Rentenbank. The scenario involving a rating downgrade in connection with the provision of further collateral relating to collateral arrangements is regularly validated and is not substantial at the moment.

## 5.8 Credit risk mitigation techniques

Rentenbank uses collateral and netting arrangements in order to reduce credit risk. Netting options only exist for derivatives in the form of netting arrangements. Rentenbank generally accepts all kinds of collateral commonly accepted by banks.



Maintenance obligations (requirement that the owner of a public entity ensures its solvency at all times [Anstaltslast]), liabilities of guarantors (Gewährträgerhaftung) and separate cover funds, used for example with regard to covered bonds, may also be used as collateral. The divisions Promotional Business, Financial Institutions and Collateral & Equity Investments are responsible for collateral management. All collateral provided to Rentenbank is reviewed as to its intrinsic value on an annual basis per business partner and with a view to the collateral type. The collateral is managed in Rentenbank's collateral system. The actual provision of collateral is monitored closely and collateral deficits are additionally demanded. The Group conducts routine, non-event-driven reviews on a test basis in connection with the use of the special-purpose funds within the scope of the special promotional business based on the credit documentation of the principal banks.

Only warranties, especially guarantees and indemnities, as well as financial collateral from collateral arrangements, are used by Rentenbank to reduce the capital charge on the basis of the Financial Collateral Simple Method in accordance with Section 185 SolvV.

Only European countries, the German federal government, the German federal states and local authorities are recognized as eligible providers of credit protection.

Under the CRSA, the following collateral was used as of December 31, 2012:

Portfolio in € million	Financial collateral	Guarantees
sovereigns	—	476
non-central governments	—	2 065
Institutions	4 646	—
Corporates	—	—
<b>Total</b>	<b>4 646</b>	<b>2 540</b>

## 6. Market price risk (Section 333 SolvV)

### Interest-rate risks in the banking book

Within the context of monitoring interest-rate risks on the level of the whole bank, present value sensitivities for all transactions subject to interest rate risks of the "Promotional Business" and "Treasury Management" segments are determined on a daily basis, and interest-rate risks for all open positions of the Group exposed to such interest-rate risks are additionally measured on a quarterly basis using a model based on present values.

The interest-rate risks from open positions may not exceed the risk limits determined by resolution of the whole Board of Managing Directors. Compliance with the limits is monitored daily and reported to the whole Board of Managing Directors, with utilization of the risk limits being measured using present values on the basis of a sensitivity.

The additional quarterly analysis examines the effects of changes in interest rates as of a specific key date. The relevant exposures are allocated to maturity buckets - separated by asset side and liability side. A net position is then determined for each maturity bucket. Subsequently, the respective net positions are multiplied by the weighting factor for the maturity bucket concerned - as prescribed by the Federal Financial Supervisory Authority (BaFin) - and then added up to form a weighted total net

position. The result is the estimated change of the present value, which is analyzed in relation to total regulatory capital. The present value is calculated on the basis of a scenario analysis without taking into account equity components. Pursuant to 24 (1) No. 14 of the German Banking Act (Kreditwesengesetz, "KWG"), a negative change in present value exceeding 20% of total regulatory capital must be reported "immediately"

The present value is calculated on the basis of scenario analysis without taking into account equity components. Early repayments of loans are taken into account for the period up to the contractual maturity. No further assumptions were made as to early repayment of loans. Non-term customer deposits are not of material significance to Rentenbank and are therefore not taken into account. The calculation of the present value does not take into account items that are not subject to interest rate risks, such as "valuation allowances", "equity investments", "non-current assets held for sale", "investment property", "property and equipment", "intangible assets", "current income tax assets", "other assets", "provisions", and "other liabilities".

In accordance with requirements imposed by BaFin, sudden and unexpected changes in interest rates were simulated using a parallel shift of  $\pm$  200 bps. As of the reporting date, rising interest rates results in risk exposure of € 323.1 million (compared with € 325.8 million in 2011). This equates to a ratio of 8.6% (compared with 9.3% in 2011) in relation to regulatory capital. At no point during 2011 or 2012 did the ratio exceed the notification threshold of 20%.

We did not provide a breakdown by currency of the results from the abovementioned interest rate risks in the banking book as the Group generally does not enter into open currency positions. It is generally not permitted to enter into open currency positions. Open currency positions result from fractional amounts from settlement, but only to a very limited extent. Exchange rate risks from foreign currency loans or issues of securities in a foreign currency are hedged through currency derivatives or offsetting transactions recognized in the balance sheet. There is no material risk to be identified for any currency.

## 7. Equity exposures (Section 332 SolvV)

### 7.1 Equity exposures in the banking book

The item "Financial Assets" in the IFRS consolidated financial statements includes equity investments, inter alia. The investments are motivated by Rentenbank's legal mandate. Promotional lending is the principal focus of the investment strategy, not maximization of contributions to earnings. The strategic investments are made by acquiring equity interests. Due to the very limited business activity of its subsidiaries and the letter of comfort issued to LR Beteiligungsgesellschaft mbH, all material risks are concentrated in Rentenbank and are therefore managed by Rentenbank on a Group level.



Description	Name	Subscribed capital in € million	Shareholding in %
Banks	DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt	3 160,1	3,4
Other companies	Getreide-Import-Gesellschaft mbH, Frankfurt	7,7	100
	Deutsche Bauernsiedlung - Deutsche Gesellschaft für Landentwicklung (DGL) GmbH, Frankfurt	8,7	25,1
	LAND-DATA GmbH, Hannover	1	10,9
	Landgesellschaft Mecklenburg-Vorpommern mbH, Leezen	10,2	9,8
	Niedersächsische Landgesellschaft mbH, Hannover	0,8	6,3
	Landgesellschaft Sachsen-Anhalt mbH, Magdeburg	9,2	5,6
	Landgesellschaft Schleswig-Holstein mbH, Kiel	27,5	3,2

## 7.2 Carrying amounts for equity exposures

Equity investments are recognized at cost as these items relate to unlisted companies and hence a reliable estimate of their fair value is not possible.

The IFRS carrying amount of unlisted companies as of December 31, 2012 amounts to € 119 million (€ 119 million).

## 7.3 Realized and unrealized gains/losses from equity exposures

No impairment losses were required to be recognized according to the impairment test performed as of December 31, 2012.