Disclosure Report
in accordance with § 26a of the German Banking Act
and the German Solvency Regulation

as at 31 December 2011

Finanzgruppe

NORD/LB

Die norddeutsche Art.

The rounding of figures may result in minor differences in the totals and percentages calculated in this report.

1 Preamble

The German Solvency Regulation entered into force on 1 January 2007. It spells out the regulations governing the capital adequacy of institutes, groups of institutions and financial holding groups demanded by § 10 of the German Banking Act and supersedes the previous Principle I.

The German Solvency Regulation transposes the European standards prescribed in the Banking Directive and the Capital Adequacy Directive into national law. The European standards in turn are based on the international Basel II set of regulations issued by the Basel Committee on Banking Supervision.

Requirements relating to the regular disclosure of qualitative and quantitative information to enhance market discipline are defined in Pillar 3 of Basel II. The aim is to create transparency with regard to the risks entered into by the institutes. Pillar 3 thus supplements the minimum capital requirements of Pillar 1 and the supervisory review process of Pillar 2. In Germany the disclosure requirements were generally implemented in § 26a of the German Banking Act. These requirements were spelled out in Part 5 of the German Solvency Regulation in §§ 319 to 337.

This report as at 31 December 2011 constitutes the disclosure of qualitative and quantitative information in accordance with the German Solvency Regulation by Norddeutsche Landesbank Girozentrale, Hanover, (NORD/LB) as the superordinate institute in the NORD/LB Group for the regulatory group. Disclosure in accordance with the German Solvency Regulation is generally aligned towards a group approach. This means that member companies in the Group are not obliged to disclose such information separately.

The disclosure principles and the disclosure process of the NORD/LB Group are set out in the “Disclosure Guidelines for the Norddeutsche Landesbank Group on Regulatory Disclosure in accordance with § 26a of the German Banking Act and the German Solvency Regulation”. An important principle in this respect is the regular review of the disclosure report with regard to the need for optimisation. As a result of the last review several optimisations have been carried out to further improve transparency.

Further changes in this report are the result of additional or revised disclosure requirements in the German Solvency Regulation. The additional reporting requirements are pointed out at the relevant points in the report. They are based on the second regulation which implements the revised Banking Directive and the revised Capital Adequacy Directive and came into force on 31 December 2011. Where only clarifications or more precise definitions were made, these are considered in this report, but they are not explicitly pointed out as they did not result in any changes in content.

The disclosure report is an auxiliary document supplementing the Annual Report of the NORD/LB Group prepared on the basis of International Financial Reporting Standards (IFRSs) and the individual annual reports of Group member institutes prepared on the basis of the German Commercial Code (HGB). Norddeutsche Landesbank Luxembourg S.A., Luxembourg, and NORD/LB COVERED FINANCE BANK S.A., Luxembourg are exceptions in this case since the bank prepares its annual financial statements in accordance with IFRSs.

Information on equity is disclosed on the one hand, while on the other hand material risks and the corresponding system of risk management as well as methods of risk control are described. The overall risk profile of the NORD/LB Group is reviewed and its material risks are identified in the risk inventory, which takes place at least annually. This currently includes counterparty risk (credit risk and investment risk), market price risk, liquidity risk and operational risk.

Quantitative disclosures contained in this report are based on the German Commercial Code which currently constitutes the basis for preparing regulatory reports in accordance with the German Solvency Regulation in the NORD/LB Group. Norddeutsche Landesbank Luxembourg S.A., Luxembourg, and NORD/LB COVERED FINANCE BANK S.A., Luxembourg, are exceptions here too, since their quantitative disclosures are based on Lux GAAP (disclosures relating to equity) or on IFRSs.

For further information about risk beyond regulatory German Solvency Regulation requirements, this report contains a few references to the risk report which is part of the NORD/LB Group’s management report. Here a detailed account is given on risk developments for each significant risk type in the period under review and an outlook for developments anticipated in future.

In accordance with § 320 para. 1 of the German Solvency Regulation, this disclosure report is published on the NORD/LB website under www.nordlb.com/reports. The publication of the report is announced in the electronic German Federal Register (www.ebundesanzeiger.de) in accordance with § 320 para. 2 of the German Solvency Regulation.

2 Application

German Solvency Regulation requirements for disclosure relate to regulatory groups of institutes in accordance with § 10a of the German Banking Act. However, only the significant companies from a risk point of view in the group of institutes are included in disclosure. The institutes are selected on the basis of a concept of materiality which is regularly reviewed so that changes in the regulatory group are taken into account for disclosure purposes.

Compliance with the principle of materiality therefore results in a deviating scope of application. The group of significant companies included in the quantitative risk reporting is defined in a multi-stage process which is described in section 5.2.1. In the NORD/LB Group, quantitative risk reporting on the basis of individual risks is based on the significant companies of the NORD/LB Group from a risk point of view.

Based on this concept, NORD/LB, Bremer Landesbank Kreditanstalt Oldenburg – Girozentrale –, Bremen (Bremer Landesbank), Norddeutsche Landesbank Luxembourg S.A., Luxembourg (NORD/LB Luxembourg), Deutsche Hypothekenbank (Actien-Gesellschaft), Hanover (Deutsche Hypo) as well as NORD/LB COVERED FINANCE BANK S.A., Luxembourg (NORD/LB CFB), are included in this report as significant Group institutes. All qualitative and quantitative disclosures therefore refer to this basis of consolidation. Particularities of the individual Group institutes are explicitly stated.

From the point of view of the entire Group, the other institutes account in quantitative terms for an insignificant level of individual risk. Risks concerning these companies are treated as investment risk.

The audit of the significant Group companies from a risk point of view considers both the consolidated companies in accordance with IFRS and the companies included in the regulatory basis of consolidation. “Group” is hence the term used below to refer to both the regulatory group and the group in accordance with IFRSs.

In accordance with § 323 para. 1 no. 2 of the German Solvency Regulation, Table 1 contains an overview of the regulatory group of significant institutes included in the NORD/LB Group and information on how they are treated in the IFRS basis of consolidation.

Table 1: Consolidation matrix for the NORD/LB Group

Type of institute	Name	Regulatory treatment				IFRS consolidation	
		Consolidation		Deduction method	Risk-weighted investments		
		Full	Proportionate			Full	Measured using equity method
Bank (parent company)	Norddeutsche Landesbank Girozentrale	●				●	
Bank	Bremer Landesbank Kreditanstalt Oldenburg – Girozentrale –	●				●	
Bank	Norddeutsche Landesbank Luxembourg S. A.	●				●	
Bank	Deutsche Hypothekenbank (Actien-Gesellschaft)	●				●	
Bank	NORD/LB COVERED FINANCE BANK S. A.	●				●	

The independent market presence of the five significant Group institutes highlights the focus on their own products and regions while, at the same time, the close ties within the Group represent a significant factor for success. Below is a description of each institute.

NORD/LB is a registered public institute (AöR) in Germany, with registered offices in Hanover, Braunschweig and Magdeburg. Its head office is in Hanover. NORD/LB is the state bank for the federal states of Lower Saxony and Saxony-Anhalt. In these two federal states and in Mecklenburg-Western Pomerania the bank performs the functions of a central and clearing bank for the savings banks (Girozentrale). NORD/LB operates in the segments of Private and Commercial Customers, Savings Bank Network, Financial Markets/Institutional Customers, Corporate Customers, Energy and Infrastructure Customers, Ship and Aircraft Customers and Real Estate Banking Customers.

Bremer Landesbank sees itself as a universal bank acting as a regional commercial bank with special international business while at the same time performing its role as a state bank and a central bank for the savings banks. Its core business region is North West Germany, from where the bank supports its regional and international customers in Europe. The owners of Bremer Landesbank are NORD/LB, which holds 92.5 per cent of the share capital, and the federal state of Bremen with a 7.5 per cent shareholding.

NORD/LB Luxembourg was founded in 1972 as an independent public limited enterprise under Luxembourg law. Since 1975 the bank has been a wholly-owned subsidiary of NORD/LB. NORD/LB Luxembourg's activities lie in the business segments of Private Banking, Corporate Banking and Financial Markets.

Deutsche Hypo, which was established in 1872, is a well-positioned mortgage bank with a rising volume of commercial real estate business. The pooling of know-how raises the significance, image and acquisition power of the NORD/LB Group among customers, partners and investors in the market for providing finance for commercial real estate. NORD/LB holds all the share capital and the voting rights of Deutsche Hypo.

NORD/LB CFB was established as a wholly-owned subsidiary of NORD/LB Luxembourg. It is a specialised bank with a licence to issue lettres de gage publiques (covered bonds acc. to Luxembourg law). NORD/LB CFB acts as a centre of competence for the NORD/LB Group's OECD-wide international public finance business. NORD/LB CFB's issues concentrate on medium and long-term covered issues outside the euro.

In addition to the five significant institutes in the NORD/LB Group stated above, the basis of consolidation under regulatory law and IFRSs comprises another 115 companies which are not significant from a risk point of view and in which NORD/LB holds direct or indirect interest. These include six banks, three financial services institutions, 67 financial companies, three insurance companies and 36 other companies.

Of these companies, 22 are fully consolidated under regulatory law, 31 ,are subject to the deduction method and 21 are exempted from inclusion in the consolidated reports in accordance with § 31 para. 3 of the German Banking Act. 41 companies included in the IFRS basis of consolidation are not consolidated under regulatory provisions. 45 companies are fully consolidated in accordance with IFRSs and 14 are measured using the equity method. 56 companies included in the regulatory basis of consolidation are not consolidated in accordance with IFRSs.

A complete list of equity holdings in accordance with § 313 para. 2 of the German Commercial Code is published in the notes to the consolidated financial statements.

The insignificant Group companies from a risk point of view result in diviations between the figures in the disclosure report and those in the Annual Report of the NORD/LB Group. Diviations may also occur because German Commercial Code figures are used in the disclosure report and IFRS figures in the consolidated financial statements and because other effects of consolidation are not included.

Changes to the figures disclosed as at the reporting date 31 December 2010 are also the result of methodological changes made in the meantime.

In the NORD/LB Group there are currently no limitations or other significant restrictions on the transfer of funds or liable equity in accordance with § 323 para. 1 no. 3 of the German Solvency Regulation.

There are no exceptions in the NORD/LB Group relating to compliance with specific German Banking Act provisions for subsidiary Group member institutes defined in the waiver regulation in § 2a of the German Banking Act, for example instructions concerning equity, large-scale loans and internal control systems according to § 25a para. 1 of the German Banking Act.

There were no subsidiaries in the NORD/LB Group which are subject to the deduction method and report insufficient capital in accordance with § 323 para. 2 of the German Solvency Regulation.

3 Risk Management

3.1 Risk Management Strategies and Processes

The business activities of a bank inevitably involve the deliberate undertaking of risks. Efficient risk management in terms of a risk-and-return-oriented allocation of equity is therefore a key component of modern bank management and a high priority for the NORD/LB Group. From a business point of view, the NORD/LB Group defines risk as being potential direct or indirect financial losses due to unexpected negative differences between the actual results and projected results of business activity.

The NORD/LB Group conducts at least once a year and when required a multi-stage process to develop an overall risk profile in accordance with the Minimum Requirements for Risk Management (MaRisk) AT 2.2. In this profile the risk types relevant to the NORD/LB Group are presented and a further distinction is made between material and non-material risks. Material in this context are all relevant risks which could have a negative impact on the NORD/LB Group's capital resources, earnings, the liquidity position or the achievement of the NORD/LB Group's strategic goals.

Basic conditions for structuring this risk management process are specified for banks and groups of banks in the Minimum Requirements for Risk Management (MaRisk) on the basis of § 25a of the German Banking Act. In accordance with these requirements, proper business organisation includes the specification of strategies on the basis of procedures for ascertaining and securing risk-bearing capacity, which comprises both risks and the capital available for covering these risks.

The NORD/LB Group's business policy is deliberately conservative. The responsible handling of risks is the uppermost priority. The Group risk strategy, drafted with this in mind, overrides the risk strategies of the significant companies of the NORD/LB Group from a risk point of view and is substantiated by their risk strategies.

The risk strategies of the significant Group companies from a risk point of view are in each case defined in accordance with the business model, the business strategy and the Group risk strategy policy and are reviewed at least once a year. They contain information on the principles of risk strategy, the organisation of the risk management and on sub-strategies for risks relating to the material risk types.

The core element of the risk strategy is the risk-bearing capacity model (RBC model), on the basis of which risk appetite is specified and the allocation of risk capital to the material risk types is undertaken.

For the NORD/LB Group it was conservatively determined that normally at most 80 per cent of the economic risk coverage may be covered with risk potential. The relevant approach in the RBC model (status quo of economic capital adequacy) should therefore provide a minimum coverage of 125 per cent. At the level of the significant companies, this specification applies for each individual institute.

The maximum risk capital is also allocated to the material risk types in the risk strategies. Most of the risk coverage is allocated to credit risk, reflecting the NORD/LB Group's focus on customer-oriented lending business. The individual institutes are responsible for determining the allocation relevant for them, although this must be consistent with the allocation for the Group.

The Group risk strategy and the risk strategies of the significant companies from a risk point of view were reviewed and adjusted in 2011 and discussed with the Supervisory Board after being passed by the resp. Managing Board.

The risk strategies aim to achieve an optimal management of all material risk types and to achieve the transparent presentation of these risks to the management, the supervisory bodies and other third parties with a justified interest.

Based on this, the significant companies of the NORD/LB Group from a risk point of view have a range of further instruments at operational level which ensure that there is sufficient transparency of the risk situation and structure the required limitation and portfolio diversification in a way which can be controlled and monitored. These instruments are described in detail in the NORD/LB Group's risk handbook and in the risk handbooks and relevant documents of the individual companies.

The NORD/LB Group has, in accordance with MaRisk AT 4.5, implemented a risk organisation system that complies with the risk policies of the Group's risk strategy. The risk organisation comprises structures to guarantee the regulated interaction of all the divisions of the NORD/LB Group's significant companies from a risk point of view involved in the process of risk control. Furthermore, an efficient risk management process with clearly defined tasks and authorities, backed up by an adequate IT infrastructure and qualified employees, ensures smooth procedures. An effective internal control and monitoring system ensures compliance. The aim is to consistently optimise the risk organisation and to adapt it to current requirements.

The risk strategies of the significant companies of the NORD/LB Group from a risk point of view comprise standard principles concerning risk management structures and processes which have been laid down for the entire Group.

The NORD/LB Group has implemented risk management processes which cover all institutes and divisions. The sub-processes apply to all risk types:

- Risk identification: Identification of the relevant risks (overall risk profile) in the risk inventory based on the risk universe and distinction between material and non-material risks (reviewed at least annually and as and when required)
- Risk assessment: Regular quantitative and/or qualitative assessment of risks using predefined methods
- Risk reporting: Reporting on the risk situation (internal and external, risk-type specific and general, regular and ad-hoc)
- Risk control and monitoring: Limiting and management (acceptance, mitigation, transfer, avoidance) of risks and monitoring of limits (limit/utilisation comparison)

Activities for the ongoing optimisation of the risk organisation include improvement to the internal control system geared to establishing uniform process and risk-oriented structures and procedures. Detailed descriptions of the risk management sub-processes are laid out in the NORD/LB Group's risk handbook and the relevant working instructions of the individual institutes.

For more detailed information on risk management strategies and processes in accordance with § 322 of the German Solvency Regulation, chapter 5 on the individual risk types is referred to.

3.2 Risk Management Structure and Organisation

Responsibility for the NORD/LB Group's risk management lies with the Managing Board of NORD/LB. The Managing Board coordinates the higher Group risk strategy and its amendments in the Erweiterter Konzernvorstand (Extended Group Managing Board); the Erweiterter Konzernvorstand also includes the Chairmen of the Bremer Landesbank, NORD/LB Luxembourg and Deutsche Hypo and its resolutions are referred to the responsible bodies in the Group institutes concerned for formal decision. NORD/LB CFB, as a subsidiary of NORD/LB Luxembourg, is represented by NORD/LB Luxembourg in the Erweiterter Konzernvorstand. After the Group risk strategy has been passed by the Managing Board of NORD/LB, it is submitted to the Supervisory Board of NORD/LB for its information and discussed with it.

The responsible Chief Risk Officer (CRO) in the Managing Board of NORD/LB bears, in concert with the Board Members of the market divisions, responsibility for drawing up and monitoring the Group risk strategy. This includes the monitoring of material risks including the risk reporting at Group level. At individual institute level responsibility lies with the respective Managing Board member or the risk officer.

NORD/LB's Risk Control Division is responsible for updating and developing the RBC model and regularly reviewing the risk strategies.

Operational risk management is performed decentrally in the significant Group companies. In order to ensure the greatest possible comparability with regard to the assessment, monitoring, controlling and reporting of all material risks, the instruments used for this purpose are agreed with the significant institutes from risk point of view.

In addition to the Erweiterter Konzernvorstand, various other committees and divisions are involved in the risk management of the NORD/LB Group:

- Konzernsteuerungskreise (Group Control Committees): A system of Konzernsteuerungskreise (KSK), whose members are, depending on the Konzernsteuerungskreis, various members of the Managing Board and divisional heads of the significant companies from a risk point of view, supports the institute-wide control. For risk control in particular the Risk/Finance Konzernsteuerungskreis is relevant.
- Group Risk Committee: The Group Risk Committee (GRC) is a committee which is part of the Risk/Finance Konzernsteuerungskreis and comprises the Chief Risk Officer, the Board Members of the market divisions and the heads of the Central Management Risk, Risk Control, Research/Economy and the credit back office divisions of NORD/LB and the risk officers at Bremer Landesbank, NORD/LB Luxembourg and Deutsche Hypo. Further participants are invited when required. The GRC supports the respective Managing Board in the holistic consideration of risks. The focus of the GRC

lies in considering the overall portfolio of the NORD/LB Group taking into account all material risk types and strengthening Group integration.

- Other advising committees: The Konzernsteuerungskreise and Managing Boards are supported by a number of other committees which provide advice in specific areas. These include for example the Asset Liability Committee (ALCO).

In 2011 a Group-wide RWA Management Committee comprising representatives from market and back office divisions was set up to improve the operational control of risk-weighted assets (RWA). The committee monitors the NORD/LB Group's target capital ratio and ensures that the RWA are allocated optimally from a productivity point of view and compatible with holistic bank control.

The structure and organisation of risk management at the NORD/LB Group complies with the requirements of MaRisk. The process of risk management is subject to constant review and improvement. Adjustments which may be made cover organisational measures, adjustments to procedures for quantifying risk and the continuous updating of relevant parameters.

In the year under review the NORD/LB Group took further measures to extend the Group-wide risk control. Subsidiaries were integrated more into the risk control of the parent company based on their risk content and to the extent possible under company law. The NORD/LB Group will in future make greater use of its scope for Group control, from further harmonisation of the methods and rules to credit rate assessment for large-volume exposures by authorised persons in NORD/LB.

The risk-oriented and process-independent audit of the effectiveness and adequacy of risk management is carried out by the Internal Audit Divisions of NORD/LB and the subsidiaries. As an instrument of the Managing Board, they are part of the internal monitoring process. The aims of Internal Audit also include the monitoring of the effectiveness, the efficiency and correctness of business activities. It also facilitates the optimisation of business processes and of controlling and monitoring procedures.

Within the framework of the Group-wide monitoring instruments, the internal audit departments of NORD/LB, Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo, NORD/LB CFB, Skandifinanz AG, Öffentlichen Versicherungen Braunschweig and NORD/LB Asset Management work together closely using fundamentally uniform conditions (audit policy) and instruments (in particular the assessment matrix for audit findings and reporting standards).

The Group audit department is carried out in addition to the internal audits in the subsidiaries. The focus is on NORD/LB Group's risk strategy, Group-wide risk-bearing capacity, Group accounting and Group reporting, reporting on Group control and the reliability of the internal audits of the subsidiaries. In addition to the Group audits, joint audits of the Group audit with the internal audits (cooperative Group audits) also take place. The objectives, tasks, role and instruments of the Group audit department are defined in a policy.

The treatment of new products, new markets, new sales channels, new services and their variations is regulated decentrally in the New Product Process (NPP) in the significant institutes of the NORD/LB Group from a risk point of view taking into account the respective conditions. There is close coordination between the institutes regarding the implementation of the NPP.

The essential aim of the NPP is to identify, analyse and assess all potential risks for the NORD/LB Group prior to starting the new business. This includes all of the essential audit areas, documentation of the new business activities, their treatment in the overall operational process, the decisions to start the business and where applicable the associated restrictions.

For more detailed information on the structure and organisation of risk management in accordance with § 322 of the German Solvency Regulation, chapter 5 on the individual types of risk is referred to.

3.3 Hedging and Mitigating Risk

Various measures for hedging and mitigating risk are undertaken, depending on the risk type in question. For more detailed information on hedging and mitigating risk in the system of risk management in accordance with § 322 of the German Solvency Regulation, chapter 5 on the individual types of risk is referred to.

3.4 Risk Reporting

The reports drawn up on at least a quarterly basis by the Risk Control Division on risk-bearing capacity (RBC reports) constitute the main instrument for risk reporting at Group and individual institute level to the respective Managing Board and the supervisory bodies. Compliance with the specifications of the risk strategy on risk appetite and on the allocation of risk capital to the material risk types is therefore reviewed regularly.

In addition to receiving the report on risk-bearing capacity, the Managing Boards of the institutes subject to the Covered Bond Act (Pfandbriefgesetz) are also informed about risks relating to covered bond business on at least a quarterly basis. These reports prepared at individual institute level meet the requirements of § 27 of the Covered Bond Act.

In general the management approach is applied for risk reporting: internal and external risk reports are always based on the same terms, methods and data.

In addition to risk reporting for the entire bank, data relating to the individual risk types is regularly reported to the Managing Board and to bodies, committees and specialised bank divisions. For details on reporting within the scope of risk management in accordance with § 322 of the German Solvency Regulation, chapter 5 on the individual types of risk is referred to.

3.5 Risk Types

3.5.1 Credit Risk

Credit risk is a component of counterparty risk and is broken down into traditional credit risk and counterparty risk in trading. Credit risk defines the risk of loss involved when a credit borrower defaults or when the credit rating of such a credit borrower deteriorates. Counterparty risk in trading defines the risk of loss involved when a borrower or contract partner in trading transactions defaults or when the credit rating of such a borrower or contract partner deteriorates. It is broken down into counterparty risk in trading, replacement risk, settlement risk and issuer risk:

- Counterparty risk in trading defines the risk of loss involved when a borrower defaults or when the credit rating of such a borrower deteriorates. It equates to traditional credit risk and relates to money market transactions.

- Replacement risk defines the risk of the contract partner in a pending transaction with a positive present value defaulting and this transaction having to be replaced with a loss.

- Settlement risk is broken down into advance payment risk and clearing risk. Advance payment risk defines the risk when the bank has completed a payment of the counter-payment not being made by the contract partner or, if payments are offset, the balance not being paid. Clearing risk defines the risk of transactions not being able to be cleared by either party upon or after the expiry of the contractually agreed performance date.

- Issuer risk defines the risk of loss involved when an issuer or reference entity defaults or when the credit rating of such an issuer or reference entity deteriorates.

In addition to the original credit risk, cross-border capital transfer services involve country risk (transfer risk). This is the risk that, despite the ability and willingness of the individual counterparty to meet payment claims, a loss will occur as a result of overriding government hindrances.

3.5.2 Investment Risk

Investment risk is a component of counterparty risk and defines the risk of incurring losses when making equity available to third parties. A potential loss due to other financial liabilities is also a component of investment risk, unless it was considered in the other risks.

In addition to the original investment risk, cross-border capital transfer services involve country risk (transfer risk).

3.5.3 Market Price Risk

Market price risk is defined as the potential losses which may be incurred as a result of changes in market parameters. With market price risk a distinction is made between interest rate risk, currency risk, share price risk, fund price risk, volatility risk as well as credit-spread risk and commodity risk.

- Interest-rate risk always occurs when the value of an item or a portfolio reacts to changes to one or several interest rates or to changes in full yield curves and when these changes may consequently impair the item. This also includes the credit-spread risk in the trading book and the liquidity reserve in accordance with the German Commercial Code (HGB).

- Credit-spread risk defines potential changes in value which would result if the credit-spread applicable for the respective issuer, borrower or reference entity used for the market value of the item changed.

- Other partial risks relevant for NORD/LB include the risk that the value of an item reacts to changes in one or more currency exchange rates (currency risk), share prices or share indexes (share price risk), fund prices (fund price risk) or volatilities applied for valuing options (volatility risk) and the changes result in a reduction in the item's value.

3.5.4 Liquidity Risk

Liquidity risks are risks which may result from disruptions in the liquidity of individual market segments, unexpected events in lending, deposit or new issue business or deterioration in the bank's own refinancing conditions. The NORD/LB Group understands placement risk to be a component of liquidity risk. It describes the risk of own issues not being placed in the market or only placed at poorer conditions. Liquidity risks are broken down into traditional liquidity risk, refinancing risk and market liquidity risk:

- Traditional liquidity risk is the risk that payment obligations cannot be met or cannot be met on time. Potential causes can be a general disruption in the liquidity of money markets which affects individual institutes or the entire financial market. Market disruptions may in particular result in significant asset classes not being available for use as collateral. Alternatively unexpected events in the banks's own lending, deposit or new issue business may also result in liquidity shortages. The focus of the NORD/LB Group's consideration is on the respective coming twelve months.

- Refinancing risk constitutes potential declines in earnings resulting from a deterioration in the bank's own refinancing conditions on the money market or capital market. The most significant cause in this case is a change in the assessment of the bank's credit rating by other market participants. The focus of consideration here is on the entire range of terms to maturity.

- Market liquidity risk defines potential losses to be borne if transactions need to be concluded at conditions which are not in line with the fair market value due to a lack of liquidity in individual market segments. Market liquidity risks may primarily result from security items in the trading and banking books.

3.5.5 Operational Risk

Operational risk is defined as the risk of incurring losses as a result of the inadequacy or failure of internal procedures, employees and technology or losses which occur as a result of external influences. This definition includes legal risks and reputational risks as secondary risks. The NORD/LB Group understands compliance risk, outsourcing risk, dilution risk and fraud risk to be components of operational risk as well.

- Legal risk defines the risk of losses occurring due to the non- or insufficient consideration of the legal framework specified by legal regulations and case law. Legal risk only exists in the bank's external relations.

- Reputational risk defines the risk of a loss occurring due to a loss of confidence among customers, business partners or owners.

- Compliance risk defines the risks of penalties being handed out by courts, authorities or disciplinary bodies as a result of improper procedures, processes etc. (due to non-compliance with laws, regulations, codes of conduct and standards) in the bank's internal relations.

- Outsourcing risk defines the risks resulting from the outsourcing of activities and processes.

- Dilution risk defines the risk relating to the balance and convertibility of a purchased receivable as a result of the borrower of the purchased receivable not being obliged to pay in full.

- Fraud risk defines the risk resulting from other criminal actions against the bank which cause a preventable loss of assets or damage to reputation.

4 Capital Structure and Adequacy

4.1 Capital Structure

The components of capital of the NORD/LB Group included in the summary according to § 10a para. 6 of the German Banking Act comprise the core capital and the supplementary capital allocated to the regulatory consilidated companies as well as certain deductions.

The core capital of the NORD/LB Group as at 31 December 2011 before half-deductible items totals € 8 838 million and primarily comprises capital paid in, other eligible reserves, a special item for general banking risks in accordance with § 340g of the German Commercial Code, additional capital in accordance with § 10 para. 2a clause 1 no. 8 of the German Banking Act, other capital in accordance with § 10 para. 2a clause 1 no. 10 of the German Banking Act and asset-side differences of which 50 per cent may be recognised.

The capital paid in totalling € 1 479 million comprises the share capital of NORD/LB as the superordinate company (€ 1 426 million) and shares in the share capital or capital stock of subordinate companies (€ 53 million). The share capital has increased by € 340 million compared to the end of 2010.

Following the EU-wide bank stress test carried out by the European Banking Authority (EBA) in July 2011, in which contributions from silent partners were not recognised as hard core capital by the EBA contrary to the applicable regulations in the German Banking Act, the owners of NORD/LB decided to convert the contributions from silent partners and other capital instruments totalling € 1 146 million into share capital plus a premium and a capital increase for cash in the amount of € 521 million. Of these capital measures, by the end of 2011 a total of € 1 389 million had been implemented. The increase in share capital in 2011 is the result of these measures being implemented.

Other eligible reserves total € 3 998 million and comprise capital reserves and retained earnings. In 2011 these reserves increased by € 1 175 million primarily due to the premium paid in as part of the aforementioned capital measures and due to retained earnings from the profit in 2010.

The remainder of the aforementioned capital measures of € 278 million were implemented on 2 January 2012. After the reporting date the total of the share capital and other eligible reserves increased by this amount.

The special item for general banking risks in accordance with § 340g of the German Commercial Code in the amount of € 1 425 million serves to reinforce the capital of the NORD/LB Group.

Additional capital in accordance with § 10 para. 2a clause 1 no. 8 of the German Banking Act totalling € 21 million and other capital in accordance with § 10 para. 2a clause 1 no. 10 of the of the German Banking Act totalling € 2 003 million consist entirely of contributions from silent partners. The inclusion as core capital is based from 31 December 2010 on the regulations in accordance with § 10 paras. 2, 2a and 4 of the German Banking Act in conjunction with the transitional regulations in accordance with § 64m of the German Banking Act. Accordingly, contributions from silent partners received before 31 December 2010 are either included as additional capital or other capital, depending on the respective contractual arrangement. Additional capital is to be included 100 per cent as core capital. Other capital may in accordance with § 10 para. 2 clause 4 of the German Banking Act make up at most 35 per cent of the core capital for solvency reasons. Other capital which is temporary or involves a repayment incentive for the issuer due to the contractual arrangements may, in deviation to this, make up at most 15 per cent of the core capital for solvency reasons in accordance with § 10 para. 2 clause 3 of the German Banking Act. However, all contributions from silent partners received before 31 December 2010 may, on a transitional basis and in accordance with § 64m para. 1 of the of the German Banking Act,

- be included until the end of 2020 in full as core capital;
- be neither additional nor other capital, and between 2021 and 2030 not make up more than 20 per cent and between 2031 and 2040 not make up more than 10 per cent of core capital for solvency reasons.

The contributions from silent partners existing as at 31 December 2011 have the following varying contractual arrangements and are to be categorised for inclusion in core capital as follows:

- Indefinite contributions without any cancellation privilege on the part of the subscribers and with the same status as share capital, which do not involve a repayment incentive for the issuer (in total € 21 million), issued in 2011. The interest for these contributions is for the first few years fixed at the capital market yield on the date of issue plus a standard market risk premium, after which it varies on an annual basis in the amount of the respective capital market yield plus a standard market risk premium which is fixed on the date of issue. Interest payments are excluded under certain conditions and are at the sole discretion of the issuer. All of these contributions meet the requirements of additional capital in accordance with § 10 para. 2a clause 1 no. 8 of the German Banking Act in conjunction with § 10 para. 4 of the German Banking Act.

- Indefinite contributions without any cancellation privilege on the part of the subscribers which do not involve a repayment incentive for the issuer (in total € 1 086 million), issued since 2005. Compared to the end of 2010 the volume of these contributions has fallen by € 700 million, as a contribution within the scope of the aforementioned capital measures has been converted into share capital plus a premium. The interest for all of these contributions is either fixed at the capital market yield on the date of issue plus a standard market risk premium or it is only fixed for the first few years of the term as already described, after which it varies on an annual basis and amounts to the respective capital market yield plus a standard market risk premium which is fixed on the date of issue. Interest payments are excluded under certain conditions and in some cases such payments are at the discretion of the issuer. All of these contributions meet the requirements of other capital in accordance with § 10 para. 2a clause 1 no. 10 of the German Banking Act in conjunction with § 10 para. 4 of the German Banking Act.

- Indefinite contributions without any cancellation privilege on the part of the subscribers which contractually involve a repayment incentive for the issuer (€ 336 million), issued in 2009. The interest for this contribution is fixed for at least the first ten years of the contract in the amount of the capital market yield at the time of issue plus a standard market risk premium. After this time, and then every further five years of the contract, the interest is reset at the level fixed in the contract at the time of issue. Interest payments are excluded under certain conditions. This contribution meets the requirements of other capital in accordance with § 10 para. 2a clause 1 no. 10 of the German Banking Act in conjunction with § 10 para. 4 of the German Banking Act, but due to the repayment incentive resulting from the fixed level of interest in the contract falls below the above-mentioned upper limit for inclusion in accordance with § 10 para. 2 clause of the German Banking Act of at most 15 per cent of core capital for solvency reasons. The NORD/LB Group complies with this upper limit as at 31 December 2011.

- Indefinite contributions with cancellation privilege on the part of the subscribers (in total € 581 million), issued between 1994 and 2001. These contributions are mainly cancelled by the subscribers and by the issuer at the earliest at the end of the tenth calendar year after they were issued. Compared to the end of 2010 the volume of these contributions has decreased by € 151 million as a contribution of € 11 million was converted into additional capital and the cancellation of contributions totalling € 88 million was announced and effected by subscribers in 2011. These cancelled contributions are therefore no longer included as core capital as at 31 December 2011. In addition to this, contributions totalling € 52 million were no longer included as core capital due to their contract terms. The interest for all of these contributions is either fixed in line at the capital market yield on the date of issue plus a risk premium for the term until the earliest possible cancellation date or it is fixed for the first few years of the term after which it varies on an annual basis and amounts to the respective capital market yield plus a standard market risk premium which is fixed on the date of issue. Interest payments are excluded under certain conditions. These contributions do not fully meet the requirements of other capital in accordance with § 10 para. 2a clause 1 no. 10 of the German Banking Act in conjunction with § 10 para. 4 of the German Banking Act and are therefore only included as other capital in the core capital on a transitional basis in accordance with § 64m para. 1 of the German Banking Act.

Contributions from silent partners eligible for inclusion as other capital make up as at 31 December 2011 25 per cent of core capital for solvency reasons. The NORD/LB Group therefore complies with the above-mentioned upper limit for inclusion in accordance with § 10 para. 2 clause 4 of the German Banking Act of 35 per cent for other capital in core capital for solvency reasons.

The above-mentioned upper limit for inclusion in accordance with § 64m para. 1 of the German Banking Act, according to which contributions from silent participations received before 31 December 2010 which are neither additional nor other capital may from the start of 2021 make up at most 20 per cent of core capital for solvency reasons, is already complied with as at 31 December 2011.

Other core capital components include asset-side differences resulting for all the regulatory investments which are fully or proportionately consolidated and whose carrying amount in the superordinate company exceeds the total of that investment's share capital and reserves. Half of these asset-side differences (altogether approx. € 9 million) are included as core capital.

Furthermore, for solvency reasons, half of the deductions shown below are deducted from the core capital (a total of € 833 million). The resulting core capital for solvency purposes totalled € 8 005 million as at 31 December 2011.

The NORD/LB Group's supplementary capital as at 31 December 2011 totalled € 3 556 million before half-deductible items and primarily comprised the following components:

- Provision reserves in accordance with § 340f of the German Commercial Code (€ 38 million).

- Participatory capital liabilities (totalling € 218 million), which have an original term to maturity of at least ten years. The amount of interest is calculated as the capital market yield on the date of issue or prolongation plus a standard market risk premium. The requirements for inclusion in supplementary capital in accordance with § 10 para. 5 of the German Banking Act have been met.

- Subordinated liabilities (totalling € 3 309 million) with original terms to maturity of ten years or more. The amount of interest is calculated as the capital market yield on the date of issue or prolongation plus a standard market risk premium. The requirements for inclusion in supplementary capital in accordance with § 10 para. 5a of the German Banking Act have been met.

- The half of asset-side differences to be deducted (totalling € 9 million). The asset-side differences indicated above, half of which are recognised as core capital, are in turn deducted from supplementary capital.

Furthermore, for solvency reasons, half of the deductions shown below are deducted from the supplementary capital (a total of € 834 million). The supplementary capital for solvency reasons calculated in this way totals € 2 722 million as at 31 December 2011.

The deductions from core capital and supplementary capital amounted to € 1 667 million of 31 December 2011 and comprise

- the carrying amounts of investments in accordance with § 10 para. 6 clause 1 nos. 1 and 5 of the German Banking Act

- deficits in valuation allowances in accordance with § 10 para. 6a no. 1 of the German Banking Act.

Compared to the end of 2010 the deductions have been reduced significantly by a total of € 565 million. This reduction is primarily the result of the sale of an investment and the inclusion of valuation allowances for loans and advances made in 2010 and which became effective in 2011.

For solvency reasons, half of the total of these deductions is deducted from core capital and half is deducted from supplementary capital.

Table 2 shows the components of capital in the regulatory capital structure in accordance with § 324 para. 2 of the German Solvency Regulation.

Table 2: Capital structure

Components of capital (in € million)	31 Dec. 2011	31 Dec. 2010
Share capital paid in	1 500	1 213
of which: Contributed capital	1 479	–
of which: Additional capital in accordance with § 10 para. 2a clause 1 no. 8 of the of the German Banking Act	21	–
Other eligible reserves	3 998	2 823
Other capital in accordance with § 10 para. 4 of the German Banking Act	2 003	2 855
of which: Other capital, convertible in a debit situation	–	–
of which: Other capital, indefinite and without repayment incentives	1 086	1 786
of which: Other capital, temporary or with repayment incentives	336	336
of which: Temporarily eligible core capital instruments subject to a transitional regulation, indefinite and without repayment incentives	581	733
of which: Temporarily eligible core capital instruments subject to a transitional regulation, temporary or with repayment incentives	–	–
Special item for general banking risks in accordance with § 340g of the German Commercial Code	1 425	1 082
Asset-side differences	9	22
Other deductions in accordance with § 10 para. 2a clause 2 of the German Banking Act	– 97	– 50
Total core capital in accordance with § 10 para. 2a of the German Banking Act	**8 838**	**7 945**
Total supplementary capital in accordance with § 10 para. 2b of the German Banking Act and tier three funds in accordance with § 10 para. 2c of the German Banking Act	**3 556**	**3 892**
Total capital deductions in accordance with § 10 paras. 6 and 6a of the German Banking Act	**– 1 667**	**– 2 232**
of which: Deficits in valuation allowances and anticipated loss amounts for IRBA items in accordance with § 10 para. 6a nos.1 and 2 of the German Banking Act	– 1 427	– 1 536
Total of modified available equity in accordance with § 10 para. 1d of the German Banking Act and eligible tier three funds in accordance with § 10 para. 2c of the German Banking Act	**10 727**	**9 605**

4.2 Capital Adequacy

4.2.1 Approaches for Ascertaining Capital Requirements

4.2.1.1 Credit Risks

In order to calculate equity capital required for credit risks, the NORD/LB Group basically uses the Internal Ratings Based Approach (IRBA).

Promotional institutes, the subsidiary Skandifinanz Bank AG, insurers, the Bremer Landesbank's commercial foreign real estate finance and Deutsche Hypo's retail banking are excluded for an indefinite period from the IRBA. Exposures excluded from the IRBA for an indefinite period are shown in the Credit Risk Standardised Approach (CRSA).

The exposure class of retail is currently still treated as partial use and is gradually being transferred to the IRBA. For the segment of minor customers without a current account partial use is still applied.

Exposures for which no internal rating procedure is available due to a gap in methodology are also treated as partial use. A regular system of rating controls will ensure that the target level of rating cover of 92 per cent will be achieved by the beginning of 2013.

The CRSA is used for individual business segments at NORD/LB Luxembourg and NORD/LB CFB, i. e. for savings bank guaranteed lending business, current account overdrafts and Lombard loans. Permanent partial use was authorised by the Luxembourg Financial Supervisory Authority CSSF (Commission de Surveillance du Secteur Financier).

Deutsche Hypo currently still uses the CRSA for receivables from central governments, foreign local authorities and companies which do not fall under real estate banking customer rating (temporary partial use). The extension of IRBA authorisation to cover the named exposure classes is planned for 2012.

In the case of securitisation transactions, the choice of method at NORD/LB, Bremer Landesbank and Deutsche Hypo for calculating capital requirements, CRSA or IRBA, also depends on the underlying pool of receivables. More information can be found in section 5.1.8.2. Securitisation transactions have so far not been relevant for NORD/LB Luxembourg and NORD/LB CFB.

4.2.1.2 Investment Risk and Investment Funds

When calculating the minimum capital requirements, the NORD/LB Group currently treats investments which are not subject to capital deduction fully in accordance with the transition rules and exceptions defined in the German Solvency Regulation. However, it is planned that the IRBA will be used.

Investments that were held in the portfolio prior to 1 January 2008 are treated based on the CRSA grandfathering rule in accordance with § 338 para. 4 of the German Solvency Regulation. Investments that are not covered by grandfathering rule are for the time being indefinitely exempted from the IRBA in accordance with § 70 no. 2 and no. 9 of the German Solvency Regulation and are also backed by equity in accordance with CRSA regulations. Compliance with the materiality threshold is monitored constantly. The same applies for Bremer Landesbank.

NORD/LB Luxembourg uses the grandfathering rule and the indefinite exemptions from the IRBA. The investments made by Deutsche Hypo are also treated using the IRBA or indefinitely exempted from the IRBA. Investments are not relevant for NORD/LB CFB.

Investment funds in the banking book are always treated using the look-through method. If looking-through is not possible, investment shares are allocated to the investments CRSA exposure class. These exposures are then included in the calculation of capital at the simple risk weight for investments in accordance with § 98 of the German Solvency Regulation. Investment funds are not relevant for NORD/LB CFB.

4.2.1.3 Market Price Risks

With regard to market price risk, NORD/LB has employed an internal risk model for general interest rate risk and for general and special share price risks to ascertain the regulatory capital requirements. The standardised approach is used for special interest rate risks and for currency risks. It is expected that the market risk model for currency risks will be approved in 2012.

Bremer Landesbank generally uses the standardised approach, in particular the duration method, for general interest rate risk. The same applies for NORD/LB Luxembourg, although in this case, share price risk is irrelevant. For Deutsche Hypo and NORD/LB CFB only currency risk plays a role and this is treated according to the standardised approach. As risks relating to commodity have no significant relevance in the NORD/LB Group, no method was implemented here.

4.2.1.4 Operational Risks

The standardised approach is used in the NORD/LB Group to calculate the equity capital required for operational risk.

4.2.2 Capital Requirements per Risk Type

Table 3 shows the regulatory capital requirements in accordance with § 325 para. 2 nos. 1–4 and § 330 para. 1 of the German Solvency Regulation for the NORD/LB Group, broken down by material risk types and the methods employed. A detailed breakdown of the investments in IRBA is provided for the first time. As a result of a reduction in volume, with credit risks the fall in risk-weighted assets (RWA) is primarily attributable to a reduction in exposures at default (EAD). This applies in particular for the Securitisations, Banks and Corporates segments. This slight increase as a result of changes in exchange rates was more than compensated by this. The market price risks in the internal model, however, have risen sharply due to changes in regulatory requirements (Stressed Value-at-Risk).

Table 3: Capital requirements

Capital requirements (in € million)	31 Dec. 2011	31 Dec. 2010
1. Counterparty risk	**6 108**	**6 468**
CRSA credit risks	**831**	**798**
Central governments	18	10
Regional governments and local authorities	58	35
Other public-sector entities	11	7
Multilateral development banks	–	–
International organisations	–	–
Banks	24	24
Covered bonds issued by banks	2	2
Corporates	443	424
Retail	151	171
Exposures secured by real estate	79	85
Investment certificates	1	–
Other exposures	15	14
Overdue exposures	29	26
IRBA credit risks	**4 939**	**5 176**
Central governments and central banks	64	88
Banks	552	694
Retail	–	–
Corporates	4 241	4 324
Other non-credit-obligation assets	82	70
Securitisations	**257**	**391**
CRSA securitisation transactions	29	29
IRBA securitisation transactions	228	362
Investments	**81**	**103**
CRSA investment items	67	92
Investment items with method continuation / grandfathering	28	28
IRBA investment items	14	11
– Simple risk-weighted approach	14	11
of which: Listed investments	–	–
of which: Not listed but included in a sufficiently diversified investment portfolio	–	–
of which: Other investments	14	11
– Internal model approach	–	–
– Investment items based on PD / LGD approaches	–	–
2. Market price risks	**339**	**183**
Market price risks in the standard approach	142	122
– Interest rate risks	74	80
of which: Special price risk for securitisation exposures in the trading book	–	–
of which: Special price risk in the correlation trading portfolio	–	–
– Share price risks	–	–
– Currency risks	68	42
– Commodity risks	–	–
– Other Risks	–	–
Market price risks is in the internal model approach	197	61

Capital requirements (in € million)	31 Dec. 2011	31 Dec. 2010
3. Operational risks	**337**	**297**
Operational risks in the basic indicator approach	–	–
Operational risks in the standard approach	337	297
Operational risks in the advanced measurement approach	–	–
Total	**6 784**	**6 948**

4.2.3 Capital Ratios

As shown in Table 4 in accordance with § 325 para. 2 no. 5 of the German Solvency Regulation, the overall ratio in accordance with § 2 para. 6 clause 2 and the core capital ratio of the significant companies of the NORD/LB Group from a risk point of view exceed the regulatory minimum capital ratios of eight per cent for total capital and four per cent for core capital as at the reporting date. Regulatory capital adequacy was given throughout the period under review.

Compared to the previous reporting date both the overall ratio in accordance with § 2 para. 6 clause 2 of the German Solvency Regulation and the core capital ratio of the NORD/LB Group have risen. The reasons for this are the volume-related reduction in RWA and an increase of over € 1.12 billion in the NORD/LB Group's capital (increase in core capital of € 893 million).

Table 4: Capital ratios

	Overall ratio in accordance with § 2 para. 6 clause 2		Core capital ratio*)	
(in %)	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Consolidated banking group				
NORD/LB Group	12,6	11,1	9,4	7,9
Parent company (as a single institute)				
Norddeutsche Landesbank Girozentrale	16,0	14,3	12,0	10,1
Subsidiaries				
Bremer Landesbank Kreditanstalt Oldenburg – Girozentrale –	10,6	11,0	8,6	8,3
Norddeutsche Landesbank Luxembourg S.A.	20,9	19,4	18,2	16,9
Deutsche Hypothekenbank (Actien-Gesellschaft)	11,6	10,6	8,4	7,6
NORD/LB COVERED FINANCE BANK S.A.	19,2	14,9	14,4	10,0

*) Core capital ratio calculated as followed: Core capital for solvency reasons / risk-weighted assets. The previous year's figures were adjusted accordingly.

4.2.4 Risk-Bearing Capacity

The risk-bearing capacity model constitutes the methodical basis for monitoring the risk strategies in the NORD/LB Group. This monitoring is carried out at Group level by NORD/LB's Risk Control Division and by the respective risk control divisions at individual institute level. NORD/LB's Risk Control Division is responsible for the overall control and development of the model.

The aim of the model is to aggregate and duly present the bank's risk-bearing capacity at both institute and Group level. The monitoring and reporting process is conducted regularly and guarantees that the responsible bodies are promptly informed about the risk-bearing capacity situation of the NORD/LB Group as a whole and its individual institutes.

The NORD/LB Group's RBC model consists of the three perspectives of going concern, economic capital adequacy and regulatory capital adequacy, in which the respective material risks (risk potential) are compared with the defined risk capital of the individual institutes and the Group. The economic and regulatory capital adequacy are both broken down further into the perspectives of status quo and under stress.

The first perspective presents the going-concern case, which assumes the continuation of the company on the basis of the NORD/LB Group's current business model. It compares, using a lower confidence level than the other two perspectives, the economically calculated risk potential with risk capital in the form of free regulatory capital based on a defined overall ratio. In addition to this, risk capital effects during the year are considered in an indexation process.

The second and third perspectives are based in terms of risk potential on a higher confidence level of 99.9 per cent. Economically-calculated risk potentials are used for the economic capital adequacy, while risk potentials calculated based on regulatory specifications are used for the regulatory capital adequacy. On the capital side both the economic and the regulatory capital adequacy tests are based on equity and equity-like components which according to banking regulations are to be classed as equity. In the economic consideration, as in the going-concern case, an indexation process takes into account risk capital effects during the year.

For the Internal Capital Adequacy Assessment Process (ICAAP) required in accordance with MaRisk, primarily the pillar of economic capital adequacy (status quo) is considered. The regulatory capital adequacy in the status quo is to be complied with as a strict supplementary condition. Strategic limits are derived from the consideration of risk-bearing capacity taking into account the allocations of risk capital in the Group risk strategy based on the going-concern case.

When calculating risk-bearing capacity, risk concentrations are also considered, both within a risk type as well as across risk types. Concentrations within a risk type essentially concern credit risks as the most significant risk type for the NORD/LB Group. These are integrated via the internal credit risk model into the RBC model.

Concentrations across different risk types are considered by stress tests. When selecting the stress scenarios the NORD/LB Group's key business areas and risks are consciously used as guidelines for selection. In the process among other things industries, segments and regions are selected which have a significant impact on the Group's risk situation. These risk concentrations are reported and monitored on a regular basis in the context of risk-bearing capacity with targeted stress tests.

The relevant scenarios are ascertained at the level of the NORD/LB Group and are to be applied consistently in all of the individual companies in order to ensure comparability between the institutes and to ensure that the group values can be aggregated. At individual institute level further stress tests can be determined which take account of the key business areas. All of the scenarios and parameters are reviewed regularly and if necessary updated.

The NORD/LB Group has revised and improved its existing RBC model in the year under review. The focus was on an optimisation of the quantitative methods and in particular extensive improvements to the credit portfolio model; these included improvements in the modelling of loss amounts in the event of default, improvements in the consideration of interdependencies between individual borrowers and the integration of losses via rating migrations. In turn, charges based on models that had previously been added were reduced. The migration of the data from the internal credit risk reporting to a new IT environment allows improved data quality, e.g. with regard to the market values and collateral considered.

The method for quantifying investment risk has been redesigned in order to adequately consider in particular risks beyond the carrying amount. With the calculation of market price risk, the scaling factor used for longer holding periods was adjusted. In addition, as at 31 December 2011 general inverse stress tests for all risk types were integrated for the first time into the RBC report.

Against the background of the industry-wide discussion with the German regulatory authority on the assessment of internal bank risk-bearing-capacity concepts and requirements relating to this formulated by the regulatory authority, the RBC model is currently the subject of a critical review. The objective here is to reinforce the conservative risk policy of the NORD/LB Group and to consider changes in economic conditions and the associated higher volatility.

The utilisation of risk capital with risk potential for the individual risk types and the risk coverage in the economic capital adequacy (status quo) for the NORD/LB Group can be found in the risk report in the Group management report.

4.2.5 Security Mechanisms at Association Level

In addition to an adequate supply of available capital for the NORD/LB Group, other mechanisms at association level are in place to secure the institute.

NORD/LB is a part of the security reserve of the Landesbanks and giro centres and is also covered by the protection system of the Savings Bank Financial Group. In addition to the security reserve of the Landesbanks and giro centres, this protection system comprises twelve other protection schemes which have been consolidated in accordance with their statutes under the umbrella of the Deutscher Sparkassen- und Giroverband (German Association of Savings Banks and Girobanks).

The aim of the protection scheme of the Savings Bank Financial Group is to recognise risks and critical situations among the member banks as early as possible and to initiate counter-measures. In this case the joint liability scheme operates a risk monitoring system with which the risk positions of participating institutes are monitored by the monitoring committees of their respective protection schemes. These committees in turn report to a central transparency committee which watches over the general risk situation of the joint liability scheme.

The joint liability scheme combines the individual protection schemes in a united protection system within the Savings Bank Financial Group. The savings bank financial group thus assumes responsibility for the portfolio of its institutes and completely covers customers' deposits from its own resources (§ 12 of the German Deposit Guarantee and Investor Compensation Act). This makes the joint liability scheme a symbol of cooperation and internal stability of the Savings Bank Financial Group.

As a member of the security reserve for Landesbanks and giro centres, Bremer Landesbank is also covered by the joint liability scheme of the Savings Bank Financial Group. NORD/LB Luxembourg and NORD/LB CFB are also secured as subsidiaries via the parent company NORD/LB. Deutsche Hypo is a member of the security reserve as an affiliated institute.

5 Disclosures on Risk Types

5.1 Credit Risk

5.1.1 Credit Risk Management

5.1.1.1 Credit Risk Management Strategies and Processes

For the NORD/LB Group lending business and the management of credit risks is a core competence that is to be permanently developed and extended. The NORD/LB Group sees itself as a reliable universal bank focusing on credit business and it positions itself with its customers accordingly.

In order to meet the specific requirements of each business segment, NORD/LB has established financing principles for the individual market segments; these cover both market and back office divisions. These principles represent binding guidelines for new business for the respective market divisions and take into account the conservative orientation of the NORD/LB Group.

New lending business focuses on concluding agreements with customers with a good to very good credit rating. The NORD/LB Group also concentrates on business with borrowers of good standing in the capital market business.

The controlling of the NORD/LB Group's credit portfolio takes into account opportunities and risks. The aim is to produce competitive profitability and ensure efficiency and flexibility in terms of the active management of credit risk positions in order to minimise unexpected losses.

The NORD/LB Group focuses regionally mainly on domestic business. Its foreign lending business focuses on developed countries and selected emerging markets. Regional concentrations are deliberately realised outside of Germany in the USA, Great Britain and France. At industry level NORD/LB focuses on ships, aircraft, energy, banks, real estate and local authorities in Germany.

The key risk indicators of expected loss and unexpected loss are applied in order to quantify counterparty risk (credit risk and investment risk). Expected loss is determined on the basis of probability of default taking into account recovery rates. The risk premium, which must be collected in order to cover expected loss, is calculated using the same methods throughout the Group.

Unexpected loss for credit risk is quantified Group-wide with the help of an economic credit risk model for different confidence levels and a time frame of one year. The credit risk model used by the NORD/LB Group includes correlations and concentrations in the risk assessment and is subject to an annual review and validation.

The credit risk model calculates the unexpected losses at the level of the overall portfolio. The model used is based on CreditRisk+ model. Using correlated sector variables, systematic industry effects are represented in the loss distribution. The estimated probability of default (PD) is based on the internal rating method. The loss given default (LGD) is determined on a transaction-specific basis. The version of the credit risk model that was improved in the year under review works with a simulation method which also takes into account specific interdependencies of borrowers, e.g. on the basis of Group structures. In addition to default losses, losses that might be caused by rating migrations are also considered.

The methods and procedures for risk quantification are agreed on between the risk control units in the significant Group companies from a risk point of view in order to ensure standardisation throughout the Group. Risk management is performed constantly and decentrally in the Group companies.

5.1.1.2 Credit Risk Management Structure and Organisation

A risk-related organisational structure and the functions, responsibilities and authorisations of divisions involved in risk processes are clearly defined at employee level. In accordance with MaRisk, processes in credit business are characterised by a clear organisational separation of the market and back-office divisions, right through to management level.

NORD/LB market divisions conduct the operational financing business relating to customers, properties and projects on a national and international level within a framework of specified limits. They are primarily responsible for the core tasks of acquisition and sales and are relieved of administrative tasks. The market divisions are responsible for the initial vote, for structuring conditions and for earnings. In the case of minor-volume, low-risk exposures, the market divisions will in some cases also bear sole responsibility for the risk (unilateral authorisation) as well as responsibility for analysing and observing these risks.

Tasks relating to analysis and risk observation as well as the specification of collateral values are combined in the Credit Risk Management (CRM) back office division. Real estate and special appraisals are exceptions here; these are carried out in a separate department. The Credit Risk Management Division is also responsible for the second vote taken for decisions on individual loans. With exposures with risk concentrations, a credit rate assessment takes place with regard to Large Exposure Management. In a multi-stage reporting system, the division also prepares segment portfolio reports on selected sub-segments at regular intervals.

The Credit and Securities Management division in the CRM is responsible for implementing the credit decisions including the contract documentation and for managing portfolios. With special finance the respective market division is responsible for these tasks.

The central management of risk concentrations in the NORD/LB Group's credit portfolio is the responsibility of the Credit Portfolio Management unit which is part of the CRM. Concentrations are examined with regard to the size an economic borrower entity in accordance with § 19 para. 2 of the German Banking Act as well as by country and industry.

The processing of non-performing exposures or exposures requiring debt readjustment is the responsibility of the Special Credit Management (SCM) Division at NORD/LB. Credits with a rating of 11 or worse on the rating master scale of the German Association of Savings Banks and Girobanks (DSGV) (i. e. allocation to the "high risk" category in accordance with the "Initiative Finanzstandort Deutschland" (IFD, initiative for Germany as a financial location) and exposures which deteriorate by three ratings and therefore fall to a rating of 9 (allocation to the "above-average/heightened risk" category in accordance with IFD) or worse must all be reported to the SCM division. Other defined risk indicators may also prompt a presentation requirement. The SCM decides whether the processing of a loan is to be taken over or whether the loan is to remain with the CRM. From a rating of 16 (allocation to the IFD Default risk category (non-performing loans)), the SCM division is obliged to take over responsibility for an exposure. For financial institutions including central governments and foreign regional authorities, asset backed securities and corporate bonds, processing remains in the Credit Risk Management Division.

Credit decision authorisation is classified in accordance with the total loan eligible and the rating of a borrower. Credit decisions are always taken by a person in authority in the market division and a person in authority in the back-office division (bilateral authorisation). The second vote is prepared in units independent of the market divisions in accordance with specified criteria. In addition to fulfilling the regulatory requirement of functional separation for credit assessments, this ensures that first-class credit decisions are taken on the basis of unified standards.

The Managing Board is responsible for controlling NORD/LB's credit portfolio. In performing its tasks, the Board consults among other things the Group Risk Committee, which ensures that a link between individual credit decisions and portfolio management as well as an approach covering all the risk types is given. The GRC recommends to the Managing Board various instruments for this purpose such as the ordering of an acquisition stop, the limiting of national, industrial or borrower-related concentrations or making recommendations relating to the placement of exposures and sub-portfolios.

From at a certain volume, decisions are taken by the Managing Board or by the Allgemeiner Arbeits- und Kreditausschuss (AAKA, General Working and Credit Committee), a sub-committee of the Supervisory Board of NORD/LB. The AAKA participates in the process of granting loans in accordance with an authorisation regulation passed by the Supervisory Board. The acquiring of investments is also subject to a Supervisory Board resolution as is approval for loans to executives.

The Credit Risk Control department is responsible for the methods for measuring credit risks and for credit risk control instruments. It is responsible for the independent monitoring of credit and investment risk at portfolio level and for the corresponding report system as well as the regulatory reporting system. This department is also where method-related responsibility for procedures relating to the economic quantification of counterparty risk lies.

At Bremer Landesbank independent back office tasks are carried out by the back office department Financing Risk Management. In addition to casting a second vote, it verifies and stipulates rating levels, verifies collateral values, processes and supervises of debt restructuring and work-out exposures and loan loss provisions, and shapes the policies and procedures for the lending business. Exposures beyond the scope of rating categories 1 to 8 are supervised more intensively or are handed over for restructuring to the department bearing the same name. This department is principally responsible for deciding on how an exposure is to be monitored in future or whether it is to be cancelled and coercive measures implemented. The tasks relating to independently monitoring risks at portfolio level and to independent reporting are the responsibility of the risk control division in Overall Bank Management.

Risk management at NORD/LB Luxembourg and NORD/LB CFB is based on the concepts of NORD/LB and is regularly improved in accordance with commercial and regulatory criteria. Credit decisions are made in accordance with the back office vote of the authorised persons in the Credit Risk Management division of NORD/LB Luxembourg. The independent monitoring of the portfolio is carried out by the Risk Control Division at NORD/LB Luxembourg. NORD/LB's SCM division and the CRM division of NORD/LB Luxembourg are responsible for monitoring loans requiring comment or debt restructuring.

Risk management at Deutsche Hypo is also based on the concepts of NORD/LB and regularly improved. The second vote for credit transactions is performed by the back office division Credit Risk Management. The exposures requiring debt restructuring are looked after by the SCM division of Deutsche Hypo, either intensively with the goal of out-of-court restructuring or with defaulting counterparties with the goal of realising collateral. The local risk control division monitors the risks of Deutsche Hypo at portfolio level.

5.1.1.3 Credit Risk Cover and Mitigation

A specific limit is stipulated for each borrower at individual transaction level within the scope of operational limiting in order to manage risks; this has the character of an upper limit. The significant parameters applied for deriving this limit are a borrower's creditworthiness, expressed as a rating, and the funds that are available at the borrower's free disposal for making principal payments when servicing a loan.

Risk concentrations and correlations at portfolio level are shown by quantifying the credit risk potential in the credit risk model. Risk concentrations are also limited by country and industry limits at portfolio level as well as by the Large Exposure Management model for borrower entities. The latter defines a loss-at-default limit for every rating on the basis of which a Group exposure for the categories corporates, financial institutes, special finance and foreign regional authorities is classified as being normal, bearing risk concentration or bearing heavy risk concentration. The exposure limits are based on the risk-bearing capacity of the NORD/LB Group.

Methods of mitigating credit risk are described in section 5.1.7.

5.1.1.4 Credit Risk Reporting

The NORD/LB's Credit Risk Control department draws up among other things a Credit Portfolio Report which shows and analyses all the significant structural features and parameters required for controlling the credit portfolio of the NORD/LB Group. The Credit Portfolio Report complements the Risk-Bearing Capacity report and includes in-depth analyses and stress scenarios relating to the credit portfolio. It is submitted to the Managing Board on a quarterly basis and is further specified for individual sub-segments by Industry Portfolio Reports from the Credit Risk Management division.

The Managing Board of NORD/LB also receives from the CRM further regular reports and reports as and when required on the credit portfolio of the NORD/LB Group and NORD/LB, e. g. on risk concentrations with borrower entities, country and industry concentrations and commitments which need to be monitored (credit watchlist).

At Bremer Landesbank the Managing Board is informed of credit risks within the scope of the credit portfolio report. The credit portfolio report is prepared on a quarterly basis and supplements the monthly RBC report. The Managing Board also receives on a monthly basis a report on an individual borrower basis on intensive and problem exposures and a report to identify and monitor risk concentrations at the level of borrower entities (large exposure management).

For NORD/LB Luxembourg and NORD/LB CFB the Controlling division prepares together with the Credit Risk Management division a credit risk report on a quarterly basis as part of the management information system for the Managing Board and the Credit Risk Committee in order to make existing risks and risk concentrations transparent and to initiate measures where necessary.

Deutsche Hypo prepares a risk report on a quarterly basis in accordance with the requirements of MaRisk. This report informs the Managing Board and the Supervisory Board in detail about the bank's risk situation.

5.1.2 Credit Portfolio Structure

Tables 5 to 7 show the volume of exposure values by credit exposure excluding investment exposures and securitisations in accordance with § 327 para. 2 nos. 1 – 4 of the German Solvency Regulation. The positions are broken down by industry, region and residual contractual maturity. Exposure values were ascertained prior to the inclusion of credit risk mitigation methods and after inclusion of the credit conversion factor (CCF) in accordance with § 48 and § 99 of the German Solvency Regulation. The credit equivalent amount was reported for derivative instruments.

Table 5: Credit exposures by industry

Industry (in € million)	Credits, commitments and other non-derivative off balance sheet assets		Securities		Derivative financial instruments	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Financing institutes/insurance companies	65 176	77 383	36 441	42 170	6 620	7 352
Service industries/other	64 923	62 646	21 347	18 543	2 523	2 166
Transport/communications	30 150	30 564	509	680	944	714
Manufacturing	6 465	6 859	649	792	1 005	608
Energy, water and mining	9 963	8 570	1 049	1 148	685	418
Trade, maintenance and repairs	3 078	3 590	47	57	202	234
Agriculture, forestry and fishing	1 610	1 555	28	27	3	6
Construction	2 620	2 991	31	55	131	85
Total	**183 984**	**194 157**	**60 101**	**63 472**	**12 114**	**11 584**

Table 6: Credit exposures by region

Region (in € million)	Credits, commitments and other non-derivative off balance sheet assets		Securities		Derivative financial instruments	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Euro countries	155 120	159 460	50 473	52 651	7 981	7 687
of which: Germany	133 765	136 870	31 555	32 184	4 070	3 425
Rest of Europe	9 982	14 987	3 440	3 659	2 158	2 076
North America	9 162	9 808	3 648	3 819	1 460	1 455
Latin America	1 988	1 460	247	387	84	8
Middle East/Africa	1 164	944	91	195	1	–
Asia	3 763	4 671	1 189	1 934	319	358
Others	2 806	2 826	1 013	827	110	–
Total	**183 984**	**194 157**	**60 101**	**63 472**	**12 114**	**11 584**

Table 7: Residual contract maturities

Residual maturity (in € million)	Credits, commitments and other non-derivative off balance sheet assets		Securities		Derivative financial instruments	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
> 0 years to ≤ 1 year	42 915	51 604	8 765	11 817	2 826	1 297
> 1 year to ≤ 5 years	41 480	41 329	32 018	31 178	5 296	6 255
> 5 years, no term	99 589	101 223	19 319	20 477	3 992	4 032
Total	**183 984**	**194 157**	**60 101**	**63 472**	**12 114**	**11 584**

The audit in accordance with § 327 para. 2 no. 1 of the German Solvency Regulation found that the figures reported as at 31 December 2011 did not differ significantly from the average figures for the period under review.

5.1.3 Loan Loss Provisions

Exposures are reviewed at regular intervals, i. e. in a system of scheduled loan monitoring, in order to ascertain whether the claims of the NORD/LB Group are recoverable or whether interest and principal payments appear to be totally or partly at risk. A review is also carried out when negative information is received (early warning indicators) about a borrower, for example information relating to the borrower's financial situation, collateral and industry environment as well as when establishing the reason for default (and issuing a default rating). Indications for a valuation allowance are for example the default on interest and capital payments or a delay in such payments of more than 90 days and considerable financial difficulties on the part of the debtor.

Since reports in accordance with the German Solvency Regulation are currently made on the basis of the accounts prepared in accordance with the German Commercial Code in the NORD/LB Group, information is also provided on risk provisions in accordance with the German Commercial Code at this point. For information on the accounting policies for risk provisions in accordance with IFRS the notes to the consolidated financial statements (note 8) in the annual report are referred to.

For acute counterparty risks relating to lending business reported in the balance sheet, if there are objective indications of a permanent loss in value NORD/LB makes specific valuation allowances and lumpsum specific loan loss provisions. A need for loan loss provisions is based on a present value consideration of anticipated interest and redemption payments which are still expected as well as on earnings from the realisation of collateral.

NORD/LB takes account of latent counterparty risk relating to transactions with non-banks for which no specific valuation allowances have been made by making lumpsum loan loss provisions. Risks relating to off-balance sheet transactions (guarantees, endorsement liabilities and loan commitments) are accounted for by a loan loss provision for risk relating to lending business.

Irrecoverable loans of up to € 10 000 for which there is no specific valuation allowance are written off immediately. Payments received for written-off loans and advances are recognised in profit or loss.

In accordance with § 327 para. 2 nos. 5 and 6 of the German Solvency Regulation, Tables 8 to 10 show non-performing loans and loans in default excluding investment exposures and securitisation transactions by industry and region, and the development of risk provisions in the reporting period. In the classification by industry, retail business is also reported. Lumpsum specific loan loss provisions are included in the specific valuation allowances. NORD/LB Luxembourg and NORD/LB CFB have been included with general loan loss provisions in accordance with IFRS. Lumpsum loan loss provisions and general loan loss provisions, direct write-offs and receipts for written-off loans are reported as a total amount and are not broken down by industry or region.

In order to distinguish between non-performing loans and loans in default, the three default rating classes 16 to 18 are used taking into account the default criteria in accordance with § 125 of the German Solvency Regulation. Rating 16 covers the default reasons of default of payment greater than 90 days and unlikely repayment. Rating 17 covers the default reasons of restructuring / rescheduling of debts / capital reconstruction and impairment / write-down. Under rating 18 the default reasons of rating-induced cancellation / repayment (only when the StandardRating rating method is used), complete write-off / abandonment, factoring with significant rating-induced loss and insolvency (request) are found.

For rated CRSA and IRBA positions, all the non-performing loans are equivalent to rating grades 17 and 18. All remaining loans in default are included in rating 16. Unrated CRSA positions in the past due exposure class are allocated to the respective category on the basis of specific characteristics. In the case of loans in default not requiring a write-down, a cautious assumption is made that the loans in rating categories 16 to 18 and corresponding CRSA positions for which no specific valuation allowances were made are all considered to be in default. Exposure values are stated.

Table 9 also includes for the regions the changes in specific valuation allowances, lumpsum loan loss provisions, general loan loss provisions, provisions, direct write-offs and receipts for written-off loans. This reporting goes beyond the requirement of § 327 para. 2 no. 5 of the German Solvency Regulation, but was chosen for reasons of transparency and uniformity – consistent with Table 8 with the breakdown by industry.

Table 8: Non-performing loans and loans in default by industry

Industry (in € million)	Non-performing loans and loans in default (requiring a write-down)	Specific valuation allowances	Lump-sum/general loan loss provisions*)	Provisions*)	Changes in specific valuation allowances	Changes in lump-sum/general loan loss provisions	Changes in provisions	Direct write-offs*)	Receipts for written-off loans	Loans in default (not requiring a write-down)
Financing institutes/insurance companies	73	71		35	– 98		– 22			14
Service industries/other	1 291	511		16	100		– 11			532
Transport/communications	1 595	431		19	182		11			1 293
Manufacturing	277	109		12	– 33		– 24			11
Energy, water and mining	134	42		8	– 12		– 2			48
Trade, maintenance and repairs	58	29		–	– 3		– 1			16
Agriculture, forestry and fishing	14	7		1	– 9		1			24
Construction	137	80		13	13		– 1			4
Retail	61	81		13	– 81		– 19			21
Total 31 Dec. 2011	**3 641**	**1 361**	**259**	**118**	**60**	**28**	**– 68**	**84**	**17**	**1 963**
Total 31 Dec. 2010	3 736	1 301	231	185	121	– 16	67	26	13	2 116

*) The reference date was adjusted retrospectively.

Table 9: Non-performing loans and loans in default by region

Region (in € million)	Non-performing loans and loans in default (requiring a write-down)	Specific valuation allowances	Lump-sum/general loan loss provisions*)	Provisions*)	Changes in specific valuation allowances	Changes in lump-sum/general loan loss provisions	Changes in provisions	Direct write-offs*)	Receipts for written-off loans	Loans in default (not requiring a write-down)
Euro countries	2 802	1 135		82	130		– 43			1 749
of which: Germany	2 378	1 000		73	44		– 28			1 337
Rest of Europe	355	107		4	– 81		– 1			72
North America	441	100		7	5		2			110
Latin America	11	2		25	– 2		– 24			14
Middle East/Africa	–	–		–	–		–			–
Asia	14	8		–	8		–			–
Others	17	9		–	–		– 2			19
Total 31 Dec. 2011	**3 641**	**1 361**	**259**	**118**	**60**	**28**	**– 68**	**84**	**17**	**1 963**
Total 31 Dec. 2010	3 736	1 301	231	185	121	– 16	67	26	13	2 116

*) The reference date was adjusted retrospectively.

Table 10: Development of loan loss provisions

Method of loan loss provision (in € million)	Opening balance for the period	Adjustments / allocations in the period	Reversal	Utilisation	Exchange-rate-related and other changes	Closing balance for the period
Specific valuation allowance	1 301	728	301	377	10	1 361
Lumpsum/general loan loss provisions*)	231	47	19	–	–	259
Provisions*)	185	66	104	32	2	118

*) The opening balance was adjusted retrospectively.

5.1.4 Information on IRBA Exposures

5.1.4.1 Internal Rating Methods

In order to assess credit risks in the NORD/LB Group, each borrower is rated within the framework of an initial or annual credit rating process and a cause-related rating or credit rating category is also determined for each borrower. The rating modules employed were either developed in various cooperation projects conducted by the savings bank financial group or the Landesbanks or they were developed internally by NORD/LB.

The classification is based on the standard IFD rating scale which the banks, savings banks and associations in the “Initiative Finanzstandort Deutschland” (IFD, initiative for Germany as a financial location) have agreed on in order to improve comparability between the rating levels of the individual banks. The rating classes of the 18-step DSGV rating master scale used in NORD/LB can be transferred directly into the IFD classes.

NORD/LB uses segment-related rating methods for estimating the anticipated probability of default of an external counterparty. The methods developed in cooperation projects are standardised to comply with the probabilities of default in the DSGV rating master scale. The master scale shows risks in comparable stages, makes the ratings of various segments comparable and facilitates communication. It is also comparable with external ratings. Each rating method results in a discrete probability of default (PD) as a measure of the expected rate of default and the related rating grade. Both the rating excluding transfer risk (local currency rating) and the rating after offsetting a transfer risk (foreign currency rating) are reported.

At present 14 internal rating methods developed by NORD/LB in collaboration with its cooperation partners have been authorised by the regulatory authorities for the IRBA system. The rating methods for country and transfer risks as well as for international authorities are predominantly allocated to the Central Government exposure class, and the rating method for banks to Banks exposure class. The other rating methods are all included in the Corporate exposure class, i. e. corporates, insurance companies, leasing companies, StandardRating, KundenKompaktRating (minor customer rating), real estate business rating, ship financing, aircraft financing, project finance, international real estate financing and SPC real estate leasing.

NORD/LB also employs a rating classification method in accordance with the Internal Assessment Approach (IAA) which was developed internally and has also been authorised by the regulatory authorities for securitisation transactions. In this case a rating grade in accordance with the Standard & Poor’s rating scale is ascertained for IAA-eligible securitisation exposures. Detailed information on the internal rating procedure for securitisations can be found in section 5.1.8.2.

The allocation of borrowers to the rating systems is regulated by the scope of application defined in the rating process. The principle of dual control is applied for all the ratings. A rating can only be released in this case by the relevant back office unit.

Retail banking transactions with private customers were still shown in the CRSA in 2011, so that SparkassenKundenScoring (savings bank customer scoring) based on an automatic scoring procedure were not yet employed in regulatory terms. The changeover to IRBA is planned to take place in 2012.

There is no rating procedure for investments. If they are processed in the IRBA system, simple risk weights in accordance with § 98 of the German Solvency Regulation are used.

The rating and scoring methods named, with the exception of the rating method for securitisation transactions, were developed in association projects, with NORD/LB cooperating with the savings bank organisation. They are updated, validated and improved by the maintenance units of the DSGV (Sparkassen Rating und Risikosysteme (SR) GmbH, Berlin) and the Landesbanks (Rating Service Unit (RSU) GmbH & Co. KG, Munich).

Mathematical-statistical methods are used to develop the processes. On the one hand (borrower-oriented) scorecard methods which assess quantitative and qualitative factors are used. These are converted to point scores and allocated to probabilities of default and rating grades in the form of a total number of points. On the other hand (asset-related) simulation methods in which projected payment flows are analysed and in turn supplemented with qualitative information are also used. A common element of all the methods is that they assess a credit rating on the basis of characteristics relevant to creditworthiness and condense them to produce a rating grade that is calibrated on the PD master scale.

The rating methods are all subjected to an annual process of validation comprising both quantitative and qualitative analyses. In this case rating factors, the definition and the calibration of methods, data quality and the entire structure of the model are reviewed on the basis of statistical and qualitative analyses as well as user feedback. The aim of calibration here is to match the empirical defaults actually observed as closely as possible to the probabilities of default predicted with the help of the rating methods.

At NORD/LB the Credit Risk Control department is responsible for monitoring counterparty risk. It is responsible for rating controlling, which must be done by each institute, in an internal validation of rating methods. This includes the following tasks:

- Administrating and supervising the rating methods
- Cooperating in SR/RSU validation activities
- Proving of the representativeness of the rating methods based on data pooling
- Monitoring and reporting rating results and histories
- Implementing and monitoring the default and recovery concept
- Ensuring the correct application of the rating methods and communicating the results of plausibility tests

For counterparties which cannot be allocated to any of the specified rating methods, a quality-based credit rating method is used, with credit ratings ranging from A (very good) to F (undergoing liquidation).

Bremer Landesbank basically uses the same rating methods as NORD/LB. NORD/LB Luxembourg and NORD/LB CFB assess credit risk in close cooperation with NORD/LB on the basis of the rating methods specified. Deutsche Hypo uses the same rating method as NORD/LB for real estate banking customers and loans to countries and international regional authorities within the scope of IRBA. Other rating methods are in use for banks at Deutsche Hypo; these are gradually being replaced by the NORD/LB method.

5.1.4.2 Using Internal Assessments for Purposes Other than Ascertaining Risk-Weighted Exposure Values in Accordance with the IRBA

In addition to ascertaining risk-weighted exposure values, internal estimations of the PD and the LGD are important parameters for risk management and credit processes.

In preliminary costing (pricing) target margins, i. e. minimum margins and full-cost margins, are calculated. In the Credit Pricing Calculator (CPC) for risk-adjusted pricing in lending business, the probabilities of default from internal rating procedures and estimated loss rates are included in calculating risk cost as a premium for expected loss and for calculating the cost of equity as a premium for unexpected loss.

As already described in section 5.1.1.2 on credit risk management structure and organisation, the level of credit decision authority is also contingent on the rating of a borrower. Allocation to the segment for problem loans and the authority of the Special Credit Management Division is undertaken on the basis of rating grades.

The NORD/LB Group regulates its risk-bearing capacity in accordance with economic aspects. The results of the internal rating procedures are included in the examination of the risk-bearing capacity. Details on the RBC model can be found in section 4.2.4 on risk-bearing capacity.

5.1.4.3 Credit Volumes and Losses in the IRBA Portfolio

Table 11 shows the total credit volume included in the IRBA, broken down by PD grades, in accordance with § 335 para. 2 nos. 1 and 2a and c of the German Solvency Regulation. In addition to the Exposure at Default (EAD), average probabilities of default (Ø PD) and average risk weights (Ø RW) are reported. Exposure values after credit risk mitigation are used as a basis.

Retail business is not included since this is handled in the CRSA system. Investments only need to be disclosed as a separate portfolio when the PD/LGD approach is used for investment exposures in the banking book. This currently does not apply in the NORD/LB Group. A separate presentation of items in accordance with § 335 para. 2 no. 1 of the German Solvency Regulation, for which separate LGD and CCF estimations are made, is not carried out since the advanced IRBA is not relevant for the NORD/LB Group.

With the average probabilities of default a slightly negative trend has been noticed compared to the previous year. The average PD (not including default) has worsened from 0.9 per cent to 1.0 per cent, while the average risk weight (not including default) has worsened from 46.2 per cent to 48.0 per cent.

Table 11: Aggregate credit volume by PD grades (not including retail)

Portfolio	EAD in € million	Ø PD in %	Ø RW in %
		0 % ≤ PD ≤ 0,5 %	
Central governments	7 903	0,0	5,1
Banks	38 477	0,1	17,7
Corporates	47 400	0,2	33,3
Investments	–	–	–
Total 31 Dec. 2011	**93 780**	**0,1**	**24,5**
Total 31 Dec. 2010	105 642	0,1	23,8
		0,5 % < PD ≤ 5 %	
Central governments	244	0,9	93,6
Banks	1 017	1,0	86,5
Corporates	26 332	1,6	95,7
Investments	–	–	–
Total 31 Dec. 2011	**27 593**	**1,5**	**95,4**
Total 31 Dec. 2010	27 383	1,6	97,1
		5 % < PD ≤ 100 %	
Central governments	19	6,7	283,6
Banks	38	10,0	204,5
Corporates	6 018	12,0	194,7
Investments	–	–	–
Total 31 Dec. 2011	**6 075**	**11,9**	**195,0**
Total 31 Dec. 2010	6 366	12,2	197,7
		Total (not including)	
Central governments	8 166	0,1	8,4
Banks	39 531	0,1	19,7
Corporates	79 751	1,5	66,1
Investments	–	–	–
Total 31 Dec. 2011	**127 448**	**1,0**	**48,0**
Total 31 Dec. 2010	139 390	0,9	46,2
		Default	
Central governments	215	100,0	0,0
Banks	2	100,0	0,0
Corporates	4 691	100,0	0,0
Investments	–	–	–
Total 31 Dec. 2011	**4 908**	**100,0**	**0,0**
Total 31 Dec. 2010	4 842	100,0	0,0

Table 12 shows a comparison of expected and actual losses incurred in lending business for the current and two previous reporting periods in accordance with § 335 para. 2 nos. 4 and 6 of the German Solvency Regulation.

The loss estimation in this case is defined as the expected loss after credit risk mitigation and is based on the assumptions for regulatory loss rates in the event of default in accordance with § 93 and § 94 of the German Solvency Regulation. This is the expected loss of risk assets which have not defaulted in traditional lending business, i.e. excluding securities in the banking book and excluding derivatives. Traditional off-balance sheet business, such as credit commitments, is taken into account. The reference dates was adjusted retrospectively by the expected loss of the defaulted risk assets.

Actual losses comprise specific valuation allowances and direct write-offs less receipts for written-off loans. They are only shown as a total amount and are not broken down by portfolio. Compared to the previous reporting period actual losses have increased by € 228 million. The increase is in particular the result of large-scale write-offs involving companies which got into difficulty as a result of the economic crisis in 2008 and later became insolvent. Many of these insolvency cases were concluded in 2011. There were also changes in the write-down methodology, whereby irrecoverable loans were derecognised earlier.

Investments only need to be disclosed as a separate portfolio when the PD/LGD approach is used for investment exposures in the banking book. This currently does not apply in the NORD/LB Group.

Table 12: Expected and actual losses in lending business

	1 Jan. 2011 – 31 Dec. 2011		1 Jan. 2010 – 31 Dec. 2010		1 Jan. 2009 – 31 Dec. 2009	
Portfolio (in € million)	Expected loss*)	Actual loss	Expected loss*)	Actual loss	Expected loss*)	Actual loss
Central governments	2		3		2	
Banks	15		17		29	
Corporates	529		536		578	
Investments	–		1		–	
Total	**546**	**347**	**558**	**119**	**608**	**196**

*) The reference date was adjusted retrospectively.

5.1.5 Information on Standard Risk-Weighted CRSA and IRBA Exposures

The rating agencies Standard & Poor's, Moody's Investors Service Ltd. and FitchRatings were named for the purpose of risk weighting CRSA exposures and securitisation exposures.

External ratings are used for issuer, issue and country credit rating assessments, with the issue rating initially being used as a basis; the issuer rating is only referred to in the absence of an issue rating. Issue ratings are not applied to unrated CRSA exposures (e.g. loans). Country classifications by export insurance agencies are not taken into account.

The rating agencies Standard & Poor's, Moody's Investors Service Ltd. and FitchRatings were also named for all the CRSA positions at Bremer Landesbank. Deutsche Hypo has also chosen these three rating agencies for the CRSA exposure classes central governments, regional governments and local authorities, other public-sector entities, multilateral development banks, corporates and securitisation transactions. NORD/LB Luxembourg and NORD/LB CFB have only named Standard & Poor's and use the ratings for the central and regional government and bank exposure classes.

In accordance with § 328 para. 2 of the German Solvency Regulation, Table 13 contains an overview of CRSA exposure values before and after credit risk mitigation. CRSA credit risk mitigation techniques take account of indemnities and financial collateral. Mortgage liens as collateral are not considered as mitigating credit risk in the CRSA; instead the secured receivables are reported in the exposure class "exposures secured with real estate".

In some cases exposure values are higher in the "after credit risk mitigation" column. This is due to the allocation of exposure values or parts of exposure values at other risk weights after risk mitigation as well as from IRBA exposures in accordance with § 84 para. 1 of the German Solvency Regulation which are secured by a CRSA guarantor and are hence reported as CRSA exposures after risk mitigation.

IRBA exposure values are also shown in accordance with §329 paras. 1 and 2 of the German Solvency Regulation, for which simple risk weights are applied for special financing (operating leases for NORD/LB aircraft loans) and investments (investment funds that have not been rendered transparent).

The heavy fall in exposure values for simple risk weights is attributable to the introduction of the aircraft rating, as these exposures are now assessed with the new rating method.

Table 13: Counterparty risk exposures for portfolios in the CRSA and IRBA on application of regulatory risk weights

	Volume of exposure values (in € million)					
	CRSA Before credit risk mitigation		CRSA After credit risk mitigation		IRBA (special financing and investments)	
Risk weight (in %)	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
0	93 835	92 810	95 165	96 124	1	4
10	215	246	215	246	–	–
20	4 636	4 135	4 724	3 510	–	–
35	342	760	1 788	2 244	–	–
50	1 157	1 145	1 161	993	3	17
70	–	–	–	8	41	257
75	4 090	4 425	2 511	2 836	–	–
90	–	–	–	–	–	23
100	11 326	13 406	8 300	8 411	–	–
115	–	–	–	–	–	2
150	238	239	211	213	–	–
190	–	–	–	–	–	–
250	–	–	–	–	14	21
290	–	–	–	–	–	–
350	–	–	–	–	–	–
370	–	–	–	–	26	17
1250	–	–	–	–	–	–
Capital deduction	–	–	–	–	–	–

5.1.6 Derivative Counterparty Risk Positions and Netting Positions

The NORD/LB Group employs derivative financial instruments for securing purposes in asset/liability management. Trading is also conducted in derivative financial transactions. Derivative financial instruments in foreign currencies are mainly concluded as forward-exchange contracts, currency swaps, interest rate/currency swaps and currency options. Interest rate derivatives primarily comprise interest rate swaps, forward rate agreements, interest rate futures and interest rate options. Futures contracts are also concluded for fixed interest rate securities. Equity derivatives agreements are mainly concluded as equity options and equity swaps. Credit derivatives are also used.

Netting agreements covering derivatives are used in accordance with §207 of the German Solvency Regulation. Eligible netting positions from derivatives are recognised at their marked-to-market replacement cost in accordance with §211 para. 2 of the German Solvency Regulation. The net measurement base for netting positions from derivatives is the amount resulting from the difference of positive and negative fair values of the transactions covered by the netting agreement plus a regulatory premium. The LeDIS system is used to check eligibility for netting.

Internal capital allocation for derivative counterparty risk positions and netting positions is carried out as part of the allocation of equity to credit risks described in section 4.2.4 on risk-bearing capacity.

Trades are only entered into with contractual partners for whom counterparty limits have been granted. All the trades concluded with a specific counterparty are offset against this limit. The risk subject is the counterparty/ contractual partner for the trade. Replacement risks and settlement risks are taken into account in terms of limit utilisation.

Replacement risk measures the risk that in the event of default by a counterparty, a loss will be incurred by transactions with a positive fair value having to be settled at a loss. § 19 of the German Solvency Regulation is hence applied for current potential replacement costs and § 20 of the German Solvency Regulation for expected future increases in current potential replacement costs.

In terms of the limiting of credits to counterparties the same rules apply as those described in section 5.1.1.3 for covering and mitigating credit risks.

With regard to collateral, reference is made to section 5.1.7 on credit risk mitigation techniques.

Provisions / impairments are recognised to account for the risk of losses. More information can be found in section 5.1.3 on risk provisions.

A downgrade in NORD/LB's external rating would not have any significant effect on collateral to be provided since NORD/LB generally does not accept any such contractual terms.

The measurement base for derivative counterparty risk positions follows the current exposure method. Eligible netting positions from derivatives are included at marked-to-market replacement cost. Table 14 shows the valuation of derivative counterparty risk positions before and after netting and collateral in accordance with § 326 para. 2 no. 1 of the German Solvency Regulation. The term "positive replacement cost" means the current potential replacement cost in accordance with § 19 of the German Solvency Regulation. This is equivalent to the current positive fair value.

Table 14: Positive replacement costs

(in € million)	Positive replacement cost before netting and collateral	Netting options	Eligible collateral	Positive replacement cost after netting and collateral
Interest rate-based contracts	11 967			
Currency-based contracts	1 796			
Equity / index-based contracts	49			
Credit derivatives	137			
Commodity-based contracts	30			
Other contracts	–			
Total 31 Dec. 2011	**13 979**	**8 399**	**1 626**	**3 954**
Total 31 Dec. 2010	10 257	6 025	1 208	3 024

The counterparty default risk to be allowed for in accordance with § 326 para. 2 no. 2 of the German Solvency Regulation is ascertained with the current exposure method and can be seen in Table 15. The counterparty default risk position is determined here as a positive replacement cost after netting and collateral plus an add-on for expected future increases in value.

Table 15: Counterparty default risk

Counterparty default risk position (in € million)	Original exposure method	Current exposure method	Standard method	Internal model
Total 31 Dec. 2011	**–**	**7 934**	**–**	**–**
Total 31 Dec. 2010	–	6 577	–	–

Table 16 shows hedge transactions with credit derivatives in accordance with § 326 para. 2 no. 3 of the German Solvency Regulation, which are used in terms of the German Solvency Regulation to mitigate risk.

Table 16: Credit derivatives – nominal value of hedge transactions

	Nominal value of hedge transactions	
(in € million)	31 Dec. 2011	31 Dec. 2010
Credit derivatives (assignees)	346	370

Table 17 shows a breakdown of the nominal value of credit derivatives in acquisitions and sales in accordance with § 326 para. 2 no. 4 of the German Solvency Regulation. The NORD/LB Group did not conduct any intermediation activities for credit derivatives in the period under review.

Table 17: Credit derivatives – purpose

	Used in the bank's own credit portfolio				Brokerage activities	
	Purchased		Sold			
Nominal value (in € million)	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Credit Default Swaps	1 250	1 555	7 239	7 553		
Total Return Swaps	–	–	706	670		
Credit Linked Notes	–	–	–	–		
Credit Options	–	–	–	–		
Other	–	–	–	–		

5.1.7 Credit Risk Mitigation Techniques

5.1.7.1 Collateral Management

For the assessment of credit risks, in addition to the credit rating of borrowers or counterparties reflected in the rating, the customary bank securities available and other risk reduction methods are of importance. The NORD/LB Group therefore accepts domestic and foreign securities in the form of property and rights (collateral) to reduce credit risk. When accepting securities the cost-benefit relationship of the security is considered.

The securities are assessed both at the time the loan is granted and during the subsequent ongoing (normally at least half-yearly) monitoring as to whether they appear to be disposable at the assumed value based on foreseeable economic developments during the (remaining) term of the loan. They are therefore reviewed on a case-to-case basis as to whether the valuation appears to be justified based on the respective type of security and based on its legal and economic applicability in respect of the person of the borrower and the type of loan. If factors relevant to the assessment have changed, the assessment is adjusted accordingly.

The credit guidelines and lending principles of the NORD/LB Group specify which fundamental types of security and the maximum loan which may be lent against the collateral (lending limit). Sureties, credit securities similar to sureties, assignments of receivables and other rights, chattle mortgages, property, receivables and other rights and collateral assignment of chattel are accepted as credit security. Other securities can be contracted with the borrower, but these do not reduce the unsecured portion of the exposure.

The legal portfolio of collateral is maintained in the dedicated Collateral Management System which is also used for the inclusion of collateral when ascertaining minimum capital requirements and for regulatory reports.

In order to ensure the legal validity and enforceability of collateral, standard contracts are mainly used or external legal opinions are obtained and the relevant jurisdictions are permanently monitored. For foreign collateral, monitoring is performed by international law firms.

5.1.7.2 Collateral to Ease Equity Requirements

The NORD/LB Group has been authorised by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin, German Federal Financial Supervisory Authority) to use mortgage liens as collateral, other IRBA physical collateral, guarantees, engines and financial collateral as credit risk mitigation techniques to ease capital requirements. Internal processes and systems operated ensure that only collateral which meets all the requirements of the German Solvency Regulation in terms of credit risk mitigation techniques is employed.

Mortgage liens as collateral relate to commercial and residential real estate. The properties are generally valued by independent internal appraisers and also by external surveyors should this become necessary. The market fluctuation concept of the Bundesverband Öffentlicher Banken Deutschlands e.V. (VÖB, German Association of Public-Sector Banks) is used to support the ongoing monitoring of real estate values. This method is recognised as a statistical method in accordance with § 20a para. 6 of the German Banking Act. The value of real estate is reviewed in three-year cycles if the mortgage lending value of property and loans secured by the property exceeds specified limits.

In the category other IRBA physical collateral, ships (NORD/LB and Bremer Landesbank), aircraft, engines, assigned or pledged life insurance policies (all only NORD/LB) and wind energy plants (only Bremer Landesbank) are used to ease equity requirements.

Ships and aircraft must be entered in a public register and fulfil certain requirements such as marketability and age. An additional requirement in the case of ships is that they must have been constructed under supervision of a recognised ship surveying firm. Aircraft must have been awarded internationally-recognised aircraft certification and an air operator's certificate. They are valued on the basis of external reports and the values must be reviewed at least once a year for regulatory approval.

The eligibility of engines for consideration is ascertained in a two-stage process. The compliance with minimum requirements for the consideration of engines as other IRBA physical collateral required by the German Solvency Regulation is, like ships and aircraft, ensured by the business policy documented in the organisational guidelines and the contract templates used. These requirements concern in particular the determination of the object, the degree of cover and the right of inspection.

Under the amendments to the German Solvency Regulation which came into effect on 31 December 2010, banks will continue to have the opportunity to include life insurance policies, though not as it was previously the case only as guarantees, but, depending on the method used to measure the credit risk, as other physical collateral (IRBA) or as guarantees (CRSA). NORD/LB includes eligible endowment insurance policies and private annuity insurance policies which are eligible for consideration whose values are reviewed at least once a year.

The location of wind energy plants is decisive for their value. Before a plant is constructed, wind power is forecast in external reports and the effective exploitation of wind is compared with these forecasts at least once a year when the plants are in operation. The value of a plant is derived from its yield in connection with the legally specified compensation for feeding electricity into the grid. The value of a wind energy plant is recalculated and lending values are re-stipulated in the event of significant deviations from forecasts. In order to be in a position to operate a wind energy plant alone if the need arises, the significant operator rights relating to location and rights resulting from supply contracts are normally assigned to it.

The guarantees considered in credit risk mitigation techniques are predominantly sureties and guarantees. The carrying amounts are based on the credit rating of the guarantor. The same rating rules apply as for all other borrowers. The main types of guarantors are public institutions and banks with a very good rating. Risk concentrations resulting from the acceptance of guarantees are monitored in connection with the direct exposure of the guarantor. There are currently no risk concentrations here.

Financial collateral is currently not a significant type of collateral in the lending business conducted by the NORD/LB Group, so no concentrations arise here. This collateral predominantly comprises cash deposits. In the Trading Division, financial collateral is relevant in repurchase transactions. Only cash collateral (NORD/LB Group as the transferor) as well as bonds whose issuers have a very good rating (NORD/LB Group as the transferee) is accepted. Bonds are generally public-issuer bonds. Transactions are therefore low risk. They are valued automatically every day and the back office of the Trading Division monitors counterparty and issuer lines daily on the basis of these valuations so that no concentrations of risk arise.

Tables 18 and 19 contain in accordance with § 336 para. 2 of the German Solvency Regulation an overview of collateralised CRSA and IRBA exposure values for each exposure class. With derivatives netting agreements are considered. Investments only need to be disclosed as a separate portfolio when the PD/LGD approach is used for investment exposures in the banking book. This currently does not apply in the NORD/LB Group.

The exposure values reported are collateralised by eligible financial collateral in accordance with § 154 para. 1 clause 1 no. 1 of the German Solvency Regulation after the application of value fluctuation factors, guarantees in accordance with § 154 para. 1 clause 1 no. 2 of the German Solvency Regulation and life insurance policies in accordance with § 170 of the German Solvency Regulation and other IRBA collateral in accordance with § 154 para. 1 clause 1 no. 3 of the German Solvency Regulation.

Loans secured by mortgage liens as collateral are reported in the exposure class “exposures secured with real estate”.

Table 18: Aggregate amount of collateralised CRSA exposure values (not including securitisations)

Exposure class (in € million)	Financial collateral		Guarantees		Mortgage liens	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Central governments	150	408	1 170	1 078	–	–
Regional governments and local authorities	947	–	2 555	2 327	–	–
Other public-sector entities	645	–	242	265	–	–
Multilateral development banks	–	–	21	31	–	–
International organisations	–	–	–	–	–	–
Banks	2 970	4 685	1 426	1 318	–	–
Covered bonds issued by banks	–	–	30	42	–	–
Corporates	789	1 562	1 449	3 231	-	–
Retail	1	1	–	–	-	–
Exposures secured by real estate	–	–	–	–	1 748	606
Investment certificates	–	–	–	–	–	–
Investments	–	–	–	–	–	–
Other exposures	–	–	–	–	–	–
Overdue exposures	–	–	–	2	30	26
Total	**5 503**	**6 656**	**6 894**	**8 294**	**1 778**	**632**

Table 19: Aggregate amount of collateralised IRBA exposure values (not including securitisations)

Exposure class (in € million)	Financial collateral		Guarantees		Other IRBA collateral	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Central governments	2 461	–	918	673	–	31
Banks	8 701	14 703	1 080	1 346	27	38
Corporates	2 343	626	2 715	3 047	21 291	20 964
Retail	–	–	–	–	–	–
Investments	–	–	–	–	–	–
Total	**13 505**	**15 329**	**4 713**	**5 066**	**21 317**	**21 033**

5.1.7.3 Netting Agreements
In order to mitigate counterparty risk in trading the NORD/LB Group employs netting agreements covering derivatives.

Netting agreements are always bilateral. Only standard general agreements are used, all of which provide for an obligation to make additional payments. The Legal Department is responsible for the conclusion of new contracts. Legal enforceability in the different jurisdictions is ensured by means of regularly obtaining legal opinions.

Contract data is stored centrally in the dedicated LeDIS standard application. This system of data management enables an automatic examination to be carried out by the users of this information, for example the employees responsible for processing reports.

Netting agreements on money receivables and cross-product netting agreements are not used.

The volume of netting agreements covering derivatives can be seen in Table 14 in section 5.1.6 on derivative counterparty risk positions and netting positions.

Only cash collateral is currently accepted in derivative transactions. Standard general agreements are also used here.

5.1.8 Securitisations

5.1.8.1 Aims, Functions and Scope of Securitisations
Securitisation is a further instrument available to the NORD/LB Group to control credit risks. The aim of these securitisation activities is to optimise the yield/risk profile of the loan portfolio and to ease regulatory equity requirements.

In order to diversify the loan portfolio, credit risks in the bank's own books can be transferred to other market participants (NORD/LB as an originator) or additional credit risks can be taken (NORD/LB as an investor or sponsor). NORD/LB also conducts securitisation activities as an arranger of structured transactions in the interest of customers.

Both synthetic securitisations using various hedging instruments and true sale transactions are available for risk control. As a sponsor, NORD/LB makes liquidity facilities available in order to improve the credit quality of the institute's own asset-backed commercial paper (ABCP) conduit programmes (Hannover Funding LLC). Securitisation transactions are all subject to a strict process of approval and monitoring, so that potential risks before and after the conclusion of a contract can be identified and regulated.

Hedge transactions were not previously used to mitigate risk with securitisation exposures in the NORD/LB Group. Risk mitigation is ensured, however, due to the stringent financing principles that apply to each individual investment. This includes in particular the limiting of liability, country or industry concentrations both within a transaction and the securitisation portfolio, minimum rating requirements for the parties involved in the securitisations and closely set triggers which enable portfolio management over time.

In the period under review no institute loans were securitised by the NORD/LB Group. The NORD/LB Group pursues a conservative exposure strategy in its role as investor and sponsor. Securitisation exposures mainly comprise tranches with a low risk weighting and generally declined in the period under review.

The NORD/LB Group acts as the arranger in particular in conjunction with transactions for Hannover Funding.

Bremer Landesbank and Deutsche Hypo have in recent years no longer appeared as an investor within the scope of securitisation transactions; there is a strategy to reduce the remaining portfolio. Neither currently act as sponsor or originator. Securitisation business has so far not been relevant for NORD/LB Luxembourg and NORD/LB CFB.

The scope of securitisation activities in the NORD/LB Group can be seen in section 5.1.8.8 on quantitative information.

5.1.8.2 Procedures for Determining Risk-Weighted Exposure Values, Internal Assessment Approaches and Rating Agencies

NORD/LB employs the following methods for ascertaining risk-weighted exposure values, depending on the pool of receivables:

IRBA pool of receivables

- In the rating-based approach (RBA), risk weights depend on external ratings, the granularity of the pool of receivables and the seniority of tranches.

- The Supervisory Formula Approach (SFA) is used for external unrated positions for which NORD/LB has sufficient up-to-date information on the composition of the securitised portfolio and is able to determine capital requirements prior to the securitisation transaction.

- Unrated securitisation exposures in the ABCP programme (excluding asset-back money-market securities) are valued with the Internal Assessment Approach (IAA) method. The risk-weighted assets are determined based on the ratings obtained with the IAA, the granularity of the pool of receivables and the seniority of tranches.

- The look-through method applies for investment funds. With the look-through method the external credit ratings of the securitisation exposures in the investment fund are considered.

CRSA pool of receivables

Only external ratings are used to specify the CRSA securitisation risk weight. In general short and long-term external ratings from Standard & Poor’s, Moody’s Investors Service Ltd. and FitchRatings are used for all types of securitisations.

NORD/LB uses a total of five internal assessment approaches which comply with the requirements of § 259 of the German Solvency Regulation to assess certain securitisation exposures. Each specific internal assessment approach relates to one of the following exposure classes: Auto Leases, Auto Loans, Consumer Receivables, Insured Trade Receivables and Trade Receivables. The result of each internal assessment approach is a rating grade based on the rating scale of Standard & Poor’s. The rating grades are used to determine the equity requirements and are an important decision-making criterion for loan decisions, pricing and portfolio management.

NORD/LB’s Credit Risk Control (CRC) department is responsible for the development and maintenance of the internal assessment approaches, whereby changes to procedures are made on the basis of the four-eyes principle. The market divisions and the Credit Risk Management department responsible for the transactions assessed with the internal assessment approaches are involved if there are any necessary changes in the international assessment approaches. Any decision on the nature and scope of the changes is made though by the CRC independently from these divisions. An annual validation of the internal assessment approaches is also conducted by the CRC. In addition to this, a review of the internal assessment approaches is conducted at regular intervals by NORD/LB’s Internal Audit. The German banking supervisory authority examined all of the internal assessment approaches before approving them.

The internal assessment approaches are structured in such a way that both a quantitative and qualitative part of the model influence the rating result. Quantitatively, the stress intensity that the respective transactions can withstand without incurring losses for NORD/LB is examined. For example, stress factors are applied to credit losses assumed in a base case as multipliers in order to simulate economic stress scenarios. Depending on the rating grade, these stress factors move between specific bands in accordance with the rating criteria of Standard & Poor’s.

In the procedures for Auto Leases, Auto Loans and Consumer Receivables, a stress factor between 4.00 and 5.00 is applied for the rating AAA, between 3.00 and 4,00 for AA, between 2.00 and 3.00 for A, between 1.75 and 2.00 for BBB and between 1.50 and 1.75 for BB. For Trade Receivables and Insured Trade Receivables, NORD/LB again bases the stress factors it uses on Standard & Poor’s, whereby the transactions involving risks are weighted with a stress factor of between 2.50 and 2.75 (AAA), between 2.25 and 2.50 (AA), between 2.00 and 2.25 (A) and between 1.50 and 2.00 (BBB). In addition to this, NORD/LB uses a range of other stress parameters which are based on the criteria of the rating agencies.

Qualitative components of NORD/LB's internal assessment approaches include valuation aspects which concern for example the management, organisation and receivables administration of the servicer or originator. The result of the qualitative model is a score which is used to determine the precise stress factors which are applied to a transaction for the various ratings.

For Bremer Landesbank and Deutsche Hypo, the methods used also depend on the underlying pool of receivables. Bremer Landesbank only uses the SFA for IRBA receivables. Deutsche Hypo uses the RBA for IRBA receivables only: it uses the rating-based approach for CRSA receivables. As securitisation transactions have so far not been relevant for NORD/LB Luxembourg and NORD/LB CFB, no process has been implemented here.

5.1.8.3 Liquidity and Operational Risks with Securitisation Transactions

Securitisation exposures held by the NORD/LB Group are assessed with regard to their degree of liquidity taking into account class and market information and are treated in accordance with their assessment in the liquidity management and control systems. Any use for the liquidity buffer required in accordance with the Minimum Requirements for Risk Management (MaRisk) is restricted by the liquidity assessment taking into account diversification aspects and only takes place with the countervalue adjusted by haircuts. In addition to this, in stress scenarios the reduced marketability or saleability of the securities held is considered as potential liquidity risk by the application of scenario-specific deduction factors.

The liquidity facilities provided by NORD/LB as the sponsor of the institute's own ABCP conduit programme are considered separately.

Possible reasons for increased use of the facilities may be a significant fall in value of the deposited assets and a change in the rating of NORD/LB and as a result not all of the commercial papers being placed on the money market. These events are considered appropriately in the stress scenarios to measure and control traditional liquidity risk.

Operational risks in the NORD/LB Group's securitisation transactions are countered by the continuous training of the employees entrusted with these transactions, the legal support for the securitisation process and the intensive analysis of the associated legal and economic conditions. Process risks are analysed within the scope of the New Product Process (NPP), as are potential reputational risks which might be associated with securitisation transactions.

5.1.8.4 Processes for monitoring Counterparty and Market Price Risks for Securitisations

In order to monitor changes in the counterparty and market price risks of securitisation exposures in accordance with § 334 para. 1 no. 6 of the German Solvency Regulation, continuous portfolio screening takes place in NORD/LB. In order to review changes in the risk situation and the risk provisioning measures to take, various monitoring processes for every transaction on an individual transaction basis were implemented. These include the annual loan monitoring presentation, ad-hoc presentations in the event of negative events during the course of the year, the quarterly monitoring and review of the risk classification of risk-relevant exposures on the credit watchlist, the weekly monitoring of securities on the credit investment watchlist and the daily monitoring of rating changes on the ABS watchlist.

In addition to this, in 2011 an external assessment of expected losses in different stress scenarios, which included an assessment of the securitisation portfolio and which supports the further optimisation and validation of necessary risk protection measures, took place. The findings are used as an additional source for identifying potentially risky exposures.

The value of securitisation exposures is primarily determined by the development of the underlying receivables. Structural components also need to be considered. These include in particular the legal protection against direct liability for the underlying receivable in the case of utilisation, the ranking of the securitisation exposures (tranches / seniority) based on the waterfall principle and the credit quality of the parties involved in the securitisation transactions.

With regard to the monitoring of changes in counterparty and market price risks for resecuritisation exposures, the process is only slightly different to the one described above.

The development of the risk-relevant parameters of the resecuritisation exposure is monitored regularly by the back office divisions of Bremer Landesbank. Deutsche Hypo has implemented basically the same process for monitoring counterparty and market price risks for securitisations Only the rating changes are not monitored daily, but together with the weekly monitoring of securities on the credit investment watchlist.

5.1.8.5 Resecuritisations

With regard to investments in resecuritisation exposures, NORD/LB and Bremer Landesbank have invested in a transaction. This was financed by taking on structured loans. Both institutes are lenders of senior tranch loans. The loans are planned to mature in November 2012.

The financed primary securitisation exposures are ranked as non-senior and were rated when the transaction was drawn up in 2008 as 99.8 per cent AAA. The risk based on the ranking is low. The underlying assets are spread across the following asset segments: residential mortgage-backed securities (prime, non-prime, subprime), commercial mortgage-backed securities, consumer loans and small-and-medium-sized-enterprise transactions. The main risks are seen in the area of subprime residential mortgage-backed securities issued in the USA.

Due to the seniority of the loan and the comparatively short residual maturity to November 2012, the risk to NORD/LB and Bremer Landesbank from the transaction is rated as low.

Deutsche Hypo has not invested in resecuritisations.

5.1.8.6 Securitisation Special-Purpose Entities

The NORD/LB Group acts as a sponsor for the securitisation special-purpose entity Hannover Funding LLC (Hannover Funding).

Hannover Funding is a fully supported ABCP programme which is sponsored and managed by NORD/LB. Hannover Funding is a bankruptcy-remote special-purpose entity with limited liability registered in Delaware, USA.

Hannover Funding typically acquires trade and leasing receivables which were generated by customers of NORD/LB (the “transaction”) and refinances itself by issuing ABCP in the capital market. Hannover Funding can issue ABCP with a term of up to 270 days for USD commercial papers and up to 183 days for EUR commercial papers. Its income from issues is used to acquire loan receivables or to issue loans secured by receivables and similar assets. The commercial papers issued by Hannover Funding benefit from an extensive credit and liquidity commitment (Liquidity Asset Purchase Agreement – LAPA) granted by NORD/LB. In order to hedge the transaction, NORD/LB provides Hannover Funding with liquidity facilities in the amount of 102 per cent of the transaction volume committed to the customer. The relevant CRSA and IRBA exposure values are shown in Table 22.

The credit and liquidity commitments within the scope of the LAPA can be utilised by Hannover Funding at any time. If Hannover Funding utilises a liquidity facility, NORD/LB is obliged either to purchase the assets from Hannover Funding or to issue a short-term loan to Hannover Funding. Within the scope of the annual credit rate assessment process to renew the liquidity facility, NORD/LB assesses the credit quality of the transactions and decides whether to renew or end the liquidity facility.

Neither NORD/LB nor any company affiliated with NORD/LB holds shares in Hannover Funding. As the programme administrator, NORD/LB is responsible for determining and implementing the investment policy of Hannover Funding and decides which assets can be purchased and which transactions can be financed. As a bankruptcy-remote company, Hannover Funding can only incur liabilities by issuing commercial papers, necessary hedging obligations, drawings within the scope of the LAPA and other measures provided for by the articles of association. The financial processing and the generation of daily reports for the activities of Hannover Funding is outsourced to the service provider Global Securitization Services (GSS); its activities are monitored by NORD/LB employees. The administration of the securitisation transactions (including business policy decisions and contracts) is performed by NORD/LB in the Asset Backed Finance unit in New York.

NORD/LB does not transfer its own receivables to Hannover Funding, as a result NORD/LB only has to record off-balance-sheet counterparty risk positions (liquidity facility) with Hannover Funding. NORD/LB’s loan receivables from its customers are financed by Hannover Funding. The marketing of commercial papers issued by Hannover Funding has been performed to date by external processors. NORD/LB does not have any direct contact with investors when commercial papers are issued and does not provide them with any advice.

5.1.8.7 Accounting Policies for Securitisations

Since reports in accordance with the German Solvency Regulation are currently made on the basis of the accounts prepared in accordance with the German Commercial Code in the NORD/LB Group, information is provided on accounting policies in accordance with the German Commercial Code at this point. For information on the accounting policies for financial instruments in accordance with IFRS the notes to the consolidated financial statements (note 7) in the annual report are referred to.

The method of reporting securitisation transactions depends on the type of securitisation. Basically there are two types of securitisations: synthetic and true sale securitisations. Currently there are no synthetic securitisations in the NORD/LB Group in terms of the regulatory definition.

With the securitisation transactions initiated as the originator, the assets are derecognised with true sale securitisations when they are transferred to a third party in accordance with the German Commercial Code.

The liquid facilities granted as the sponsor are reported in the balance sheet as irrevocable credit commitments in accordance with the German Commercial Code.

For the securitisation exposures acquired as an investor, different accounting polices apply depending on whether they are classified as fixed or current assets. In the NORD/LB Group these are only assigned to the banking book. For securities treated as fixed assets, write-downs to the lower of cost or market are made for securities with carrying amounts above par, but only down to a book price of a maximum of 100 per cent. Write-downs to the lower of cost or market are not charged for securities with carrying amounts below par. Write-ups (appreciation in value in accordance with §253 para. 5 of the German Commercial Code) are made up to the cost of acquisition, even in excess of 100 per cent. Furthermore, impairment losses are charged to the fair value for lasting impairments. If the fair value cannot be derived primarily from monitorable, contractable prices, the fair value is calculated using a discounted cash flow model using customary and generally accepted input parameters. Securities in the liquidity reserve are valued in accordance with the strict lower-of-cost-or-market principle. Accordingly write-downs to the lower fair value are to be made as at the balance sheet date.

Compared to the previous period there has been no change in the accounting policies described.

5.1.8.8 Quantitative Disclosures relating to Securitisations

In accordance with §334 para. 2 no. 1 of the German Solvency Regulation, the securitisation activities conducted with the NORD/LB Group as the originator and for the first time as the sponsor are shown in Tables 20 and 21. Loan amounts are unweighted exposure values. Please note that the NORD/LB Group does not maintain any securitisation exposures in connection with revolving counterparty risk positions. The NORD/LB Group only has securitisation exposures in the banking book. Furthermore, the NORD/LB Group does not act as a servicer in the case of securitised loans so no disclosures are made relating to securitised non-performing loans or loans in default or on losses realised in the current period in accordance with §334 para. 4 no. 1 of the German Solvency Regulation. In the period under review, as in the previous period, no institute receivables were securitised by the NORD/LB Group. Additionally, in the period under review no institute receivables were planned for securitisation.

In Table 20 the total outstanding securitised receivables are reported in accordance with the amendment to the German Solvency Regulation. In order to enable comparability of the data, the reference data was adjusted accordingly. The total amount of outstanding securitised receivables has been increased by the proportionate cumulative outstanding interest.

Table 20: Total amount of outstanding securitised receivables as originator

Portfolio	Outstanding securitised receivables	
(in € million)	31 Dec. 2011	31 Dec. 2010
True sale securitisations Receivables from wholly or partial commercial real estate loans	156	124
Synthetic securitisations –	–	–
Total	**156**	**124**

Table 21: Total amount for sponsor activities

Portfolio (in € million)	Total for sponsor activities	
	31 Dec. 2011	31 Dec. 2010
Receivables from other retail loans	144	109
Receivables from corporate loans	1 496	1 482
Receivables from own and purchased leasing receivables	176	296
Receivables from automobile finance (not including leasing)	–	87
Total	**1 816**	**1 974**

In accordance with § 334 para. 2 no. 2 and para. 3 no. 1 of the German Solvency Regulation, securitisation activities of the significant companies of the NORD/LB Group are not only shown in their function as originator, they are also shown in their function as an investor and sponsor in Tables 22 and 23. Compared to the previous reporting date the exposure values and equity requirements due to repayments have fallen.

Table 23 shows that investments are primarily made in tranches with a low risk weight, whereby there has been a shift compared to the previous reporting date to the risk weight bands. The reason for this is in particular the rating migrations due to the change in method used by the leading rating agencies.

Table 22: Total amount of retained or purchased securitisation exposures

Securitisation exposures (in € million)	Retained/purchased securitisation exposures			
	Exposure values CRSA		Exposure values IRBA	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
On-balance-sheet items				
Receivables from housing construction loans	393	481	76	175
Receivables from other retail loans	48	120	–	–
Receivables from wholly or partial commercial real estate loans	–	–	816	1 188
Receivables from corporate loans	–	–	248	329
Receivables from own and purchased leasing receivables	–	–	8	23
Receivables from automobile finance (not including leasing)	31	34	–	–
Resecuritisations	–	–	251	376
Other on-balance-sheet items	–	–	251	370
On-balance-sheet receivables from special-purpose entities and other on balance sheet loan enhancement measures	–	–	–	–
Aggregated on-balance-sheet items	**472**	**634**	**1 651**	**2 462**
Off-balance-sheet items				
Liquidity facilities	176	296	1 639	1 679
Guarantees and other off-balance-sheet loan enhancement measures	–	–	–	–
Derivatives	–	–	–	–
Other off-balance-sheet items	–	–	–	–
Aggregated off-balance-sheet items	**176**	**296**	**1 639**	**1 679**

Table 23: Capital requirements for retained or purchased securitisation exposures by risk weight bands

Capital requirements for retained or purchased securitisation exposures by risk weight bands (in € million)	Banking book							
	Securitisations				Resecuritisations			
	Exposure value		Capital requirement		Exposure value		Capital requirement	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Standardised approach	**649**	**930**	**29**	**29**	**–**	**–**	**–**	**–**
20 %	517	834	8	13	–	–	–	–
50 %	72	42	2	2	–	–	–	–
100 %	30	42	2	3	–	–	–	–
350 %	20	2	6	1	–	–	–	–
1250 %	10	10	10	10	–	–	–	–
Rating-based approach	**2 360**	**2 920**	**190**	**337**	**-**	**–**	**-**	**–**
≤ 10 %	776	721	5	4	–	–	–	–
> 10 % ≤ 20 %	527	718	7	9	-	–	-	–
> 20 % ≤ 50 %	336	383	8	9	–	–	–	–
> 50 % ≤ 100 %	439	342	24	20	–	–	–	–
> 100 % ≤ 250 %	45	223	4	20	–	–	–	–
> 250 % ≤ 650 %	131	331	38	84	–	–	–	–
> 650 % ≤ 1250 %	108	202	104	192	–	–	–	–
Regulatory formula approach	**3**	**5**	**2**	**3**	**251**	**474**	**4**	**3**
Internal assessment approach	**498**	**463**	**12**	**7**	**–**	**–**	**–**	**–**
Capital deduction	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Looking-through	**178**	**278**	**20**	**13**	**–**	**–**	**–**	**–**
Total	**3 688**	**4 597**	**254**	**388**	**251**	**474**	**4**	**3**

In Table 24 below the unweighted exposure values of the securitisation exposures are presented for the first time in accordance with the requirements of § 334 para. 2 no. 5 of the German Solvency Regulation; they are to be considered with a risk weight of 1.250 per cent. For securitisations the NORD/LB Group applies a risk weight of 1.250 per cent instead of a capital deduction.

This is the first time that a detailed breakdown of the exposures has been provided; as a result no figures are reported for the reference date.

Tabelle 24: Securitisiation exposures with a risk weight of 1.250 per cent

Securitisiation exposures with a risk weight of 1 250 % (in Mio €)	Exposure value
	31 Dec. 2011
Receivables from housing construction loans	13
Receivables from corporate loans	96
Total	**108**

In Table 25 purchased resecuritisation exposures are presented for the first time in accordance with the requirements of § 334 para. 3 no. 2 of the German Solvency Regulation. These exposures were not secured by the NORD/LB Group. Compared to the previous reporting date the exposure values due to repayments have fallen.

Table 25: Resecuritisation exposures and hedged amounts

Resecuritisation exposures and hedged amounts (in € million)	Exposure value 31 Dec. 2011	Exposure value 31 Dec. 2010
Resecuritisation exposures before collateralisation	251	474
Collateralisation by guarantees	–	–
of which Guarantors with rating AAA to A	–	–
of which Guarantors with rating below A	–	–
Collateralisation by other collateral	–	–
Resecuritisation exposures after collateralisation	251	474

5.2 Investment Risk

5.2.1 Investment Risk Management

5.2.1.1 Investment Risk Management Strategies and Processes

Securing and improving the bank's own market position is the primary motive behind the investment policy of the NORD/LB Group. Generally the acquiring of investments serves to effectively consolidate the universal activities of the bank and to fulfil joint responsibilities resulting from the function as a state bank and central bank for the savings banks. In order to support the NORD/LB Group's business model there is a deliberate focus on banks and financial institutions.

Group interests are maintained in relation to investments primarily by centrally specifying key business ratios or specific tasks. The aim is to ensure that the Group is effectively managed and that transparency is guaranteed for third parties.

Investments are regularly monitored by analysing reports drawn up during the year, intermediate and annual reports and audit reports drawn up by the auditors. Control is carried out by NORD/LB representatives or the supervising subsidiaries in the supervisory boards, advisory boards, shareholders' meetings, annual general meetings and owners' meetings as well as by means of holding operative mandates in the companies.

In addition to optimising the investment portfolio, the continued development of investment risk management was a priority in the period under review. The bank has finalised its materiality concept for Investment Management and subjected existing risk factors to different considerations.

The method for measuring investment risk now considers risks beyond the carrying amount, e. g. additional contributions and letters of comfort. In the category of investment risk, the risk potential is quantified for different confidence levels and a time horizon of one year using a risk model; the parameters that are used generally focus on loss events relating to investments. The further calculation is based on the Gordy model, which is used by the Basel Bank Supervisory Committee for aligning equity requirements within the framework of Basel II.

The model used calculates contributions made by individual investments towards unexpected loss at portfolio level, which together add up to an unexpected loss for the full portfolio.

At the level of the NORD/LB Group, all of the significant investments from a risk point of view are considered and integrated into the risk management system of the Group based on the quantified risk potential for each risk type.

5.2.1.2 Investment Risk Management Structure and Organisation

Risks resulting from investments at various levels in the Group are managed by NORD/LB's Investment Management in close cooperation with other divisions, in particular the Finance, Controlling and Risk Control divisions. Domestic and foreign investments are all supervised centrally by Investment Management or by the corresponding units in the subsidiaries. Minor exposures are controlled and supervised by the divisions initiating the exposure in each case due to the close factual connection. This is done in close cooperation with Investment Management.

Based on the investment analysis model, investments were classified consistently across all divisions as significant, important and other investments. The review considers both quantitative and qualitative criteria.

The result of the materiality analysis determines how closely the risks are monitored in all divisions of NORD/LB. A further differentiation is made from a risk point of view for the treatment of significant investments. The significant investments based on quantitative criteria of Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo and NORD/LB CFB (referred to as significant investments from a risk point of view below) are considered in the internal reporting of the NORD/LB Group at the level of individual risk type. The significant investments based on qualitative reasons of the NORD/LB Asset Management Group, the Öffentliche Versicherungen Braunschweig Group and Skandifinanz AG are reported together with the important and other investments as investment risk, but are subjected to closer analysis by the divisions included in Investment Management.

Based on the data as at 31 December 2011, DekaBank Deutsche Girozentrale was redefined as a significant investment of the NORD/LB Group. Investment Management is currently arranging the resulting intensity of monitoring with the other divisions involved in control.

The materiality concept is still in the implementation phase in subsidiaries with their own investments (Bremer Landesbank and Öffentliche Versicherungen Braunschweig). The investments of the subsidiaries of NORD/LB Luxembourg are analysed by NORD/LB's Investment Management.

5.2.1.3 Investment Risk Cover and Mitigation
In order to enhance earnings potential and reduce capital tied and potential risk relating to investments the NORD/LB Group has, on the basis of a critical review of the investment portfolio, disposed of a range of investments since 2005. In continuation of this strategy, NORD/LB disposed the majority of its indirect holdings in DekaBank Deutsche Girozentrale in 2011.

5.2.1.4 Investment Risk Reporting
Current income (earnings and depreciation) and the risks of all investments monitored by Investment Management are regularly evaluated and reported to the NORD/LB Managing Board on a half-yearly basis by Investment Management together with other significant key data within the scope of modified reporting.

In addition to this, realised or anticipated income from investments is reported on a monthly basis to the Finance Division. The Controlling Division also submits a report on the income and profitability of the NORD/LB Group's largest investments consolidated under commercial law to NORD/LB's Managing Board.

In the significant subsidiaries from a risk point of view that have investments, corresponding reports are also regularly prepared on the respective investments.

5.2.2 Quantitative Information on Investment Risk
In accordance with § 332 Nos. 2a and b of the German Solvency Regulation, Table 26 contains an overview of the carrying amounts of investment exposures in the banking book which are not consolidated for regulatory purposes and not deducted from capital. Such investments are currently not relevant for NORD/LB Luxembourg and NORD/LB CFB.

Since reports in accordance with the German Solvency Regulation are currently prepared on the basis of accounts prepared in accordance with the German Commercial Code in the NORD/LB Group, information is also provided here on valuations of investments in accordance with the German Commercial Code. For information on the accounting policies in accordance with IFRS the notes to the consolidated financial statements (note 7) in the annual report are referred to. Investments are reported at acquisition cost or at lower fair value in the event of a permanent loss of value, whereby the fair value is calculated based on the present value of the shareholders' future net earnings associated with the ownership of the company.

With regard to Table 26, when a listed value is ascertained, this is normally the fair value, for funds which are not listed the repurchase value is used. In cases in which a current value is ascertained for internal or external purposes, this is the fair value, otherwise the carrying amount is used.

For the sake of clarity, four investment groups are reported in Table 26, each broken down by listed, not listed but included in a sufficiently diversified investment portfolio and other investments. Yield investments are made to achieve an optimum yield taking into account risk-bearing capacity; they also include private equity investments and typically silent participations. Investments to support the operational business concern investments in product suppliers, in outsourced or third-party service providers and credit-substituting investments. Regional or structural investments are made to serve the bank's respective responsibilities as a Landesbank. Investments that cannot be allocated to any of the above-mentioned groups are consolidated in the group of other investments.

Table 26: Carrying amounts of investment exposures

	Carrying amount		Fair value		Market value	
Group of investment exposures (in € million)	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Yield investments						
Listed	6	25	6	25	6	25
Not listed but included in a sufficiently diversified investment portfolio	847	782	815	825		
Other investment exposures	–	–	–	–		
Investments to support the operational business						
Listed	–	–	–	–	–	–
Not listed but included in a sufficiently diversified investment portfolio	37	137	102	162		
Other investment exposures	9	11	9	11		
Regional or structural investments						
Listed	–	3	–	3	–	3
Not listed but included in a sufficiently diversified investment portfolio	11	10	26	19		
Other investment exposures	–	–	–	–		
Other investments						
Listed	–	–	–	–	–	–
Not listed but included in a sufficiently diversified investment portfolio	73	70	93	78		
Other investment exposures	–	17	–	17		

In accordance with § 332 nos. 2c and d of the German Solvency Regulation, Table 27 contains an overview of the realised and unrealised profits or losses in the banking book which are not consolidated for regulatory purposes and not deducted from capital. Such investments are currently not relevant for NORD/LB Luxembourg and NORD/LB CFB.

While a profit from sales was recorded in the previous period, a loss has been realised in the current period. This is seen alongside latent revaluation profits as at the reporting date.

Table 27: Realised and unrealised profits / losses from investment exposures

	Realised profit / loss from sale / liquidation		Latent revaluation profits / losses			
			Total		Of which included in supplementary capital	
(in € million)	1 Jan.– 31 Dec. 2011	1 Jan.– 31 Dec. 2010	1 Jan.– 31 Dec. 2011	1 Jan.– 31 Dec. 2010	1 Jan.– 31 Dec. 2011	1 Jan.– 31 Dec. 2010
Total	**– 2**	**2**	**68**	**84**	**–**	**–**

5.3 Market Price Risk

5.3.1 Market Price Risk Management

5.3.1.1 Market Price Risk Management Strategies and Processes

The activities of the NORD/LB Group associated with market price risks are concentrated on selected markets, customers and product segments. The positioning on money, currency and capital markets should be in line with the significance and dimension of the Group and is primarily geared towards the needs of customers and supporting the control measures of the bank as a whole. As far as possible, there is no positioning on an opportunistic basis.

Trading activities relating to customer business focus on interest products. Here the NORD/LB Group aims, within the scope of set market price risk limits, to achieve earnings from term transformation or credit spreads and to participate in general market developments within the framework of these risk limits.

Significant credit-spread risks in the banking book also result across the Group from existing investments in securities and credit derivatives. The NORD/LB Group generally aims to use the credit spreads to maturity and to gradually reduce the amount of the credit-spread risks in banking book by trimming down the portfolio.

Trading book positions are valued daily at current market prices. Valuation is carried out bank-wide at a specific time. Market prices and valuation parameters such as interest rate curves and spreads are reviewed daily by the Market Risk Control department which is independent of trading.

Gains/losses are mainly determined in the front-office systems. The valuation algorithms that are stored there have been approved by the Market Risk Control department. Risk is ascertained in a risk control system supplied with market data from the front-office systems which is quality-assured independent of trading.

For the internal control, monitoring and limiting of market price risks, Value-at-Risk (VaR) methods are generally employed for all significant portfolios.

The VaR ratios are calculated daily using the historical simulation method or, in the case of Bremer Landesbank and Deutsche Hypo, based on a variance-covariance approach. In the process a Group-wide unilateral confidence level of 95 per cent and a holding period of one trading day are used. At the end of each quarter NORD/LB also prepares a VaR calculation for the NORD/LB Group based on the above parameters when calculating the risk-bearing capacity.

The VaR calculation is based on historical changes to risk factors over the previous twelve months. The models take account of correlation effects between risk factors and sub-portfolios. Credit-spread risks in the banking book are currently controlled uniformly in the Group not using a VaR method, but by a scenario analysis.

Credit-spread risks in the banking book are currently not controlled across the Group by VaR limits; instead they are limited separately by a scenario analysis.

The prediction quality of the VaR model is verified with comprehensive back-testing analyses. This involves a comparison of the daily change in value of the respective portfolio with the VaR of the previous day. A back-testing exception exists if a negative change in value observed exceeds the VaR.

The number of back-testing exceptions rose during the course of the year under review and was as at the reporting date red for NORD/LB and green for the other significant companies of the NORD/LB Group from a risk point of view. This increase was partly expected due to the worsening national debt crisis in Europe and the associated market fluctuations in the interest and credit markets. It was also partly the result of basis risks in the banking book, i. e. distortions between the various interest markets. The VaR values of the trading area concerned are increased accordingly by additions from back-testing until these effects are corrected.

In addition to the VaR method, the effects of extreme market changes on the risk position of NORD/LB are examined in daily stress-test analyses. Various stress scenarios were defined for each of the types of market price risk, namely interest rate, currency, share price, fund price and volatility risk, and these approximately reflect the average of the highest changes seen in the respective risk factors and are combined with scenarios spanning the types of market price risk. In addition to this, a stress test analysis of the credit-spread risks is conducted on a weekly basis for the banking book. The risk factors observed were selected in such a manner that material risks relating to the entire portfolio of NORD/LB and to the individual sub-portfolios of the trading divisions are covered.

In addition, other stress test analyses are conducted at least once a month, including strategy-related stress tests for selected trading items and specific stress scenarios for spread and basis risks in the banking book. Further general stress tests for all risk types are conducted on a quarterly basis within the context of reporting on risk-bearing capacity. The stress test parameters are reviewed on at least an annual basis and adjusted for changes in the market situation as and when required.

5.3.1.2 Market Price Risk Management Structure and Organisation

The trading divisions Treasury, Markets and Portfolio Investments are responsible for controlling market price risks in NORD/LB. Within the scope of their Global Head function, the trading divisions are also responsible for trading activities conducted at the foreign branches in London, New York, Singapore and Shanghai. Trade transactions are processed and controlled in separate divisions.

The strategic control of market price risks is supported by the Asset Liability Committee (ALCO). The ALCO is an advisory body that meets on a monthly basis at the level of NORD/LB and on a quarterly basis at the level of the NORD/LB Group. It supports the strategic control of market price risk positions, liquidity positions and the investment portfolio with the aim of optimising the profitability of the risk capital tied up in the positions. For this purpose recommendations for actions are developed as a basis for decision-making for the Managing Board. Members of the ALCO in NORD/LB include the Financial Markets, Risk Control and Finance Members of the Managing Board. Also represented are the heads of the trading divisions and the Risk Control, Credit Risk Management, Research / Economy, Controlling and Finance divisions. The Group's ALCO also includes the representatives of the significant companies from a risk point of view. The measures passed by the Managing Board are implemented by the Portfolio Investments and Treasury divisions and the relevant units of the subsidiaries.

Risks are monitored by the Risk Control Division, which in accordance with MaRisk operates independently of divisions responsible for market price risk control in terms of both function and organisation and performs comprehensive monitoring, limiting and reporting activities for NORD/LB (including its foreign branches) and the NORD/LB Group. This also includes calculating amounts eligible for the quarterly SolvV report to the Bundesbank. The responsibility for the development and validation of the risk model also lies with the Risk Control Division.

The market price risks of Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo and NORD/LB CFB are managed decentrally by the local trade and treasury divisions. They have their own risk control units which are responsible for monitoring the risks. The data is integrated into the reporting at Group level.

5.3.1.3 Market Price Risk Cover and Mitigation

The VaR limit for market price risks is derived from the RBC model, allocated by Managing Board resolution to the Member of the Managing Board who is responsible for Financial Markets and who delegates to the subordinate organisational units.

Compliance with the limits is monitored both throughout the day and at the end of the day by the Risk Control units. Any losses are immediately added to the loss limits, hence resulting in a reduction in VaR limits in accordance with the principle of self-absorption. Correlation effects between the portfolios are included in calculating VaR and in the delegation of sub-limits.

In some areas specific sensitivity limits are added to the VaR limits. Banking book credit-spread risks are limited separately.

5.3.1.4 Market Price Risk Reporting

In compliance with the Minimum Requirements for Risk Management (MaRisk), the Risk Control Division, which is independent of the divisions responsible for the items, reports daily on market price risks to the respective Member of the Managing Board. The Members of the Managing Board are therefore also informed about the effects of the stress scenarios beyond the scope of VaR scenarios. A weekly report is also provided on the credit- spread risks in the banking book of the institutes of the NORD/LB Group. The Managing Board is informed in detail once a month about NORD/LB's and the NORD/LB Group's market price risks and earnings position.

Daily reporting to the respective Members of the Managing Board and monthly reporting to the Managing Board also take place in the significant subsidiaries from a risk point of view.

5.3.2 Quantitative Information on Market Price Risk

In accordance with § 330 of the German Solvency Regulation, for institutes with internal models first of all an overview of the VaR values in the trading book is to be reported, and secondly, the daily VaR is to be compared with the daily changes in the value of the portfolio and significant VaR transgressions are to be disclosed.

VaR data relating to general interest-rate risks and general and specific share price risks determined in the internal model is shown in Table 28. The schedule contains the VaR on the balance sheet date, the highest and lowest VaR during the reporting period and the annual average.

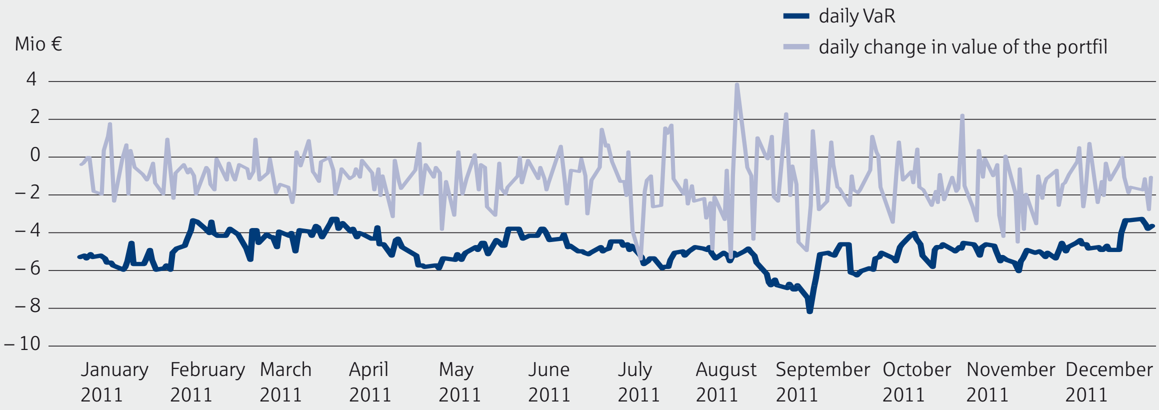
The VaR for Table 28 has been calculated with a confidence level of 99 per cent and a holding period of one trading day. With the crisis risk amount (Stressed VaR), as this is reported for the first time as at 31 December 2011, no comparative values for the previous reference date are reported.

Table 28: Overview of the VaR of portfolios in the trading book (internal model)

Trading book portfolios (general interest rate risk and share price risk) (in € million)	VaR at the end of the reporting period		VaR values during the period					
			Highest value		Lowest value		Reporting periods ø	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
Combined VaR	**3**	**7**	**8**	**9**	**3**	**3**	**5**	**5**
General interest rate risk	3		6		2		3	
Share price risk	–		3		–		1	
Volatility risk	–		1		–		–	
Stressed VaR	**7**		**9**		**7**		**8**	
General interest rate risk	6		10		6		8	
Share price risk	1		3		1		2	
Volatility risk	1		1		–		1	

The following diagram shows the VaR values for general interest-rate risk and general share price risk calculated daily at the close of business using the internal model with a confidence level of 99 per cent and a holding period of one trading day. In order to make it easier to identify any backtesting exceptions, i.e. negative changes in value in accordance with § 318 para. 1 clause 2 of the Germany German Solvency Regulation which exceed the previous day's VaR value, the following presentation was chosen: The VaR value is reported as a potential loss with a minus sign, the part for special share price risk in accordance with § 339 para. 14 of the German Solvency Regulation (in the version of the German Solvency Regulation applicable as at 30 December 2011) is not considered, and the change in value in accordance with § 318 para. 1 clause 2 of the German Solvency Regulation at the close of business on this date and the VaR value at the close of business of the previous day are assigned to the respective date. This is not the backtesting of the VaR value for internal control purposes, but the relevant value in terms of regulatory requirements.

Value-at-Risk (99 per cent, 1 day) portfolio change in value in € million



In the period under review one backtesting exception was recorded. This exception occurred on 11 July 2011. After Italy came under the spotlight of overindebted Euro countries and it became clear that the euro rescue package needed to be expanded, there were major movements in the markets (rises in interest rates, increased interest volatility, fall in share markets). As a result there were high losses in the relevant trading book portfolios, which resulted in the exception. Subsequent analyses of processes and models did not identify any need for action. The relevant crisis scenarios for the market movements observed showed much higher losses than the loss actually observed on 11 July 2011. Due to this regulatory backtesting exception there was no need to adjust the crisis scenarios.

Overall the reduction in VaR recorded in the year under review was based on the greatly reduced share positions.

Reference is made to Table 3 in section 4.2.2 on capital requirements for disclosures relating to capital charge for market price risks, presented separately for the standard approach and the internal model approach.

5.3.3 Special Information on Interest-Rate Risk in the Banking Book

Interest-rate risks in the banking book mainly arise from new business or strategic interest management. In order to quantify the risk content of these positions at individual institute level on a daily basis, the VaR model, which is also used for the trading book, is applied. The quarterly report on the interest rate shock in the banking book at Group level is based on the regulatory stress test involving a parallel shift in the interest rate curve by + 200 basis points or – 200 basis points. The internal calculation frequency in terms of the Circular 11/2011 (BA) was set at least once a week.

The models used in daily control measures are also used for interest rate shocks. This involves mapping onto the fixed interest period for products with fixed terms and various models of stochastic products. The majority of open-end investments are shown in moving average models. Unsecured cancellation rights for loans are restricted by imposing limits. Unlimited equity and unlimited investments are not considered in accordance with regulatory requirements.

Table 29 in accordance with § 333 para. 2 of the German Solvency Regulation shows changes in the present values given an interest rate shock of + 200 basis points and an interest rate shock of – 200 basis points. Increases in present values are shown as positive figures while decreases in present values are preceded by a minus sign.

In accordance with Federal Financial Supervisory Authority (BaFin) Circular 11/2011, the same procedure is used to calculated the change in the present value of every foreign currency as the procedure for positions in euros. For foreign currencies the least favourable changes in present values are added up and this total is then added to the change in the present value in the respective euro scenario.

Due to the regulatory changes in the basis points for interest rate shock from + 130 to + 200 and from – 190 to – 200 and as a result the limited comparability, the previous year's values are not reported in Table 29. Overall the change in the present value for interest rate shock +130 basis points was € – 287 million and for interest rate shock -190 basis points € + 491 million as at 31 December 2010.

Table 29: Interest-rate risks in the banking book

Currency (in € million)	Change in present value			
	Interest rate shock + 200 basis points		Interest rate shock – 200 basis points	
	31 Dec. 2011	31 Dec. 2010	31 Dec. 2011	31 Dec. 2010
EUR	– 379		500	
Foreign currency effects	– 56		– 56	
Total	**– 435**		**444**	

5.4 Liquidity Risk

5.4.1 Liquidity Risk Management

5.4.1.1 Liquidity Risk Management Strategies and Processes

Securing perpetual liquidity for the NORD/LB Group is strategically essential. While traditional liquidity risk is principally hedged by maintaining a sufficient supply of liquid assets (in particular central bank eligible securities), refinancing risks are allowed to be taken with a structural transformation of liquidity terms. Risks are constrained with suitable limits in both cases.

The limit for traditional liquidity risk serves to secure the ability to make payment even in a conservative stress scenario, while the limit for the refinancing strategy is derived from the risk strategy and the risk-bearing capacity of NORD/LB and allows term transformation to contribute to earnings.

In order to limit market liquidity risk the NORD/LB Group primarily makes securities transactions in markets which have proven themselves to be sufficiently liquid even when they are under pressure.

In the Global Group Liquidity Policy the business policies for liquidity risk management in the NORD/LB Group are specified. The individual institutes of the NORD/LB Group also have liquidity control policies which describe the basic strategic guidelines for ensuring a sufficient supply of liquidity. Liquidity management measures in cases of emergency and in crisis situations are specified in contingency plans.

Risk concentrations on the liabilities side are prevented by a diversified investor base and product range. The focus is on institutional and public investors, which is in line with the risk-based orientation of the NORD/LB Group. The diversification of refinancing sources is also strengthened by covered bond issues and retail deposits.

The NORD/LB Group calculates the utilisation of volume structure limits for the various maturity bands on the basis of a liquidity progress review of the entire position, which essentially reflects the standard case. Liquidity risk is quantified in a risk-bearing capacity concept resulting from a present-value consideration of the refinancing risk.

Calculation of dynamic and static stress scenarios for modelling traditional liquidity risk is based on the current liquidity maturities. These are stressed until they reflect a crisis. For example, a reduced amount of accounting liquidity and an increased utilisation of credit commitments is presumed. The stress scenarios can be used to show the effect of unexpected events on the liquidity situation of the Group, enabling the Group to plan for the future and to be well-prepared for cases of emergency.

The analysis of stress scenarios takes into consideration the overriding significance of the market liquidity of all securities in the portfolio. In addition, a separate credit-spread risk calculation is made for securities in the banking book when calculating market price risks. Since the spreads observed on the market reflect both the credit rating of an issuer and the market liquidity of the securities and since the parameters applied for calculating a scenario are specified in relation to current market spreads, the risk report also indirectly takes into account the market liquidity of the securities. No separate risk dimension is applied for market liquidity risks.

5.4.1.2 Liquidity Risk Management Structure and Organisation

In addition to the Treasury division, the global trading divisions Markets and Portfolio Investments and the Risk Control Division are included in the process of liquidity risk management at NORD/LB.

The Treasury Division is responsible for controlling items bearing liquidity risks and producing profits and losses resulting from changes in the liquidity situation (in general or specific to NORD/LB).

The Treasury Division also presents the liquidity maturity balance sheet to the Asset Liability Committee. It also reports to this committee on refinancing risk and makes recommendations for action concerning the future approach towards strategic planning if necessary.

The Risk Control Division is in charge of the implementation and development of internal procedures for measuring, limiting and monitoring liquidity risks. The Risk Control Division also ascertains and monitors traditional liquidity risk and monitors refinancing risk. It also ascertains and monitors regulatory indicators in accordance with the German Liquidity Regulation.

A Global Liquidity Management crisis team is available in the event of a liquidity crisis and assumes responsibility for liquidity management in close cooperation with the Managing Board.

The liquidity risks of Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo and NORD/LB CFB are managed decentrally by the local Treasury units and monitored by their own Risk Control units. In order to coordinate the decentralised units of the NORD/LB Group, information is regularly exchanged between the significant companies of the NORD/LB Group from a risk point of view to address both issues relevant to control in the Treasury Division and also model-relevant issues in the Risk Control Division.

5.4.1.3 Liquidity Risk Cover and Mitigation

The refinancing risk of NORD/LB and the significant subsidiaries from a risk point of view is limited by the present value limits and the volume structure limits for various maturity bands that are derived from the risk-bearing capacity. The liquidity maturities are also considered separately by currency.

Traditional liquidity risk is primarily limited by analysing a dynamic stress scenario. The scenario describes the most likely crisis situation in each case, hence also describing a current market environment which is characterised by economic problems in the periphery countries of the EU and a continuing loss of confidence in financial markets. Analysis is based on liquidity cash flows and covers the coming twelve months on a daily basis. For products without fixed liquidity flows, optional components (e. g. from irrevocable credit commitments), planned new business and refinancing opportunities, assumptions are made in accordance with the market situation which are subject to regular validation.

With the help of the limit system it is ensured that in the event of a stress case, surplus liquidity is available for at least three months. This means that securing the ability to make payment at any time in this maturity band is given preference over possible opportunities to generate profits. The aim is to ensure a liquidity surplus for at least six months in the dynamic stress scenario taking into account profitability considerations.

The dynamic stress scenario is supplemented by other statistical stress tests every month. These tests cover a scenario specific to NORD/LB, the alternative scenario of a comprehensive liquidity crisis, a short-term scenario for a market-wide liquidity problem and the scenario for calculating the liquidity buffer resulting from the third MaRisk amendment.

Market liquidity risks are implicitly accounted for by means of classifying securities in the liquidity maturity balance sheet in accordance with their market liquidity. Securities are allocated on the basis of a detailed security category concept to one of eleven main categories with one to eight subcategories (e. g. by central bank eligibility and rating). The liquidity maturity balance sheet is presented by liquidity category, with the maturities ranging from payable on demand to final maturity.

When classifying the securities in the liquidity categories, in addition to the tradability, in particular the usability of the collateral of key importance, i. e. the suitability of the securities as collateral in repo transactions, with central banks or as cover for covered bonds.

For control at Group level, a Group liquidity maturity balance sheet is prepared on a morthly basis. For this purpose all of the cash flows in euro and the translated foreign currency cash flows of the significant Group companies from a risk point of view are compiled in one overview. The liquidity maturity balance sheets are also prepared in the most important foreign currencies.

5.4.1.4 Liquidity Risk Reporting

The Risk Control Division reports to the responsible Members of the Managing Board several times a week, and depending on the amount of the limit used on a daily basis if necessary, on the dynamic stress test scenario for the NORD/LB Group’s traditional liquidity risk.

The Managing Board is informed in detail in the monthly report on market and liquidity risks of the NORD/LB Group’s liquidity risk situation. Information is also provided on a quarterly basis in the report on risk-bearing capacity.

In addition to this, NORD/LB’s biggest investors in new business are monitored regularly. The responsible Member of the Managing Board and departmental heads are informed of liquidity concentrations in the concentration risk report.

The monthly refinancing risk reports are prepared in euro and in the most important foreign currencies. The maturity balance sheets upon which the refinancing risk is based are also presented together with the stress tests to the Asset Liability Committee which meets on a monthly basis.

The liquidity ratios calculated in accordance with the German Liquidity Regulation can be calculated daily and submitted to the Treasury Division for the purpose of regulating liquidity risk. The report in accordance with the German Liquidity Regulation for the entire bank and each location is submitted to the Bundesbank, the control divisions and to the Managing Board of NORD/LB once a month.

With the significant subsidiaries from a risk point of view, the relevant reports on traditional liquidity risk, refinancing risk and the liquidity situation are established in the status quo and under stress. These inform the controlling divisions, responsible Members of the Managing Board and the entire Managing Board on a monthly, weekly or even daily basis.

5.4.2 Quantitative Information on Liquidity Risk

There are no quantitative regulatory requirements relating to the disclosure of liquidity risk. Reference is made here to the risk report included in the management report of the NORD/LB Group.

5.5 Operational Risk

5.5.1 Operational Risk Management

5.5.1.1 Operational Risk Management Strategies and Processes

Operational risk is imminent in any business activity. For this reason, various measures undertaken in the NORD/LB Group have for a long time now focussed on the management of operational risk.

The main aim is to avoid operational risks as far as this is economically viable. The NORD/LB Group protects itself against operational risks if the costs for the protection are not greater than the costs directly incurred as a result of the risk or if its reputation could be significantly affected.

The NORD/LB Group possesses a suitable framework in the form of technical and organisational measures, contractual regulations, working instructions and other documentation in order to prevent operational risks from occurring as far as possible. This includes business continuation planning, recovery planning and appropriate insurance cover. The raising of risk awareness among all employees plays a key role in preventing operational risks in day-to-day business (risk culture).

The management of operational risks is supported by a methodical framework for risk identification and assessment so that specific measures can be quickly implemented.

With continual analysis of loss events, risk indicators and scenarios, causes of risk should be identified and concentrations of risk prevented. The internal control system (ICS) is reviewed regularly in relation to its appropriateness and effectiveness with regard to risk (ICS control cycle). Appropriate countermeasures are taken as and when required. Business continuation and recovery plans serve to limit damage in the case of extreme unexpected events.

NORD/LB has been collecting data on loss events resulting from operational risk since the beginning of 2003 and has classified these events by process, cause, and effect. There is no “insignificant” level; however there is a simplified reporting process for gross losses of less than € 2500. Data in the loss database provides the basis for analyses in support of risk management and is an important element of the statistical/mathematical risk model developed by the bank. The significant companies from a risk point of view of the NORD/LB Group and the NORD/LB Asset Management Group are included in the collection of loss events.

The loss events collected are exchanged in anonymous form in the Data Consortium of Operational Risks (DakOR) with other banks. The consortium data extends the data basis which is used for the internal model. In addition information contained in the database Öffentliche Schadenfälle OpRisk (ÖffSchOR) is available in which press releases on major losses resulting from operational risk are collected, structured and processed. The two sources of data are used for scenario analyses and for regular benchmarking.

With the help of the risk assessment method applied in NORD/LB, Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo, NORD/LB CFB and the NORD/LB Asset Management Group, the recording of data concerning past losses is supplemented with future components. Expert appraisals on the impact of specific scenarios provide a detailed insight into the risk situation of the individual bank divisions so that relevant measures can be derived if necessary. The scenarios and areas where data is gathered are selected on a risk-oriented basis and on the basis of an analysis of various data sources (e.g. loss events and audit reports). The results are included in the internal model, further improving measurement accuracy and enabling a more process-related view of the bank’s operational risks.

In order to identify potential risks early on and to take countermeasures, risk indicators are used in NORD/LB. The selection of indicators takes place on a risk-oriented basis and is regularly reviewed for its appropriateness. Causes of risk should also be identified and concentrations of risk prevented with the continual and comparative analysis of loss events, risk indicators and scenarios.

The NORD/LB Group has an internal model to measure operational risk which is based on the loss distribution approach. The loss frequency is calculated based on internal data. The parameterisation of loss values also includes scenario analyses and external data from the DakOR consortium, whereby elements of the extreme value theory are considered. The Value at Risk for the holding period of one year is calculated using the Monte Carlo simulation method. Correlation effects are modelled with the help of a Gaussian copula, in which qualitative and quantitative information is included in the parameters.

Risk indicators in the warning area impact on the models. If anticipated losses are considered in the planning process of the divisions, these are deducted from the model result. The VaR calculated by the model is used as a control variable for operational risks in the RBC model. An allocation process which combines size indicators with risk-sensitive elements is used to distribute the model results to the individual institutes. The model's parameters are regularly subjected to a comprehensive validation and stress tests. The methods used here were revised and added to in the year under review.

Mitigation effects due to insurance or other instruments used to transfer risk are currently not considered in the quantification model. The bank considers the use of customary insurance products to be part of active risk control.

The methods and procedures implemented in the NORD/LB Group meet the requirements of § 272 of the German Solvency Regulation concerning the use of the standard approach for operational risk. The amount allowable for operational risk was calculated in the year under review using the standard approach in accordance with the German Solvency Regulation. The methods used in overall bank management and to establish the risk-bearing capacity are already based closely on the requirements of the German Solvency Regulation for an advanced measurement approach. However, further qualitative improvements to the methods for operational risk currently have priority over a regulatory certificate for the internal model.

5.5.1.2 Operational Risk Management Structure and Organisation

All hierarchical levels and divisions are involved in the management of operational risks. The Managing Board stipulates the basic method of handling operational risk, taking into account the risk situation at general bank level. Responsibility for the control of operational risk within the general environment specified is decentralised and lies with the individual divisions.

NORD/LB has a security strategy and uniform standards in order to efficiently and sustainably protect the bank from harm and at the same time meet legal and supervisory requirements. Contingency measures ensure appropriate operation in the event of an emergency and a return to normal operations as quickly as possible with consistent business continuation and recovery planning which focuses on time-critical activities and processes.

The Risk Control Division is responsible for the central monitoring of operational risks and the independent reporting. The division is also responsible for specifying the rules for developing and implementing the methods used to control operational risks. All of the strategic and conceptual responsibilities relating to security and contingency management are concentrated in the Group Security division. Internal Audit is responsible for the process-independent audit to establish whether methods and procedures are properly implemented and carried out.

The operational risks of Bremer Landesbank, NORD/LB Luxembourg, Deutsche Hypo and NORD/LB CFB are managed decentrally. For the monitoring of risks, these companies have their own Risk Control units which coordinate closely with the Risk Control Division of NORD/LB. The methods and guidelines which apply throughout the Group are defined by the Risk Control Division of NORD/LB.

5.5.1.3 Operational Risk Cover and Mitigation

Process-related and structural organisational risks are countered with well-organised structures and procedures. If weaknesses in the organisation or in the control system are identified, appropriate countermeasures are taken immediately. The internal control system has a uniform structure in the NORD/LB Group. The ICS framework implemented for this purpose is based on the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) for internal controls and includes a specific operational and organisational structure. With the use of standardised methods and procedures, an appropriate and effective ICS will be ensured throughout the bank and a lasting improvement sought.

The operational structure of NORD/LB's ICS is geared towards a recurrent control cycle. The overriding goal is the bank-wide assessment of the ICS based on the consideration of the appropriateness and effectiveness of the controls implemented. The control cycle will be supported by an organisational structure optimised for this purpose. This includes roles related specifically to the ICS, the tasks, competencies and responsibilities of which are defined and distinguished from one another. The current reporting to different groups of recipients is part of this control cycle.

Based on a standard process map in the NORD/LB Group, the risk content of processes is assessed with the help of a scoring model and a detailed analysis with regard to the appropriateness and effectiveness of the ICS is undertaken.

In the IT Division, instructions on procedures, alternative capacities and backups ensure that the IT infrastructure is adequately stable. Security concepts and contingency plans supplement pre-emptive measures in order to prevent loss or damage resulting from the failure or the manipulation of systems and information.

Personnel risk is countered by an appropriate personnel level in terms of quality and quantity. The bank pays particular attention to employee qualifications and the qualification status is reviewed with the help of a system of job specifications and employee assessments. Personnel development measures can therefore be initiated in a targeted manner. The remuneration system comprises a performance-related component which provides incentives and at the same time supports sustainability and risk awareness in work practices. The requirements of the Institute Remuneration Act (Institutsvergütungsverordnung) are implemented in the NORD/LB Group. The remuneration report can be found at https://www.nordlb.com/investor-relations/reports/.

Criminal actions are countered in close cooperation with the criminal prosecution authorities. The Fraud Prevention Management, which is located in Compliance department, prevents internal and external acts of fraud as far as possible and continually improves the preventive measures. For this purpose a detailed risk analysis employing risk scenarios based on experience and internal control processes based on these are used throughout the institute. Employee awareness of risks is raised with classroom and online-based training, a regular newsletter and ad-hoc information on current risks. There is an informer system for employees and customers so that information can be passed on securely.

At the start of 2011 the new group Regulatory Compliance department commenced operations. It should provide evidence in all divisions that NORD/LB complies with all applicable banking regulatory requirements.

In order to safeguard against legal risks, the respective Legal Department is to be consulted for example when legal action to be taken and when contracts which are not based on approved standard contracts are concluded.

The quality of external suppliers and service providers is ensured in the NORD/LB Group by concluding service level agreements or detailed specifications and the ongoing controlling of performance. A process for assessing service providers in terms of their materiality for risk aspects was installed in order to implement MaRisk requirements concerning outsourcing. For each material service outsourced a position is nominated which is responsible for managing services and risk relating to the business relationship. A risk assessment takes place on a quarterly basis using the method of risk indicators. An individual contingency plan is also drawn up for each material service outsourced.

The NORD/LB Group's insurance cover is appropriate. NORD/LB's insurance cover was subjected in the previous year to a full analysis with regard to its scope and effectiveness. The resulting optimisation measures were implemented in the year under review. Natural disasters and terrorist attacks are defined as force majeure. These risks are countered in contingency concepts.

5.5.1.4 Operational Risk Reporting

Within the framework of a continuous risk management process, results from the collection of loss events, risk assessment, risk indicators and internal model are analysed and communicated to the Managing Board on a quarterly basis and the responsible divisions as and when required and at least once a year. All of the results are included in the quarterly RBC reporting.

5.5.2 Quantitative Information on Operational Risk

Reference is made to Table 3 in section 4.2.2 on capital requirements for disclosures relating to minimum capital requirements for operational risks.

List of Tables

The tables are based on the use cases of the expert panel on disclosure requirements of the Deutsche Bundesbank of November 2006.

List of Abbreviations

AAKA	"Allgemeiner Arbeits- und Kreditausschuss" (General Working and Credit Committee at NORD/LB)
ABCP	Asset-Backed Commercial Papers
ALCO	Asset Liability Committee
BA	Bankenaufsicht (Banking Supervisory)
BaFin	"Bundesanstalt für Finanzdienstleistungsaufsicht" (German Federal Financial Supervisory Authority)
CCF	Credit Conversion Factor
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPC	Credit-Pricing Calculator
CRC	Credit Risk Control
CRM	Credit Risk Management
CRO	Chief Risk Officer
CRSA	Credit Risk Standard Approach
DakOR	"Datenkonsortium zur Sammlung von Schadenfällen im Kontext der operationellen Risiken" (Data Consortium for the collection of loss events in the context of Operational Risk)
DSGV	"Deutscher Sparkassen- und Giroverband" (German Association of Savings Banks and Girobanks)
EAD	Exposure at Default
EBA	European Banking Authority
EL	Expected Loss
GRC	Group Risk Committee
GSS	Global Securitization Services
HGB	"Handelsgesetzbuch" (German Commercial Code)
IAA	Internal Assessment Approach
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Internal Control System
IFD	"Initiative Finanzstandort Germany" (Initiative for Germany as a Financial Location)
IFRS	International Financial Reporting Standards
IRBA	Internal Ratings Based Approach
KSK	Konzernsteuerungskreis (Group Control Committee)
KWG	German Banking Act
LAPA	Liquidity Asset Purchase Agreement
LGD	Loss Given Default
LigV	German Liquidity Regulation
Lux GAAP	National Accounting Regulations of the Grand Duchy of Luxembourg
MaRisk	"Mindestanforderungen an das Risikomanagement" (Minimum Requirements for Risk Management)
NPP	New-Product Process
OECD	Organisation for Economic Co-operation and Development
ÖffSchOR	"Datenbank Öffentliche Schadenfälle OpRisk" (database of public loss events relating to operational risk)
PD	Probability of Default
RBA	Rating Based Approach
Repo	Repurchase Agreement
RSU	Rating Service Unit GmbH & Co. KG
RBC	Risk-Bearing Capacity
RW	Risk Weight
RWA	Risk-Weighted Assets
SFA	Supervisory Formula Approach
SCM	Special Credit Management
SolvV	"Solvabilitätsverordnung" (German Solvency Regulation)
SR	Sparkassen Rating und Risikosysteme GmbH
VaR	Value-at-Risk
VÖB	"Bundesverband Öffentlicher Banken Deutschlands" (German Federal Association of Public-Sector Banks)

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