Capital and Risk Management (Pillar III) Report

Nordea Bank Danmark Group 2012

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Nordea Bank Danmark hereby presents its capital position and how the size and composition of the capital base is related to the risks as measured in Risk-Weighted Assets (RWA). The national capital adequacy legislation is based on Directive 2006/48/EC of the European Parliament and of the Council , commonly referred to as the Capital Requirements Directive (the CRD) , which is in turn based on the Basel II framework issued by the Basel Committee on Banking Supervision (BCBS).

The Nordea Bank Danmark Group follows the Danish Financial business act 705 and the Danish Financial Supervisory Authority's regulation 1399Executive order on capital adequacy and 915 Executive order on Capital Base, which are based on the CRD.

This Pillar III disclosure constitutes a comprehensive disclosure on risks, risk management and capital management. In a summarised form, the disclosure is also presented in Nordea Bank Danmark's Annual Report 2012.

The Pillar III disclosure is made for the Nordea Group and for the subgroups Nordea Bank Danmark Group, Nordea Bank Finland Group and Nordea Bank Norge Group as well as Nordea Bank Polska S.A. These reports are presented on www.nordea.com and the key data on capital adequacy is also presented in the annual report of each legal entity.

The full Pillar III disclosure is made annually and the periodic information is published quarterly, included in the quarterly report for the entity. The format, frequency and content of the disclosures follow, to as large extent as possible with regards to local legislation, a common set-up in Nordea. Nordea has stated the common principles in a policy and instruction for disclosing information on capital adequacy in the Nordea Group.

In this report, Nordea Bank Danmark Group is defined as Nordea Bank Danmark and Nordea Group is defined as Nordea.

1. Highlights of 2012

Nordea Bank Danmark continued to show a solid risk position and credit quality as well as further improved its capital ratios in 2012. This was reflected in an increased core tier 1 capital ratio excluding transition rules to 12.1%, a loan loss ratio of 71bp, and slightly positive overall effects from migration.

The Nordic economies have continued to perform well compared to the rest of Europe, although with differences within the region, while global growth has remained weak. The sentiment in the financial markets has improved since late 2011, driven partly by measures taken by the central banks. Nordea Bank Danmark continued to show a solid risk position and remains a strong name in the funding market, with maintained high activity also in the long-term funding market.

Nordea Bank Danmark is confident and well-prepared for the future, due to stable profitability, solid quality in its well-diversified credit portfolio, a strong capital position and a diversified funding base.

Continued solid credit quality and strong risk management

Overall credit quality remained solid in 2012, although net loan losses remained on an elevated level with a loan loss ratio of 71bp. This reflected the relatively weak macroeconomic environment in Denmark compared to other Nordic markets. In 2012, the credit exposure increased slightly by 0.3%.

Nordea Bank Danmark's market risk-taking activities are well-diversified and oriented towards the Nordic and European markets. The total market risk VaR (mainly interest rate risk) in 2012 increased slightly to an average of EUR 26.6m (EUR 21.6m).

Capital ratios already at strong levels

The core tier 1 capital ratio excluding transition rules, increased further in 2012, due to the profit generation of the Group, a capital injection (EUR 500m) from the parent company as well as RWA efficiency activities, to reach 12.1% at the end of 2012 (last year 10.1%).

CRD IV and CRR (Basel III) – new regulations for capital and liquidity risk

During 2012, further clarity emerged as to the main elements of the new regulatory requirements for capital and risk – the Capital Requirement Directive IV (CRD IV) and the Capital Requirements Regulation (CRR).

The new CRD IV/CRR regulatory requirements are expected to be finalised in 2013. In addition, other closely related regulations are also emerging, such as a new policy for dealing with bank failure (crisis management) and a proposal for a European single supervisory mechanism (banking union).

In Nordea Bank Danmark, there is a strong focus on capital, liquidity and risk management within the organisation and Nordea Bank Danmark is well-prepared to meet the new regulatory requirements.

2. Governance of risk and capital management

Management of risk, liquidity and capital are key success factors in the financial services industry. The maintaining of risk awareness in the organisation is incorporated in the business strategies. Nordea has defined clear risk, liquidity and capital management frameworks, including policies and instructions for different risk types, capital adequacy and capital structure.

2.1 The Financial Group Nordea Bank Danmark in the capital adequacy context

The information given in this report refers to Nordea Bank Danmark A/S, with corporate registration number 13522197.

The financial statements are published semi-annually and the consolidated financial statements include the accounts of the parent company Nordea Bank Danmark A/S including subsidiaries according to International Accounting Standard (IAS) 27. In the Financial Group, the insurance operations are not consolidated, which is a difference to the treatment for accounting purposes. According to the requirements in the CRD, insurance subsidiaries and associated undertakings with financial operations are instead deducted from the capital base in the capital adequacy reporting (e g credit institutions or insurance companies where Nordea own 10% or more of the capital). End 2012 Nordea Bank Danmark included no insurance entities. However, with references to act 705 "Bekendtgørelsen om finansiel virksomhed and by requirements by the Danish Financial Supervisory Authority, holdings in LR Realkredit A/S (Nordea Bank Danmark holds 39% of voting power) are included in RWA and capital base with a proportional part. Tables and figures with specification of exposures, RWA and capital requirement related to LR Kredit are not included in this report if not stated. This is valid only in Nordea Bank Danmark and is not included in the capital requirements of Nordea Group. Table 2.1 at the end of this chapter discloses the undertakings that have been consolidated and deducted from the capital base.

2.2 Risk and capital management

2.2.1 *Risk and capital management principles and control*

2.2.1.1 Board of Directors and Board Risk Committee

The Board of Directors has the ultimate responsibility for limiting and monitoring the Group's risk exposure as well as for setting the targets for the capital ratios. Risk is measured and reported according to common principles and policies approved by the Board of Directors, which also decides on policies for credit, market, liquidity, business, life and operational risk management as well as the ICAAP. All policies are reviewed at least annually.

In the credit instructions, the Board of Directors decides on powers-to-act for credit committees at different levels within the business areas. These authorisations vary for different decision-making levels, mainly in terms of size of limits but also dependent on the internal rating of customers. The Board of Directors furthermore decides on the limits for market and liquidity risk in Nordea.

The Board Risk Committee assists the Board of Directors in fulfilling its oversight responsibilities concerning management and control of risk, risk frameworks as well as controls and processes associated with the Group's operations.

2.2.1.2 Responsibility of CEO and GEM

The Chief Executive Officer (CEO) has the overall responsibility for developing and maintaining effective risk, liquidity and capital management principles and control.

The CEO and GEM regularly review reports on risk exposure and have established a number of committees for risk, liquidity and capital management.

The Asset and Liability Committee (ALCO), chaired by the Chief Financial Officer (CFO), prepares issues of major importance concerning the Group's financial operations and financial risks as well as capital management for decision by the CEO in GEM.

The Risk Committee, chaired by the Chief Risk Officer (CRO), oversees the management and control of the Group's risks on an aggregate level and evaluates the sufficiency of the risk frameworks, controls and processes associated with these risks. Furthermore, the Risk Committee decides, within the scope of resolutions adopted by the Board of Directors, the allocation of the market risk limits as well as the liquidity risk limits to the risk-taking units Group Treasury and Nordea Markets. The limits are set in accordance with the business strategies and are reviewed at least annually. The heads of the units allocate the respective limits within the unit and may introduce more detailed limits and other risk mitigating techniques such as stop-loss rules. The Risk Committee has established sub-committees for its work and decision-making within specific risk areas.

The Group Executive Management Credit Committee (GEM CC) and Executive Credit Committee (ECC) are chaired by the CRO, while the Group Credit Committee Retail Banking (GCCR) and the Group Credit Committee Wholesale Banking (GCCW) are chaired by the Chief Credit Officer (CCO). These credit committees decide on major credit risk limits and industry policies for the Group. Credit risk limits are granted as individual limits for customers or consolidated customer groups and as industry limits for certain defined industries.

The CRO has the authority to issue supplementary guidelines and limits for all risk types where deemed necessary.

2.2.1.3 Responsibility of CRO and CFO

Figure 2.1 illustrates the governance structure of risk, liquidity and capital management in Nordea.

Figure 2.1 Governance of risk, liquidity and capital management

Within the Group, two units – Group Risk Management and Group Corporate Centre, are responsible for risk, capital, liquidity and balance sheet management. Group Risk Management, headed by the CRO, is responsible for the risk management framework and processes as well as the capital adequacy framework. Group Corporate Centre, headed by the CFO, is responsible for the capital policy, the composition of the capital base and for management of liquidity risk.

Each business area and group function is primarily responsible for managing the risks in its operations within the applicable limits and framework, including identification, control and reporting.

Nordea Bank Danmark has appointed a Chief Risk Officer (CRO). The CRO reports to the Executive Management of Nordea Bank Danmark and is responsible for the overall Risk Management coordination in NBD.

The risk management functions of Nordea Bank Danmark are represented by independent risk management units which are responsible for risk management in individual areas. The interaction between the individual risk management units and the CRO includes credit risk, market risk, liquidity risk and operational risk. The credit risk function comprises Group Credit and Group Credit Control.

2.2.2 *Monitoring and reporting*

The "Policy for Internal Control and Risk Management in the Nordea Group" states that the management of risks includes all activities aiming at identifying, measuring, assessing, monitoring and controlling risks as well as measures to limit and mitigate the consequences of the risks. Management of risk is proactive, emphasising training and risk awareness. The Nordea Group maintains a high standard of risk management by means of applying available techniques and methodology to its own needs.

The control environment is, among other things, based on the principles for segregation of duties and independence. Monitoring and reporting of risk is conducted on a daily basis for market and liquidity risk and on a monthly and quarterly basis for credit and operational risk.
Risk appetite reporting is done quarterly to the Risk Committee, GEM, the Board Risk Committee and the Board of Directors.

Risk reporting, covering credit, market, operational risk together with liquidity risk as well as the capital base, is regularly made to Risk Committee, GEM and Board of Directors. In addition, the Board of Directors in each legal entity receives risk reporting which covers market, credit and liquidity risk per legal entity. Reporting of the internal required capital includes all types of risks and is reported regularly to ALCO.

Group Internal Audit makes an independent evaluation of the processes regarding risk and capital management in accordance with the annual audit plan.

2.2.3 *Different risk types within capital adequacy*

There are different risk types which are described in more detail below in accordance with how they are structured within the Capital Requirements Directive (CRD).

2.2.3.1 Risk in Pillar I

In Pillar I, which forms the base for the regulatory capital requirement, three risk types are covered – credit risk, market risk and operational risk:

- Credit risk is the risk of loss if counterparts fail to fulfil their agreed obligations and the pledged collateral does not cover the claims. The credit risk arises mainly from various forms of lending, but also from guarantees and documentary credits, such as letters of credit. Furthermore, credit risk includes counterparty risk, which is the risk that a counterpart in a foreign exchange (FX), interest rate, commodity, equity or credit derivative contract defaults prior to maturity of the contract and Nordea at that time has a claim on the counterpart. The measurement of credit risk is based on the parameters probability of default (PD), loss given default (LGD) and credit conversion factor (CCF).
- Market risk is the risk of loss in the market value of portfolios and financial instruments (also known as market price risk) as a result of movements in financial market variables. The market price risk exposure relates to interest rates, credit spreads, FX rates, equity prices, option volatilities and commodity prices.
- Operational risk is defined as the risk of direct or indirect loss, or damaged reputation resulting from inadequate or failed internal processes, from people and systems, or from external events. Legal and compliance risk as well as crime risk, project risk and process risk, including IT risk, constitute the main sub-categories to operational risk.

2.2.3.2 Risk in Pillar II

In Pillar II, additional risks that are not included in Pillar I, are measured and assessed. These are managed and measured although they are not included in the calculation of the minimum capital requirements. In the

calculation of economic capital (EC) the Pillar II risk is included as well as risk in the life insurance operations. Examples of Pillar II risk types are business risk, interest rate risk in the banking book and concentration risk;

- Business risk is the earnings volatility inherent in all business due to the uncertainty of revenues and costs due to changes in the economic and competitive environment. Business risk in the economic capital framework is calculated based on the observed volatility in historical profit and loss that is attributed to business risk.
- Interest rate risk in the banking book consists of exposures deriving from the balance sheet (mainly lending to public and deposits from public) and from Group Treasury's investment and liquidity portfolios. The interest rate risk inherent in the banking book is measured in several ways on a daily basis and in accordance with the financial supervisory authorities' requirements.
- Pension risk is included in market risk in the economic capital framework and includes equity risk, interest rate risk and FX risk in the Nordea-sponsored defined benefit pension plans.
- Life insurance risk is the risk posed by changes in mortality rates, longevity rates and disability rates.
- Real estate risk consists of exposure to owned and leased properties and is included in market risk in the economic capital framework.
- Concentration risk is the credit risk related to the degree of diversification in the credit portfolio, i.e. the risk inherent in doing business with large customers or not being equally exposed across industries and regions. The concentration risk includes both single name concentration risk and sector/geography concentration risk and is included in the economic capital framework.

Liquidity risk is a Pillar II risk, however it is not included in the EC framework, but instead mitigated through the active management of liquidity. Liquidity risk is the risk of being able to meet liquidity commitments only at increased cost or, ultimately, being unable to meet obligations as they fall due. The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. In order to measure the exposure, a number of liquidity risk measures have been developed.

2.3 Roll-out plan

Nordea Bank Danmark is approved to use the Foundation Internal Rating Based (FIRB) approach for corporate and institution exposure classes. Nordea Bank Danmark is also approved to use the IRB approach for the retail exposure class (with the exception of the finance companies which were not applied for). The standardised approach is currently used for the remaining portfolios. Nordea aims to continue the roll-out of the IRB approaches in forthcoming years.

Table 2.1 Specification over undertakings consolidated/deducted from Nordea Bank Danmark, 31 December 2012

	Number of shares	Book value EURm	Voting power of holding %	Domicile	Consolidation method
Group undertakings included in the capital base					
Nordea Finans Danmark A/S	20,006	177	100	Høje-Taastrup	purchase method
Nordea Kredit Realkreditaktieselskab	17,172,500	2,206	100	Copenhagen	purchase method
Fionia Asset Company A/S	148,742,586	1,163	100	Copenhagen	purchase method
Nordea Finance Ltd	2	7	100	London	purchase method
Structured Finance Servicer A/S	2	1	100	Copenhagen	purchase method
NJK 1 ApS	12,500,000	35	100	Copenhagen	purchase method
Other companies		2			
Total included in the Nordea Bank Danmark Group		**3,591**			
Over 10% investments in credit institutions deducted from the capital base		0			
Total investments in credit institutions deducted from the capital base		**0**			

3. Capital position

Nordea Bank Danmark has during the year strengthened its capital position in terms of decreased RWA and an increased capital base. In 2012, core tier 1 capital ratio increased to 12.1% compared to 10.1% at the end of 2011. The capital ratio increased to 18.2% compared to 17.0% at the end of 2011.

3.1 Capital adequacy assessment

Banks need to keep sufficient capital to cover all risks taken over a foreseeable future. Therefore, Nordea Bank Danmark strives to be efficient in its use of capital through active management of the balance sheet with respect to different asset, liability and risk categories. Nordea Bank Danmark's goal is to enhance returns to shareholders while maintaining a prudent risk and return relationship. Strong capital and RWA management supports and underpins the strategic visions. In addition, it provides resistance against unexpected losses that arise as a result of the risks taken within the Nordea Bank Danmark.

The internal capital adequacy assessment process (ICAAP, see chapter 9) is established to determine internal capital requirements that reflect the risks and to assess the adequacy of the capital.

3.2 Regulatory capital requirements

Regulatory capital requirements are defined in the Capital Requirements Directive (the CRD – EU Directive 2006/48/EC – which is the consolidated version incorporating the latest amendments, CRD III). In Danish legislation capital requirements are defined in Danish Financial business act 705 and the Danish Financial Supervisory Authority's regulation: 1399 Executive order on capital adequacy and 915 Executive order on capital base. The capital adequacy figures presented in this report follow the CRD definitions.

Table 3.1 presents an overview of the capital requirements and RWA as of December 2012 split by the different risk types and with comparison with the previous year. Of the minimum capital requirements, credit risk accounts for approximately 84%, while operational risk accounts for 11% market risk 5%.

The table also includes information about the approach used for calculation of the capital requirements. Out of the total capital requirements for credit risk exposure, 86% of the exposure has been calculated with the IRB approach and 14% with the standardised approach.

Table 3.1 Capital requirements and RWA

	31 December 2012		31 December 2011	
EURm	Capital requirement	RWA	Capital requirement	RWA
Credit risk	**2,526**	**31,579**	**2,727**	**34,086**
IRB	2,357	29,467	2,523	31,534
- of which corporate	1,470	18,375	1,628	20,350
- of which institution	45	562	52	653
- of which retail	803	10,032	813	10,160
- of which retail SME	22	271	26	324
- of which retail mortgage	391	4,889	371	4,633
- of which retail other	390	4,873	416	5,204
- of which other	40	499	30	371
Standardised	169	2,112	204	2,551
- of which sovereign	5	63	7	91
- of which institution	11	141	39	481
- of which corporate	5	67	2	19
- of which retail	43	532	41	514
- of which other[1]	105	1,309	116	1,446
Market risk	**153**	**1,910**	**74**	**925**
- of which trading book, Internal approach	60	754	39	492
- of which trading book, Standardised approach	92	1,156	35	433
- of which banking book, Standardised approach	0	0	0	0
Operational risk	**325**	**4,062**	**309**	**3,859**
Standardised	325	4,062	309	3,859
Sub total	**3,004**	**37,551**	**3,110**	**38,870**
Additional capital requirement due to transition rules	1,329	16,608	1,117	13,966
Total	**4,333**	**54,159**	**4,227**	**52,836**

1) Includes associated company LR Kredit with EUR54m (EUR 50m) in capital requirements, of which EUR 18m (EUR 15m) is market risk.

3.3 Capital ratios

Nordea Bank Danmark's core tier 1 capital ratio excluding transition rules was 12.1% at the end of 2012. Improved capital ratios were achieved through a rights issue, profit generation and decreasing RWA.

The transition rules create a need to manage the bank using a variety of capital measurements and capital ratios. Table 3.2 shows the yearly capital adequacy development during 2012, both including and excluding transition rules.

The core tier 1 and the tier 1 ratio excluding transition rules ended at 12.1% while the corresponding capital ratio ended at 18.2%. The core tier 1 and tier 1 ratio including transition rules was 8.4% and the capital ratio including transition rules was 12.6%

Table 3.2 Key capital adequacy figures

EURm	31 December 2012	31 December 2011
RWA including transition rules	54,159	52,836
RWA excluding transition rules	37,551	38,870
Capital requirement including transition rules	4,333	4,227
Core tier 1 capital	4,558	3,943
Tier 1 capital	4,558	3,943
Capital base	6,816	6,614
Capital ratios excluding transition rules		
Core tier 1 capital ratio	12.1%	10.1%
Tier 1 capital ratio	12.1%	10.1%
Capital base ratio	18.2%	17.0%
Capital adequacy quotient (Capital base/Capital requirement)	2.3	2.1
Capital ratios including transition rules		
Core tier 1 capital ratio	8.4%	7.5%
Tier 1 capital ratio	8.4%	7.5%
Capital base ratio	12.6%	12.5%
Capital adequacy quotient (Capital base/Capital requirement)	1.6	1.6

4. Credit risk

The overall credit quality in Nordea Bank Danmark's portfolio is solid and the credit portfolio is well diversified in terms of industry sectors. Following the prolonged difficult economic environment the housing market remained weak in 2012 contributing to increased impaired loans and loan losses.

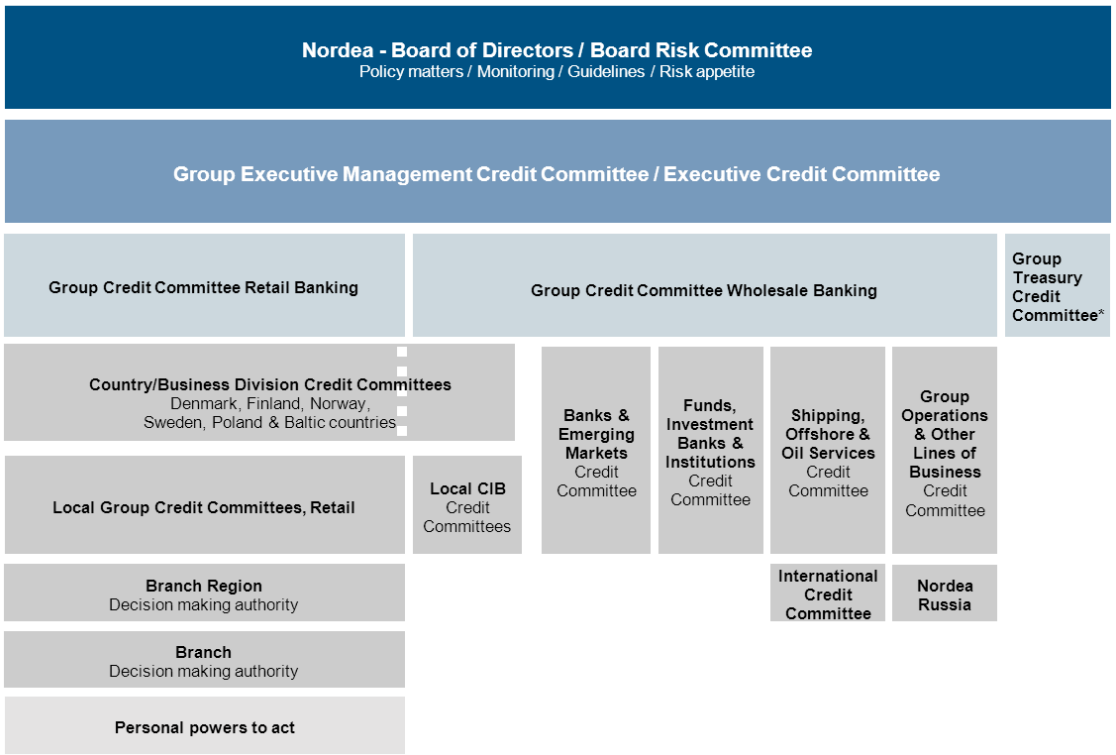
4.1 Credit risk

4.1.1 *Governance of credit risk*

Group Risk Management is responsible for the credit process framework and the credit risk management framework, consisting of policies, instructions and guidelines for the Group. Group Risk Management is also responsible for controlling and monitoring the quality of the credit portfolio and the credit process, besides ensuring that all incurred losses are covered by adequate allowances. Each business area and customer responsible unit/product responsible unit is primarily responsible for managing the credit risks in its operations within the applicable framework and limits, including identification, control and reporting.

Within the powers-to-act granted by the Board of Directors, credit risk limits are approved by credit decision-making bodies on different levels in the organisation. The rating and exposure of the customer determine at what level the decision will be made (see Figure 4.1). The Group Executive Management Credit Committee (GEM CC) decides on proposals for the largest exposures and proposals related to major principle issues. Responsibility for the credit risk lies within the customer responsible unit. Customers are assigned a rating or risk grade (based on scoring) in accordance with the framework for quantification of credit risk. The Board of Directors in Nordea Bank Danmark takes the final credit decision concerning Nordea Bank Danmark.

Figure 4.1 Credit risk decision making structure for main operations



*Making decisions and allocations within limits approved by ECC

4.1.2 *Management of credit risk*

Credit risk is defined as the risk of loss if customers fail to fulfil their agreed obligations and the pledged collateral does not cover existing claims. The credit risks stem mainly from various forms of lending, but also

from issued guarantees and documentary credits, such as letters of credit where Nordea has potential claims on the customers. Furthermore, credit risk may also include counterparty credit risk, transfer risk and settlement risk. Counterparty credit risk is the risk that the counterpart in an FX, interest, commodity, equity or credit derivative contract defaults prior to maturity of the contract at which time Nordea has a claim on the counterpart. Settlement risk is the risk of losing the principal on a financial contract, due to a counterpart's default during the settlement process. Further information about counterparty credit risk and settlement risk is available in section 4.4.5.

For monitoring the distribution of a portfolio, improving risk management and defining a common strategy, there are specific industry credit policies and principles in place that establish requirements and caps. The concentration risk in specific industries is followed by industry monitoring groups. Industry credit policies are established for industries where at least two of the following criteria are fulfilled:

- Significant weight in the Nordea loan portfolio
- High cyclicality and/or volatility of the industry
- Special skills and knowledge required

Nordea currently has industry credit policies in place for the following industries:

- Shipping, Oil and Offshore
- Energy
- Leveraged buy-out (LBO)
- Hedge Fund
- Commercial Real Estate

Industry credit principles apply to:

- Forest
- Telecom
- Aircraft

All industry credit policies are approved by the Executive Credit Committee and confirmed annually by the Board Risk Committee. The Industry Credit Principles are approved by Group Credit Committee Wholesale (GCCW) and confirmed by Executive Credit Committee (ECC).

Decisions regarding credit risk limits for customers and customer groups are made by the relevant decision-making bodies on different levels within the Group. The responsibility for credit risk lies within the customer responsible unit, which continuously assesses customers' ability to fulfil their obligations and identifies deviations from agreed conditions and weaknesses in the customers' performance. In addition to building strong customer relationships and understanding each customer's financial position, monitoring of credit risk is based on all available information about the customer and macroeconomic factors. Information such as late payments data, behavioural scoring and rating migration are important parameters in the internal monitoring process. If new information indicates the need, the customer responsible unit must reassess the rating and assess whether the customer's repayment ability is threatened. If it is considered unlikely that the customer will be able to repay his/her debt obligations in full and the situation cannot be satisfactorily remedied, the customer must be tested for impairment. See section 4.1.5 for more details on impairment.

If credit weakness is identified in relation to a customer exposure, the exposure is assigned special attention in terms of more frequent reviewing of the risk. In addition to continuous monitoring, an action plan is established outlining how to minimise the potential credit loss. If necessary, a special work-out team is set up to support the customer responsible unit. Nordea has a project organisation for handling work-out credits for corporate customers and individual work-out teams including relevant specialists are established for larger work-out cases. The credit organisation and other specialist units support customer responsible units in handling smaller work-out customers. The follow-up of individual work-out cases is part of the quarterly risk review process. In this process the impairment of individual customers and customer groups is also assessed and the actions related to handling of work-out customers are reviewed and followed up.

The environmental risks of corporate customers are taken into account in the overall risk assessment through the Environmental Risk Assessment Tool (ERAT). Social and political risks are taken into account by the Social and Political Risk Assessment Tool (SPRAT). For larger project finance transactions, Nordea has adopted the Equator Principles, a financial industry benchmark for determining, assessing and managing social and environmental risk in project financing. The Equator Principles are based on the policies and guidelines of the World Bank and International Finance Corporation.

4.1.3 *Measurement of credit risk*

Credit risk is measured, monitored and segmented in several dimensions. On-balance sheet lending constitutes the major part of the credit portfolio and the basis for impaired loans and loan losses. Credit risk in lending is measured and presented as the principle amount of on-balance sheet claims, i.e. loans to credit institutions and the public as well as off-balance sheet potential claims on customers and counterparts net after allowances. Credit risk exposure also includes counterparty credit risk such as risk related to derivative contracts and securities financing. Nordea's loan portfolio is broken down by segment, industry and geography.

One way of assessing credit quality is through analysis of the distribution across rating grades for rated corporate customers and institutions, as well as the distribution across risk grades for scored household and small business customers, i.e. retail exposures.

4.1.4 *Credit risk mitigation and collateral policy*

Credit risk mitigation is a fundamental part of the credit decision process. In every credit decision and review, the valuation of collaterals as well as the adequacy of covenants and other risk mitigation measure are considered.

Pledging of collaterals is the main credit risk mitigation method. Collateral coverage requirements are higher for exposure to financially weaker customers than for those who are financially stronger.

Nordea instructions emphasise that practice and routines are timely and prudent in order to ensure that collateral items are controlled by Nordea and that loans and pledge agreements as well as collaterals are legally enforceable. Nordea is therefore entitled to liquidate collateral in the event of the obligor's default and can claim and control cash proceeds from a liquidation process.

To a large extent Nordea standard loan and pledge agreements are used, thus ensuring legal enforceability.

The following collateral types are most common in Nordea:

- Residential real estate, commercial real estate and land situated in Nordea's home markets (the Nordic countries (except Iceland), the Baltics, Poland and Russia).
- Other tangible assets such as machinery, equipment, vehicles, vessels, aircrafts and trains
- Inventory, receivables (trade debtors) and assets pledged under floating charge
- Financial collateral such as listed shares, listed bonds and other specific securities
- Deposits
- Guarantees
- Insurance policies (capital assurance with surrender value)

For each type of collateral, more specific instructions are added to the general valuation principle. A specific maximum collateral ratio is set for each type. In the calculation of RWA, the collateral must fulfil certain eligibility criteria.

For large exposures, syndication of loans is the primary tool for managing concentration risk, while credit risk mitigation by the use of credit default swaps is applied to a very limited extent.

Covenants in credit agreements do not substitute collateral, but may serve as a complement to both secured and unsecured exposures. All exposures of substantial size and complexity include appropriate covenants. Financial covenants are designed to highlight early warning signs and are carefully followed up.

4.1.5 *Definition and methodology of impairment*

Weak and impaired exposure is closely and continuously monitored and reviewed at least quarterly in terms of current performance, business outlook, future debt service capacity and the possible need for provisions. A need for provisioning is recognised if there is objective evidence, based on loss events or observable data, that there is an impact on the customer's future cash flow to the extent that full repayment is unlikely, collaterals taken into account. Exposures with provision are considered as impaired. The size of the provision is equal to the estimated loss, which is the difference between the book value of the outstanding exposure and the discounted value of the future cash flow, including the value of pledged collaterals. Impaired exposure can be either performing or non-performing. Exposure that is past due more than 90 days is regarded as in default, and reported as non-performing and impaired, or not impaired depending on the deemed loss potential.

In addition to individual impairment testing of all individually significant customers, collective impairment testing is performed for groups of customers not identified individually as impaired. Collective impairment is based on the migration of rated and scored customers in the credit portfolio. The assessment of collective impairment relates to both up- and downgrades of customers, as well as new customers entering and those leaving the portfolio. Moreover, customers going to and from default affect the calculation. Collective impairment is assessed quarterly for each legal unit.

The rationale for this two-step procedure with both individual and collective assessment is to ensure that all incurred losses are accounted for up to and including each balance sheet day. Impairment losses recognised for a group of loans represent an interim step pending the identification of impairment losses for an individual customer.

4.2 Link between credit risk exposure and balance sheet

This section discloses the link between the loan portfolio as defined in accordance with accounting standards and exposure as defined in accordance with the CRD. The main differences are outlined in this section to illustrate the link between the different reporting methods. A detailed definition of exposure classes used in the capital adequacy calculations is shown in appendix 12.2 and 12.3.
Original exposure is the exposure before taking into account substitution effects stemming from credit risk mitigation, credit conversion factors (CCFs) for off-balance exposure and allowances within the standardised approach. In this report, however, exposure is defined as exposure at default (EAD) for IRB exposure and exposure value for standardised exposure if nothing else is stated. Credit risk exposure presented in this report, in accordance with the CRD, is divided between exposure classes where each exposure class is divided into exposure types as follows:

- On-balance sheet items
- Off-balance sheet items (e.g. guarantees and unutilised amounts of credit facilities)
- Securities financing (e.g. reversed repurchase agreements and securities lending)
- Derivatives

Items presented in the Annual Report are divided as follows (in accordance with the accounting standards):

- On-balance sheet items (e.g. loans to central banks and credit institutions, loans to the public, reversed repurchase agreements, positive fair value for derivatives, treasury bills and interest-bearing securities)
- Off-balance sheet items (e.g. guarantees and unutilised amounts of credit facilities)

Table 4.1 shows the link between the CRD credit risk exposure and items presented in the Annual Report.

Table 4.1 Specification of on-balance sheet and off-balance sheet items for Nordea Bank Danmark, 31 December 2012

EURm **On-balance sheet items**	Balance sheet (accounting)	Items related to market risk	Repos, derivatives, securities lending	Other	Original Exposure	CCF %	Exposure[1]
Cash and balances with central banks	10,347				10,347		10,347
Treasury bills, other interest-bearing securities and pledged instruments	11,805	-4,103			7,702		7,702
Loans to credit institutions	1,751		-1,037	0	714		714
Loans to the public	81,616		-11	1,397	83,002		83,002
Derivatives	478		-478		0		0
Intangible assets	392		0	-392	0		0
Other assets and prepaid expenses	6,892	-2,818	0	-2,661	1,413		1,413
Total	**113,282**	**-6,922**	**-1,527**	**-1,656**	**103,177**		**103,177**

Off-balance sheet items in the Annual Report	Off-bal. sheet (accounting)	Included in derivatives & sec fin	Included in CRD off-bal.
Contingent liabilities	3,536		3,536
Commitments	24,078		24,078
Total	**27,613**	**0**	**27,613**

Off-balance items in CRD	Included in CRD off-bal. (from AR)	Included in CRD (not in AR)[2]	Original Exposure	CCF %	Exposure
Credit facilities & checking accounts	23,704		23,704	29%	6,843
Loan commitments	374		374	100%	373
Guarantees	3,049		3,049	66%	2,019
Other (leasing and documentary credits)	487		487	50%	243
Total	**27,613**	**0**	**27,613**		**9,477**

Derivatives and securities financing	Original Exposure	CCF %	Exposure
Derivatives	379	100%	379
Securities Financing Transactions & Long Settlement Transactions			
Total credit risk (CRD definition)	**131,169**		**113,033**

1) The on-balance exposures have a CCF of 100% but can still have lower EAD due to provisions in the standardised approach, financial collateral in the standardised approach and residual value for leasing in the IRB approach, that are deducted from the original exposure when calculating EAD.
2) Off-balance exposures included in the CRD but not included in the Annual Report (AR), such as exposures related to undrawn credit facilities which are unconditionally cancellable.

4.2.1 *On-balance sheet items*

As shown in Table 4.1, the following items have been excluded from the balance sheet, when calculating on-balance exposure in accordance with the CRD:

- Market risk related items in the trading book, such as certain interest-bearing securities and treasury bills.
- Repos, derivatives and securities lending. These transactions are either included in the calculation of market risk in the trading book or reported as separate exposure types (derivatives or securities financing).
- Other, mainly allowances, intangible assets and deferred tax assets.

4.2.2 *Off-balance sheet items*

The following off-balance sheet items specified in the Annual Report are excluded when off-balance exposure is calculated in accordance with the CRD:

-
- Assets pledged as security for own liabilities and "Other assets pledged" (apart from leasing). These transactions are reported as a separate exposure type, securities financing.
- Derivatives

4.2.3 *Derivatives and securities financing*

It should be noted that derivatives are both included on-balance (i.e. positive fair value) and off-balance (i.e. nominal amounts) in accordance to accounting standards. However, in the CRD, the derivatives and securities financing are reported as separate exposure types. The calculation method used in the CRD is based on the sum of current exposure and potential future exposure. Also, repurchase agreements and securities lending/borrowing transactions are in the balance sheet calculated based on nominal value. In the CRD calculations these exposure types are determined net of the collateral value.

4.3 Capital requirement for credit risk

This section includes an overview as well as an in-depth description of the distribution of the credit risk portfolio. For more detailed information on the principles for RWA calculations under the IRB and standardised approaches see appendix 12.2 and 12.3.

In Table 4.2, the original exposure, the exposure, the average risk weight, RWA and the capital requirements, are distributed by exposure class. The IRB exposure classes contain the portfolios for which Nordea Bank Danmark has been approved to use IRB methods. The standardised approach is currently used for the remaining portfolios, such as Nordea Finance Retail. Some exposure classes have been merged in the table due to insignificant exposure in these exposure classes.

4.4 Credit risk exposure

4.4.1 *Exposure by exposure class and exposure type*

In Table 4.3, the exposure is split by exposure class and exposure types. The average exposure in 2012 is presented in Table 4.4.

Table 4.2 Capital requirements for credit risk, split by exposure class, 31 December 2012

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
Institutions	6,582	6,380	9%	562	45
Corporate	53,986	38,597	48%	18,375	1,470
Retail	52,285	51,394	20%	10,032	803
- of which mortgage	37,429	37,346	13%	4,889	391
- of which other retail	14,095	13,368	36%	4,873	390
- of which SME	761	679	40%	271	22
Other non-credit obligation assets	499	499	100%	499	40
Total IRB approach	**113,352**	**96,870**	**30%**	**29,467**	**2,357**
Standardised exposure classes					
Central government and central banks	12,580	12,322	1%	63	5
Regional governments and local authorities	1,808	983	0%	0	0
Institutions	699	688	20%	141	11
Corporates	124	67	100%	67	5
Retail	1,199	710	75%	532	43
Exposures secured by real estate					
Other[1]	1,408	1,379	62%	857	69
Total standardised approach	**17,818**	**16,147**	**10%**	**1,660**	**133**
Total	**131,170**	**113,017**	**28%**	**31,127**	**2,490**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short term claims, covered bonds and other items.

Table 4.3 Exposure split by exposure class and exposure type, 31 December 2012

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institutions	6,264	107		10	6,380
Corporates	32,847	5,750			38,597
Retail	48,080	3,314		0	51,394
- of which mortgage	37,088	258			37,346
- of which other retail	10,579	2,789			13,368
- of which SME	412	267		0	679
Other non-credit obligation assets	499	0			499
Total IRB approach	**87,689**	**9,171**		**10**	**96,870**
Standardised exposure classes					
Central governments and central banks	12,168	154			12,322
Regional governments and local authorities	913	70			983
Institutions	307	11		370	688
Corporates	12	55			67
Retail	692	18			710
Exposures secured by real estate					
Other[1]	1,379	0			1,379
Total standardised approach	**15,470**	**307**		**370**	**16,147**
Total exposure	**103,159**	**9,478**		**380**	**113,017**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short-term claims, covered bonds and other items.

Table 4.4 Average quarterly exposure during 2012, split by exposure class and exposure type

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institutions	6,162	120		6	6,289
Corporates	33,279	5,635		2	38,916
Retail	47,601	3,477		0	51,078
- of which mortgage	36,310	312			36,622
- of which other retail	10,853	2,886			13,739
- of which SME	439	279		0	717
Other non-credit obligation assets	461				461
Total IRB approach	**87,503**	**9,232**		**8**	**96,743**
Standardised exposure classes					
Central governments and central banks	12,036	141			12,177
Regional governments and local authorities	836	93			929
Institutions	382	12		1,387	1,782
Corporates	25	41			66
Retail	697	20			717
Exposures secured by real estate					0
Other[1]	1,303	0			1,303
Total standardised approach	**15,280**	**307**		**1,387**	**16,975**
Total exposure	**102,783**	**9,540**		**1,395**	**113,718**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short-term claims, covered bonds and other items.

4.4.2 *Exposure by geography*

Table 4.5 splits exposure by geography, based on where the exposure is booked.

Table 4.5 Exposure split by exposure class and geography, 31 December 2012

EURm	Nordic countries	- of which Denmark	- of which Finland	- of which Norway	- of which Sweden	Baltic countries	Poland	Russia	Other[2]	Total
IRB exposure classes										
Institution	6,380	6,380								6,380
Corporate	38,597	38,597								38,597
Retail	51,394	51,394								51,394
- of which mortgage	37,346	37,346								37,346
- of which other retail	13,368	13,368								13,368
- of which SME	679	679								679
Other non-credit obligation assets	499	499								499
Total IRB approach	**96,870**	**96,870**								**96,870**
Standardised exposure classes										
Central governments and central banks	12,322	12,322								12,322
Regional governments and local authorities	983	983								983
Institution	688	688								688
Corporate	67	67								67
Retail	710	710								710
Exposures secured by real estates										0
Other[1]	1,379	1,379								1,379
Total standardised approach	**16,147**	**16,147**								**16,147**
Total exposure	**113,017**	**113,017**								**113,017**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short-term claims, covered bonds, and other items. Associated companies not included in exposure.
2) Includes International Units

4.4.3 *Exposure by industry*

In Table 4.6 the total exposure is split by industry and by the main exposure classes. The industry breakdown follows the Global Industries Classification Standard (GICS) and is based on NACE codes (statistical classification codes of economic activities in the European community).

Table 4.6 Exposure split by industry group and by main exposure class, 31 December 2012

	IRB approach				Standardised approach		
EURm	Institutions	Corporates	Retail	Other	Central governments and central banks	Regional governments and local authorities	Other[1]
Retail mortgage			37,346				
Other retail			13,368				710
Central and local governments					2,860	983	
Banks	5,505				9,461		643
Construction and engineering		521	59				0
Consumer durables (cars, appliances, etc.)		434	9				0
Consumer staples (food, agriculture, etc.)		7,189	75				0
Energy (oil, gas, etc.)		14	0				
Health care and pharmaceuticals		292	25				0
Industrial capital goods		670	6				0
Industrial commercial services		4,672	82				0
IT software, hardware and services		426	13				10
Media and leisure		556	33				0
Metals and mining materials		20	0				
Paper and forest materials		238	3				0
Real estate management and investment		7,561	106				0
Retail trade		4,198	115				0
Shipping and offshore		939	1				
Telecommunication equipment		9	0				
Telecommunication operators		242	0				
Transportation		745	19				1
Utilities (distribution and production)		1,583	6				0
Other financial companies	875	3,574	23				376
Other materials (chemical, building materials, etc.)		671	12				0
Other		4,042	90	499			1,102
Total exposure	**6,380**	**38,597**	**51,394**	**499**	**12,322**	**983**	**2,843**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, standardised institutions, standardised corporates, standardised retail, standardised exposures secured by real estate, past due items, short term claims, covered bonds and other items.

4.4.3.1 Specification of exposure against central governments and central banks

Nordea applies the standardised approach for exposure to central governments and central banks. In this approach, the rating from an eligible rating agency is converted to a credit quality step (the mapping is defined by the financial supervisory authorities). Each credit quality step corresponds to a fixed risk weight.

Nordea uses Standard & Poor's as eligible rating agency. In Table 4.7, the central government and central bank exposure distributed by credit quality steps is presented.

Table 4.7 Exposures to central governments and central banks, distributed by credit quality step, 31 December 2012

Credit quality step	Standard & Poor's rating	Risk weight	Exposure (EURm)
1	AAA to AA-	0%	12,258
2	A+ to A-	20%	
3	BBB+ to BBB-	50%	0
4 to 6 or blank	BB+ and below, or without rating	100 - 150%	63
Total			**12,322**

4.4.4 *Specification of off-balance exposure*

The reason that an off-balance exposure amount does not contain the same risk as an on-balance exposure amount is that the off-balance amount is transformed to an on-balance equivalent amount through the application of a CCF between 0% and 100%. The main categories within off-balance sheet items are guarantees, credit commitments and unutilised portion of approved credit facilities. Credit commitments and unutilised amounts are the part of the external commitments that have not been utilised. The CCF is set depending on the approach, product type and whether the utilised amounts are unconditionally cancellable or not.

For the IRB retail portfolio an internal CCF model is used. The model is built on a product based approach. There are three explanatory variables that determine which CCF value an IRB retail off-balance exposure will receive: customer type, product type/CCF pool and country in which the reporting is made. The CCF is based on internal estimates of the expected total exposure at the time of default.

Table 4.8 shows the weighted average CCF for the IRB exposure.

Table 4.8 CCF in Nordea Bank Danmark, 31 December 2012

EURm	Exposure after substitution effects	Exposure	CCF
Retail	4,192	3,314	79%
- of which mortgage	341	258	76%
- of which other retail	3,509	2,789	79%
- of which SME	342	267	78%

4.4.5 *Counterparty credit risk*

Counterparty credit risk is the risk that Nordea's counterpart in an FX, interest, equity, credit or commodity derivative contract defaults prior to maturity of the contract and that Nordea at that time has a claim on the counterpart. Counterparty credit risk can also exist in repurchasing agreements and other securities financing transactions.

Derivative contracts are financial instruments, such as futures, forwards, swaps or options that derive their value from underlying interest rates, currencies, equities, credit spreads or commodity prices. The derivative contracts are often traded over the counter (OTC), which means the terms connected to the specific contract are individually defined and agreed on with the counterpart.

Nordea enters into derivative contracts based on customer demand, both directly and in order to hedge positions that arise through such activities. Group Treasury also uses interest rate swaps and other derivatives in its hedging activities of the assets and liability mismatches in the balance sheet. Furthermore, Nordea may, within clearly defined restrictions, use derivatives to take open positions in its operations. Derivatives affect counterparty credit risk and market risk as well as operational risk.

Counterparty credit risk is subject to credit limits like other credit exposure and is treated accordingly.

4.4.5.1 *Pillar I method for counterparty credit risk*

The mark-to-market method, also called the current exposure method (CEM), is used to calculate the exposure for counterparty credit risk in accordance with the credit risk framework in the CRD, i.e. the sum of current exposure (replacement cost) and potential future exposure. The potential future exposure is an estimate reflecting possible changes in the future market value of the individual contract during the remaining maturity, and is measured as the notional principal amount multiplied by the add-on factor. The size of the add-on factor depends on the contract's remaining maturity and the type of the underlying asset. Netting of potential future exposure on contracts within the same legally enforceable netting agreement is done as a function of the gross potential future exposure of all the contracts and the quotient between the net current exposure and the gross current exposure.

Table 4.9 shows the exposure as well as RWA split by exposure class.

Table 4.9 Counterparty credit risk by exposures by exposure class, 31 December 2012

EURm	Exposure	RWA
IRB exposure classes		
Institution	10	2
Corporate		
Retail		
Total IRB approach	**10**	**2**
Standardised exposure classes		
Central government and central banks		
Other	370	74
Total standardised approach	**370**	**74**
Total exposure	**380**	**76**

1) Exposures are after closeout netting and collateral agreements and only include derivatives

4.4.5.2 *Counterparty credit risk for internal credit limit purposes*

Counterparty credit risk for internal credit limit purposes is for the main part of Nordea's OTC derivatives exposure calculated using a simulation model, based on a stressed calibration. Model parameters are based on data from a specific three-year period, including a one-year period identified to have the most significant increase in credit spreads in recent times. Thereby general wrong-way risk is taken into account in the counterparty credit risk management.

On traded OTC contracts, Nordea performs fair value adjustments, which are adjustments to the counterparty credit risk exposure done by including an estimate of the cost of hedging the specific counterparty credit risk. This cost of hedging is either based directly on market prices or on a theoretical calculation based on the credit rating of the counterparty.

4.4.5.3 *Mitigation of counterparty credit risk exposure*

To reduce the exposure towards single counterparties, risk mitigation techniques are widely used in Nordea. The most common is the use of closeout netting agreements, which allow Nordea to net positive and negative replacement values of contracts under the agreement in the event of default of the counterparty. In addition, Nordea also mitigates the exposure towards large banks, hedge funds and institutional counterparties by an increasing use of financial collateral agreements, where collateral on daily basis is placed or received to cover the current exposure. The collateral is largely cash (EUR, USD, DKK, SEK and NOK), as well as government bonds and to a lesser extent mortgage bonds are accepted.

In Table 4.10, information of how the counterparty credit risk exposure is reduced with risk mitigation techniques is available.

Table 4.10 Mitigation of counterparty credit risk exposure, 31 December 2012

EURm	Current exposure (gross)	Reduction from closeout netting agreements	Reduction from held collateral	Current exposure (net)
Total	**23**	**23**	**0**	**0**

Nordea's financial collateral agreements do not normally contain any trigger dependent features, e.g. rating triggers. For a few agreements the minimum exposure level for further posting of collateral will be lowered in case of a downgrading. Separate credit guidelines are in place for handling of the financial collateral agreements.
Finally, Nordea also uses a risk mitigation technique based upon a condition in some of the long-term derivative contracts, which gives the option to terminate a contract at a specific time or upon the occurrence of specified credit-related events.

4.4.5.4 Settlement risk

Settlement risk is a type of credit risk arising during the process of settling a contract or execution of a payment.

The risk amount is the principal of the transaction, and a loss could occur if a counterpart were to default after Nordea has given irrevocable instructions for a transfer of a principal amount or security, but before receipt of the corresponding payment or security has been finally confirmed.

The settlement risk on individual counterparts is restricted by settlement risk limits. Each counterpart is assessed in the credit process and clearing agents, correspondent banks and custodians are selected with a view of minimising settlement risk.

Nordea is a shareholder of, and participant in, the global FX clearing system CLS (Continuous Linked Settlement), which eliminates the settlement risk of FX trades in those currencies and with those counterparts that are eligible for CLS clearing.

4.4.6 *Other items*

In the exposure class other items, Nordea's equity holdings in the banking book are included. Investments in companies in which Nordea holds over 10% of the capital are deducted from the capital base (see Table 2.1) and are hence not included in other items. For more information about equity holdings in the banking book see section 5.7.

4.5 Rating and scoring

In this section the probability of default (PD) is described with respect to the development of rating/risk grade distribution and migration.

4.5.1 *Rating and scoring definition*

The common denominator of the rating and scoring is the aim to predict defaults and rank customers according to their default risk. Rating and scoring are used as integrated parts of the credit risk management and decision-making process, including:

- The credit approval process
- Calculation of risk-weighted assets (RWA)
- Calculation of economic capital (EC) and expected loss (EL)
- Monitoring and reporting of credit risk
- Performance measurement using the economic profit (EP) framework
- Collective impairment assessment

While rating is used for corporate and institution exposure, scoring is used for retail exposure.
A rating is an estimate that reflects only the risk of customer default. The rating scale in Nordea consists of 18 grades from 6+ to 1– for non-defaulted customers and three grades from 0+ to 0– for defaulted customers. The default risk of each rating grade is quantified by a one-year PD. Rating grades 4– and better are comparable

to investment grade as defined by rating agencies such as Moody's and Standard & Poor's (S&P). Rating grades 2+ and lower are considered as weak or critical, and require special attention.

The risk grade scale used for customers in the retail portfolio consists of 18 grades, named A+ to F– for non-defaulted customers and three grades from 0+ to 0– for defaulted customers.

In Table 4.11, the mapping from the internal rating scale to the S&P's rating scale, using condensed scales, is shown.

Table 4.11 Indicative mapping between internal ratings and the S&P rating scale

Rating

Internal	Standard & Poor's
6+, 6, 6-	AAA to AA-
5+, 5, 5-	A+ to A-
4+, 4, 4-	BBB+ to BBB-
3+, 3, 3-	BB+ to BB-
2+, 2, 2-,1+	B+ to B-
1, 1-	CCC
0+, 0, 0-	D

The mapping of the internal ratings to S&P's rating scale is based on a predefined set of criteria, such as comparison of default and risk definitions. The mapping does not intend to indicate a fixed relationship between Nordea's internal rating grades and S&P's rating grades since the rating approaches differ. On a customer level the mapping does not always hold and, moreover, the mapping may change over time.

Ratings are assigned in conjunction with credit proposals and the annual review of the customers, and are approved by the credit committees. However, a customer is down-graded as soon as new information indicates a need for it. The consistency and transparency of the ratings are ensured by the use of rating models. A rating model is a set of specified and distinct rating criteria which, given a set of customer characteristics, produces a rating. It is based on the predictability of customers' future performance based on their characteristics.

Nordea has different rating models for different customer types to better reflect the risk. Rating models have therefore been developed for several general as well as specific segments, e.g. real estate management and shipping. Different methods ranging from purely statistical, using internal data to expert-based methods, depending on the segment in question, have been used when developing the rating models. The models are largely based on an overall framework, in which financial factors are combined with qualitative factors as well as customer factors.

Models used in the household segment and for small corporate customers are based on scoring, which is a statistical technique used to predict the probability of customer default. The models are based on internal data and takes account specific characteristics as well as behavioural information of the customer. The models are used to support both the credit approval process, e.g. automatic approvals or decision support, and the risk management process, e.g. "early warning" for high risk customers and monitoring of portfolio risk levels. As a supplement to the scoring models, credit bureau information is used in the credit process. The scoring models are used to predict PDs, in order to calculate the economic capital and RWA for customers. The scoring models are validated yearly in order to maintain and improve the scorecards, and thereby the risk differentiation.

Nordea has established an internal validation process in accordance with the CRD requirements with the aim to ensure and improve the performance of the models, procedures and systems and to ensure the accuracy of the PD estimates.

The rating and scoring models are validated annually and the validation includes both a quantitative and a qualitative validation. The quantitative validation includes statistical tests of the models' discriminatory power, i.e. the ability to distinguish default risk on a relative basis, and cardinal accuracy, i.e. the ability to predict default levels.

Credit Risk Model Validation Committee, a sub-committee to the Risk Committee, is responsible for the approval of the annual rating and scoring model validations, as well as approval of proposals concerning the credit risk model validation framework.

4.5.2 *Point-In-Time vs. Through-The-Cycle*

A point-in-time (PIT) rating system uses all currently available obligor-specific and aggregate information to assign obligors to risk buckets. All obligors within a risk grade share roughly the same unstressed PD, and an obligor's rating is expected to change rapidly as its economic prospects change. A through-the-cycle (TTC) rating system uses static and dynamic obligor characteristics but tends not to adjust ratings in response to changes in macroeconomic conditions. The distribution of ratings across obligors will not change significantly over the business cycle, and an obligor's rating is expected to change only when its own dynamic characteristics change.

Between PIT and TTC rating systems lie a range of hybrid rating systems. The rating models Nordea uses for exposure classes corporate and institution exhibits characteristics of both TTC and PIT rating philosophies. For retail portfolio, Nordea currently employs a set of scoring models which are close to the PIT.

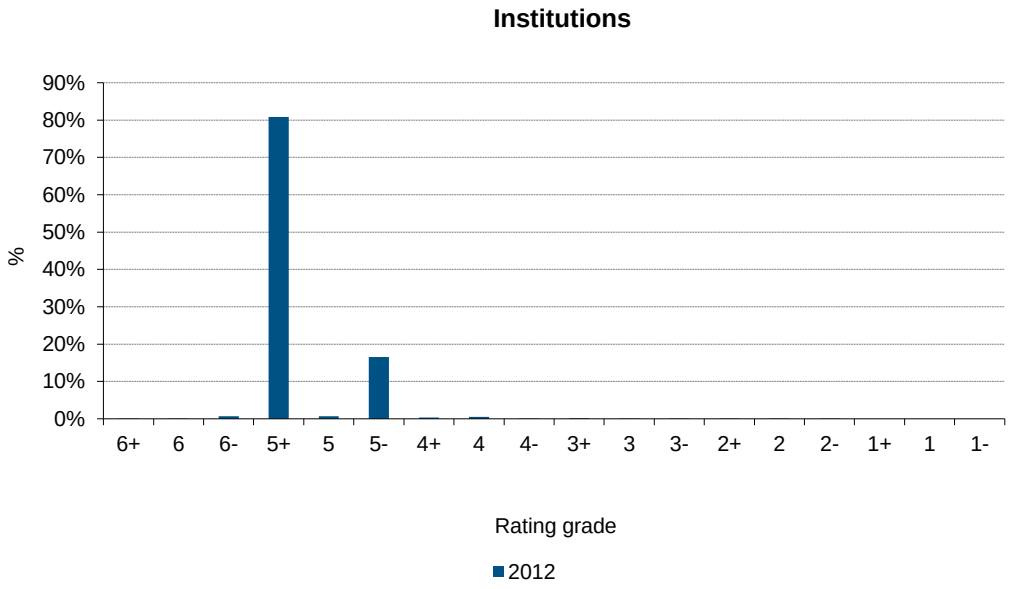
4.5.3 *Rating and scoring distribution*

In this section are the rating and scoring distributions for the IRB exposure classes presented.

4.5.3.1 Rating distribution of the IRB institution portfolio

Figure 4.2 shows the rating grade distribution of the IRB institution portfolio. In December 2012, 100% (99%) of the institution exposure was found in the rating grades 4 and higher.

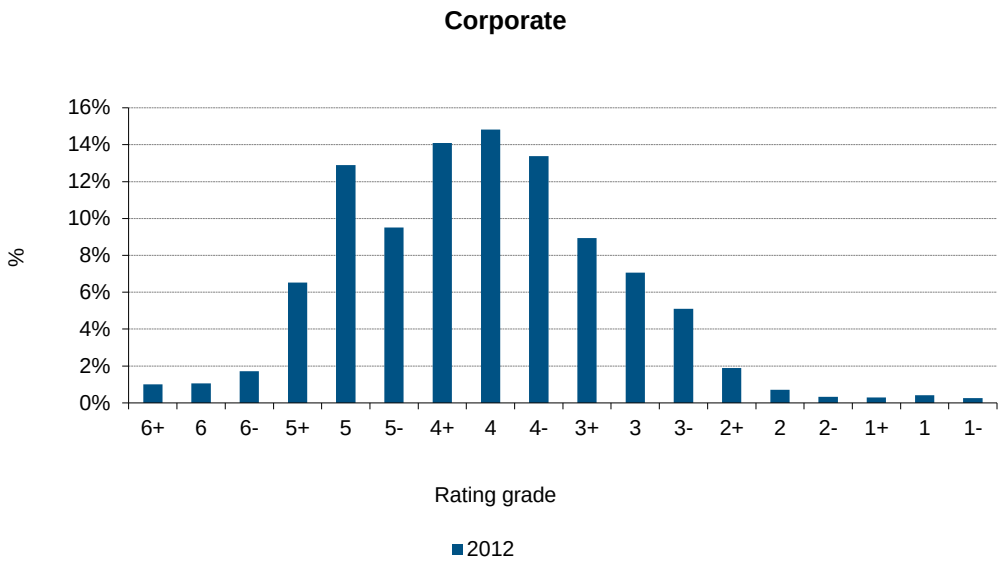
Figure 4.2 Exposure distributed by rating grade, IRB institution



4.5.3.2 Rating distribution of the IRB corporate portfolio

Figure 4.3 shows the rating grade distribution of the IRB corporate portfolio. In December 2012, 75% (71%) of the IRB corporate exposure was found in the rating grades 4- and above.

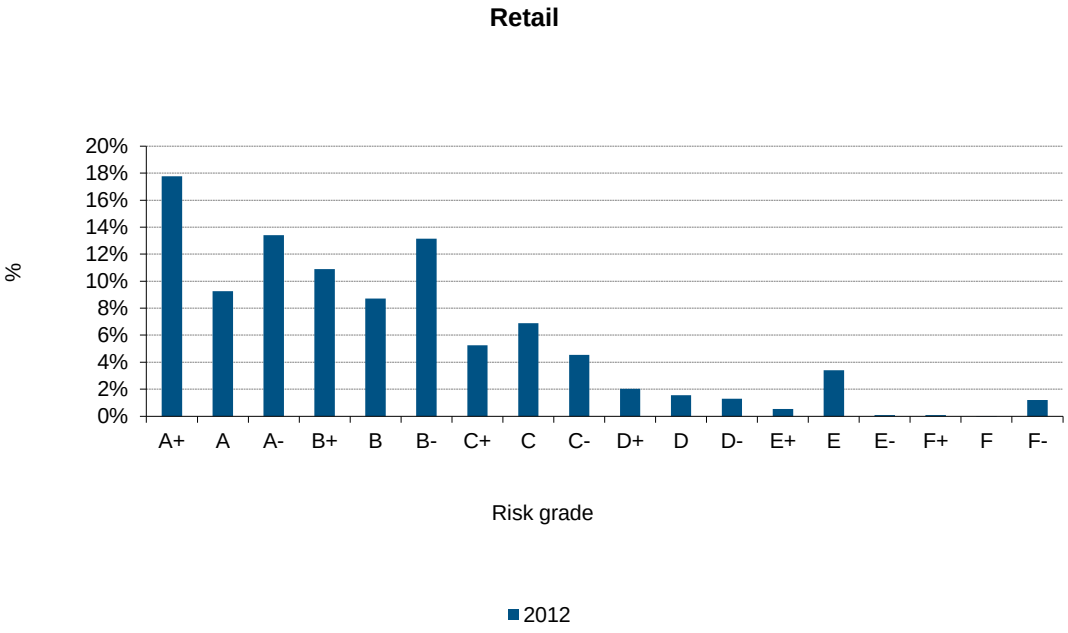
Figure 4.3 Exposure distributed by rating grade, IRB corporate



4.5.3.3 Scoring distribution of the IRB retail portfolio

Figure 4.4 shows the risk grade distribution of the IRB retail portfolio. As of end 2012, approximately 90% (87%) of the retail exposure was found in the risk grades C- and above.

Figure 4.4 Exposure distributed by rating grade, IRB retail



4.5.4 *Rating and scoring migration*

The rating and scoring distribution changes mainly due to three factors:

- Changes in rating/scoring for existing customers (pure migration).
- Different rating/scoring distribution of new customers and customers leaving Nordea, compared to the rating distribution of existing customers during the comparison period.

- Increased or decreased exposure per rating/scoring to existing customers.

Rating migration is affected by macroeconomic development, industry sector developments, changes in business opportunities and development in financial situation of the customers and other company related factors. Scoring migration is affected by macroeconomic development and the customers' repayment capacity among other things.

4.6 Collateral

In this section the collaterals have been broken down and specified.

4.6.1 *Loss Given Default*

In Table 4.12, the exposure per exposure class secured by eligible collateral, guarantees and credit derivatives is shown.

Table 4.12 Exposure secured by collaterals, guarantees and credit derivatives, split by exposure class, 31 December 2012

EURm	Original exposure	Exposure	- of which secured by guarantees and credit derivatives	- of which secured by collateral	Average weighted LGD
IRB exposure classes					
Institution	6,582	6,380	40	0	13%
Corporate	53,986	38,597	794	15,305	39%
Retail	52,285	51,394	303	37,694	20%
- of which mortgage	37,429	37,346		37,253	14%
- of which other retail	14,095	13,368	136	250	38%
- of which SME	761	679	167	191	22%
Other non-credit obligation assets	499	499			n.a.
Total IRB approach	**113,352**	**96,870**	**1,136**	**52,999**	**27%**
Standardised exposure classes					
Central government and central banks	12,580	12,322	374	0	
Regional governments and local authorities	1,808	983			
Institution	699	688			
Corporate	124	67		0	
Retail	1,199	710		0	
Exposures secured by real estates	0	0			
Other [1]	1,408	1,379			
Total standardised approach	**17,818**	**16,147**	**374**	**0**	

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, standardised institution, standardised corporate, past due items, short term claims, covered bonds and other items. Associated companies not included in exposure.

4.6.1.1 Guarantees and credit derivatives

The guarantees used as credit risk mitigation are to a large extent issued by central and regional governments in the Nordic countries. Banks and insurance companies are also important guarantors of credit risk.

Only eligible providers of guarantees and credit derivatives can be recognised in the standardised and IRB approach for credit risk. All central governments, regional governments and institutions are eligible as well as some multinational development banks and international organisations. Guarantees issued by corporate entities can only be taken into account if their rating corresponds to A– (S&P's rating scale) or better.

Credit derivatives are only used as credit risk protection to a very limited extent since the credit portfolio in Nordea Bank Danmark is considered to be well diversified.

4.6.1.2 Collateral distribution

Table 4.13 presents the distribution of collateral used in the capital adequacy calculation process. The table shows real estate to be the major part of the eligible collateral items in relative terms.

Table 4.13 Distribution of collateral, 31 December 2012

Financial collateral	1%
Receivables	0%
Residential real estate	71%
Commercial real estate	26%
Other physical collateral	2%

4.6.1.3 Valuation principles of collateral

A conservative approach with long-term market values and taking volatility into account is used as valuation principle for collaterals when defining the maximum collateral ratio.
Valuation and hence eligibility is based on the following principles:

- Market value is assessed; markets must be liquid, public prices must be available and the collateral is expected to be liquidated within a reasonable time frame.
- A reduction of the collateral value is to be considered if the type, location or character (such as deterioration and obsolescence) of the asset indicates uncertainty regarding the sustainability of the market value. Assessment of the collateral value also reflects the previously experienced volatility of market.
- Forced sale principle: assessment of market value or the collateral value must reflect that realisation of collaterals in a distressed situation is initiated by Nordea.
- No collateral value is to be assigned if a pledge is not legally enforceable and/or if the underlying asset is not adequately insured against damage.

4.7 Estimation and validation of credit risk parameters

Nordea has established an internal process, aimed at ensuring and improving the performance of models, procedures and systems and at ensuring the accuracy of the parameters.

The PD, LGD and CCF parameters are validated annually. The validation includes both a quantitative and a qualitative validation. The quantitative validation includes statistical tests to ensure that the estimates are still valid when new data is added.

The estimation process is linked to the validation since the estimates used for the PD scale are based on Nordea's actual default frequency (ADF).

The PD estimation, and hence the validation, takes into account that the rating models used for corporate and institution customers have a higher degree of TTC than the scoring models used for retail customers. The PD estimates are based on the long-term default experience and adjusted by adding a margin of conservatism between the average PD and the average ADF. This add-on consists of two parts, one that compensates for statistical uncertainty whereas the other constitutes a business cycle adjustment of the rating and scoring models. Table 4.14 shows expected loss, gross loss and net loss for the last three years.

Table 4.14 Expected loss vs. gross loss and net loss

	Retail household					
EURm	Mortgage	Other	Corporate[1]	Institution	Government	**Total**
2012						
EL	-34	-62	-96	-2	0	**-194**
Gross loss	-86	-284	-602	0	0	**-972**
Net loss	-62	-161	-357	0	0	**-580**
2011						
EL	-43	-72	-114	-3	0	**-232**
Gross loss	-47	-206	-544	0	0	**-797**
Net loss	-38	-144	-246	0	0	**-429**
2010						
EL	-44	-78	-124	-3	-2	**-250**
Gross loss	-29	-204	-460	0	0	**-693**
Net loss	-14	-141	-301	0	0	**-456**

1) Includes SME retail.

Note that the EL will vary over time due to changes in the rating and the collateral coverage distributions, but the average long-term net loss is expected to be in line with the average EL disregarding the fact that EL includes extra margins for statistical uncertainty and, in the case of LGD, a downturn add-on.

4.8 Impaired loans and loan losses

In the tables 4.15-4.18 impaired loans, loan losses and allowances are distributed and stated according to International Financial Reporting Standard (IFRS) as in the Annual Report which differs somewhat from CRD.

Table 4.15 Loans and receivables, impaired loans, allowances and provisioning ratios, split by customer type, 31 December 2012

EURm	Loans after allowances	Impaired loans after allowances	Impaired loans in % of loans and receivables	Allowances for collectively assessed loans	Specific allowances	Provisioning ratio
To central banks and credit institutions	**7,757**	**0**	**0%**	**0**	**0**	**0%**
- of which central banks	6,006	0	0%	0	0	0%
- of which credit institutions	1,751	0	0%	0	0	
To the public	**81,616**	**2,362**	**3%**	**113**	**1,284**	**37%**
- of which corporate	39,370	1,726	4%	84	826	35%
Energy (oil, gas, etc.)	5	0	0%	0	0	0%
Metals and mining materials	20	0	2%	0	0	40%
Paper and forest materials	346	0	0%	1	2	93%
Other materials (building materials, etc.)	591	14	2%	2	10	46%
Industrial capital goods	432	5	1%	3	10	70%
Industrial commercial services, etc.	5,547	204	4%	4	71	27%
Construction and civil engineering	1,171	68	6%	3	33	35%
Shipping and offshore	946	165	17%	11	117	44%
Transportation	780	19	2%	2	14	47%
Consumer durables (cars, appliances, etc.)	462	8	2%	3	32	81%
Media and leisure	933	29	3%	1	24	47%
Retail trade	4,167	104	2%	11	60	41%
Consumer staples (food, agriculture, etc.)	7,773	646	8%	23	219	27%
Health care and pharmaceuticals	561	8	1%	0	4	34%
Financial institutions	3,483	66	2%	5	65	52%
Real estate management	7,886	231	3%	8	84	29%
IT software, hardware and services	745	16	2%	1	9	39%
Telecommunication equipment	11	0	3%	0	0	15%
Telecommunication operators	129	0	0%	0	0	240%
Utilities (distribution and production)	1,522	8	1%	2	4	42%
Other	1,860	136	7%	3	66	34%
- of which household	41,051	636	3%	28	458	43%
Mortgage financing	28,980	458	2%	4	68	14%
Consumer financing	12,072	178	1%	24	391	70%
- of which public sector	1,195	0	0%	0	0	0%
Total loans in the banking operations	**89,373**	**2,362**	**3%**	**113**	**1,284**	**37%**
Lending in the life insurance operations						
Total including life insurance operations	**89,373**	**2,362**	**3%**	**113**	**1,284**	**37%**

Table 4.16 Loans to the public, impaired loans, allowances and provisioning ratios, split by geography, 31 December 2012

EURm	Loans after allowances	Impaired loans after allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Specific allowances	Provisioning ratio
Nordic countries	78,481	2,361	3%	112	1,270	37%
- of which Denmark	78,089	2,361	3%	112	1,252	37%
- of which Finland	41	0	0%	0	0	0%
- of which Norway	76	0	0%	0	0	100%
- of which Sweden	275	0	0%	0	17	99%
Estonia	9	0	0%	0	0	0%
Latvia	16	0	0%	0	0	96%
Lithuania	22	0	0%	0	1	100%
Poland	135	0	0%	0	0	0%
Russia	3	0	0%	0	0	0%
EU countries other	1,348	0	0%	0	5	95%
USA	93	0	0%	0	0	74%
Asia	295	0	0%	0	0	100%
Latin America	154	0	0%	0	0	100%
OECD other	132	0	0%	0	2	100%
Non-OECD other	928	0	0%	0	5	100%
Total	**81,616**	**2,362**	**3%**	**113**	**1,284**	**37%**

Table 4.17 Reconciliation of allowance accounts for impaired loans, 2012

	Group			Parent company		
Loans and receivables, EURm	Ind. assessed	Coll. assessed	Total	Ind. assessed	Coll. assessed	Total
Opening balance at 1 Jan 2012	**-917**	**-176**	**-1,093**	**-786**	**-145**	**-931**
Provisions	-847	-47	-894	-712	-25	-736
Reversals	235	111	346	202	94	296
Changes through the income statement	**-612**	**64**	**-548**	**-509**	**69**	**-440**
Allowances used to cover write-offs	244	0	244	195	0	195
Currency translations differences	1	0	1	1	0	1
Closing balance at 31 Dec 2012	**-1,284**	**-113**	**-1,397**	**-1,100**	**-76**	**-1,176**

Table 4.18 Loan losses, 2012

EURm	
Loan losses divided by class, net	
Loans and receivables to credit institutions	0
- of which write-offs and provisions	0
- of which reversals and recoveries	0
Loans and receivables to the public	-575
- of which write-offs and provisions	-940
- of which reversals and recoveries	365
Off-balance sheet items	4
- of which write-offs and provisions	-17
- of which reversals and recoveries	21
Total	**-572**
Specification of loan losses	
Changes of allowance accounts in the balance sheet	-545
- of which loans and receivables	-548
- of which off-balance sheet items	4
Changes directly recognised in the income statement	-27
- of which realised loan losses	-46
- of which realised recoveries	19
Total	**-572**

5. Market risk

The market risk taking activities of Nordea Bank Danmark are primarily focused on the Nordic and European markets. The total consolidated market risk for Nordea Bank Danmark, measured by VaR, was EUR 26m on average in 2012, compared to EUR 22m in 2011. The total market risk, measured by VaR, is primarily driven by interest rate risk.

5.1 Market risk management

5.1.1 *Governance of market risk*

Group Risk Management has the operational responsibility for the development and maintenance of the group-wide market risk framework. The framework defines common management principles and policies for the market risk management in the Nordea Group. These principles and policies are approved by the Group Board of Directors and have been endorsed by the Board of Directors in Nordea Bank Danmark. The same reporting and control processes are applied for market risk exposures in both the trading and banking books, on a Nordea Group level as well as in Nordea Bank Danmark.

Transparency in the risk management process is central to maintaining risk awareness and a sound risk culture throughout the organisation. This transparency is achieved through:

- A comprehensive Group-wide policy framework, in which responsibilities and objectives are explicitly outlined and in which the risk appetite is clearly defined.
- Clearly defined risk mandates, in terms of limits and restrictions on which instruments may be traded.
- A framework for approval of traded financial instruments and valuation methods that require an elaborate analysis and documentation of the instruments' features and risk factors.
- Proactive information sharing between trading and risk control.
- Timely reporting to senior management on market risk development. The Group CRO receives reporting on the Group's consolidated market risk daily, whereas GEM, the Board of Directors and its associated risk committees receive reports on a monthly basis. The Board of Directors in Nordea Bank Danmark receives a report of Nordea Bank Danmark's consolidated market risk quarterly.

5.1.2 *Management of market risk*

Market risk is defined as the risk of value loss in Nordea's holdings and transactions as a result of changes in market rates and parameters that affect the market value, for example changes to interest rates, credit spreads, FX rates, equity prices, commodity prices and option volatilities.

Nordea Markets and Group Treasury are the key contributors to market risk in the Nordea Group. Nordea Markets is responsible for the customer-driven trading activities, whereas Group Treasury is responsible for funding activities, asset and liability management, liquidity portfolios, pledge/collateral portfolios and investments for Nordea's own account. For all other banking activities, the basic principle is that market risks are transferred to Group Treasury where the risks are managed.

5.1.2.1 Structural market risks

In addition to the immediate change in the market value of Nordea's assets and liabilities from a change in financial market variables, a change in interest rates could also affect the net interest income over time. In Nordea this is seen as structural interest income risk (SIIR).

5.1.3 *Measurement of market risk*

As there is no single risk measure that captures all aspects of market risk, Nordea uses several risk measures including Value-at-Risk (VaR), stressed VaR, stress testing, scenario simulation and other non-statistical risk measures such as basis point values, net open positions and option key figures. In addition, simulation-based models are used to capture the default and migration risks from corporate debt, credit derivatives and correlation products in the trading book. These are the Incremental Risk Measure (IRM) and the

Comprehensive Risk Measure (CRM).

5.1.3.1 Value-at-Risk

Nordea calculates VaR using historical simulation. This means that the current portfolio is revaluated using the daily changes in market prices and parameters observed during the last 500 trading days, thus generating a distribution of 499 returns based on empirical data. From this distribution, the expected shortfall method is used to calculate a VaR figure, meaning that the VaR figure is based on the average of the worst outcomes from the distribution. The 1-day VaR figure is subsequently scaled to a 10-day figure using the "square-root of time" assumption. The 10-day VaR figure is used to limit and measure market risk at all levels both in the trading book and in the banking book.

Separate VaR figures are calculated for interest rate, credit spread, foreign exchange rate and equity risks. The total VaR includes all these risk categories and allows for diversification among them. The VaR figures include both linear positions and options. The model has been calibrated to generate a 99% VaR figure. This means that the 10-day VaR figure can be interpreted as the loss that will statistically be exceeded only in one of hundred 10-day trading periods.

It is important to note that while every effort is made to make the VaR model as realistic as possible, all VaR models are based on assumptions and approximations that have significant effect on the risk figures produced. While historical simulation has the advantage of not being dependent on a specific assumption regarding the distribution of returns, it should be noted that the historical observations of the market variables that are used as input, may not give an adequate description of the behaviour of these variables in the future. The choice of the time period used is also important. While using a longer time period may enhance the model's predictive properties and lead to reduced cyclicality, using a shorter time period increases the model's responsiveness to sudden changes in the volatility of financial markets. The choice of using the last 500 days of historical data has thus been made with the aim to strike a balance between the pros and cons from using longer or shorter time series in the calculation of VaR.

5.1.3.2 Stressed VaR

Stressed VaR is calculated using a similar methodology as the ordinary VaR measure. However, whereas the ordinary VaR model is based on data from the last 500 days, stressed VaR is based on a specific 250 day period with considerable stress in financial markets. The specific period to be used is evaluated yearly.

5.1.3.3 Stress testing

Stress tests are used to estimate the possible losses that may occur under extreme market conditions. The main types of stress tests include:

1. Historical stress tests. These are conducted by identifying the most adverse scenario for the current portfolio from a data set covering a significantly longer time period than the ordinary VaR model. Separate historical stress tests are also conducted where the current portfolio is exposed to the market movement from selected historical events with significant stress in financial markets.
2. Subjective stress tests, where the portfolios are exposed to scenarios for financial developments that are deemed particularly relevant at a particular time. The scenarios are inspired by the financial, the macroeconomic or geopolitical situation, or the current composition of the portfolio.
3. Sensitivity tests, where rates, prices, and/or volatilities are shifted markedly to emphasize exposure to situations where historical correlations fail to hold. Another sensitivity measure used is the potential loss stemming from a sudden default of an issuer of a bond or the underlying in a credit default swap.
4. Reversed stress tests. These assess and try to identify the type of events that could lead to losses equal to or greater than a pre-defined level.

Historical stress tests and sensitivity tests are conducted daily for the consolidated risk across banking book and trading book. Subjective stress tests are conducted periodically for the consolidated risk across the banking book and trading book. Reversed stress tests are conducted quarterly for the trading book.

While these stress tests measure the risk over a shorter time horizon, market risk is also a part of Nordea's comprehensive firm-wide ICAAP stress test, which measures the risk over a three-year horizon. For further information on group-wide stress tests, see chapter 9.

5.2 Consolidated market risk for Nordea Bank Danmark

The consolidated market risk for Nordea Bank Danmark presented in Table 5.1 includes both the trading book and the banking book. Total VaR was EUR 17m at the end of 2012 (EUR 32m at the end of 2011) and demonstrated a considerable diversification effect between interest rate, equity and foreign exchange risk.

Table 5.1 Consolidated market risk figures for Nordea Bank Danmark, 31 December 2012

EURm	Measure	31 Dec 2012	2012 high	2012 low	2012 avg.	31 Dec 2011
Total risk	VaR	17.2	49.6	9.3	26.2	31.6
- Interest rate risk	VaR	14.2	44.4	7.2	22.7	25.0
- Equity risk	VaR	11.5	11.5	2.0	6.2	6.6
- Foreign exchange risk	VaR	0.7	5.7	0.4	0.9	1.6
Diversification effect		35%	45%	3%	14%	5%

5.3 Market risk for the trading book

The market risk for the trading book in Nordea Bank Danmark is presented in Table 5.2. The total VaR was EUR 15m at the end of 2012 (EUR 3m at the end of 2011). The main contributor to total VaR was interest rate risk, with the largest part of the interest rate sensitivity stemming from interest rate positions in DKK, EUR and SEK.

Table 5.2 Market risk (VaR) figures in the trading book, 31 December 2012

EURm	Measure	31 Dec 2012	2012 high	2012 low	2012 avg.	31 Dec 2011
Total risk	VaR	15.0	36.4	2.3	11.4	2.6
- Interest rate risk	VaR	15.8	36.9	0.7	10.7	2.9
- Equity risk	VaR	3.7	3.7	0.3	1.6	0.7
- Foreign exchange risk	VaR	1.1	6.2	0.9	1.6	1.7
Diversification effect		27%	54%	7%	22%	51%
Total stressed VaR	sVaR	17.0	33.7	2.9	12.1	3.4

5.4 Capital requirements for market risk in the trading book (Pillar I)

Market risk in the CRD context contains two categories: general risk and specific risk. General risk is related to changes in overall market prices and specific risk is related to price changes for specific issuers. When the capital requirements for market risk are calculated using the internal model approach, general risk is based on VaR and stressed VaR.

Nordea Bank Danmark uses the internal model approach to calculate the market risk capital requirements for the predominant part of the trading book. However, for specific interest rate and equity risk the market risk capital requirements are calculated using the standardised approach. The use of the internal model approach in Nordea Bank Danmark is shown in Table 5.3. Table 5.4 presents RWA and capital requirements for market risk.

Table 5.3 Methods for calculating capital requirements

	Interest rate risk		Equity risk		
	General	Specific	General	Specific	FX risk
Nordea Bank Danmark	IA	SA	IA	SA	IA

IA: internal model approach, SA: Standardised approach

Table 5.4 RWA and capital requirements for market risk, 31 December 2012

	Trading book, IA		Trading book, SA		Banking book, SA		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk[1]	310	25	900	72			1,210	97
Equity risk	106	8	256	20			362	29
Foreign exchange risk	65	5					65	5
Commodity risk								
Diversification effect	-87	-7					-87	-7
Stressed VaR	360	29					360	29
Total	**754**	**60**	**1,156**	**93**	**0**	**0**	**1,911**	**153**

1) Interest rate risk in column IA only includes general interest rate risk while column SA includes both general and specific interest rate risk.

By the end of 2012, RWA and the capital requirements for market risk in the trading book were EUR 1,911m (EUR 925m) and EUR 153m (EUR 74m), respectively. The increase in RWA for Nordea Bank Denmark is mainly explained by increased holdings in Danish mortgage bonds, of which, the specific interest rate risk is calculated according to the standardised approach.

5.4.1 *Backtesting*

Backtesting of the VaR models is conducted on a daily basis in accordance with the guidelines laid out by the Basel Committee on Banking Supervision (BCBS). Backtests are conducted using both hypothetical profit/loss and actual profit/loss (hypothetical profit/loss is the profit/loss that would have been realised if the positions in the portfolio had been held constant during the following trading day). The profit/loss is in the backtest compared to one-day VaR figures.

5.5 Interest rate risk in the banking book

Monitoring of the interest rate risk in the banking book is done daily by measuring and monitoring VaR on the banking book and by controlling interest rate sensitivities, which measure the immediate effects of interest rate changes on the economic values of assets, liabilities and off-balance sheet items. As of end 2012, the interest rate VaR in the banking book of Nordea Bank Danmark was EUR 8m (EUR 29m at the end of 2011). Table 5.5 shows the net effect on economic value of a parallel shift in rates of up to 200 basis points.

Table 5.5 Interest rate sensitivities for the banking book, instantaneous interest rate movements, 31 December 2012

EURm	+200bp	+100bp	+50bp	-50bp	-100bp	-200bp
DKK	-126.3	-63.2	-31.6	31.6	63.2	126.3
EUR	19.3	9.8	5.2	-9.9	-20.4	-29.5
USD	-1.7	-0.9	-0.4	0.4	0.9	1.7
Total	**-110.1**	**-54.9**	**-27.2**	**22.5**	**44.3**	**100.0**

The totals are netted and include currencies not specified.

5.6 Structural Interest Income Risk

Structural Interest Income Risk (SIIR) is the amount Nordea's accumulated net interest income would change during the next 12 months if all interest rates were to change by one percentage point. SIIR reflects the mismatch in the balance sheet items and the off-balance sheet items when the interest rate repricing periods, volumes or reference rates of assets, liabilities and derivatives do not correspond exactly.

Nordea's SIIR management is based on policy statements resulting in different SIIR measures and organisational procedures. Policy statements focus on optimising financial structure, balanced risk taking and reliable earnings growth, identification of all significant sources of SIIR, measurement under stressful market conditions and adequate public information. Group Treasury has the responsibility for the operational management of SIIR.

5.6.1 *SIIR measurement methods*

Nordea's SIIR is measured through dynamic simulations by calculating several net interest income scenarios and comparing the difference between these scenarios. Several interest rate scenarios are applied, but the basic measures for SIIR are the two scenarios (increasing rates and decreasing rates) measuring the effect on Nordea's net interest income for a 12 month period of a one percentage point increase, respectively decrease, in all interest rates (note that Table 5.6 below also covers repricing gaps over 12 months). The balance sheet is assumed to be constant over time.

Main elements of the customer behaviour and Nordea's decision-making process concerning Nordea's own rates are however taken into account.

5.6.2 *SIIR analysis*

At the end of the year, the SIIR for increasing market rates in Nordea Bank Danmark was EUR 166m (EUR 69m) and the SIIR for decreasing market rates was EUR –42m (EUR –149m). These figures imply that net interest income would increase if interest rates rise and decrease if interest rates fall. The methodology for deriving SIIR figures was improved during 2012 which explains the large change in SIIR between the two years as 2011 figures have not been restated.

Table 5.6 Repricing gap analysis, scenario of a one percentage point increase in all rates, 31 December 2012

		Interest rate fixing period							
EURm	Group balance sheet	Within 3 months	3-6 months	6-12 months	1-2 years	2-5 years	>5 years	Non-repricing	Total
Interest-bearing assets	103,681	59,793	5,615	7,504	3,262	11,431	16,077	0	103,681
Non-interest bearing assets	9,600	0	0	0	0	0	0	9,600	9,600
Total assets	**113,282**	**59,793**	**5,615**	**7,504**	**3,262**	**11,431**	**16,077**	**9,600**	**113,282**
Interest-bearing liabilities	100,024	50,932	4,530	4,481	7,016	8,089	13,600	11,377	100,024
Non-interest bearing liabilities	13,258	0	0	0	0	0	0	13,258	13,258
Total liabilities and equity	**113,282**	**50,932**	**4,530**	**4,481**	**7,016**	**8,089**	**13,600**	**24,634**	**113,282**
Off-balance sheet items, net		**8,830**	**948**	**-2,365**	**-4,060**	**-2,434**	**-920**	**0**	
Exposure		**17,691**	**2,033**	**658**	**-7,813**	**908**	**1,557**	**-15,034**	
Cumulative exposure			**19,724**	**20,382**	**12,569**	**13,477**	**15,034**	**0**	
SIIR impact of increasing interest rates for the year 2013									
Impact[1]		155	9	2					
Cumulative SIIR impact			164	166					

1) Impact is calculated based on +100bps change on exposure

5.7 Equity risk in the banking book

In Table 5.7, the equity holdings in the banking book are grouped based on the intention of the holding. All equities in the table are carried at fair value. The portfolio of illiquid alternative investments is included with a fair value of EUR 556m (EUR 567m), of which hedge funds EUR 173m, private equity funds EUR 270m and credit funds EUR 112m. All three types of investments are spread over a number of funds in Nordea Bank Danmark.

Table 5.7 Equity holdings in the banking book, 31 December 2012

EURm	Book value	Fair value	Unrealised gains/losses[3]	Realised gains/losses[3]	Capital requirement
Investment portfolio[1]	580	580	49	8	46
Other[2]	121	121	-7	0	10
Total	**701**	**701**	**42**	**8**	**56**
1) Of which listed equity holdings	29				
2) Of which listed equity holdings	111				
3) Result for 2012					

5.8 Determination of fair value of financial instruments

Fair value is defined by IAS 32 and IAS 39 as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. The best evidence of fair value is the existence of published price quotations in an active market and when such prices exist they are used for the assignment of fair value. Published price quotations are predominantly used to establish fair value for items disclosed under the following balance sheet items:

- Treasury bills
- Interest-bearing securities
- Shares
- Listed derivatives
- Debt securities in issue (issued mortgage bonds in Nordea Kredit Realkreditaktieselskab)

If quoted prices for a financial instrument fail to represent actual and regularly occurring market transactions or if quoted prices are not available, fair value is established by using an appropriate valuation technique. Valuation techniques can range from simple discounted cash flow analysis to complex option pricing models. These are designed to apply observable market prices and rates as input whenever possible, but can also make use of unobservable model parameters. Nordea uses valuation techniques to establish fair value for OTC derivatives and for securities and shares for which quoted prices in an active market are not available.

The calculation of fair value using valuation techniques is supplemented by a portfolio adjustment for uncertainties associated with the model assumptions and uncertainties associated with the portfolio's counterparty credit risk and liquidity risk.

If non-observable data has a significant impact on the valuation, the instrument cannot be recognised initially at fair value and any upfront gains are therefore deferred and amortised over the contractual life of the contract.

The applied valuation models are consistent with accepted economic methodologies for pricing financial instruments, and incorporate the factors that market participants consider when setting a price. New valuation models are subject to approval by Group Risk Management and all models are reviewed on a regular basis.

The valuation framework is a joint responsibility between the Group CFO and the Group CRO. The Group Valuation Committee, a sub-committee to the Risk Committee consisting of senior management representatives from Group Finance, Group Risk Management and the control organisations in the business divisions, serves as an oversight committee and supports the CFO and CRO on different issues in relation to the framework, including standards for valuation and processes for valuation and valuation control.

5.8.1 *Compliance with requirements applicable to exposure in the trading book*

The CRD outlines the requirements for systems and controls to provide prudent and reliable valuation estimates. Nordea complies in all material aspects with these requirements. Overall valuation principles and processes are governed by policies and instructions developed and maintained by Group Risk Management. The product control organisations in the individual business units are responsible for performing valuation controls in accordance with the policies and instructions. The quality control framework is assessed by relevant Group functions as well as by Group Internal Audit on an ongoing basis.

The set-up for valuation adjustments is designed to be compliant with the requirements in IAS 39. Requirements in the annex not supported by IAS 39 are therefore not implemented. Nordea incorporates counterparty risk in OTC derivatives, bid/ask spreads and where judged relevant, also model risk.

6. Operational risk

Operational risk is inherent in all activities performed by Nordea Bank Denmark. During 2012, a Group-wide scenario analysis process has been introduced which puts focus on extreme operational risks.

6.1 Operational risk management

6.1.1 *Governance of operational risk*

Group Risk Management is responsible for developing and maintaining the framework for managing operational and compliance risks, and for supporting the business organisation in their implementation of the framework. Information security, physical security, crime prevention as well as educational and training activities are important components when managing operational risks.

Managing operational risk is part of management's responsibilities. In order to manage these risks, a common set of standards and a sound risk management culture is aimed at the objective to follow best practice regarding market conduct and ethical standards in all business activities.

The key principle of operational risk in Nordea is the three lines of defence. The first line of defence is represented by the business organisation which includes the risk and compliance officer network. The risk and compliance officers ensure that operational and compliance risks are managed effectively within the business organisation and consequently they are located in the first line of defence but performing second line of defence tasks. Group Risk Management, representing the second line of defence, has defined a common set of standards (Group Directives, processes and reporting) in order to manage operational risks. Group Internal Audit, representing the third line of defence, provides assurance to the Board of Directors on the risk management, control and governance processes.

During 2012, the Group decided to strengthen its anti-money laundering (AML) governance in order to protect the bank from being used for financial crime. A revised AML structure was implemented in order to further improve AML processes and routines and to ensure proper attention from senior management and vital stakeholders. As a result, robust mitigating plans with focus on Know Your Customer procedures are established.

Nordea uses external risk transfer in the form of insurance, including re-insurance, to cover certain aspects of crime risk and professional liability, including the liability of directors and officers. The Group furthermore uses insurance for travel, property and general liability purposes.

6.1.2 *Management of operational risk*

The Policy for Internal Control and Risk Management in the Nordea Group states that the management of risks includes all activities aiming at identifying, measuring, assessing, monitoring and controlling risks as well as measures to limit and mitigate consequences of the risks. Management of risks is proactive, emphasising training and risk awareness.

Operational risk is the risk of direct or indirect loss, or damaged reputation resulting from inadequate or failed internal processes, from people and systems or from external events. Operational risk includes compliance risk, which means the risk of business not being conducted according to legal and regulatory requirements, market standards and business ethics, thereby jeopardising customers' best interest, other stakeholders' trust and increasing the risk of regulatory sanctions, financial loss or damage to the reputation and confidence in the Group.

An important part of operational and compliance risk management is protecting the Group from being used for the purpose of money laundering and terrorist financing. Therefore the Group has strict processes concerning customer identification and verification, customer acceptance, monitoring of customer relations, record keeping, detection and reporting of suspicious activities and transactions and employee training to ensure adequate awareness.

Operational risk also includes legal risk, which is the risk that the Group suffers damage due to a deficient or incorrect legal assessment. Operational risk is inherent in all activities within the organisation, in outsourced activities and in all interactions with external parties.

Operational risks are managed based on common principles established for the Group. A common operating model and key processes are set forth in the Operational Risk Policy.

6.1.3 *Measurement of operational risk*

6.1.3.1 Key processes

Risk and control self-assessment

The risk and control self-assessment (RCSA) process puts focus on identifying key risks as well as ensuring fulfilment of requirements specified in Group directives. The process has gone through changes in 2012 when the risk self-assessment and internal control checklist processes were combined into the new comprehensive RCSA process.

This year's process was executed in the new operational and compliance risk system. In the system risks are categorised and the same operational risk library is used for several processes which enables comparison of data across the processes. The division management assesses the risks in the risk library and estimate which risks are relevant for their organisation. The risks are identified both through top-down division management involvement and through bottom-up analysis of result from control questions as well as existing information from processes, e.g. incident reporting, quality and risk analyses, and product approvals. Upon identification of the risks, the estimated impact of risk materialisation is assessed and the mitigating actions are identified. The mitigating actions related to the most critical risks are followed up in the Group's risk appetite reporting.

The purpose of the control assessment is to verify whether Nordea adequately fulfils minimum legal requirements as specified in the Nordea Group Directives as well as to ensure a sufficient level of internal control in the Group. The extended time period for answering aims at providing time for actions to be taken by the business to correct substandard matters, thereby making the process an active tool for improvement rather than merely a status report.

Incident reporting

Incidents and security weaknesses are dealt with immediately in order to minimise damage. Upon detection of an incident, handling of the incident has first priority. The unit manager is responsible for the proper handling, documentation and reporting of the incidents and any quality deficiencies in the unit.

Incident reporting is a group-wide process which is performed in the operational risk system by the risk and compliance officer in order to ensure consistent quality in the process. Nordea's operational risk library, which reporting reflects regulatory standards and is compliant with Operational Riskdata eXchange Association (ORX) reporting requirements, is the taxonomy used for categorisation of incidents. Nordea joined ORX in 2010 and since Q2 2011, Nordea delivers risk loss data on a quarterly basis to ORX.

The threshold levels for incidents are EUR 1,000 for minor incidents and EUR 20,000 for major incidents. Incidents with no direct financial loss are reported if there is a reputational, regulatory, process or other impact to it. Aggregated incident information is included in regular risk reports to the Risk Committee, GEM , the Board Risk Committee and the Board of Directors, and key observations are included in the group risk map and the semi-annual compliance report.

Scenario analysis process

During 2012, a group-wide scenario analysis process was introduced which puts focus on extreme operational risks. The objective of the process is to challenge and extend the Group's present understanding of its operational risk landscape as well as to evaluate the potential financial impact of certain risks. The Group's internal loss data, RCSA result as well as external data showing losses suffered by peer institutions are analysed in order to identify the risk areas where extreme events are most likely to occur.

The estimates of the potential financial exposure for the scenarios are based on the result of the data analyses, complemented with output from interviews with the business organisation representatives. The results of the scenario analysis process are compliant with the risk library structure and will be used as input to the next Group risk map.

Other processes

Nordea has developed more task-specific risk management processes in three key areas; product approvals, business continuity and ad hoc changes.

The purpose of the product approval process is to ensure common requirements and documentation in respect of new products as well as material changes to existing products.

Business continuity management covers the broad scope from the procedures for handling incidents in the organisation via escalation procedures to crisis management on Group level. As most service chains are supported by IT applications, disaster recovery plans for technical infrastructure and IT systems constitute the core of the business continuity management in Nordea.

The quality and risk analysis (QRA) is used to analyse risk and quality aspects related to changes on case by case basis, for example new programmes or projects, significant changes to organisations, processes, systems and procedures. In principle, the product approval process described above constitutes a QRA.

The two awareness programmes, one targeting senior management and one group-wide, which were introduced in 2011 will continue during 2013 with update of existing modules as well as launch of new topics. The module preventing bribery and corruption was launched early 2013 as part of the Group-wide programme and will be followed by a module covering anti-money laundering, counter-terrorist financing and sanctions risk management. Both programmes are mandatory and aim to set the tone at the top and to increase the awareness of operational and compliance risk related threats and challenges throughout the organisation.

6.1.3.2 Key reports

Group risk map

The results from RCSA process represent the main input to the Group risk map. In the first part of the report, the Group's top risks and related mitigating actions are defined as well as analysed from a risk category perspective. Likelihood and impact are used as selection criteria for the top risks. The result of the control assessment as well as Group loss data split per risk category is presented. The second part of the report supplies a risk overview for each of the business areas in the Group with more detailed information on individual risks. The report is used as input to the Group's annual planning process in order to ensure adequate resource allocation to the planned mitigating actions. Mitigating actions are followed up on a quarterly basis within the risk appetite framework with detailed descriptions of the current development status. The Group risk map is submitted to GEM, the Board Risk Committee and the Board of Directors on an annual basis.

Semi-annual reporting on operational and compliance risks

Semi-annual reporting on operational and compliance risks is done based on input from risk and compliance officers in the business. The risk and compliance officers are asked to make their own reflections on the division's future challenges, improvements and his/her own ability to work independently. Reporting also contains specific, ad hoc themes, focusing on areas that are relevant at current. The semi-annual Nordea Group compliance report is based on the risk and compliance officers' reports as well as GORC's own observations and analysis of key compliance risks, incident reporting and other relevant data. Local compliance report is sent to the Board of Directors or Nordea Bank Danmark.

6.2 Capital requirements for operational risk

The capital requirements for operational risk is calculated mainly according to the standardised approach, in which all of the institution's activities are divided into eight standardised business lines and a defined beta coefficient is multiplied by the gross income for each business line. Nordea Bank Danmark's capital requirements for operational risk for 2012 amounts to EUR 325m (EUR 308m). The capital requirements for operational risk are updated on a yearly basis.

7. Securitisation and credit derivatives

Nordea's role in securitisation has been limited to that of being a sponsor of various schemes together with some limited trading on credit derivatives as described below. Nordea has not participated in securitisation as originator and hence has not transferred loans or their risk outside of Nordea. Nordea uses the models introduced by CRD III to calculate capital requirements for credit derivatives.

7.1 Introduction to securitisation and credit derivatives trading

The CRD defines securitisation as a scheme where the credit risk of underlying exposures is converted into marketable securities so that payments from these securities depend on the performance of the underlying exposures and a subordination scheme exists for determining how losses are distributed among investors to these securities. In a traditional securitisation, the ownership of these assets is transferred to a special purpose entity (SPE), which in turn issues securities backed by these assets. In synthetic securitisation, ownership of these assets does not change, however the credit risk is still is transferred to the investor through the use of credit derivatives.

Banks have different roles in securitisations. First, they can act as originators by having assets they have originated themselves as underlying exposures. Second, they can act as sponsors in which role they establish and manage securitisations of assets from third party entities. Third, in their credit trading activity they can themselves invest in these types of marketable securities or create these exposures in credit derivatives markets.

Nordea has to date not acted as originator in securitisations. However, Nordea has sponsored various securitisation schemes which are described in the following section. Nordea is also acting as an intermediary in the credit derivatives market, especially in Nordic names. In addition to becoming exposed to the credit risk of a single entity, credit derivatives trading often involves buying and selling protection for collateralised debt obligation (CDO) tranches. These can be characterised as credit risk related financial products, the risk of which depends on the risk of a portfolio of single entities ('a reference portfolio') as well as the subordination. Subordination defines the level of defaults in the reference portfolio after which further defaults will create a credit loss for the investor in the CDO tranche. Because hedging CDO tranches always involves a view on how the correlation between the credit risk of single names evolves it has been customary to talk about correlation trading in this context. The market risk created by Nordea's correlation trading is described in further detail in section 7.3.

7.2 Traditional securitisations where Nordea acts as sponsor

Nordea sponsors a limited number of SPEs. These SPEs have been established to facilitate or secure customer transactions, either to enable investments in structured credit products, or with the purpose of supporting trade receivable or account payable securitisation for Nordea corporate customers. At year-end 2012, Nordea is sponsoring the SPEs presented in Table 7.1.

The decision to sponsor these SPEs has been made by senior management. The SPEs are monitored centrally to ensure appropriate purpose and governance. Nordea's role in these transactions has included acting as arranger, account bank, swap/FX counterparty, administrator, calculation agent and/or CP dealer.

In accordance with IFRS, Nordea does not consolidate SPEs' assets and liabilities beyond its control. In determining whether Nordea controls an SPE or not, Nordea makes judgements about risks and rewards from the SPE and assesses its ability to make operational decisions for the SPE. Nordea consolidates all SPEs where it retains the majority of the risks and rewards. For the SPEs that are not consolidated, the rationale is that Nordea does not have any significant risks nor rewards on these assets and liabilities.

The SPEs in Table 7.1 are not consolidated for capital adequacy purposes. Instead, loans and loan commitments to the SPEs are included in the banking book and capital requirements are calculated in accordance with the rules described in chapter 4. Bonds and notes issued by the SPE and held by Nordea as well as credit derivative transactions between Nordea and the SPE are reported in the trading book. Nordea has been approved to calculate the general and specific market risk of these transactions under the VaR

model. The counterparty credit risk of credit derivative transactions is calculated in accordance with the current exposure method. More information on the different SPEs can be found below.

Table 7.1 Special purpose entities where Nordea is the sponsor, 31 December 2012

EURm		Duration	Accounting treatment	Book	Nordea's investment[1]	Total assets
Kalmar Structured Finance A/S	Credit-linked note	< 1 year	Consolidated	Trading	1	23
Viking ABCP Conduit	Receivables Securitisation	< 5 years	Consolidated	Banking	1,230	1,326
Total					**1,231**	**1,349**

1) Includes all assets towards SPEs (such as bonds, subordinated loans and drawn credit facilities)

7.2.1 *Entities issuing structured credit products*

Nordea gives investors an opportunity to invest in different types of structured credit products, such as structured Credit-Linked Notes (CLN) and Collateralised Mortgage Obligations (CMO).

Kalmar Structured Finance A/S (Kalmar) was established to allow customers to invest in structured products in the global credit markets. Nordea sells protection in the credit derivative market by entering into a portfolio CDO. At the same time, Nordea purchases protection under similar terms from Kalmar which issues CLNs to investors. In this process the investors end up bearing the credit risk of the underlying portfolio. In case of credit losses in the underlying portfolio the collateral given by the investors in connection with the CLN is reduced. The total notional outstanding CLNs in this category were EUR 23m (EUR 23m) at year-end 2012.

Nordea holds a small amount of CLNs issued by the SPE as part of offering a secondary market for the notes. Nordea includes the CLN holdings and derivative positions with the SPEs in the capital requirement calculations for its trading book. Nordea's risk is limited to the holding of CLNs issued by the SPE.

7.2.2 *Securitisations of customer assets*

The Viking ABCP Conduit (Viking) was established with the purpose of supporting trade receivable or accounts payable securitisations to core Nordic customers. The SPEs purchase trade receivables (the only asset class purchased) and fund the purchases either by issuing commercial paper via the established asset-backed commercial paper programme or by drawing on the liquidity facilities. Nordea has provided liquidity facilities of maximum EUR 1,691m at year end 2012 (EUR 1,443m) out of which EUR 1, 230m (EUR 1,092m) had been utilised. Nordea Bank Danmark has provided liquidity facilities of maximum EUR 593m at year end 2012 (EUR 287m) out of which EUR 488m (EUR 213m) were utilised.

Nordea's risks are limited to its holding of CPs issued by Viking and to the drawings under the liquidity facilities provided by Nordea to the SPEs. First loss protection is provided by the originators of the assets and/or from additional external credit enhancement such as the purchase of credit protection from a credit insurance policy, depending on the nature of the SPE and the quality of the purchased assets. When deciding if Nordea should arrange a new transaction, and in providing the liquidity facilities, Nordea uses the same approach as if it was to provide liquidity directly to the underlying customer.

There was no outstanding commercial paper issue at year end 2011 or 2012. The credit facility results in an RWA of EUR 614m (EUR 697m), which is included within the credit risk framework of Nordea's banking book.

7.3 Credit derivatives trading

Nordea acts as an intermediary in the credit derivatives market, especially in Nordic names. Nordea also uses credit derivatives to hedge positions in corporate bonds and synthetic CDOs.

When Nordea sells protection in a CDO transaction, it carries the risk of losses in the reference portfolio if a credit event occurs. When Nordea buys protection in a CDO transaction, any losses in the reference portfolio triggered by a credit event are then carried by the seller of protection.

Credit derivatives transactions create counterparty credit risk in similar manner to other derivative transactions. Counterparties in these transactions are typically subject to a financial collateral agreement, where the exposure is covered daily by collateral placements.
CDO valuations are subject to fair value adjustments for model risk. These fair value adjustments are recognised in the income statement. The credit derivative portfolio is part of Nordea Bank Finland.

8. Liquidity risk and funding

During 2012, Nordea Bank Danmark continued to benefit from its focus on prudent liquidity risk management, in terms of maintaining a diversified and strong funding base. Nordea had access to all relevant financial markets and was able to actively use all of its funding programmes.

8.1 Liquidity risk management

8.1.1 *Governance of liquidity risk*

Group Treasury is responsible for pursuing the Nordea's liquidity strategy, managing the liquidity in Nordea and for compliance with the group-wide limits set by the Board of Directors and the Risk Committee. Furthermore, Group Treasury develops the liquidity risk management frameworks, which consist of policies, instructions and guidelines for the Group as well as the principles for pricing liquidity risk.

8.1.2 *Management of liquidity risk*

Liquidity risk is the risk of being able to meet liquidity commitments only at increased cost or, ultimately, being unable to meet obligations as they fall due. Nordea's liquidity management and strategy is based on policy statements resulting in various liquidity risk measures, limits and organisational procedures.

Policy statements stipulate that Nordea's liquidity management reflects a conservative attitude towards liquidity risk. Nordea strives to diversify the Group's sources of funding and seeks to establish and maintain relationships with investors in order to ensure market access. A broad and diversified funding structure is reflected by the strong presence in the Group's four domestic markets in the form of a strong and stable retail customer base and the variety of funding programmes. Funding programmes are both short-term (US commercial paper, European commercial paper, commercial paper, Certificates of Deposits) and long-term (covered bonds, European medium-term notes, medium term notes) and cover a range of currencies.

Nordea's liquidity risk management includes stress testing and a business continuity plan for liquidity management. Stress testing is defined as the evaluation of potential effects on a bank's liquidity situation under a set of exceptional but plausible events. Stress testing framework includes also survival horizon metrics (see below), which represents a combined liquidity risk scenario (idiosyncratic and market-wide stress).

8.1.3 *Measurement of liquidity risk*

The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. In order to manage short-term funding positions, Nordea measures the funding gap risk, which expresses the expected maximum accumulated need for raising liquidity in the course of the next 30 days. Cash flows from both on-balance sheet and off-balance sheet items are included. Funding gap risk is measured and limited for each currency and as a total figure for all currencies combined. The total figure for all currencies combined is limited by the Board of Directors.

To ensure funding in situations where Nordea is in urgent need of cash and the normal funding sources do not suffice, Nordea holds a liquidity buffer. The buffer minimum level is set by the Board of Directors. The liquidity buffer consists of central bank eligible high-grade liquid securities held by Group Treasury that can be readily sold or used as collateral in funding operations.

During 2011, the Survival horizon metric was introduced. The metric is composed of a liquidity buffer and funding gap risk cash flows, and includes expected behavioural cash flows from contingent liquidity drivers. Survival horizon defines the short-term liquidity risk appetite of the Group and expresses the excess liquidity after a 30-day period without access to market funding. The Board of Directors has set a limit for minimum survival without access to market funding during 30 days.

The structural liquidity risk of Nordea is measured and limited by the Board of Directors through the net balance of stable funding (NBSF), which is defined as the difference between stable liabilities and stable assets. These liabilities primarily comprise retail deposits, bank deposits and bonds with a remaining term to maturity of more than 12 months, as well as shareholders' equity, while stable assets primarily comprise retail

loans, other loans with a remaining term to maturity longer than 12 months and committed facilities. The CEO in GEM has set as a target that the NBSF should be positive, which means that stable assets must be funded by stable liabilities.

8.2 Liquidity risk and funding analysis

The short-term liquidity risk remained at moderate levels throughout 2012. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 30 days, was EUR +1.1bn (EUR -1.0bn). Nordea Bank Danmark's liquidity buffer range was EUR 20.8 – 31.2bn (EUR 17.8 – 26.5bn) throughout 2012 with an average buffer size of EUR 24.1bn (EUR 21.4bn). Nordea Bank Danmark's liquidity buffer is highly liquid, consisting of only central bank eligible securities held by Group Treasury. Survival horizon was in the range EUR 11.3 – 24.8bn (EUR 11.3 – 25.5bn) throughout 2012 with an average of EUR 17.8bn. The aim of always maintaining a positive NBSF was comfortably achieved throughout 2012. The yearly average for the NBSF was EUR 13.3bn (EUR 4.1bn). The methodology for deriving NBSF was changed during 2012 and the figure for 2011 is not directly comparable as it has not been restated.

9. ICAAP and internal capital requirement

The recent financial turmoil has increased the focus on banks' internal capital evaluation processes and their capability to assess the solvency needed to cover losses and other cyclical effects. During 2012, financial supervisors and central banks performed several stress tests and capital reviews of Nordea Group and Nordea Bank Danmark. The results of these, together with the EBA capital review exercise confirm that Nordea is well capitalised. Note that this chapter does not present the individual solvency need for Nordea Bank Danmark and its legal entities. The individual solvency need is disclosed quarterly in a separate document and can be found at www.nordea.dk or on Nordea's Investor Relations webpage at www.nordea.com/IR.

9.1 ICAAP

The purpose of the Internal Capital Adequacy Assessment Process (ICAAP) is to review the management, mitigation and measurement of material risks within the business environment in order to assess the adequacy of capitalisation and to determine an internal capital requirement reflecting the risks of the institution.

The ICAAP is a continuous process which increases awareness of Nordea's capital requirements and exposure to material risks throughout the organisation, both in the business area and legal entity dimensions. Stress tests are important drivers of risk awareness, looking at capital and risk from a firm-wide perspective on a regular basis and on an ad hoc basis for specific areas or segments. The process includes a regular dialogue with Nordea's supervisors, rating agencies and other external stakeholders with respect to capital management, measurement and mitigation techniques used.

The capital ratios and capital forecasts for Nordea Bank Danmark and its legal entities are regularly monitored by Group Risk Management. The current capital situation and forecasts are reported to the Asset and Liability Committee (ALCO), Risk Committee, GEM and the Board of Directors. On an annual basis the capital requirements and adequacy are thoroughly reviewed and documented in Nordea Bank Danmark's ICAAP report, which ultimately is decided and signed off by the Nordea Bank Danmark's Board of Directors.

9.1.1 *Capital planning and capital policy*

The capital planning process is intended to ensure that the Nordea Group and its legal entities have sufficient capital to meet minimum regulatory requirements, support its credit rating, growth and strategic options. The process includes a forecast of the capital development (e.g. the Pillar I and Pillar II capital requirements), the available capital (e.g. core tier 1, tier 1 and tier 2 capital) as well as the impact of new regulations. The capital planning is based on key components of Nordea's rolling financial forecast, which includes lending volume growth by customer segment and country as well as forecasts of net profit including assumptions of future loan losses. The capital planning process also considers forecasts of the state of the economy to reflect the future impact of credit risk migration on the capital situation of Nordea Bank Danmark Group. An active capital planning process ensures that Nordea is prepared to make necessary capital arrangements regardless of the state of the economy and the introduction of new capital adequacy regulations.

The ALCO is responsible for evaluating and deciding on capitalisation and prepares proposals for decision by the CEO in GEM when needed.

9.1.2 *Conclusion of ICAAP and SREP*

Nordea's capital levels continue to be adequate to support the risks taken, both from an internal perspective as well as from the perspective of supervisors. Heading into 2013, Nordea Bank Danmark will continue to closely follow the development of the new capital requirement regime as well as maintain its open dialogue with the Danish FSA.

9.2 Internal capital requirements

Nordea Bank Danmark bases its internal capital requirements under the ICAAP on its internally identified risks, which consists of both Pillar I and Pillar II risks. In effect, the internal capital requirement is a combination of risks defined by the CRD and risks defined by quantitative models under Pillar II.

In addition to calculating risk capital for its various risk types, Nordea Bank Danmark conducts a comprehensive capital adequacy stress test to analyse the effects of a series of global and local shock scenarios. The results of the stress tests are considered in Nordea Bank Danmark's internal capital requirements as buffers for economic stress.

By considering the stress test results in the assessment of internal capital requirements, the pro-cyclical effects inherent in the risk-adjusted capital calculations of the economic capital and IRB approaches are addressed. Regulatory buffers are introduced with the implementation of CRD IV. This might lead to higher capitalisation requirements than what is determined in the internal capital requirement. Should the regulatory capital requirement come to exceed the internal capital requirement, additional capital will be held to meet regulatory requirements with a margin.

9.2.1 *Economic capital (EC)*

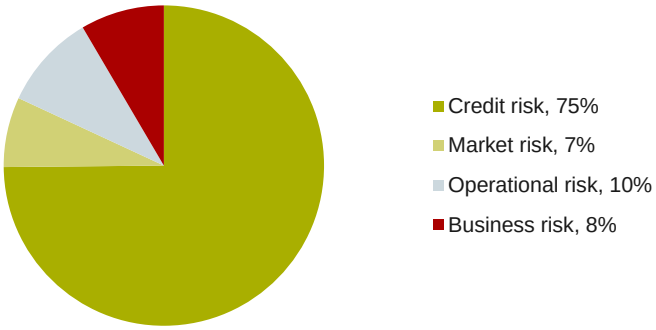
Since 2001, Nordea Bank Danmark's EC framework has included the following major risk types:

- Credit risk
- Market risk
- Operational risk
- Business risk

Pillar II closes the gap between regulatory capital and EC by improving the risk sensitivity of regulatory capital measurement, but still several differences remain, since EC covers both Pillar I and Pillar II risks and EC. EC will during 2013 be further aligned to core tier 1 capitalisation requirements anticipated in forthcoming regulation.

As of end 2012 the total EC for Nordea Bank Danmark equals EUR 3.4bn. Figure 9.1 shows the economic capital distributed by risk type.

Figure 9.1 EC distributed by risk type



9.2.2 *Stress tests and recapitalisation exercise*

During 2012, Nordea Bank Danmark performed internal stress tests in order to evaluate general effects of an economic downturn as well as effects for specifically identified segments or high risk areas. In addition to the internal stress tests, the Nordea Group and Nordea Bank Danmark were subject to stress tests and capital review exercises performed by financial supervisors and central banks. The Nordea Group participated in the continued recapitalisation exercise for European banks initiated by the EBA in their effort to strengthen the capitalisation of the European banks to core tier 1 capital levels above 9% by Q2 2012. The EBA recapitalisation exercise demonstrates that the Nordea Group is well capitalised. Nordea Bank Danmark's position as a strong and stable bank was also confirmed by stress tests performed by the Danish FSA during 2012.

As a part of the ICAAP and the capital planning process, firm-wide stress tests are used as an important risk management tool in order to determine how severe unexpected changes in the business and macro environment will affect the capital need. The stress test reveals how the capital need varies during a stress scenario, where the income statements, balance sheet, regulatory capital requirements, EC and capital ratios are impacted.

In addition to the firm-wide stress tests which cover all risks defined in the EC framework, Nordea Bank Danmark performs ad hoc stress test and sensitivity analysis of various risk parameters and risk factors on a need-by-need basis.

Nordea Bank Danmark has also carried out reverse stress tests of various recovery environments in relation to the development of the recovery and resolution plan.

In addition to performing stress tests and sensitivity analysis, Nordea Bank Danmark continuously refines its stress testing methodologies and practises. During 2012, a new loan loss model was incorporated into the stress testing framework. In the new loan loss model losses are calculated bottom-up, based on stressed rating migrations and collateral values. Stressed point in time PDs that are functions of the downturn scenario, are used in the calculation of loan losses. The loan loss calculation also covers idiosyncratic losses related to exposure to single customers and industries. The loan loss model covers both specific and collective provisions.

The stress test process is divided into the following three steps:

- Scenario development and translation
- Calculation
- Analysis and reporting

Each of these steps is described in further in the sections following.

9.2.2.1 Scenario development and translation

The annual ICAAP stress test is based on three-year macroeconomic scenarios for each Nordic and Baltic country and the scenarios are designed to replicate shocks that are particularly relevant for the existing portfolio. Stress scenarios are designed by experts within the Nordea Economic Research division. Nordea also uses its rolling financial forecast for complementary assumptions of the base case. The difference between the stressed scenarios and the base case scenario is used to determine the stress effect and the additional capital need.

While the annual stress test is based on comprehensive macroeconomic scenario which involves estimates of several macroeconomic factors, the ad hoc stress tests are based on direct estimates of risk parameter changes or based on a few macroeconomic variables. This enables senior management to easily define scenarios and evaluate the effect of them in capital planning.

After a scenario is developed, the effects on risk drivers are translated and the risk and financial parameters are simulated. Advanced models in combination with expert judgment from business areas are used in order to determine the effect of the scenario.

As an example, in the annual stress test, the scenario is translated into an impact on the parameters listed in Table 9.1.

9.2.2.2 Calculation

The stressed figures and parameters from the scenario are used to calculate the effects on the regulatory capital requirements, the EC and the financial statements. The regulatory capital is calculated for the credit risk, market risk and operational risk according to the CRD with regards to the IRB approaches used. The calculations for each risk type are aggregated into total capital requirement figures.

EC with the stressed parameters is calculated for credit risk, market risk, operational risk, business risk and life risk according to the EC framework. The calculation for each risk type is aggregated into total EC figures.

Stressed figures for loan losses, net profit and dividend from the stressed financial statements are used to calculate the effect on the capital base components. The capital base is set in relation to the regulatory capital

or EC in order to calculate the effect on capital ratios during a stress scenario. See Figure 9.2 for the calculation process used in the stress test framework.

9.2.2.3 Analysis and reporting

The first level of reporting in Nordea is the ALCO and the Risk Committee, which review the details of the stress tests and implications on future capital need. The results, showing the implications of the stress tests on the adequacy of existing capital are distributed to the executive management and the Board of Directors.

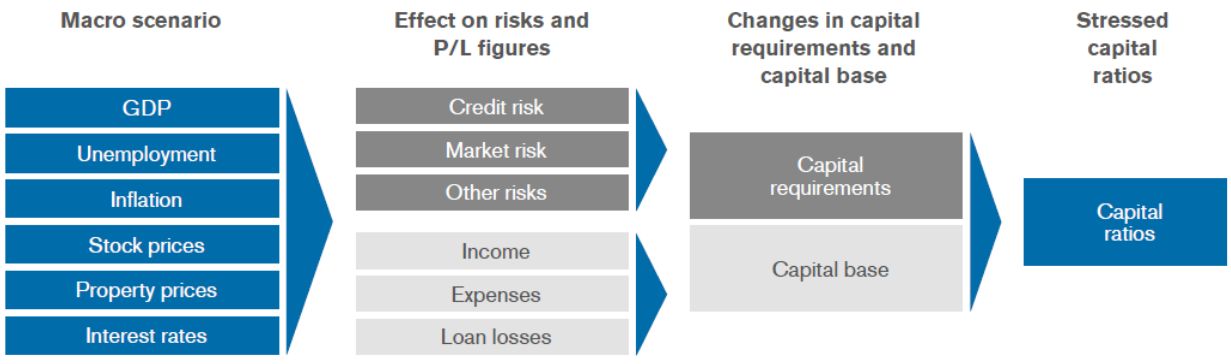
The results of the stress tests should support senior management's understanding of the implications of the current capital strategy given potential market shocks. Based on this information senior management is able to ensure that the Group holds enough capital against potential economic downturns and other stress events. Business area involvement in defining and assessing the stress tests is seen as important in order to increase the risk awareness throughout the organisation and the understanding of the relation between capital requirements and exposure to material risks.

The outcome of the stress tests demonstrates how Nordea Bank Danmark's loan loss and capital ratios will change during a stress scenario. The outcome is then analysed in order to decide the capital need during a downturn period and to ensure that Nordea Bank Danmark is well capitalised.

Table 9.1 Parameters in the annual stress test

Parameter	Impact
Volumes	Volumes in deposits and lending are adjusted according to the impact from each isolated parameter for all scenarios.
Margins	The margins are adjusted according to the development of the credit spread and the maturity of the portfolio.
Net interest income	Net interest income figures are adjusted according to the change in volume and margins in deposits and lending.
Net fee and commission income	Net fee and commission income is adjusted for changes in fees and commissions from activities in Asset Management.
Funding cost	Changes in funding costs deriving from liquidity risk is incorporated and increases the cost of long-term and short-term funding and reduces the net interest income.
Loan losses	Bottom-up model based on stressed credit ratings, stressed point-in-time PDs and stressed collateral values. The model covers both specific and collective provisions. An addition is made for idiosyncratic losses.
Exposures	Exposures are adjusted with the volume and growth expectations as well as the loan losses.
Rating migration	Each year a new rating distribution is created for each portfolio. This includes stress testing of the financial statements for the majority of corporate customers which results in a new rating according to the rating model.
Probability of default	The PD values are stressed in order to reflect increases in defaults, simulating the existing process for defining probability of default.
Collateral values	The collateral coverage is stressed by moving parts of the exposure from secured to unsecured, resulting in an increase in average weighted LGD.

Figure 9.2 Calculation process



10. Capital base

Nordea Bank Danmark's capital base improved during 2012 due to a significant increase in core tier 1 capital. Core tier 1 capital increased due to a right issue of EUR 500m and profit generation. In addition Nordea redeemed tier 2 capital of EUR 300m during the year.

10.1 Capital base definition

Capital for regulatory purposes, the capital base, is determined in accordance with the CRD and the Danish legislation and is based on equity as reported under applicable accounting standards in the balance sheet.

Only capital contributed by companies within the financial group and by the consolidated accounts can be included in the capital base. Items included in the capital base should without restrictions or time constraints be available for the institution to cover risk and absorb potential losses.

The size of the capital base must as a minimum correspond to the sum of the capital requirements for credit, market and operational risks, in accordance with the pillar I requirements.

The capital base (referred to as own funds in the CRD) is the sum of tier 1 capital (referred to as original own funds in the CRD) and tier 2 capital (referred to as additional own funds in the CRD) after deductions and excluding capital from entities not related to the financial group.

Tier 1 capital consists of both core tier 1 capital (paid-in shareholder capital and retained earnings) and undated subordinated debt . The tier 2 capital consists mostly of dated/undated subordinated loans. For the moment Nordea Bank Danmark has no undated subordinated tier 1 capital loans. A summary of items included in the capital base is available in Table 10.1.

To quantify the degree of capital coverage, different ratios based on different capital base items are used. These ratios include, but are not limited to:

- The core tier 1 capital ratio: calculated by dividing core tier 1 capital by RWA.
- The tier 1 capital ratio: calculated by dividing tier 1 capital by RWA.
- The capital ratio: calculated by dividing the capital base by RWA.

Below is a detailed description of the items included in the capital base.

10.2 Core tier 1 capital and tier 1 capital

Core tier 1 capital is defined as eligible capital including eligible reserves, net of regulatory required deductions done directly to the tier 1 capital. The capital recognised as core tier 1 capital holds the ultimate characteristics for loss absorbance defined from a "going concern" perspective and are the most subordinated claim in terms of liquidation. The tier 1 capital is defined as core tier 1 capital and capital of the same or close to the character of eligible capital and eligible reserves. The tier 1 capital can include a limited part of subordinated capital loans (up to 50% of tier 1 dependent on the specific terms of the instruments). Deductions mandatory for tier 1 capital will accordingly also be required as deduction in the defined core tier 1 capital.

10.2.1 *Eligible capital and eligible reserves*

Paid-up capital is equal to the share capital contributed by shareholders. Eligible reserves consist primarily of retained earnings, other reserves, minority interest and income from current year. Retained earnings are earnings from previous years reported via the income statement. Other reserves are related to revaluation and translation reserves referred to acquisitions and associated companies under the equity method. The equity interests of minority shareholdings in companies that are fully consolidated in the financial group are also included. Positive income from current year is included as eligiblecapital after verification by the external auditors, owever negative income must be included as a deduction. Repurchased own shares or own shares temporary included in trading portfolios are deducted from eligible reserves.

Table 10.1 Summary of items included in capital base, 31 December 2012

EURm	31 December 2012	31 December 2011
Tier 1 capital		
Paid-up capital	670	673
Share premium	0	0
Eligible capital	**670**	**673**
Reserves	4,089	3,284
Minority interests	170	170
Income from current year	203	298
Eligible reserves	**4,462**	**3,752**
Core tier 1 capital (before deductions)	**5,132**	**4,424**
Subordinated capital loans	**0**	**0**
Proposed/actual dividend	0	0
Deferred tax assets	-12	-16
Intangible assets	-392	-409
Deductions for investments in credit institutions	0	-8
IRB provisions shortfall (-)	-170	-48
Other items, net	0	0
Deductions	**-574**	**-481**
Tier 1 capital (net after deduction)	**4,558**	**3,493**
- of which subordinated capital	0	0
- of which core tier 1 capital (net of deductions)	**4,558**	**3,493**
Tier 2 capital		
Undated subordinated loans	0	0
Dated subordinated loans	2,425	2,725
Other additional own funds	3	3
Tier 2 capital (before deductions)	**2,428**	**2,728**
Deductions for investments in credit institutions	0	-8
IRB provisions shortfall (-)	-170	-48
Deductions	**-170**	**-57**
Tier 2 capital (net after deductions)	**2,258**	**2,671**
Capital base	**6,816**	**6,614**

10.2.2 *Tier 1 instruments subject to limits*

The requirement for including undated subordinated capital loans, undated subordinated loans, in tier 1 capital is restricted and repurchase can normally not take place until five years after original issuance. Undated subordinated loans may be repaid only upon decision by the Board of Directors in Nordea Bank Danmark and with the permission of the Danish FSA. Further, there are restrictions related to step-up conditions, order of priority andinterest payments under constraint conditions. Currently, the inclusion of undated subordinated capital as a component of tier 1 capital is limited by regulation to 50% net of relevant deductions.

Currently there are no subordinated capital loans issued by Nordea Bank Danmark or included in the capital base of Nordea Bank Danmark.

10.2.3 *Deductions from tier 1 capital*

10.2.3.1 Proposed/actual dividend

In relation to income for the period, the corresponding dividend should be deducted. The amount deducted from tier 1 capital is based on the dividend proposed by the Board of Directors of Nordea Bank Danmark to be decided at the annual general meeting of Nordea Bank Danmark's shareholders.

10.2.3.2 Deferred tax assets

In accordance with local legal requirements deferred tax assets have been deducted from tier 1 capital. The deducted amount is calculated based on accounting standards relevant for the individual companies included in the finacial group.

10.2.3.3 Goodwill and other intangible assets

The significant part of deducted intangible assets contains goodwill and other intangible assets related to IT software and development.

10.2.3.4 Deductions for investments in credit institutions and financial institutions

The institutions should in its capital base deduct for equity holdings and some other types of contributions to institutions that are not consolidated into the financial group (in Nordea foremost associated companies). By end 2012 no holdings had to be deducted..

10.2.3.5 IRB provisions shortfall

In accordance with Danish legislation, the differences between actual IRB provision (EUR 1.4bn) made for the related exposure and expected loss (EUR 1.8bn) are adjusted for in the capital base. The negative difference (when the expected loss amount is larger than the provision amount) is defined as a shortfall. According to the CRD, the shortfall is to be deducted equally from tier 1 capital and tier 2 capital. A positive difference (provisions exceeding expected loss) can be included in tier 2 capital subject to certain limitations

10.2.3.6 Other deductions

Other deductions contains of pension assets in excess of related liabilities. Surplus net value of pension plans for employees should under certain circumstances be deducted from the tier 1. At the end of 2012 the surplus values of the plans reached EUR 8 m.

10.3 Tier 2 capital

Tier 2 capital must be subordinated to depositors and general creditors of the bank. It cannot be secured or covered by a guarantee of the issuer or related entity or include any other arrangement that legally or economically enhances the seniority of the claim vis-à-vis depositors and other bank creditors.

10.3.1 *Tier 2 – Subordinated loans*

Tier 2 capital consists mainly of subordinated debt. Tier 2 capital includes two different types of subordinated loan capital; undated loans and dated loans. The total tier 2 amount may not exceed the tier 1 capital amount and dated tier 2 loans may not exceed half the amount of tier 1. The limits are set net of deductions.

The basic principle for subordinated debt in the capital base is the order of priority in case of a default or bankruptcy situation. Under such conditions, the holder of the subordinated loan would be repaid after other creditors, but before shareholders. The share of outstanding loan amount possible to include in the tier 2 capital related to dated loans is reduced if the remaining maturity is less than three If the remaining maturity is less than three years but two years or more 25% shall be deducted. If the remaining maturity is less than two years but one year or more 50% shall be deducted and the last year 75% has to be deducted.

During 2012, Nordea has not issued new loans and one loan has been called. Nordea thereby holds EUR 2,425 bn in dated subordinated loans.

10.3.2 *Other tier 2 capital*

Other additional funds contains revaluations appropriations according to Danish executive order on capital base §27 item 1 no 2. Deductions from tier 2 capital.

10.3.2.1 Deductions for investments in credit institutions and financial institutions

The institutions should in its capital base deduct for equity holdings and some other types of contributions to institutions that are not consolidated into the financial group (in Nordea foremost associated companies). The regulation stipulates 50% to be deducted from tier 1 capital and 50% to be deducted from tier 2 capital.

10.3.2.2 IRB provisions excess (+) / shortfall

The differences between EL and provisions made for the related exposure are adjusted for in the tier 2 capital. See section 11.2.4 for further explanation.

10.3.3 *Changes in Tier 2 capital 2012*

During the period, Nordea's tier 2 capital decreased EUR 300m due to a loan which has been called during 2012. The deduction from the shortfall increased during the period.

11. New regulations

The European Commission issued a proposal of the Capital Requirement Directive IV (CRD IV) and Capital Requirement Regulation (CRR) for the European financial market in July 2011. The Directive will be implemented through national law within all EU member states while the Regulation will become applicable in all EU countries directly through the European process. Discussions and negotiations have taken place between the European Commission, the European Council and the European Parliament during late autumn 2012 and the legislation is now expected to be finalised during 2013.

11.1 Forthcoming regulatory framework

The changes for financial institutions in the regulatory area related to capital and risk are extensive. In addition to the CRD IV/CRR, other closely related regulations are also emerging. These include a new framework for dealing with bank failure (crisis management) a proposal for a European single supervisory mechanism (banking union), a review regarding treatment of the trading book (Fundamental review of the Trading Book), a proposal regarding a structural reform primarily related to the trading book as well as changes to the accounting regulation that will have an effect on capital and risk. Furthermore, data and reporting requirements for banks is expected to increase substantially, not only due to new capital and liquidity regulations but also due to additional requirements for global systemically important banks (G-SIBs).

11.2 Basel III and the CRD IV/CRR

In December 2010, the Basel Committee issued detailed rules of new global regulatory standards on credit institutions capital adequacy, leverage and liquidity, collectively referred to as Basel III. These standards will be transposed to European legislation through the CRD IV/CRR.

CRD IV/CRR includes several key initiatives which change the current requirements that have been in effect since 2007. The regulation requires higher capitalisation levels and better quality capital, better risk coverage, the introduction of a leverage ratio as a backstop to the risk-based requirement, measures to promote the build-up of capital that can be drawn in periods of stress and the introduction of liquidity standards.

The EU Commission proposal was sent to the EU Parliament and the EU Council in July 2011 for further discussion. The proposal was under negotiation "trilogue" (the EU Council, the EU Parliament and the EU Commission) during 2012 and is now expected to be finalised during 2013.

The CRD IV/CRR will be implemented through a Directive and a Regulation. The Directive covers areas such as authorisation of banks, principles for prudential supervision including Pillar II rules, corporate governance, capital buffers and sanctions. The Regulation contains detailed requirements covering own funds, capital requirement for credit risk, market risk, operational risk, large exposures, liquidity, leverage ratio, and disclosure requirements. The CRR is intended to set a single rule book for all banks in the EU, avoiding diverging national rules.

The EBA which main objective is to play a leading role in the creation of the single rule book for the EU Banking system, will support the process by issuing binding technical standards for banks. More than 100 binding technical standards are expected due to CRD IV/CRR, of which a large amount of standards were issued for consultation already during 2012.

11.2.1 *Proposed capital regulation*

11.2.1.1 Capital base

The proposed capital regulation includes a revised definition of the capital base, with the purpose to give higher quality capital and hence better loss-absorbing capacity. The predominant form of tier 1 capital must be common shares and/or retained earnings. The requirements for inclusion of instruments in core tier 1 (referred to as Common Equity Tier 1 (CET1) in CRD IV/CRR) are stricter and the details will be supported by a technical standard from the EBA. The regulatory deductions should mainly be applied to the core tier 1

component of capital. Under the current framework important deductions have been applied to other parts of the capital base as well. According to the CRD IV/CRR these new changes should be gradually phased-in until 2018. However, the CRD IV/CRR proposal opens up for local regulators to phase in deductions faster. The required features of capital instruments to be eligible as additional tier 1 and tier 2 capital will also be stricter. For example, instruments with incentives to redeem (e.g. step-up clauses) will not be eligible. Instruments that do not contain the required features should be gradually phased-out until 2022. The regulation opens up for local regulators to phase out instruments that are not fully compliant faster.

11.2.1.2 Regulatory minimum capital requirements

CRD IV/CRR requires banks' to comply with the following minimum capital ratios:

- Core tier 1 capital ratio of 4.5%
- Tier 1 capital ratio of 6%
- Capital base ratio of 8.0%

The minimum core tier 1 capital ratio and the minimum tier 1 capital ratio should be gradually phased-in until 2015, but open up for faster implementation by national regulators.

11.2.1.3 Capital buffers

Apart from the changed composition of the capital base, a capital conservation buffer of 2.5% will be established above regulatory minimum requirements. Further, a countercyclical capital buffer is implemented as an extension of the capital conservation buffer, which will be developed by national jurisdictions when excess credit growth is judged to be associated with a build-up of system wide risk. In addition, the CRD IV/CRR allows for a systemic risk buffer to be added. The systemic risk buffer should be seen in conjunction with the other buffers and are to be covered by core tier 1 capital. A breaching of these buffer requirements will restrict banks' capital distribution, such as the payment of dividends.

The Basel Committee has proposed that G-SIBs should have an additional loss absorbency requirement ranging from 1.0% to 2.5% of RWA. According to the G-SIB framework in November 2012, Nordea would be subject to a 1% additional requirement. This additional requirement should also be met by core tier 1 capital.

11.2.2 ***Risk-weighted assets (RWA)***

RWA will mainly be affected by additional requirements related to counterparty credit risk and an introduction of an asset correlation factor for exposures towards financial institutions.

For banks calculating RWA according to the IRB approach, a floor was previously introduced, stipulating that the RWA should not be less than 80% of the Basel I calculated RWA. This floor was expected to end December 2012. Current proposal is a prolongation of the so called capital floors at least until 31 December 2014.

11.2.2.1 Counterparty credit risk

The largest change on the calculation of risk-weighted assets is the changes made to calculation of counterparty credit risk. The changes are mainly made in the introduction of a capital charge for credit valuation adjustment risk (CVA-risk) and a capital charge for exposures to central counterparties (CCP).

The CVA-risk mirrors that the value of a financial instrument may not be realised due to the default of the counterparty. The basis of the capital charge is to hold capital against potential mark-to-market losses associated with deterioration in the creditworthiness of a counterparty (which impacts CVA, a fair value component). The capital charge can be determined according to two methods: advanced or standardised. The advanced method should be implemented if the bank has both Internal Model Method (IMM) approval for counterparty credit risk and a specific interest rate VaR approval, hence Nordea is to use the advanced method for applicable portfolios.

Exposures to CCPs will be subject to a capital requirement. A CCP is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. The size of the requirement will depend on the type of exposure and whether the CCP is qualified or not.

11.2.2.2 Asset correlation factor

The CRD IV/CRR introduce an asset correlation factor of 1.25% when calculating RWA for exposures to large regulated financial entities that are subject to prudential supervision and whose assets are greater than or equal to EUR 70bn. Also unregulated financial entities with relevant activities are affected. The motivation for the introduction of an asset correlation factor is that the correlation for these customer segments is substantial.

11.2.3 *Leverage regulation*

The CRD IV/CRR introduces a non-risk based measure, the leverage ratio, in order to limit an excessive build-up of leverage on credit institutions' balance sheets and thus helps in containing the cyclicality of lending. The impact of the ratio will be monitored with an aim to migrating to a binding measure in 2018, based on appropriate review and calibration. The ratio will be calculated as tier 1 capital divided by the exposure (on-balance and off-balance sheet exposures, with adjustments for certain items such as derivatives).

11.2.4 *Liquidity regulations*

The objective of the liquidity reforms is to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill-over from the financial sector to the real economy. In CRD IV/CRR the proposal is to introduce two new quantitative liquidity standards; the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR). LCR aims to ensure that a bank maintains an adequate level of unencumbered, high quality assets that can be converted into cash to meet the bank's liquidity need for a 30-day time horizon under an acute liquidity stress scenario. NSFR establishes a minimum acceptable amount of stable funding based on the liquidity characteristics of an institution's assets and activities over a one-year horizon. Both LCR and NSFR will be subject to observation periods and will include a review clause to address any unintended consequences. After the observation period, LCR is expected to be phased-in from 2015 while NSFR might be introduced as a minimum standard by 2018.

11.2.5 *Reporting requirements*

The EBA has by mandate in the CRD IV/CRR developed draft Implementing Technical Standards related to supervisory reporting requirements. The harmonisation of reporting is part of the intention in building the single rule book in Europe, with the particular aim of specifying uniform formats, frequencies and dates of prudential reporting as well as IT solutions to be applied by credit institutions and investment firms in the EU. The requirements cover capital adequacy ("Corep"), Financial Reporting ("Finrep") and Liquidity. The new reporting requirements will require additional data gathering, extensive IT implementations and changes to reporting templates. The new Corep reporting will be mandatory when the CRD IV/CRR comes into force.

11.3 Crisis management and Recovery and Resolution

During 2011, the FSB published the consultative document of "Effective resolution of Systemically Important Financial Institutions" and "Key Attributes of Effective Resolution Regimes for Financial Institutions. The EU Commission published the consultative documents "Crisis Management Directive", which is planned to be adopted by 2014. On an overall level these regulations address how to maintain financial stability through reducing the systemic impact of failing financial institutions. A central political aim is to minimize the intrinsic public financial support to the banking system during large scale financial crises, while avoiding critical disruptions in the financial markets and infrastructures.

The Crisis Management Directive outlines the tools and powers available to the relevant authorities in the EU, which enable them to handle banks in crises. These span a wide range of measures to be used from the proactive phase of early intervention to the powers and tools necessary to take control of the company when entering into resolution, and for securing an orderly wind-down. The bail-in tool is part of the tools available to relevant authorities to support and facilitate the resolution process. Furthermore the Directive sets out the other rules supporting the crisis management framework, such as the approach towards recovery and resolution of cross-border banks, the formation of cross-border resolution/supervisory colleges, intragroup financial support and resolution funds.

11.3.1 *Recovery and Resolution Plan*

In November 2012, the FSB and Basel Committee identified 29 so called Global Systemically Important Banks (G-SIBs). Nordea was identified as the only G-SIB in the Nordic region.

G-SIBs are requested to submit recovery plans aiming at reducing the probability of default, while authorities are required to establish credible and operational resolution plans tailored to the institutions in their jurisdictions.

A recovery plan documents the ability of the institution to recover from a situation where its business model is so challenged by the economic environment that it is necessary to revise the strategy of the institution in order to avoid reaching a point of non-viability. Recovery plans and resolution plans for G-SIBs must be compiled by end of Q1 2013 at the latest.

Resolution plans are to be made by the authorities and the purpose is to document how the institution can be resolved in case the recovery plan does not prevent the institution from reaching the point of non-viability.

G-SIBs are required to maintain a G-SIB capital buffer (from 1% - 3.5%) which is applicable from 2016. The size of the buffer reflects the degree of systemic importance as determined by the FSB.

11.4 Banking union

In the early autumn of 2012, the Commission presented a proposal to move to a full banking union in the Eurozone. The proposal for a single supervisory mechanism for banks in the euro area should be seen as an important step in strengthening the Economic and Monetary Union (EMU). A banking union can be defined as a fully integrated bank regulatory and supervisory system within a federal structure. National supervisors will however continue to play an important role in preparing and implementing European Central Bank's (ECB) decisions. The EBA will continue to develop the single rule book applicable to all 27 member states.

For banks active in several countries, both inside and outside the EMU, existing home/host supervisor coordination procedures will continue to exist as they do today.

The proposal has not yet been approved within the trilogue and it is uncertain when and if it will come into play during 2013-2014.

11.5 Separation of trading activities

In February 2012, the EU Commission established a high-level expert group (HLEG) with the task to assess whether additional reforms on the structure of individual banks should be considered. The HLEG answer to the task was presented in a report in October 2012 with the suggestion to have a mandatory separation of proprietary trading and other so called high risk trading activities from the normal banking activities. The main purpose is to separate certain particularly risky parts of financial activities from deposit taking activities within a banking group. The underlying objective of the proposal is to make deposit taking banks safer and less connected to trading activitie4s. Risky financial activities are defined as proprietary trading and all securities or derivatives incurred in the process of market making as well as exposures towards hedge funds, private equity investments and so called structured investment vehicles. The report also includes proposals to enable separate recovery and resolution plans for the Trading Entity, requirements related to bail-inable instruments as well as a proposal for higher capital requirements for both trading and pure banking activities.

The HLEG proposal is still at an early stage and it is difficult to, at this stage, know if and how this suggestion will be enforced and how it would affect Nordea.

11.6 Other regulations

11.6.1 *Trading book review*

In May 2012, the Basel Committee published a consultative document on a fundamental review of the trading book. The aim is to strengthen the resilience to markets risks due to observed weaknesses during the crisis. The review is at an early stage and an analysis of its impact requires a range of assumptions. The review sets out a potential definition of the scope of the trading book and proposes either a trading evidence based

approach or a valuation-based approach. In addition, the proposal is to strengthen the relationship between the standardised and internal models-based approaches.

11.6.2 *Accounting standards*

There are other regulations under consideration and implementation, which require close monitoring and assessment of the impact. New accounting rules and proposal for a tax on financial transactions are two examples.

Nordea's accounting policies, which follow IFRS, are under significant change. Nordea's assessment is that the most important changes for Nordea are related to Financial Instruments (IFRS 9), Insurance Contracts (IFRS 4), Employee Benefits (IAS 19) and Leasing (IAS 17), although other changes might/will also significantly impact Nordea. IAS 19 has been finalised and is effective as of 1 January 2013 and the standard will have significant impact on own funds. The finalisation dates and effective dates for the other standards are still pending.

12. Appendix

12.1 General description of Pillar I, II and III

Capital adequacy is a measure of the financial strength of a bank, usually expressed as a ratio of capital to assets. There is now a worldwide capital adequacy standard (Basel II) drawn up by the Basel Committee on Banking Supervision (BCBS). Within the EU, the capital adequacy requirements are outlined in the CRD.

The CRD contains a detailed set of minimum requirements to assure the conceptual soundness and integrity of the internal assessment. Over the years, amendments have been made to the first version of the CRD regulation. CRD II was implemented at the end of 2010 and strengthened the large exposure regime, increased the quality of the capital base and added stricter securitisation regulation. CRD III, which has been valid since 31 December 2011 includes capital requirements for re-securitisation, disclosure of securitisation positions, capital requirements for trading book positions and remuneration policies (from 1 January 2011). The transition rule, stipulating that the capital requirement is not allowed to be below 80% of the capital requirement calculated under Basel I regulation, has been prolonged to apply at least until December 2014.

The regulatory capital requirements are calculated using the following formula:

Minimum capital requirements = Capital base/RWA
where
Minimum capital requirements ≥ 8%

The Basel II framework is built on three Pillars:

- Pillar I – requirements for the calculation of RWA and capital requirements
- Pillar II – rules for the Supervisory Review Process (SRP), including the ICAAP
- Pillar III – rules for the disclosure on risk and capital management, including capital adequacy

12.1.1 *Pillar I*

Pillar I relates to the estimation, management and reporting of minimum capital requirements for credit risk, market risk, and operational risk.
Banks can apply more or less sophisticated methods to calculate their RWA. More risk-sensitive models to estimate credit risk, market risk or operational risk require approval from the supervisory authorities.

There are three approaches for calculating capital requirements for credit risk in the CRD:

1. The standardised approach (SA), where calculation of credit risk is close to Basel I regulation, except an additional possibility to use external ratings for counterparties and a wider use of financial collateral. RWA is calculated by multiplying the exposure with a fixed risk weight factor, defined by the regulators, dependent on the external rating and exposure class.
2. The Foundation IRB (FIRB) approach, where the calculation for credit risk is based on the internal rating and (PD) for each counterpart and fixed (supervisory) estimates for LGD, CCF and maturity.
3. The Advanced IRB (AIRB) approach, where calculations are based on internal estimates for PD, LGD, CCF and maturity.

Pillar I also encompasses the design, implementation, validation, oversight and performance of the credit risk classification systems.

12.1.2 *Pillar II*

Pillar II or the Supervisory Review Process (SRP), comprises of two processes:

- the Internal Capital Adequacy Assessment Process (ICAAP)and
- the Supervisory Review and Evaluation Process (SREP)

The SRP is designed to ensure that institutions identify their material risk and allocate adequate capital, and employ sufficient management processes, to support such risk. The SRP also encourages institutions to

develop and employ better risk management techniques in monitoring and measuring risk in addition to the credit risk, market risk and operational risk in the CRD. The ICAAP allows banks to review their risk management policies and capital positions relative to the risk they undertake. In ICAAP, the institution ensures that it has sufficient available capital to meet regulatory and internal capital requirements, even during periods of economic or financial stress. The ICAAP covers all components of risk management, from daily risk management of material risk to the more strategic capital management of the entire Group and its legal entities. The SREP constitutes the supervisor's review of the institution's capital management and the assessment of the institution's internal controls and governance.

Other risk types, which are not covered by the minimum capital requirements according to Pillar I, are typically liquidity risk, business risk, interest rate risk in the banking book and concentration risk. These are covered either by capital or risk management and mitigation processes under Pillar II. For further information on Pillar II, please see chapter 10.

12.1.3 *Pillar III*

The CRD also stipulates how and when institutions should make disclosures on capital and risk management. The disclosure should follow the requirements according to Pillar III. The main requirements are:

- Description of the Group structure and overall risk and capital management
- Regulatory capital requirements and the capital base
- Credit risk, including RWA calculations and loan losses
- Market risk
- Operational risk
- Liquidity risk
- Remuneration policy

12.2 IRB approach

Nordea is approved to use the IRB approach for the exposure classes institution, corporate, retail and other non-credit obligation assets. For the remaining exposure classes, Nordea used the standardised approach in 2012. Following is a description of what exposures are included in the different exposure classes.

12.2.1 *IRB exposure classes*

12.2.1.1 Institution exposure

Exposure to credit institutions and investment firms is classified as exposure to institutions. In addition, exposure to regional governments, local authorities and multilateral development banks is classified as exposure to institutions unless it is treated as exposure to sovereigns[1] according to regulations issued by the authorities.

12.2.1.2 Corporate exposure

Exposure that does not fall into any of the other exposure classes is classified as corporate exposure. The corporate exposure class contains exposure that is rated in accordance to Nordea's internal rating guidelines.

12.2.1.3 Retail exposure

Exposure to SMEs (with an exposure of less than EUR 250k[2]) and to private individuals are included in the retail exposure class and defined in accordance to Nordea's internal guidelines for scoring.

12.2.1.4 Other non-credit obligation assets

Assets that do not require any performance from any counterparty are classified as non-credit obligation assets.

1) Sovereigns include central governments, central banks, regional governments, local authorities and other public sector entities.

2) EUR 100k in Baltic countries, Poland and Russia

12.2.2 *Calculation of RWA in IRB approach*

The calculation of EAD in Nordea differs between approaches but is also depending on the exposure classes within the IRB approach.

The FIRB approach is used for calculating the minimum capital requirements for exposure to institutions and corporate customers. Input parameters are Nordea's internal estimate of PD while LGD, EAD and maturity are set by the supervisory authorities.

Internal estimates of PD, LGD and EAD are used in the retails IRB approach). The retail IRB risk parameters differ from the Advanced IRB risk parameters in two respects; first, the asset correlation assumptions are different, second, the retail IRB risk weight functions do not include maturity adjustments.

12.2.2.1 Exposure at default (EAD)

The EAD is an estimate of the total exposure to the customer at the time of default. For on-balance sheet items, EAD is normally the same as the booked value, such as the market value or utilisation. For off-balance exposures, a CCF is multiplied with the amount to estimate how much of the exposure will be drawn at default.

12.2.2.2 Probability of default (PD)

PD means the likelihood of default of a counterpart. The PD represents the long-term average of yearly default rates. The internal credit risk classification models (rating models for corporate customers and institutions and scoring models for retail customers) provide an estimate of the repayment capacity of the counterpart. The internal risk classification scale consists of 18 grades for non-defaulted customers and three grades for defaulted customers. All customers with the same risk classification are expected to have the same repayment capacity; independent of the customers' industry, size, etc.

12.2.2.3 Loss given default (LGD)

The LGD measures the economic loss that can be expected if a customer defaults. The regulatory capital requirements are dependent on LGD.

For the FIRB institution and corporate exposure classes, the LGD values are fixed by the supervisory authorities. The LGD value in the retail IRB approach is based on internal estimates. Nordea uses LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. The LGD pools are based on collateral types, country and customer type. The LGD value in the AIRB approach is calculated using similar internal calculations as for the retail IRB portfolio.

12.2.2.4 Credit risk mitigation

RWA and exposure are reduced by the recognition of credit risk mitigation techniques. Only certain types of collateral and some issuers of guarantees are eligible to reduce the capital requirement. Furthermore the collateral management process and the terms in the collateral agreements have to fulfil the minimum requirements (such as procedures for monitoring of market values, insurance and legal certainty) in the capital adequacy regulations. Collateral items and guarantees which can reduce the capital requirement are defined as eligible collateral.

Nordea uses a wide variety of risk mitigation techniques in different markets which contribute to risk diversification and credit protection.

12.2.2.5 Maturity

For exposure calculated under the FIRB approach, maturity is set to standard values in the RWA calculation formula based on the estimates set by the financial supervisory authorities. The maturity parameter used is set to 2.5 years for the exposure types on-balance sheet items, off-balance sheet items and derivatives. For securities financing the maturity parameter is 0.5 years.

12.3 Standardised approach

12.3.1 *Standardised exposure classes*

12.3.1.1 Central governments and central banks

Exposure to central governments and central banks is treated as low risk if the counterparty is within European Economic Area and has a high rating.

12.3.1.2 Regional governments and local authorities

Exposure to regional governments and local authorities is treated as exposure to the central government in whose jurisdiction they are established, with the exception of Norway, where a risk weight of 20% is applied.

12.3.1.3 Institution exposure

Exposure to institutions is assigned a risk weight based on an eligible rating agency rating of the institution. In Poland, Luxembourg and Russia, the risk weight of the exposure is determined according to the external rating of the institution. Specific rules also determine how to treat an exposure where no rating by an eligible rating agency exists. Risk weights can differ from 0% to 150% for this exposure.

12.3.1.4 Corporate exposure

Exposure to corporates rated by an eligible rating agency is assigned a risk weight between 20% and 150%. Exposure without rating agency rating is assigned a risk weight of 100%.

12.3.1.5 Retail exposure

Retail exposure is assigned a risk weight of 75%.

12.3.1.6 Exposure secured by real estate

Exposure secured by mortgages on residential real estate is assigned a risk weight of 35%. The risk weight is only reduced for the part of the exposure that is fully secured. Exposure that is secured by commercial real estate is subject to national discretions and the regulations differ between the Nordic countries.

12.3.1.7 Other

Additional exposure classes exist within the standardised approach, such as:

- Exposure to administrative bodies and non-commercial undertakings
- Exposure to multilateral development banks
- Exposure to named international organisations
- Past due items
- Short-term claims.

12.3.2 *Calculation of RWA in the standardised approach*

The standardised approach remains in use for portfolios in Poland, Luxemburg and Russia and the retail exposure in the finance companies as well as exposure towards sovereigns and equity exposure. The SA approach is the least sophisticated of the capital calculation approaches. The risk weights in the standardised approach are set by the supervisory authorities and are based on the external rating and the exposure class. Some exposure classes are derived from the type of counterparty while others are based on asset type, product type, collateral type or exposure size.

The EAD of an on-balance sheet exposure in the standardised approach is measured net of value adjustments such as provisions. Off-balance sheet exposure is converted into EAD using a CCF set by the financial supervisory authorities. Derivative contracts and securities financing have an EAD that is the same amount as the exposure.

List of abbreviations

ADF	Actual Default Frequency
ALCO	Asset and Liability Committee
ALM	Asset and Liability Management
BCBS	Basel Committee on Banking Supervision
BRC	Board Risk Committee
CAE	Chief Audit Executive
CCF	Credit Conversion Factor
CCO	Chief Credit Officer
CCP	Central Counterparties
CCR	Counterparty credit risk
CEM	Current Exposure Method
CDO	Collateralised Debt Obligation
CDS	Credit Default Swap
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CLN	Credit-Linked Notes
CLS	Continuous Linked Settlement
CP	Commercial Paper
CRD	EU's Capital Requirements Directive
CRM	Comprehensive Risk Measure
CRMVC	Credit Risk Model Validation Committee
CRO	Chief Risk Officer
CVA	Credit Value Adjustment
D-SIBs	Domestic Systemically Important Banks
EAD	Exposure at Default
EBA	European Banking Authority
EC	Economic capital
ECC	Executive Credit Committee
EL	Expected Loss
EP	Economic profit
ERAT	Environmental Risk Assessment Tool
EU	European Union
EV	Economic value
FIRB	Foundation Internal Rating Based approach
FRA	Forward rate agreement
FSA	Financial Supervisory Authority
FSB	Financial Stability Board
G-SIBs	Global systemically important banks
GCCR	Group Credit Committee Retail Banking
GCCW	Group Credit Committee Wholesale Banking
GEM	Group Executive Management
GEM CC	Group Executive Management Credit Committee
GICS	Global Industries Classification Standard
GVC	Group Valuation Committee
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standard
IMM	Internal Model Method
IRB	Internal Rating Based approach
IRM	Incremental Risk Measure
KYC	Know Your Customer
LCR	Liquidity Coverage Ratio
LGD	Loss given default
LTV	Loan-to-value
MCEV	Market-Consistent Embedded Value
NBSF	Net Balance of Stable Funding
NLP	Nordea Life & Pensions
NSFR	Net Stable Funding Ratio
ORSA	Own Risk and Solvency Assessment
OTC	Over-the-counter
ORX	Operational Riskdata eXchange Association
P/L	Profit and Loss
PD	Probability of default
PIT	Point-in-time
QIS	Quantitative Impact Study
QRA	Quality and Risk Analysis
RCSA	Risk and Control Self-Assessment
RWA	Risk-weighted assets
S&P	Standard & Poor's
SIBs	Systemically important banks
SIIR	Structural Interest Income Risk
SME	Small and medium-sized enterprises
SPE	Special Purpose Entity
SPRAT	Social and Political Risk Assessment Tool
SREP	Supervisory Review and Evaluation Process
SRP	Supervisory Review Process
TTC	Through-the-cycle
VaR	Value-at-Risk