



Capital adequacy and  
risk management report (pillar 3)  
Nordea Bank Norge Group 2008

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# 1. Introduction

This is Nordea Bank Norge Group's second report on Capital adequacy and Risk management in accordance with the legal disclosure requirements in EU's Capital Requirements Directive (CRD). The report presents the capital position and how the size and composition of the capital base is related to the risks as measured in risk-weighted amounts (RWA).

In the beginning of 2007, the new Capital Requirements Directive (CRD) came into effect as the common framework for implementing the Basel II framework in EU. The CRD is built on three pillars:

- Pillar 1 – requirements for the calculation of the Risk Weighted Amounts (RWA) and capital requirement
- Pillar 2 – rules for the Supervisory Review Process (SRP), including the Internal Capital Adequacy Assessment Process (ICAAP)
- Pillar 3 – rules for the disclosure of risk and capital management, including capital adequacy

Basel II is an international initiative with the purpose to implement a more risk sensitive framework for the assessment of risk for the calculation of regulatory capital, i.e. the minimum capital that the institution must hold. The intention is also to align the actual assessment of risk within the institutions with the assessment of the regulatory capital by allowing use of internal models. The CRD contains a detailed set of minimum requirements to assure the conceptual soundness and integrity of the internal assessment. The CRD will have a stepwise effect on the institutions through the transitional rules limiting the possible reduction of capital requirement. The full effect will occur after the transition rules period (January 2010). A general description of the 3 pillars is available in appendix 12.1.

## 1.1 Pillar 3

Pillar 3 sets the rules for the disclosure of capital and risk management. The Nordea Bank Norge Group follows the Norwegian Financial Supervisory Authority's regulations on Capital Adequacy and the guidance Rundskriv 27/2007 on disclosure of financial information according to the regulations on capital adequacy, which are based on the CRD. Furthermore, the disclosures are made in accordance with Nordea's internal policy and instructions for disclosing information on capital adequacy in the Nordea Group.

In this report, Nordea discloses a description of the different risk types in its balance sheet as well as off balance sheet risk and the management of the risk and capital in accordance with the pillar 3 rules. The presentation follows the structure below:

- Highlights of 2008
- Description of the Group structure and overall risk and capital management
- Credit risk, including description of credit process, exposure, RWA and RWA calculations and loan losses
- Market risk, including market risk for the Group as well as market risk for the trading book
- Operational risk
- Off balance, including risk in derivatives
- Liquidity risk and Structural Interest Income Risk (SIIR)
- Internal Capital Adequacy Assessment Process (ICAAP)
- Capital base components

- Capital adequacy conclusions

Further details and disclosure of risk, liquidity and capital management are presented in the annual report in accordance with the international financial reporting standards, IFRS.

The pillar 3 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. This report for the Nordea Bank Norge Group is presented on [www.nordea.com](http://www.nordea.com) and the key data on capital adequacy is presented in the annual report of the entity.

The full pillar 3 disclosure will be made annually and the periodic information will be 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 the local legislation, a common setup in Nordea Group. Group Corporate Centre has stated the common principles in a policy and instructions for disclosing information on capital adequacy in the Nordea Group.

In this report, Nordea Bank Norge Group is defined as Nordea.

## 2. Highlights of 2008

2008 has been a challenging and extreme year in the global financial market. The financial turmoil continued throughout the year and deepened in the fall due to failures of some of the largest investment banks in the world. Uncertainty and risks have increased significantly both in the financial markets and about the macroeconomic development.

During 2008, stability programmes have been launched by the governments in the Nordic region with the purpose to ensure liquidity and improve the overall stability of the financial system. For further details about the stability plan in Norway, see section 12.2 in the appendix.

During the turbulent 2008 risk management strategies and models have been tested under very severe and challenging market conditions. It is therefore satisfying that Nordea despite challenging market conditions is reporting a solid result, including only minor negative effects from the turmoil in financial markets. Nordea's well segmented culture of cost, risk and capital management has proved to be working well. Active risk management and control measures have been taken during the year to ensure a well balanced risk taking. During the year specifically activities have been enforced to control liquidity, credit and costs as well as increased internal focus on the RWA at all levels in the organisation.

The process for capital management is well established and the ICAAP was done for the second time and sent to the Nordic financial supervisory authorities in June 2008.

Nordea continues to roll out the Internal Rating Based approach (IRB) for its credit portfolios under the CRD (the new Basel II regime). In December 2008, the IRB approval was received for the retail portfolio, with start from 31 of December 2008.

The overall purpose of the capital policy is to maintain capital at levels that are adequate from the perspective of regulators, funding, rating agencies and to optimise shareholder value in light of the external requirements. The capital policy and the capital targets have recently been revised. The revised capital policy for Nordea Group states that over a business cycle, the target for the tier 1 ratio is 9% and the target for the capital ratio is 11.5%. The Board of Directors of Nordea Group has resolved to increase Nordea Group's share capital through an underwritten discounted issue of new ordinary shares with pre-emptive rights for existing shareholders of approx. EUR 2.5bn net and secondly by proposing to reduce the dividend payment to 19% of the net profit for 2008, to be decided by the 2009 Annual General Meeting, which will increase core tier 1 capital by approx. EUR 0.5bn. The rights offering is subject to shareholder approval at an Extraordinary General Meeting to be held on 12 March 2009.

### 3. Risk and capital management

In this chapter, the consolidation principles for the capital base within Nordea are described as well as the principles for management and control of risk and capital.

#### 3.1 Nordea in the capital adequacy context

The financial statements are published quarterly and the consolidated financial statements include the accounts of the parent company Nordea Bank Norge ASA, with corporate registration number 911044110, and subsidiaries according to IAS 27. According to the requirements in the CRD, insurance companies and associated undertakings with financial operations are 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). However, due to requirements under Forskrift nr 121 om anvendelse av soliditetsregler på konsolidert basis m.v. datert 31.01. 2007, holdings in Eksportfinans ASA (Nordea holds 23.2% of voting power) are included in RWA and capital base with a proportional part. This is valid only in Nordea Bank Norge and is not included in the capital requirements of Nordea Group. Table 1 includes information of what undertakings that have been consolidated and deducted from the capital base.

Table 1  
Specification over group undertakings consolidated/deducted from the Nordea Norge, 31 December 2008

	Number of shares	Book value EURm	Voting power of holding %	Domicile	Consolidation method
<i>Group undertakings included in the Nordea Bank Norge Group</i>					
Norgeskreditt AS	15,336,269	206	100.0	Oslo	purchase method
Nordea Finans Norge AS	63,000	13	100.0	Oslo	purchase method
Christiania Forsikring AS	172,560	2	100.0	Oslo	purchase method
Privatmegleren AS	1,092,569	6	67.0	Oslo	purchase method
Other companies		0			purchase method
<b>Total included in Nordea Bank Norge Group</b>		<b>227</b>			
<i>Investments in credit institutions deducted from the capital base</i>					
Other		0			
<b>Total investments in credit institutions deducted from the capital base</b>		<b>0</b>			

#### 3.2 Risk, liquidity and capital management

Risk, liquidity and capital management are key success factors in the financial services industry. Exposure to risk is inherent in providing financial services, and Nordea assumes a variety of risks in its ordinary business activities, the most significant being credit risk related to loans and receivables.

Maintaining risk awareness in the organisation is a key component of Nordea's business strategies.

Nordea has clearly defined risk, liquidity and capital management frameworks, including policies and instructions for different risk types and for the capital structure.

##### 3.2.1 Management principles and control

###### *Board of Directors*

The Board of Directors of Nordea Group has ultimate responsibility for limiting and monitoring the Group's risk exposure.

The Board of Directors also has ultimate responsibility for setting the targets for the capital ratios. Risk in Nordea is measured and reported according to common principles and

policies approved by the Board of Directors. The Board of Directors decides on policies for credit, market, liquidity, operational risk management and the internal capital adequacy assessment process. 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 customer areas in Nordea. Authorisations may also vary depending on the internal rating of customers.

The Board of Directors also decides on the limits for market and liquidity risk in the Group.

#### *Board Credit Committee*

The Board Credit Committee monitors the development of the credit portfolio on the whole as well as with respect to industry and major customer exposures. The Board Credit Committee confirms industry policies approved by the Executive Credit Committee (ECC).

#### *CEO and GEM*

The Chief Executive Officer (CEO) has overall responsibility for developing and maintaining effective principles for risk, liquidity and capital management as well as internal principles and control in Nordea.

The Group CEO in Group Executive Management (GEM) decides on the targets for the Group's risk management regarding Structural Interest Income Risk (SIIR) and, in accordance with the scope of resolutions adopted by the Board of Directors, allocates the market and liquidity risk limits to risk taking units such as Group Treasury and Markets. The setting of limits is guided by Nordea's business strategies, which 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 CEO and GEM regularly review reports on risk exposures and have established the following 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, financial risks and capital management for decision by the CEO in GEM.
- Capital Planning Forum, chaired by the CFO, monitors the development of internal and regulatory capital requirements, the capital base, and decides also upon capital planning activities within the Group.
- The Risk Committee, chaired by the Chief Risk Officer (CRO), monitors developments of risks on an aggregated level.
- The Executive Credit Committee (ECC) and Group Credit Committee (GCC), chaired by the CRO, 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, where deemed necessary, to issue supplementary guidelines and limits.

### *CRO and CFO*

Within the Group, two units, Group Credit and Risk Control and Group Corporate Centre, are responsible for risk, capital, liquidity and balance sheet management.

Group Credit and Risk Control is responsible for the risk management framework, consisting of policies, instructions and guidelines for the whole Group. Group Corporate Centre is responsible for the capital management framework including required capital as well as the capital base. Group Treasury, within Group Corporate Centre, is responsible for SIIR and liquidity risk.

The CRO is head of Group Credit and Risk Control and the CFO is head of Group Corporate Centre.

The CRO is responsible for the Group's credit, market and operational risk. This includes the development, validation and monitoring of the rating and scoring systems, as well as credit policy and strategy, credit instructions, guidelines to the credit instructions as well as the credit decision process and the credit control process.

The CFO is responsible for the capital planning process, which includes capital adequacy reporting, economic capital and parameter estimation used for the calculation of risk-weighted amounts and for liquidity and balance sheet management.

Each customer area and product area is primarily responsible for managing the risks arising from its operations.

This responsibility entails identification, control and reporting, while Group Credit and Risk Control consolidates and monitors the risks on Group level and relevant sub levels.

### **3.2.2 Different risk types**

There are different risk types which are described more in detail below in accordance with how they are structured within CRD.

#### *Risk in pillar 1*

In pillar 1, which forms the base for the capital requirement, there are three risk types: credit, market and operational risk.

- Credit risk is the risk of loss if counterparts of Nordea fail to fulfil their agreed obligations and that the pledged collateral does not cover Nordea's claims. The credit risk in Nordea 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 Nordea's counterpart in a foreign exchange, 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; 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 in Nordea relates primarily to interest rates and equity prices and to a lesser degree to foreign exchange rates and commodity prices. For all other activities, the basic principle is that market risk is eliminated by matching assets, liabilities and off balance sheet items.
- 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 sys-



tems, 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.

### *Risk in pillar 2*

In pillar 2 other risk types 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 EC most of the pillar 2 risk is included as well as risk in the life insurance operations. Examples of pillar 2 risk types are liquidity risk, business risk, interest rate risk in the non-trading book and concentration 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. The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. The liquidity risk management includes a business continuity plan and stress testing for liquidity management. In order to measure the exposure, a number of liquidity risk measures have been developed.
- Business risk represents 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 EC framework is calculated based on the observed volatility in historical profit and loss that is attributed to business risk.
- Interest rate risk in the non-trading book consists of exposures deriving from the balance sheet (mainly lending to public and deposits from public) and from hedging the equity capital of the Group. The interest rate risk inherent in the non-trading book is measured in several ways on a daily basis and in accordance with the financial supervisory authorities' requirements.
- The market risk in investment portfolios includes equity, interest rate, private equity, hedge fund and FX risk and is included as market risk in the EC framework.
- Pension risk is included in market risk EC and includes equity, interest rate and FX risk in Nordea sponsored defined pension plans.
- Real estate risk consists of exposure to owned and leased properties and is included in the market risk EC.
- 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 is measured by comparing the output from a credit risk portfolio model with the risk weight functions used in calculating RWA. The concentration risk is included in the EC framework.

### **3.2.3 *Monitoring and reporting***

The control environment in Nordea is based on the principles of separation of duties and strict independence of organisational units. Monitoring and reporting of risk is conducted on a daily basis for market and liquidity risk, on a monthly and quarterly basis for credit risk and on a quarterly basis for operational risk.

Risk reporting is regularly made to Group Executive Management and to the Board of Directors. The Board of Directors in each legal entity reviews internal risk reporting covering market, credit and liquidity risk per legal entity. Within the credit risk reporting, different portfolio analyses such as credit migration, current probability of default and stress testing are included.

The internal capital reporting includes all types of risks and is reported regularly to the Risk Committee, ALCO, Capital Planning Forum, Group Executive Management and Board of Directors.

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

## 4. Credit risk

Credit risk is the largest risk comprising approximately 93% of the total RWA. The information in this chapter is disclosed in several dimensions aiming to give an in depth view of the distribution of the credit portfolio in different exposure classes, geography, industries, risk weights etc.

In appendix 12.3 the definition of exposure classes and calculation principles of credit risk RWA in pillar 1 can be found.

### 4.1 Credit process

#### 4.1.1 Roles and responsibilities in credit risk management

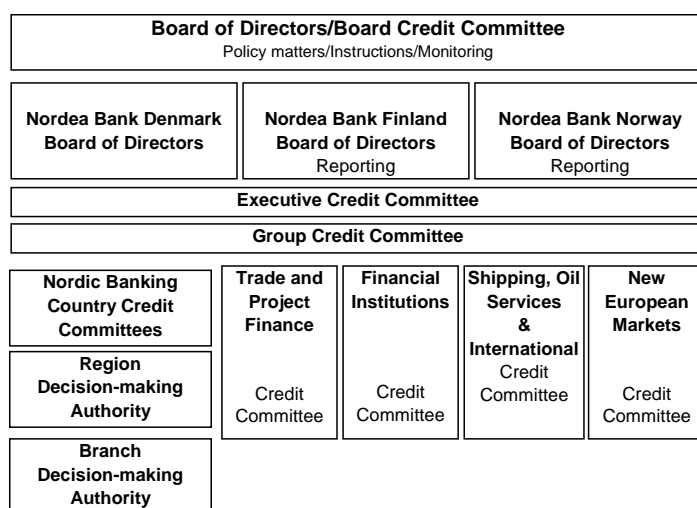
Group Credit and Risk Control is responsible for the credit risk management framework, consisting of policies, instructions and guidelines for the Group.

Each customer area and product area is primarily responsible for managing the credit risks in its operations, while Group Credit and Risk Control consolidates and monitors the credit risks on both Group and sub levels.

Within the powers-to-act granted by the Board of Directors, credit risk limits are approved by decision-making authorities on different levels in the organisation (see figure 1).

The responsibility for a credit exposure lies with a customer responsible unit. Customers are assigned a rating or score in accordance with the Nordea framework for quantification of credit risk.

Figure 1: Credit decision-making structure



#### 4.1.2 Credit risk identification

Credit risk is defined as the risk of loss if counterparts of Nordea fail to fulfil their agreed obligations and that the pledged collateral does not cover Nordea's claims.

The credit risks in Nordea stem mainly from various forms of lending to the public (corporate and household customers), but also from guarantees and documentary credits, such

as letters of credit. NBN does not have documentary credits in its own books, but sell these products on behalf of Nordea Bank Finland Plc.

The credit risk from guarantees and documentary credits arises from the potential claims on customers, for which Nordea has issued guarantees or documentary credits.

Credit risk may also include counterparty risk, transfer risk and settlement risk. Counterparty risk is the risk that Nordea's counterpart in an FX, interest rate, commodity, equity or credit derivatives contract defaults prior to maturity of the contract and that Nordea at that time 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. Transfer risk is a credit risk attributable to the transfer of money from another country where a borrower is domiciled, and is affected by changes in the economic and political situation of the countries concerned.

Risks in specific industries are followed by industry monitoring groups and managed through industry policies, which establish requirements and limits on the overall industry exposure. Corporate customers' environmental risks are also taken into account in the overall risk assessment through the so-called Environmental Risk Assessment Tool. This tool is currently being extended to also include assessment of social and political risk.

For larger project finance transactions, Nordea has adopted the Equator Principles, which is 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 (IFC).

#### ***4.1.3 Decisions and monitoring of credit risk***

The decisions regarding credit risk limits for customers and customer groups are made by the relevant credit decision authorities on different levels within the Group (see figure above).

The responsibility for credit risk lies with the customer responsible unit, which on an ongoing basis assesses customers' ability to fulfil their obligations and identifying 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 from internal systems, such as late payments data, behavioural scoring migration and macro-economic circumstances.

If new information indicates a change in the customer's financial position, the customer responsible unit must evaluate and, if necessary, reassess the rating to reflect whether the credit is impaired or if the customer's repayment ability is threatened.

If it is considered unlikely that the customer will be able to repay its debt obligations, for example the principal, interest or fees, and the situation cannot be satisfactorily remedied, then the exposure is regarded as defaulted.

Exposures that have been past due more than 90 days are automatically regarded as defaulted. If credit weaknesses are identified in relation to a customer exposure, that exposure is assigned special attention in terms of review of the risk. In addition to the continu-

ous monitoring, an action plan is established outlining how to minimise a potential credit loss. If necessary, a special team is set up to support the customer responsible unit.

#### *4.1.3.1 Collateral policy and documentation*

Local instructions emphasise that national practice and routines are timely and prudent in order to ensure that collateral items are controlled by the bank and that the loan and pledge agreement as well as the collateral is legally enforceable. Thus the bank holds the right to liquidate collateral in event of the obligor's financial distress and the bank can claim and control cash proceeds from a liquidation process.

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

#### *4.1.3.2 Types of collateral commonly accepted*

The following collateral types are most common in Nordea:

- Residential real estate, commercial real estate and land which are situated in Nordea's core markets.
- Other physical 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 and letters of support
- Insurance policies (capital assurance with surrender value)

For each type, more specific instructions are added to the general valuation principle. A specific maximum collateral ratio is set for each type. Restrictions for acceptance refer in general to assessment of the collateral value rather than the use of the collateral for credit risk mitigation as such. In the RWA calculations, the collaterals must fulfil certain eligible criteria.

#### *4.1.3.3 The credit decision process and handling of collateral*

Credit risk measures are part of the approval in the credit decision process. Each corporate and institution customer is reviewed at least annually in the annual review process. Each credit exposure is reviewed at least annually in the annual review of the customer. Furthermore, for some customers who have been assessed to have a high risk of default, an even more detailed review takes place in order to ensure an actual valuation and legal enforceability of collateral. Business and credit strategies towards the customer or customer group are also reviewed in detail.

#### *4.1.4 Rating and scoring*

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

- the credit approval process
- calculation of RWA
- calculation of EC and Expected Loss (EL)
- monitoring and reporting of credit risk
- performance measurement using the Economic Profit framework

While the rating is used for corporate customers, institution counterparts as well as sovereigns<sup>1</sup>, scoring is used for households as well as small business customers.

A rating is an estimate that exclusively reflects the quantification of the repayment capacity of the customer, i.e. the risk of customer default. The rating scale in Nordea consists of 18 grades from 6+ to 1- for non-defaulted customers and 3 grades from 0+ to 0- for defaulted customers. The repayment capacity of each rating grade is quantified by a one year PD.

Rating grade 4- and higher are comparable to investment grade as defined by external rating agencies such as Moody's and Standard & Poor (S&P). Rating grade 2+ and lower are considered as weak or critical, and require special attention. In table 2, the mapping from the internal rating scale to the S&P's rating scale, using condensed scales, is shown.

**Table 2**

**Indicative mapping between  
internal rating and Standard  
& Poor's**

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

The mapping of the internal ratings to the 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 approved by the credit committees. However, a customer is downgraded 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 criteria which, given a set of customer characteristics, produces a rating that ranks the customer based on its repayment capacity. Rating models are based on the principle that it is possible to derive a prediction of future customer performance from the default history of past customers on the basis of their characteristics. In order to better reflect the risk of customers in industries with highly distinctive characteristics, Nordea has decided upon a differentiation of rating models. Aside from a general corporate model used to rate the majority of industries, a number of specific models have been developed for specific segments, such as shipping and real estate management, taking into account the unique characteristics of these segments. Moreover, in each model the development methodology may vary. These methods range

<sup>1</sup> Sovereigns include central governments, central banks, regional governments, local authorities and other public sector entities

from purely statistical models based on internal data to expert-based models. In general however, all rating models are based on an overall framework, in which financial and quantitative factors are combined with qualitative factors.

Scoring models are pure statistical methods used to predict the probability of customer default. The models are used in the household segment as well as for small corporate customers. Nordea utilises bespoke behavioural scoring models developed on internal data to support both the credit approval process, e.g. automatic approvals or decision support, as well as the risk management process, where "early warnings" can be issued for high risk customers and monitoring of portfolio risk levels can be closely monitored. As a supplement to the behavioural scoring models Nordea also utilises commercial credit bureau information in the credit process.

## 4.2 Exposures versus lending

The credit process is essential in verifying that lending is given to solid counterparts. In IFRS the term lending is used, whereas exposures are used in the CRD. For several reasons the principles for how these terms are used differs. In both disclosures the items booked in the balance sheet on and off balance are included but presented in different ways. The main differences will be outlined in this section clarifying and highlighting the bridge between the information presented in the balance sheet in the Annual report and this report. A detailed definition of exposure classes used in the capital adequacy calculations can be found in appendix 12.3.

Tables presented in this chapter, containing exposure, are presented with original exposure if not stated otherwise. The figures presented are aggregated from transaction level in EUR. The tables are presented in EURm, which can lead to small rounding discrepancies in the tables. The numbers for 2007 have not been restated following the financial supervisory authority approval of Retail IRB end of December 2008.

### 4.2.1 Differences as regards to classification of exposure

The main differences and the effect on comparisons between the exposures are presented below.

- The exposure distributions by industry and by geography are in this report presented for the entire credit portfolio, whereas in the financial reporting, these distributions are presented for loans and receivables to the public (lending), being the main part of the on balance sheet exposure.
- Treasury bills and interest-bearing securities are in this report partly included in the capital requirements for market risk, whereas in the financial reporting, these are included in the credit risk exposure.
- Reversed repurchase agreements are in this report included as a separate exposure type, whereas in the financial reporting, these are included in the on balance sheet item loans and receivables to the public (corporate/institutions) or as off balance.
- In the financial reporting loans and receivables to the public (corporate) consist of the on balance sheet exposure in the Corporate exposure class as well as smaller part of the Retail exposure class (non-rated SMEs).
- Equity holdings related to insurance operations are included in the annual report, but excluded in this report since the insurance operations are deducted from the capital base based on the fact that insurance companies are subject to specific solvency regulations.

- Intangible assets and deferred taxes are deducted from the capital base and are therefore not included in the RWA calculations. In the financial reporting these items are included in the balance sheet.

The credit risk exposure in this report presented is distributed by exposure class, where each exposure class is distributed into the following different exposure types:

- On balance sheet items
- Off balance sheet items (e g guarantees and unutilised amounts of credit facilities)
- Securities financing (e g reversed repurchase agreements)
- Derivative contracts

In the annual report, the credit risk exposure includes:

- On balance sheet items: loans and receivables to credit institutions and loans and receivables to the public (e g reversed repurchase agreements)
- Off balance sheet items (e g guarantees and unutilised amounts of credit facilities)
- Counterparty risk in derivative contracts
- Credit risk in treasury bills and interest-bearing securities

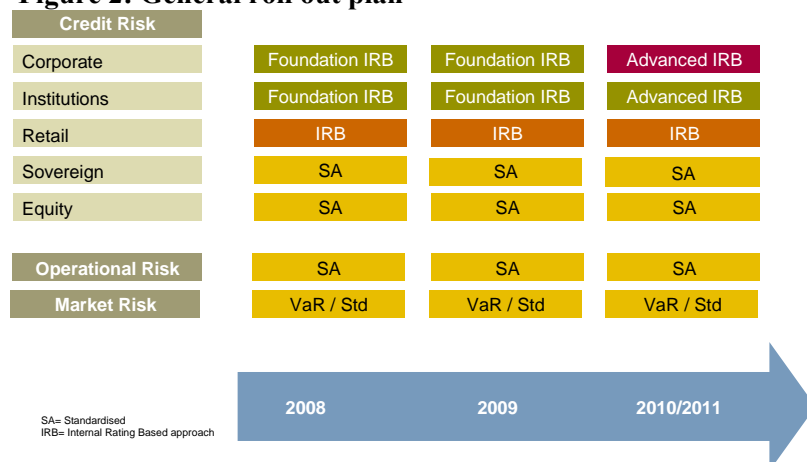
### 4.3 Development of exposure

Throughout this chapter, the credit risk exposure is presented based on definitions and approaches used in the calculation of capital requirement. In June 2007, Nordea received approval by the financial supervisory authorities to use FIRB approach for corporate and institution exposure classes in Norway. In December 2008 Nordea was approved of using the IRB approach for the Retail exposure class in Norway (with the exception for the Finance company which was not applied for).

Nordea Group aims to continue the roll-out of the IRB approaches. The main focus is the development of advanced IRB for corporate customers in the Nordic area, including internal estimates of LGD and CCF.

The standardised approach will continue to be used for smaller portfolios and new portfolios for which approved internal models are not yet in place. An overview of the roll-out plan is displayed below in figure 2.

**Figure 2: General roll out plan**





### 4.3.1 Exposure type by exposure class

In table 3, the exposures as of 31 December 2008 are split by exposure classes and exposure types. The table is split between exposure classes subject to the IRB approach and exposure classes subject to the standardised approach.

Table 3

Exposure classes split by exposure type, 31 December 2008

EURm	On balance sheet items	Off balance sheet items	Securities financing	Derivatives	Total exposure
<b>IRB exposure classes</b>					
Institutions	3,495	507	0	287	4,289
Corporate	25,839	8,396	18	2	34,254
Retail	16,824	2,494	0	0	19,318
- of which mortgage	13,204	1,131	0	0	14,335
- of which other retail	3,620	1,363	0	0	4,983
Other non-credit obligation assets	160	0	0	0	160
<b>Total IRB approach</b>	<b>46,317</b>	<b>11,397</b>	<b>18</b>	<b>289</b>	<b>58,021</b>
<b>Standardised exposure classes</b>					
Central governments and central banks	1,431	95	0	0	1,526
Regional governments and local authorities	369	181	0	0	550
Institution	5,576	237	198	641	6,653
Corporate	1,108	435	0	0	1,543
Retail	721	1	0	0	722
Exposures secured by real estates	0	0	0	0	0
Other <sup>1</sup>	227	0	0	0	227
Basel I reporting entities	0	0	0	0	0
<b>Total standardised approach</b>	<b>9,433</b>	<b>949</b>	<b>198</b>	<b>641</b>	<b>11,221</b>
<b>Total exposure</b>	<b>55,750</b>	<b>12,346</b>	<b>216</b>	<b>931</b>	<b>69,243</b>

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

In table 4, the average exposure during 2008 is presented. The retail exposures are presented as standardised approach since the IRB approach was approved late December 2008.

Table 4

Exposure classes split by exposure type, Average exposure during 2008

<b>Average exposure<sup>2</sup></b>					
EURm	items	items	Securities financing	Derivatives	Total exposure
<b>IRB exposure classes</b>					
Institutions	3,906	562	2	262	4,732
Corporate	25,004	9,669	44	3	34,721
Other non-credit obligation assets	271	0	0	0	271
<b>Total IRB approach</b>	<b>29,181</b>	<b>10,232</b>	<b>46</b>	<b>265</b>	<b>39,724</b>
<b>Standardised exposure classes</b>					
Central governments and central banks	617	91	0	2	710
Regional governments and local authorities	219	208	0	0	428
Institution	6,401	339	49	609	7,398
Corporate	1,159	574	0	0	1,733
Retail	4,650	1,371	0	1	6,022
Exposures secured by real estates	14,875	1,406	0	0	16,281
Other <sup>1</sup>	255	0	0	0	255
<b>Total standardised approach</b>	<b>28,176</b>	<b>3,990</b>	<b>49</b>	<b>612</b>	<b>32,827</b>
<b>Total exposure</b>	<b>57,357</b>	<b>14,221</b>	<b>95</b>	<b>878</b>	<b>72,551</b>

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

<sup>2</sup> In this table, Retail is presented in the Standardised exposure class due to that Retail was approved in end of December.

### 4.3.2 Exposure by geography

In table 5, exposures as of end December 2008 are split by main geographical areas, based on where the credit risk is referable.

**Table 5**  
**Exposure split by geography and exposure classes, 31 December 2008**  
**Internal Rating Based approach**

Internal Rating Based approach					Standardised approach						
EURm	Institution	Corporate	Retail mortgage	Other retail	Central governments and central banks	Regional governments and local authorities	Institution	Corporate	Retail	Exposures secured by real estates	Other <sup>1</sup>
Nordic countries of which Denmark of which Finland of which Norway of which Sweden	4,289	34,254	14,335	4,983	1,526	550	6,645	31	722	0	387
Baltic countries Poland Russia Other <sup>1</sup>											
Total exposure	4,289	34,254	14,335	4,983	1,526	550	6,645	31	722	0	387

<sup>1</sup> Administrative bodies and non-commercial undertakings, multilateral developments banks, short term claims, covered bonds, and other items. From F IRB other non-credit obligation assets.

### 4.3.3 Exposure by industry

In table 6, the exposure as of 31 December 2008 is split by important industries and by the main exposure classes.

**Table 6**  
**Exposure split by industry group, 31 December 2008**

EURm	Internal rating based approach				Standardised approach		
	Institution	Corporate	Retail	Other non-credit obligation assets	Central governments and central banks	Regional government and local authorities	Other <sup>1</sup>
Retail mortgage			12,775				
Other retail			6,051				737
Central and local governments					422	550	
Banks	2,931				1,104		5,559
Construction and engineering		633	33				0
Consumer durables (cars, appliances etc)		380	5				0
Consumer staples (food, agriculture etc)		2,151	15				0
Energy (oil, gas etc)		1,861	0				177
Health care and pharmaceuticals		122	6				0
Industrial capital goods		279	4				0
Industrial commercial services		8,059	140				0
IT software, hardware and services		130	4				0
Media and leisure		622	27				0
Metals and mining materials		107	1				0
Paper and forest materials		164	1				0
Real estate management and investment		8,521	116				0
Retail trade		1,280	40				0
Shipping and offshore		5,849	2				1,071
Telecommunication equipment		6	0				0
Telecommunication operators		557	1				0
Transportation		532	11				27
Utilities (distribution and production)		1,538	1				0
Other financial companies	1,358	373					0
Other materials (chemical, building materials etc)		832	6				0
Other		259	78	160			1,573
<b>Total exposure</b>	<b>4,289</b>	<b>34,254</b>	<b>19,318</b>	<b>160</b>	<b>1,526</b>	<b>550</b>	<b>9,145</b>

<sup>1</sup> Administrative bodies and non-commercial undertakings, multilateral developments banks, standardised institution, standardised corporate, past due items, short term claims, covered bonds and other items.

### 4.3.4 Equity holdings

In the exposure class “Other items”, Nordea’s equity holdings outside the trading book are included. Investments in companies where Nordea holds over 10% of the capital are deducted from the capital base (see table 1) and hence not included in the “other items”. In table 7, Nordea’s equity holdings outside the trading book are grouped based on the intention of the holding. In the investment portfolio, there are no holdings in private equity funds. All equities in the table are booked at fair value. The evidence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure the value of financial assets and financial liabilities. For equities with no published price quotations, internal valuation techniques are used to establish fair value. The table below shows to what extent published price quotations are used

**Table 7**  
**Equity holding outside trading book, 31 December 2008**

EURm	Book value	Fair value	Unrealised gains/losses	Realised gains/losses	Capital requirement
Investment portfolio <sup>1</sup>	13	13	0	0	1
Other <sup>2)</sup>	6	6	0	0	1
<b>Total</b>	<b>19</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>2</b>

<sup>1</sup>Of which listed equity holdings

0

<sup>2</sup>Of which listed equity holdings

0

## 4.4 Calculation of RWA

The risk weight and EAD calculations in Nordea differ between approaches but also depending on the exposure classes within IRB approach. In table 8, the exposure, EAD, average risk weight expressed as percentages, RWA and capital requirement, are distributed by exposure class, which serves as the basis for the reporting of capital requirements to the authorities. In this report the IRB exposure classes that Nordea has been approved for are presented. For the remaining portfolios the standardised approach exposure classes are used. Some exposure classes have been merged in the table, due to low exposures in these exposure classes.

For the remaining portfolios the standardised approach exposure classes are used. Some exposure classes have been merged in the table, due to low exposures in these exposure classes.

**Table 8**  
**Capital requirement for credit risk, 31 December 2008**

EURm	Original exposure	EAD	Average risk weight	RWA	Capital requirement
<b>IRB exposure classes</b>					
Institutions	4,289	4,171	25%	1,027	82
Corporate	34,254	32,134	60%	19,404	1,552
Retail	19,318	18,866	21%	3,880	310
- of which mortgage	14,335	14,324	16%	2,282	183
- of which other retail	4,983	4,542	35%	1,598	128
Other non-credit obligation assets	160	142	100%	142	11
<b>Total IRB approach</b>	<b>58,021</b>	<b>55,314</b>	<b>44%</b>	<b>24,453</b>	<b>1,956</b>
<b>Standardised exposure classes</b>					
Central government and central banks	1,526	1,459	0%	0	0
Regional governments and local authorities	550	408	20%	82	7
Institution	6,653	6,439	19%	1,193	95
Corporate	1,543	1,325	100%	1,325	106
Retail	722	714	75%	536	43
Exposures secured by real estates	0	0	0%	0	0
Other <sup>1</sup>	227	227	74%	168	13
<b>Total standardised approach</b>	<b>11,221</b>	<b>10,572</b>	<b>31%</b>	<b>3,304</b>	<b>264</b>
<b>Total</b>	<b>69,243</b>	<b>65,886</b>	<b>42%</b>	<b>27,758</b>	<b>2,221</b>

<sup>1</sup> Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short term claims, covered bonds, and other items. Associated companies not included.

The following sections describe the principles for calculating RWA with the IRB and the standardised approach respectively.

#### 4.4.1 Calculation of RWA with the IRB approach

The FIRB approach is used for calculating the minimum capital requirements for exposures to institutions and corporate customers. Credit risk is measured using sophisticated formulas for calculating RWA. Input parameters are Nordea's internal estimate of PDs and inputs fixed by the financial authorities supervisory for LGD, EAD and maturity.

Internal estimates of PD, LGD and EAD are used for the IRB approach for retail exposures, which in turn are based on internal historical loss data.

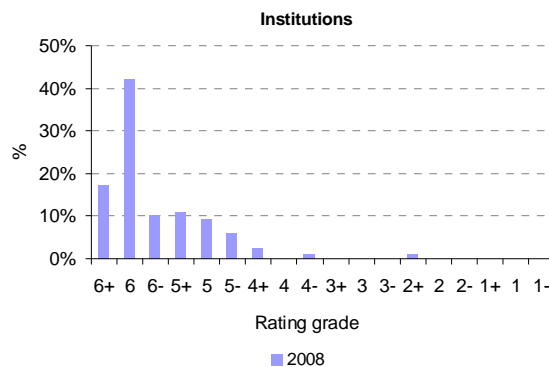
##### 4.4.1.1 PD

PD means the likelihood of default of a counterpart. The PD represents the long-term average of yearly default rates. The internal rating is an estimation of the repayment capacity of a counterpart. The internal risk classification models (rating models for corporate customers and institutions and scoring models for retail customers) provide an estimation of the repayment capacity of a counterpart. The internal risk classification scale consists of 18 grades for non-defaulted customers and 3 grades for defaulted customers. All customers with the same rating are expected to have the same repayment capacity; independent of the customers' industry, size, etc.

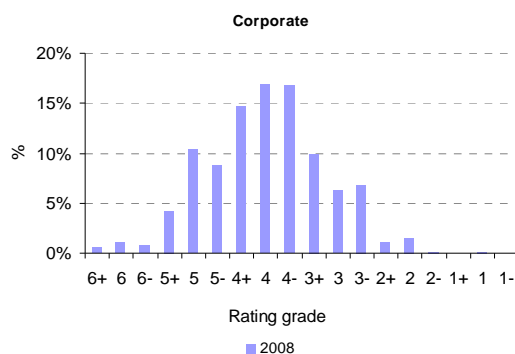
##### Rating distribution

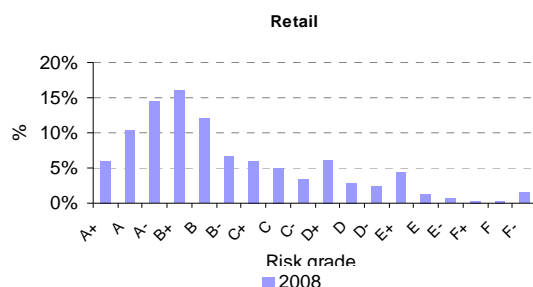
In figures 3 to 5, the exposure is distributed over the internal risk classification scale for the exposures in the IRB exposure classes. Exposure is defined as EAD in these figures.

**Figure 3: Rating distributions, IRB Institutions**



**Figure 4: Rating distribution, IRB Corporate**



**Figure 5: Rating distribution, IRB Retail**

#### 4.4.1.2 EAD

EAD is an estimate of how much of an exposure will be drawn within the period one year prior to default. For on balance sheet items, EAD is normally the same as the booked value, such as the market value or utilisation. An off balance product, such as a credit facility, does not contain the same risk as an on balance exposure, since it is rarely fully utilised at the time of the customer's default. A CCF is multiplied to the off balance amount to estimate how much of the exposure will be drawn at default. In the FIRB approach the CCFs are fixed by financial supervisory authorities.

The CCF model used for the Retail IRB approach is built on a product based approach. There are three explanatory variables that determine which CCF value an off balance exposure will receive. These variables determine which CCF value an off balance exposure will receive. The three variables are: customer type, product type/CCF pool and country. The table 9 shows the weighted average CCF for the IRB retail portfolio. The CCF is based on own estimates on expected total exposure at the time of default. More information regarding the off balance sheet exposure can be found in chapter 7.

**Table 9**  
**CCF, 31 December 2008**

	Exposure	EAD	CCF
Retail	2,494	2,043	82%
- of which mortgage	1,122	1,116	99%
- of which other retail	1,257	871	69%
- of which SME	115	56	49%

#### 4.4.1.3 LGD

LGD is measured taking into account the collateral type, the counterparty's balance sheet components, and the presence of any structural support. LGD measures the expected realised loss given the default of a customer. The regulatory capital requirement is dependent on LGD.

For the FIRB institution and corporate exposure classes the LGD values are fixed by financial supervisory authorities. When setting the LGD to fixed levels the CRD has taken into account downturn in the economy.

The LGD value in the retail IRB approach is based on internal estimates. LGD estimates are based on the experience and practices in Nordea as well as the external environment in which the bank operates. 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. These codes are mapped to LGD pools depending on country and customer type (household or SME).

#### *Credit risk mitigation*

RWA, EL and exposures 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 purposes. 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 called eligible collateral.. The eligibility requirements are explicitly mentioned in the CRD for physical exposures in FIRB, which are currently used for corporate and institution exposures. Financial supervisory authorities may permit the use of other physical collaterals only if two specific requirements are met in addition to the general minimum requirements listed further down in the document. The first requirement is that there is a liquid market and the second that there are established market prices.

The reduction of the capital requirements is calculated in four ways, depending of the type of credit risk mitigation technique:

1. Adjusted exposure amount

The comprehensive method for financial collateral such as cash, bonds and stocks. The exposure amount is adjusted with regards to the financial collateral. The size of the adjustment depends on the volatility of the collateral and the type of exposure. Nordea uses volatility adjustments specified by the financial supervisory authorities (supervisory haircuts).

2. Adjusted PD (substitution of PD)

The substitution method is used for guarantees, which implies that the PD for the customer is substituted. This means that the credit risk in respect of the customer is substituted by the credit risk of the guarantor and the risk thereby reduced. Hence, an exposure fully guaranteed will be assigned the same capital requirement as if the loan was initially granted to the guarantor rather than the customer. The PD value of exposures is adjusted if the capital requirement for both the customer and the guarantor is calculated according to the IRB approach.

3. Adjusted LGD

The LGD value is reduced if the exposures in the IRB approach (i.e. to large corporate and institutions) is fully collateralised with real estates (commercial and residential), other physical collateral or receivables. The size of the LGD adjustment is stipulated by the CRD in the FIRB approach. The LGD value in the retail IRB approach is based on internal estimates.

4. Adjusted risk weight

Netting agreements are mainly used for transactions in derivatives in the trading book. The exposure value is adjusted so that the capital requirements for credit risk reflect only the net position of derivative contracts with positive and negative values under the netting agreement. Netting across product categories is not used.

Nordea uses a wide variety of risk mitigation techniques in several different markets which contribute to risk diversification and credit protection. The different credit risk mitigation techniques such as collateral, guarantees, netting agreements and covenants are used to reduce the credit risk. All credit mitigation activities are not recognised for capital

adequacy purposes since they are not defined as eligible, i.e. covenants. Loan documentations and similar agreements can include covenants such as financial ratios that the debtor has to comply with. Covenants are not taken into account in the calculations of regulatory capital. Another example is receivables. Receivables with an original maturity of more than one year are not eligible for capital adequacy purposes. A third example is assets that could not be sold in a liquid market. Such assets could be pledged but are not assigned any value in the credit process, nor in the regulatory capital calculations.

In table 10, the exposure per exposure class secured by eligible collateral, guarantees and credit derivatives are available. The table presents a split between exposure classes subject to the IRB approach and exposure classes subject to the standardised approach.

**Table 10**  
**Exposure secured by collaterals, guarantees and credit derivatives, 31 December 2008**

EURm	Exposure	EAD	of which secured by guarantees and credit derivatives	of which secured by collateral
<b>IRB exposure classes</b>				
Institutions	4,289	4,171	0	48
Corporate	34,254	32,134	34	10,575
Retail	19,318	18,866	38	14,359
- of which mortgage	14,226	14,220	0	14,220
- of which other retail	4,600	4,213	8	2
- of which business customers	492	434	30	138
Other non-credit obligation assets	160	142	0	0
<b>Total IRB approach</b>	<b>58,021</b>	<b>55,314</b>	<b>72</b>	<b>24,983</b>
<b>SA exposure classes</b>				
Central government and central banks	1,526	1,459	0	0
Regional governments and local	550	408	0	0
Institution	6,653	6,439	2	59
Corporate	1,543	1,325	0	0
Retail	722	714	0	0
Exposures secured by real estates	0	0	0	0
<sup>1</sup> Other	227	227	0	0
<b>Total standardised approach</b>	<b>11,221</b>	<b>10,572</b>	<b>2</b>	<b>59</b>

<sup>1</sup> Administrative bodies and non-commercial undertakings, multilateral development banks, past due items, short term claims, covered bonds, and other items

#### *Guarantees and credit derivatives*

The guarantees used as credit risk mitigation are largely 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 FIRB approach for credit risk. All central governments, regional governments and institutions are eligible. Some multinational development banks and international organisations are also eligible. Guarantees issued by corporate entities can only be taken into account if their rating corresponds to A- (S&P's rating scale) or better. Out of the guarantors, central governments and municipalities within the Nordic countries comprise approximately 18 %. The exposures that are guaranteed by these guarantors receive risk weight of 0% and 20%, respectively. Approximately 35 % of the main guarantors are institutions and the remaining guarantors are corporate.

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

#### *Collateral distribution*

In table 11, the distribution of collateral used in the capital adequacy calculation process is presented. The table shows that real estate is the major part of the eligible collateral items. Real estate is commonly used as collateral for credit risk mitigation purposes.

**Table 11**  
**Collateral distribution, 31 December 2008**

Other Physical Collateral	17%
Receivables	2%
Residential Real Estate	60%
Commercial Real Estate	18%
Financial Collateral	3%

#### *Valuation principles of collateral*

A conservative approach with long-term market values and taking volatility into account is used as valuation principle for collateral 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 timeframe.
- 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 experienced volatility of market values in the past.
- Forced sale principle; assessment of market value or the collateral value must reflect that realisation of a collateral in a distressed situation is initiated by the bank.
- 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.

#### *Average weighted LGD*

As of December 31 2008, the average exposure weighted LGD for the corporate and institution portfolio were 42% and 44% respectively. Due to the FIRB approach, the LGD estimates are pre-defined.

The LGD for the retail portfolio are divided in pools of collateral and is based on historical loss data. In table 12, the exposure weighted LGD is shown for the retail portfolio.

**Table 12**  
**Exposure weighted LGD**

Retail	20%
- of which mortgage	16%
- of which other retail	31%
- of which SME	31%

#### *4.4.1.4 Maturity*

For exposures calculated with the FIRB approach, the maturity is set to standard values in the RWA calculation formula based on the estimates set by the financial supervisory au-



thorities. The maturity parameter used is set to 2.5 years for the exposure types on balance, off balance and derivatives. For securities financing the maturity parameter is 0.5 years.

#### 4.4.1.5 *Estimation and validation of parameters*

Nordea has established an internal process in accordance with the legal requirements with the purpose of ensuring and improving the performance of models, procedures and systems and to ensure the accuracy of the parameters.

The PDs are validated semi annually, while the LGD and CCF parameters are validated at least 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. Triggers have been defined for all tests.

In table 13, the EL is compared to the actual gross and net losses. The EL has been calculated using the definition from the EC framework, in which defaulted exposures receive 0% EL. Figures represent the full year outcome.

**Table 13**  
**EL vs Gross loss and net loss, EURm**

	Retail				
EURm	Household	Corporate <sup>1</sup>	Institution	Government	Total
2008					
EL	-14	-60	-1	0	-75
Gross loss	-15	-90	0	0	-105
Net loss	-11	-69	0	0	-79
2007					
EL	-13	-46	0	0	-59
Gross loss	-14	-26	0	0	-40
Net loss	-8	21	0	0	13

<sup>1</sup>Corporate segment in this table includes SME Retail

Note that the EL will vary over time as a consequence of that the rating and the collateral coverage distributions change with the business cycle. This manifests that Nordea's rating models are neither entirely through the cycle nor entirely point in time. The implication is that the EL calculated at the top of the business cycle will not represent the EL over a full business cycle and that migration will not explain the full variation in actual losses. It is expected that the average long term net loss will match the average EL over time. The figures for 2008 evidence that the net losses are lower than what should be expected on average. The fact that net losses includes reversals and recoveries from previous years limits the use of the figure as an indicator of the model's performance looking at only one year of data. Also for the gross loss figure a much longer times series than 1 year is required since the EL is reflecting business cycle adjusted long term averages in the case of PD and expected downturn levels for the LGD and CCF.

#### 4.4.2 *Calculation of RWA with the standardised approach*

The standardised measures credit risk pursuant to fixed risk weight and is the least sophisticated capital calculations. The application of risk weight in standardised is given by financial supervisory authorities and is based on the exposure class to which the exposure is assigned. Some exposure classes are derived from the type of counterparty while others are based on the asset type, product type, collateral type or exposure size.

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

In calculating RWA with the standardised approach, external rating may be used as an alternative to use the fixed risk weight. The external ratings must come from eligible external credit assessment institutions. More information regarding the risk weight of the exposures under the standardised approach can be found in appendix 12.3.

#### *Exposure against central government and central banks*

Nordea uses Standard & Poor's as eligible rating agency. The external rating is converted to the credit quality step (the mapping is defined by the financial supervisory authorities), which corresponds to a fixed risk weight. In table 14, the central government and central banks exposures distributed by the credit quality steps is available. The exposure in the table is after credit risk mitigation, but the effect of credit risk mitigation is minor.

**Table 14**  
**Exposures to central governments and central banks, 31 December 2008**

EURm			31 December 2008
Standard & Poor's rating	Credit quality step	Risk weight	Exposure
AAA to AA-	1	0%	1,526
A+ to A-	2	20%	0
BBB+ to BBB-	3	50%	0
BB+ and below, or without rating	4 to 6 or blank	100-150%	0
<b>Total</b>			<b>1,526</b>

## **4.5 Information about impaired loans and loan losses**

### **4.5.1 Information about definition and methods of impaired loans**

Throughout the process of identifying and mitigating credit impairments, Nordea works continuously to review the quality of the credit exposures.

Weak and impaired exposures are closely and continuously monitored and reviewed at least on a quarterly basis in terms of current performance, business outlook, future debt service capacity and the possible need for provisions.

An exposure is impaired, and a provision is recognised, if there is objective evidence based on loss events or observable data that the customer's future cash flow is impacted to the extent that full repayment is unlikely, collateral included. The size of the provision is equal to the estimated loss considering the discounted value of the future cash flow and the value of pledged collateral.

Impaired exposures can be either performing or non-performing. Impaired exposures are treated as in default when determining default probability.

In addition to individual impairment testing of all individually significant customers, collective impairment testing is performed for groups of customers that have not been found to be impaired on individual level. 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.

#### 4.5.2 Disclosure of exposures, impaired loans and loan losses

In the tables below impaired loans, loan losses and allowances are distributed and stated according to IFRS as in the annual report. The tables in this section follow the segmentation used in the annual report.

In table 15, impaired loans to corporate customers are distributed by industry.

Table 15  
Loans and receivables, impaired loans and allowances, by customer type, 31 December 2008

EURm	Loans and receivables, before allowances	..of which, not impaired	Allowances for collectively assessed loans	Allowances for collectively assessed loans in % of not impaired	Individually impaired loans and receivables gross			
					Impaired loans before allowances	in % of Loans and receivables before allowances	Specific allowances	.... in % of Impaired loans before allowances
<b>To credit institutions</b>	3,408	3,408	0	0.00	0	0.00	0	0%
- of which banks	0	0	0	0.00	0	0.00	0	0%
- of which other credit institutions	3,408	3,408	0	0.00	0	0.00	0	0%
<b>To the public</b>	45,456	45,198	-61	0.13	258	0.57	-86	33%
- of which corporate	28,995	28,815	-34	0.12	180	0.62	-65	36%
Energy (oil, gas, etc.)	1,264	1,264	0	0.00	0	0.01	0	14%
Metals and mining materials	167	166	0	0.00	1	0.36	0	15%
Paper and forest materials	15	14	0	0.00	1	8.24	-1	47%
Other materials (building materials, etc.)	661	655	0	0.00	5	0.83	-5	92%
Industrial capital goods	974	972	0	0.00	1	0.15	-1	55%
Industrial commercial services, etc.	5,362	5,341	-8	0.14	21	0.38	-15	75%
Construction and civil engineering	514	497	-16	3.09	16	3.18	-7	46%
Shipping and offshore	5,730	5,680	0	0.00	50	0.87	-5	10%
Transportation	553	534	0	0.03	18	3.30	-3	17%
Consumer durables (cars, appliances, etc.)	368	367	0	0.04	1	0.28	0	44%
Media and leisure	550	547	0	0.00	3	0.56	-2	50%
Retail trade	1,409	1,395	0	0.01	14	0.98	-8	59%
Consumer staples (food, agriculture, etc.)	1,605	1,601	0	0.01	4	0.25	-2	53%
Health care and pharmaceuticals	143	142	0	0.00	1	0.42	0	29%
Financial Institutions	447	447	0	0.00	0	0.00	0	0%
Real estate management	7,745	7,703	-10	0.13	42	0.54	-14	34%
IT software, hardware and services	151	151	0	0.00	0	0.13	0	39%
Telecommunication equipment	14	14	0	0.00	0	0.00	0	0%
Telecommunication operators	74	73	0	0.00	0	0.47	0	57%
Utilities (distribution and production)	791	790	0	0.00	1	0.13	0	0%
Other	459	459	0	0.00	0	0.00	0	0%
- of which household	15,949	15,871	-27	0.17	78	0.49	-21	27%
Mortgage financing	15,186	15,156	-16	0.11	30	0.00	-3	10%
Consumer financing	763	715	-10	1.38	48	6.30	-18	37%
- of which public sector	512	512	0	0.00	0	0.00	0	0%
<b>Total credit risk exposure in the banking operations</b>	<b>48,864</b>	<b>48,606</b>	<b>-61</b>	<b>0.12</b>	<b>258</b>	<b>0.53</b>	<b>-86</b>	<b>33%</b>

In table 16, impaired loans are distributed by geography.

**Table 16**  
Loans and receivables, impaired loans and allowances, by geography, 31 December 2008

EURm	Loans and receivables, before allowances	..of which, not impaired	Allowances for collectively assessed loans	Allowances for collectively assessed loans in % of not impaired	Individually impaired loans and receivables gross			
					Impaired loans before allowances	in % of Loans and receivables before allowances	Specific allowances	... in % of Impaired loans before allowances
Nordic countries	41,737	41,479	-61	-0.15	258	0.62	-85	33%
of which Denmark	106	104	0	0	2	1.61	-2	92%
of which Finland	8	8	0	0	0	0.05	0	102%
of which Norway	41,090	40,834	-61	-0.15	256	0.62	-83	32%
of which Sweden	533	533	0	0	0	0.02	0	100%
Estonia	1	1	0	0	0	0.00	0	0%
Latvia	25	25	0	0	0	0.00	0	0%
Lithuania	2	2	0	0	0	0.00	0	0%
Poland	13	13	0	0	0	0.03	0	100%
Russia	0	0	0	0	0	0.00	0	0%
EU countries other	1,275	1,275	0	0	0	0.01	0	72%
USA	226	225	0	0	0	0.03	-1	1388%
Asia	470	470	0	0	0	0.03	0	25%
Latin America	1,023	1,023	0	0	0	0.01	0	4%
OECD other	28	28	0	0	0	0.19	0	100%
Non-OECD other	656	656	0	0	0	0.00	0	10%
<b>Total</b>	<b>45,456</b>	<b>86,677</b>	<b>61</b>	<b>0.13</b>	<b>258</b>	<b>0.57</b>	<b>-86</b>	<b>33%</b>

Table 17 shows the specification of the loan losses according to the income statement in the annual report, as well the changes in the allowance accounts in the balance sheet.

**Table 17**  
Loan losses, 31 December 2008

	EURm
<b>Loan losses divided by class, net</b>	
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	-76
- of which write-offs and provisions	-101
- of which reversals and recoveries	25
Off-balance sheet items	-3
- of which write-offs and provisions	-4
- of which reversals and recoveries	1
<b>Total</b>	<b>-79</b>
<b>Specification of Loan losses</b>	
Changes of allowance accounts in the balance sheet	-79
- of which Loans and receivables	-76
- of which Off-balance sheet items	-3
Changes directly recognised in the income statement	0
- of which realised loan losses	-7
- of which realised recoveries	7
<b>Total</b>	<b>-79</b>

Table 18 shows the reconciliation of allowance accounts for impaired loans.

**Table 18**  
Reconciliation of allowance accounts for impaired loans

EURm	Individually assessed	Credit institutions		Total	Individually assessed	The public		Total	Individually assessed	Total Collectively assessed	Total
		Collectively assessed				Collectively assessed					
Opening balance at 1 Jan 2008	0	0	0	-48	-40	-88		48	-40	-88	
Provisions	0	0	0	-54	-24	-78		-54	-24	-78	
Reversals	0	0	0	11	4	15		11	4	15	
Changes through the income statement	0	0	0	-43	-20	-63		-43	-20	-63	
Allowances used to cover write-offs	0	0	0	9	0	9		9	0	9	
Currency translations differences	0	0	0	-1	0	-1		-1	0	-1	
<b>Closing balance at 31 Dec 2008</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-82</b>	<b>-60</b>	<b>-143</b>		<b>-82</b>	<b>-60</b>	<b>-143</b>	

## 5. Market risk

In this chapter, the management of market risk is described. Market risk is the risk of a loss in the market value of portfolios and financial instruments as a result of movements in financial market variables.

The customer-driven trading activity of Nordea Markets and the investment and liquidity portfolios of Group Treasury are the key contributors to market risk in Nordea. For all other banking activities, the basic principle is that market risks are eliminated by matching assets, liabilities and off balance sheet items. This is achieved by transactions in Group Treasury.

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 of Nordea over time. In Nordea this is seen as structural interest income risk (SIIR) and is dealt with in Chapter 8.

### 5.1 Reporting and control process

A Nordea Group wide framework establishes common management principles and standards for the market risk management. This implies that the same reporting and control processes are applied for the market risk exposures in Markets (the Trading Book) and Group Treasury. Moreover the same Value-at-Risk model (VaR model) is used to measure and manage the consolidated risk and the risk divided into Trading Book and Banking Book risk.

However, certain risk exposures have special characteristics and are monitored and limited separately. This is e.g. the case for commodity risk and structured equity options in Markets, which are measured using scenario simulation. The scenarios are based on the sensitivity to changes in the underlying prices and, where relevant, their volatility. These risk figures are limited and monitored in the daily reporting and control process, but not included in the VaR numbers. Credit Default Swaps are included in the VaR figures through their sensitivities to changes in credit spreads, in analogy with corporate bonds. In addition, jump-to-default exposures are limited and monitored in the daily control process.

Transparency in all elements of the risk management process is central to maintaining risk awareness and a sound risk culture throughout the organisation. In Nordea this transparency is achieved by

- senior management taking an active role in the process. The CRO receives reporting on the Group's consolidated market risk every day; GEM receives reports on a monthly basis, and the Board of Directors on a quarterly basis.
- defining clear risk mandates (at departmental, desk and individual levels), in terms of limits and restrictions on which instruments may be traded. Adherence to limits is crucial, and should a limit be breached, the decision-making body would be informed immediately.
- having a comprehensive policy framework, in which responsibilities and objectives are explicitly outlined. Policies are decided by the Board of Directors, and are complemented by instructions issued by the CRO.
- having detailed business procedures that clearly state how policies and guidelines are implemented.

- having proactive information sharing between trading and risk control.
- having risk models that make risk figures easily decomposable.
- having a framework for approval of traded financial instruments and methods for the valuation of these that requires an elaborate analysis and documentation of the instruments' features and risk factors.
- having a “business intelligence” type risk IT system that allows all traders and controllers to easily monitor and analyse their risk figures.
- having tools that allow the calculation of VaR figures on the positions that a trader, desk or department has during the day.

## **5.2 Measurement methods**

As there is no single risk measure that captures all aspects of market risk, Nordea on a daily basis uses several risk measures including VaR models, stress testing, Jump-to-Default exposure, scenario simulation and other non-statistical risk measures such as basis point values, net open positions and option key figures.

### **5.2.1 Value-at-Risk**

Nordea's universal VaR model is a 10-day, 99% confidence model, which uses the expected shortfall approach (sometimes referred to as tVaR, for tail-VaR) and is based on historical simulation on up to two years' historical changes in market prices and rates. This implies that Nordea's historical simulation VaR model uses the average of a number of the most adverse simulation results as an estimate of VaR. The sample of historical market changes in the model is updated daily. The “square root of ten” rule is applied to scale 1-day VaR figures to 10-day figures. The model is used to limit and measure market risk at all levels both for the Trading Book and in Group Treasury.

VaR is used by Nordea to measure interest rate, foreign exchange, equity and credit spread risks. A VaR measure across these risk categories, allowing for diversification among them, is also used. The VaR figures include both linear positions and options.

With the chosen characteristics of Nordea's VaR model, the VaR-figures can be interpreted as the loss that will only be exceeded in one of hundred 10-day trading periods. However, 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. Also, it should be noted that the historical observations of the market variables that are used as input, may not give an adequate description of their behaviour in the future. In particular the historical values may fail to reflect the potential for extreme market moves.

In the summer of 2007 the volatility in the financial markets increased markedly, and in the spring of 2008, Nordea's back testing indicated a need for making the model more responsive to changes in market volatility. As a result, in June 2008, the model was adjusted by reducing the look back period, to one year, and the number of the most adverse simulation results in the estimate of the VaR (i.e. further out in the left-hand tail of the distribution of historical simulation outcomes).

### 5.2.2 Stress testing

Stress tests are used to estimate the possible losses that may occur under extreme market conditions.

Stress tests are conducted daily for the consolidated risk of Nordea. The main types of stress tests include:

1. Historical stress tests, which include selected historical episodes, and are calculated by exposing the current portfolio to the most unfavourable developments in financial markets since 1993. (The calculations for historical episode scenarios use simplifying assumptions.)
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 are conducted on interest rates, and include tests where rates, spreads and/or volatilities are shifted markedly. The sensitivities are measured both gross and net; the gross figures shedding light on exposure to situations where normal relationships between financial variables 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.

While these stress tests measure the risk over a shorter time horizon, market risk is also a part of Nordea's comprehensive ICAAP stress testing, which measures the risk over a three year horizon.

## 5.3 Consolidated market risk

The volatile developments in the financial markets and the fact that the model is now more responsive to changes in market volatility, has caused the market risk – as measured by the total VaR – to increase during 2008.

Another significant driver for change for the consolidated VaR figures over 2008 has been the extension of the credit spread VaR model to include Group Treasury, increasing this figure. Total VaR increased to EUR 26m at the end of 2008 from EUR 3m at the end of 2007. Structured equity option risk decreased, and commodity risk remained at an insignificant level. The consolidated market risk figures is available in table 19.

**Table 19**  
**Consolidated market risk figures, 31 December 2008, EURm**

	Measure	31 Dec 2008	2008 high	2008 low	2008 avg
Total Risk	VaR	25.6	33.7	7.2	15.8
- Interest Rate Risk	VaR	9.1	14.3	2.1	6.6
- Equity Risk	VaR	1.6	6.7	1.1	1.5
- Credit Spread Risk	VaR	22.9	30.6	6.4	14.8
- Foreign Exchange Risk	VaR	1.7	1.8	0.1	0.7
Diversification effect		28%			
Structured Equity Option Risk	Simulation	0.6	3.6	0.5	2.3
Commodity Risk	Simulation	0.3	3.3	0.2	1.6

## 5.4 Regulatory capital for market risk in the Trading Book (pillar 1)

Nordea uses both the Internal Models Approach and the Standardised Approach to capture the market risk capital requirement in the Trading Books. Market risk in the CRD context contains two types of risk measures: general risk and specific risk. General risk is risk related to changes in the overall market prices while specific risk is related to price changes for the specific issuer.

Market risk RWA was nearly unchanged between Q4 2007 and Q4 2008, although VaR contribution increased from EUR 0.1bn to EUR 0.3bn during the year as a result of both increased average VaR and an increased multiplier. RWA and capital requirements for market risk for the trading book is available in table 20.

**Table 20**  
**Capital requirements for market risk, 31 December 2008**

EURm	Trading book, VaR		Trading book, non-VaR		Banking book, non-VaR		Total	
	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk	328	26	300	24			628	50
Equity risk	75	6	8	1			83	7
Foreign exchange risk	67	5			0	0	67	5
Commodity risk			2	0			2	0
Diversification effect	-129	-10					-129	-10
<b>Total</b>	<b>341</b>	<b>27</b>	<b>310</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>651</b>	<b>52</b>

**Capital requirements for market risk, 31 December 2007**

EURm	Trading book, VaR		Trading book, non-VaR		Banking book, non-VaR		Total	
	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk	75	6	523	42			598	48
Equity risk	63	5	30	2			93	7
Foreign exchange risk	0	0			1	0	1	0
Commodity risk			0	0			0	0
Diversification effect	-37	-3					-37	-3
<b>Total</b>	<b>101</b>	<b>8</b>	<b>553</b>	<b>44</b>	<b>1</b>	<b>0</b>	<b>655</b>	<b>52</b>

### 5.4.1 Internal model (VaR)

Nordea uses the VaR model to calculate capital requirements for significant parts of the Trading Book. In 2008, the financial supervisory authorities extended the approval to also cover exposures on equity options. Consequently, the methods used for calculating capital requirements for market risk are:

**Table 21**

#### Methods for calculating capital requirements

	Interest rate risk		Equity risk		FX risk
	General	Specific	General	Specific	General
Nordea (Nordea Bank Norge)	IM	Standard	IM	Standard	IM

### 5.4.2 Backtesting of the VaR-model

Back testing is conducted daily in accordance with the guidelines laid out by the Basel Committee on Banking Supervision.

For general interest rate, general equity risk and total risk (comprising all risk categories), the hypothetical (simulated) profit/loss (p/l) is held against 1-day VaR. Back tests are done similarly for credit spread risk, although this risk figure is not used for calculating capital requirements in Nordea.



### 5.4.3 VaR in the Trading Book

Table 22 shows VaR in the trading book. The increase in VaR levels that was the result of the continued extreme volatility in financial markets and adjustment to the VaR-model is as apparent for the Trading book as it is for the Group's consolidated risk.

**Table 22**  
**Market risk figures in Trading Book as of 31 December 2008**

EURm	Measure	31 Dec 2008	2008 high	2008 low	2008 avg
Total Risk	VaR	3.3	14.6	3.3	7.1
- Interest Rate Risk	VaR	2.5	10.2	1.2	4.5
- Equity Risk	VaR	1.2	6.8	0.9	1.3
- Credit Spread Risk	VaR	2.0	9.5	2.0	4.5
- Foreign Exchange Risk	VaR	1.8	1.8	0.2	0.7
Diversification effect		57%			
Structured Equity Option Risk	Simulation	0.6	3.6	0.5	2.3
Commodity Risk	Simulation	0.3	3.3	0.2	1.6

### 5.4.4 Standardised approach

As described above, not all positions are covered by the approved VaR model, instead these have to be calculated following the standardised approach. Capital requirement for these positions is calculated according to the CRD.

The main part of the standardised approach contribution to market risk required capital is specific interest rate risk. In the standardised approach specific interest rate risk is calculated through a maturity based method with different risk capital charge factors depending on category and time to maturity.

The current approved equity risk VaR model does not capture the risk on some structured equity options, for which instead the standardised approach is used. In the standardised approach equity positions receive a capital charge factor depending on the position's quality and liquidity. Commodity risk in the Trading Book and FX risk outside the Trading Book is not covered by the VaR model and is also calculated through the standardised approach.

## 5.5 Compliance with requirements applicable to exposures in the Trading Book

Annex VII, Part B of the European Parliament and Council Directive 2006/49/EG of 14 June 2006 on the capital requirements for investment firms and credit institutions 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 are governed by policies and instructions applicable for the Nordea Group and independent Group staffs are responsible for the overall valuation process. The local risk control organisations in the individual business units are responsible for performing valuation controls in accordance to the policies and instructions applicable for the Nordea Group. 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 in Nordea is designed to be compliant with the requirements in IAS39. 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.

## 5.6 Interest rate risk in the Banking Book

Monitoring of the interest rate risk in the Banking Book is done daily by controlling interest rate sensitivities which measure the immediate effects of interest rate changes on the fair values of assets, liabilities and off balance sheet items. Table 23 shows the net effect on fair value of a 200 basis points parallel shift increase in rates, by currency, with positions as of 31 December 2008.

Furthermore Nordea regularly measures the SIIR (the amount Nordea's accumulated net interest income would change during the next 12 months if all interest rates change by one percentage point). See chapter 8 for further details.

**Table 23**

**Interest rate sensitivities for non-trading book, 31 December 2008, instantaneous interest rate movements**

EURm	+200 bp	+100 bp	+50 bp	-50 bp	-100 bp	-200 bp
EUR	-23.6	-11.8	-5.9	5.9	11.8	23.6
NOK	-20.8	-10.4	-5.2	5.2	10.4	20.8
USD	-3.6	-1.8	-0.9	0.9	1.8	3.6
Total	-49.9	-25.0	-12.5	12.5	25.0	49.9

The totals are netted and include currencies not specified.

## 6. Operational risk

In this chapter, the management of operational risk is described.

### 6.1 Report and control process

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. Compliance risk is defined as 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. Operational risk also includes "Legal Risk", which means the risk that the Group suffers damage due to a deficient or incorrect legal assessment.

Operational risks are inherent in all activities within the organisation, in outsourced activities and in all interaction with external parties.

Solid internal control and quality management, consisting of a risk management framework, leadership and skilled personnel, is the key to successful operational risk management.

An annual report on the quality of Internal Control in the Group is submitted to the Board, incorporating all main issues on financial and operational risks.

Each Division in Nordea is primarily responsible for managing its own operational risks. Group Credit and Risk Control develops and maintains a framework for identifying, assessing, mitigating, monitoring, controlling and reporting operational risks and supports the line organisation in implementing the framework.

Information security, physical security, crime prevention and educational and training activities are important components when managing operational risks. To cover this broad scope, the Group security and the Group compliance functions are included in Group Credit and Risk Control, and close cooperation is maintained with Group IT and Group Legal, in order to raise the risk awareness throughout the organisation.

The main processes for managing operational risks are ongoing monitoring through risk self-assessment and the documenting, registering and following up activities related to incidents and quality deficiencies. The analysis of operational risk-related events, potential risk indicators and other early-warning signals are in focus when developing the processes.

Special emphasis is put on quality and risk analysis in change management and product development.

The mitigating techniques consist of continuous improvement initiatives and business continuity plans together with crisis management preparedness and a broad insurance cover for handling major incidents. Mitigation efforts target reliability and continuity in the value chains rather than focusing on single units in the organisation.

The techniques and processes for managing operational risks are structured around the risk sources as described in the definition of operational risk. This approach improves the

comparability of risk profiles in different areas and functions and globally throughout the organisation. It also complements the focus on limiting and mitigating measures in relation to the sources, rather than the symptoms.

## **6.2 Capital requirements for operational risk**

The capital requirement for operational risk is in Nordea calculated 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 average of the gross income for each business line. The capital requirement for operational risk amounts to EUR 113m.

## 7. Off balance items including derivatives and securitisation

In this chapter, Nordea discloses information about off balance with focus on derivatives and securitisation.

Off balance sheet items are divided into two different exposure types in accordance with calculation of credit risk RWA in the CRD:

1. Off balance sheet items:

Main categories of off balance sheet items are guarantees, credit commitments and unutilised portion of approved credit facilities.

2. Derivatives:

Financial instruments that derive their value from underlying interest rates, currencies, equities, credit spreads or commodity prices. Derivatives do not only result in counterparty risk measured within the credit risk RWA but also affect the market risk (see section 7.1).

For the different off balance exposure types mentioned above, there are different possible values for the calculation base. For the off balance items, the nominal value of the guarantee is applied with a CCF for calculating the EAD. The CCF factor is 50% or 100% depending of the type of guarantee, i.e. lowering the risk weight compared with the same exposure on balance. Credit commitments and unutilised amounts are the part of the external commitment that has not been utilized. The CCF, ranging from 0% to 100%, is multiplied with the calculation base depending of approach, product type and whether the unutilized amounts are unconditionally cancellable or not. For derivatives it is a combination of the market value and the nominal amount.

The overall capital requirements for these items are available in table 24, where the figures for derivatives stem from counterparty risk. The information in the table includes exposures both from the IRB and standardised exposure classes. It can be concluded that although off balance items have large exposure amounts, the effect on RWA is reduced due to the use of CCF in the calculation of EAD.

**Table 24**  
**Exposure, RWA and capital requirements by exposure type, 31 December 2008**

EURm	On balance sheet items <sup>1</sup>	Off balance sheet items	Derivatives	Total exposure
Exposure	55,966	12,346	931	<b>69,243</b>
EAD	55,882	9,074	931	<b>65,886</b>
RWA	23,108	4,481	170	<b>27,758</b>
Capital requirement	1,849	358	14	<b>2,221</b>
Average risk weight %	41%	49%	18%	<b>42%</b>

<sup>1</sup>On-balance sheet items includes Securities financing

Off balance sheet exposures can be found both in the banking book and in the trading book. The majority of derivatives are found in the trading book.

### 7.1 Risk in derivatives

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 OTC-traded, i.e. the terms connected to the specific contract are agreed upon on individual terms with the counterpart.

### 7.1.1 General information about derivatives

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

#### 7.1.1.1 Specific information about credit derivatives transactions

In the Nordea Group, the credit derivative portfolio is referable to Nordea Bank Finland Plc.

### 7.1.2 Counterparty risk

Counterparty risk is the risk that Nordea's counterpart in a FX, interest rate, commodity, equity or credit derivative contract defaults prior to maturity of the contract and that Nordea at that time has a claim on the counterpart. Counterparty risk in Nordea is subject to credit limits like other credit exposures and is treated accordingly. Counterparty risk arises mainly in the trading book, but also in the banking book due to hedging of external funding.

#### 7.1.2.1 Pillar 1 method for counterparty risk

Nordea uses the mark-to-market method to calculate the EAD for counterparty risk in accordance with the credit risk framework in CRD, i.e. the sum of current exposure (replacement cost) and potential future exposure. The potential future exposure is an estimate, which reflects possible changes in the market value of the individual contract during the remaining lifetime, and is measured as the notional principal amount multiplied by a risk weight. The size of the risk weight depends on the contract's remaining lifetime and the underlying asset. Netting of potential future exposures 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.

In table 25, the EAD as well as the RWA and capital requirement split on the exposure classes are available. As stated above, EAD equals the sum of current exposure and potential future exposure and as of December 2008 the potential future exposure is the major part of the EAD.

**Table 25**

#### Counterparty risk exposures, 31 December 2008

EURm	EAD	RWA	Capital requirement
Central government and central banks	0	0	0
Institutions	287	39	3
Corporate	2	2	0
Other	642	128	10
<b>Total</b>	<b>931</b>	<b>170</b>	<b>14</b>

<sup>1</sup> Exposure after closeout netting and collateral agreements

### 7.1.2.2 *Internal measurement of counterparty risk*

Counterparty risk for internal credit limit purposes are calculated using a similar method to the pillar 1 method, but somewhat different risk weight and netting principles for calculation of the potential future exposure are applied.

As of December 2008, the current net exposure was EUR 277m and the potential future exposure was EUR 94 in the internal counterparty risk framework. The current exposure has increased during the year, which is due to the large movements in the financial markets, especially for various FX rates, interest rates and credit spreads.

For internal capital purposes (EC framework), the significant part of the counterparty risk exposure is calculated using a method referred to as Expected Positive Exposure. For the remaining part of the exposure, the method is similar to the method used for internal credit risk limits.

On traded OTC contracts, Nordea performs fair value adjustments to the counterparty risk exposures on portfolio level, which means that the market value of the contracts is adjusted to account for credit risk.

### 7.1.2.3 *Mitigation of counterparty 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 the bank 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 regular – typically daily - basis is placed or received to cover the current exposure. The collateral is largely cash (EUR, USD, DKK, SEK and NOK), but also government bonds and to a lesser extent mortgage bonds are accepted.

In table 26, information of how the counterparty risk exposure is reduced with risk mitigation techniques are available.

**Table 26**

**Mitigation of counterparty risk exposure due to closeout netting and collateral agreements, 31 December 2008**

EURm	Current Exposure (gross)	Reduction from closeout	Reduction from held	Current Exposure (net)
		netting agreements	collateral	
<b>Total</b>	<b>565</b>	<b>37</b>	<b>251</b>	<b>277</b>

As of December 2008 Nordea had 17 financial collateral agreements. Nordea's financial collateral agreements do typically not contain any trigger dependent features, for example 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 Nordea the option to terminate a contract at a specific time or upon the occurrence of specified credit related events.

### 7.1.3 *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 participates 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. As a result, Nordea's settlement risk exposure against major trading counterparts has decreased considerably in recent years.

#### **7.1.4 Market risk**

For all categories of derivatives, it applies that the market risk stemming from the derivative contracts is an integral part of Nordea's general setup for managing market risk. A prime purpose of derivatives is to hedge market risk from on balance sheet items. Therefore, when measuring Nordea's market risk, no distinction is made between risk from on balance sheet items and derivatives. The RWA for market risk therefore contains risk stemming from derivatives, including credit derivatives. See chapter 5 for further description of Nordea market risk models and capital requirement for market risk in Nordea.

## **7.2 Special Purpose Entities and securitisations**

### **7.2.1 Consolidation of Special Purpose Entities**

A special purpose entity (SPE) is an entity created to accomplish a narrow and well-defined objective. Examples are entities created to effect leases, research and development activities or securitisations of financial assets. The legal form of a SPE may be a corporation, trust, partnership or unincorporated entity. SPEs are often created with legal arrangements setting limits on the decision-making powers of their governing board, trustee or management over the SPE's operations.

The sponsor (or entity on whose behalf the SPE was created) often transfers assets to the SPE and obtains the right to use assets held by the SPE. The sponsor can perform services for the SPE, while other parties may provide capital to fund the SPE. A SPE can in substance be controlled by an entity engaged in transactions with the SPE.

In accordance with IFRS, Nordea does not consolidate SPEs' assets and liabilities beyond its control. In order to determine whether Nordea controls a SPE or not, Nordea has to make judgements about risks and rewards and assesses the ability to make operational decisions for the SPE in question. Factors included in the assessment are whether the activities of the SPE are being in substance conducted on Nordea's behalf or if Nordea has in substance the decision making powers, the rights to obtain the majority of the benefits or the majority of the residual- or ownership risks. Nordea consolidates all SPEs where Nordea has retained 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 or rewards on these assets and liabilities. At year end 2008, the Nordea Group is the sponsor of some SPEs. Nordea offers a secondary market in notes issued by some of these SPEs and occasionally buys back financial instruments from the external counterparts. More information on the different SPEs can be in the Capital Adequacy and Risk Management



Report for the Nordea Group, section 7.3. Nordea (Nordea Bank Norge) carries no risk in relation to these transactions.

### **7.2.2 *Investments in securitisations***

According to the CRD, banks have securitisation positions whenever exposed to transactions where payments depend on the performance of an underlying pool of exposures and where a subordination structure ("tranche structure") exists for determination of losses from the same pool.

In a traditional securitisation, assets are transferred to a SPE, which in turn issues securities backed by these assets. In synthetic securitisation, assets are not physically transferred but by using credit derivatives it is possible to synthetically create a situation similar to a physical transfer. Nordea has no investments in securitisations in the banking book, according to the CRD definition of securitisation. As of end of 2008, Nordea (Nordea Bank Norway) carries no risk from investments in synthetic securitisations or other credit derivatives.

## **8. Liquidity risk and Structural Income Interest Risk**

### **8.1 Liquidity management**

#### **8.1.1 Management principles and control**

The Board of Directors of Nordea Group has the ultimate responsibility for Asset and Liability Management of the Group i.e. limiting and monitoring the Group's structural risk exposures. Risks in Nordea Group are measured and reported according to common principles and policies approved by the Board. The Board of Directors also decides on policies for liquidity risk management. These policies are reviewed at least annually. The CEO in GEM decides on the targets for the Group's risk management regarding SIIR, as well as, within the scope of resolutions adopted by the Board of Directors, the allocation of the liquidity risk limits. The ALCO, chaired by the CFO, prepares issues of major importance concerning the Group's financial operations and financial risks for decision by CEO in GEM. Group Treasury operationalises the targets and limits and develops the liquidity risk and SIIR management frameworks, which consists of policies, instructions and guidelines for the whole Group.

#### **8.1.2 Liquidity risk management**

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 Group's liquidity management is based on policy statements resulting in different 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 manage the market access. 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.

Special focus is given for the composition of the investor base in the terms of geographical range and rating sensitivity. Nordea publishes adequate information on the liquidity situation of the Group to remain trustworthy at all times. 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. The stress test should identify events or influences that could affect the funding need or the funding price and seek to quantify the potential effects. The purpose of stress tests is to supplement the normal liquidity risk measurement and confirm that the business continuity plan is adequate in stressful events, and that the business continuity plan properly describes procedures to handle a liquidity crisis with minimal damage to Nordea. Nordea stress scenarios are based on assessment of the particular events for which Nordea is presumed to be most vulnerable to taking into account the current business structure and environment. Stress tests focus on the other hand on increased funding need and on the other hand on increased funding price.

Group Treasury is responsible for managing the liquidity in Nordea and for compliance with the group wide limits from the Boards of Directors, CEO in GEM and ALCO.

### 8.1.3 *Liquidity risk measurement methods*

The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. In order to measure the exposure on both horizons, a number of liquidity risk measures have been developed covering all material sources of liquidity risk. In order to avoid short-term funding pressures, Nordea measures the funding gap risk, which expresses the expected maximum accumulated need for raising liquidity in the course of the next 14 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. Limit is set by the Board of Directors for the minimum size of the liquidity buffer. The liquidity buffer is set to ensure a total positive cash flow defined by the funding risk measurement and consists of high-grade liquid securities that can be sold or used as collateral in funding operations. The structural liquidity risk of Nordea is measured and limited by the Board of Directors through the net balance of stable funding, 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 longer than 6 months, and shareholders' equity, while stable assets primarily comprise retail loans, other loans with a remaining term to maturity longer than 6 months and committed facilities. ALCO has set as a target that the net balance of stable funding should be positive, which means that stable assets must be funded by stable liabilities.

### 8.1.4 *Liquidity risk analysis*

The short-term liquidity risk has been held at moderate levels throughout 2008. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 14 days, has been EUR -1.9bn (EUR -0.8bn). Nordea's liquidity buffer has been in the range EUR 2.7 – 6.0bn (EUR 1.6–3.3bn) throughout 2008 with an average of EUR 3.4bn (EUR 2.4bn). Nordea considers this a high level and it reflects the Group's conservative attitude towards liquidity risk in general and towards unexpected liquidity events in particular. The yearly average for the net balance of stable funding was EUR 4.9bn (EUR 0.3bn).

## 8.2 **Structural Interest Income Risk (SIIR)**

SIIR is the amount Nordea's accumulated net interest income would change during the next 12 months if all interest rates change by one percentage point. SIIR reflects the mismatch in the balance sheet items and the off balance sheet items when the interest rate re-pricing periods, volumes or reference rates of assets, liabilities and derivatives do not correspond exactly. Nordea Group's SIIR management is based on policy statements resulting in different SIIR measures, targets 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 and for complying with Group wide targets.

### 8.2.1 *SIIR measurement methods*

The basic measures for SIIR are the two re-pricing gaps measuring the effect on Nordea's net interest income for a 12 months period of a one percentage point increase, respectively decrease, in all interest rates. The re-pricing gap is presented in table 27. The re-pricing gaps are calculated under the assumption that no new market transactions are made during the period. Main elements of the customer behaviour and Nordea's decision-making process concerning Nordea's own rates are, however, taken into account. For

example in a low interest rate environment, when rates are decreasing further, the total decrease of rates cannot be applied to non-maturity deposits since rates cannot be negative. Similarly in an increasing rate environment Nordea may choose not to increase interest rates on all customer deposits correspondingly.

### 8.2.2 SIIR analysis

At the end of the year, the SIIR for decreasing market rates was EUR –8m (EUR –41m) and the SIIR for increasing rates was EUR 8m (EUR 41m). These figures imply that net interest income would decrease if interest rates fall and increase if interest rates rise.

Table 27

#### GAP Analysis, December 31 2008, EURm

Interest Rate Fixing Period	Group bs	Within 3 months	3-6 month	6-12 month	1-2 year	2-5 year	>5 year	Non Repricing	Total
<b>Assets</b>									
Interest bearing assets	53,592	49,486	2,625	207	242	681	283	68	53,592
Non interest bearing assets	2,143	0	0	0	0	0	0	2,143	2,143
<b>Total assets</b>	<b>55,734</b>	<b>49,486</b>	<b>2,625</b>	<b>207</b>	<b>242</b>	<b>681</b>	<b>283</b>	<b>2,210</b>	<b>55,734</b>
<b>Liabilities</b>									
Interest bearing liabilities	51,265	48,755	2,180	105	84	132	9	0	51,265
Non interest bearing liabilities	4,469	0	0	0	0	0	0	4,469	4,469
<b>Total liabilities</b>	<b>55,734</b>	<b>48,755</b>	<b>2,180</b>	<b>105</b>	<b>84</b>	<b>132</b>	<b>9</b>	<b>4,469</b>	<b>55,734</b>
<b>Off-balance sheet items NET</b>		<b>1,682</b>	<b>-1,128</b>	<b>-34</b>	<b>-72</b>	<b>-302</b>	<b>-146</b>	<b>0</b>	
<b>Exposure</b>		<b>2,413</b>	<b>-683</b>	<b>69</b>	<b>85</b>	<b>247</b>	<b>128</b>	<b>-2,259</b>	
<b>Cumulative exposure</b>			<b>1,730</b>	<b>1,799</b>	<b>1,884</b>	<b>2,131</b>	<b>2,259</b>	<b>0</b>	

## 9. ICAAP

Pillar 2 in the CRD, or the Supervisory Review Process (SRP), covers two main processes: the ICAAP and the Supervisory Review and Evaluation Process (SREP). This chapter describes the major components of these processes such as the EC framework, stress testing, and SREP.

### 9.1 Components of ICAAP

The purpose of the ICAAP is for each institution to review the management, mitigation and measurement of material risk to assess the adequacy of internal capital and to determine an internal capital requirement reflecting the risk appetite of the institution.

The internal capital requirement under the ICAAP is in Nordea based on the internal EC framework. In addition to calculating EC, Nordea conducts a comprehensive capital adequacy stress test process to analyse the effects of a series of global and local shock scenarios as part of the ICAAP. The results of stress testing are considered, along with potential management interventions, in internal capital requirement. Moreover, the internal capital requirement also takes less quantifiable components and third party requirements into consideration, both legally binding requirements and those arising from business decisions.

#### 9.1.1 EC

Since 2001 Nordea has calculated internal capital requirements based on the EC framework. This covers the following major risk types: credit risk, market risk, operational risk and business risk. Pillar 1 of the CRD 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 1 and pillar 2 risks. The primary differences between EC and the capital requirement according to CRD are:

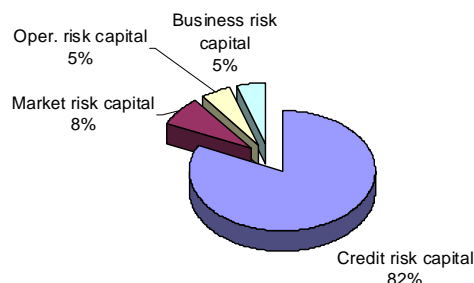
- Confidence level:
  - The confidence level for all risk types is 99.97% in the EC framework, versus 99.9% in pillar 1 of CRD.
- Credit risk:
  - EC for credit risk includes maturity adjustments
  - Exposures calculated using the Standardised Approach in pillar 1 according to CRD are calculated on the basis of internal models in the EC framework, though the models have not yet been approved by the financial supervisory authorities for use in the regulatory calculations.
  - Credit risk EC for corporate and institutions exposures is calculated using the internal estimates of LGD and EAD (i.e. using the Advanced IRB), rather than the regulatory values in the FIRB approach within pillar 1 of CRD.
  - Concentration risk is captured via the use of an internal credit risk portfolio model at the Nordea Group level, which is not specifically accounted for in pillar 1 in CRD but accounted for in the EC framework. Credit concentration risk is the credit risk stemming from not having a perfectly diversified credit portfolio, i.e. the risk inherent in doing business with large customers or being overexposed in particular industries or regions. Through the use of a credit risk portfolio model which considers exposures by industry and geography, the concentration risk can be identified. Credit risk measures are based on the results of the portfolio model although the industry or region concentration impact is allocated pro rata over the entire portfolio. Additionally, the credit risk measures consider

exposure to large customers by applying a single-name concentration add-on in the EC framework.

- Market risk:
  - EC for market risk is calculated for the trading book, but also for market risk in the investment portfolio, risk in internal defined benefit plans as well as real estate risk. The market risk associated with Nordea's long-term leases of its own office buildings is measured using a framework based on the book value of the underlying assets. In pillar 1 of the CRD, only the trading book is included in the capital calculations for market risk.
- Business risk:
  - Business risk is not included in pillar 1 of CRD. The EC framework includes business risk to account for the residual volatility in historical profit and loss after adjustments for market, operational and credit risk. Business risk represents the earnings volatility inherent in all businesses due to the uncertainty of revenues and costs as a consequence of changes in the economic and competitive environment. The main risk drivers of business risk are size of the fixed cost base, business margin volatility, volatility in business volumes and cost volatility. In this context, indirect effects such as the net interest income (NII) effect (a consequence of the SIIR, strategic risk and liquidity risk are considered). The business risk measurement is based on historical volatility in profit and loss stemming from business risk, i.e. a "cleaned operating profit" where the contributions from other risk types are neglected (e.g. trading income, credit losses, effect of operational risk events).
- Operational risk:
  - Differences in operational risk are due to differences in the historical collection of gross income data, which is the most recent rolling four quarters in EC and a three year average in pillar 1.
- Diversification effects:
  - Unlike pillar 1 in CRD, the EC framework accounts for group level diversification benefits in Nordea's varied operations.

The figure 6 shows the EC in the dimension risk type as of end of December 31 2008.

**Figure 6**  
EC distributed by risk type



### 9.1.2 Stress test

As a part of the ICAAP, stress tests are used as an important risk management tool in order to determine how severe unexpected changes in business and macro environment

will effect the capital need. The stress test reveals how the capital need varies during a stress scenario, where impact on regulatory capital requirements, EC and capital ratios occur.

Nordea conducts a comprehensive stress test annually, while ad-hoc stress tests, reverse stress tests and parameter sensitivity analyses for risk parameter are performed continuously. The stress test process is divided into the following three steps:

- Scenario development and translation
- Calculation
- Analysis and reporting

#### 9.1.2.1 *Scenario development and translation*

The annual stress test is based on three-year economic scenarios designed to replicate shocks that are particularly relevant for the existing portfolio. The development of stressed scenarios is performed by experts within Nordea Economic Research division. In addition to the stress scenarios Nordea uses a rolling financial forecast as a base case and the difference between the stressed and the base case scenario will set the ground for the stress effect and the additional capital need.

While the annual stress test is based on complex macro economic scenarios which involve estimates of several macroeconomic factors, the ad-hoc stress tests are based on direct estimates on risk parameter changes or a few macro 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 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 to impact the following parameters:

Parameter	Impact
Volumes	Volumes from deposits and lending are adjusted according to each scenario by isolating the specific impact of each parameter
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	Loan losses are calculated using an expected loss/provisions-recoveries model or stated in the scenario as bps of lending for each segment and country
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

#### 9.1.2.2 Calculation

The stressed figures and parameters from the scenario are used to calculate the effect on the regulatory capital requirements, 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, including diversification effects.

Stressed figures for loan losses, net profit and dividend from the financial statement are used to calculate the effect on the capital base. 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.

#### 9.1.2.3 Analysis and reporting

The first level of reporting is in Nordea the Capital Planning Forum, which reviews the details of the stress testing and implications on future capital. The finalised results are distributed to the Board of Directors in each legal entity in a manner that describes the implications of the stress tests on the adequacy of existing capital.

The results of the stress testing 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 Nordea Group and the sub-groups hold enough capital against the risk of the stressed events, or similar events, occurring.

The ICAAP stress testing in 2008 concluded that Nordea's existing capital was adequate to support its risks.

### 9.1.3 Conclusion of ICAAP and SREP

Nordea's capital levels have and continue to be adequate to support its risks from an internal perspective as well as from the vantage point of regulators. Heading into 2009, Nordea expects to continue to review the capital situation closely with regular ad-hoc stress testing providing a solid foundation for senior management decision making.

During the spring 2008, the regulators concluded that Nordea was adequately capitalised given its risk profile and portfolio based on the 2007 ICAAP. The 2008 ICAAP submission took place in mid 2008.



## 10. Capital base components

This chapter describes the conditions and major components of the capital base.

The calculation of capital base is done in accordance with the CRD and the Norwegian legislation. The outcome must as a minimum correspond to the sum of the capital requirement for credit risks, market risks, operational risks and capital requirement related to transition rules. In the capital base for the financial group only capital contributed by subsidiaries or firms that are covered by the consolidated accounts are to be included.

Items included in the capital base should without restrictions or time constraints be available for the institution to cover risk and absorb potential losses. All amounts are included net of any tax charge.

Generally, Nordea Group has the ability to transfer capital within its legal entities without material restrictions. International transfers of capital between legal entities are normally possible after approval by of the local regulator and are of importance when governing the capital position within the Group. The guarantee schemes introduced within EU has under certain circumstances limited the transferability to protect own countries' bank system before the functionality of cross border financial groups. The practical impact is at this time difficult to assess.

A summary of items included in the capital base is available in table 28.

**Table 28**

**Summary of items included in capital base**

EURm	31 December 2008	31 December 2007
Calculation of total capital base		
<b>Original own funds</b>		
Paid up capital	392	484
Share premium	97	120
<b>Eligible capital</b>	<b>489</b>	<b>604</b>
Reserves	1,827	1,898
Minority interests	0	0
Income (positive/negative) from current year	439	356
<b>Eligible reserves</b>	<b>2,266</b>	<b>2,254</b>
<b>Tier 1 capital (before hybrid capital and deductions)</b>	<b>2,755</b>	<b>2,858</b>
<b>Hybrid capital loans subject to limits</b>	<b>207</b>	<b>0</b>
Proposed/actual dividend	-305	0
Deferred tax assets	0	-142
Intangible assets	-37	-33
Deductions for investments in credit institutions	0	-2
IRB provisions excess (+) / shortfall (-)	-50	-26
Other items, net	23	59
<b>Deductions from original own funds</b>	<b>-368</b>	<b>-144</b>
<b>Tier 1 capital (net after deduction)</b>	<b>2,594</b>	<b>2,714</b>
- of which hybrid capital	207	0
<b>Additional own funds</b>		
Securities of indeterminate dur. and other instr.	352	327
Subordinate loan capital	666	652
Other additional own funds	0	0
<b>Tier 2 capital (before deductions)</b>	<b>1,018</b>	<b>979</b>
Deductions for investments in credit institutions	0	-2
IRB provisions excess (+) / shortfall (-) <sup>1</sup>	-50	-26
<b>Deductions from original additional own funds</b>	<b>-50</b>	<b>-28</b>
<b>Tier 2 capital ( net after deductions)</b>	<b>968</b>	<b>951</b>
Participations held in insurance undert., reinsurance	0	0
Pension assets in excess of related liabilities	0	0
<b>Total own funds for solvency purposes</b>	<b>3,562</b>	<b>3,665</b>

The capital base (referred to as own funds in the CRD) is the sum of tier 1 capital and tier 2 capital after deductions and less capital related to insurance companies. The two main components in the capital base are core equity in the balance sheet and subordinated debt. Below is a detailed description of the items included in the capital base.

The capital ratio is calculated by dividing the capital base with RWA while the quotient is calculated from the capital base in relation to the capital requirement.

## **10.1 Tier 1 capital**

Tier 1 capital is defined as capital of the same or close to the character of eligible capital, eligible reserves and also a limited part (up to 15% of tier 1) instrument hybrid capital loans (perpetual loans).

### ***10.1.1 Eligible capital***

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 the capital part of untaxed reserves, 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 companies group are also included. Positive income from current year is included as eligible capital after verification by the external auditors. However, negative income must always be included as a deduction. Potential repurchased own shares or own shares temporary included in trading portfolios should be deducted from eligible reserves.

### ***10.1.2 Hybrid capital loans subject to limits***

The requirements for including undated loans in tier 1 capital is restricted and repurchase can normally not take place until five years after the loan originally is issued. Hybrid capital loans, undated subordinated loans, may be repaid only by decision from Board of Directors in Nordea and with the permission of the Norwegian Financial Supervisory Authority. Further, there are restrictions related to step up conditions, order of priority, interest payments under constraint conditions and the level of amount that can be part of the tier 1 capital. The limit for including hybrid capital in the tier 1 capital is restricted to 15% after relevant deductions. If there are any surplus after applying the legal limit of 15 %, exceeding amount can be transferred to tier 2 capital.

Currently the hybrid capital loans included in the capital base of Nordea Bank Norge Group constitute 7.9% of the tier 1 capital.

### ***10.1.3 Deductions from Tier 1 capital***

#### ***10.1.3.1 Proposed/actual dividend***

In relation to income for the period, corresponding dividend should be deducted. The amount is deducted from the tier 1 capital and amounts to proposed distribution to shareholders by decision of the annual general meeting of shareholders.

#### ***10.1.3.2 Deferred tax assets***

In accordance with local legal requirements deferred tax assets has been deducted from the tier 1 capital. Deducted amount is based on accounting standards relevant for the groups of institutions which constitute the capital base. At year end 2008 there were no deferred tax assets in Nordea Bank Norge.

### *10.1.3.3 Intangible assets*

Intangible assets should be deducted from the tier 1 capital. The significant part of deducted intangible assets contains of goodwill. Other intangible assets relates to it software and development.

### *10.1.3.4 Deductions for investments in credit institutions*

The capital base should be deducted for equity holdings and some other certain types of contributions to institutions that are not part of the financial companies group (in Nordea foremost associated companies). 50 percent should be deducted from tier 1 capital and 50 percent should be deducted from tier 2 capital.

### *10.1.3.5 IRB provisions excess (+) / shortfall*

The calculation of the capital base is in accordance with the CRD and the Norwegian legislation. The differences between EL and actual provision made for the related exposures are adjusted for in the capital base. The negative difference (when the EL amount is larger than the provision amount) is included in the capital base as shortfall. According to the rules in the CRD, the shortfall amount shall be deducted from the capital base and be divided into both tier 1 capital and tier 2 capital. A positive difference (provisions exceed EL) can be included in tier 2 capital with certain limitations (maximum 0,6 percentage of IRB RWA).

## **10.2 Tier 2 capital**

The tier 2 capital is mainly related to subordinated debt with some specific deductions.

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

The basic principle for subordinated debt in the capital base is the order of priority in a default or bankruptcy situation. Under such conditions, the holder of the subordinated loan would be repaid after other creditors, but before shareholders. The subordinated debt will to some extent prevent the institution to go into liquidation.

The amount possible to include in the tier 2 capital related to dated loans is reduced if the remaining maturity is less then five years. Outstanding amount in the specific issue is deducted by 20 % for each year beyond five years.

As of end year 2008, Nordea (Nordea Bank Norge) holds EUR 0,7bn in dated subordinated debenture loans, EUR 0.4bn in undated subordinated debenture loans and EUR 0.2bn in hybrid capital loans (included as tier 1 capital).

### **10.2.1 Other additional funds**

Other additional funds contains of adjustment to valuation differences in available for sale equities transferred to core additional own funds. Unrealised gains from equity holdings classified as available for sale securities can according to regulation only be included in tier 2 capital.

### **10.2.2 Deductions from Tier 2 capital**

#### *Deductions for investments in credit institutions*

The capital base should be deducted for equity holdings and some other certain types of contributions to institutions that are not part of the financial companies group (in Nordea

foremost associated companies). 50 percent should be deducted from tier 1 capital and 50 percent should be deducted from tier 2 capital.

*IRB provisions excess (+) / shortfall*

The differences between EL and provision made for the related exposures are adjusted for in the capital base. The negative difference (when the EL amount is larger than the provision amount) is included in the capital base as shortfall. According to the rules in the CRD, the shortfall amount shall be deducted from the capital base and be divided into 50 percent in tier 1 capital and 50 percent in tier 2 capital.

*Participations hold in insurance undertakings*

Participations hold in insurance undertakings is deducted from the capital base. There is no participations hold in insurance within Nordea.

*Other deductions*

Surplus net value of pension plans for employees should under certain circumstances be deducted from the sum of tier 1 and tier 2.

## 11. Capital adequacy conclusions

This chapter includes a summary of the capital requirements and detailed information of capital related ratios.

### 11.1 Capital policy

In 2008, Nordea's capital base and tier 1 capital exceeded the regulatory minimum requirements outlined in CRD. Considering results of capital adequacy stress testing, capital forecasting and growth expectations, Nordea assesses that the buffers held for regulatory capital purposes are sufficient. The revised capital policy for Nordea Group states that over a business cycle, the target for the tier 1 ratio is 9% and the target for the capital ratio is 11.5%. The Board of Directors of Nordea Group has resolved to increase Nordea Group's share capital through an underwritten discounted issue of new ordinary shares with pre-emptive rights for existing shareholders of approx. EUR 2.5bn net and secondly by proposing to reduce the dividend payment to 19% of the net profit for 2008, to be decided by the 2009 Annual General Meeting, which will increase core tier 1 capital by approx. EUR 0.5bn. The rights offering is subject to shareholder approval at an Extraordinary General Meeting to be held on 12 March 2009.

### 11.2 Regulatory capital requirement

In table 29, an overview of the capital requirements and the RWA as of December 2008 divided on the different risk types is presented. The credit risk comprises approximate 93% of the risk. Operational risk accounts for 2% of the capital requirements and market risk comprises 5% of the capital requirements.

**Table 29**  
**Capital requirements and RWA**

EURm	2008		2007	
	Capital requirement	Basel II RWA	Capital requirement	Basel II RWA
<b>Credit risk</b>	<b>2,221</b>	<b>27,758</b>	<b>1,825</b>	<b>22,811</b>
IRB	1,956	24,453	1,113	13,911
of which institution	82	1,027	56	702
of which corporate	1,552	19,404	1,049	13,116
of which retail	310	3,880	n.a	n.a
retail mortgage	180	2,252	n.a	n.a
other retail	115	1,432	n.a	n.a
retail SME	16	196	n.a	n.a
of which other	11	142	7	92
Standardised	264	3,304	712	8,900
of which sovereign	7	82	3	35
of which institution	95	1,193	88	1,105
of which corporate	106	1,325	81	1,016
of which retail	43	536	526	6,575
of which other	13	168	14	169
<b>Market risk</b>	<b>52</b>	<b>651</b>	<b>42</b>	<b>530</b>
of which trading book, VaR	27	341	7	82
of which trading book, non-VaR	25	310	36	448
of which FX, non-VaR	0	0	0	1
<b>Operational risk</b>	<b>113</b>	<b>1,415</b>	<b>101</b>	<b>1,260</b>
Standardised	113	1,415	101	1,260
<b>Sub total</b>	<b>2,386</b>	<b>29,824</b>	<b>1,968</b>	<b>24,601</b>
<b>Adjustment for transition rules</b>				
Additional capital requirement according to transition rules	744	9,302	710	8,878
<b>Total</b>	<b>3,130</b>	<b>39,126</b>	<b>2,678</b>	<b>33,478</b>

### 11.3 Capital ratios

The transition phase of Basel II creates a need to manage the bank using a variety of capital measurements and capital ratios. The table 30 below shows that the regulatory transition rules comprise a floor on Nordea's capital requirement when compared to Basel II minimum requirements.

**Table 30**  
**Capital adequacy ratios, EURm**

	31 December 2008	31 December 2007
RWA with transition rules	39,126	33,478
RWA Basel II (pillar 1) before transition rules	29,824	24,601
Regulatory Capital requirement with transition rules	3,130	2,678
Economic Capital	1,914	1,695
Capital base	3,562	2,967
Tier 1 capital	2,594	2,196
<hr/>		
Tier 1 ratio including transition rules (%)	6.6%	6.6%
Tier 1 ratio excluding transition rules (%)	8.7%	8.9%
Core capital ratio including transition rules (%)	6.1%	n.a.
Core capital ratio excluding transition rules (%)	8.0%	n.a.
Capital ratio with transition rules (%)	9.1%	8.9%
Capital ratio before transition rules (%)	11.9%	12.1%
Capital base / Regulatory Capital requirement before transition rules (%)	149.3%	150.7%

## 12. Appendix

### 12.1 General description of pillar 1, 2 and 3

The Basel II framework was an international initiative with the purpose to implement a more risk sensitive framework for the assessment of risk for the calculation of regulatory capital, i.e. the minimum capital that the institution must hold. The intention was also to align the actual assessment of risk within the institutions with the assessment of the regulatory capital by allowing use of internal models also for credit risk.

From the beginning of 2007, the new CRD came into effect as the common framework for implementing the Basel II framework in EU. The CRD is built on three pillars:

- Pillar 1 – requirements for the calculation of the RWAs and capital requirement
- Pillar 2 – rules for the (SRP), including the ICAAP
- Pillar 3 – rules for the disclosure of risk and capital management, including capital adequacy

The CRD contains a detailed set of minimum requirements to assure the conceptual soundness and integrity of the internal assessment. In order to prevent large short-term effects on capital requirements, the regulators have introduced transition rules (also known as capital floor) for all institutions implementing the new capital adequacy reporting. The transitional rules, in force 2007-2009, mark the lowest eligible capital base and relate directly to the capital requirements calculated under Basel I regulations. During 2007 the capital requirements should be no less than 95% of the capital requirements calculated under Basel I regulations. For 2008 and 2009 the amounts of capital requirements are allowed to be 90% and 80% respectively of the capital requirements calculated under Basel I regulations. Therefore, it can be concluded that the CRD will have a step-wise effect on the institutions through the transitional rules limiting the possible reduction of capital requirement. The full effect will occur after the transition rules period (January 2010).

#### 12.1.1 Pillar 1

The new CRD is not changing the minimum required capital ratio of 8% compared to the previous regulation (Basel I). The changes are related to the definition and calculations of the RWA, which is the method used to measure the risk exposure of the reporting institution. The regulatory capital requirements are calculated using the following formula:

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$$\text{Minimum capital requirements} = \text{Capital base} / \text{RWA}$$

where,

$$\text{Minimum capital requirements} \geq 8\%$$


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The RWAs are calculated by using more sophisticated and risk sensitive methods than previously. Credit risk and market risk are two essential risk types like in Basel I, while operational risk is introduced as a new risk type in the CRD. The table below identifies the approaches available for calculating RWA in each risk type in accordance with the CRD:

### Primary approaches in the CRD

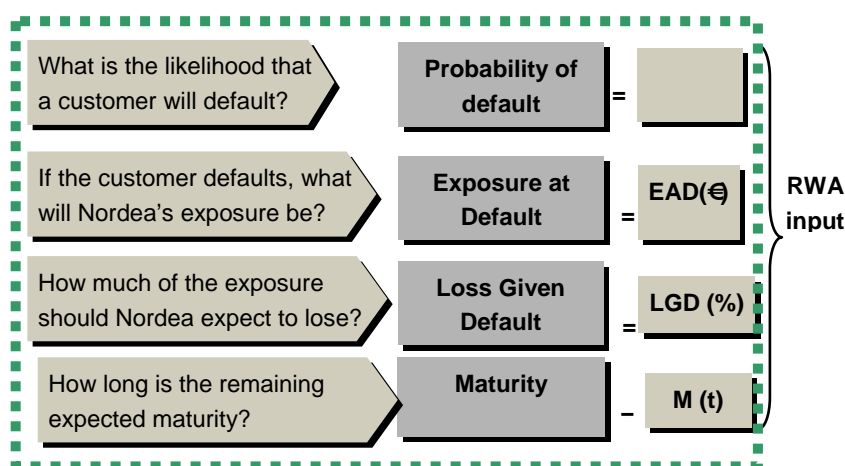
Approaches for reporting capital requirements		
Credit Risk	Market Risk	Operational Risk
(1) Standardised Approach	(1) Standardised Approach	(1) Basic Indicator Approach
(2) Foundation Internal Rating Based Approach (FIRB)	(2) Internal Models Approach	(2) Standardised Approach
(3) Advanced Internal Rating Based Approach (AIRB)		(3) Advanced Measurement Approach

The standardised approach for calculating credit risk is close to the previous Basel I regulation, except an additional possibility to use external rating for the counterparties and wider use of financial collateral. The RWA is set by multiplying the exposure with a risk weight factor dependent on the external rating and exposure class.

Credit risk according to FIRB is based on the internal rating and PD for each counterpart and fixed estimates for LGD and CCF, while Advanced IRB is based on internal estimates for PD, LGD and CCF

Below is an overview of the key parameters used in calculation of RWA in Pillar I.

**Figure 7: Key parameters in the RWA calculation**



#### 12.1.2 Pillar 2

Pillar 2, or the SRP, comprises two processes:

- the ICAAP and
- the (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 use better risk management techniques in monitoring and measuring risk in addition to the credit, market 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 includes 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 is the supervisor's review of the institution's capital management and an assessment of the institution's internal controls and governance.

Other risk types, which are not covered by the minimum capital requirements according to pillar 1, are typically liquidity risk, business risk, interest rate risk in the non-trading book and concentration risk. These are covered either by capital or risk management and mitigation processes under pillar 2.

### **12.1.3 Pillar 3**

In the CRD it is also stipulated how and when institutions should disclose capital and risk management. The disclosure should follow the requirements according to the pillar 3. 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

## **12.2 Financial stability plan in Norway**

State schemes for financial stability and amendments to these have been presented by the governments in the Nordic countries during the autumn 2008 and the beginning of 2009. Generally, Nordea Group welcomes the State schemes for financial stability and is currently evaluating the schemes and the amendments.

In Norway, stabilising liquidity measures through the Norwegian Central Bank with a facility for banks, where government bonds are swapped for covered bonds have been conducted.

The Norwegian Government has also, in February 2009, announced a new stability plan that aims at providing adequate access to financing from banks to households and corporates at an amount of NOK 100bn. The stabilizing liquidity measures have also been extended. During the fourth quarter 2008, Nordea participated in swap facilities under the present Norwegian scheme. In Norway, stabilising efforts have so far been focused on liquidity measures through the Norwegian Central Bank with a NOK 350bn facility with banks, where government bonds are swapped for covered bonds.

The Norwegian Government has announced a new stability plan that aims at providing adequate access to financing from banks to households and corporates. The amount allocated to the plan is NOK 100bn, which is evenly divided between two initiatives.

The government will establish a Government Bond Fund of NOK 50bn for the purpose of buying bonds issued by Norwegian corporates in the primary or second hand market. The Government Finance Fund of NOK 50bn can make investments in banks in the shape of hybrid bonds or preference capital, thus aimed improving the capital ratio.

Further details of the conditions will be developed in legislation and regulations to follow, and also in individual agreements with respective banks seeking capital injections under the plan.

During the fourth quarter, Nordea has participated in swap facilities under the present Norwegian scheme.

## 12.3 Exposure classes for Credit risk

A diversified credit portfolio can be divided into the exposure classes defined by the CRD. The basis for calculation of the EAD in the RWA formula is the division of exposure classes. Nordea is approved to use the FIRB 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 2008. Following is a description of what exposures are included in the different exposure classes.

### 12.3.1 IRB exposure classes

#### **Institutions exposures**

Exposures to credit institutions and investment firms are classified as exposures to institutions. In addition, exposures to regional governments, local authorities and multilateral development banks are classified as exposures to institutions if they are not treated as exposures to sovereigns<sup>2</sup> according to regulations issued by the authorities.

#### **Corporate exposures**

Exposures that are not assigned to any of the other exposure classes are classified as corporate exposures. The corporate exposure class contains exposures that are rated in accordance to Nordea's internal guidelines.

#### **Retail exposures**

Exposures to small and medium sized entities and to private individuals are included in the retail exposure class and defined in accordance to Nordea's internal guidelines for scoring.

#### **Other non- credit obligation assets**

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

### 12.3.2 Standardised exposure classes

#### **Central governments and central banks**

Exposures to central governments and central banks are, subject to national discretion, treated with low risk if the counterparty is within European Economic Area member states. Subject to national discretion, the risk weight of 0% is, for the majority of these exposures, applied in Nordea.

#### **Regional governments and local authorities**

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

#### **Institution exposures**

Exposures to institutions are assigned a risk weight depending on the external rating, by an eligible rating agency, of the central government in the jurisdiction of the institution. In Poland, 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. Therefore, the risk weights can differ from 0% to 150% for these exposures.

<sup>2</sup> Sovereigns include central governments, central banks, regional governments, local authorities and other public sector entities.

### **Corporate exposures**

Exposures to corporate rated by eligible rating agency are assigned a risk weight from 20% to 150%. Exposures without external rating are assigned a risk weight of 100%.

### **Retail exposures**

Retail exposures are assigned a risk weight of 75%.

### **Exposures secured by real estate**

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

### **Other**

- Exposures to administrative bodies and non-commercial undertakings (such as public sector entities) are, subject to decision by the local authority, assigned a risk weight of 0% to 100%.
- Exposures to named multilateral development banks are assigned a risk weight of 0%. Other multilateral development banks are assigned a risk weight according to the methods used for exposures to institutions.
- Exposures to named international organisations are assigned a risk weight of 0%. Other international organisations are assigned a risk weight of 100%.
- Past due items (items that are past due for more than 90 days). The unsecured part of any past due item are assigned a risk weight of 150% if value adjustments (allowances) are less than 20% and 100% if value adjustments (allowances) are no less than 20% of the unsecured part. The part of the past due items that are secured by residential real estate property are assigned a risk weight of 100% or 50% depending on the size of the value adjustment (above or below 20%) and national regulations.
- Short-term claims. Exposures reported as short-term claims receive a risk weight based on the short term external rating of the institution. Short-term exposures to institutions and corporate for which a short-term credit assessment by a nominated rating agency is available, are assigned a risk weight in accordance with a six step mapping scale made by the financial supervisory authorities. However, this exposure class is not used for exposures to institutions treated according to the central government risk weighted method.
- Other items
  1. Tangible assets, prepayments and accrued income where no counterpart can be determined, holdings of equity etc are assigned a risk weight of 100%.
  2. Cash are assigned a 0% risk weight.

## List of abbreviations

ALCO	Asset and Liability Committee
CCF	Credit Conversion Factor
CDS	Credit Default Swaps
CEBS	Committee of European Bank Supervisors
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CLN	Credit Linked Notes
CMO	Collateralised Mortgage Obligations
CPF	Capital Planning Forum
CRD	EU's Capital Requirements Directive
CRO	Chief Risk Officer
EBF	European Banking Federation
ECC	Executive Credit Committee
EAD	Exposure at Default
EC	Economic Capital
EL	Expected Loss
EU	European Union
FFFS	Finansinspektionens Författningssamling (The Swedish FSA's directive)
FIRB	Foundation Internal Rating Based approach
FX	Foreign Exchange
GCC	Group Credit Committee
GEM	Group Executive Management
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standard
IRB	Internal Rating Based approach
LGD	Loss Given Default
LTV	Loan to Value
NLP	Nordea Life and Pensions
OTC	Over The Counter (derivatives)
PD	Probability of Default
RWA	Risk Weighted Amount
S&P	Standard & Poor's
SA	Standardised approach
SRP	Supervisory Review Process
SREP	Supervisory Review and Evaluation Process
SIIR	Structural Interest Income Risk
SME	Small and Medium-sized Enterprises
SPE	Special Purpose Entity
VaR	Value at Risk