



Capital and Risk Management (Pillar III)

Nordea Bank Finland Group 2011

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Nordea Bank Finland hereby presents its capital position and how the size and composition of the capital base is related to the risks as measured in Risk Weighted Amounts (RWA). The national capital adequacy legislations are based on the European Union's (EU) Capital Requirements Directive (CRD), which in turn is based on the Basel II framework issued by the Basel Committee on Banking Supervision (BCBS).

The Nordea Bank Finland Group follows the Finnish Act on credit institutions and the Finnish financial supervisory authority's standards 4.5 Supervisory disclosure of capital adequacy information and 4.1 Establishment and maintenance of internal control and risk management. Furthermore, the disclosures are made in accordance with Nordea's internal policy and instructions for disclosing information on capital adequacy in the Nordea Group.

Further disclosure of risk, liquidity and capital management is presented in the annual report in accordance with the international financial reporting standards, IFRS. The pillar III disclosure is made for the Nordea Group and for the subgroups Nordea Bank Danmark Group, Nordea Bank Finland Group and Nordea Bank Norge Group as well as Nordea Bank Polska S.A. This report for the Nordea Bank Finland Group is presented on www.nordea.com and the key data on capital adequacy is presented in the annual report of the entity.

The full pillar III disclosure is made annually and the periodic information is published semi-annually, included in the semi-annual 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. Nordea has stated the common principles in a policy and instruction for disclosing information on capital adequacy in the Nordea Group. The Board of Directors in Nordea Bank Finland has also approved a policy regarding pillar III disclosure.

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

# 1. Highlights of 2011

Nordea Bank Finland continued to show a solid risk position and credit quality. This was reflected in a 12.8% core tier 1 capital ratio both including and excluding transition rules.

The macroeconomic recovery in the Nordic countries slowed down while turbulence in the financial markets intensified in the second half of 2011. Nordea has continued to show a solid risk position and Nordea continued to have a strong name in the funding market, with high activity also maintained in the long-term funding market.

Nordea is confident and well-prepared for the future, due to strong profitability, good quality in the well-diversified credit portfolio, a strong capital base and a diversified funding base. From what is known today, Nordea will be able to meet the Basel III capital requirements and liquidity coverage ratio (LCR) requirements in due time for implementation.

# Capital ratios already at strong levels

The core tier 1 capital ratio of Nordea Bank Finland both including and excluding transition rules was 12.8% at the end of 2011 (13.6%).

# Strong funding name maintained and high long-term funding activity

Also in the funding and liquidity risk area, Nordea maintained its position as one of the strongest names in the funding market. Nordea, by virtue of its well-recognised name and strong rating, has been able to actively use all its funding programmes during 2011. Nordea has continued to see an inflow of new investor names, both in Europe and in the US.

#### Strength in adverse scenarios – stress testing

During 2011 Nordea has performed several internal stress tests in order to evaluate the effects of an economic downturn as well as effects from specifically identified high-risk areas. In addition, the Nordea Group has been subject to external stress tests performed by financial supervisors, central banks and equity analysts. Nordea participated in the EU-wide stress test as well as the recapitalisation exercise for European banks which was coordinated by the European Banking Authority (EBA). The results of the EBA stress test as well as the recapitalisation exercise clearly demonstrated that Nordea is well capitalised.

# Basel III - new regulations for capital and liquidity risk

During 2011, more clarity has emerged as to the main elements of the new regulatory requirements for capital and risk – the Capital Requirement Directive IV (CRDIV) and the Solvency II frameworks. In Nordea, there is a strong focus on capital, liquidity and risk management within the organisation and Nordea is well prepared to meet new regulatory requirements.

In the forthcoming years banks will be subject to changes, not only in additional capital and liquidity requirements, but also other closely related regulations are emerging. It is the additional capital surcharge of so called Systemically Important Banks (SIBs) both on global (G-SIBs) and on domestic level (D-SIBs), a new policy for dealing with bank failure (crisis management) and changes to the accounting regulation that will have an effect on capital and risk.

# 2. Governance of risk and capital management

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

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

The information given in this report refers to Nordea Bank Finland Plc. with corporate registration number 1680235-8.

The financial statements are published semi-annually and the consolidated financial statements include the accounts of the parent company Nordea Bank Finland Plc. including subsidiaries according to International Accounting Standard (IAS) 27. In the Financial Group, the insurance operations are not consolidated. According to the requirements in the CRD, insurance subsidiaries and associated undertakings with financial operations are instead deducted from the capital base in the capital adequacy reporting (e.g. credit institutions or insurance companies, where Nordea Bank Finland owns 10% or more of the capital). Table 1 last in this chapter disclose the undertakings that have been consolidated and deducted from the capital base.

# 2.2 Risk and capital management

# 2.2.1 Risk and capital management principles and control

#### **Board of Directors and Board Risk Committee**

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

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

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

#### Responsibility of CEO and GEM

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

The CEO in Group Executive Management (GEM) decides on the targets for the Nordea's risk management regarding Structural Interest Income Risk (SIIR).

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

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

The Risk Committee, chaired by the Chief Risk Officer (CRO), oversees the management and control of the Nordea Group's risks on an aggregate level and evaluates the sufficiency of the risk frameworks, controls and processes associated with these risks. Further, the Risk Committee decides, within

the scope of resolutions adopted by the Board of Directors, the allocation of the market risk limits as well as liquidity risk limits to the risk-taking units Group Treasury and Nordea Markets. The limits are set in accordance with the business strategies and are reviewed at least annually. The heads of the units allocate the respective limits within the unit and may introduce more detailed limits and other risk mitigating techniques such as stop-loss rules. The Risk Committee has established two subcommittees for its work and decision-making within specific risk areas.

The two sub-committees are the Group Valuation Committee (GVC) and the Credit Risk Model Validation Committee (CRMVC). GVC addresses issues related to the valuation framework of traded financial instruments, including standards, processes and control of valuation. The responsibility of CRMVC is to review and approve the validation of credit risk models and parameter estimation (PD, LGD and CCF).

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

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

# Responsibility of CRO and CFO

In figure 1 the governance structure of risk, liquidity and capital management in Nordea is illustrated.

Figure 1 Governance of risk, liquidity and capital management

# Risk, Liquidity and Capital Management governance structure

# Nordea – Board of Directors Board Risk Committee Chief Executive Officer (CEO) / Group Executive Management (GEM) Asset and Liability Committee, ALCO (Chairman: CRO) Risk Committee (Chairman: CRO) GCCR and GCCW (Chairman CCO)

# Risk, Liquidity and Capital Management responsibilities

Chief Financial Officer (CFO)	Chief Risk Officer (CRO)
Group Corporate Centre (Head: CFO) Liquidity management framework Capital management framework	Group Risk Management (Head: CRO) Risk management framework Capital adequacy framework Monitoring and reporting

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

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

# 2.2.2 Monitoring and reporting

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

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

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

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

# 2.2.3 Different risk types within capital adequacy

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

#### Risk in pillar I

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

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

# Risk in pillar II

In pillar II, additional risks not included in the pillar I risks are measured and assessed. These are managed and measured although they are not included in the calculation of the minimum capital requirements. In the calculation of Economic Capital (EC) most of the pillar II risk is included as well as risk in the life insurance operations. Examples of pillar II risk types are liquidity risk, business risk, interest rate risk in the banking 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. In order to measure the exposure, a number of liquidity risk measures have been developed.
- Business risk is the earnings volatility inherent in all business due to the uncertainty of revenues and costs due to changes in the economic and competitive environment. Business risk in the Economic Capital framework is calculated based on the observed volatility in historical profit and loss that is attributed to business risk.
- Interest rate risk in the banking book consists of exposures deriving from the balance sheet
  (mainly lending to public and deposits from public) and from Group Treasury's investment
  and liquidity portfolios. The interest rate risk inherent in the banking book is measured in
  several ways on a daily basis and in accordance with the financial supervisory authorities' requirements.
- Pension risk is included in market risk in the Economic Capital framework and includes equity, interest rate and FX risk in the Nordea sponsored defined benefit pension plans.
- Life insurance risk is the impact from changes in mortality rates, longevity rates and disability rates.
- Real estate risk consists of exposure to owned and leased properties and is included in the market risk Economic Capital.
- Concentration risk is the credit risk related to the degree of diversification in the credit portfolio, i.e. the risk inherent in doing business with large customers or not being equally exposed across industries and regions. The concentration risk includes both single name concentration risk and sector/geography concentration risk and is included in the Economic Capital framework.

# 2.3 Roll-out plan

In June 2007, Nordea received approval by the Financial Supervisory Authorities (FSA) to use the Foundation Internal Rating Based (FIRB) approach for corporate and institution exposure classes in Finland and other Nordic countries. In December 2008 Nordea was approved of using the Internal Rating Based (IRB) approach for the Retail exposure class in Finland and other Nordic countries (with the exception for the Finance companies in all countries that were not applied for). The standardised approach is currently used for the remaining portfolios, such as Nordea Finance Retail portfolio, international branches (incl. Baltics) as well as subsidiaries in Baltic countries and Poland. Nordea aims to continue the roll-out of the IRB approaches in forthcoming years.

Table 1 Specification over Group undertakings deducted from Nordea Bank Finland, 31 December 2011

	Number of	Book value V	oting power	Consolidation
	shares	EURm o	of holding % Domicile	method
Group undertakings included in Nordea Bank Finland				
Nordea Finance Finland Ltd	1,000,000	306	100 Espoo	purchase method
SIA promano Lat		30	100 Riga	purchase method
Promano Est Oü		10	100 Tallinn	purchase method
Promano Lit UAB		10	100 Vilnius	purchase method
SIA Realm		10	100 Riga	purchase method
SIA Lidosta		1	100 Riga	purchase method
Other companies		3		purchase method
Total		370		
Over 10 % investments in credit institutions deducted from the capital base				
Luottokunta		49	27 Helsinki	
NF Fleet Oy		2	20 Espoo	
Other		3		
Total investments in credit institutions deducted from the capital base		54		

# 3. Capital position

Nordea Bank Finland has during the year maintained the strong capital position. The New Normal strategy delivered on capital efficiency which gave a positive impact on the capital position. All ratings given for Nordea Bank Finland during the year are stable, stating that the bank has a strong business position with adequate capital, earnings and resilient risk profile.

# 3.1 Capital adequacy assessment

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

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

# 3.2 Regulatory capital requirements

In table 2, an overview of the capital requirements and the RWA as of December 2011 divided on the different risk types is presented in comparison with previous year. The credit risk comprises approximately 84% of the risk. Operational risk accounts for 6% of the capital requirements and market risk comprises 10% of the capital requirements.

Table 2 Capital requirements and RWA in Nordea Bank Finland

	31 Decer	nber 2011	31 December 20	
EURm	Capital requirements	RWA	Capital requirements	RWA
Credit risk	5,367	67,088	5,238	65,470
IRB	2,798	34,972	2,541	31,766
- of which corporate	1,838	22,972	1,718	21,477
- of which institution	594	7,425	446	5,581
- of which retail	346	4,327	356	4,456
- of which retail SME	48	604	47	587
- of which retail mortgage	189	2,357	158	1,980
- of which retail other	109	1,366	151	1,888
- of which other	20	248	20	253
Standardised	2,569	32,116	2,696	33,704
- of which sovereign	29	362	28	348
- of which institution	918	11,474	1,005	12,560
- of which corporate	1,214	15,177	1,270	15,875
- of which retail	310	3,880	319	3,992
- of which other	98	1,222	74	929
Market risk <sup>1</sup>	663	8,291	358	4,474
- of which trading book, Internal Approach	460	5,749	119	1,482
- of which trading book, Standardised Approach	203	2,542	239	2,992
- of which banking book, Standardised Approach	-	-	-	-
Operational risk	415	5,189	421	5,258
Standardised	415	5,189	421	5,258
Sub total	6,445	80,567	6,016	75,203
Adjustment for transition rules				
Additional capital requirement according to transition rules	-	-	-	-
Total	6,445	80,567	6,016	75,203

<sup>&</sup>lt;sup>1</sup>Note that the comparison figures are not restated with respect to CRD III.

The RWA excluding transition rules of EUR 80.6bn ended on 7% higher level compared to the previous year despite the higher average growth in the total exposures. With the adoption of the CRD III amendments, new risk types under the internal approach have been introduced. For Nordea Bank Finland this includes additional capital charge for stressed VaR, incremental and comprehensive risk. In addition, under the standardised approach the risk weights for specific equity risk have increased. The total CRD III impact for Nordea Bank Finland is an increase of EUR 4,549m in market risk RWA.

# 3.3 Capital ratios

The growth in RWA was supported by slight increase in the capital base. The capital base ratio decreased from 14.3% to 13.4% mainly due to the change in the capital requirement for market risk. Table 3 shows the key capital adequacy figures in Nordea Bank Finland. Transition rules are not affecting the Nordea Bank Finland's capital requirement compared to Basel II (pillar I) minimum requirements.

Table 3 Key capital adequacy figures in Nordea Bank Finland

EURm	31 December 2011	31 December 2010
RWA including transition rules	80,567	75,203
RWA excluding transition rules	80,567	75,203
Capital requirement including transition rules	6,445	6,016
Core tier 1 capital	10,310	10,242
Tier 1 capital	10,310	10,242
Capital base	10,805	10,730
Capital ratios excl. transition rules		
Core tier 1 capital ratio	12.8%	13.6%
Tier 1 capital ratio	12.8%	13.6%
Capital base ratio	13.4%	14.3%
Capital adequacy quotient (Capital base /Capital requirement)	1.7	1.8
Capital ratios incl. transition rules		
Core tier 1 capital ratio	12.8%	13.6%
Tier 1 capital ratio	12.8%	13.6%
Capital base ratio	13.4%	14.3%
Capital adequacy quotient (Capital base /Capital requirement)	1.7	1.8

# 4. Credit risk

The overall credit quality is solid with strongly rated customers and continued positive migration. Nordea Bank Finland's credit portfolio is well diversified both in terms of industry sectors and geography and has no direct exposure to the Euro crisis. Loan losses decreased from last year, although an increase was seen towards the end of the year.

# 4.1 Credit risk management

#### 4.1.1 Governance of credit risk

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

Within the powers to act granted by the Board of Directors, credit risk limits are approved by credit decision making authorities on different levels in the organisation. The rating and exposure of the customer determine at what level the decision will be made (see figure 2). The credit decision making structure has been adjusted with effect from the third quarter of 2011 to reflect organisational changes in Nordea in the second quarter of 2011. The Group Executive Management Credit Committee (GEM CC) decides on proposals for the largest exposures and proposals related to major principle issues. Responsibility for the credit risk lies with the customer responsible unit. Customers are assigned a rating or risk grade (based on scoring) in accordance with the framework for quantification of credit risk.

Figure 2 Credit decision-making structure for main operations



# 4.1.2 Management of credit risk

Credit risk is defined as the risk of loss if customers fail to fulfil their agreed obligations and the pledged collateral does not cover existing claims. The credit risks stem mainly from various forms of lending, and also from issued guarantees and documentary credits, such as letters of credit where Nordea has potential claims on the customers. Furthermore, credit risk may also include counterparty credit risk, transfer risk and settlement risk. Counterparty credit risk is the risk that the counterpart in an FX, interest, commodity, equity or credit derivatives contract defaults prior to maturity of the contract at which time Nordea has a claim on the counterpart. Settlement risk is the risk of losing the principal on a financial contract, due to a counterpart's default during the settlement process. Further information about counterparty credit risk and settlement risk is available in section 4.4.5. Transfer risk is a credit risk attributable to the transfer of money from the country where the borrower is domiciled, and is affected by changes in the economic and political situation of the countries concerned.

Concentration risk in specific industries is followed by industry monitoring groups and managed through specific industry credit policies which are established for industries where at least two of the following criteria are fulfilled:

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

There is usually a cap set for Nordea in such an industry. All industry credit policies are decided by the Executive Credit Committee and reported annually to the Board Risk Committee.

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

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

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

#### 4.1.3 Measurement of credit risk

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

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

# 4.1.4 Credit risk mitigation and collateral policy

All credit risk mitigations are an inherent part of the credit decision process. In every credit decision and review the valuation of collateral is considered as well as the adequacy of covenants and other risk mitigations.

Pledging of collateral is the main credit risk mitigation method. Collateral coverage is higher for exposure to financially weaker customers than for those, which are financially strong.

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

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

The following collateral types are most common in Nordea:

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

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

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

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

# 4.1.5 Definition and methodology of impairment

Weak and impaired exposure is closely and continuously monitored and reviewed at least quarterly in terms of current performance, business outlook, future debt service capacity and the possible need for provisions. A need for provision is recognised if there is objective evidence, based on loss events or observable data, that there is impact on the customer's future cash flow to the extent that full repayment is unlikely, collateral included. Exposures with provision are considered as impaired. The size of the provision is equal to the estimated loss, which is the difference between the book value of the outstanding exposure and the discounted value of the future cash flow, including the value of pledged

collateral. Impaired exposure can be either performing or non-performing. Impaired exposure is treated as in default when determining default probability. Exposure that is past due more than 90 days is automatically regarded as in default, and reported as non-performing and impaired, or not impaired depending on the deemed loss potential.

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

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

# 4.2 Link between credit risk exposure and the balance sheet

This section discloses the link between the loan portfolio as defined in accordance with accounting standards and exposure as defined in accordance with the CRD. The main differences are outlined in this section to illustrate the link between the different reporting methods. A detailed definition of exposure classes used in the capital adequacy calculations is described in chapter 13.

Original exposure is the exposure before taking into account substitution effects stemming from credit risk mitigation, credit conversion factors for off-balance exposure and allowances within the standardised approach. In this report, however, exposure is defined as exposure at default (EAD) for IRB exposure and exposure value for standardised exposure if nothing else is stated. Credit risk exposure presented in this report, in accordance with the CRD, is divided between exposure classes where each exposure class is divided into exposure types as follows:

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

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

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

Table 4 shows the link between the CRD credit risk exposure and items presented in the Annual Report.

Table 4 Specification of on-balance and off-balance items for Nordea Bank Finland, 31 December 2011

Total	399,287	-27,425	-202,331	-542	168,989	168,616
Other assets and prepaid expenses	10,774	-7,945	-12	-1,276	1,542	1,509
Intangible assets	106			-106		
Derivatives	170,228		-170,228			
Loans to the public <sup>2</sup>	99,331		-25,440	840	74,731	74,391
Loans to credit institutions <sup>1</sup>	79,350		-6,651		72,699	72,699
pledged instruments	39,212	-19,480			19,731	19,731
Treasury bills, other interest-bearing securities and						
Cash and balances with central banks	286				286	286
On balance items						_
On balance	(accounting)	market risk	lending	Other	Exposure	Exposure
	Balance sheet	related to	securities		Original	
EURm		Items	derivatives,			
			Repos,			

	Off balance	Included in	Included in
	sheet	derivatives	CRD off
Off balance	(accounting)	& sec fin	balance
Off balance items in Annual Report			
Assets pledged as security for own liabilities	35,016	-35,016	
Contingent liabilities	19,041		19,041
Commitments	18,725		18,725
Total	72,782	-35,016	37,765

	Included in CRD off bal (from AR)	Included in CRD (not in AR) <sup>3</sup>	Original Exposure	Credit Conversion Factor %	Exposure
Off balance items in CRD					
Credit facilities and credit accounts	16,456	3,211	19,667	30%	5,812
Loan commitments	2,228	701	2,928	36%	1,065
Guarantees	17,957		17,957	61%	10,867
Other (leasing and documentary credits)	1,125		1,125	29%	325
Total	37,765	3,912	41,677		18,070
Derivatives and Securities			Original		

Derivatives and Securities	Original	
Financing	Exposure	Exposure
Derivatives	42,468	42,466
Securities Financing Transactions & Long Settlement Transactions	1,617	1,617
Total credit risk (CRD definition)	254,752	230,769

<sup>1)</sup> Corresponding figure before allowances EUR 79,350m

#### On-balance sheet items

As shown in table 4, the following items have been excluded from the balance sheet, when calculating on-balance exposure in accordance with the CRD:

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

#### Off-balance sheet items

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

<sup>2)</sup> Corresponding figure before allowances EUR 100,171m

<sup>3)</sup> Off-balance exposures included in the CRD but not included in the Annual Report (AR), such as exposures related to undrawn credit facilities which are unconditionally cancellable.

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

#### Derivatives and securities financing

It should be noted that derivatives are both included on-balance (i.e. fair value without netting) and off-balance (i.e. nominal amounts) in accordance to accounting standards. However, in the CRD the derivatives and securities financing are reported in their own exposure types. The calculation method used in the CRD is based on the sum of current exposure and potential future exposure. Also, repurchase agreements and securities lending/borrowing transactions are in the balance sheet calculated based on nominal value. The exposure in the CRD calculations is determined net of the collateral value.

# 4.3 Capital requirements for credit risk

# 4.3.1 Development of exposure and RWA

This section includes an overview as well as an in-depth description of the distribution of the credit risk portfolio. For more detailed information on the principles for RWA calculations under the IRB and standardised approaches see chapter 13.

In table 5, the original exposure, the exposure, the average risk weight expressed as percentages, RWA and capital requirement, are distributed by exposure class. The IRB exposure classes contain the portfolios for which Nordea has been approved.

The standardised approach is currently used for the remaining portfolios, such as foreign branches. Some exposure classes have been merged in the table due to low exposure in these exposure classes.

Table 5 Capital requirements for credit risk in Nordea Bank Finland, 31 December 2011

	Original		Average risk		Capital
EURm	exposure	Exposure	weight	RWA	requirements
IRB exposure classes					
Institutions	37,455	36,705	20%	7,425	594
Corporates	57,714	43,647	53%	22,972	1,838
Retail	33,480	31,592	14%	4,327	346
- of which mortgage	25,914	25,606	9%	2,357	189
- of which other retail	6,344	4,995	27%	1,366	109
- of which SME	1,222	991	61%	604	48
Other non-credit obligation assets	277	248	100%	248	20
Total IRB approach	128,925	112,191	31%	34,972	2,798
Standardised exposure classes					
Central government and central banks	39,230	41,579	1%	332	27
Regional governments and local authorities	2,676	2,994	1%	30	2
Institutions	48,078	47,212	24%	11,474	918
Corporates	19,776	15,161	100%	15,177	1,214
Retail	8,222	3,982	75%	2,987	239
Exposures secured by real estate	2,608	2,553	35%	893	71
Other <sup>1</sup>	5,236	5,096	24%	1,222	98
Total standardised approach	125,826	118,578	27%	32,116	2,569
Total	254,752	230,769	29%	67,088	5,367

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

# 4.4 Credit risk exposure

# 4.4.1 Exposure by exposure type

In table 6, the exposure is split by exposure classes and exposure types.

Table 6 Exposure classes split by exposure type in Nordea Bank Finland, 31 December 2011

		Off balance sheet	Securities		
EURm	On balance sheet items	items	financing	Derivatives	Total
IRB exposure classes					
Institutions	10,191	911	556	25,047	36,705
Corporates	20,877	11,074	628	11,068	43,647
Retail	30,550	921	0	121	31,592
- of which mortgage	25,492	114	0	0	25,606
- of which other retail	4,289	615	0	91	4,995
- of which SME	768	193	0	30	991
Other non-credit obligation assets	243	5	0	0	248
Total IRB approach	61,860	12,911	1,184	36,236	112,191
Standardised exposure classes					
Central governments and central banks	39,374	429	225	1,552	41,579
Regional governments and local authorities	1,715	114	2	1,164	2,994
Institutions	43,309	435	196	3,272	47,212
Corporates	11,127	4,034	0	0	15,161
Retail	3,839	143	0	0	3,982
Exposures secured by real estate	2,552	1	0	0	2,553
Other¹	4,841	3	10	242	5,096
Total standardised approach	106,756	5,159	433	6,230	118,578
Total exposure	168,616	18,070	1,617	42,466	230,769

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

The average exposure in 2011 is presented in table 7.

Table 7 Exposure classes split by exposure type in Nordea Bank Finland, Average exposure during 2011

Average exposure					
		Off balance sheet	Securities		
EURm	On balance sheet items	items	financing	Derivatives	Total
IRB exposure classes					
Institutions	6,444	923	1,030	21,372	29,769
Corporates	20,120	11,508	171	8,568	40,367
Retail	30,040	2,205	0	84	32,330
- of which mortgage	24,986	123	0	0	25,109
- of which other retail	4,276	1,885	0	55	6,216
- of which SME	778	197	0	29	1,004
Other non-credit obligation assets	231	8	0	0	239
Total IRB approach	56,835	14,644	1,201	30,024	102,705
Standardised exposure classes					
Central governments and central banks	21,976	388	221	1,802	24,387
Regional governments and local authorities	1,648	94	0	800	2,542
Institutions	42,524	331	191	3,482	46,529
Corporates	10,916	3,698	0	0	14,615
Retail	3,897	43	0	0	3,940
Exposures secured by real estate	2,299	0	0	0	2,300
Other <sup>1</sup>	3,395	8	26	607	4,036
Total standardised approach	86,656	4,562	439	6,691	98,348
Total exposure	143,492	19,206	1,640	36,715	201,053

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

# 4.4.2 Exposure by geography

In table 8, exposure is split by geographical areas, based on where the exposures are booked.

Table 8 Exposure split by geography and exposure classes in Nordea Bank Finland, 31 December 2011

	Nordic	- of which	- of which	- of which	- of which	Baltic				
EURm	countries	Denmark	Finland	Norway	Sweden	countries	Poland	Russia	Other	Total
IRB exposure classes										
Institution	36,705		36,705							36,705
Corporate	43,647		43,647							43,647
Retail	31,592		31,592							31,592
- of which mortgage	25,606		25,606							25,606
- of which other retail	4,995		4,995							4,995
- of which SME	991		991							991
Other non-credit obligation	248		248							248
assets										
Total IRB approach	112,191		112,191							112,191
Standardised exposure class	es									
Central governments and central banks	29,724		29,724			631			11,225	41,580
Regional governments and local authorities	2,792		2,792			202			0	2,994
Institution	42,373		42,373			294			4,545	47,212
Corporate	141		141			4,920	88		10,012	15,162
Retail	2,949		2,949			1,025			8	3,982
Exposures secured by real	529		529			2,023			0	2,552
estates										
Other <sup>1</sup>	4,570		4,570			447			78	5,095
Total standardised	83,078		83,078			9,543	88		25,868	118,577
approach										
Total exposure	195,269		195,269			9,543	88		25,868	230,769

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

# 4.4.3 Exposure by industry

In table 9 the total exposure is split by industries and by the main exposure classes. The industry breakdown follows the Global Industries Classification Standard (GICS) and is based on NACE codes (i.e. statistical classification of economic activities in the European community).

Table 9 Exposure<sup>2</sup> split by industry group in Nordea Bank Finland, 31 December 2011

		Internal rating	based approa	ıch	Standa	ardised approach	
			• •		Central	Regional	
					governments	governments	
					and central	and local	
EURm	Institutions	Corporates	Retail	Other	banks	authorities	Other <sup>1</sup>
Retail mortgage			25,606				2,553
Other retail			4,995				3,982
Central and local governments					10,373	2,994	
Banks	31,357				31,206		45,745
Construction and engineering		1,523	124				520
Consumer durables (cars, appliances etc)		1,253	23				703
Consumer staples (food, agriculture etc)		1,821	40				833
Energy (oil, gas etc)		1,195	0				560
Health care and pharmaceuticals		529	36				323
Industrial capital goods		2,893	10				815
Industrial commercial services		3,535	135				1,082
IT software, hardware and services		461	17				177
Media and leisure		670	95				164
Metals and mining materials		543	3				39
Paper and forest materials		1,560	10				256
Real estate management and investment		9,116	131				1,025
Retail trade		3,138	211				984
Shipping and offshore		1,232	2				4,147
Telecommunication equipment		575	1				36
Telecommunication operators		790	1				89
Transportation		996	72				619
Utilities (distribution and production)		3,103	5				565
Other financial companies	5,348	3,992	12				4,639
Other materials (chemical, building materials etc)		2,856	42				708
Other		1,868	20	248			3,443
Total exposure	36,705	43,647	31,592	248	41,579	2,994	74,004

<sup>&</sup>lt;sup>1</sup> Administrative bodies and non-commercial undertakings, multilateral developments banks, standardised institutions, standardised corporates, standardised retail, standardised exposures secured by real estate, past due items, short term claims, covered bonds and other items.

# 4.4.3.1 Specification of exposure against central government and central banks

Nordea Bank Finland applies the standardised approach for exposure to central government and central banks. In this approach, the external rating from an eligible rating agency is converted to the credit quality step (the mapping is defined by the financial supervisory authorities), which corresponds to a fixed risk weight. Nordea Bank Finland uses Standard & Poor's as eligible rating agency. In table 10, the central government and central bank exposure distributed by the credit quality steps is available.

Table 10 Exposures to central governments and central banks Nordea Bank Finland, 31 December 2011

EURm			
Standard & Poor's rating	Credit quality step	Risk weight	Exposure
AAA to AA-	1	0%	41,140
A+ to A-	2	20%	0
BBB+ to BBB-	3	50%	214
BB+ and below, or without rating	4 to 6 or blank	100 - 150%	225
Total			41,579

<sup>&</sup>lt;sup>2</sup> Total exposure covering on-balance, off-balance, repos and derivatives

# 4.4.4 Specification of off-balance exposure

The reason that an off-balance exposure amount does not contain the same risk as an on-balance exposure amount is that the off-balance amount can be reduced to a value that carries the risk of a corresponding on-balance amount. This is done with a CCF factor, a percentage value (i.e. 0-100%) which is multiplied with the committed undrawn off-balance amount to reduce the exposure. The main categories within off-balance items are guarantees, credit commitments and unutilized portion of approved credit facilities. Credit commitments and unutilised amounts are the part of the external commitments that has not been utilised. The CCF is set depending on the approach, product type and whether the utilised amounts are unconditionally cancellable or not.

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

Table 11 shows the weighted average CCF for the IRB retail exposure.

Table 11 CCF in Nordea Bank Finland, 31 December 2011

	Exposure after		
	substitution effects	Exposure	CCF
Retail	1,761	921	52%
- of which mortgage	422	114	27%
- of which other retail	972	615	63%
- of which SME	368	193	52%

# 4.4.5 Counterparty credit risk

Counterparty credit risk is the risk that Nordea's counterpart in a FX, interest, 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 credit risk can also exist in repurchasing agreements and other securities financing transactions.

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

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

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

# 4.4.5.1 Pillar I method for counterparty credit risk

The marked-to-market method, also called the current exposure method (CEM), is used to calculate the exposure for counterparty credit risk in accordance with the credit risk framework in the CRD, i.e. the sum of current exposure (replacement cost) and potential future exposure. The potential future exposure is an estimate reflecting possible changes in the future market value of the individual contract during the remaining maturity, and is measured as the notional principal amount multiplied by

the add-on factor. The size of the add-on factor depends on the contract's remaining maturity and the type of the underlying asset. Netting of potential future exposure on contracts within the same legally enforceable netting agreement is done as a function of the gross potential future exposure of all the contracts and the quotient between the net current exposure and the gross current exposure.

In table 12, the exposures as well as the RWA split by the exposure classes are shown.

Table 12 Counterparty credit risk by exposure class<sup>1</sup> in Nordea Bank Finland, 31 December 2011

•		
EURm	Exposure	RWA
IRB exposure classes		
Institution	25,047	5,828
Corporate	11,068	5,173
Retail	121	47
Total IRB approach	36,236	11,047
Standardised exposure classes		
Central government and central banks	1,552	69
Other	4,677	691
Total standardised approach	6,230	760
Total exposure	42,466	11,807

<sup>&</sup>lt;sup>1</sup> Exposures are after closeout netting and collateral agreements and only include derivatives

# 4.4.5.2 Counterparty credit risk for internal credit limit purposes

Counterparty credit risk for internal credit limit purposes for the main part of Nordea's OTC derivatives exposure is calculated using an internal simulation model. This is a change from 2010 when an internal add-on based method was used. In table 13, the counterparty credit risk is presented for different counterparty types.

Table 13 Counterparty credit risk exposure (internal) in Nordea Bank Finland, 31 December 2011

	31 Dec 2011 31 Dec 2010			2010
EURm	Current exposure net	Pre-settlement risk	Current exposure net	Pre-settlement risk
Public entities	1,049	4,183	476	2,227
Institutions	2,136	20,003	1,590	17,984
Corporates	7,585	20,120	4,517	12,095
Total	10,770	44,306	6,583	32,306

As of December 2011, the current exposure net (after close-out netting and collateral reduction) was EUR 11bn and the pre-settlement risk ("worst-case-scenario") was EUR 44bn, comprised of both simulated and non-simulated trades. The rise in the current exposure net by 63% since December 2010 is mainly due to falling interest rates and a stronger USD throughout 2011. The noticeable change in the pre-settlement risk is due to several underlying changes;

- Business volumes have increased (+22%) measured as notional volumes
- Structural portfolio composition, have meant increased risk due to lower interest rates and stronger USD
- More advanced risk calculation has impacted the risk on less diversified portfolios upwards and on more diversified portfolios downwards
- The risk measures have increased due to a more conservative (higher) confidence level.

For internal capital purposes (economic capital framework), the main part of the counterparty risk exposure is calculated using a measure 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, which are adjustments to the counterparty credit risk exposure done by including an estimate of the cost of hedging the specific counterparty credit risk. This cost of hedging is either based directly on market prices or on a theoretical calculation based on the credit rating of the counterparty.

#### 4.4.5.3 Mitigation of counterparty credit risk exposure

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

In table 14, information of how the counterparty credit risk exposure is reduced with risk mitigation techniques is shown.

Table 14 Mitigation of counterparty credit risk exposure due to closeout netting and collateral agreements in Nordea Bank Finland, 31 December 2011

		Reduction from closeout	Reduction from held	
EURm	Current exposure (gross)	netting agreements	collateral	Current exposure net
Total	165,571	149,778	5,023	10,770

As of December 2011 Nordea had 839 (627) financial collateral agreements. The effects of closeout netting and collateral agreements are considerable, as 93% (93%) of the current exposure (gross) was eliminated by the use of these risk mitigation techniques.

Nordea's financial collateral agreements do not normally contain any trigger dependent features, e.g. rating triggers. For a few agreements the minimum exposure level for further posting of collateral will be lowered in case of a downgrading. Separate credit guidelines are in place for handling of the financial collateral agreements.

Finally, Nordea also uses a risk mitigation technique based upon a condition in some of the long-term derivative contracts, which gives the option to terminate a contract at a specific time or upon the occurrence of specified credit related events.

The 10 largest counterparties, measured on net current exposure, account for around 11% (17%) of the total current exposure, and consists of a mix of financial institutions, public and corporate counterparties, with high credit quality.

#### 4.4.5.4 Settlement risk

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

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

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

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

#### 4.4.6 Other items

In the exposure class "other items", Nordea's equity holdings in the banking book are included. Investments in companies in which Nordea holds over 10% of the capital are deducted from the capital base (see table 1) and are hence not included in the "other items". For more information about equity holdings in the banking book see section 5.7.

# 4.5 Rating and scoring

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

# 4.5.1 Rating and scoring definition

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

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

While rating is used for corporate and institution exposure, scoring is used for retail exposure.

A rating is an estimate that reflects only the 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 grades 4- and better are comparable to investment grade as defined by external rating agencies such as Moody's and Standard & Poor's (S&P). Rating grades 2+ and lower are considered as weak or critical, and require special attention.

The risk grade master scale used for scored customers in the retail portfolio consists of 18 grades, named A+ to F- for non-defaulted customers and 3 grades from 0+ to 0- for defaulted customers.

In table 15, the mapping from the internal rating scale to the S&P's rating scale, using condensed scales, is shown.

Table 15 Indicative mapping between internal rating and Standard & Poor's

# Rating

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

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

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

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

Scoring models are pure statistical methods to predict the probability of customer default. The models are used in the household segment as well as for small corporate customers. Bespoke behavioural scoring models, developed on internal data, are used to support both the credit approval process, e.g. automatic approvals or decision support, and the risk management process, e.g. "early warning" for high risk customers and monitoring of portfolio risk levels. As a supplement to the behavioural scoring models also bureau information is used in the credit process. The internal behaviour scoring models are used to identify the PDs, in order to calculate the economic capital and RWA for customers. The ambition is always to improve the scorecards, and thereby the risk differentiation.

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

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

The Risk Committee has established the sub-committee Credit Risk Model Validation Committee (CRMVC). The charter for the CRMVC was approved in September 2011. The CRMVC is responsible

for the approval of the annual rating and scoring model validations, as well as approval of proposals concerning the credit risk model validation framework.

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

In a Point-In-Time (PIT) process, an internal rating reflects an assessment of the borrower's current condition and/or most likely future condition over the course of the chosen time horizon. The internal rating changes as the borrower's condition changes over the course of the credit/business cycle. A Through-The-Cycle (TTC) process requires assessment of the borrower's risk under a longer period of time. In this case, a borrower's rating would tend to stay the same over the course of the credit/business cycle.

The creditworthiness indicated by a purely TTC risk classification system would correspond to the long-term average credit risk, which manifests itself in no migration between rating grades. A purely PIT risk classification system, on the other hand, would only represent the credit risk at the point when the risk assessment was made which leads to higher migration compared to a TTC system.

Nordea currently employs a hybrid risk classification system that is neither purely TTC nor purely PIT. The PD estimates for the risk grades remain fairly stable over time, but migration between risk grades is expected which affects the average PDs and hence the RWA.

Nordea's rating system (used in the exposure classes corporate and institution) is balanced between PIT and TTC. The main factors influencing the rating produced by the models are the financial factors supplemented by qualitative factors into a total risk assessment. The financial factors are based on the last audited financial statements and will therefore vary as the overall business conditions fluctuate. Adjustments and overrides in ratings can be made when the financial factors do not reflect the future repayment capacity. The qualitative factors are based on the subjective view of the expert with respect to management, industry outlook, products etc. The qualitative factors are seen as more forward-looking, but assess the risk of a borrower based on the current state and not on a worst-case scenario. Therefore, the qualitative factors can be viewed as more long term.

Nordea's scoring models (used in the exposure class retail) are assessed to be relatively close to PIT. The scorecards, or score models, are built to reflect the latest available information and a new score is calculated each month. This will guarantee that the score models give a score reflecting a customer's monthly performance status and behaviour. The model is, however not fully PIT due to that there are some elements that have a lag and do not meet the requirements for 100% PIT.

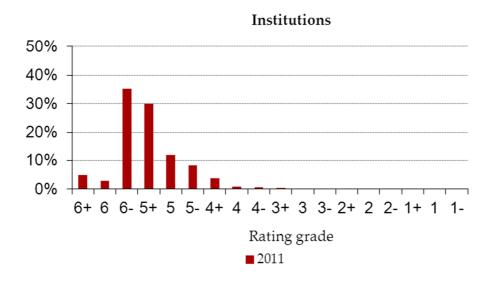
Nordea's internal data is used when determining estimates of PD. However, the time series used are representing a relatively recent period and the observed values are adjusted in order to represent long term average estimates. For PDs this adjustment intends to create a margin of conservatism and is based on the number of observations as well as on the long-term default frequency observed in Nordea's markets.

# 4.5.3 Rating and scoring risk grade distribution

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

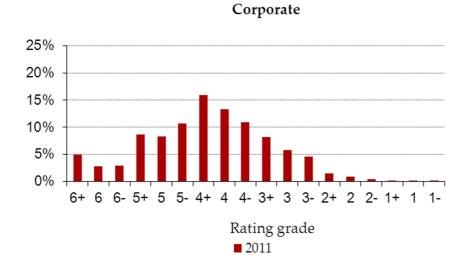
# 4.5.3.1 Rating distribution of the IRB institution portfolio

Figure 3 Exposure distributed by rating grade, IRB institution, Nordea Bank Finland



# 4.5.3.2 Rating distribution of the IRB corporate portfolio

Figure 4 Exposure distributed by rating grade, IRB corporate, Nordea Bank Finland



# 4.5.3.3 Scoring risk grade distribution of the IRB retail portfolio

Retail

25%

20%

15%

10%

A+ A A- B+ B B- C+ C C- D+ D D- E+ E E- F+ F F
Risk grade

2011

Figure 5 Exposure distributed by risk grade, IRB retail, Nordea Bank Finland

# 4.5.4 Rating and scoring migration

The rating/scoring distribution changes over time intervals mainly due to three factors:

- Changes in rating/risk grade for existing customers (pure migration).
- Different rating distribution of new customers and customers leaving Nordea, compared to the rating distribution of existing customers during the comparison period.
- Increased or decreased exposure per rating/risk grade to existing customers.

Migration is for instance affected by macroeconomic development, industry sector developments, changes in business opportunities and development in financial statements of the customers and other company related factors. Scoring migration is affected by macroeconomic development and timely payments among other things.

# 4.6 Collateral

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

# 4.6.1 Loss Given Default

In table 16, the exposure per exposure class secured by eligible collateral, guarantees and credit derivatives is shown. The table presents a split between exposure classes subject to the IRB approach and exposure classes subject to the standardised approach.

Table 16 Exposure secured by collaterals, guarantees and credit derivatives in Nordea Bank Finland, 31 December 2011

EURm	Original exposure	Exposure	of which secured by guarantees and credit derivatives	of which secured by collateral	Average weighted LGD
IRB exposure classes					
Institution	37,455	36,705	72	3,875	32.0 %
Corporate	57,714	43,647	2,836	10,739	42.2 %
Retail	33,480	31,592	1,048	26,664	14.2 %
- of which mortgage	25,914	25,606	0	25,606	10.9 %
- of which other retail	6,344	4,995	992	391	28.6 %
- of which SME	1,222	991	56	668	25.7 %
Other non-credit obligation assets	277	248	0	3	n.a.
Total IRB approach	128,925	112,191	3,956	41,282	
Standardised exposure classes					-
Central government and central banks	39,230	41,579	35	0	
Regional governments and local authorities	2,676	2,994	0	0	
Institution	48,078	47,212	0	0	
Corporate	19,776	15,161	26	0	
Retail	8,222	3,982	26	0	
Exposures secured by real estates	2,608	2,553	0	2,553	
Other <sup>1</sup>	5,236	5,096	2	0	
Total standardised approach	125,826	118,578	88	2,553	

<sup>&</sup>lt;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.

#### 4.6.1.1 Guarantees and credit derivatives

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

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

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

#### 4.6.1.2 Collateral distribution

Table 17 presents the distribution of collateral used in the capital adequacy calculation process.

Table 17 Collateral distribution in Nordea Bank Finland, 31 December 2011

Other Physical Collateral	5%
Receivables	2%
Residential Real Estate	71%
Commercial Real Estate	12%
Financial Collateral	11%

# 4.6.1.3 Valuation principles of collateral

A conservative approach with long-term market values and taking volatility into account is used as valuation principle for collateral when defining the maximum collateral ratio.

Valuation and hence eligibility is based on the following principles:

- Market value is assessed; the market 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 previously experienced volatility of the market value.
- Forced sale principle: assessment of market value or the collateral value must reflect that realisation of collateral in a distressed situation is initiated by Nordea.
- No collateral value is to be assigned if a pledge is not legally enforceable and/or if the underlying asset is not adequately insured against damage.

# 4.7 Estimation and validation of credit risk parameters

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

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

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

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

Table 18 EL vs. gross loss and net loss in Nordea Bank Finland

	Retail Housel	$nold^{1)}$	Corporate <sup>1)</sup>	Institution	Government	Total
EURm	Mortgage	Other				
2011						
EL	-23	-55	-126	-12	-1	-217
Gross loss	-30	-58	-188	0	0	<i>-</i> 275
Net loss	-2	-33	-35	0	0	-70
2010						
EL	-18	-67	-150	-11	-2	<b>-24</b> 8
Gross loss	-41	-75	-314	0	0	-430
Net loss	-13	-46	-213	0	0	-272
2009						
EL	-15	-46	-140	-5	-1	-207
Gross loss	-84	-42	-358	-10	0	<b>-494</b>
Net loss	-77	-26	-296	18	0	-381

<sup>1)</sup> SME Retail is included in the corporate segment

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

# 4.8 Loan portfolio, impaired loans and loan losses

# 4.8.1 Impaired loans

In the tables 19-21 impaired loans, loan losses and allowances are distributed and stated according to International Financial Reporting Standard (IFRS) as in the Annual Report which differs somewhat from CRD. In table 19, impaired loans to corporate customers are distributed by industry.

Table 19 Loans and receivables, impaired loans and allowances, by customer type in Nordea Bank Finland, 31 December 2011

EURm

		Impaired loans	Impaired loans in	Allowances for		
	Loans before	before	% of loans and	collectively	Specific	Provisioning
	allowances	allowances	receivables	assessed loans	allowances	ratio
To credit institutions	79,375	24	0%	0	25	103%
- of which banks	77,079	24	0%	0	25	102%
- of which other credit institutions	2,296	0	0%	0	0	10270
To the public	100,118	1,898	2%	236	551	41%
- of which corporate	62,736	1,032	2%	108	451	54%
Energy (oil, gas, etc.)	1,019	0	0%	1	0	
Metals and mining materials	533	1	0%	0	0	42%
Paper and forest materials	1,026	3	0%	2	0	89%
Other materials (building materials, etc.)	2,323	166	7%	30	91	73%
Industrial capital goods	627	42	7%	3	38	97%
Industrial commercial services, etc.	1,793	147	8%	2	50	36%
Construction and civil engineering	1,171	47	4%	3	22	54%
Shipping and offshore	4,423	34	1%	0	12	37%
Transportation	1,317	28	2%	2	3	19%
Consumer durables (cars, appliances, etc.)	963	39	4%	2	16	46%
Media and leisure	741	56	8%	1	26	48%
Retail trade	3,119	150	5%	1	80	54%
Consumer staples (food, agriculture, etc.)	2,025	35	2%	1	15	47%
Health care and pharmaceuticals	387	11	3%	0	1	12%
Financial institutions	1,374	16	1%	0	6	38%
Real estate management	9,762	173	2%	42	37	46%
IT software, hardware and services	388	19	5%	7	7	73%
Telecommunication equipment	118	6	5%	0	6	108%
Telecommunication operators	428	0	0%	0	0	19%
Utilities (distribution and production)	1,455	0	0%	1	0	
Other	27,743	60	0%	10	40	83%
- of which household	36,561	867	2%	127	100	26%
Mortgage financing	29,239	501	2%	90	22	22%
Consumer financing	7,322	366	5%	37	78	32%
- of which public sector	821	0	0%	0	0	
Total in banking operations	179,493	1,922	1%	236	576	42%

In table 20, impaired loans are distributed by geography of the customer.

Table 20 Loans to the public, impaired loans and allowances, by geography in Nordea Bank Finland, 31 December 2011

EURm

		Impaired loans		Allowances for		
	Loans before	before	Impaired loans	collectively	Specific	Provisioning
	allowances	allowances	in % of loans	assessed loans	allowances	ratio
Nordic countries	73,782	1,328	2%	104	409	39%
of which Denmark	11,166	0	0%	0	0	-
of which Finland	57,065	1,328	2%	104	409	39%
of which Norway	402	0	0%	0	0	-
of which Sweden	5,148	0	0%	0	0	-
Estonia	3,046	99	3%	32	20	53%
Latvia	3,000	282	9%	81	53	48%
Lithuania	2,442	123	5%	17	48	53%
Poland	118	0	0%	0	1	134%
Russia	154		0%	0	0	-
EU countries other	9,049	49	1%	0	18	36%
USA	2,226	0	0%	0	0	-
Asia	1,656	16	1%	0	3	19%
Latin America	369	0	0%	0	0	-
OECD other	408	0	0%	0	0	-
Non-OECD other	3,869	0	0%	0	0	-
Total	100,118	1,898	2%	236	551	41%

Table 21 shows the reconciliation of allowance accounts for impaired loans.

Table 21 Reconciliation of allowance accounts for impaired loans in Nordea Bank Finland

	Individually	Collectively	
Loans and receivables, EURm	assessed	assessed	Total
Opening balance at 1 Jan 2011	-565	-316	-881
Provisions	-177	-35	-211
Reversals	57	115	172
Changes through the income statement	-120	81	-39
Allowances used to cover write-offs	109	0	109
Currency translation differences and reclassifications	0	-1	-1
Closing balance at 31 Dec 2011	-576	-236	-812
Opening balance at 1 Jan 2010	-447	-316	-763
Provisions	-273	-69	-342
Reversals	61	69	130
Changes through the income statement	-212	0	-212
Allowances used to cover write-offs	96	0	96
Currency translation differences	-2	0	-2
Closing balance at 31 Dec 2010	-565	-316	-881

# 4.8.2 Loan losses

Nordea has defined its credit risk appetite as an expected loan loss level of 25 basis points over the cycle. Table 22 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 22 Loan losses in Nordea Bank Finland, 31 December 2011

r	0 0 0 -69 268 199
<ul> <li>of which write-offs and provisions</li> <li>of which reversals and recoveries</li> <li>Loans and receivables to the public</li> <li>of which write-offs and provisions</li> <li>of which reversals and recoveries</li> </ul>	0 0 -69 268 199
<ul> <li>of which reversals and recoveries</li> <li>Loans and receivables to the public</li> <li>of which write-offs and provisions</li> <li>of which reversals and recoveries</li> </ul>	0 -69 268 199
Loans and receivables to the public  - of which write-offs and provisions  - of which reversals and recoveries	-69 268 199
<ul><li>of which write-offs and provisions</li><li>of which reversals and recoveries</li></ul>	268 199
- of which reversals and recoveries	199
Off-balance sheet items	1
	-1
- of which write-offs and provisions	-6
- of which reversals and recoveries	5
Total	<i>-</i> 70
Specification of Loan losses	
Changes of allowance accounts in the balance sheet	-40
- of which Loans and receivables	-39
- of which Off-balance sheet items	-1
Changes directly recognised in the income statement	-30
- of which realised loan losses	-57
- of which realised recoveries	27
Total	-70

# 5. Market risk

The market risk taking activities are mainly oriented towards the Nordic and European markets, and the risk is to a large extent driven by interest rate risk. The total consolidated market risk for Nordea Bank Finland, measured by VaR, was on average EUR 42m in 2011, the same level as in 2010.

# 5.1 Market risk management

# 5.1.1 Governance of market risk

Group Market Risk Management (GMRM) has the operational responsibility for the development and maintenance of the group wide market risk framework. The framework defines common management principles and policies for the market risk management in the Nordea. These principles and policies are approved by the Board of Directors. The same reporting and control processes are applied for market risk exposures in both the trading and banking books.

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

- Senior management taking an active role in the process. The CRO receives reporting on Nordea's consolidated market risk every day, whereas GEM, the Board of Directors and its associated risk committees receive reports on a monthly basis.
- Having a comprehensive policy framework, in which responsibilities and objectives are explicitly outlined and in which the risk appetite is defined. 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.
- Defining clear risk mandates (at departmental, desk and individual levels), in terms of limits and restrictions on which instruments may be traded.
- Having a framework for approval of traded financial instruments and methods for the valuation of these that require an elaborate analysis and documentation of the instruments' features and risk factors.
- Having risk models that make risk figures easily decomposable.
- Having a "business intelligence" type risk IT system that allows all traders and controllers to easily monitor and analyse their risk figures.
- Having proactive information sharing between trading and risk control.

#### 5.1.2 Management of market risk

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

Nordea Markets and Group Treasury are the key contributors to market risk in Nordea. Nordea Markets is responsible for the customer-driven trading activities, whereas Group Treasury is responsible for asset and liability management, liquidity buffer, investments, and funding activities for Nordea's own account. For all other banking activities, the basic principle is that market risks are eliminated by matching assets, liabilities and off-balance sheet items.

#### 5.1.2.1 Structural market risks

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

#### 5.1.3 Measurement of market risk

As there is no single risk measure that captures all aspects of market risk, Nordea uses several risk measures including Value-at-Risk, stress testing, scenario simulation and other non-statistical risk measures such as basis point values, net open positions and option key figures.

In relation to the implementation of the new capital requirements directive (CRD III), Nordea has also introduced three new risk measures from end of 2011; Stressed Value-at-Risk, the Incremental Risk Measure and the Comprehensive Risk Measure. The three new risk measures are now included in the calculation of regulatory capital for market risk in the trading book.

#### 5.1.3.1 Value-at-Risk

Nordea's VaR model is a ten-day, 99% confidence level model, which uses the expected shortfall approach and is based on historical simulation on up to two years' historical changes in market prices and rates. This implies that Nordea's 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 one-day VaR figures to ten-day figures. The model is used to limit and measure market risk at all levels both in the trading book and in the banking book.

VaR is used to measure interest rate, credit spread, FX, equity and liquid commodity risks. A total VaR measure calculated 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 ten-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 the behaviour of these variables in the future.

#### 5.1.3.2 Stressed Value-at-Risk

Stressed VaR is calculated using a similar methodology as the ordinary VaR measure. However, whereas the ordinary VaR model is based on up to two years' historical data, stressed VaR is based on a 250 day period with considerable stress in financial markets.

#### 5.1.3.3 Incremental risk measure

The incremental risk measure (IRM) measures the risk of losses due to the credit migration or default of issuers of tradable corporate debt or credit derivatives held in the trading book. Nordea's IRM model is based on monte-carlo simulations and measures the risk with a 99.9% probability over a one-year horizon.

#### 5.1.3.4 Comprehensive risk measure

The comprehensive risk measure (CRM) measures the total risk related to positions in credit correlation products. This includes the risk of losses due to the credit migration or default of issuers of tradable corporate debt and other risk factors specifically relevant for correlation products. Similarly to the IRM model, Nordea's CRM model is also based on Monte Carlo simulations and measures the risk with a 99.9% probability over a one-year horizon.

#### 5.1.3.5 Stress testing

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

1. Historical stress tests, which include selected historical episodes, and are calculated by exposing the current portfolio to the most unfavourable developments in financial markets since 1993.

- 2. Subjective stress tests, where the portfolios are exposed to scenarios for financial developments that are deemed particularly relevant at a particular time. The scenarios are inspired by the financial, the macroeconomic or geopolitical situation, or the current composition of the portfolio.
- 3. Sensitivity tests, where rates, prices, and/or volatilities are shifted markedly to emphasize exposure to situations where historical correlations fail to hold. Another sensitivity measure used is the potential loss stemming from a sudden default of an issuer of a bond or the underlying in a credit default swap.

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

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

#### 5.2 Consolidated market risk for Nordea Bank Finland

The consolidated market risk for Nordea Bank Finland presented in table 23 includes both the trading book and the banking book. The total VaR was EUR 30m (EUR 31m) at the end of 2011 demonstrating a considerable diversification effect between interest rate, equity, credit spread and foreign exchange risk, as the total VaR is lower than the sum of the risk in the four categories. The commodity risk was at an insignificant level.

Table 23 Consolidated market risk figures for Nordea Bank Finland, 31 December 2011

EURm	Measure	31 Dec 2011	2011 high	2011 low	2011 avg 3	1 Dec 2010
Total risk	VaR	30.4	68.6	24.2	41.5	30.7
- Interest rate risk	VaR	27.8	75.6	20.4	40.1	34.6
- Equity risk	VaR	0.6	6.7	0.1	0.7	0.5
- Credit spread risk	VaR	5.4	17.6	4.9	10.8	15.0
- Foreign exchange risk	VaR	4.4	12.1	2.7	6.0	8.0
Diversification effect		21%	47%	10%	28%	47%

## 5.3 Market risk for the trading book

The Nordea Bank Finland market risk for the trading book is presented in table 24. The total VaR was EUR 24m (EUR 30m) at the end of 2011 and the main contribution to the total VaR was interest rate risk. The interest rate VaR was EUR 22m (EUR 29m), with the largest part of the interest rate sensitivity stemming from interest rate positions in EUR, DKK and SEK.

Table 24 Market risk figures for the Trading Book of Nordea Bank Finland, 31 December 2011

EURm	Measure	31 Dec 2011	2011 high	2011 low	2011 avg 31	Dec 2010
Total risk	VaR	23.7	81.8	20.6	41.9	29.5
- Interest rate risk	VaR	22.1	74.4	17.7	38.4	28.7
- Equity risk	VaR	0.5	6.6	0.1	0.7	0.5
- Credit spread risk	VaR	5.3	16.4	4.7	10.0	14.4
- Foreign exchange risk	VaR	4.4	12.1	2.7	6.0	8.0
Diversification effect		27%	50%	9%	25%	43%
Total stressed VaR <sup>1</sup>	sVaR	69.1	81.7	33.1	51.8	-

<sup>&</sup>lt;sup>1</sup>Stressed VaR has been calculated since 1 October 2011, consequently the high low and average figures relate only to this period

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

Market risk in the CRD context contains two categories: general risk and specific risk. General risk is related to changes in overall market prices and specific risk is related to price changes for specific issuers. When market capital requirement is calculated using the internal model approach, general risk is based on VaR with an additional capital charge for stressed VaR whereas specific risk is based on equity VaR and credit spread VaR with an additional charge for incremental risk and comprehensive risk.

Nordea Bank Finland uses the internal model approach to calculate the market risk capital requirement for the predominant part of the trading book. However, for specific interest rate risk from Danish mortgage bonds and for specific equity risk from structured equity options, the market risk capital requirement is calculated using the standardised approach. The usage of the internal model approach in Nordea Bank Finland is shown in table 25.

In addition to positions in the trading book, market risk capital requirement also covers FX risk in the banking book through the standardised approach.

Table 25 Methods for calculating capital requirements for market risk in the trading book

	Interest	Interest rate risk		Equity risk		
	General	Specific	General	Specific	General	
Nordea Bank Finland	IA	$IA^1$	IA	$IA^1$	IA	

IA: internal model approach

By the end of 2011, RWA and capital requirement for market risk in the trading book stood at EUR 8,291m (EUR 4,474m) and EUR 663m (EUR 358m), respectively. The decomposition of current figures is presented in table 26. With the adoption of the CRD III amendment, new risk types under the internal approach have been introduced. For Nordea Bank Finland this implies an additional capital charge for stressed VaR, incremental and comprehensive risk. In addition, under the Standardised Approach the risk weights for specific equity risk have increased. The total CRD III impact for Nordea Bank Finland is an increase of EUR 4,549m in market risk RWA and this is the main reason for the increase in RWA between 2010 and 2011.

Table 26 Capital requirements for market risk in Nordea Bank Finland, 31 December 2011

	Trading	book, IA	Trading	book, SA	Banking book, SA	To	otal
		Capital		Capital	Capita	ıl	Capital
EURm	RWA	requirements	RWA	requirements	RWA requirement	s RWA	requirements
Interest rate risk <sup>1</sup>	1,577	126	1,616	129		3,193	255
Equity risk	30	2	901	72		931	74
Foreign exchange risk	256	20				256	20
Commodity risk			24	2		24	2
Diversification effect	-445	-36				-445	-36
Stressed Value-at-Risk	2,704	216				2,704	216
Incremental Risk Charge	710	57				710	57
Comprehensive Risk Charge	917	73				917	73
Total	5,749	460	2,542	203	·	8,291	663

<sup>1</sup> Interest rate risk in column IA only includes general interest rate risk while column SA includes both general and specific interest rate risk

<sup>&</sup>lt;sup>1</sup> The capital requirement for specific interest rate risk from Danish mortgage bonds and specific equity risk from structured equity options is calculated according to the standardised approach.

#### 5.4.1 Backtesting of the VaR model

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

#### 5.4.2 Validation of models used for calculation of IRM and CRM

The models used in the calculation of the incremental risk measure and the comprehensive risk measure are validated through an assessment of the quantitative and qualitative reasonableness of the various data being modelled (distribution of defaults and credit migrations, dynamics of credit spreads, recovery rates and correlations etc.). The input parameters are evaluated through a range of methods including sensitivity tests and scenario analysis.

## 5.5 Interest rate risk in the banking book

Monitoring of the interest rate risk in the banking book is done daily by measuring and monitoring VaR on the banking book and by controlling interest rate sensitivities which measure the immediate effects of interest rate changes on the fair values of assets, liabilities and off-balance sheet items. Per end of 2011 the interest rate VaR in the banking book stood at EUR 9m (EUR 15m) for Nordea Bank Finland. Table 27 shows the net effect on fair value of a parallel shift in rates of up to 200 basis points.

Table 27 Interest rate sensitivities in Nordea Bank Finland banking book, 31 December 2011, instantaneous interest rate movements

EURm	+200 bp	+100 bp	+50 bp	-50 bp	-100 bp	-200 bp
EUR	-52.4	-26.2	-13.1	13.1	26.2	52.4
GBP	-1.9	-0.9	-0.5	0.5	0.9	1.9
SEK	-2.6	-1.3	-0.6	0.6	1.3	2.6
Total	-56.1	-28.1	-14.0	14.0	28.1	56.1

The totals are netted and include currencies not specified.

#### 5.6 Structural Interest Income Risk

Structural Interest Income Risk (SIIR) is the amount Nordea's accumulated net interest income would change during the next 12 months if all interest rates change by one percentage point.

SIIR reflects the mismatch in the balance sheet items and the off-balance sheet items when the interest rate repricing periods, volumes or reference rates of assets, liabilities and derivatives do not correspond exactly.

Nordea's SIIR management is based on policy statements resulting in different SIIR measures, 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.

#### 5.6.1 SIIR measurement methods

The basic measures for SIIR are the two repricing gaps (increasing rates and decreasing rates) measuring the effect on Nordea's net interest income for a 12 month period of a one percentage point increase, respectively decrease, in all interest rates (note that table 28 below also covers repricing gaps over 12m). The repricing 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.

### 5.6.2 SIIR analysis

At the end of the year, the SIIR for increasing rates in Nordea Bank Finland was EUR 70 (EUR 225m) and the SIIR for decreasing market rates was EUR –88m (EUR –134m). These figures imply that net interest income would increase if interest rates rise and decrease if interest rates fall.

Table 28 Repricing gap analysis in Nordea Bank Finland, 31 December 2011

Interest Rate Fixing Period		Within 3						No	
EURm	Group bs	months	3-6 month	6-12 month	1-2 year	2-5 year	>5 year	Repricing	Total
Assets									
Interest bearing assets	218,355	177,478	15,089	10,623	819	2,743	477	11,126	218,355
Non interest bearing assets	180,932	0	C	0	0	0	0	180,932	180,932
Total assets	399,287	177,478	15,089	10,623	819	2,743	477	192,058	399,287
Liabilities									
Interest bearing liabilities	193,879	171,084	8,114	6,636	552	6,053	1,438	0	193,879
Non interest bearing liabilities	205,408	0	C	0	0	0	0	205,408	205,408
Total liabilities	399,287	171,084	8,114	6,636	552	6,053	1,438	205,408	399,287
Off-balance sheet items NET		-2,658	-934	-2,422	-1,051	5,753	1,311	0	
Exposure		3,735	6,041	1,565	<i>-</i> 785	2,443	350	-13,350	
Cumulative exposure			9,776	11,342	10,557	13,000	13,350	0	
SIIR impact of increasing inter	rest rates for	the vear 20	112						
Impact <sup>1</sup>	200 12100 101	26	38	6					
Cumulative SIIR impact			64	70					

<sup>&</sup>lt;sup>1</sup> Impact is calculated based on +100bps change on exposure

## 5.7 Equity risk in the banking book

In table 29, the equity holdings in the banking book are grouped based on the intention of the holding. All equities in the table are booked at fair value. The portfolio of private equity funds is included with a fair value of EUR 8m in Nordea Bank Finland.

Table 29 Equity holding outside trading book in Nordea Bank Finland, 31 December 2011

			Unrealised	Realised	Capital
EURm	Book value	Fair value	gains/losses 3	gains/losses 3	requirements
Investment portfolio 1)	16	16	0	0	1
Other 2)	6	6	2	0	0
Total	22	22	2	0	1

<sup>&</sup>lt;sup>1</sup> Of which listed equity holdings

<sup>&</sup>lt;sup>2</sup> Of which listed equity holdings 2

#### 5.8 Determination of fair value of financial instruments

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

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

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

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

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

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

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

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

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 and processes are governed by policies and instructions developed and maintained by GMRM. The product control organisations in the individual business units are responsible for performing valuation controls in accordance with the policies and instructions. The quality control framework is assessed by relevant Group functions as well as by Group Internal Audit on an on-going basis.

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

## 6. Operational risk

Operational risk is inherent in all activities performed by Nordea. Risk management is proportional to the risks in question, and risk mitigation is designed to match Nordea's risk appetite. The risk management framework was redesigned during 2009 and 2010 and the implementation continues with enhanced focus on key risks as well as simplified reporting and structured follow-up procedures.

## 6.1 Operational risk management

#### 6.1.1 Governance of operational risk

Group Operational Risk and Compliance (GORC) is responsible for developing and maintaining the framework for managing operational and compliance risks, and for supporting the business organisation in their implementation of the framework.

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

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

The key principle of operational risk in Nordea is the three lines of defence. The first line of defence is represented by the risk and compliance officer network in the business organisation, which ensures that operational and compliance risk is managed effectively within Nordea. GORC, representing the second line of defence, has defined a common set of standards (Group Directives, processes and reporting) in order to manage these risks.

Group Internal Audit, representing the third line of defence, provides assurance to the Board of Directors on the risk management, control and governance processes.

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

#### 6.1.2 Management of operational risk

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

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

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

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

Operational risks are managed based on common principles established for Nordea. A common operating model and key processes are set forth in the Operational Risk Policy. During 2011 a new IT system for operational risk has been implemented, which allows a better alignment as well as connectivity between the processes, thereby providing better analyses and risk identification.

#### 6.1.3 Measurement of operational risk

### 6.1.3.1 Key processes

#### Risk self-assessment

The risk self- assessment process puts focus on the key risks, which are identified through a top-down approach with division management's involvement as well as a bottom-up approach where existing information from processes such as quality and risk analyses, incident reporting and product approval is included. The risks are then categorised, quantified, assessed and documented in a structured way with mitigating actions. Based on the prioritisation, each division identifies a set of key risks and GORC uses the risks and the prioritisations as input for the Group Risk Map, where Group risks are identified and followed up on separately. The timing of this process is synchronised with the annual planning process to be able to ensure adequate input to Nordea's overall prioritisations.

#### Internal control checklist

The internal control process aims at ensuring fulfilment of requirements specified in Group Directives, reflecting both external and internal requirements on the business. The focus areas are addressed by the business organisation over an extended period of time, and the division result (score) is commented on and signed off by the division manager, and subsequently reported to GORC. The extended time period for answering aims at providing time for actions to be taken by the business to correct substandard matters, thereby making the process an active tool for improvement rather than merely a status report. The results are subsequently aggregated in different dimensions and used as input to the CEO's annual report on internal control.

#### Other processes

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

The purpose of the product approval process is to ensure common requirements and documentation in respect of new products as well as material changes to existing products. Approved products are reported on a regular basis.

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

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

A compliance awareness programme targeted for senior management was introduced in 2011 and a group wide Operational Risk and Compliance Awareness Programme was launched in end of 2011. Both programmes aim to set the tone at the top and increase the awareness of operational and compliance risk related threats and challenges throughout the organisation.

#### 6.1.3.2 Key reports

#### Annual report on internal control

The result and comments from the internal control process represent the main input. The reporting is provided annually.

GORC collects the signed off input from the divisions, aggregates them to business area level, and forwards them to the business area heads for comments. The comments from the business areas are then compiled and, together with comments from a Group perspective, forwarded to the CEO. The CEO subsequently submits the annual report on internal control to the Nordea Board of Directors.

#### Semi-annual reporting on operational and compliance risks

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

#### **Incident reporting**

Incident reporting reflects Basel II standards and is compliant with ORX (Operational Riskdata Exchange Association) reporting requirements. Nordea joined ORX in 2010 and starting from Q2 2011 Nordea delivers risk loss data on a quarterly basis to ORX. The introduction of a new operational risk system further enables the two-tiered incident reporting process, by having loss reporting separated from the incident reporting. Business has the flexibility to adjust the incident reporting process to its specific need whereas Group loss reporting is done according to one standardized process set by GORC, in order to avoid capturing data which is not needed from a Group perspective, as well as ensuring compliance with ORX. Group loss reporting is made by the risk and compliance officer, based on information from the initial incident, in order to ensure consistent quality in the process. The threshold levels for incidents are EUR 1,000 for minor incidents and EUR 20,000 for major incidents and losses classified as minor or major are reported in the same way. Incidents with no direct financial loss are still reported if there is a reputational, regulatory, process or other impact to it. Aggregated incident reports are included in regular risk reports to Group Risk Management and the Board Risk Committee, and key observations are included in the semi-annual report on operational risk.

## 6.2 Capital requirements for operational risk

The capital requirements for operational risk is calculated according to the standardised approach, in which all of the institution's activities are divided into eight standardized business lines and a defined beta coefficient is multiplied by the gross income for each business line.

Nordea Bank Finland's capital requirements for operational risk for 2011 amounts to EUR 415m (EUR 421m). The capital requirements for operational risk are updated on a yearly basis.

## 7. Securitisation and credit derivatives

Nordea's role in securitisation has been limited to that of being a sponsor of various schemes together with some limited trading on credit derivatives as described below. Nordea has not used securitisation as originator by having its loans or their risk transferred outside of Nordea.

Nordea is using Value-at-Risk modelling to calculate a new capital requirement for credit derivatives trading under the capital adequacy rules.

Nordea have decided to disclose the total portfolio of the securitisation and credit derivatives for the Nordea Group in this chapter, in order to give the reader an total overview of the total risk.

## 7.1 Introduction to securitisation and credit derivatives trading

EU directive (2006/48/EC) defines securitisation as a scheme where credit risk of underlying exposures is converted into marketable securities so that payments from these securities depend on the performance of the underlying exposures and a subordination scheme exists for determining how losses are distributed among investors to these securities. In a traditional securitisation, the ownership of these assets is transferred to a Special Purpose Entity (SPE), which in turn issues securities backed by these assets. In synthetic securitisation, ownership of these assets does not change. However, the credit risk entailed by these assets is transferred to the investor by using credit derivatives.

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

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

## 7.2 Traditional securitisations where Nordea acts as sponsor

Traditional securitisations where Nordea transfers assets to a SPE are consolidated in Nordea accounts and are treated as any other subsidiary for capital adequacy purposes. The assets in the SPEs are included in the banking book and the capital requirements are calculated in accordance with the IRB approach described in chapter 4. In addition to SPEs to which Nordea has transferred assets, Nordea has set up a limited number of SPEs where Nordea acts as a sponsor. These SPEs have either been set up for enabling investments in structured credit products or for acquiring assets from customers. At year end 2011, Nordea is sponsoring the following SPEs presented in table 30.

Table 30 Special Purpose Entities where Nordea is the sponsor

EURm			Accounting treatment	Book	Nordea's investment <sup>1</sup>	Total assets
CMO Denmark A/S	Collateralised Mortgage Obligation	<1 years	Consolidated	Trading	2	2
Kalmar Structured Finance A/S	Credit Linked Note	1-5 years	Consolidated	Trading	2	24
Viking ABCP Conduit	Receivables Securitisation	<5 year	Consolidated	Banking	1,092	1,157
Total					1,096	1,183

<sup>&</sup>lt;sup>1</sup> Includes all assets towards SPEs (such as bonds, subordinated loans and drawn credit facilities)

In accordance with IFRS, Nordea does not consolidate SPEs' assets and liabilities beyond its control. In determining whether Nordea controls a SPE or not, Nordea makes judgements about risks and rewards from the SPE and assesses its ability to make operational decisions for the SPE. Nordea consolidates all SPEs where 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.

The SPEs in table 30 are not consolidated for capital adequacy purposes. Instead, eventual loans and loan commitments to the SPEs are included in the banking book and capital requirement is calculated in accordance with the rules described in chapter 4. Bonds and notes issued by the SPE and held by Nordea as well as credit derivative transactions between Nordea and the SPE are reported in the trading book. Since Q4 2006 Nordea has an approval to calculate the general and specific market risk of these transactions under the so called Value-at-Risk model. The counterparty risk of derivative transactions is calculated in accordance with the so called current exposure methodology. More information on the different SPEs can be found below.

#### 7.2.1 Entities issuing structured credit products

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

CMO Denmark A/S was established with the purpose of issuing CMOs in order to meet specific customer preferences in terms of credit risk, interest rate risk, prepayment risk, maturity etc. The SPE purchases a pool of mortgage bonds and reallocates the risks by issuing a tranched bond (CMOs). At year end 2011 the total notional of outstanding bonds was EUR 0m (EUR 26m) available to investors. Nordea offers a secondary market for bonds issued by CMO Denmark A/S. However, there were no positions in this category as of year-end of 2011. The RWA and capital requirement of these positions are included within the market risk framework of Nordea's trading book.

Kalmar Structured Finance A/S (Kalmar) was established to allow customers to invest in structured products in the global credit markets. Nordea sells protection in the credit derivative market by entering into a portfolio CDO. At the same time, Nordea purchases protection under similar terms from Kalmar which issues CLNs to investors. In this process the investors finally take the credit risk of the underlying portfolio. In case of credit losses in the underlying portfolio the collateral given by the investors in connection with CLN is reduced. The total notional outstanding CLNs in this category was EUR 23m (EUR 91m) at year end 2011.

Nordea holds CLNs issued by the SPE as part of offering a secondary market for the notes. The investment amounted to EUR 51m (EUR 25m) at year end 2011. Nordea includes the CLN holdings and derivative positions with the SPEs in the capital requirement calculations for its trading book. For market risk Nordea has a Value-at-Risk approval and for counterparty risk Nordea uses the so called current exposure method.

#### 7.2.2 Securitisations of customer assets

The Viking ABCP Conduit (Viking) has been established with the purpose of supporting trade receivable or accounts payable securitisations to core Nordic customers. The SPEs purchase trade receivables and funds the purchases either by issuing Commercial Papers (CP) via the established Asset Backed Commercial Papers programme or by drawing the funds on the liquidity facilities available. Nordea has provided liquidity facilities of maximum EUR 1,443m at year end 2011 (EUR 1,299m) out of which EUR 1,092m (EUR 948m) were utilised. There is no outstanding CP issue at year end 2011. The credit facility results in an RWA of EUR 697m, which is included within the credit risk framework of Nordea's banking book.

## 7.3 Credit derivatives trading

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

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

Credit derivatives transactions create counterparty risk in similar manner to other derivative transactions. Counterparties in these transactions are typically subject to a financial collateral agreement, thus the exposure is on daily basis covered by collateral placements.

Table 31 and table 32 list the total outstanding volumes of credit default swaps and CDOs at the end of 2011, split by bought and sold positions.

Also the CDO valuations are subject to fair value adjustments for model risk. These fair value adjustments are recognized in the income statement. In the Nordea Group, the credit derivative portfolio is referable to Nordea Bank Finland Plc.

Table 31 Credit default swaps, 31 December 2011

	Total gross	Total gross
EURm	notional sold	notional bought
Single name CDS: Investment grade	5,978	5,743
Single name CDS: Non-Investment grade	3,644	3,388
Multi name CDS indices	19,095	19,276
Total	28,717	28,407

Table 32 Collateralised Debt Obligations (CDO) - Exposure (excl NLP)<sup>1</sup>

Notionals EURm	Bought protection	Sold protection
CDOs, gross	1,575	2,267
Hedged exposures	1,394	1,394
CDOs, net <sup>2</sup>	181 <sup>3</sup>	873 <sup>4</sup>
Of which:		
- Equity	114	223
- Mezzanine	65	101
- Senior	2	549

<sup>&</sup>lt;sup>1</sup> First-To-Default (FTD) swaps are not classified as CDOs and are therefore not included in the table. Net bought protection amounts to EUR 218m (EUR 71m) and net sold protection to EUR 53m (EUR 80m). Both bought and sold protection are, to the predominant part, investment grade.

 $<sup>^2</sup>$  Net exposure disregards exposure where bought and sold tranches are completely identical in terms of reference pool attachment, detachment, maturity and currency.

<sup>&</sup>lt;sup>3</sup> Of which investment grade EUR 181m (EUR 209m) and sub investment grade EUR 0m (EUR 4m).

<sup>&</sup>lt;sup>4</sup> Of which investment grade EUR 873m (EUR 922m), subinvestment grade EUR 0m (EUR 0m) and not rated EUR 0m (EUR 0m)

## 8. Liquidity risk and funding

Nordea has during 2011 continued to benefit from its focus on prudent liquidity risk management, reflected by a diversified and strong funding base. Nordea has had access to all relevant financial markets and has been able to actively use all its funding programmes. Nordea issued approximately EUR 32bn in long-term debt in 2011 of which approximately EUR 18bn in the Swedish, Finnish and Norwegian covered bond markets.

## 8.1 Liquidity risk management

### 8.1.1 Governance of liquidity risk

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

#### 8.1.2 Management of liquidity risk

Liquidity risk is the risk of being able to meet liquidity commitments only at increased cost or, ultimately, being unable to meet obligations as they fall due. Nordea's liquidity management and strategy is based on policy statements resulting in 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 Nordea's four domestic markets in the form of a strong and stable retail customer base and the variety of funding programs. Funding programs are both short-term (US Commercial Papers, European Commercial Papers, Certificates of Deposits) and long-term (Covered bonds, European Medium Term Notes, Medium Term Notes) in diverse currencies. Foreign exchange risk is covered.

Nordea's liquidity risk management includes stress testing and a business continuity plan for liquidity management. Stress testing is defined as the evaluation of potential effects on a bank's liquidity situation under a set of exceptional but plausible events. Stress testing framework includes also Survival horizon metrics (see below), which represents a combined liquidity risk scenario (idiosyncratic and market wide stress). Group Treasury is responsible for managing the liquidity and for compliance with the group wide limits from the Boards of Directors and CEO in GEM.

#### 8.1.3 Measurement of liquidity risk

The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. In order to manage short-term funding positions, Nordea measures the funding gap risk, which expresses the expected maximum accumulated need for raising liquidity in the course of the next 30 days. Cash flows from both on-balance sheet and off-balance sheet items are included. Funding gap risk is measured and limited for each currency and as a total figure for all currencies combined. The total figure for all currencies combined is limited by the Board of Directors. To ensure funding in situations where Nordea is in urgent need of cash and the normal funding sources do not suffice, Nordea holds a liquidity buffer. Limit is set by the Board of Directors for the minimum size of the liquidity buffer. The liquidity buffer consists of central bank eligible high-grade liquid securities held by Group Treasury that can be sold or used as collateral in funding operations.

During 2011 Basel Liquidity Coverage Ratio likewise Survival horizon metrics was introduced. In alignment with Basel, the Board of Directors has set a limit for a minimum survival of 30 days. The

survival horizon metrics is composed of Liquidity Buffer and Funding gap risk cash flows, but includes even expected behavioural cash flows from contingent liquidity drivers.

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. GEM 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.

## 8.2 Liquidity risk and funding analysis

The short-term liquidity risk has been held at moderate levels throughout 2011. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 30 days, has been EUR -6.6bn (EUR -0.8bn). Nordea Bank Finland's liquidity buffer has been in the range EUR 10.6 – 14.9bn (EUR 13.3 – 14.7bn) throughout 2011 with an average of EUR 13.4bn (EUR 14.1bn). Nordea Bank Finland's liquidity buffer is highly liquid, consisting of only central bank eligible securities held by Group Treasury. Survival horizon has been in range of EUR 0.2 - 14.0bn throughout 2011. This expresses the excess liquidity for set limit for 30 days. The aim of always maintaining a positive net balance of stable funding has been comfortably achieved throughout 2011. The yearly average for the net balance of stable funding was EUR 3.3bn (EUR -2.4bn).

## 9. ICAAP and internal capital requirements

The current financial turmoil has increased the focus on banks' internal capital evaluation processes and their capability to assess the solvency need to cover losses and other cyclicality effects. During 2011 financial supervisors and central banks have performed several stress tests and capital reviews of the Nordea Group and Nordea Bank Finland.

#### **9.1 ICAAP**

The purpose of the ICAAP is to review the management, mitigation and measurement of material risks in order to assess the adequacy of capitalisation and to determine an internal capital requirements reflecting the risk appetite of the institution.

The ICAAP is a continuous process within Nordea which contributes to increased awareness of Nordea's capital requirements and exposure to material risks throughout the organisation, in both the business area and legal entity dimensions. Stress tests are an important driver of the increased risk awareness, looking at capital and risk from a firm-wide perspective or, on an ad-hoc basis, on more specific areas or segments. The process includes a regular dialogue with the Finnish FSA with respect to risk and capital management, measurement and mitigation techniques used within Nordea Bank Finland.

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

#### 9.1.1 Capital planning and capital policy

The capital planning process shall ensure that Nordea have sufficient capital to meet minimum regulatory requirements and support the growth and strategic options. The process includes a forecast of the development of the capital requirements, (e.g. the pillar I and pillar II capital requirements), the available capital (e.g. core tier 1, tier 1 and tier 2 capital) as well as impact of new regulations. The capital planning is based on key components of Nordea's rolling financial forecast, which includes lending volume growth by customer segment and country as well as forecasts of net profit including assumptions of future loan losses.

The capital planning process also consider forecasts of the state of the economy, to reflect the future impact of credit risk migration on the capital situation of Nordea Bank Finland and its legal entities. An active capital planning process ensures that Nordea is prepared to make necessary capital arrangements regardless of the state of the economy as well as the introduction of new capital adequacy regulations.

The Asset and Liability Committee is responsible for evaluating the capital plans and prepares proposals for decision by the CEO in GEM if needed.

#### 9.1.2 Conclusion of ICAAP and SREP

Nordea's capital levels have been and continue to be adequate to support the risks taken from an internal perspective as well as from the perspective of supervisors. Heading into 2012, Nordea Bank Finland will closely follow the development of the new capital requirement regime as well as maintain its open dialogue with the Finnish FSA.

## 9.2 Internal capital requirements

Nordea's internal capital requirements are defined using a "pillar I plus pillar II" approach. This methodology uses the pillar I capital requirements for credit risk, market risk and operational risk as outlined in the legislation as the starting point for its risk assessment. Therefore, a key component of Nordea's ICAAP is the pillar I capital requirements as shown in chapter 3.

In the next step, pillar II risks, i.e. risks not included in pillar I, are considered. Nordea uses its economic capital framework to identify and assess pillar II risks, and as its primary tool for internal capital allocation considering all risk types. Another important component of assessing capital adequacy is stress testing. Nordea stress tests both pillar I and pillar II risks and the stress tests are considered when determining Nordea's internal capital requirements. By considering the stress test results in the assessment of internal capital requirements the pro-cyclical effects inherent in the risk adjusted capital calculations of the economic capital and IRB approaches are addressed. Figure 6 below shows the described buildings blocks used in Nordea's internal capital requirements

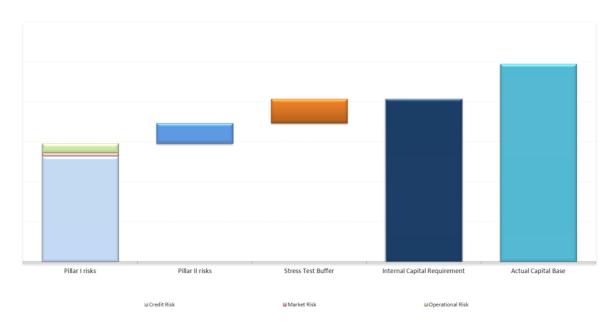


Figure 6 Illustration of Nordea's internal capital requirements

#### 9.2.1 Economic capital

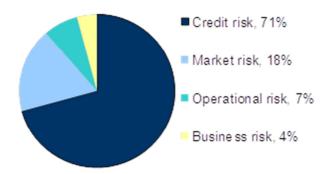
Since 2001, Nordea's economic capital framework has included the following major risk types

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

Pillar II of the Basel framework closes the gap between regulatory capital and economic capital by improving the risk sensitivity of regulatory capital measurement, but still several differences remain, since economic capital covers both pillar I and pillar II risks.

As of end 2011 the total economic capital equals EUR 5.1bn and figure 7 shows the economic capital distributed by risk type.

Figure 7 Economic capital distributed by risk type and customer area, Nordea Bank Finland



#### The economic capital framework

As a consequence of the financial turmoil and the upcoming regulations, the focus has shifted towards building capital analyses on regulatory capital requirements rather than the result of internal capital models. Due to the shift in focus and to ensure that each customer unit within Nordea is correctly charged for the actual capital consumption, Nordea decided in 2010 to align the economic capital framework to the regulatory capital framework, i.e. the pillar I risk measurement methods are used in the economic capital framework for credit, market and operational risk. However, both pillar I and pillar II risks are included in the EC framework.

The alignment provides a framework that links capital allocation to Nordea's internal capital requirements and targets, as described in Nordea's capital policy, and supports capital efficiency within Nordea.

#### 9.2.2 Stress tests

During 2011 Nordea has performed several internal stress tests in order to evaluate general effects of an economic downturn as well as effects for specifically identified high risk areas. In addition to the internal stress tests, Nordea has been part of external stress tests and capital review exercises performed by financial supervisors, central banks and equity analysts. The Nordea Group participated in the EU-wide stress test as well as the recapitalisation exercise for European banks which was coordinated by the European Banking Authority (EBA). The results of the EBA stress test as well as the recapitalisation exercise clearly demonstrated that the Nordea Group is well capitalised.

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

Nordea conducts a comprehensive stress test at least annually, while ad-hoc stress tests, reverse stress tests and parameter sensitivity analyses for various risk parameters are performed on a need by need basis. The stress test process is divided into the following three steps:

- Scenario development and translation
- Calculation
- Analysis and reporting

In addition to the firm wide stress tests which cover all risks defined in the economic capital framework, Nordea performs several stand-alone stress tests for each risk type such as market risk and liquidity risk. See the market and liquidity risk chapters for more details.

#### 9.2.2.1 Scenario development and translation

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

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

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

As an example, in the annual stress test, the scenario is translated into an impact on the parameters listed in table 33.

Table 33 Parameters in the annual stress test

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

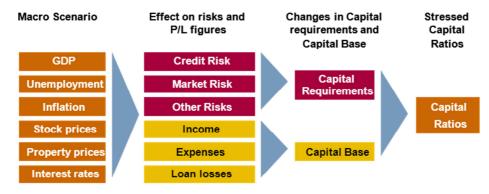
#### 9.2.2.2 Calculation

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

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

Stressed figures for loan losses, net profit and dividend from the stressed financial statements are used to calculate the effect on the capital base components. The capital base is set in relation to the regulatory capital or economic capital in order to calculate the effect on capital ratios during a stress scenario. See figure 8 for the calculation process used in the stress test framework.

Figure 8 Calculation process



#### 9.2.2.3 Analysis and reporting

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

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

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

## 10. Capital base

The quality of Nordea Bank Finland's capital base continued on strong level during 2011. Tier 1 capital represents 95% of total capital base in Nordea Bank Finland. Nordea Bank Finland has not issued any tier 1 hybrid capital instruments.

## 10.1 Capital base definition

Capital for regulatory purposes is determined in accordance with the CRD and the Finnish legislation, while equity as reported in the balance sheet is based on applicable accounting standards. Balance sheet equity is the core capital in the capital base and should absorb losses so that the banks creditors will be safeguarded.

The size of the capital base must as a minimum correspond to the sum of the capital requirements for credit risk, market risk, operational risk and capital requirement for transition rules. Only capital contributed by companies within the financial group and by the consolidated accounts is included in the capital base. Items included in the capital base should without restrictions or time constraints be available for the institution to cover risk and absorb potential losses.

The total capital base (referred to as own funds in the CRD) is the sum of tier 1 capital (called original own funds in the CRD) and tier 2 capital (called additional own funds in the CRD) after deductions and excluding capital related to insurance companies. The two main components in the capital base are equity in the balance sheet and subordinated debt. Related to the new CRD III requirements, as regards to additional fair value adjustments, Nordea Bank Finland has well established procedures for evaluating instruments to fair value, aligned with current accounting requirements.

Different ratios are used based on different capital base items, such as:

- The core tier 1 capital ratio is calculated by dividing the tier 1 capital excluding hybrid capital with RWA.
- The tier 1 capital ratio is calculated by dividing the tier 1 capital with RWA.
- The capital base ratio is calculated by dividing the capital base with RWA.
- The capital adequacy quotient is calculated by dividing capital base with capital requirement

A summary of items included in the capital base is shown in table 34.

Table 34 Summary of items included in capital base in Nordea Bank Finland, 31 December 2011

	31 December	31 December
EURm	2011	2010
Calculation of total capital base		
Original own funds		
Paid up capital	2,319	2,319
Share premium	599	599
Eligible capital	2,918	2,918
Reserves	7,602	7,448
Minority interests	5	6
Income from current year	1,099	852
Eligible reserves	8,706	8,306
Tier 1 capital (before hybrid capital and deductions)	11,624	11,224
Hybrid capital loans subject to limits	0	0
Proposed/actual dividend	-1,000	-700
Deferred tax assets	-16	-17
Intangible assets	-106	-85
Deductions for investments in credit institutions	-27	-23
IRB provisions shortfall (-)	-42	-50
Other items, net	-123	-107
Deductions from original own funds	-1,314	-982
Tier 1 capital (net after deductions)	10,310	10,242
- of which hybrid capital	0	0
- of which core tier 1 capital	10,310	10,242
Additional own funds		
Securities of indeterminate dur. and other instr.	568	561
Subordinate loan capital	-	-
Other additional own funds	-4	-
Tier 2 capital (before deductions)	564	561
Deductions for investments in credit institutions	-27	-23
IRB provisions shortfall (-)	-42	-50
Deductions from additional own funds	-69	-73
Tier 2 capital (net after deductions)	495	488
Total own funds for solvency purposes	10,805	10,730

## 10.2 Core tier 1 capital and tier 1 capital

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

Deductions mandatory for tier 1 capital will accordingly also be required as deduction in the defined core tier 1 capital.

#### 10.2.1 Eligible capital

Paid up capital is equal to the share capital contributed by shareholders. Eligible capital also includes share premium capital.

#### 10.2.2 Eligible reserves

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. Repurchased own shares or own shares temporary included in trading portfolios are deducted from eligible reserves.

#### 10.2.3 Hybrid capital loans subject to limits

The requirement for including undated loans in tier 1 capital is restricted and repurchase can normally not take place until five years after the loan originally was issued.

Hybrid capital loans, undated subordinated loans, may be repaid only by decision from Board of Directors in Nordea Bank Finland and with the permission of the Finnish 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.

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

#### 10.2.4 Deductions from tier 1 capital

#### Proposed/actual dividend

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

#### Deferred tax assets

In accordance with local legal requirements deferred tax assets have been deducted from the tier 1 capital. The deducted amount is based on accounting standards relevant for the groups of institutions which constitute the capital base.

#### Intangible assets

The significant part of deducted intangible assets contains IT software and development.

#### 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 Bank Finland foremost associated companies). 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital.

#### IRB value adjustments and provisions shortfall

In accordance with the CRD and the Finnish legislation, the differences between actual IRB value adjustments and provisions made for the related exposure and expected loss are adjusted for in the capi-

tal base. The negative difference (when the expected loss amount is larger than the provision amount) is defined as shortfall. According to the rules in the CRD, the shortfall amount shall be deducted from the capital base and be divided equally into both tier 1 capital and tier 2 capital.

A positive difference (provisions exceeding expected loss) can be included in tier 2 capital with certain limitations (maximum 0.6% of IRB RWA).

For the purpose of the CRD transition rules difference between expected loss amount and provision amount is to be adjusted in RWA to be neutralised in a Basel 1 perspective.

#### Other deductions

Other deductions contains of pension assets in excess of related liabilities. Surplus net value of pension plans for employees should under certain circumstances be deducted from the tier 1 capital.

## 10.3 Additional own funds

The principal of tier 2 capital has turned from an additional capital base item to items with the function of absorbing losses on a "gone concern" basis, i.e. after the failure of a firm. The tier 2 capital must be subordinated to depositors and general creditors of the bank. It cannot be secured or covered by a guarantee of the issuer or related entity or include other arrangement that legally or economically enhances the seniority of the claim vis-à-vis depositors and general bank creditors.

#### 10.3.1 Tier 2 capital

The tier 2 capital is mainly related to subordinated debt and 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 case of a default or bankruptcy situation. Under such conditions, the holder of the subordinated loan would be repaid after other creditors, but before shareholders. The subordinated debt might within certain levels of losses prevent the institution to go into liquidation.

The share of outstanding loan amount possible to include in the tier 2 capital related to dated loans is reduced if the remaining maturity is less than five years. Currently only one loan is subject to reduction. Outstanding amount in the specific issue is deducted by 20% for each year.

As of year-end 2011, Nordea Bank Finland holds EUR 568m in undated subordinated loans.

#### 10.3.2 Other additional funds

Other additional funds consists 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. Nordea Bank has no significant holdings in this category and have only a minor impact in the tier 2 capital.

#### 10.3.3 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 Bank Finland foremost associated companies). 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital. (See table 1 for specification of associated companies)

#### IRB value adjustments and provisions shortfall

The difference between expected loss and provisions made for the related IRB exposures is adjusted for in the tier 2 capital, see section 10.2.4 for further explanation.

## 11. New regulations

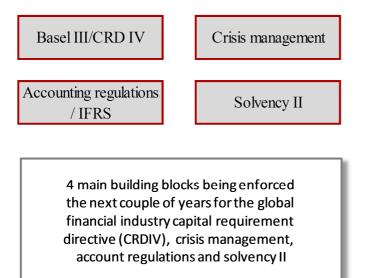
The EU Commission issued a proposal of the Capital Requirement Directive IV for the European financial market in July 2011. A final version is expected to be presented early autumn 2012 and thereafter locally implemented within all member states as per January 2013.

During 2011 Nordea has put much effort into preparing for the new regulatory requirements and is moving into implementation phase in 2012 and Nordea is well prepared to meet the new requirements both in form of liquidity, capital and processes.

## 11.1 Forthcoming regulatory framework

The changes for financial institutions in the regulatory area related to capital and risk are extensive and will be implemented in the years 2012 - 2023. Other closely related regulations are emerging such as the additional capital surcharge of so called systemically important banks (SIB's) both on global (GSIB's) and on national level (D-SIB's), a new policy for dealing with bank failure (crisis management) and changes to the accounting regulation that will have an effect on capital and risk. The main elements of the Capital Requirement Directive CRD IV are further described in section 11.2. Other regulations are furthermore described in section 11.3 - 11.4.

Figure 9 Forthcoming regulatory framework



#### 11.2 Basel III and the CRD IV

In December 2010, the Basel Committee on Banking Supervision (BCBS) issued detailed rules of new global regulatory standards on credit institution capital adequacy, leverage and liquidity that collectively are referred to as Basel III. These standards will be transposed to European legislation through the Capital Requirement Directive IV.

The Commission proposal was sent to the European Parliament and Council in July 2011 for further discussion and will probably be finalised after summer 2012. The CRD IV is expected to come into force from 1 January 2013. The CRD IV will be implemented both through a Regulation and a Directive. The Regulation is intended to set a single rule book for banks in all EU Member States, i.e. directly applicable to avoid divergent national rules. The Regulation contains detailed requirements

covering capital, liquidity, leverage ratio, counterparty credit risk and a single rule book for capital rules. The Directive covers areas such as authorization of banks, principles for prudential supervision including pillar II rules, corporate governance, capital buffers and sanctions if an institution breaches the requirements. Further on, the Commission and the European Banking Authority (EBA) have mandates to decide a large number of technical standards to the Regulation and Directive.

During 2011 several Quantitative Impact studies (QIS) have been carried out on many areas of the regulations initiated by the Basel Committee, Financial Stability Board (FSB) and the EU Commission. Extensive data gathering exercises related to new regulations is expected to continue in the coming years.

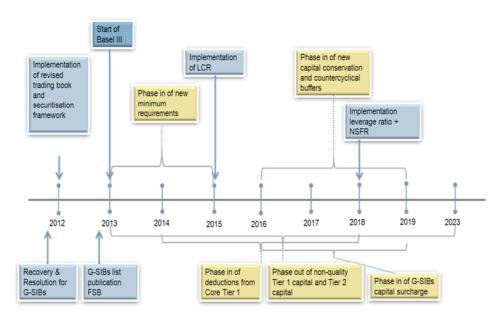


Figure 10 Overview of the Basel III implementation and transition agreements

The EU Commissions proposal to a CRD IV has adopted the Basel III timetable, although in the proposal end 2011 national regulators will be allowed to impose faster implementation than the time frame set forth in Basel III. In December 2011 the European Parliament's Committee on Economic and Monetary Affairs published a report on CRD IV proposing a number of amendments to both the Directive and Regulation. The report emphasises, among other things, the need for further development of the establishment of a single rule book and the principles of maximum harmonisation. This report will be discussed and subsequently decided upon in the European Parliament later in 2012.

#### 11.2.1 Revised capital regulation

The Basel III and the CRD IV framework includes several key initiatives, which change the current Basel II and EU directive framework that has been in effect since 2007.

#### 11.2.1.1 Capital base

The Basel Committee as well as the EU Commission proposes a revised definition of the capital base, resulting in higher quality capital and hence higher loss-absorbing capacity. The predominant form of tier 1 capital must be common shares and retained earnings.

The regulatory deductions should mainly be applied to the Common Equity Tier 1 (CET 1) component of capital. Under the current framework important deductions have been applied to other parts of the capital base as well. According to the CRD IV framework these new changes should be phased in between 2014 - 2018. However the CRD IV proposal opens up for local regulators to phase in deductions faster. In chapter 10, the capital base composition is presented, in accordance with the current regulations.

The required features of capital instruments to be eligible as Additional Tier 1 and Tier 2 capital will be stricter. For example, instruments with incentives to redeem (e.g. step up clauses) will not be eligible. Instruments that do not contain the required features should according to the Basel III and the CRD IV framework be gradually phased out between 2013 and 2022. The CRD IV proposal opens up for local regulators to phase out instruments that are not fully compliant faster.

In line with the Basel III framework, the CRD IV proposal requires banks' to comply with the following minimum capital ratios.

- Common Equity Tier 1 (CET1) capital ratio of 4.5%
- Tier 1 capital ratio of 6%
- Total capital ratio of 8.0%

The minimum CET 1 ratio and the minimum Tier 1 ratio should, according to the Basel III framework, be gradually phased in between 2013-2015.

#### 11.2.1.2 Capital buffers

Besides the changed composition of the capital base, a capital conservation buffer of 2.5% is established above regulatory minimum requirements, which is designed to ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred. Further, a countercyclical buffer is implemented as an extension of the capital conservation buffer, which will be developed by national jurisdictions when excess credit growth is judged to be associated with a build-up of system wide risk. Both the capital conservation buffer and the countercyclical buffer should be covered by CET 1 capital. If banks do not meet these buffers, constraints will be imposed on the banks capital distribution, such as dividends and bonuses.

The capital conservation buffer and the countercyclical buffer should according to the framework be gradually phased-in between 2016 and 2019. However, the CRD IV proposal per July 2011 opens up for local regulators to phase in minimum requirements as well as the countercyclical buffers faster. The latter only if justified by excessive credit growth.

The Basel Committee has on top of this proposed that global systemically important banks (G-SIB's) should have an additional loss absorbency requirement ranging from 1.0% to 2.5% of RWA. This additional requirement should also be met by CET 1 capital. In 12.2.7 further information regarding SIB's and G-SIB's can be found.

#### 11.2.2 Risk weighted amounts

Risk weighted amounts will mainly be affected by additional requirements for counterparty credit risk and an introduction of an asset correlation factor for exposures towards financial institutions.

Four changes will be introduced for counterparty credit risk: the Credit Value Adjustment (CVA), an introduction of capital charge for central counterparties (CCPs) stressed VaR and specific wrongway risk.

The Credit Value Adjustment (CVA) Risk mirrors that the value of a financial instrument may not be realized due to the default of the counterparty. The basis of the capital charge is to hold capital against potential mark-to-market losses associated with deterioration in the credit worthiness of a counterparty (which impacts CVA, a fair value component). The capital charge can be determined according to two methods: advanced or standardized. The advanced method should be implemented if the bank has both IMM approval for counterparty credit risk and a specific interest rate VaR approval.

Also exposures to central counterparties (CCPs) will be subject to a capital requirement. A central counterparty, also known as a clearing house, is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. The size of the requirement will depend on the type of exposure and whether the CCP is qualified or not. To be classified as a qualifying CCP, it must be authorized by the member state and

confirmed by the competent authority. For a qualified CCP, trade exposures will be subject to a requirement of 2% and the clearing member bank is furthermore obliged to cover its exposure arising from its pre-funded contribution to the default fund. Where a CCP is not qualified, the standardized approach for credit risk shall apply for trade exposures. The bank's pre-funded and contractually committed default fund contributions to such CCP should be capitalized.

Internal Model Method (IMM) for determining the default risk charge of counterparty credit risk will also need to take into account periods of stress covering a period of 3 years.

In addition, the CRDIV proposes changes to how exposures are calculated where specific wrong-way risk has been identified. Specific wrong way risk occurs when the future exposure to a specific counterparty is highly correlated with its default probability.

#### 11.2.3 New leverage regulation

The Basel Committee proposed that the risk sensitive capital framework should be supplemented with a non-risk based measure, the leverage ratio. The CRD IV introduces this in order to limit an excessive build-up of leverage on credit institutions' balance sheets and thus help containing the cyclicality of lending. It will be introduced as an instrument for the supervisory review of institutions. The impact of the ratio will be monitored with a view to migrating to a binding pillar one measure in 2018, based on appropriate review and calibration, in line with international agreements. The ratio will be calculated as the Tier 1 capital divided by the exposure (on-balance and off-balance sheet exposures, with some adjustments for certain items such as derivatives). A minimum leverage ratio of 3% will be evaluated during the parallel run period from 1 January 2013 to 1 January 2017.

#### 11.2.4 New liquidity regulations

The objective of the liquidity reform is to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill-over from the financial sector to the real economy. The Basel Committee has developed two new quantitative liquidity standards, as part of the new Basel III framework i.e. liquidity coverage ratio (LCR) and net stable funding ratio (NSFR). The standards aim to set the minimum levels of liquidity for internationally active banks. LCR aims to ensure that a bank maintains an adequate level of unencumbered, high quality assets that can be converted into cash to meet its liquidity need for a 30-day time horizon under an acute liquidity stress scenario. NSFR establishes a minimum acceptable amount of stable funding based on the liquidity characteristics of an institution's assets and activities over a one year horizon. To further strengthen and promote consistency in international liquidity risk supervision, the Basel Committee has also developed a minimum set of monitoring tools to be used in the on-going monitoring and in communicating this exposure among home and host supervisors. Both LCR and NSFR will be subject to an observation period and will include a review clause to address any unintended consequences. Any revisions would be made to the LCR by mid-2013 and to the NSFR by mid-2016. After the observation period, LCR will be introduced January 2015 and NSFR will move to minimum standard by January 2018.

CDR IV issued by European Commission during the summer has adopted the same approach as Basel III by introducing LCR and NSFR with observation periods. However, the significant change is a somewhat tentative approach towards NSFR by postponing the final decision to end of 2016. By December 2015, the European Banking Authority (EBA) shall report to the Commission whether and how it would be appropriate to use NSFR, including an impact assessment. By December 2016, the Commission shall on the basis of this information, submit a report and, if appropriate, a legislative proposal to the European Parliament and Council.

#### 11.2.5 Pillar II

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

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

The Pillar II process has not been changed in the Basel III agreement compared to the current regulation in Basel II. In the CRD IV the Commission has, however, suggested a considerable widening of the national authorities mandate within Pillar II. The suggestion is to introduce systemic risk and the possibility to increase the own funds requirement for a certain type of institutions (group of institutions) that is or might be exposed to similar risks or pose similar risks to the financial system. The technical criteria for the SREP have also been extended to include a number of new criteria's (e.g. business model, geographical location of exposures, excessive leverage).

#### 11.2.6 EBA binding technical standards

In January 2011 the European banking Authority (EBA) was established replacing the tasks and responsibilities from the Committee of European Banking Supervisors. EBA is an authority which main focus is to set European regulatory technical standards and guidelines for banks.

The main objective of EBA is to play a leading role in the creation of the single rule book for the EU Banking system. Based upon the CRD IV, published in July 2011, about 200 deliverables will be expected from the EBA including more than 100 binding technical standards, of which 40 during 2012. These will be detailed and leave very little possibility to make national interpretations.

## 11.2.7 Systemically Important Banks (SIB's)

In November, the Financial Stability Board (FSB) in cooperation with the Basel Committee presented, their regulatory framework regarding the G-SIB's. Furthermore FSB presented the list of the 29 banks, of which Nordea is one, that are classified as G-SIB's and therefore will be subject to an extra capital surcharge, more intensive supervision and requirements for resolution planning.

The list of G-SIB's will be updated annually and published by the FSB in November each year. As a result new entries and exits as well as the number of G-SIB's may change. The methodology will be reviewed every three years to capture changes and progress in measuring systemic importance. As from November 2012, the list will show the allocations to buckets corresponding to the level of additional loss absorbency banks would be required to meet if the requirements had been in effect.

Banks are defined and mapped into 4 buckets with capital requirements ranging from additional 1.0% to 2.5% in a two-step process; first a sample of banks (currently 73) are all analysed through the five indicator methodology as shown in table 35, secondly the banks considered systemically important are mapped into 4 buckets.

Table 35 Five indicator methodology

Indicator	Individual sub-indicator	Indicator weighting
Chase inmindiational activity	Cross-jurisdictional claims	10%
Cross-jurisdictional activity	Cross jurisdictional liabilities	10%
Size	Total exposures	20%
Interconnectedness	Intra-financial system assets	6.67%
	Intra-financial system liabilities	6.67%
	Wholesale funding ratio	6.67%
Substitutability/financial institution infrastructure	Asset under custody	6.67%
	Payments cleared and settled through payment systems	6.67%
	Values of underwritten transactions in debt and equity markets	6.67%
Complexity	OTC derivatives	6.67%
	Level 3 assets	6.67%
	Held for trading and available for sale	6.67%

The additional loss absorbency requirements will be phased in parallel with the capital conservation and countercyclical buffers starting in January 2016 becoming fully effective on 1 January 2019, initially to those banks listed in November 2014 using the allocation to buckets at that date. The first three year review will be conducted by November 2017.

The G-SIB's on the list will also need to meet the resolution planning requirements by end 2012. National authorities may decide to extend these resolution planning requirements to other institutions in their jurisdictions. For further information regarding recovery and resolution plans, please see section 11.3.

In addition to resolution planning and capital surcharges G-SIB's will also be subject to more supervision and higher supervisory expectations for risk management functions, data aggregation capabilities, risk governance and internal controls.

The FSB will also review how to extend the framework to also cover a wider group of institutions, including financial market infrastructures, insurance companies and other non-bank financial institutions that are not part of banking group structure.

#### 11.2.8 Corporate governance and risk management procedures

The CRDIV Directive also introduces new rules related to the corporate governance of financial institutions. These rules are aimed at increasing the effectiveness of risk oversight by boards, strengthening the status of the risk management function and ensuring effective monitoring by supervisors of risk governance. Changes to banks risk management procedures, remuneration and disclosure are also suggested.

## 11.3 Crisis management

During 2011 FSB published the Consultative Document of "Effective resolution of Systemically Important Financial institutions" and "Key Attributes of Effective Resolution Regimes for Financial Institutions".

Also the EU Commission published the Consultative documents "Crisis Management Directive", which is planned to be adopted by 2014.

The objective of the new regulations is to reduce the risk of a bank failure through better planning for financial disasters (recovery). The impact of failure could be reduced if a plan (resolution) could be prepared to enable an institution to be taken through bankruptcy in an orderly fashion without costs for tax payers.

These measures put a lot of emphasis on building an international standard for national resolution regimes as well as creating requirements for resolvability.

## 11.4 Other regulations

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

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

## 12. Remuneration

Nordea has clear remuneration policies, instructions and processes, securing sound remuneration structures throughout the organisation.

#### 12.1 The Board Remuneration Committee

The Board Remuneration Committee (BRC) is responsible for preparing and presenting proposals to the Board of Directors on remuneration issues. This includes proposals regarding the Nordea Remuneration Policy and supplementing instructions, guidelines for remuneration to the executive officers to be decided by the Annual General Meeting (AGM) as well as the remuneration for the Group Chief Executive Officer (CEO), the Group Chief Audit Executive (CAE) and also other employees in leading positions. At least annually, the Committee follows-up on the application of the Nordea Remuneration Policy and supplementing instructions through an independent review by Group Internal Audit.

## 12.2 Remuneration risk analysis

New regulations require financial institutions to establish a remuneration policy and to conduct a risk analysis in respect of the policy. Nordea's risk analysis includes risks related to the governance and structure of the remuneration schemes, goal setting and measurement of results, as well as fraud and reputation. Mitigating actions are furthermore described. The main focus in the analysis is on the variable remuneration elements.

#### 12.2.1 Effective and balanced risk management

Nordea Remuneration Policy and its underlying instructions, systems, schemes and processes is aligned with and supports efficient risk management and discourages excessive risk-taking by:

- Ensuring that the Remuneration Policy, instructions and schemes etc. are approved at the relevant organisational level, supported by analyses of potential financial as well as non-financial consequences, where relevant.
- Having clear governance and approval processes for all compensation elements, including the grandparent principle, and by having most compensation paid as fixed compensation.
- Requiring that the main variable remuneration elements are based on a pre-determined set of well-defined financial as well as non-financial success criteria, including Nordea Group criteria.
- Having divisional pools defined by a share of divisional Economic Profit.

Risks related to the processes governed by the Remuneration Policy exist and will continue to exist going forward. Nordea applies a wide range of processes, tools and control activities to manage the risks and thereby reduce potential negative effects.

#### 12.2.2 The governance and structure of the remuneration schemes

A range of new regulations as well as recommendations on best market practices have been issued in respect of the structure of variable remuneration elements on the back of the financial crisis. Nordea aims at developing the structure of variable remuneration elements on a continuous basis in order to meet own needs, regulatory requirements, and such best market practices. The schemes are considered to take these factors satisfactorily into account.

In the second half of 2009 Nordea engaged external consultants to perform a review of key issues in respect of Bonus structures, principles, and levels. Although certain changes and improvements were recommended, the review concluded that Nordea has a reasonably well structured Bonus schemes, measured against new international guidelines. The identified gaps were addressed by

Nordea. In autumn 2010 a follow-up review was conducted, concluding a need for a shift in the balance between variable and fixed compensation due to new regulations and per 1 January 2011 Nordea introduced caps on individual variable compensation as part of fixed compensation.

Even well-structured Remuneration Policy and variable remuneration schemes can be counterproductive if the goals and performance criteria are ill-designed. Nordea pays due attention to these risks by conducting a broadly based strategy process on an annual basis and reflecting this process in the decision on financial targets, risk limits and Group KPIs. Group KPIs furthermore include both financial and non-financial targets.

#### 12.2.3 Performance measurement and control defines remunerations

Measuring results and achievements correctly and consistently is, and will continue to be, a challenge. Good systems and processes for performance measurement are important for fair and equal treatment of employees under variable remuneration schemes. This applies to both quantitative and qualitative criteria. Nordea meets this challenge by undertaking continuous improvements in the financial reporting processes as well as having clear governance and approval processes, including the grandparent principle. When assessing goal and target fulfilment, discretionary judgment is furthermore applied in addition to absolute outcome.

There is always a risk of fraudulent actions by one or more employees. This means that there is a risk of e.g. manipulating results. Nordea mitigates this risk by means of its internal control framework which is based on the control environment, and includes the following elements: Values and management culture, goal orientation and follow-up, a clear and transparent organisational structure, segregation of duties, the four-eye principle, quality and efficiency of internal communication and an independent evaluation process.

#### 12.2.4 Annual review of all remuneration schemes

Nordea furthermore meets reputational challenges by performing an annual review of all remuneration schemes, aiming at having competitive remuneration schemes, while at the same time ensuring that these schemes are based on Nordea's business strategies and goals. Nordea also meets the challenge by disclosing relevant information in terms of policies and principles, specific schemes, amount in respect of variable remuneration in Nordea, as well as total compensation to Group Executive Management and Board of Directors.

## 12.3 Bonus schemes risk analysis

Bonus schemes are only offered to selected groups of employees employed in specific businesses areas or units approved by the Board of Directors. Nordea pays bonuses linked to performance where both divisional bonus pools and individual allocations are explicitly based on defined performance measures. Divisional financial performance is measured as risk-adjusted profits, explicitly incorporating capital and funding costs, and adjust for multi-period revenue effects as well as minimum required profit. In the event of weak or negative overall Nordea Group result, bonus pools can be adjusted downwards at the discretion of the Board of Directors. As such, individual compensation is determined based on detailed performance evaluations covering a range of financial and non-financial factors.

Inappropriate individual bonuses are prevented through both caps on the percentage of risk-adjusted profit that can be paid out as well as individual caps. Nordea has introduced deferral programmes for the staff in the risk analysis, defined as employees having an impact on Nordea's risk profile.

Care is taken to ensure that control and compliance staff employed in divisions having bonus schemes remains competitively rewarded.

The Board of Directors decides new or revised bonus schemes and outcome of divisional bonus pools on proposal by BRC. GEM has responsibility for the implementation of the agreed bonus schemes. Nordea also applies a stringent process to ensure that compensation for individuals does not

encourage excessive risk taking behaviour. To supplement the division level assessment, there is an approval process for significant bonuses to individuals, with the CEO's approval required for bonuses exceeding a predetermined level.

## 12.4 Additional disclosures on remuneration

Additional disclosures on remuneration under Nordic FSAs' regulations and general guidelines are published in the Annual Report and in a separate report on Nordea's homepage (www.nordea.com) in due time before the Annual General Meeting.

## 13. Appendix

## 13.1 Government guarantee scheme

In response to the financial markets turmoil, the governments in each of the Nordic countries launched state funding schemes, guarantee schemes or capitalisation programs. To date, other than to facilitate the Swedish State's subscription of its pro rata number of new ordinary shares in the rights offering carried out in the spring of 2009 through the National Debt Office, the Nordea Group has not joined the Finnish or Swedish state funding or capitalisation schemes or the Danish or Norwegian capitalisation schemes. The Swedish State's subscription in Nordea's rights offering was financed through the State's stabilisation fund. The stabilisation fund is financed with fees paid by banks and other credit institutions.

In the first half of 2011, central banks and governments begun to unwind the support measures introduced in 2008 and 2009. However, during the summer months investors became increasingly concerned about the sovereign debt crisis together with political uncertainties and weakening growth prospects. The room for fiscal stimulus has been reduced by debt worries and consequently the central banks have been forced to continue to provide liquidity to the markets. There has been a clear tightening of liquidity conditions which has also been reflected in the interbank markets.

## 13.2 General description of pillar I, II and III

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.

The Basel II framework was implemented in EU through the Capital Requirement Directive (CRD) and is built on three pillars:

- Pillar I requirements for the calculation of the RWAs and capital requirement
- Pillar II rules for the Supervisory Review Process (SRP), including the ICAAP
- Pillar III 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. During 2010 and 2011, new requirements have been added to the CRD regulation. CRD II was implemented end 2010 strengthening the large exposure regime, increased the quality of the capital base and added stricter securitisation regulation. CRD III which was valid from 31 December 2011includes capital requirements for re-securitisation, disclosure of securitisation positions, capital requirements for the trading book positions and remuneration policies (from 1 January 2011). The transition rule, stipulating that the capital requirement is not allowed to be below 80% of the capital requirement calculated under Basel I regulation is prolonged until end of 2015.

#### Pillar I

The 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:

Minimum capital requirements = Capital base / RWA where, Minimum capital requirements  $\geq 8\%$  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 was 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 CR

#### Primary approaches in the CRD

Approaches for reporting capital requirements

#### Credit Risk

- 1. Standardised approach
- 2. Foundation Internal Rating Based approach
- 3. Advanced Internal Rating Based approach

#### Market Risk

- 1. Standardised approach
- 2. Internal Models approach

## Operational Risk

- 1. Basic Indicator approach
- 2. Standardised approach
- 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.

#### Pillar II

Pillar II, 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 institutes internal controls and governance.

Other risk types, which are not covered by the minimum capital requirements according to pillar I, are typically liquidity risk, business risk, interest rate risk in the banking book and concentration risk. These are covered either by capital or risk management and mitigation processes under pillar II. For further information of Pillar II, please see chapter 9.

#### Pillar III

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 III. The main requirements are:

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

## 13.3 IRB approach

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 IRB approach for the exposure classes: institution, corporate, retail and other non-credit obligation assets. For the remaining exposure classes Nordea used the Standardised Approach in 2011. Following is a description of what exposures are included in the different exposure classes.

#### 13.3.1 IRB exposure classes

#### **Institution exposure**

Exposure to credit institutions and investment firms is classified as exposure to institutions. In addition, exposure to regional governments, local authorities and multilateral development banks is classified as exposure to institutions if it is not treated as exposure to sovereigns<sup>1</sup> according to regulations issued by the authorities.

#### Corporate exposure

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

#### Retail exposure

Exposure to small and medium sized entities (with an exposure of less than EUR 250k) 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-creditobligation assets.

#### 13.3.2 Calculation of RWA in IRB approach

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

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

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

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

#### 13.3.2.1 Exposure at Default (EAD)

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

#### 13.3.2.2 Probability of Default (PD)

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

### 13.3.2.3 Loss Given Default (LGD)

The LGD measures the economic loss that can be expected if a customer goes default. 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. The LGD value in the retail IRB approach is based on internal estimates. Nordea uses LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. The LGD pools are based on collateral types, country and customer type.

#### 13.3.2.4 Credit risk mitigation

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

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

#### 1. 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.

#### 2. Adjusted LGD

The LGD value is reduced if the exposure in the IRB approach (i.e. to large corporate and institutions) is fully collateralised with real estates (commercial and residential), other physical collateral, financial 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.

#### 3. Adjusted EAD

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.

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

#### 13.3.2.5 Maturity

For exposure 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 authorities. The maturity parameter used is set to 2.5 years for the exposure type's on-balance, off-balance and derivatives. For securities financing the maturity parameter is 0.5 years.

## 13.4 Standardised approach

#### 13.4.1 Standardised exposure classes

#### Central governments and central banks

Exposure to central governments and central banks is, treated with low risk if the counterparty is within European Economic Area (EEA) member states and has a high rating.

#### Regional governments and local authorities

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

#### **Institution exposure**

Exposure to institutions is 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 this exposure.

#### Corporate exposure

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

#### Retail exposure

Retail exposure is assigned a risk weight of 75%.

#### Exposure secured by real estate

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

#### Other

• Exposure to administrative bodies and non-commercial undertakings (such as public sector entities) subject to decision by the local authority is assigned a risk weight of 0% to 100%.

- Exposure to named multilateral development banks is assigned a risk weight of 0%. Other multilateral development banks are assigned a risk weight according to the methods used for exposures to institutions.
- Exposure to named international organisations is 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. Short-term corporate exposure, for which a short-term credit assessment by a nominated rating agency is available, is assigned a risk weight in accordance with a six step mapping scale made by the financial authorities.
- 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.

#### 13.4.2 Calculation of RWA in standardised approach

The parts remaining in the standardised approach are foreign branches, subsidiaries in Baltic countries and Poland and the retail exposure in the finance companies as well as exposure towards sovereigns. The standardised approach 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 approach is measured net of value adjustments such as provisions. Off-balance sheet exposure is converted into EAD using CCF set by the financial supervisory authorities. Derivative contracts and securities financing has an EAD that is the same amount as the exposure.

## List of abbreviations

ADF	Actual Default Frequency	G-SIB's	Global Systemically Important Banks
AGM	Annual General Meeting	GCCR	Group Credit Committee Retail
ALCO	Asset and Liability Committee	GCCW	Group Credit Committee Wholesale
BCBS	Basel Committee on Banking Supervi-	GEM	Group Executive Management
	sion	GEM CC	Group Executive Management Credit
CCF	Credit Conversion Facto		Committee
CCO	Chief Credit Officer	GICS	Global Industries Classification Stand-
CCP	Central Counterparties		ard
CEM	Current Exposure Method	GMRM	Group Market Risk Management
CET1	Common Equity Tier 1	GORC	Group Operational Risk and Compli-
CDO	Collateralised Debt Obligation		ance
CDS	Credit Default Swap	GVC	Group Valuation Committee
CEO	Chief Executive Officer	IAS	International Accounting Standard
CFO	Chief Financial Officer	ICAAP	Internal Capital Adequacy Assessment
CLN	Credit Linked Notes		Process
CLS	Continuous Linked Settlement	IFRS	International Financial Reporting
CMO	Collateralised Mortgage Obligations		Standard
CP	Commercial Paper	IMM	Internal Model Method
CRD	EU's Capital Requirements Directive	IRB	Internal Rating Based approach
CRMVC	Credit Risk Model Validation Commit-	IRM	Incremental Risk Measure
	tee	LCR	Liquidity Coverage Ratio
CRO	Chief Risk Officer	LGD	Loss Given Default
CVA	Credit Value Adjustment	NSFR	Net Stable Funding Ratio
D-SIB's	Domestic Systemically Important Banks	OTC	Over The Counter (derivatives)
EAD	Exposure at Default	ORX	An international database for incidents
EBA	European Banking Authority	PD	Probability of Default
EC	Economic Capital	PIT	Point-in-Time
ECC	Executive Credit Committee	QIS	Quantitative Impact Study
EEA	European Economic Area	QRA	Quality and Risk Analysis
EL	Expected Loss	RWA	Risk Weighted Amount
EP	Economic Profit	S&P	Standard & Poor's
ERAT	Environmental Risk Assessment Tool	SIB's	Systemically Important Banks
EU	European Union	SIIR	Structural Interest Income Risk
EV	Economic Value	SME	Small and Medium-sized Enterprises
FFFS	Finansinspektionens Författningssam-	SPE	Special Purpose Entity
	ling (The Swedish FSA's directive)	SPRAT	Social and Political Risk Assessment
FIRB	Foundation Internal Rating Based ap-		Tool
	proach	SREP	Supervisory Review and Evaluation
FSA	Financial Supervisory Authority		Process
FSB	Financial Stability Board	SRP	Supervisory Review Process
FTD	First-to-Default	TTC	Through-the-Cycle
FX	Foreign Exchange	VaR	Value at Risk