Capital and risk management (pillar III)

Nordea 2010

Contents

Nordea hereby presents its capital position and how the size and composition of the capital base are 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). This disclosure follows the Swedish Capital adequacy and large exposure act (2006:1371) and the Swedish Financial Supervisory Authority's (Swedish FSA) regulation and general guidelines regarding public disclosure of information concerning capital adequacy and risk management (FFFS 2007:5, 2010:12), which are based on the CRD.

This report constitutes the comprehensive disclosure on risks, risk management and capital management. In a summarised form, the main disclosure is also presented in Nordea Group's Annual Report 2010.

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

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

1. Highlights of 2010

In 2010, the macroeconomic recovery started in the Nordic countries as well as in the Baltic countries with strong GDP growth. Credit quality has improved, rating and scoring migration turned positive and net loan losses decreased to a level of 31 basis points. Due to this and strong earnings, the core tier 1 ratio was unchanged at 10.3% excluding transition rules, despite continued strong volume growth and a dividend payout ratio of 44% in 2010.

Nordea continued to have a strong name in the funding market and has been able to maintain a high activity in the funding market, with record-high long-term issuance of EUR 33bn, despite the extreme turbulence in the global financial markets.

Nordea is confident and well prepared for the future, due to strong profitability, high quality in the well diversified credit portfolio, strong capital base and a diversified funding base. From what is known today, Nordea already meets the Basel III capital requirements.

Improving credit quality and continued strong risk management

Credit quality improved in 2010 as net loan losses decreased to a loan loss ratio of 31 basis points and rating migration turned positive. Impaired loans have stabilised with an impaired loans ratio of 146 basis points. In 2010, the credit exposure increased by 13%, with increases both from the corporate and household segments.

Nordea's market risk-taking activities are well diversified and oriented towards Nordic and European markets. The Group's market risk is to a large extent driven by interest rate risk. The total market risk VaR was on average EUR 84m in 2010.

Capital management well established – capital strength for new regulations and growth

Despite the strong volume growth, the core tier 1 capital ratio, excluding transition rules, was unchanged compared to last year and was at the end of 2010 10.3% (10.3%).

From what is known today, Nordea already meets the Basel III requirements on capital. The effect on risk-weighted amounts (RWA) from the Basel III regulations (CRD III and CRD IV) is expected to be approximately 10% and the effect on the capital base from changes in deduction rules are expected to be small.

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, supported by its well recognised name and strong rating, has had access to all relevant financial markets and has been able to actively use all its funding programmes. Approximately EUR 33bn was issued in long-term debt during 2010, excluding Danish covered bonds (last year EUR 27bn).

Strength in adverse scenarios – stress testing

During 2010, Nordea has continued to perform several internal stress tests in order to evaluate the risks in different economic scenarios, both macroeconomic and for certain identified high risk areas. In addition to the internal stress tests, Nordea Group has been part of external stress tests performed by financial supervisors, central banks and equity analysts. The result of CEBS' stress test of European banks that was performed during spring/summer confirms Nordea's strong balance sheet and capital situation. Nordea was one of 91 banks that was included in the stress test and even in the most severe scenario i.e. the adverse scenario combined with the sovereign shock; Nordea's tier 1 ratio dropped only 10 bps. This clearly demonstrates the strength of Nordea's risk management, capital planning and its ability to asses a sufficient need of capital. In accordance with the 2010 Internal Capital Adequacy Assessment Process (ICAAP) and Supervisory Review and Evaluation Process (SREP), the regulators agreed that Nordea was adequately capitalised given its risk profile and portfolio.

Basel III – new regulations for capital and liquidity risk

During 2010, more clarity has evolved as to the main elements of the new regulatory requirements for capital and risk – the Basel III and Solvency II frameworks. In Nordea, there is strong focus on capital, liquidity and risk management within the organisation in order to meet new regulatory demands. Nordea is well prepared to meet the new regulatory requirements.

2. Governance of risk and capital management

Risk, liquidity and capital management are key success factors in the financial services industry. Exposure to risk is inherent in providing financial services, and Nordea assumes a variety of risks in its ordinary business activities, the most significant being credit risk. The maintaining of risk awareness in the organisation is incorporated in the business strategies. Nordea has clearly defined risk, liquidity and capital management frameworks, including policies and instructions for different risk types, capital adequacy and for the capital structure.

2.1 The Financial Group in the capital adequacy context

The information given in this report refers to the Financial Group of Nordea Bank AB (publ), with corporate registration number 516406-0120. Nordea is supervised on different levels and subject to ensure sufficient capital for all entities and subgroups. In this report, most focus is on the Financial Group due to the pillar III legislation but risks in the insurance part is also described in a separate chapter.

The financial statements are published quarterly and the consolidated financial statements include the accounts of the parent company Nordea Bank AB (publ) including subsidiaries according to International Accounting Standard (IAS) 27. In the Financial Group, the insurance companies of the group are not consolidated, which is a difference to the treatment for accounting purposes. Instead, holdings in insurance subsidiaries and associated undertakings are deducted from the capital base in the capital adequacy report. Table 1 last in this chapter discloses the undertakings that have been consolidated and deducted from the capital base.

2.2 Risk and capital management

2.2.1 Risk and capital management principles and control

Board of Directors and Board Credit Committee

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

The Board Credit Committee monitors the development of the credit portfolio including industry and major customer exposures and confirms industry policies approved by the Executive Credit Committee (ECC).

CEO and GEM

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

The CEO in Group Executive Management (GEM) decides on the targets for the Group's risk management regarding SIIR (Structural Interest Income Risk), as well as, within the scope of resolutions adopted by the Board of Directors, the allocation of the market risk limits and liquidity risk limits to the risk-taking units Group Treasury and 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 CEO and GEM regularly review reports on risk exposure and have established the following committees for risk, liquidity and capital management:

- The Asset and Liability Committee (ALCO), chaired by the Chief Financial Officer (CFO), prepares issues of major importance concerning the Group's financial operations 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), monitors developments of the different risks on an aggregated level.
- The Group Executive Management Credit Committee (GEM CC) and Executive Credit Committee (ECC) are chaired by the CRO and the Group Credit Committee (GCC) by the Chief Credit Officer (CCO). These credit committees decide on major credit risk limits and industry policies for the Group. Credit risk limits are granted as individual limits for customers or consolidated customer groups and as industry limits for certain defined industries.

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

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

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

The Board of Directors is ultimately responsible for the overall risk appetite for the Group and for setting the principles for how risk appetite is managed.

To support the Board of Directors in these responsibilities, Nordea will further develop the Group's risk appetite framework through 2011, allowing for easier aggregation and communication of the overall boundaries to risk taking, as well as making the process for top down risk appetite decisions and actions more straightforward. It is intended that the risk appetite framework considers all risks relevant to Nordea's business activities and on an aggregate level is represented in terms of solvency, earnings, liquidity, and operational and business risks.

This development work also extends to the processes for cascading risk appetite to segments and risk types within the portfolio, relevant customer areas and in relation to anticipated business plans. On this level Group Risk Management supports the customer areas with setting risk limits that reflect the overall risk appetite, set by the Board of Directors.

2.2.3 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 or quarterly basis for credit risk and on a quarterly basis for operational risk.

Risk reporting is regularly made to GEM and to the Board of Directors. The Board of Directors in each legal entity receives internal risk reporting which covers market, credit and liquidity risk per legal entity. Within the credit risk reporting, different portfolio analyses such as credit migration, current Probability of Default (PD) and stress testing are included.

Reporting of the internal capital requirement includes all types of risks and is reported regularly to the Risk Committee, ALCO, GEM and Board of Directors. Group Internal Audit makes an independent evaluation of the processes regarding risk and capital management in accordance with the annual audit plan.

2.2.4 Different risk types

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

Risk in pillar 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 risk arises primarily from various forms of lending but also from guarantees and documentary credits. Furthermore, credit risk also include counterparty credit risk, transfer risk and settlement risk. 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 financial instruments, as a result of movements in financial market variables. The market risk exposure relates to interest rates, credit spreads, FX rates, equity prices 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.
- Business risk represents the earnings volatility inherent in all business due to the uncertainty of revenues and costs due to changes in the economic and competitive environment. Business risk in the 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.
- 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 to use the Foundation Internal Rating Based (FIRB) approach for corporate and institution exposure classes in Denmark, Finland, Norway and Sweden. In December 2008 Nordea was approved of using the Internal Rating Based (IRB) approach for the Retail exposure class in Denmark, Finland, Norway and Sweden (with the exception for the Finance companies in all countries that were not applied for). The standardised approach is used for the remaining portfolios, such as foreign branches and subsidiaries in Luxembourg, Russia and Poland.

Nordea aims to continue the roll-out of the IRB approaches. The main focus is the development of advanced IRB for corporate customers in the Nordic area, including internal estimates of LGD and CCF. The standardised approach will continue to be used for smaller portfolios and new portfolios for which approved internal models are not yet in place.

Table 1 Specification over group undertakings consolidated/deducted from the Nordea Financial Group, 31 December 2010

	Number of shares	Book value EURm	Voting power of holding	Domicile	Consolidation method
Group undertakings included in the Nordea Financial Group					
Nordea Bank Finland Plc	1,030,800,000	5,954	100%	Helsinki	purchase method
Nordea Finance Finland Ltd			100%	Espoo	purchase method
Nordea Bank Danmark A/S	50,000,000	3,507	100%	Copenhagen	purchase method
Nordea Finans Danmark A/S			100%	Copenhagen	purchase method
Nordea Kredit Realkreditaktieselskab			100%	Copenhagen	purchase method
Fionia Bank A/S			100%	Odense	purchase method
Nordea Bank Norge ASA	551,358,576	2,405	100%	Oslo	purchase method
Nordea Eiendomskreditt AS			100%	Oslo	purchase method
Nordea Finans Norge AS			100%	Oslo	purchase method
PRIVATmegleren AS			67%	Oslo	purchase method
Nordea Bank Polska S.A.	55,498,700	362	99%	Gdynia	purchase method
OOO Promyshlennaya Companiya Vestcon (Orgresbank)	4,601,942,680	659	100%	Moscow	purchase method
OJSC Nordea Bank			100%	Moscow	purchase method
Nordea Hypotek AB (publ)	100,000	1,898	100%	Stockholm	purchase method
Nordea Fonder AB	15,000	229	100%	Stockholm	purchase method
Nordea Bank S.A.	999,999	453	100%	Luxembourg	purchase method
Nordea Finans Sverige AB (publ)	1,000,000	77	100%	Stockholm	purchase method
Nordea Fondene Norge Holding AS	1,200	29	100%	Oslo	purchase method
Nordea eijendomsinvestering A/S	1,000	29	100%	Copenhagen	purchase method
Nordea Investment Management AB	12,600	223	100%	Stockholm	purchase method
Nordea Invest Fund Management A/S	25,000	8	100%	Copenhagen	purchase method
Nordea Investment Fund Company Finland Ltd	3,350	138	100%	Helsinki	purchase method
Nordic Baltic Holding (NBH) AB	1,000	9	100%	Stockholm	purchase method
Nordea Life Holding AB	1,000	626	100%	Stockholm	purchase method
Other companies		1			purchase method
Total included in the capital base		**16,607**			

Cont. Table 1 Specification over group undertakings consolidated/deducted from the Nordea Financial Group, 31 December 2010

	Number of shares	Book value EURm	Voting power of holding	Domicile	Consolidation method
Group undertakings deducted from the capital base					
Nordea Life Holding AB, including debts from parent company		1,147	100%	Stockholm	
Total group undertakings deducted from the capital base		**1,147**			
Over 10 % investments in credit institutions deducted from the capital base					
Eksportfinans ASA		133	23%	Oslo	
Luottokunta		42	26%	Helsinki	
NF Fleet Oy		2	20%	Espoo	
LR Realkredit A/S		12	39%	Copenhagen	
KIFU-AX II A/S		3	25%	Copenhagen	
Axel IKU Invest A/S		1	33%	Billund	
Nordea Thematic funds of Funds KS		13	25%	Copenhagen	
INN KAP 2		0	15%	Copenhagen	
Symbion Capital I		1	25%	Copenhagen	
Norges Investor III AS		1	16%	Copenhagen	
Other		4			
Total investments in credit institutions deducted from the capital base		**212**			

3. Capital position

Nordea has maintained strong capital positioning coherent with growth in lending. The profits generated are in line with the growth in Risk Weighted Amount which in turn has resulted in stable capital ratios, excluding transition rules. The quality of the capital base has been improved by a larger portion of equity and the capital ratios are well above the targets in Nordea's capital policy.

3.1 Capital adequacy assessment

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

The ICAAP, see chapter 10, is established to determine internal capital requirement that reflects the risks and to assess the adequacy of the capital.

3.2 Regulatory capital requirement

In table 2, an overview of the capital requirements and the Risk Weighted Amounts (RWA) as of December 2010 split by the different risk types is presented in comparison with previous year. The credit risk comprises 89% of the pillar I risk, while operational risk accounts for 8% of the capital requirements and market risk comprises 3% of the capital requirements.

The table also includes information about the approach used for calculation of the capital requirements. Out of the total credit risk, 79% of the exposure has been calculated with the IRB approach and 21% with the standardised approach.

The transition rules have been prolonged, and the capital requirement is not allowed to be below 80% of the capital requirement calculated under Basel I regulations. The RWA for credit risk, market risk and operational risk of EUR 185.1bn is adjusted with EUR 29.6bn due to transition rules, ending at a total RWA of EUR 214.8bn including transition rules.

The RWA excluding transition rules increased with 7.8% during the year to EUR 185.1bn. The increase in RWA excluding transition rules is primarily due to growth in exposure, stronger Swedish/Norwegian currency and increase in operational risk RWA counteracted by positive rating migration and RWA optimisation activities. In figure 2 the different drivers behind the development of RWA are disclosed.

The credit quality was improved mainly due to positive rating migration and new exposures towards on an average higher rated customers. The average risk weight decreased as a consequence of this development. The growth during 2010 is seen in corporate, retail and institutions. One factor impacting on all credit risk portfolios was strengthened FX rates mainly in SEK and NOK during 2010. The impact of the FX rate changes on RWA were EUR 5.7bn. The RWA optimisation stems from enhanced collateral sourcing and credit risk mitigation from guarantees, which have been set forth on a quarterly basis.

The main part of the market risk RWA is related to business in Nordea Markets. Market risk RWA increased by EUR 0.4bn between end of 2009 and end of 2010 primarily explained by an increase in the specific interest rate risk on Danish mortgage bonds in the trading book.

3.3 Capital ratios

The growth in RWA has been complemented by an increase in the capital base which has lead to sustained capital ratios during the year. The main improvement in the capital base was due to strong profit generation during 2010.

The transition rules create a need to manage the bank using a variety of capital measurements and capital ratios. Table 3 shows that the regulatory transition rules comprise a floor on Nordea's capital requirement when compared to Basel II (pillar I) minimum requirements.

The core tier 1 excluding transition rules ended at 10.3% (10.3%) while corresponding tier 1 ratio was 11.4% (11.4%) and the capital ratio excluding transition rules was 13.4% (13.4%). The tier 1 ratio including transition rules was 9.8% (10.2%) and the capital ratio including transition rules was 11.5% (11.9%).

Table 2 Capital requirements and RWA

	2010		2009	
EURm	Capital requirement	RWA	Capital requirement	RWA
Credit risk	**13,173**	**164,662**	**12,250**	**153,123**
IRB	10,028	125,346	9,655	120,692
– of which corporate	7,204	90,047	7,060	88,249
– of which institution	722	9,021	821	10,263
– of which retail	1,964	24,556	1,673	20,912
– of which other	138	1,722	101	1,269
Standardised	3,145	39,316	2 595	32 431
- of which sovereign	35	434	70	871
- of which retail	781	9,760	711	8 887
- of which other	2,329	29,122	1 814	22 673
Market risk	**461**	**5,765**	**431**	**5,386**
– of which trading book, VaR	105	1,317	107	1,335
– of which trading book, non-VaR	278	3,469	267	3,342
– of which FX, non-VaR	78	979	57	710
Operational risk	**1,176**	**14,704**	**1,057**	**13,215**
Standardised	1,176	14,704	1,057	13,215
Sub total (excluding transition rules)	**14,810**	**185,131**	**13,738**	**171,724**
Adjustment for transition rules				
Additional capital requirement according to transition rules	2,370	29,629	1,611	20,134
Total (including transition rules)	**17,180**	**214,760**	**15,348**	**191,858**

Table 3 Key capital adequacy figures

EURbn	Q4 2010	Q3 2010	Q2 2010	Q1 2010	Q4 2009
RWA including transition rules	214.8	207.1	205.9	198.2	191.9
RWA Basel II (pillar 1) excluding transition rules	185.1	181.7	184.9	179.4	171.7
Regulatory capital requirement including transition rules	17.2	16.6	16.5	15.9	15.3
Capital base	24.7	24.6	24.3	24.4	22.9
Tier 1 capital	21.0	20.9	20.5	20.1	19.6
Core tier 1 capital	19.1	18.9	18.6	18.2	17.8
Tier 1 ratio including transition rules (%)	9.8%	10.1%	10.0%	10.1%	10.2%
Tier 1 ratio excluding transition rules (%)	11.4%	11.5%	11.1%	11.2%	11.4%
Core tier 1 ratio including transition rules (%)	8.9%	9.1%	9.0%	9.2%	9.3%
Core tier 1 ratio excluding transition rules (%)	10.3%	10.4%	10.0%	10.1%	10.3%
Capital ratio including transition rules (%)	11.5%	11.9%	11.8%	12.3%	11.9%
Capital ratio excluding transition rules (%)	13.4%	13.5%	13.2%	13.6%	13.4%
Capital adequacy quotient (Capital base / Regulatory capital requirement including transition rules)	1.4	1.5	1.5	1.5	1.5
Capital adequacy quotient (Capital base / Regulatory capital requirement excluding transition rules)	1.7	1.7	1.6	1.7	1.7

Figure 2 Drivers behind the development of RWA excluding transition rules

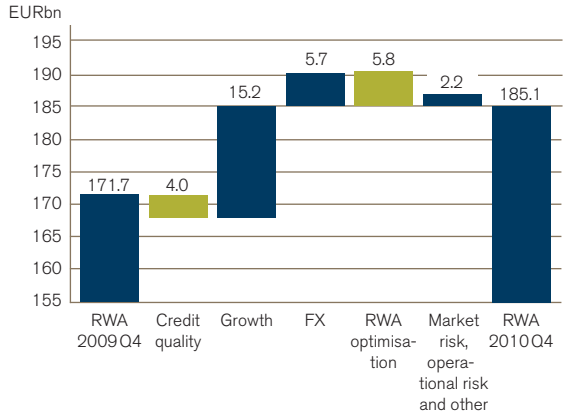


Figure 3 Capital adequacy ratios

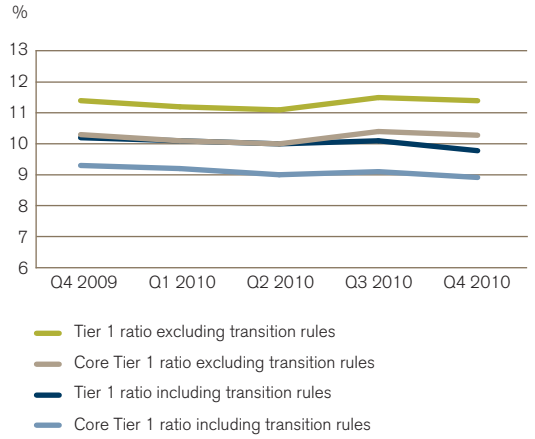
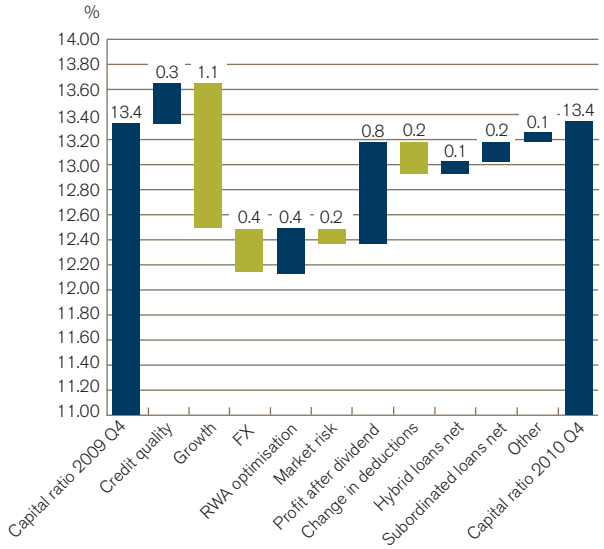


Figure 4 Development of capital ratio (excluding transition rules)



In figure 3 the development of the core tier 1 ratios and tier 1 ratios are illustrated.

3.4 Financial conglomerate

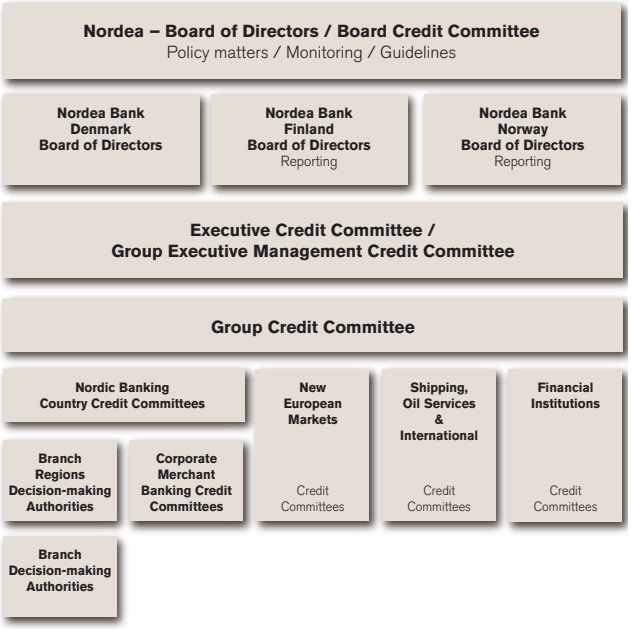
The capital requirements valid for financial conglomerates are stated in Swedish Law (Act 2006:531). The Swedish FSA had until end 2009 defined Nordea as a financial conglomerate. During 2010 the Sampo Group share in Nordea reached above 20%, hence Nordea is included in the Sampo Conglomerate and is therefore no longer subject to financial conglomerate regulatory requirements.

4. Credit risk

During the year Nordea has, given the strong funding name and the capital strength, continued to focus on the successful execution of the ongoing organic growth strategy.

Corporate and residential real estate exposure showed stable growth of high quality. The macroeconomic development has strengthened the credit quality in terms of positive rating migration and improved average risk weights on existing as well as new customers. Nordea's credit portfolio is well diversified both in terms of industry sectors and geographical spread.

Figure 5 Credit decision-making structure for main operations



4.1 Identification of credit risk

4.1.1 Roles and responsibilities in credit risk management

Group Credit is responsible for the credit risk management framework, consisting of policies, instructions and guidelines for the Group. Group Credit Control is responsible for controlling and monitoring the quality of the credit portfolio and the credit process. 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 decision-making authorities on different levels in the organisation (see figure 5). The credit decision-making structure has been adjusted with effect from fourth quarter of 2010. The new Group Executive Management Credit Committee (GEM CC) has been set up to decide on proposals related to major principle issues. The changes will only impact the Credit Committees on Group level (ECC and GCC), and do not impact Credit Committees in the Customer areas.

Responsibility for a credit exposure lies with a customer responsible unit. Customers are assigned a rating or scoring in accordance with the framework for quantification of credit risk.

4.1.2 Credit risk identification

Credit risk is defined as the risk of loss if counterparts 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 guarantees and documentary credits, such as letters of credit. The credit risk from guarantees and documentary credits arises from the potential claims on customers, for which Nordea has issued guarantees or documentary credits. Furthermore, credit risk may also include counterparty credit risk, transfer risk and settlement risk. Counterparty 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 the bank 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 risk and settlement risk is available in section 4.2.6 in this report. Transfer risk is a credit risk attributable to the transfer of money from a country where a borrower is domiciled, and is affected by changes in the economic and political situation of the countries concerned. See section 4.4.3 for further information about transfer risk.

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 portfolio
- High cyclicality and/or volatility of the industry
- Special skills and knowledge required

There is usually a cap set for the Group's total exposure in such an industry. All industry credit policies are approved by the Executive Credit Committees and confirmed annually by the Board Credit Committee.

Corporate customers' environmental risks are taken into account in the overall risk assessment through the so-called Environmental Risk Assessment Tool (ERAT).

Social and political risks are taken into account by the so-called Social and Political Risk Assessment Tool (SPRAT). SPRAT is applied as part of the corporate lending process, in parallel to the ERAT. For larger project finance transactions, the bank 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 Decisions and monitoring of credit risk

Decisions regarding credit risk limits for customers and customer groups are made by the relevant decision-making authorities on different levels within the Group. 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 its debt obligations, for example the principal, interest, or fees, 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, such exposure is assigned special attention in terms of review 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 team is set up to support the customer responsible unit. Nordea has a project organisation for handling work-out corporate customers. Individual deal-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 assessed and the actions related to handling of work-out customers are reviewed and followed up.

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. In corporate exposure, the main collateral types are real estate mortgages, floating charges and leasing objects. 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 the bank and that loans and pledge agreements as well as the collateral are legally enforceable. The bank is therefore entitled to liquidate collateral in event of the obligor's financial distress and the bank can claim and control cash proceeds from a liquidation process.

To a large extent national standard loan and pledge agreements are used, 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 and letters of support
- Insurance policies (capital assurance with surrender value)

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

Regarding large exposure, syndication of loans is the primary tool for managing concentration risk while credit risk mitigation by the use of credit default swaps has been applied to a limited extent.

Covenants in credit agreements do not substitute collateral but may be of great help as a complement to both secured and unsecured exposure. All exposure of substantial size and complexity includes 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. An exposure is impaired, and a 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. The size of the provision is equal to the estimated loss being the difference between the book value 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 down-ratings of customers, as well as new customers 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. There is an independent credit control organisation with the overall responsibility to control and monitor quality in the credit portfolio, the credit process and ensuring that all incurred losses are covered by adequate allowances.

4.1.6 Link between credit risk exposure and balance sheet in Annual Report

Credit risk can be measured, monitored and segmented in different ways. The loan portfolio is the major part of the credit portfolio and the basis for impaired loans and loan losses. This section discloses the link between the loan portfolio as defined in accordance with accounting standards and exposure as defined in accordance with the CRD. The main differences are outlined in this section to illustrate the link between the different reporting methods. A detailed definition of exposure classes used in the capital adequacy calculations is shown in appendix 13.3.

In this report, tables containing exposure are presented as Exposure at Default (EAD) for IRB exposure and Exposure value for standardised exposure if nothing else is stated. It is based on the exposure amount on which the RWA is calculated. This amount differs from the original exposure, which is the exposure before taking into account substitution effects stemming from credit risk mitigation and credit conversion factors for off-balance exposure.

Credit risk exposure presented in this report, in accordance with the CRD, is divided between exposure classes, in which each exposure class is divided into the following exposure types:

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

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

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

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 Group, 31 December 2010

EURm On-balance	Balance sheet (accounting)	Items related to market risk	Repos, derivatives, securities lending	Life insurance operations	Other	Original exposure	Credit Conversion Factor %	Exposure[1]
On-balance items								
Cash and balances with central banks	10,023			–66		9,957	100%	9,957
Treasury bills, other interest-bearing securities and pledged instruments	91,743	–18,446		–24,379		48,918	100%	48,918
Loans to credit institutions [2]	15,788		–7,825		2	7,965	100%	7,965
Loans to the public [3]	314,211		–19,701	–327	2,573	296,756	100%	296,153
Derivatives	96,825		–96,801	–24				
Intangible assets	3,219			–341	–2,878			
Other assets and prepaid expenses	49,030	–24,217	–83	–17,657	–227	6,846	100%	6,846
Total	**580,839**	**–42,663**	**–124,410**	**–42,794**	**–530**	**370,442**		**369,839**

Off-balance	Balance sheet (accounting)	Life insurance operations	Excluded in CRD	Included in CRD
Off-balance items in balance sheet				
Assets pledged as security for own liabilities	145,954	–23,654	–122,300	
Other assets pledged	5,972		–5,972	
Contingent liabilities	23,963	–111		23,852
Commitments	92,749	–1,033	–2,142	89,574
Total	**268,638**	**–24,798**	**–130,414**	**113,426**

	Included in CRD OffBal (from balance sheet)	Not balance sheet, incl in CRD [4]	Original exposure	Credit Conversion Factor %	Exposure
Off-balance items in CRD					
Credit facilities	48,446	31,173	79,619	35%	28,034
Checking accounts	25,188		25,188	23%	5,751
Loan commitments	15,181	2,379	17,560	49%	8,555
Guarantees	23,088		23,088	64%	14,852
Other (leasing and documentary credits)	1,523		1,523	46%	695
Total	**113,426**	**33,552**	**146,978**		**57,887**

Derivatives and Securities Financing	Original exposure	Credit Conversion Factor %	Exposure
Derivatives	28,174	100%	28,174
Securities Financing Transactions & Long Settlement Transactions	1,197	100%	1,197
Total credit risk (CRD definition)	**546,791**		**457,097**

1) The on-balance exposures have a CCF of 100% but can still have lower EAD due to provisions in the standardised approach, financial collateral in the standardised approach and residual value for leasing in the IRB approach, that are deducted from the original exposure when calculating EAD.
2) Corresponding figure before allowances EUR 15,824m
3) Corresponding figure before allowances EUR 316,709m
4) There are also off-balance exposures that are included under the capital adequacy regulation but not included in the Annual Report. Such exposure relates to undrawn credit facilities which are unconditionally cancellable.

4.1.6.1 On-balance items
As shown in table 4, the following items have been excluded from the balance sheet, when calculating on-balance exposure in accordance with 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).
- Life insurance assets, due to solvency regulation
- Other, mainly intangible assets and deferred tax assets. These items are adjusted for when calculating the capital base.

4.1.6.2 Off-balance items
The following items are excluded from the off-balance sheet, in accordance with accounting rules, when calculating the off-balance exposure in accordance with CRD:

- Life insurance exposure, due to solvency regulation
- 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.

4.1.6.3 Securities financing and derivatives
It should be noted that derivatives are both included on-balance (i.e. positive fair value without netting) and off-balance (i.e. nominal amounts) in accordance to accounting standards. 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.

4.1.7 Large exposures
The purpose of the large exposure regulation is to limit the size of potential losses for the credit institution in case a customer or a group of connected clients are unable to fulfil their obligations towards the institution. The CRD II regulation, which came into force 31 December 2010, introduced a number of additional regulatory requirements into the large exposure framework and affects many areas throughout Nordea.

The main area includes more restrictive demands on institutions where a holding of aggregated exposures of more than 25% of the capital base towards other institutions is prohibited regardless of remaining maturity, with the exception of some specified transactions. Also, a wider definition of connected clients has been adopted. Together, these changes are made to reduce the concentration of risk within the financial sector and thereby enhance the stability of the financial system.

Nordea has adopted changes both in the credit process and in the calculation of large exposure. Customer responsible units have, together with product units delivering services to the clients, made improvements in the business processes in order to comply with the amendments to the regulations.

4.2 Capital requirement for credit risk

4.2.1 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 of the principles for RWA calculations under the IRB and standardised approaches see appendix 13.4.

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 retail portfolio is divided into three sub-segments; mortgage (credit risk exposure to private individuals, pledged by real estate), other retail (exposure to private individuals, except mortgage) and SME (exposure to small and medium-sized enterprises, including loans secured by real estate collateral).

For the remaining portfolios the standardised approach concerning exposure classes is used. The standardised approach is applied to the exposure in Poland, Russia, Luxembourg and foreign branches (e.g. Baltic countries, New York, London), as well as the finance companies in the Nordic countries. Furthermore, acquisitions of new portfolios are treated according to the standardised approach until approval by the financial supervisory authorities has been given to include them in the IRB approach.

Some exposure classes have been merged in the table due to low exposure in these exposure classes.

Table 5 Capital requirement for credit risk, 31 December 2010

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
Institution	57,309	53,497	17%	9,021	722
Corporate	219,768	157,542	57%	90,047	7,204
Retail	153,815	148,777	17%	24,556	1,964
– of which mortgage	117,960	117,166	11%	13,241	1,059
– of which other retail	32,321	28,528	35%	10,015	801
– of which SME	3,534	3,083	42%	1,299	104
Other non-credit obligation assets	1,778	1,722	100%	1,722	138
Total IRB approach	**432,669**	**361,538**	**35%**	**125,346**	**10,028**
Standardised exposure classes					
Central government and central banks	33,365	35,850	1%	351	28
Regional governments and local authorities	10,548	7,805	1%	83	7
Institution	7,925	7,699	22%	1,665	133
Corporate	36,900	25,328	99%	24,987	1,999
Retail	17,648	11,553	75%	8,665	693
Exposures secured by real estates	2,486	2,428	45%	1,096	88
Other[1]	5,250	4,897	50%	2,470	198
Total standardised approach	**114,122**	**95,559**	**41%**	**39,316**	**3,145**
Total	**546,791**	**457,097**	**36%**	**164,662**	**13,173**

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

Capital requirement for credit risk, 31 December 2009

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
Institution	50,345	45,416	23%	10,263	821
Corporate	207,214	145,376	61%	88,249	7,060
Retail	135,231	130,751	16%	20,912	1,673
– of which mortgage	100,704	100,144	11%	10,661	853
– of which other retail	30,497	27,007	33%	8,860	709
– of which SME	4,030	3,600	39%	1,391	111
Other non-credit obligation assets	1,712	1,269	100%	1,269	102
Total IRB approach	**394,501**	**322,813**	**37%**	**120,692**	**9,655**
Standardised exposure classes					
Central government and central banks	32,148	35,236	2%	786	63
Regional governments and local authorities	9,703	7,625	1%	85	7
Institution	4,452	4,159	24%	1,014	81
Corporate	28,196	19,646	98%	19,266	1,541
Retail	16,419	11,025	75%	8,269	661
Exposures secured by real estates	1,162	1,114	56%	618	49
Other[1]	4,633	4,328	55%	2,393	191
Total standardised approach	**96,713**	**83,133**	**39%**	**32,431**	**2,595**
Total	**491,214**	**405,945**	**38%**	**153,123**	**12,250**

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

The total exposure has increased 13% and the composition between different exposure classes has remained throughout the year. The IRB institution portfolio increased by 18% and comprised 12% (11%) of the total exposure at year-end. The IRB corporate portfolio increased mainly due to general growth and stronger SEK and NOK and amounted to 34% (36%) of the total exposure at year-end. The IRB retail portfolio increased and amounted in 33% (32%) of the total exposure at year-end, which mainly stems from retail mortgages. The exposure to central government and central banks increased and represented at year-end 8% (9%)of the total exposure . The remaining exposure in IRB and standardised represented 13% (12%) of the total exposure volume.

The total credit risk RWA has increased by 8% due to growth including FX impact, the increase is offset by enhanced credit quality and RWA optimisation activities. The total average risk weight under the IRB approach has decreased during the year which is a result of that both the corporate and the institution risk weight, with an average risk weight of 57% and 17% respectively, have decreased considerably. Retail exposure with an average risk weight of 17% has increased slightly.

The average risk weight increased in 2010 to 41% for the standardised exposure classes. This is mainly due to corporate exposure growth in foreign branches, Poland and Russia.

4.2.1.1 FX effect on exposure and RWA

In the four Nordic countries the impact of changes in the exchange rates relates mainly to SEK and NOK since Nordea reports in EUR. During 2010 changes in SEK/EUR and NOK/EUR have increased the exposure by EUR 14.1bn resulting in increased RWA by EUR 5.7bn.

4.2.2 Exposure type by exposure class

In table 6, the exposure is split by exposure classes and exposure types for 2010 and 2009 respectively.

As of year-end 2010 79% of the total credit risk exposure was calculated using the IRB approach, which is the same level as previous year. The main part of the exposure is within the IRB corporate and IRB retail portfolio.

During 2010, the on-balance exposure in the IRB institution exposure classes increased due to larger volumes of covered bonds. The corporate and retail exposures in the standardised approach contributed to a growth in both on- and off-balance. Securities financing shows a high relative increase (although the volumes are small), this is due to one exposure with short maturity towards a clearing house.

The average exposure in 2010 is shown in table 7.

Table 6 Exposure classes split by exposure type, 31 December 2010

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	32,393	2,055	665	18,384	53,497
Corporate	113,218	36,467	419	7,437	157,542
Retail	135,896	12,823	0	58	148,777
– of which mortgage	113,543	3,623			117,166
– of which other retail	20,015	8,481		33	28,528
– of which SME	2,339	719	0	25	3,083
Other non-credit obligation assets	1,722				1,722
Total IRB approach	**283,230**	**51,345**	**1,083**	**25,879**	**361,538**
Standardised exposure classes					
Central governments and central banks	34,115	539	114	1,082	35,850
Regional governments and local authorities	6,792	439		574	7,805
Institution	7,358	251		90	7,699
Corporate	20,346	4,728		254	25,328
Retail	11,013	540		1	11,553
Exposures secured by real estates	2,412	16			2,428
Other[1]	4,575	28		293	4,897
Total standardised approach	**86,609**	**6,541**	**114**	**2,295**	**95,559**
Total exposure	**369,839**	**57,887**	**1,197**	**28,174**	**457,097**

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

Exposure classes split by exposure type, 31 December 2009

IRB exposure classes					
Institution	22,663	2,298	141	20,314	45,416
Corporate	106,516	32,335	49	6,476	145,376
Retail	119,477	11,227	0	47	130,751
– of which mortgage	97,406	2,738			100,144
– of which other retail	19,266	7,716		24	27,007
– of which SME	2,805	772	0	23	3,600
Other non-credit obligation assets	1,269				1,269
Total IRB approach	**249,925**	**45,860**	**190**	**26,838**	**322,813**
Standardised exposure classes					
Central governments and central banks	33,377	496	310	1,054	35,236
Regional governments and local authorities	6,674	419		532	7,625
Institution	3,676	189	14	281	4,159
Corporate	16,414	3,170	4	57	19,646
Retail	10,771	252	1	1	11,025
Exposures secured by real estates	1,095	19			1,114
Other[1]	4,280	17		30	4,328
Total standardised approach	**76,287**	**4,562**	**329**	**1,954**	**83,133**
Total exposure	**326,213**	**50,422**	**519**	**28,792**	**405,945**

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

Table 7 Exposure classes split by exposure type, average[1] exposure during 2010

Average exposure

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	24,380	2,037	624	20,413	47,455
Corporate	113,011	33,751	199	8,123	155,084
Retail	130,144	12,336	0	67	142,547
– of which mortgage	107,523	3,263			110,785
– of which other retail	20,005	8,343		41	28,389
– of which SME	2,616	731	0	26	3,373
Other non-credit obligation assets	1,484	6			1,490
Total IRB approach	**269,020**	**48,130**	**823**	**28,603**	**346,576**
Standardised exposure classes					
Central governments and central banks	28,219	539	29	918	29,704
Regional governments and local authorities	6,727	378		667	7,772
Institution	4,744	196	3	143	5,086
Corporate	18,277	4,020	1	196	22,495
Retail	11,341	322	0	2	11,665
Exposures secured by real estates	1,444	11			1,455
Other[2]	4,106	12		148	4,266
Total standardised approach	**74,858**	**5,479**	**32**	**2,075**	**82,444**
Total exposure	**343,878**	**53,609**	**855**	**30,678**	**429,020**

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

4.2.3 Exposure by geography

In table 8, exposure is split by geographical areas, based on where the credit risk is referable. The home markets for Nordea are the Nordic countries and the New European Markets (Baltic countries, Poland and Russia).

Nordea is geographically well diversified as no market accounts for more than 30% of the exposure. Both the retail and corporate exposure have shown stable growth in all Nordic countries, as well as in foreign branches, during 2010.

The exposure in Sweden and Finland represents 27% each of the total exposure in the Group while Denmark stands for 23% and Norway 15%. The corporate and retail growth in Sweden explains the relatively large share in exposure while Finland remains on a high level due to its share of institution and sovereign volumes.

In 2010 the exposure towards institutions has increased in all the Nordic countries, except Norway. The large growth in Denmark is a result of increased covered bond volumes.

The total exposure in New European Markets increased 16% over the year, which is related to increased volumes in Poland and Russia according to growth plans while the volumes in Baltic countries were stable. Other OECD countries remain at a similar level as in 2009 with regards to the relative part of the total exposure, and the increase in exposure of 21% stems from foreign branches.

Table 8 Exposure split by geography and exposure classes, 31 December 2010

EURm	Nordic countries	of which Denmark	of which Finland	of which Norway	of which Sweden	Baltic countries	Poland	Russia	Other	Total
IRB exposure classes										
Institution	53,497	10,353	25,996	2,405	14,742					53,497
Corporate	157,542	38,952	37,758	34,631	46,201					157,542
Retail	148,777	47,871	32,103	27,476	41,327					148,777
– of which mortgage	117,166	34,976	24,118	22,685	35,386					117,166
– of which other retail	28,528	12,179	7,046	4,406	4,897					28,528
– of which SME	3,083	716	939	385	1,043					3,083
Other non-credit obligation assets	1,722	481	251	223	768					1,722
Total IRB approach	**361,538**	**97,658**	**96,107**	**64,734**	**103,038**					**361,538**
Standardised exposure classes										
Central governments and central banks	32,634	3,641	14,555	2,071	12,367	685	922	288	1,322	35,850
Regional governments and local authorities	7,092	554	1,583	200	4,755	150			562	7,805
Institution	883	2	875	7		80	593	185	5,958	7,699
Corporate	2,514	962	1,309	3	239	4,385	1,526	4,387	12,515	25,328
Retail	6,259	1,073	2,968	913	1,305	1,490	3,373	276	155	11,553
Exposures secured by real estates	637	203	434			1,226	186		378	2,428
Other[1]	3,977	1,283	339	384	1,971	284	102	137	398	4,897
Total standardised approach	**53,996**	**7,718**	**22,063**	**3,579**	**20,637**	**8,299**	**6,702**	**5,273**	**21,989**	**95,559**
Total exposure	**415,534**	**105,376**	**118,170**	**68,313**	**123,675**	**8,299**	**6,702**	**5,273**	**21,989**	**457,097**

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

Exposure split by geography and exposure classes, 31 December 2009

EURm	Nordic countries	of which Denmark	of which Finland	of which Norway	of which Sweden	Baltic countries	Poland	Russia	Other	Total
IRB exposure classes										
Institutions	45,416	4,526	24,571	3,286	13,033					45,416
Corporate	145,376	38,473	35,492	33,591	37,821					145,376
Retail	130,751	44,714	29,702	23,654	32,681					130,751
– of which mortgage	100,144	33,012	22,118	17,963	27,052					100,144
– of which other retail	27,007	10,883	6,670	5,296	4,157					27,007
– of which SME	3,600	819	914	395	1,472					3,600
Other non-credit obligation assets	1,269	279	254	162	574					1,269
Total IRB approach	**322,813**	**87,991**	**90,019**	**60,693**	**84,109**					**322,813**
Standardised exposure classes										
Central governments and central banks	31,662	5,658	12,217	5,015	8,772	968	872	123	1,610	35,236
Regional governments and local authorities	7,009	902	1,498	255	4,354	97			519	7,625
Institution	1,022	540	441	2	38	276	289	289	2,283	4,159
Corporate	1,208	211	783	51	163	4,104	1,562	3,228	9,544	19,646
Retail	5,863	984	3,051	834	995	2,621	2,157	215	169	11,025
Exposures secured by real estates	581	171	410		0		183		350	1,114
Other[1]	3,478	1,201	280	277	1,719	277	93	142	336	4,328
Total standardised approach	**50,823**	**9,668**	**18,679**	**6,435**	**16,040**	**8,343**	**5,157**	**3,997**	**14,813**	**83,133**
Total exposure	**373,635**	**97,659**	**108,699**	**67,128**	**100,150**	**8,343**	**5,157**	**3,997**	**14,813**	**405,945**

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

4.2.4 Exposure by industry

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

The IRB corporate portfolio is well diversified between industries. The real estate management and investment sector in this portfolio is the largest sector, and is the only sector that accounts for more than 5% of the total exposure of EUR 457bn. During the year, the largest increases are found within the real estate management investments with 16%, which is in line with other industries, and other financial institution industries with 39%. The IRB institution portfolio shows a significant growth in the sector other institutions, this is to a large extent explained by increased volumes in covered bonds.

Table 10 shows the exposure in the IRB and SA portfolios distributed both by industry and geography. This illustrates Nordea's diversification of the corporate portfolio and cross-border business model.

Table 9 Exposure split by industry sector, 31 December 2010

	Internal rating based approach				Standardised approach			
EURm	Institution	Corporate	Retail	Other non-credit obligation assets	Central governments and central banks	Regional government and local authorities	Other[1]	Total
Retail mortgage			117,166				2,428	119,593
Other retail			28,528				11,553	40,081
Central and local governments					17,317	7,805		25,122
Banks	22,460				18,533		2,732	43,725
Industry sector								
– Construction and engineering		4,197	353				280	4,830
– Consumer durables (cars, appliances etc)		5,269	56				969	6,294
– Consumer staples (food, agriculture etc)		11,480	189				960	12,629
– Energy (oil, gas etc)		3,467	1				718	4,186
– Health care and pharmaceuticals		1,811	111				685	2,607
– Industrial capital goods		4,728	23				833	5,584
– Industrial commercial services		17,181	507				1,665	19,353
– IT software, hardware and services		1,672	64				432	2,169
– Media and leisure		2,579	243				313	3,136
– Metals and mining materials		1,083	7				34	1,124
– Paper and forest materials		3,863	25				196	4,085
– Real estate management and investment		40,108	460				1,043	41,611
– Retail trade		11,338	579				1,112	13,030
– Shipping and offshore		8,472	7				4,626	13,105
– Telecommunication equipment		603	1				9	613
– Telecommunication operators		2,789	3				44	2,836
– Transportation		3,263	148				1,116	4,527
– Utilities (distribution and production)		6,901	14				479	7,394
– Other financial institutions	31,037	14,136	59				1,909	47,140
– Other materials (chemical, building materials etc)		7,333	93				757	8,184
– Other		5,267	139	1,722			17,012	24,141
Total exposure	**53,497**	**157,542**	**148,777**	**1,722**	**35,850**	**7,805**	**51,904**	**457,097**

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

Cont. Table 9 Exposure split by industry sector, 31 December 2009

	Internal rating based approach				Standardised approach			
EURm	Institution	Corporate	Retail	Other non-credit obligation assets	Central governments and central banks	Regional government and local authorities	Other[1]	Total
Retail mortgage			100,144				1,114	101,259
Other retail			27,007				11,025	38,031
Central and local governments					17,837	7,625		25,462
Banks	28,496				17,399		1,844	47,739
Industry sector								
– Construction and engineering		4,252	444				434	5,130
– Consumer durables (cars, appliances etc)		5,594	55				427	6,076
– Consumer staples (food, agriculture etc)		11,560	240				840	12,639
– Energy (oil, gas etc)		3,102	1				579	3,683
– Health care and pharmaceuticals		2,087	132				297	2,516
– Industrial capital goods		4,387	24				179	4,590
– Industrial commercial services		15,204	650				311	16,165
– IT software, hardware and services		1,408	86				278	1,772
– Media and leisure		2,561	291				244	3,096
– Metals and mining materials		888	7				72	967
– Paper and forest materials		3,444	33				80	3,558
– Real estate management and investment		34,461	472				1,445	36,378
– Retail trade		10,552	632				758	11,942
– Shipping and offshore		8,053	6				3,434	11,493
– Telecommunication equipment		374	1				36	412
– Telecommunication operators		2,583	3				158	2,744
– Transportation		3,383	164				463	4,010
– Utilities (distribution and production)		5,792	15				617	6,424
– Other financial institutions	16,920	10,140	53				335	27,448
– Other materials (chemical, building materials etc)		6,882	107				539	7,528
– Other		8,669	184	1,269			14,762	24,884
Total exposure	**45,416**	**145,376**	**130,751**	**1,269**	**35,236**	**7,625**	**40,271**	**405,945**

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

Table 10 IRB corporate exposure split by industry and geography, 31 December 2010

EURm	Denmark	Finland	Norway	Sweden	Total
Construction and engineering	570	1,402	1,619	605	4,197
Consumer durables (cars, appliances etc)	600	990	1,449	2,230	5,269
Consumer staples (food, agriculture etc)	7,253	1,638	1,678	911	11,480
Energy (oil, gas etc)	15	641	1,490	1,322	3,467
Health care and pharmaceuticals	519	372	207	713	1,811
Industrial capital goods	968	2,247	111	1,402	4,728
Industrial commercial services	4,373	2,919	6,205	3,685	17,181
IT software, hardware and services	534	496	163	479	1,672
Media and leisure	682	646	528	722	2,579
Metals and mining materials	18	531	210	324	1,083
Paper and forest materials	186	1,669	40	1,968	3,863
Real estate management and investment	6,060	7,296	10,149	16,603	40,108
Retail trade	4,081	3,006	1,488	2,763	11,338
Shipping and offshore	1,265	1,134	4,847	1,228	8,472
Telecommunication equipment	6	588	1	9	603
Telecommunication operators	450	824	263	1,252	2,789
Transportation	581	902	593	1,187	3,263
Utilities (distribution and production)	1,487	2,984	1,396	1,035	6,901
Other financial institutions	4,459	3,190	1,312	5,174	14,136
Other materials (chemical, building materials etc)	1,190	2,922	690	2,531	7,333
Other	3,657	1,360	193	57	5,267
Total exposure	**38,952**	**37,758**	**34,631**	**46,201**	**157,542**

IRB corporate exposure split by industry and geography, 31 December 2009

EURm	Denmark	Finland	Norway	Sweden	Total
Construction and engineering	606	1,435	1,455	756	4,252
Consumer durables (cars, appliances etc)	685	1,054	1,567	2,288	5,594
Consumer staples (food, agriculture etc)	7,204	1,980	1,478	898	11,560
Energy (oil, gas etc)	5	667	1,421	1,010	3,102
Health care and pharmaceuticals	818	399	176	694	2,087
Industrial capital goods	899	2,406	109	973	4,387
Industrial commercial services	3,527	2,715	5,853	3,107	15,204
IT software, hardware and services	465	525	145	273	1,408
Media and leisure	741	646	566	607	2,561
Metals and mining materials	20	435	159	274	888
Paper and forest materials	164	1,536	38	1,707	3,444
Real estate management and investment	5,331	6,430	9,114	13,585	34,461
Retail trade	3,798	2,749	1,407	2,598	10,552
Shipping and offshore	1,406	1,362	4,653	632	8,053
Telecommunication equipment	11	362	1	1	374
Telecommunication operators	441	816	241	1,085	2,583
Transportation	736	850	539	1,258	3,383
Utilities (distribution and production)	1,259	2,768	1,034	731	5,792
Other financial institutions	3,194	2,621	1,010	3,315	10,140
Other materials (chemical, building materials etc)	1,234	2,782	887	1,979	6,882
Other	5,929	954	1,738	48	8,669
Total exposure	**38,473**	**35,492**	**33,591**	**37,821**	**145,376**

4.2.4.1 Specification of exposure against central government and central banks

Nordea 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 uses Standard & Poor's as eligible rating agency. In table 11, the central government and central bank exposure distributed by the credit quality steps is available.

The main part (98%) of the exposure towards central governments and central banks is within the highest credit quality step, resulting in no RWA. For this exposure only insignificant amounts relate to central governments and central banks outside the OECD. The exposure towards central governments and central banks has been stable over the year.

Table 11 Exposure to central governments and central banks

EURm Standard & Poor's rating	Credit quality step	Risk weight	31 December 2010 Exposure	31 December 2009 Exposure
AAA to AA–	1	0%	35,302	33,868
A+ to A–	2	20%	126	552
BBB+ to BBB–	3	50%	193	280
BB+ and below, or without rating	4 to 6 or blank	100–150%	230	536
Total			**35,850**	**35,236**

4.2.5 Specification of off-balance exposure

The distribution of the off-balance exposure is specified in table 12. The off-balance exposure is presented as original exposure (excluding the application of CCF).

The total off-balance volume increased by 9% in 2010. The total corporate off-balance sheet items have experienced growth during the year, however the level of 75% of the total off-balance exposure is the same as last year.

The largest part of the increase in off-balance exposure stems from the corporate segment, both IRB and standardised. The increase in IRB retail stems mainly from increasing housing loan commitments in Sweden and Norway, which besides growth is partly effected by the strengthened currencies in the Nordic region.

Table 12 Original exposure off-balance split by exposure class

EURm	31 December 2010	31 December 2009
IRB exposure classes		
Institution	5,267	5,322
Corporate	93,798	89,843
Retail	16,885	14,786
– of which mortgage	4,417	3,298
– of which other retail	11,351	10,329
– of which SME	1,117	1,158
Other non-credit obligation assets		
Total IRB approach	**115,950**	**109,951**
Standardised exposure classes		
Central government and central banks	1,564	1,346
Regional governments and local authorities	6,233	5,374
Institution	682	1,200
Corporate	15,892	11,318
Retail	6,437	5,417
Exposures secured by real estates	71	67
Other	149	92
Total standardised approach	**31,027**	**24,815**
Total	**146,978**	**134,766**

The overall capital requirement split by exposure type is available in table 13, where the exposure for derivatives stems from counterparty risk. The information in the table includes exposure from both the IRB and standardised exposure classes. The main categories within off-balance items are guarantees, credit commitments and unutilised portion of approved credit facilities.

Off-balance items have a smaller effect on RWA than on-balance items. At the end of 2010, only 23% of the total credit risk RWA stems from off-balance items and derivatives, which is at the same level as 2009. RWA for off-balance items was 20% of the original exposure, while RWA for on-balance including securities financing was 34% of the original exposure.

The exposure class IRB corporate has the largest portion of off-balance exposure which constitutes 43% of the total original exposure in this exposure class, but a large part is revocable credit facilities.

An off-balance exposure amount does not contain the same risk as an on-balance exposure amount. 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. For the off balance items, the nominal value of a guarantee is applied with a CCF for calculating the exposure. The CCF is for instance 50% or 100% depending on the type of guarantee, i.e. lowering the risk weights compared with the same exposure on-balance. Credit commitments and unutilised amounts are the part of the external commitments that has not been utilised. This amount forms the calculation base depending on approach, product type and whether the utilised amounts are unconditionally cancellable or not.

The internal CCF model used for IRB retail is built on a product based approach. There are three explanatory variables that determine which CCF value an off-balance exposure will receive. The three variables are 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 14 shows the weighted average CCF for the IRB exposure.

The decrease in average CCF for exposure class IRB institutions is a result of lower volumes in documentary credits which hold a CCF of 50% and at the same time larger volumes towards checking accounts and revocable facilities with a CCF of 0%.The decrease in CCF for corporate exposure is in addition a result of a larger portion of revocable facilities.

4.2.6 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. Nordea, through 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 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.

Table 13 Exposure, RWA and capital requirements split by exposure type, 31 December 2010

EURm	On-balance sheet items[1]	Off-balance sheet items	Derivatives	Total
Original exposure	371,639	146,978	28,174	546,791
EAD	371,037	57,887	28,174	457,097
RWA	126,925	29,423	8,315	164,662
Capital requirement	10,154	2,354	665	13,173
Average risk weight	34%	51%	30%	36%

1) On-balance sheet items include securities financing.

Exposure, RWA and capital requirements split by exposure type, 31 December 2009

EURm	On-balance sheet items[1]	Off-balance sheet items	Derivatives	Total
Original exposure	327,657	134,766	28,792	491,214
EAD	326,732	50,422	28,792	405,945
RWA	118,094	25,631	9,398	153,123
Capital requirement	9,448	2,051	752	12,250
Average risk weight	36%	51%	33%	38%

1) On-balance sheet items include securities financing.

Table 14 Credit conversion factor and exposure split by IRB exposure class, 31 December 2010

EURm	Exposure after substitution effects[1]	Exposure	CCF
Institution	5,554	2,055	37%
Corporate	93,237	36,467	39%
Retail	16,851	12,823	76%
– of which mortgage	4,417	3,623	82%
– of which other retail	11,321	8,481	75%
– of which SME	1,112	719	65%

1) Exposure after substitution effects is the exposure after taking credit risk mitigation techniques, such as guarantees and credit derivatives, into account.

Credit conversion factor and exposure split by IRB exposure class, 31 December 2009

EURm	Exposure after substitution effects[1]	Exposure	CCF
Institution	5,572	2,298	41%
Corporate	89,333	32,335	36%
Retail	14,783	11,227	76%
– of which mortgage	3,298	2,738	83%
– of which other retail	10,329	7,716	75%
– of which SME	1,156	772	67%

1) Exposure after substitution effects is the exposure after taking credit risk mitigation techniques, such as guarantees and credit derivatives, into account.

4.2.6.1 Pillar I method for counterparty credit risk

Nordea uses the so called marked-to-market method to calculate the exposure for counterparty credit risk in accordance with the credit risk framework in CRD, i.e. the sum of current exposure (replacement cost) and potential future exposure. The potential future exposure is an estimate reflecting possible changes in the market value of the individual contract during the remaining lifetime, and is measured as the notional principal amount multiplied by the so called add-on factor. The size of the add-on factor depends on the contract's remaining lifetime and 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 15, the exposure as well as the RWA split by the exposure classes are shown.

Table 15 Counterparty risk split by exposure class[1]

	31 December 2010		31 December 2009	
EURm	Exposure	RWA	Exposure	RWA
IRB exposure classes				
Institution	18,384	4,062	20,314	5,232
Corporate	7,437	3,848	6,476	3,867
Retail	58	29	47	24
Total IRB approach	**25,879**	**7,939**	**26,838**	**9,124**
Standardised exposure classes				
Central government and central banks	1,082	68	1,054	14
Other	1,212	309	900	260
Total standardised approach	**2,295**	**376**	**1,954**	**275**
Total exposure	**28,174**	**8,315**	**28,792**	**9,398**

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

4.2.6.2 Counterparty credit risk for internal credit limit purposes

Counterparty credit risk for internal credit limit purposes is calculated using an alternative method which differs from the pillar I method with respect to add-on factors, treatment of collaterals, netting principles and calculation of total exposure. For example, in counterparty credit risk exposure for regulatory capital, the add-ons are fixed and decided by supervisors whereas the internal add-ons in Nordea are internally derived and may change over time. Also, in calculation of regulatory exposure for counterparty credit risk, collateral affects the LGD value in the IRB formula and not the level of exposure. However, for internal limit purposes the collateral affects the level of exposure instead, which results in different exposure levels when comparing the two methods.

In table 16, the current exposure and potential future exposure are presented for different type of customers. Exposure equals the sum of current exposure and potential future exposure and as of December 2010 the potential future exposure is the major part of the exposure.

As of December 2010, the current net exposure was EUR 6,990m and the potential future exposure was EUR 30,365m in the internal counterparty risk framework. The rise in the potential future exposure by 24% since December 2009 indicates an increase in the business volumes and an increase of the internal add-on levels in 2010 due to modified internal measurement rules when calculating potential future exposure.

On traded OTC contracts, Nordea performs fair value adjustments which adjust the profit/loss of these contracts by taking into account the cost of hedging in the secondary market. The cost of hedging is either based directly on market prices or on a theoretical calculation based on the credit rating of the counterparty.

Table 16 Counterparty risk exposures (internal)

	December 31, 2010			December 31, 2009		
EURm	Current exposure	Potential future exposure	Total credit risk	Current exposure	Potential future exposure	Total credit risk
Public entities	481	2,405	2,249	596	2,180	2,466
Institution	1,990	19,077	19,236	1,933	15,304	16,223
Corporate	4,518	8,883	12,110	3,863	7,024	9,918
Total	**6,990**	**30,365**	**33,595**	**6,392**	**24,508**	**28,608**

4.2.6.3 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 consists mostly of cash and high quality bonds.

In table 17 information as to how the counterparty risk exposure is reduced with risk mitigation techniques is shown.

As of December 2010 Nordea had 914 (703) financial collateral agreements. The effects of closeout netting and collateral agreements are considerable, as 93% (92%) 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, such as rating triggers. For a few agreements the minimum exposure level for further posting of collateral will be lowered in the event 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 on a condition in some of the long-term derivative contracts, which gives the option to terminate a contract at a specific time or on the occurrence of specified credit-related events.

The 10 largest counterparties measured on net current exposure account for around 14% (20%) of the total current exposure, and consist of a mix of financial institutions, public and corporate counterparties.

4.2.6.4 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.

4.2.7 Equity holdings

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".

In table 18, the equity holdings in the banking book are grouped based on the intention of the holding. In the investment portfolio, holdings in private equity funds are included at the amount of EUR 244m. All equities in the table are booked at fair value. The evidence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure the value of financial assets and financial liabilities. For equities with no published price quotations, internal valuation techniques are used to establish fair value. Table 18 shows to what extent published price quotations are used.

Table 17 Mitigation of counterparty risk exposure due to closeout netting and collateral agreements

	31 December 2010				31 December 2009			
EURm	Current Exposure (gross)	Reduction from closeout netting agreements	Reduction from held collateral	Current Exposure (net)	Current Exposure (gross)	Reduction from closeout netting agreements	Reduction from held collateral	Current Exposure (net)
Total	**98,649**	**87,369**	**4,291**	**6,990**	**77,030**	**67,201**	**3,437**	**6,392**

Table 18 Equity holdings outside the trading book, 31 December 2010

EURm	Book value	Fair value	Unrealised gains/losses	Realised gains/losses	Capital requirement
Investment portfolio[1]	511	511	186	51	41
Other[2]	361	361	14	0	29
Total	**872**	**872**	**200**	**51**	**70**

1) Of which listed equity holdings, 143.
2) Of which listed equity holdings, 45.

4.3 Rating, collateral and maturity distribution

The parameters PD, LGD and maturity are a central part of calculating the RWA. In this section the components are described with respect to development of rating distribution and migration, LGD development, maturity distribution and how these parameters are estimated and validated.

4.3.1 Rating and scoring

The common denominator of the rating and scoring is the ability to predict defaults and rank customers according to their default risk. The 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-.

In table 19, the mapping from the internal rating scale to the S&P's rating scale, using condensed scales, is shown.

Table 19 Indicative mapping between internal rating and Standard & Poor's

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

The mapping of the internal ratings to 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. Nordea has always the ambition 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.

In tables 20 to 23, the exposure is distributed over the internal rating scale for the exposure in the IRB exposure classes. The PD and the average risk weight are weighted based on exposure. The risk weight is a function of PD and lower PD means lower risk weight. The exposure distributions on the rating scale are illustrated in figure 6, figure 7 and figure 9.

Table 20 Exposure towards IRB Institution, distributed by rating grade[1]

	31 December 2010 Institution			31 December 2009 Institution		
EURm Rating	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
6+	0.03%	1,821	13%	0.03%	2,758	14%
6	0.03%	5,237	9%	0.03%	3,626	13%
6–	0.05%	23,818	9%	0.05%	17,950	13%
5+	0.07%	12,770	16%	0.07%	7,695	18%
5	0.10%	4,119	21%	0.10%	4,493	28%
5–	0.16%	2,117	34%	0.16%	6,332	38%
4+	0.24%	1,538	46%	0.24%	698	49%
4	0.35%	808	61%	0.35%	357	53%
4–	0.53%	335	71%	0.53%	611	73%
3+	0.81%	279	90%	0.81%	207	91%
3	1.19%	115	102%	1.18%	119	104%
3–	2.01%	71	122%	2.01%	94	122%
2+	3.63%	28	144%	3.63%	21	128%
2	6.16%	36	168%	6.16%	24	150%
2–	9.86%	49	204%	9.86%	83	198%
1+	14.79%	20	234%	14.79%	14	234%
1	20.71%	7	254%	20.71%	7	254%
1–	26.93%	0	N/A	26.93%	17	263%
	0.11% [2]	**53,167**	**17%**	**0.13%**[2]	**45,104**	**23%**

1) Exposure includes rated customers.
2) Exposure weighted PD.

Figure 6 Exposure distributed by rating grade, IRB Institution

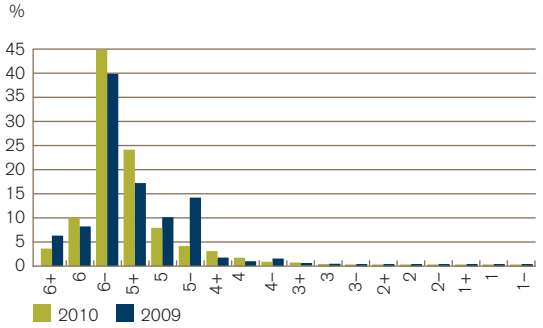
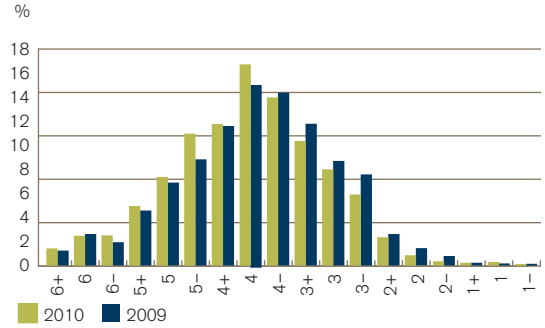


Figure 7 Exposure distributed by rating grade, IRB Corporate



4.3.2 Rating distribution

4.3.2.1 Rating distribution of the IRB institution portfolio

In December 2010, approximately 99% (99%) of the institution exposure is found in the nine highest rating grades, 4- and higher.

The average PD of the institution portfolio improved as well as the average risk weight as shown in table 20. The decrease in 5- corresponds well with the increase in 5+ and 6-. More information about the rating migration is shown in section 4.3.4

4.3.2.2 Rating distribution of the IRB corporate portfolio

In December 2010, approximately 72% (67%) of the corporate exposure was found in the nine highest rating grades, 4- and above.

During 2010 many industries have recovered from the financial challenges in 2009. This can be seen in the corporate rating migration where the average risk weight has decreased as a result of a lower PD of 0.76% (0.87%).

As shown in figure 8, the average rating per industry has increased during 2010. The industries that have increased the average rating the most are metals and mining materials and paper and forest materials. The industries other materials and telecommunication equipment have remained largely unchanged. The upgrade in ratings took place mainly in the last 6 months of the year.

Table 21 Exposure towards IRB Corporate, distributed by rating grade[1]

	31 December 2010 Corporate			31 December 2009 Corporate		
EURm Rating	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
6+	0.03%	2,095	13%	0.03%	1,711	14%
6	0.03%	3,688	15%	0.03%	3,647	17%
6–	0.05%	3,705	18%	0.05%	2,676	15%
5+	0.07%	7,421	23%	0.07%	6,389	23%
5	0.10%	11,069	28%	0.10%	9,690	29%
5–	0.16%	16,563	37%	0.16%	12,417	37%
4+	0.24%	17,764	45%	0.24%	16,333	45%
4	0.35%	25,321	55%	0.35%	21,181	56%
4–	0.53%	21,168	66%	0.53%	20,286	66%
3+	0.81%	15,639	77%	0.81%	16,594	79%
3	1.19%	12,087	90%	1.18%	12,263	88%
3–	2.01%	8,886	98%	2.01%	10,690	101%
2+	3.63%	3,499	120%	3.63%	3,641	122%
2	6.16%	1,220	127%	6.16%	1,970	133%
2–	9.86%	457	148%	9.86%	1,039	163%
1+	14.79%	288	175%	14.79%	297	162%
1	20.71%	400	215%	20.71%	216	200%
1–	26.93%	121	181%	26.93%	123	211%
	0.76%[1]	**151,393**	**57%**	**0.87%[2]**	**141,161**	**61%**

1) Exposure includes rated customers.
2) Exposure weighted PD.

4.3.2.3 Scoring distribution of the IRB retail portfolio
At the end of 2010, approximately 87% (86%) of the retail exposure was found in the nine highest risk grades, C- and above. In the sub-exposure class retail mortgage approximately 90% of the exposures have the highest rating grades. For retail other and retail SME the corresponding figures are 78% and 48%.

The scoring distribution of the retail portfolio was relatively stable in 2010. Improvements can be seen in the highest risk grade A+. Altogether, the average PD has improved to 0.90% from 0.93%.

4.3.3 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.

Figure 8 Development of average rating per industry for the IRB corporate portfolio

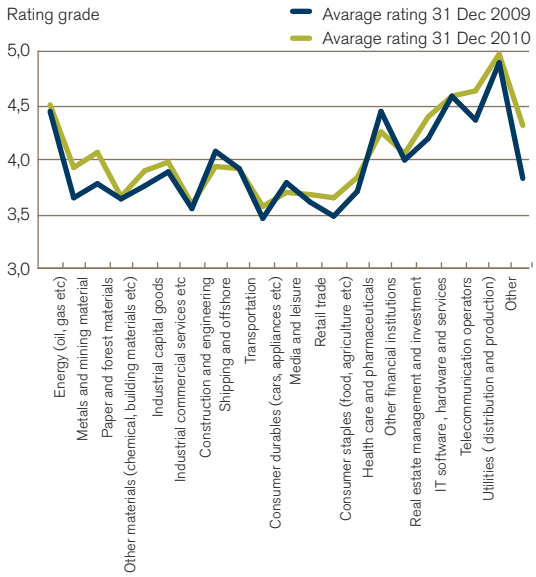


Table 22 Exposure towards IRB Retail, distributed by risk grade[1]

	31 December 2010 Retail			31 December 2009 Retail		
EURm Risk grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
A+	0.08%	41,859	3%	0.08%	34,771	3%
A	0.11%	16,389	5%	0.11%	15,136	5%
A–	0.16%	12,818	6%	0.16%	11,572	7%
B+	0.22%	13,132	9%	0.22%	11,264	9%
B	0.31%	12,275	11%	0.31%	10,729	11%
B–	0.43%	9,316	14%	0.43%	8,948	14%
C+	0.60%	7,789	17%	0.60%	6,736	18%
C	0.84%	8,550	22%	0.84%	7,224	22%
C–	1.17%	5,160	28%	1.17%	4,665	28%
D+	1.64%	4,352	32%	1.64%	4,391	35%
D	2.30%	3,465	38%	2.30%	3,205	38%
D–	3.20%	3,411	42%	3.20%	3,191	44%
E+	4.47%	2,478	50%	4.47%	1,940	50%
E	6.30%	2,952	56%	6.30%	2,764	52%
E–	8.79%	566	62%	8.79%	585	57%
F+	12.28%	758	66%	12.28%	421	66%
F	17.19%	240	76%	17.19%	321	80%
F–	24.04%	925	88%	24.04%	879	87%
	0.90%[2]	**146,435**	**17%**	**0.93%[2]**	**128,742**	**16%**

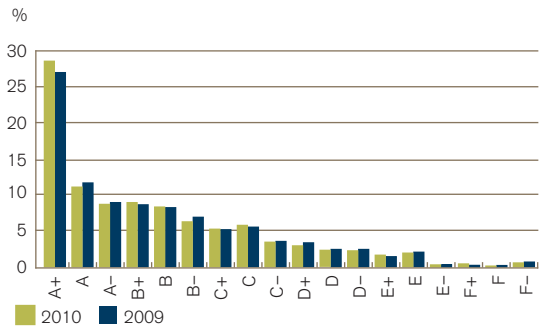
1) Exposure includes scored customers.
2) Exposure weighted PD.

Table 23 Exposure towards IRB Retail sub-exposure classes, distributed by risk grade[1]

EURm	31 December 2010 Retail				31 December 2009 Retail			
Risk grade	PD scale	Retail mortgage	Other Retail	SME	PD scale	Retail mortgage	Other Retail	SME
A+	0.08%	37,470	4,101	288	0.08%	30,588	3,735	448
A	0.11%	14,079	2,274	36	0.11%	12,683	2,381	73
A–	0.16%	10,798	1,986	34	0.16%	9,677	1,834	61
B+	0.22%	10,733	2,359	40	0.22%	9,244	1,948	73
B	0.31%	9,417	2,772	86	0.31%	8,339	2,270	119
B–	0.43%	6,889	2,334	93	0.43%	6,849	1,967	133
C+	0.60%	5,827	1,864	98	0.60%	4,908	1,727	101
C	0.84%	6,063	2,346	141	0.84%	5,354	1,714	156
C–	1.17%	3,180	1,396	583	1.17%	2,882	1,178	605
D+	1.64%	2,755	1,275	323	1.64%	2,601	1,418	371
D	2.30%	2,095	1,061	309	2.30%	1,957	925	323
D–	3.20%	2,246	830	335	3.20%	2,060	785	346
E+	4.47%	1,558	743	177	4.47%	1,086	678	176
E	6.30%	1,651	1,142	159	6.30%	664	1,915	185
E–	8.79%	318	167	82	8.79%	130	370	85
F+	12.28%	308	412	37	12.28%	202	181	39
F	17.19%	128	76	36	17.19%	173	103	46
F–	24.04%	563	328	34	24.04%	506	319	54
		116,077	**27,466**	**2,892**		**99,901**	**25,447**	**3,395**

1) Exposure includes scored customers.

Figure 9 Exposure distributed by risk grade, IRB Retail



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.

4.3.4 Rating migration

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

1. The rating distribution for new customers and customers leaving the bank differs from the rating distribution of the customers existing both in the beginning and end of the period
2. Increased or decreased exposure to existing customers
3. Changes in rating/scoring for existing customers (migration). 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.

Figures 10 to 12 show the rating/scoring migration for institution, corporate and retail customers during 2010, comparing the development from the beginning of the year with year-end. The migration is based on existing customers at year-end 2009 and 2010. The migration is shown both in terms of number of customers and exposure. The RWA decrease due to rating/scoring migration reflects the impact of procyclicality in the pillar I capital requirement calculations of the IRB approaches.

Out of the total exposure in the institution portfolio approximately 22% has migrated up or down during 2010. This corresponds to approximately 35% of the number of counterparts. The migration downwards is shown in the top rating grade 6+. A downgrading by one rating grade does not have a significant impact on RWA due to the low risk weights.

Of the total exposure in the corporate portfolio approximately 43% has migrated either up or down in 2010. This corresponds to approximately 57% of customers. Nordea's largest counterparties have been largely stable in rating while some counterparties with less exposure have migrated, although the latter have had a smaller impact on the credit quality.

Out of the total exposure in the retail portfolio approximately 43% has migrated up or down during 2010. This corresponds to approximately 58% of the customers.

The migration had a positive impact on credit risk during 2010, reducing the RWA with approximately 1.3%. This calculation does not take into account the rating distribution of lost/new counterparts as well as counterparts that have defaulted.

4.3.5 Loss Given Default

In table 24, 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. In 2010, approximately 38% (37%) of total exposure was secured by eligible collateral. In the IRB portfolios 47% (47%) of the exposure was secured by eligible collateral.

The relative share of collateralised exposure remains stable with slight increases in three out of four IRB exposure classes.

In the FIRB approach the LGD estimates are predefined in the legislation. For instance, exposure fully secured by real estate collateral is assigned an LGD of 30-35% depending on national regulations. Exposure fully secured by other physical collateral is assigned an LGD of 40%. The LGD value for unsecured senior exposure is 45%. The LGDs for the retail portfolio are based on an internal model, and divided in pools of collateral and based on historical loss data.

Average LGD in exposure class institution decreased to 27% (34%), which is mainly related to a larger share of covered bonds which have a much lower LGD compared to other products in the portfolio. Average LGD on the retail portfolio has also improved over the year as a result of the growth in residential real estate exposure.

Average LGD in exposure class corporate is stable at 41%.

Figure 10a Institution rating migration, exposure that has been up- or downgraded during 2010

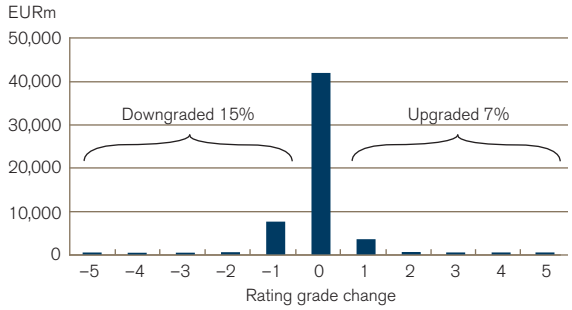


Figure 10b Institution rating migration, number of counterparts that have been up- or downgraded during 2010

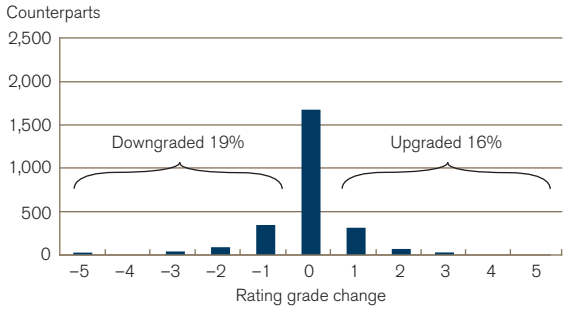


Figure 11a Corporate rating migration, exposure that has been up- or downgraded during 2010

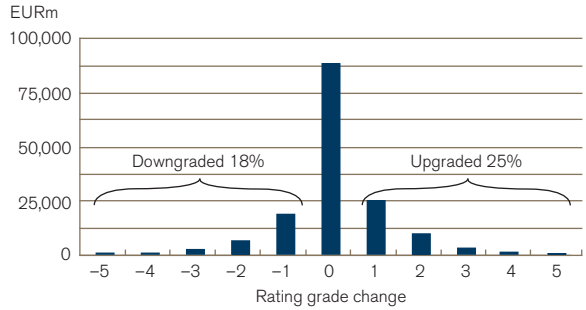


Figure 11b Corporate rating migration, number of counterparts that have been up- or downgraded during 2010

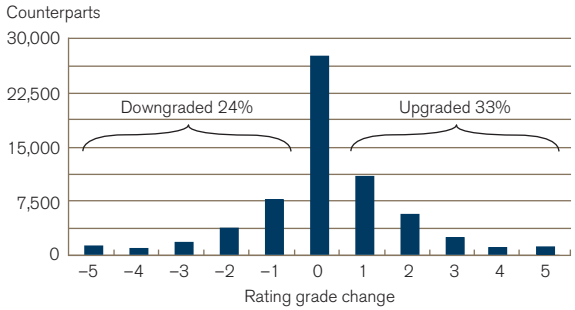


Figure 12a Retail risk grade migration, exposure that has been up- or downgraded during 2010

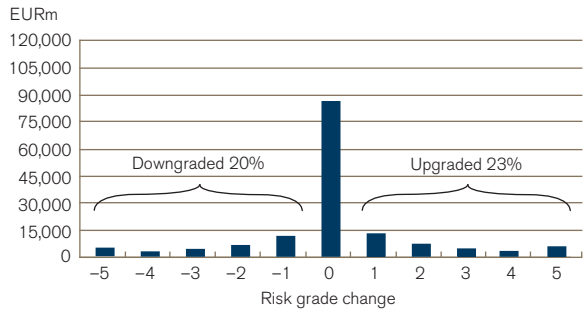


Figure 12b Retail risk grade migration, number of counterparts that have been up- or downgraded during 2010

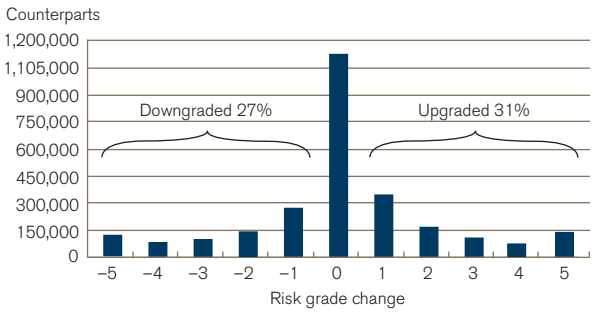


Table 24 Exposure secured by collaterals, guarantees and credit derivatives, 31 December 2010

EURm	Original exposure	Exposure	of which secured by guarantees and credit derivatives	of which secured by collateral	Average weighted LGD
IRB exposure classes					
Institution	57,309	53,497	933	3,329	26.5%
Corporate	219,768	157,542	5,774	50,644	41.2%
Retail	153,815	148,777	2,761	117,674	18.2%
– of which mortgage	117,960	117,166		115,267	13.6%
– of which other retail	32,321	28,528	2,451	898	36.8%
– of which SME	3,534	3,083	311	1,509	23.8%
Other non-credit obligation assets	1,778	1,722			n.a.
Total IRB approach	**432,669**	**361,538**	**9,468**	**171,646**	
Standardised exposure classes					
Central government and central banks	33,365	35,850	352	0	
Regional governments and local authorities	10,548	7,805	0		
Institution	7,925	7,699	0		
Corporate	36,900	25,328	701	55	
Retail	17,648	11,553	49		
Exposures secured by real estates	2,486	2,428		2,428	
Other [1]	5,250	4,897	2	0	
Total standardised approach	**114,122**	**95,559**	**1,105**	**2,483**	

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

Exposure secured by collaterals, guarantees and credit derivatives, 31 December 2009

EURm	Original exposure	Exposure	of which secured by guarantees and credit derivatives	of which secured by collateral	Average weighted LGD
IRB exposure classes					
Institution	50,345	45,416	2,342	2,667	34.1%
Corporate	207,214	145,376	5,125	45,933	41.4%
Retail	135,231	130,751	2,584	102,189	18.9%
– of which mortgage	100,704	100,144		99,065	14.5%
– of which other retail	30,497	27,007	2,282	781	34.6%
– of which SME	4,030	3,600	302	2,343	24.7%
Other non-credit obligation assets	1,712	1,269			n.a.
Total IRB approach	**394,501**	**322,813**	**10,052**	**150,789**	
Standardised exposure classes					
Central government and central banks	32,148	35,236	28	0	
Regional governments and local authorities	9,703	7,625	0		
Institution	4,452	4,159	1		
Corporate	28,196	19,646	777	38	
Retail	16,419	11,025	97		
Exposures secured by real estates	1,162	1,114		1,114	
Other [1]	4,633	4,328	2	0	
Total standardised approach	**96,713**	**83,133**	**905**	**1,153**	

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

4.3.5.1 Guarantees and credit derivatives

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

Only eligible providers of guarantees and credit derivatives can be recognised in the standardised and FIRB approach for credit risk. All central governments, regional governments and institutions are eligible. Some multinational development banks and international organisations are also eligible. Guarantees issued by corporate entities can only be taken into account if their rating corresponds to A- (S&P's rating scale) or better. Out of the guarantors, central governments and municipalities within the Nordic countries comprise approximately 81%. The exposure that is guaranteed by these guarantors receives an average risk weight of 0%. 7% of the guarantors are IRB institutions, of which 100% have a rating of 5- or higher. IRB corporate accounts for 4% of the guarantors, where 100% have a guarantor with a rating of 5- or higher. The remaining 8% of the guarantors are within the standardised institution and corporate portfolios.

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

4.3.5.2 Collateral distribution

Table 25 presents the distribution of collateral used in the capital adequacy calculation process. The table shows real estate to be the major part of the eligible collateral items in relatively terms. With regards to the other collateral types the volumes have also increased, although residential real estate have increased more which explains the relative change in distribution. Real estate is commonly used as collateral for credit risk mitigation purposes. There is no major concentration of real estate collateral to any region within the Nordic and Baltic countries. Other physical collateral consist mainly of ships.

Table 25 Collateral distribution

	31 Dec 2010	31 Dec 2009
Other Physical Collateral	5.4%	6.0%
Receivables	1.1%	1.0%
Residential Real Estate	74.3%	72.9%
Commercial Real Estate	16.6%	17.6%
Financial Collateral	2.5%	2.5%
Total	**100.0%**	**100.0%**

4.3.5.3 Valuation principles of collateral

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

Valuation and hence eligibility is based on the following principles:

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

A common way to analyse the value of the collateral is to measure the loan to value (LTV) ratio, i.e. the exposure divided by market value. In table 26, the retail mortgage exposures are distributed continuously by LTV range up to the top LTV bucket based on the LTV ratio. In 2010, the retail mortgage exposure increased in the LTV buckets representing loan-to-value below 80%.

Table 26 Loan-to-value distribution[1], Retail mortgage exposure, on-balance

EURbn	31 Dec 2010	31 Dec 2009
<50%	85.7	74.2
50–70%	20.0	15.8
70–80%	5.3	4.0
80–90%	1.8	2.0
>90%	0.8	1.3
Total	**113.5**	**97.4**

1) The exposure is continously distributed by LTV buckets. For example, an exposure of 540 with a LTV of 54% is distributed 500 to the <50% bucket and 40 to the 50–70% bucket.

4.3.6 Maturity

Exposure in the IRB exposure classes is divided by maturity, defined as remaining maturity, and is presented in table 27.

Table 27 IRB exposure split by maturity, 31 December 2010

EURm	Institution	Corporate	Retail
< 1 year	37,289	42,343	63,191
1–3 years	11,311	30,513	2,402
3–5 years	779	27,831	5,867
> 5 years	4,117	56,855	77,318
Total exposure	**53,497**	**157,542**	**148,777**

IRB exposure split by maturity, 31 December 2009

EURm	Institution	Corporate	Retail
< 1 year	29,775	47,756	44,884
1–3 years	7,402	19,405	1,468
3–5 years	1,488	19,930	2,445
> 5 years	6,752	58,285	81,954
Total exposure	**45,416**	**145,376**	**130,751**

4.3.7 Estimation and validation of parameters

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

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

The estimation process is linked to the validation since the estimates used for the PD scale are based on Nordea's Actual Default Frequencies (ADF). Any suggested changes to the PD scale are processed through appropriate channels such as the Risk Committee and subsequently decided by GEM.

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 28 shows, from the validation, the average PD based on Nordea's current PD scale and weighted with the number of customers for each exposure class. The average PD is based on the period 2003–2009 for the corporate and institution portfolios and 2005–2009 for the retail portfolio. Table 28 also shows the average ADF, calculated as the customer-weighted default frequency for the period 2004–2010 for the corporate and institution portfolios and 2006–2010 for the retail portfolio.

Table 28 Obligor weighted PD vs. ADF, 2010

	Average PD	Average ADF
Retail	1.28%	1.13%
Corporate & Institution	1.37%	1.21%

Table 29 shows estimated and realised LGD for IRB exposure. The estimated LGD is higher than the realised LGD mainly due to the fact that the estimated LGD includes a downturn add-on.

Table 29 Estimated vs. realised LGD, 2010

	LGD	
	Estimated[1] %	Realised average %
Retail	18.18%	10.84%

1) Defaulted customers are not included.

In table 30, the EL is compared to the actual gross and net losses. EL has been calculated using the definition from the Economic Capital framework, in which defaulted exposure receive 0% EL and where Nordea has internal LGD and CCF estimates for corporate and institution exposure. The figures represent the full-year outcome. For 2010, the EL ratio used for calculating risk-adjusted profit was on average 25 basis points, excluding the sovereign and institution exposure classes.

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

Table 30 EL vs. gross loss and net loss

	Retail Household[1]					
EURm	Mortgage	Other	Corporate[1]	Institution	Government	**Total**
2010						
EL	–111	–223	–478	–22	–5	**–839**
Gross loss	–86	–319	–1,094	0	0	**–1,499**
Net loss	–27	–192	–659	0	0	**–879**
2009						
EL	–81	–198	–451	–21	–3	**–754**
Gross loss	–108	–236	–1,479	–19	0	**–1,842**
Net loss	–97	–148	–1,262	21	0	**–1,486**
2008[2]						
EL	–77	–190	–390	–48	–3	**–706**
Gross loss	–20	–196	–635	–38	0	**–890**
Net loss	–17	–86	–330	–32	0	**–466**

1) SME Retail is included in the corporate segment.
2) Figures are restated due to changes in economic capital framework as of 1st of January 2009.

4.4 Loan portfolio, impaired loans and loan losses

4.4.1 Loan portfolio

Nordea's total loans have increased by 11% to EUR 314bn during 2010 (EUR 282bn). The increase is attributable to an increase of 14% in the household portfolio and 10% in the corporate portfolio. The portion of total lending to corporate customers was 54% (54%) and to household customers 45% (44%). The portfolio is geographically well diversified with no market accounting for more than 30% of total lending. Lending in the Baltic countries constitutes 2.5% and the shipping industry 4% of the Group's total lending. Lending to companies owned by private equity funds constitutes 3% of lending, of which 99% are senior loans. Following the economic recovery, improving credit quality has been seen in 2010, mainly in the corporate credit portfolio. The total effect on RWA from rating and scoring migration in the portfolio was a decrease by approximatly 1.3% during the full year 2010.

For breakdown of the loan portfolio by geography see Annual Report.

4.4.1.1 Lending to corporate customers

Loans to corporate customers increased 10% to EUR 169bn (EUR 154bn). Real estate, financial institutions, industrial commercial services and shipping and offshore were the industries that increased the most in 2010. The three largest industries account for approximately 25% of total lending. Real estate remains the largest industry in the lending portfolio, at EUR 42.5bn (EUR 37.2bn).

The distribution of loans to corporate by size of loans, seen in table 31, shows a high degree of diversification where approximately 63% of the corporate volume represents loans up to EUR 50m per customer.

The real estate portfolio, shown in table 32, predominantly consists of relatively large and financially strong companies, with 71% (69%) of the lending in rating grades 4- and higher. There is a higher level of collateral coverage for the real estate portfolio than for other corporate customers. Approximately 40% or EUR 17.0bn of lending to the real estate industry is to companies in Sweden and more than 40% is to companies with mainly residential real estate.

There is a general trend in most shipping segments of declining order books combined with slippage and cancellation of existing orders. Close to one fourth of the crude tank orders that one year ago were expected for delivery 2010, have yet to be materialised. The increase in the oil price during 2010 has resulted in more exploration and production spending, which has had a positive impact on the demand for oil services. Nordea's exposure to the shipping, offshore and oil services industries is well diversified with an average rating of 4 (4-). However, proactive risk management will remain high on the agenda.

The loans to shipping and offshore, shown in table 33, increased 9% to EUR 11.4bn (EUR 10.4bn). In line with Nordea's global customer strategy, there is an even distribution between Nordic and non-Nordic customers.

Table 31 Loans to corporate customers, split by size of loan

	31 Dec 2010		31 Dec 2009	
EURm	Loans EURbn	%	Loans EURbn	%
0-10	68.8	40.7	58.9	38.4
10-50	37.6	22.3	35.9	23.4
50-100	18.5	10.9	18.3	11.9
100-250	21.2	12.6	17.7	11.5
250-500	11.1	6.6	11.4	7.4
500-	11.7	6.9	11.2	7.3
Total	**169.1**	**100.0%**	**153.5**	**100.0%**

Table 32 Real estate management industry, loans and total exposure, split by country

	31 Dec 2010		31 Dec 2009	
EURbn	Loans	%	Loans	%
Denmark	6.5	15.3	5.6	15.1
Finland	7.4	17.3	6.5	17.6
Norway	9.6	22.6	8.7	23.4
Sweden	17.0	39.9	14.2	38.3
Baltic countries	1.2	2.9	1.3	3.5
Poland	0.2	0.4	0.2	0.6
Russia	0.4	0.9	0.4	1.0
Other	0.3	0.7	0.2	0.6
Total	**42.5**	**100.0%**	**37.2**	**100.0%**

Table 33 Shipping and offshore industry, loans

	31 Dec 2010		31 Dec 2009	
EURbn	Loans	%	Loans	%
Bulk carriers	1.8	15.3	1.6	15.3
Product tankers	0.9	8.1	1.1	10.9
Crude tankers	1.0	8.7	1.0	9.3
Chemical tankers	0.8	7.3	0.7	7.1
Gas tankers	0.7	6.4	0.7	6.6
Other Shipping	3.1	27.1	2.6	24.6
Offshore and Oil Services	3.1	27.1	2.7	26.3
Total exposure	**11.4**	**100.0%**	**10.4**	**100.0%**

4.4.1.2 Lending to household customers
In 2010, mortgage loans increased by 15% to EUR 111.2bn and consumer loans increased by 11% to EUR 29.3bn. The proportion of mortgage loans of total household loans was 79% (78%), of which the Nordic market accounts for 94%.

4.4.2 Impaired loans
In the tables 34–37 impaired loans, loan losses and allowances are distributed and stated according to International Financial Reporting Standard (IFRS) as in the Annual Report which is not exactly the same as in CRD. In table 34, impaired loans to corporate customers are distributed by industry.

Table 34 Loans, impaired loans and allowances, split by customer type, 31 December 2010

EURm	Loans before allowances	Impaired loans before allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Specific allowances	Provisioning ratio
To credit institutions	**15,824**	**33**	**0.21**	**–3**	**–33**	**108%**
– of which banks	12,658	33	0.26	–3	–33	108%
– of which other credit institutions	3,166					
To the public[1]	**316,709**	**4,816**	**1.52**	**–779**	**–1,719**	**52%**
– of which corporate	170,995	3,500	2.05	–529	–1,405	55%
Energy (oil, gas, etc.)	3,977	0	0.00	–17	0	
Metals and mining materials	1,356	7	0.52	–6	–4	137%
Paper and forest materials	2,339	64	2.73	–5	–42	73%
Other materials (building materials, etc,)	6,051	310	5.13	–46	–138	59%
Industrial capital goods	2,036	140	6.86	–14	–38	37%
Industrial commercial services, etc.	16,550	267	1.62	–41	–125	62%
Construction and civil engineering	4,640	188	4.05	–28	–86	61%
Shipping and offshore	11,544	263	2.28	–35	–82	44%
Transportation	4,504	65	1.44	–15	–21	56%
Consumer durables (cars, appliances, etc.)	3,603	233	6.48	–15	–81	41%
Media and leisure	3,008	105	3.50	–8	–40	46%
Retail trade	11,586	410	3.54	–55	–222	68%
Consumer staples (food, agriculture, etc.)	12,729	431	3.38	–75	–100	41%
Health care and pharmaceuticals	2,060	15	0.74	–3	–5	53%
Financial institutions	21,025	113	0.54	–17	–65	72%
Real estate management	42,791	505	1.18	–103	–143	49%
IT software, hardware and services	1,924	75	3.89	–3	–30	44%
Telecommunication equipment	162	9	5.58	0	–6	61%
Telecommunication operators	1,698	133	7.81	–1	–71	55%
Utilities (distribution and production)	4,775	1	0.02	–5	–1	
Other	12,637	166	1.31	–35	–105	85%
– of which household	**141,066**	**1,316**	**0.93**	**–250**	**–314**	**43%**
Mortgage financing	111,355	562	0.50	–126	–50	31%
Consumer financing	29,711	754	2.54	–124	–263	51%
– of which public sector	**4,647**	**0**	**0.00**	**0**	**0**	**114%**
Total loans in the banking operations	**332,533**	**4,849**	**1.46**	**–782**	**–1,752**	**52%**
Loans in the life insurance operations	327					
Total loans including life insurance operations	**332,860**	**4,849**	**1.46**	**–782**	**–1,752**	**52%**

Provisions for off-balance sheet items for 2010 were EUR 20m for credit institutions and EUR 311m related to lending to the public.
1) Corresponding lending figure after allowances EUR 314,211m.

Cont. Table 34 Loans, impaired loans and allowances, split by customer type, 31 December 2009[1]

EURm	Loans before allowances	Impaired loans before allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Specific allowances	Provisioning ratio
To credit institutions	**18,593**	**35**	**0.19**	**–3**	**–35**	**107%**
– of which banks	16,716	35	0.21	–3	–35	107%
– of which other credit institutions	1,877					
To the public[2]	**284,529**	**4,205**	**1.48**	**–835**	**–1,350**	**52%**
– of which corporate	155,144	3,039	1.96	–598	–1,111	56%
Energy (oil, gas, etc.)	3,005	0	0.01	–5	0	
Metals and mining materials	1,242	6	0.47	–10	–3	221%
Paper and forest materials	2,243	17	0.76	–9	–9	104%
Other materials (building materials, etc.)	5,351	248	4.63	–29	–119	60%
Industrial capital goods	2,329	126	5.40	–20	–42	49%
Industrial commercial services, etc.	15,059	200	1.32	–40	–82	61%
Construction and civil engineering	4,576	202	4.41	–35	–85	59%
Shipping and offshore	10,474	239	2.28	–53	–44	41%
Transportation	4,519	88	1.95	–15	–25	45%
Consumer durables (cars, appliances, etc.)	4,410	215	4.88	–17	–75	43%
Media and leisure	3,066	94	3.07	–7	–27	36%
Retail trade	10,737	298	2.78	–46	–151	66%
Consumer staples (food, agriculture, etc.)	12,366	247	2.00	–93	–56	61%
Health care and pharmaceuticals	2,073	17	0.81	–3	–4	42%
Financial institutions	16,818	81	0.48	–14	–41	68%
Real estate management	37,435	501	1.34	–127	–134	52%
IT software, hardware and services	1,561	58	3.72	–12	–18	51%
Telecommunication equipment	140	11	8.21	0	–13	110%
Telecommunication operators	1,706	103	6.05	–7	–27	33%
Utilities (distribution and production)	3,923	16	0.41	–6	–2	51%
Other	12,111	272	2.25	–50	–154	75%
– of which household	123,571	1,166	0.94	–238	–239	41%
Mortgage financing	96,785	503	0.52	–143	–27	34%
Consumer financing	26,786	664	2.48	–95	–212	46%
– of which public sector	5,814	0	0.01	0	0	70%
Total loans in the banking operations	**303,122**	**4,240**	**1.40**	**–838**	**–1,385**	**52%**
Loans in the life insurance operations	309					
Total loans including life insurance operations	**303,431**	**4,240**	**1.40**	**–838**	**–1,385**	**52%**

Provisions for off-balance sheet items for 2009 were EUR 19m for credit institutions and EUR 217m related to lending to the public.
1) Gross impaired loans, total allowances and provisioning ratio restated following the acquisition of Fionia Bank.
2) Corresponding loans figure after allowances EUR 282,411m.

Impaired loans gross increased 14% to EUR 4,849m (EUR 4,240m) in 2010. 59% of impaired loans gross are performing loans and 41% are non-performing loans. Allowances for individually assessed loans increased to EUR 1,752m (EUR 1,385m) and alowances for collectively assessed loans decreased to EUR 782m (EUR 838m). The ratio of total allowances to cover impaired loans gross was 52% (52%). The industries with the largest increases in impaired loans were consumer staples, retail trade and industrial commercial services. Provisions for off-balance items have increased to EUR 331m (EUR 236m).

In table 35, impaired loans are distributed by geography and industry. The increase in impaired loans continued to relate mainly to Denmark.

Table 35 Impaired loans gross and allowances split by country and industry, 31 December 2010

EURm	Nordea	Den-mark	Finland	Norway	Sweden	Baltic	Poland	Russia	Allow-ances	Provision-ing ratio
Energy (oil, gas etc)	0	0	0	0	0	0	0	0	17	
Metals and mining materials	7	0	2	1	0	0	0	4	10	137%
Paper and forest materials	64	7	55	1	0	1	0	0	47	73%
Other materials (building materials etc.)	310	29	133	22	66	37	10	13	184	59%
Industrial capital goods	140	78	50	0	11	0	0	0	52	37%
Industrial commercial services, etc.	267	87	94	42	2	35	6	0	166	62%
Construction and engineering	188	82	18	30	8	45	5	0	115	61%
Shipping and offshore	263	41	1	204	18	0	0	0	117	44%
Transportation	65	21	22	9	11	1	1	0	36	56%
Consumer durables (cars, appliances etc.)	233	75	45	4	102	5	2	0	96	41%
Media and leisure	105	39	39	4	17	6	0	0	48	46%
Retail trade	410	177	101	50	49	25	3	4	277	68%
Consumer staples (food, agriculture, etc.)	431	367	33	5	4	12	1	9	175	41%
Health care and pharmaceuticals	15	6	6	1	3	0	0	0	8	53%
Financial institutions	113	99	8	5	1	0	0	0	82	72%
Real estate	505	171	28	101	49	156	0	0	246	49%
IT software, hardware and services	75	37	27	1	10	0	0	0	33	44%
Telecommunication equipment	9	0	9	0	0	0	0	0	6	61%
Telecommunication operators	133	1	0	132	0	0	0	0	73	55%
Utilities (distribution and productions)	1	1	0	0	0	0	0	0	6	
Other, public and organisations	166	134	18	0	0	11	2	0	141	85%
Corporate	**3,500**	**1,449**	**689**	**613**	**353**	**336**	**31**	**29**	**1,934**	**55%**
Household mortgages	562	21	218	52	2	236	25	8	177	31%
Household consumer	754	306	367	50	17		3	11	387	51%
Public sector	0	0	0	0	0	0	0	0	0	114%
Total impaired loans	**4,816**	**1,776**	**1,275**	**715**	**372**	**572**	**59**	**48**		
Allowances	**2,498**	**969**	**537**	**364**	**239**	**320**	**24**	**38**	**2,498**	**100%**
Provisioning ratio	**52%**	**55%**	**42%**	**51%**	**64%**	**56%**	**41%**	**78%**		

Table does not include credit institutions.

Table 36 Reconciliation of allowance accounts for impaired loans, 2010

EURm	Individually assessed	Collectively assessed	Total
Opening balance, 1 Jan 2010	**–1,385**	**–838**	**–2,223**
Provisions	–966	–220	–1,186
Reversals	246	286	532
Changes through the income statement	**–720**	**66**	**–654**
Allowances used to cover write-offs	381		381
Reclassification	12		12
Currency translation differences	–40	–10	–50
Closing balance, 31 Dec 2010	**–1,752**	**–782**	**–2,534**

4.4.3 Loan losses

Table 37 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. Loan losses were EUR 879m in 2010 compared to EUR 1,486m last year. This corresponded to a loan loss ratio of 31 basis points (54 basis points), including 4 basis points of provisions related to the Danish guarantee scheme of EUR 110m.

EUR 660m (EUR 1,262m) relates to corporate customers and EUR 220m (EUR 245m) relates to household customers. The main losses were in the corporate sectors retail trade, other materials and industrial commercial services as well as household consumer financing. The loan loss ratio in Nordic Banking was 32 basis points (52 basis points). Net loan losses as well as impaired loans continued to stem from a large number of smaller and medium-sized exposures rather than from a few large exposures. In the Baltic countries, the loan loss ratio was 99 basis points (243 basis points). Individual net loan losses amounted to 33 basis points (40 basis points) and collective provisions net were positive at 2 basis points (14 basis points).

Loan losses corresponded to 31 basis points in 2010 of which 26 basis points in H2 2010 (51 basis points), shown in figure 13. Over a cycle loan losses of 25 basis points of total loans are expected which also is the measure of Nordea's credit risk appetite. As shown in table 37 the loan loss ratio was 29 basis points when lending to the public as well as lending to credit institutions is included.

Table 37 Loan losses, 2010

EURm	New provisions and write-offs	Reversals and recoveries	Net loan losses	Loan loss ratio bps
To credit institutions	**–6**	**7**	**0**	**—**
– of which banks	–6	7	0	—
– of which other financial institutions				
To the public	**–1,493**	**614**	**–879**	**31**
– of which corporate	–1,088	428	–660	43
Energy (oil, gas, etc.)	–11	0	–11	36
Metals and mining materials	–2	6	4	—
Paper and forest materials	–46	10	–35	159
Other materials (building materials, etc.)	–103	26	–76	147
Industrial capital goods	–43	15	–27	121
Industrial commercial services, etc.	–86	24	–63	42
Construction and civil engineering	–48	28	–20	44
Shipping and offshore	–87	36	–51	49
Transportation	–15	9	–6	14
Consumer durables (cars, appliances, etc.)	–34	13	–21	48
Media and leisure	–35	9	–26	86
Retail trade	–142	40	–102	97
Consumer staples (food, agriculture, etc.)	–70	41	–30	24
Health care and pharmaceuticals	–5	3	–2	9
Financial institutions	–44	11	–33	20
Real estate management	–93	74	–19	5
IT software, hardware and services	–17	14	–4	25
Telecommunication equipment	0	0	0	—
Telecommunication operators	–43	7	–36	216
Utilities (distribution and production)	–2	2	0	—
Other	–163	61	–102	85
– of which household	**–405**	**185**	**–220**	**18**
Mortgage financing	–86	59	–27	3
Consumer financing	–319	126	–192	73
– of which public sector	**0**	**0**	**0**	**0**
Total	**–1,499**	**620**	**–879**	**29**

Table 38 shows past due loans not impaired split by corporate and household customers. Past due loans were for corporate customers end of 2010 EUR 1,825m (EUR 1,528m) and for household customers EUR 1,603m (EUR 1,430m).

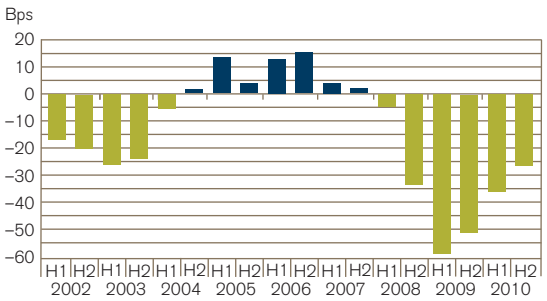
Table 38 Past due loans, not impaired, 31 December 2010

EURm	Corporate customers	Household customers
6–30 days	1,021	841
31–60 days	491	349
61–90 days	91	114
>90 days	222	298
Total	**1,825**	**1,603**
Past due loans, not impaired, in %	1.08%	1.14%

Past due loans, not impaired, 31 December 2009

EURm	Corporate customers	Household customers
6–30 days	835	582
31–60 days	239	281
61–90 days	84	259
>90 days	369	307
Total	**1,528**	**1,430**
Past due loans, not impaired, in %	1.00%	1.16%

Figure 13 Annualised net loan losses



To recognise the risk related towards lending to developing countries, Nordea carries transfer risk allowance and provisions for non-investment grade rated countries. The transfer risk exposure is dominated by a few countries and is primarily short-term and trade-related. As can be seen in table 39 Asia and Latin America contributing the highest to transfer risk where Brazil (EUR 667m) and China (EUR 509m) reflecting these countries' importance for Nordea's Nordic corporate customers. The total transfer risk allowance and provisions at the end of 2010 was EUR 25m, down from 2009 (EUR 27m).

Table 39 Transfer risk exposure

EURm	31 Dec 2010	31 Dec 2009
Asia	1,302	1,504
Eastern Europe and CIS	178	179
Latin America	849	612
Middle East	521	470
Africa	175	182
Total	**3,025**	**2,947**

5. Market risk

Nordea's market-risk-taking activities are well diversified and oriented towards the Nordic and European markets. The Group's market risk is to a large extent driven by interest rate risk. The total market risk, measured by Value at Risk, was on average EUR 84m during 2010, which was close to the average in 2009.

5.1 Introduction to market risk

The customer-driven trading activity of Nordea Markets and the investment, liquidity buffer and funding activities in Group Treasury are the key contributors to market risk. For all other banking activities, the basic principle is that market risks are eliminated by matching assets, liabilities and off-balance sheet items. Furthermore, market risk on Nordea's account arises from the Nordea sponsored defined benefit pension plans for employees and the market risk from the investment of policyholders' money with guaranteed minimum yields in Life and Pensions. The latter is described in chapter 9.

Structural FX risk arises primarily from investments in subsidiaries and associated enterprises denominated in foreign currencies. The general principle is to hedge this by matched funding, although exceptions from this principle may be made in markets where matched funding is impossible to obtain, or can only be obtained at an excessive cost.

Earnings and cost streams generated in foreign currencies or from foreign branches generate an FX exposure, which for the individual Nordea companies is handled in each company's FX position. Direct profit and loss in foreign exchange in the individual Nordea companies must be hedged at least monthly.

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) and is described in chapter 8.

5.2 Market risk framework

A group-wide framework establishes common management principles and standards for the market risk management. This implies that the same reporting and control processes are applied for the market risk exposure in the trading book and the banking book.

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 the Group's consolidated market risk every day; GEM receives reports on a monthly basis, and the Board of Directors on a quarterly 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.
- Defining clear risk mandates (at departmental, desk and individual levels), in terms of limits and restrictions on which instruments may be traded. Adherence to limits is crucial, and should a limit be breached, the decision-making body would be informed immediately.
- Having detailed business procedures that clearly state how policies and guidelines are implemented.
- Having proactive information sharing between trading and risk control.
- Having risk models that make risk figures easily decomposable.
- Having a framework for approval of traded financial instruments and methods for the valuation of these that requires an elaborate analysis and documentation of the instruments' features and risk factors.
- Having a "business intelligence" type risk IT system that allows all traders and controllers to easily monitor and analyse their risk figures.
- Having tools that allow the calculation of Value at Risk (VaR) figures on the positions that a trader, desk or department has during the day.

5.3 Market risk appetite

The Board of Directors has formulated market risk appetites for both the investment, liquidity buffer and funding activities in Group Treasury and the trading activities in Nordea Markets. For Group Treasury, market risk related activities may not lead to a reported monthly loss in investment earnings exceeding EUR 150m or an accumulated loss exceeding EUR 250m at any time in a calendar year. The compliance with the risk appetite is ensured by market risk limits and stop-loss rules. For trading activities, the risk appetite and the market risk limits are set in relation to the earnings these activities generate. The market risk appetite is part of the Group's initiative to further develop the risk appetite framework through 2011. See section 2.2.2 for further information.

5.4 Measurement methods

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

5.4.1 Value-at-Risk

Nordea's VaR model is a ten-day, 99% confidence level model, which uses the expected shortfall approach (sometimes referred to as tVaR, for tail-VaR) and is based on historical simulation on up to two years' historical changes in market prices and rates. This implies that Nordea's historical simulation VaR model uses the average of a number of the most adverse simulation results as an estimate of VaR. The sample of historical market changes in the model is updated daily. The "square root of ten" rule is applied to scale 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 VaR measure across these risk categories, allowing for diversification among them, is also used. The VaR figures include both linear positions and options.

With the chosen characteristics of Nordea's VaR model, the VaR-figures can be interpreted as the loss that will only be exceeded in one of hundred 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.

5.4.2 Stress testing

In addition to VaR and other risk measures used to capture the market risk during normal market conditions, 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 firm wide stress tests see chapter 10.

5.5 Consolidated market risk for the Nordea Group

The consolidated risk for Nordea presented in table 40 includes both the trading book and the banking book.

The total VaR was EUR 81m (EUR 114m) at the end of 2010 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.

The interest rate VaR ended 2010 at EUR 91m (EUR 111m). The net interest rate sensitivity was EUR –195m (EUR –370m) and the largest part of Nordea's interest rate sensitivity stemmed from interest rate positions in Danish Kroner and Euro, with positions in Swedish Kronor, US Dollars and Norwegian Kroner also contributing significantly. The total gross sensitivity to a 1 percentage point parallel shift, which measures the development in the market value of Nordea's interest rate sensitive positions if all interest rates were to move adversely, was EUR 458m at the end of 2010 (EUR 375m).

At the end of 2010, Nordea's equity VaR stood at EUR 13m (EUR 38m).

Credit spread VaR ended 2010 at EUR 33m (EUR 24m). Credit spread risk is to a large extent concentrated on financials, particular in the Nordic region.

The foreign exchange VaR was EUR 14m (EUR 19m) at year-end. The largest foreign exchange exposure is to Danish Kroner and Swedish Kronor.

The fair value of the portfolio of less liquid alternative investments constituted EUR 674m (EUR 381m) at year-end. The fair value of investments in hedge funds was EUR 239m (EUR 197m). The fair value of investments in private equity funds was EUR 358m (EUR 184m) and the fair value of credit fund was EUR 77m (no credit fund exposure per end 2009). All three types of investments are spread over a number of funds.

5.6 Market risk for the trading book

The consolidated risk for the trading book is presented in table 41. The total VaR was EUR 32m (EUR 28m) at the end of 2010 and the main contribution to the total VaR was interest rate risk. The interest rate VaR was EUR 25m (EUR 19m), with the largest part of the interest rate sensitivity stemming from interest rate positions in Danish Kroner and Euro. The equity VaR was EUR 2m (EUR 4m). The credit spread VaR was EUR 15m (EUR 14m), with the credit spread risk concentrated mainly on financials. The foreign exchange rate VaR ended 2010 at EUR 8m (EUR 14m).

Table 40 Consolidated market risk figures, 31 December 2010

EURm	Measure	31 Dec 2010	2010 high	2010 low	2010 avg	31 Dec 2009
Total risk	VaR	80.9	150.1	53.5	84.2	114.1
– Interest rate risk	VaR	91.4	118.1	38.5	74.1	111.5
– Equity risk	VaR	13.0	67.9	8.0	27.9	37.5
– Credit spread risk	VaR	33.0	42.6	24.0	34.5	23.8
– Foreign exchange risk	VaR	13.9	35.9	8.6	20.2	18.8
Diversification effect		47%	60%	25%	46%	41%

Table 41 Consolidated market risk figures for the trading book, 31 December 2010

EURm	Measure	31 Dec 2010	2010 high	2010 low	2010 avg	31 Dec 2009
Total risk	VaR	31.8	74.5	18.8	40.4	28.3
– Interest rate risk	VaR	24.6	61.7	16.2	31.2	18.9
– Equity risk	VaR	1.5	15.9	0.4	2.0	3.7
– Credit spread risk	VaR	14.5	22.9	11.7	16.0	13.8
– Foreign exchange risk	VaR	8.2	28.4	6.2	15.1	14.3
Diversification effect		35%	56%	19%	38%	44%

5.7 Capital requirement for market risk in the trading book (pillar I)

Nordea uses both the internal model approach (VaR) and the standardised approach to measure the market risk capital requirement in the trading book. Market risk in the CRD context contains two types of risk measures: general risk and specific risk. General risk is risk related to changes in the overall market prices while specific risk is related to price changes for a specific issuer. In addition to the positions in the trading book, regulatory capital for market risk covers FX risk in the banking book through the standardised approach. The implementation of CRD III is expected to take place by the end of 2011. See chapter 12 for further information on the CRD III implications for Nordea's regulatory capital.

The capital requirement for market risk at the end of 2009 and 2010 is presented in table 42. As seen in the table, the largest contribution to the non-VaR capital requirement is interest rate risk which is mainly related to specific interest rate risk on Danish mortgage bonds. The main part of the market risk RWA is related to business in Nordea Markets. Market risk RWA increased from EUR 5.4bn to EUR 5.8bn between end of 2009 and end of 2010 which is primarily explained by an increase in the specific interest rate risk on Danish mortgage bonds in the trading book as this increased by EUR 0.5bn over the year.

Table 42 Capital requirements for market risk, 31 December 2010

	Trading book, VaR		Trading book, non-VaR		Banking book, non-VaR		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk[1]	1,934	155	2,798	224			4,732	379
Equity risk	50	4	621	50			671	54
Foreign exchange risk	368	29			979	78	1,347	107
Commodity risk			50	4			50	4
Diversification effect	-1,035	-83					-1,035	-83
Total	**1,317**	**105**	**3,469**	**278**	**979**	**78**	**5,765**	**461**

1) Interest rate risk in column Trading book VaR includes both general and specific interest rate risk which is elsewhere referred to as interest rate VaR and credit spread VaR.

Capital requirements for market risk, 31 December 2009

	Trading book, VaR		Trading book, non-VaR		Banking book, non-VaR		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk[1]	1,529	123	2,268	181			3,797	304
Equity risk	124	10	938	75			1,062	85
Foreign exchange risk	502	40			710	57	1,212	97
Commodity risk			135	11			135	11
Diversification effect	–820	–66					–820	–66
Total	**1,335**	**107**	**3,342**	**267**	**710**	**57**	**5,386**	**431**

1) Interest rate risk in column Trading book VaR includes both general and specific interest rate risk which is elsewhere referred to as interest rate VaR and credit spread VaR.

The following section describes the principles for calculating RWA with the internal model approach and the standardised approach respectively. Table 43 presents the methods in use for calculation of capital requirements.

5.7.1 Internal model approach (VaR)

Nordea uses the VaR model to calculate capital requirements for the predominant part of the trading book. The methods used for calculating capital requirements for market risk for the Group's legal entities are shown in table 43.

Table 43 Methods for calculating capital requirements

	Interest rate risk		Equity risk		FX risk
EURm	General	Specific	General	Specific	General
Nordea Group	IM	IM[1]	IM	IM[1]	IM
Nordea Bank Danmark	IM	Standard	IM	Standard	IM
Nordea Bank Finland	IM	IM	IM	IM[1]	IM
Nordea Bank Norge	IM	Standard	IM	Standard	IM

IM: Internal model approach, Standard: Standardised approach.
1) The capital requirement for specific interst rate risk from Danish mortgage bonds and specific equity risk from structured equity options is calculated according to the standardised approach.

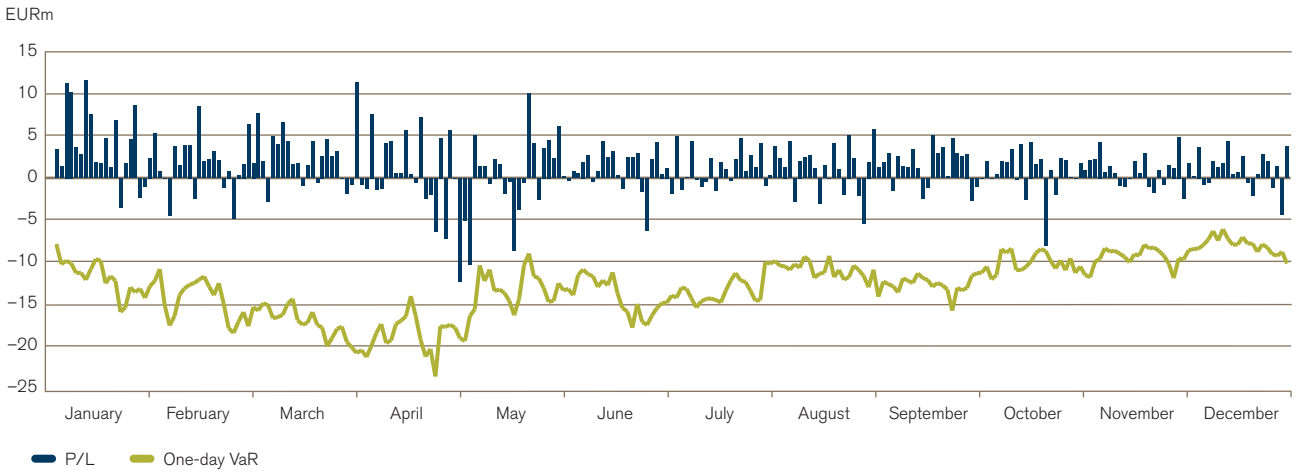
General interest rate risk is measured by the interest rate VaR, while specific interest rate risk is measured through credit spread VaR. The minimum capital requirement for the positions not covered by the VaR model is calculated according to the standardised approach.

5.7.2 Backtesting of the VaR-model

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

The backtest deciding the capital requirement multiplier for Nordea's consolidated trading book is the backtest holding the one-day VaR figures against actual profit/loss. As can be seen in figure 14, the model is comfortably in the green zone.

Figure 14 Backtest of VaR for the trading book: Profit/loss (actual, excluding commisions) against one-day VaR



5.8 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 2010 the interest rate VaR in the banking book stood at EUR 83m (EUR 111m). Table 44 shows the net effect on fair value of a parallel shift in rates of up to 200 basis points, by currency, with positions as of 31 December 2010.

Furthermore, Nordea regularly measures the SIIR. See chapter 8 for further details.

Table 44 Interest rate sensitivities for Nordea Group non-trading book 31 December 2010, instantaneous interest rate movements

EURm	+200 bp	+100 bp	+50 bp	–50 bp	–100 bp	–200 bp
DKK	–150.6	–75.3	–37.7	37.5	74.1	150.6
EUR	–3.4	–3.2	–3.2	7.4	15.3	27.9
GBP	–8.8	–4.2	–2.1	1.5	3.0	6.2
NOK	–38.3	–19.1	–9.6	9.6	19.1	38.3
SEK	–141.6	–70.2	–34.7	33.4	64.9	137.6
USD	–36.9	–17.7	–8.6	9.8	19.6	39.6
Total	**–375.9**	**–187.9**	**–95.0**	**98.2**	**194.3**	**396.4**

The totals are netted and include currencies not specified. In accordance with an analysis of account holder behaviour, a portion of non-maturing deposit accounts are assumed to be fixed term.

5.9 Determination of fair value of financial instruments

Financial assets and liabilities classified as financial assets/liabilities at fair value through profit or loss and derivative instruments are recorded at fair value on the balance sheet with changes in fair value recognised in the income statement in the item "Net gains/losses on items at fair value".

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 existence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure financial assets and financial liabilities. Nordea is predominantly using published price quotations 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.

Valuation models 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-derivative and for securities and shares where quoted prices in an active market are not available.

Fair value is calculated as the theoretical net present value of the individual contracts, based on independently sourced market parameters and assuming no risks and uncertainties. This calculation is supplemented by a portfolio adjustment. The portfolio adjustment covers uncertainties associated with the valuation techniques, model assumptions and unobservable parameters as well as the portfolio's counterparty credit risk and liquidity risk (bid/offer spread). The portfolio adjustment for model risk is based on two components:

- Benchmarking of the model output (market values) against market information or against results from alternative models, where available.
- Sensitivity calculations where unobservable parameters are varied to take other reasonable values.

If non-observable data has a significant impact on the valuation, the instrument cannot be recognised initially at the fair value estimated by the valuation technique and any upfront gains are deferred and amortised over the contractual life of the contract. Nordea regards observable market data, as data that can be collected from generally available external sources and where this data is judged to represent realistic market prices.

The applied valuation models are consistent with accepted economic methodologies for pricing financial instruments, and incorporate the factors that market participants consider when setting a price.

New valuation models are subject to approval by Group Risk Management and all models are reviewed on a regular basis.

Table 45 shows fair value by valuation method as of 31 December 2010.

Table 45 Determination of fair value from quoted market prices or valuation techniques (Group, excluding Life and Pensions), 31 December 2010

EURm	Quoted prices in active markets for same instrument (Level 1)	Valuation technique using observable data (Level 2)	Valuation technique using non-observable data (Level 3)	Total
Assets				
Loans to credit institutions	0	8,169	0	**8,169**
Loans to the public	0	63,121	0	**63,121**
Debt securities	39,190	13,793	62	**53,045**
Shares	2,813	8	1,808	**4,629**
Derivatives	689	93,911	2,201	**96,801**
Other assets	0	3,628	0	**3,628**
Prepaid expenses and accrued income	0	49	0	**49**
Liabilities				
Deposits by credit institutions	0	19,372	0	**19,372**
Deposits and borrowings from the public	0	18,244	0	**18,244**
Debt securities in issue	30,963	5,907	0	**36,870**
Derivatives	419	93,189	2,262	**95,870**
Other liabilities	7,501	10,057	0	**17,558**
Accrued expenses and prepaid income	0	546	0	**546**

5.9.1 Group Valuation Committee

The Group Valuation Committee (GVC) is a forum consisting of senior management representatives from Group Finance, Group Market Risk Management and the Financial Control organisations in the Business Divisions. The Committee serves as an oversight committee that supports GEM in issues related to the valuation framework for traded financial instruments. Among its tasks, the Committee prepares proposals for the Group CFO/Group CRO on issues of major importance concerning the valuation framework, including governance structure, principles for model risk management, standards for valuation and model risk controls.

Also the Committee is responsible for monitoring the quality and reliability of performed valuations including the quality of valuation processes, the valuation control and model risk control procedures, based on input from GVC members representing individual Business Divisions.

5.9.2 Compliance with requirements applicable to exposure in the trading

Annex VII, Part B of the European Parliament and Council Directive 2006/49/EG of 14 June 2006 on the capital requirements for investment firms and credit institutions outlines the requirements for systems and controls to provide prudent and reliable valuation estimates. Nordea complies in all material aspects with these requirements. Overall valuation principles are governed by policies and instructions and independent Group staffs are responsible for the overall valuation process. The local risk control organisations in the individual business units are responsible for performing valuation controls in accordance with the policies and instructions. The quality control framework is assessed by relevant Group functions as well as by Group Internal Audit on an ongoing basis.

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

6. Operational risk

Operational risk is inherent in all activities performed by Nordea. Risk management is proportional to the risks in question, and risk mitigation is designed to match the Group's risk appetite. During 2009 and 2010 a redesigned risk management framework was implemented in the Group, with enhanced focus on key risks as well as simplified reporting and structured follow-up procedures. This will lead to increased risk awareness, better management information and added business value.

6.1 Overall description and definition 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. The Nordea Group maintains a high standard of risk management by means of applying available techniques and methodology to its own needs in a cost efficient way.

Operational risk is the risk of direct or indirect loss, or damaged reputation resulting from inadequate or failed internal processes, from people and systems or from external events. Operational Risk includes compliance risk which means the risk of business not being conducted according to legal and regulatory requirements, market standards and business ethics, thereby jeopardising customers' best interest, other stakeholders trust and increasing the risk of regulatory sanctions, financial loss or damage to the reputation and confidence in the Group. Operational risk also includes legal risk, which is the risk that the Group suffers damage due to a deficient or incorrect legal assessment. Operational risk is inherent in all activities within the organisation, in outsourced activities and in all interactions with external parties.

6.2 Operational Risk Management and the operating model

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

Information security, physical security, crime prevention and educational and training activities are important components when managing operational risks. To cover this broad scope, the Group security and the Group compliance functions are included in Group Risk Management, and close cooperation is maintained with Group IT and Group Legal, 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 for with the objective to follow best practice regarding market conduct and ethical standards in all business activities.

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

The Group's network of risk and compliance officers ensures that operational and compliance risk within the Group is managed effectively in the business organisation, which represents the first line of defence. In order to manage these risks Group Operational Risk Management, representing the second line of defence, has defined a common set of standards (Group Directives, processes and reporting). Group Internal Audit, representing the third line of defence, provides assurance to the Board of Directors on the risk management, control and governance processes.

6.3 Key processes

6.3.1 Risk self assessment

The risk self assessment process puts focus on the key risks, which are identified both through top-down division management involvement and bottom-up reuse of existing information from processes such as quality and risk analyses, product approvals etc. The risks are then quantified, assessed and documented in a structured way, and subsequently presented in a risk map for prioritisation of them for mitigating activities. The key risks are prioritised and their mitigating activities are tracked together with the detailed information of the risk.

The divisions' key risks are also presented in a Group risk map. The timing of this process in synchronised with the annual planning process to be able to ensure adequate input to the Group's overall prioritisations.

6.3.2 Internal control

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) will be commented on and signed off by the division manager, to be subsequently reported to Group Operational Risk Management. 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.

6.3.3 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.

The business continuity management covers a broad scope ranging from procedures for handling incidents via escalation procedures, to crisis management on Group level. The most important factors governing the business continuity preparedness are the recovery requirements and prioritisations of products and services. As most of the value chains rely on IT applications, disaster recovery plans for technical infrastructure represent a key part of the Nordea's business continuity planning.

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 programs or projects, or significant changes to organisation, processes, systems and procedures. In principle, the product approval process described above constitutes a QRA.

6.4 Key reports

6.4.1 Annual report on internal control

The result and comments from the Internal Control process represent the main input. The reporting is provided annually.

Group Operational Risk Management 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 Group Board.

6.4.2 Semi annual report on operational risks

The semi annual report is the independent report from the risk organisation, and is based on input from risk and compliance officers in the business. The report also closely relates to the risk self assessment process as it requires the risk and compliance officers to comment on the key risks and their mitigating actions as identified in the risk self assessment process.

The report features standard, recurring subjects relating to operational risk and compliance for the risk and compliance officers to comment on, but may also contain specific, ad hoc themes focusing on currently relevant areas. Group Operational Risk Management adds own observations to the final Group report which is submitted to the Risk Committee, GEM and the Board of Directors.

6.4.3 Incident reporting

The incident reporting reflects Basel II standards and ensures compliance with ORX (an international database for incidents) requirements.

The process of reporting incidents is divided into a two-tiered process, with one business specific part where business have the flexibility to adjust it to its specific needs, and one Group related part where the incidents are reported from the business to Group Operational Risk Management. Key aspects of the process include major and minor incidents being reported in the same way (albeit with different level of detail required), and both the identifier of the incident and the risk and compliance officer reporting different parts of the incident information to ensure consistent quality.

Threshold levels for reporting are EUR 1,000 for minor incidents and EUR 20,000 for major incidents. Incidents with no direct financial loss are still reported on other consequences, such as legal, reputational, regulatory, process and other impacts.

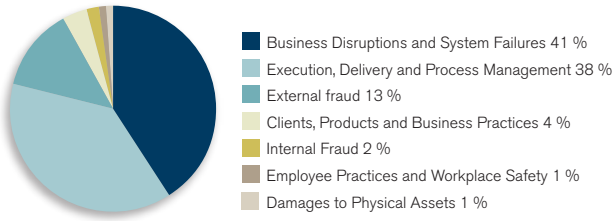
Figure 15 shows major incidents reported last 4 years combined (2007–2010) distributed by Basel Event types.

Aggregated incident reports are submitted to every Risk Committee meeting, and key observations are included in the semi annual report on operational risk.

6.5 Capital requirement for operational risk

The capital requirement for operational risk is calculated mainly according to the standardised approach, in which all of the institution's activities are divided into eight standardised business lines and a defined beta coefficient is multiplied by the gross income for each business line. The basic indicator approach is used for some subsidiaries, such as the subsidiaries in Luxembourg, Russia and Poland. The capital requirement for operational risk for 2010 amounts to EUR 1,176m (EUR 1,057m). The capital requirement for operational risk is updated on a yearly basis.

Figure 15 Distribution of incidents reported



7. Securitisation and credit derivatives

Nordea has no exposure where the capital requirement is reported under the current securitisation framework. In general, Nordea's role in securitisation has been limited to that of being a sponsor of various schemes which are described below. Nordea has not used securitisation in the role of an originator by having its loans or their risk transferred outside of Nordea.

7.1 Introduction to securitisation

Capital directive (2006-48-EC) defines securitisation as a scheme where the credit risk of underlying exposures is converted into marketable securities where payments from these securities are dependent on the performance of the underlying exposures and a subordination scheme exists for determination of 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 these assets entail 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 securitisation schemes which are described in the following section. Nordea is also acting as an intermediary in the credit derivatives market, especially in Nordic names. This credit trading activity creates counterparty and market risk which are 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 the Group 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 requirement is 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 2010, Nordea is sponsoring the following SPEs presented in table 46.

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 it. 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 47 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 2010 the total notional of outstanding bonds was EUR 26m (EUR 32m) available to investors. Nordea holds bonds issued by CMO Denmark A/S as part of offering a secondary market for the bonds. The investment amounted to EUR 11m (EUR 13m) as of year end 2010. 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 Credit Default Swap (CDO). At the same time, Nordea purchases protection under similar terms from Kalmar which issues Credit Linked Notes 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 91 m (EUR 142m) at year end 2010.

Table 46 Special Purpose Entities where Nordea is the sponsor

EURm		Duration	Accounting treatment	Book	Nordea's investment[1]	Total assets
CMO Denmark A/S	Collateralised Mortgage Obligation	>5 years	Consolidated	Trading	11	26
Kalmar Structured Finance A/S	Credit Linked Note	>5 years	Consolidated	Trading	25	91
Viking ABCP Conduit	Factoring	<5 years	Consolidated	Banking	948	1,000
Total					**984**	**1,117**

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

Nordea holds CLNs issued by the SPE as part of offering a secondary market for the notes. The investment amounted to EUR 25 m (EUR 34m) at year end 2010. 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 from the approved sellers 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 1,299m and at year end 2010 (EUR 995m) out of which EUR 948m (EUR 478m) were utilised. There is no outstanding CP issue at year end 2010. The credit facility results in a RWA of EUR 697m, which is included within the credit risk framework of Nordea's banking book.

7.3 Synthetic securitisations and other credit derivatives

Nordea acts as an active intermediary in the credit derivatives market, especially in Nordic based 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 equal 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 47 and table 48 list the total outstanding volumes of credit default swaps and CDOs at the end of 2010, split by bought and sold positions. To illustrate the business volume, the figures are provided on gross level, meaning no netting has been considered between bought and sold contracts in the same underlying name. The risk positions are integrated in Nordea's consolidated market risk management and as such subject to:

- Limits, including VaR, jump-to-default and correlation risk
- The product and transaction approval process

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

Table 47 Credit default swaps, 31 December 2010

EURm	Total gross notional sold	Total gross notional bought
Single name CDS: Investment grade	8,129	8,270
Single name CDS: Non-Investment grade	5,002	4,831
Multi name CDS indices	11,774	11,976
Total	**24,905**	**25,077**

Table 48 Collateralised Debt Obligations (CDO) – Exposure (excl NLP)[1], 31 December 2010

Notionals EURm	Sold protection	Bought protection
CDOs, gross	2,244	1,535
Hedged exposures	1,322	1,322
CDOs, net[2]	**922[3]**	**213[4]**
Of which:		
– Equity	251	108
– Mezzanine	129	104
– Senior	542	1

1) First-To-Default (FTD) swaps are not classified as CDOs and are therefore not included in the table. Net bought protection amounts to EUR 71m and net sold protection to EUR 80m. Both bought and sold protection are, to the predominant part, investment grade.
2) Net exposure disregards exposure where bought and sold tranches are completely identical in terms of reference pool attachment, detachment, maturity and currency.
3) Of which investment grade EUR 922m, subinvestment grade EUR 0m and not rated EUR 0m.
4) Of which investment grade EUR 213m and sub investment grade EUR 0m.

8. Liquidity risk and Structural Interest Income Risk

Nordea has during 2010 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 33bn in long-term debt in 2010 of which approximately EUR 14bn in the Swedish, Finnish and Norwegian covered bond markets. During 2010 the Nordea Nordic covered bond platform became complete, by adding covered bond issuance platforms in Norway and Finland, subject to Norwegian and Finnish covered bond legislation.

Extensive discussions on new liquidity risk regulation are still ongoing among regulators. Nordea is participating in the discussions in several forums and is well prepared for potential changes. Chapter 12 discusses the new regulation in more detail.

8.1 Liquidity risk

8.1.1 Management principles and control

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

8.1.2 Liquidity risk management

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

Policy statements stipulate that Nordea's liquidity management reflects a conservative attitude towards liquidity risk. Nordea strives to diversify the Group's sources of funding and seeks to establish and maintain relationships with investors in order to manage the market access. Broad and diversified funding structure is reflected by the strong presence in the Group's four domestic markets in the form of a strong and stable retail customer base and the variety of funding programmes. Funding programs are both short-term (US Commercial Papers, European Commercial Papers, Commercial Papers, Certificates of Deposits) and long-term (Covered bonds, European Medium Term Notes, Medium Term Notes) in diverse currencies. However, foreign exchange risk is covered. In table 49 the funding sources are presented. As of the end of 2010, the total volume utilised under short-term programmes was EUR 56bn with the average maturity of 0.2 years and the total volume under long-term programmes was EUR 96bn with the average maturity of 7.2 years. During 2010, the volume of long-term programmes increased by EUR 18bn and the volume of short-term programmes increased by EUR 3bn. Nordea publishes periodically information on the liquidity situation of the Group to remain trustworthy at all times.

Nordea's liquidity risk management includes stress testing and a business continuity plan for liquidity management. Stress testing is defined as the evaluation of potential effects on a bank's liquidity situation under a set of exceptional but plausible events. 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.

Table 49 Funding sources, 31 December 2010

Liability type	Interest rate base	Average maturity	EURm
Deposits by credit institutions			
– shorter than 3 months	Euribor etc	0.1	39,446
– longer than 3 months	Euribor etc	1.6	1,290
Deposits and borrowings from the public			
– Deposits on demand	Administrative	0.0	113,534
– Other deposits	Euribor etc	0.2	62,856
Debt securities in issue			
– Certificates of deposits	Euribor etc	0.2	43,265
– Commercial papers	Euribor etc	0.2	12,792
– Mortgage covered bond loans	Fixed rate, Market based	8.6	67,733
– Other bond loans	Fixed rate, Market based	3.7	27,788
Derivatives			95,887
Other non-interest-bearing items			45,183
Subordinated debentures			
– Dated subordinated debenture loans	Fixed rate, Market based	7.7	5,210
– Undated and other subordinated debenture loans	Fixed rate, Market based		2,552
Equity			24,538
Total (total liabilities and equity)			**542,073**
Liabilities to policyholders			38,766
Total (total liabilities and equity) including Life insurance operations			**580,839**

8.1.3 Liquidity risk measurement methods

The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. In order to 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 14 days. Cash flows from both on-balance sheet and off-balance sheet items are included. Funding gap risk is measured and limited for each currency and as a total figure for all currencies combined. The total figure for all currencies combined is limited by the Board of Directors. To ensure funding in situations where Nordea is in urgent need of cash and the normal funding sources do not suffice, Nordea holds a liquidity buffer. Limit is set by the Board of Directors for the minimum size of the liquidity buffer. The liquidity buffer is set to ensure a total positive cash flow defined by the funding risk measurement and consists of high-grade liquid securities that can be sold or used as collateral in funding operations. The structural liquidity risk of Nordea is measured and limited by the Board of Directors through the net balance of stable funding, which is defined as the difference between stable liabilities and stable assets. These liabilities primarily comprise retail deposits, bank deposits and bonds with a remaining term to maturity longer than 6 months, and shareholders' equity, while stable assets primarily comprise retail loans, other loans with a remaining term to maturity longer than 6 months and committed facilities. ALCO has set as a target that the net balance of stable funding should be positive, which means that stable assets must be funded by stable liabilities.

8.1.4 Liquidity risk analysis

The short-term liquidity risk has been held at moderate levels throughout 2010. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 14 days, has been EUR –10.2bn (EUR –9.4bn). Nordea's liquidity buffer has been in the range EUR 47.3 – 61.1bn (EUR 34.6– 59.3bn) throughout 2010 with an average of EUR 52.7bn (EUR 45.7bn). Nordea's liquidity buffer is highly liquid consisting of 98% of central bank eligible securities at the end of 2010. By utilising the liquidity buffer, Nordea is able to secure its funding requirements for more than one year without access to new market funding. The aim of always maintaining a positive net balance of stable funding has been comfortably achieved throughout 2010. The yearly average for the net balance of stable funding was EUR 33.2 (EUR 16.9bn). The net balance of stable funding is shown in table 50.

Table 50 Net balance of stable funding, 31 December 2010

Stable liabilities and equity

Liability type	EURbn
Equity and Core Liabilities	
Deposits and borrowings from the public	139.7
Equity	24.5
Structural funding	
Long term deposits from credit institutions	1.1
Long CD and CP	3.5
Long term bonds issued	70.4
Other structural funding	3.9
Total stable liabilities	**243.1**

Stable long-term assets

Asset type	
Core assets	
Loans to the public	195.9
Long term loans to credit institutions	5.6
Illuiquid assets	4.3
Total stable long-term assets	**205.7**
Net balance of stable funding (NBSF)	**37.4**

8.2 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 re-pricing 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.

8.2.1 SIIR measurement methods

The basic measures for SIIR are the two re-pricing gaps measuring the effect on Nordea's net interest income for a 12 months period of a one percentage point increase, respectively decrease, in all interest rates. The re-pricing 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.

8.2.2 SIIR analysis

At the end of the year, the SIIR for decreasing market rates was EUR –230m (EUR –191m) and the SIIR for increasing rates was EUR 213 (EUR 148m). These figures imply that net interest income would decrease if interest rates fall and increase if interest rates rise.

Table 51 Re-pricing gap analysis, 31 December 2010

Re-pricing gap for increasing interest rates, EURm

Interest rate fixing period	Group balance sheet	Within 3 months	3–6 months	6–12 months	1–2 years	2–5 years	>5 years	Non repricing	Total
Assets									
Interest bearing assets	431,246	321,870	18,963	18,020	9,681	12,082	19,240	31,390	431,246
Non interest bearing assets	149,593	0	0	0	0	0	0	149,593	149,593
Total assets	**580,839**	**321,870**	**18,963**	**18,020**	**9,681**	**12,082**	**19,240**	**180,983**	**580,839**
Liabilities and equity									
Interest bearing liabilities	376,464	270,337	17,670	12,796	15,230	35,090	21,515	3,826	376,464
Non interest bearing	204,224	0	0	0	0	0	0	204,375	204,375
Total liabilities and equity	**580,689**	**270,337**	**17,670**	**12,796**	**15,230**	**35,090**	**21,515**	**208,200**	**580,839**
Off-balance-sheet items, net		**–31,143**	**4,045**	**–2,602**	**2,928**	**23,301**	**3,471**	**0**	
Exposure		**20,389**	**5,339**	**2,621**	**–2,622**	**293**	**1,196**	**–27,217**	
Cumulative exposure			**25,728**	**28,349**	**25,728**	**26,021**	**27,217**	**0**	

9. Risk and Capital in Life and Pension operations

The nature of life insurance leads Nordea's Life and Pension operation to take risks that are quite different to those addressed in the banking operation. However the main risks in Nordea's Life and Pension operation are market risks and life insurance risks.

Life and Pension operation clearly benefitted from the recovery in most risky assets in 2010. This is a tribute to the ALM processes which enabled participation in the market development despite the risk reductions necessary during the volatile and sharp downturn in the preceeding period.

9.1 Risk and capital management principles and control

The risk and capital management within Life and Pension operation is supported by an asset and liability management (ALM) policy, which is supplementing the other policies and directives within the Nordea group. The ALM policy is formulated by the risk management function of Life and Pension operation together with Group Risk Management.

Life and Pension operation has its own risk management function, which monitors solvency and market risk levels, both for the consolidated Life and Pension operation and for the different legal entities. The solvency levels, financial buffers, risk limit utilization and ALM related market risk are calculated and reported on a weekly basis. Market risk for the separated equity capital of the legal entities in Life and Pension operation is estimated and reported daily by Group Risk Management.

Solvency ratios for the consolidated Life and Pension operation (Nordea Life Holding AB) are measured and reported to regulators on a monthly basis. ALM issues are reported quarterly to the Group Asset & Liability Committee, while the ALM related P/L risk and the market risk of the separated equity capital are reported regularly to GEM and Board of Directors.

9.2 Key risks in Life and Pension operations

9.2.1 Market risk

The market risk is the risk of loss in profit as a result of movements in market rates and prices (e.g. interest and FX rates, equity and commodity prices, volatilities) that affect the value of Nordea's positions. Market risk is measured according to two approaches:

- A scenario-based risk measure, similar to the "traffic light" methods used by FSAs, is used to measure the risk Nordea faces if the return on assets were to fall short of the guaranteed yields to policy holders.
- Value-at-Risk is used to measure the market risk in the separated equity capital investment. See chapter 5 for further details.

9.2.2 Life insurance risk

Life insurance risk is the impact from changes in mortality, longevity and disability rates. The sensitivity on the financial accounts from these risks is shown in table 52.

The split between the customers and the shareholder equity effect are impacted due to uncertainty in the Norwegian legislation because of some early Solvency II adjustment. During the autumn 2010 the Norwegian FSA signalled that they are uncertain whether an increase in technical provision can take place over a multi-year period.

The increase in the life insurance risk on counterparties belongs to a change in investment and an adjustment in the previously reported investments in high and low rated securities.

Table 52 Life insurance risk and market risks in the Life insurance operations

	31 Dec 2010		31 Dec 2009	
Sensitivites EURm	Effect on policyholders	Effect on Nordea's own account	Effect on policyholders	Effect on Nordea's own account
Mortality – increased living with 1 year	–133	–73	–124	–21
Mortality – decreased living with 1 year	190	8	126	23
Disability – 10% increase	–28	–5	–24	–4
Disability – 10% decrease	28	5	24	4
50 bp increase in interest rates	–78	0	–70	0
50 bp decrease in interest rates	32	0	–20	0
12% decrease in all shareprices	–457	–6	–217	–8
8% decrease in property value	–262	–8	–236	–6
8% loss on counterparts	–458	–34	–154	–10

9.3 Asset Liability Management (ALM)

The ALM aims at creating long-term value of Life and Pension operation while optimising the rate of return to policyholders given a level of risk.

In Life and Pension operation the "ALM square" has been adopted as a mindset, meaning that the elements of value and risk given by the four corners (P/L, economic value & capital, legal requirements and market return) are taken into consideration when making management decisions or determine the ALM of Life and Pension operation.

Table 53 shows the asset and liabilities as of 31 December 2010. The development in asset and liabilities is determined mainly by premium in- and outflow and the investment result.

Table 53 Assets and liabilities, 31 December

Assets	31 Dec 2010 EURm	31 Dec 2009 EURm
Investment properties	3,506	3,486
Shares	11,376	7,990
Alternative investments	3,077	2,377
Debt Securities – At fair value	19,368	18,707
Debt Securities – HtM	2,256	1,875
Deposits and treasury bills	4,916	4,660
Other assets	1,750	1,583
Total assets	**46,249**	**40,679**

Liabilities	31 Dec 2010 EURm	31 Dec 2009 EURm
Traditional provisions	21,819	21,166
Collective bonuspotential	1,791	1,434
Unit linked provisions	5,202	4,480
Investment contracts	9,339	6,178
Other insurance provisions	616	574
Other liabilities	5,579	5,134
Shareholders equity	1,381	836
Subordinated loans	522	878
Total liabilities	**46,249**	**40,679**

9.3.1 Guaranteed level

Due to strong sales in Unit Link policies (no guarantees) in 2010 the arithmetic average guarantee is reduced from 1.76% in 2009 to approximately 1.62% in 2010. For the guaranteed part of the policies alone (0% and above) the average guarantee increased from 2.26% in 2009 to 2.34% in 2010. The development can mainly be explained by migration from 0% guarantees to Non-guarantied policies (Unit Link).

9.3.2 Investment return

Investment return performance is only relevant for the traditional business because Nordea is carrying the risk and decides upon the asset allocation in both a strategic and a tactical perspective.

All figures in table 55 are consolidated from the different legal life companies. The asset under management are affected by the investment return and the in- and outflows in the different asset classes.

Table 55 Investment return, traditional life insurance

	31 Dec 2010		31 Dec 2009	
EURm	Assets under management	Investment return	Assets under management	Investment return
Interest bearing securities and deposits	19,805	4.9%	19,513	6.7%
Shares	3,062	8.1%	2,392	24.1%
Alternative investments	3,058	15.8%	2,358	–2.3%
Investment property	3,408	5.0%	3,401	3.6%
Total return	**29,333**	**6.3%**	**27,664**	**6.4%**

Table 54 Insurance provisions (technical provisions) and provision on investment contracts divided into guarantee levels (technical interest rates)

31 Dec 2010 EURm	non	0 pct.	0 to 3 pct.	3 to 5 pct.	Over 5 pct.	Total liabilities
Technical provision	11,090	3,267	11,664	10,169	170	36,360

31 Dec 2009 EURm	non	0 pct.	0 to 3 pct.	3 to 5 pct.	Over 5 pct.	Total liabilities
Technical provision	7,047	4,196	10,612	9,791	178	31,823

Insurance claims provisions are EUR 434m in 2010 and EUR 395m in 2009.

9.4 Solvency capital and solvency ratio

The solvency position during 2010 was mainly impacted by increased solvency level in firstly, the subsidiaries of EUR 113m and secondly, a positive currency effect of EUR 43m. The consolidated solvency position is illustrated in table 56.

Table 56 Solvency I Capital / Ratio

EURm	31 Dec 2010	31 Dec 2009
Tier I capital	955	763[1]
Tier II capital	522	552
Solvency capital	1,477	1,315
Solvency requirement	–1,176	–1,111
Solvency balance	301	204
Solvency ratio	**126**	**118**

1) Tier I capital include 325 mEUR in capital reconstructed from tier 2 to tier 1 capital. The transaction took place, and was final approved by the Swedish FSA, in March 2010.

9.5 Market Consistent Embedded Value (MCEV)

The Market Consistent Embedded Value model (MCEV) is a stochastic dividend-stream model projecting the future developments in a large number of scenarios through Monte Carlo simulation. The model calculates the dividend stream to the shareholder in each scenario and derives the Economic Value (EV) for the shareholder in each scenario by finding the net present value of the dividend stream by discounting using relevant discount factors relevant for the specific scenario. Having run a large number of Monte Carlo simulations and knowing the EV in each scenario, the model draws up the probability distribution of EV for the company. The MCEV is defined as the average of this distribution and is calculated as the simple mean of the scenario-specific EVs.

The MCEV is used to reflect the real value of the Life and Pension operation of Nordea, but also to managerial support.

Table 57 MCEV Development

	31 Dec 2010			31 Dec 2009		
EURm	Traditional	Unit Linked	Total	Traditional	Unit Linked	Total
Denmark	1,000	155	1,155	1,104	149	1,253
Finland	464	418	883	476	327	803
Norway	728	124	852	582	80	661
Poland	11	259	271	13	199	212
Sweden	53	443	495	-2	316	314
Total	**2,256**	**1,399**	**3,655**	**2,173**	**1,071**	**3,244**

During 2010 Life and Pensions has increased the MCEV value of EUR 412m compared to 2009. A more detailed description of the movements is shown in table 58.

The major positive effects are coming from a positive new business inflow with a value increase of EUR 253m (New Business). In addition the total financial buffer level which has slightly increased compared to 2009 and the very positive period earnings has also contributed to an increased MCEV value (Other). Finally the FX accounting effect has also contributed positively to the MCEV development (FX effect) together with a capital injection of EUR 12m in Poland (Other).

On the contrary the main negative effect on the MCEV value is coming from a decrease in the long interest rates (up to -40 basis points) giving a negative impact on the financial outlook for the traditional products (Financial Effects). Furthermore a dividend of EUR 110m in Denmark and a dividend of EUR 100m in Finland has been paid out also decreasing the MCEV value (Other).

Table 58 MCEV movement analysis

EURm	MCEV 2009Q4	New Business	Financial effects	Expected earnings	Other	FX Effect	MCEV 2010Q4
Denmark	1,253	57	–172	31	–14	–2	1,155
Finland	803	86	–49	31	12	0	883
Norway	661	23	–14	18	91	73	852
Poland	212	39	–2	9	0	12	271
Sweden	314	48	–13	9	90	47	495
Total	**3,244**	**253**	**–250**	**98**	**180**	**131**	**3,655**

As shown in table 59 the relative low impact of yield curve change (-100bp and -50bp) in Finland is due to a small part of the traditional portfolio, which is highly sensitive, is offset by a larger market return portfolio having the opposite effect.

The opposite movement in the interest rate sensitivities in Poland (+100bp) is due to that the positive effect on the traditional product is offset by a larger negative effect in the market return products.

Table 59 MCEV sensitivity analysis

Assumption change	Scenario	Denmark	Finland	Norway	Poland	Sweden	Total
Yield curve Change	IntRates –100bp	–21.1%	1.0%	–8.1%	–1.1%	18.0%	–6.4%
	IntRates –50bp	–7.8%	0.3%	–2.7%	–0.3%	8.4%	–2.1%
	IntRates +50bp	4.3%	0.2%	1.1%	0.0%	–7.5%	0.8%
	IntRates +100bp	6.6%	0.5%	1.5%	–0.3%	–14.5%	0.9%
Equity return 1st year	EquityReturn +10pct	4.8%	10.5%	1.0%	2.8%	6.3%	5.3%
	EquityReturn –10pct	–7.2%	–10.5%	–1.0%	–2.8%	–6.6%	–6.2%
Admin costs (relative change)	AdminCost +10pct	–0.4%	–1.1%	–3.6%	–1.8%	–3.2%	–1.8%
	AdminCost –10pct	0.2%	1.1%	3.4%	1.8%	3.2%	1.7%
Surrender rates (relative change)	Surrender +10pct	–0.4%	–1.1%	–1.2%	–4.3%	–3.6%	–1.2%
	Surrender –10pct	0.3%	1.2%	1.2%	4.6%	3.9%	1.2%
Pay-up rates (relative change)	Lapse +10pct	–0.9%	–0.3%	–0.6%	–2.1%	–1.7%	–0.8%
	Lapse –10pct	0.8%	0.3%	0.6%	2.2%	1.8%	0.8%

9.6 Financial buffers

The level of financial buffers is crucial for the traditional part of the life insurance business. The financial buffers express the policyholders' potential for bonus on top of the guaranteed benefit or yield. For the shareholders, the financial buffers are important due to the fact that they are a P/L protection against poor investment return, crediting and/or low return environments.

For Nordea Life and Pension a moderate financial buffer level is almost equal to stabile P/L due to the mostly fee-based business models. However, at low financial buffer levels higher P/L volatility is expected.

9.6.1 Development of financial buffers

The financial buffer developed positively during 2010 as shown in table 60. The improvement comes from a robust investment return combined with a conservative crediting rate. Interest rate risk has been kept very low impacting the financial buffers in especially Sweden and Finland positively.

Figure 16 Financial buffers

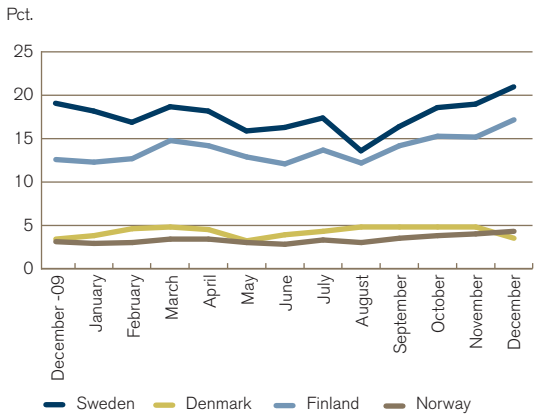


Table 60 Financial buffers

	Financial buffers		% of guaranteed liabilities	
EURm	31 Dec 2010	31 Dec 2009	31 Dec 2010	31 Dec 2009
Denmark	482	448	3.5%	3.4%
Norway	199	127	4.3%	3.1%
Sweden	465	344	21.0%	19.1%
Finland	645	515	17.2%	12.6%
Total	**1,791**	**1,434**	**7.3%**	**6.1%**

10. ICAAP and Internal capital requirements

The recent financial turmoil as well as the new regulatory environment has heightened the focus on banks' internal capital evaluation processes and their capability to assess the solvency needed to cover losses and other cyclicality effects. During 2010 financial supervisors and central banks have performed several stress tests of the Nordea Group and its peers. The result of the stress tests, such as the CEBS stress test performed during the spring and summer 2010, clearly shows that the Nordea Group is well capitalised.

The regulators agreed that Nordea was adequately capitalised given its risk profile and portfolio, in accordance with the 2010 ICAAP and SREP process.

10.1 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 requirement 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 Nordea's supervisors, rating agencies and other external stakeholders with respect to capital management, measurement and mitigation techniques used within Nordea.

The capital ratios and capital forecasts for the Nordea Group 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 and the Board of Directors on group, subgroup as well as legal entity level. On an annual basis the capital requirement and adequacy is thoroughly reviewed and documented in Nordea's ICAAP report, which ultimately is decided and signed of by the Board of Directors.

10.1.1 Capital planning and Capital policy

The capital planning process includes a forecast of the development of the capital requirements, (e.g. the pillar I and pillar II capital requirement), the available capital (e.g. capital base, tier 1 and core tier 1 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 Group 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.

Nordea's capital policy constitutes a major component of Nordea's ICAAP and as such has a key role in the capital planning. The capital policy states target capital ratios over a business cycle. The targets for tier 1 ratio and capital ratio are shown in table 61. The current capital position is described in chapter 3.

Table 61 Nordea Group capital targets, 2010

	Target over the cycle
Tier 1 ratio	9.0%
Capital ratio	11.5%

At the end of 2010, Nordea has reviewed the capital policy and it has been decided to leave the targets unchanged. Nordea expects to review the capital policy in light of new regulatory proposals and market perception during 2011.

Additional policies are in place reflecting Nordea's target capital allocation in terms of core tier 1, tier 1 hybrid instruments and tier 2 capital. The policies also define the internal process for combining the capital policy and capital planning to ensure that Nordea is adequately capitalised and that capital decisions are made in a timely manner.

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

10.1.2 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 regulators and supervisors. Heading into 2011, Nordea will review the capital situation closely with regards to the new capital adequacy framework "Basel III" and maintain its open dialogue with various supervisory authorities.

10.2 Internal capital requirements

Nordea's internal capital requirement is defined using a "pillar I plus pillar II" approach. This methodology uses the pillar I capital requirement 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 requirement 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 requirement. By considering the stress test results in the assessment of internal capital requirement the procyclical effects inherent in the risk adjusted capital calculations of the economic capital and IRB approaches are addressed.

10.2.1 Economic capital

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

- Credit risk
- Market risk
- Operational risk
- Business risk
- Life insurance risk

Pillar II of the of the Basel II 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 and economic capital also includes risks in the insurance business of the group.

As of end 2010 the total economic capital equals EUR 17.5bn and Figure 17 shows the economic capital distributed by business area and risk type. Notably the credit risk accounts for 72% of the total economic capital. During 2010, the EC increased with 5.2%[1], largely explained by an increase in credit risk.

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 requirement 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 during 2010 implied the following for the economic capital framework:

- Credit risk – The calculation of economic capital for credit risk is in general aligned to regulatory capital. This implies that the significant part of the corporate and institution exposure is calculated according to the Foundation IRB approach. However, in order to keep a risk differentiated measure within the economic capital framework, the corporate and institution portfolios not yet approved for Foundation IRB is calculated as if they were approved. For counterparty credit risk, the Expected Positive Exposure (EPE) method is used compared to the Mark to Market (MtM) method used in the regulatory capital. Moreover, to better account for sector credit concentration risk an improved method has been implemented in the economic capital framework. The economic capital for the majority of the retail portfolio is calculated as in the regulatory capital requirement, i.e. according to the Retail IRB approach.
- Market risk – Economic capital for market risk is based on a pillar I plus pillar II approach. The pillar I market risk is completely aligned with regulatory capital and the pillar II market risks are assessed using the same VaR model and assumptions as in the calculation of regulatory market risk capital and as used internally within the market risk management.
- Operational risk – Economic capital for operational risk is calculated in the same manner as the regulatory capital for operational risk.

Figure 17 EC distributed by risk type

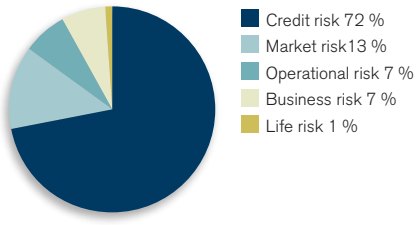
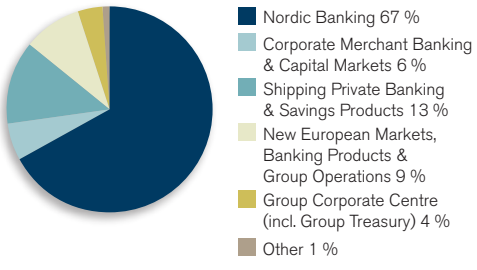


Figure 17 EC distributed by customer area



1) In comparison to restated EC following changes in the EC framework reflecting alignment towards regulatory framework.

10.2.2 Stress tests

During 2010 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 Group has been part of external stress tests performed by financial supervisors, central banks and equity analysts. The result of the CEBS' stress test of European banks that was performed during spring/summer 2010 confirms Nordea's strong balance sheet and capital situation. Nordea was one of 91 banks that were included in the stress test and even in the most severe scenario, i.e. the adverse scenario combined with the sovereign shock, Nordea's Tier 1 ratio dropped only 10bps. This clearly demonstrates the strength of Nordea's capital position.

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 requirement, 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 is performing 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.

10.2.2.1 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 and the base case scenario will set the ground for the stress effect and the additional capital need.

While the annual stress test is based on complex macro economic scenarios which 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 62.

10.2.2.2 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 requirement 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 18 for the calculation process used in the stress test framework.

10.2.2.3 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 GEM and the Board of Directors. A similar governance process is used for the sub groups and legal entities.

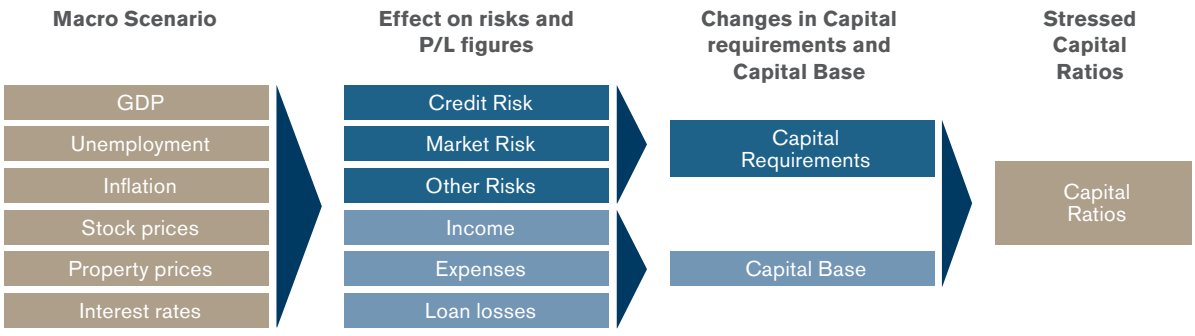
The results of the stress tests should support senior management's understanding of the implications of the current capital strategy given potential market shocks. Based on this information senior management is able to ensure that the Group holds enough capital against the risk of stressed or similar 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 requirement 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.

Table 62 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

Figure 18 Calculation process



11. Capital base

The quality of Nordea's capital base has been strengthened during 2010 following strong profit generation. The organic growth strategy established by the Group has resulted in stable development of the capital base throughout the year. Nordea has not issued nor called any tier 1 hybrid capital instruments and has a limited portion of hybrids, 9.2% of tier 1 capital.

11.1 Capital base

The calculation of the capital base is done in accordance with the CRD and the Swedish legislation. The size of the capital base must as a minimum correspond to the sum of the capital requirement for credit, market and operational risks. 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. All amounts are included net of any tax charge.

The capital base has been improved following strong profit generation during 2010. Profit for the year is included in the tier 1 capital after deductions for proposed dividend.

During 2010, Nordea Bank AB (publ) issued two EUR-denominated tier 2 hybrid instruments of a total of EUR 1,740m, priced at a coupon of 4.0-4.5%. The impact on the capital ratios excluding transition rules was approximately 0.9% as of December 31, 2010.

A summary of items included in the capital base is available in table 63.

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 together with hybrid capital loans. 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 risk weighted amounts.
- The capital ratio is calculated by dividing the capital base with risk weighted amounts.
- The capital adequacy quotient is calculated from the capital base in relation to the capital requirement.

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

11.2 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 capital of the same or close to the character of eligible capital and eligible reserves. The tier 1 capital can also include a limited part (up to 50% of tier 1) of hybrid capital loans (perpetual loans). Deductions mandatory for tier 1 capital will accordingly also be required as deduction in the defined core tier 1 capital.

11.2.1 Eligible capital

Paid up capital is equal to the share capital contributed by shareholders.

11.2.2 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.

11.2.3 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 and with the permission of the Swedish 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. Previous years the limit for including hybrid capital in the tier 1 capital has been restricted to 30% but after decision by the Swedish FSA and in effect from December 2010, the limit is changed to be 50% of the tier 1 capital after relevant deductions. If there is any surplus after applying the legal limit of 50%, exceeding amount can be transferred to tier 2 capital. For hybrid capital loans including step up conditions or other conditions that could give incentive to repurchase, the limit of 15% applies.

Table 63 Summary of items included in capital base

EURm	31 December 2010	31 December 2009
Calculation of total capital base		
Original own funds		
Paid up capital	4,043	4,037
Share premium	1,065	1,065
Eligible capital	**5,107**	**5,102**
Reserves	15,979	14,389
Minority interests	10	11
Income (positive/negative) from current year	2,658	2,313
Eligible reserves	**18,648**	**16,713**
Tier 1 capital (before hybrid capital and deductions)	**23,755**	**21,815**
Hybrid capital loans subject to limits	**1,946**	**1,811**
Proposed/actual dividend	–1,168	–1,006
Deferred tax assets	–266	–122
Intangible assets	–2,878	–2,612
Deductions for investments in credit institutions	–106	–98
IRB provisions shortfall (–)	–234	–211
Deductions from original own funds	**–4,652**	**–4,049**
Tier 1 capital (net after deduction)	**21,049**	**19,577**
– of which hybrid capital	1,946	1,811
– of which core tier 1 capital	19,103	17,766
Additional own funds		
Securities of indeterminate dur. and other instr.	710	682
Subordinate loan capital	4,593	4,251
Other additional own funds	2	
Tier 2 capital (before deductions)	**5,305**	**4,933**
Deductions for investments in credit institutions	–106	–98
IRB provisions excess (+) / shortfall (–)	–234	–211
Deductions from original additional own funds	**–340**	**–309**
Tier 2 capital (net after deductions)	**4,965**	**4,624**
Participations hold in insurance undert., reinsurance	–1,147	–1,177
Pension assets in excess of related liabilities	–132	–98
Total own funds for solvency purposes	**24,734**	**22,926**

Currently the hybrid capital loans included in the capital base of Nordea Group constitute 9.2% of the tier 1 capital, where of the loans with step up conditions together amounts to EUR 1,452m.

11.2.4 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 and amounts to the proposed dividend to shareholders by a decision of the annual general meeting of 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 of goodwill. Other intangible assets relate to 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 foremost associated companies). 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital.

IRB provisions shortfall
In accordance the Swedish legislation, the differences between actual provision (EUR 2.3bn) made for the related exposure and EL (EUR 2.8bn) are adjusted for in the capital base. Note that this only relates to the IRB exposure. The negative difference (when the EL amount is larger than the provision amount) is included in the capital base as shortfall. According to the rules in the CRD, the shortfall amount shall be deducted from the capital base and be divided equally into both tier 1 capital and tier 2 capital. For the purpose of the CRD transition rules calculations of the shortfall is under Swedish regulation deducted from the RWA to be neutralised in a Basel I perspective. A positive difference (provisions exceeding EL) can be included in tier 2 capital with certain limitations (maximum 0.6% of IRB RWA).

11.2.5 Changes in core tier 1 capital 2010-2009
The core tier 1 capital has increased about EUR 1.3bn and the main contribution is the profit for the year (excluding proposed dividend) of EUR 1.5bn. There has also been a net increase in some deductions, EUR 0.6bn, affecting both core tier 1 and tier 1 capital, whereof dividend amounts to EUR 0.2bn of the increase. The remaining EUR 0.4bn relates to other changes in the eligible reserves.

11.2.6 Change in hybrid capital loans 2010-2009
There has been a net increase in hybrid capital loans with an amount of EUR 0.1bn as per 31 December 2010 stemming from FX changes. During 2010 Nordea has not issued any new hybrid loans nor have any contract been called. As of year-end 2010, Nordea holds EUR 1.9bn in hybrid capital loans (included as tier 1 capital). Table 63 shows the booked outstanding amounts of hybrid capital loans included in the tier 1 capital.

11.3 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 can not 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.

11.3.1 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 a default or bankruptcy situation. Under such conditions, the holder of the subordinated loan would be repaid after other creditors, but before shareholders. The subordinated debt will to some extent prevent the institution to go into liquidation.

The amount possible to include in the tier 2 capital related to dated loans is reduced if the remaining maturity is less then five years. 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 2010, Nordea holds EUR 4.6bn in dated subordinated loans and EUR 0.7bn in undated subordinated loans.

Table 64 shows the booked outstanding amounts of hybrid capital loans included in the tier 1 capital and subordinate loans included in the tier 2 capital. Call date is where the issuer has the legal right buy back outstanding loan amounts according the terms of agreement. The loans and the principles for time-reductions follow Swedish legislation. The book value in the table can deviate from capital amounts used in the capital base due to swap arrangements and adjustments for maturities.

11.3.2 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 has no significant holdings in this category and no impact in the tier 2 capital.

11.3.3 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 foremost associated companies). 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital. (See section 2.1 for specification of associated companies.)

IRB provisions excess (+) / shortfall
The differences between EL and provision made for the related exposure are adjusted for in the tier 2 capital, see section 11.2.4 for further explanation.

Table 64 Dated and undated loans

Dated loans

Issuer	Book value EURm	Capital base 31 December 2010	Start	Maturity	Call date	Coupon
Nordea Bank AB	78	78	06	Feb-16	Feb-11	Fixed
Nordea Bank AB	500	500	06	Mar-16	Mar-11	Frn
Nordea Bank AB	374	424	05	Jun-16	Jun-11	Frn
Nordea Bank AB	262	281	06	Jun-16	Jun-11	Frn
Nordea Bank AB	223	223	06	Aug-16	Aug-11	Frn
Nordea Bank AB	500	505	04	Sep-16	Sep-11	Fixed
Nordea Bank AB	112	112	06	Dec-16	Dec-11	Frn
Nordea Bank AB	112	112	06	Dec-16	Dec-11	Fixed
Nordea Bank AB	598	120	02	Nov-12	Nov-12	Fixed
Nordea Bank AB	498	498	08	Sep-18	Sep-13	Fixed
Nordea Bank AB	995	995	10	Mar-20	Mar-20	Fixed
Nordea Bank AB	745	745	10	Mar-26	Mar-21	Fixed
Total Dat.loans	**4,997**	**4,593**				

Undated loans, tier 1

Issuer	Book value EUR	Capital base 31 December 2010	Start	Maturity	Call date	Coupon
Nordea Bank AB	368	381	09	n/a	Mar-15	Fixed
Nordea Bank AB	368	368	09	n/a	Mar-15	Fixed
Nordea Bank AB	449	479	05	n/a	Apr-15	Fixed
Nordea Bank AB	184	144	05	n/a	Mar-35	Fixed
Nordea Bank AB	92	73	05	n/a	Oct-35	Fixed
Nordea Bank AB	500	500	04	n/a	Sep-44	Frn
Total Und.tier 1	**1,962**	**1,946**				

Undated loans, tier 2

Issuer	Book value EURm	Capital base 31 December 2010	Start	Maturity	Call date	Coupon
Nordea Bank Finland Plc	348	468	04	n/a	Jul-14	Frn
Nordea Bank Finland Plc	92	92	99	n/a	Feb-29	Fixed
Nordea Bank Norway ASA	150	150	08	n/a	Nov-50	Fixed
Total Und.tier 2	**590**	**710**				
Grand Total	**7,549**	**7,249**				

11.3.4 Changes in tier 2 capital 2010

During the period, Nordea has bought back dated subordinated loans to an amount of EUR 1.5bn. Nordea has issued EUR 1.7bn in tier 2 subordinated loans during 2010. The deduction from the shortfall has increased during the period.

11.4 Deductions from the total capital base

Participations hold in insurance undertakings

By a transition rule in effect until end of year 2012, participations hold in insurance undertakings is deducted from the total capital base, meaning that the deduction should not affect the tier 1 capital. After year 2012, half of the amount should be deducted from tier 1 capital. There has been a minor increase in the deducted amount following the holding in the insurance sector.

Other deductions

Surplus net value of pension plans for employees should under certain circumstances be deducted from the sum of tier 1 and tier 2. At the end of 2010 the sum of the surplus values of the plans reached EUR 131.6m.

11.5 Changes in the capital base 2010

Figure 19 illustrates the main changes in the capital base during year 2010. The main part of the increase over the year, relates to core tier 1 capital stemming from profit.

11.6 Capital transferability and restrictions

Generally, Nordea Group has the ability to transfer capital within its legal entities without material restrictions. International transfers of capital between legal entities are normally possible after approval by of the local regulator and are of importance when governing the capital position within the Group. The guarantee schemes introduced within EU during 2008 has under certain circumstances limited the transferability of capital with impact on cross border financial groups. There are no such restrictions directly affecting Nordea as per end of 2010.

11.7 Development of the capital base and the components

Figure 20 illustrates the increase in the capital base over a period of ten years and the developments of its main components; own funds, hybrid capital and tier 2 capital.

Figure 19 Development of the capital base 2010

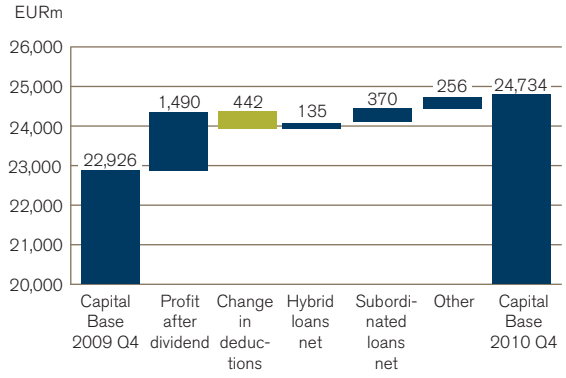
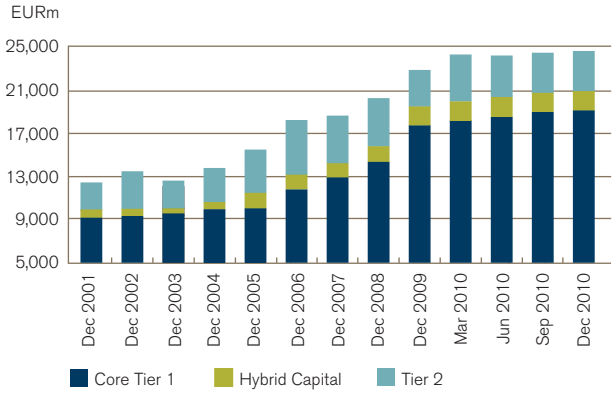


Figure 20 Development of the capital base



12. New regulations – Basel III and Solvency II

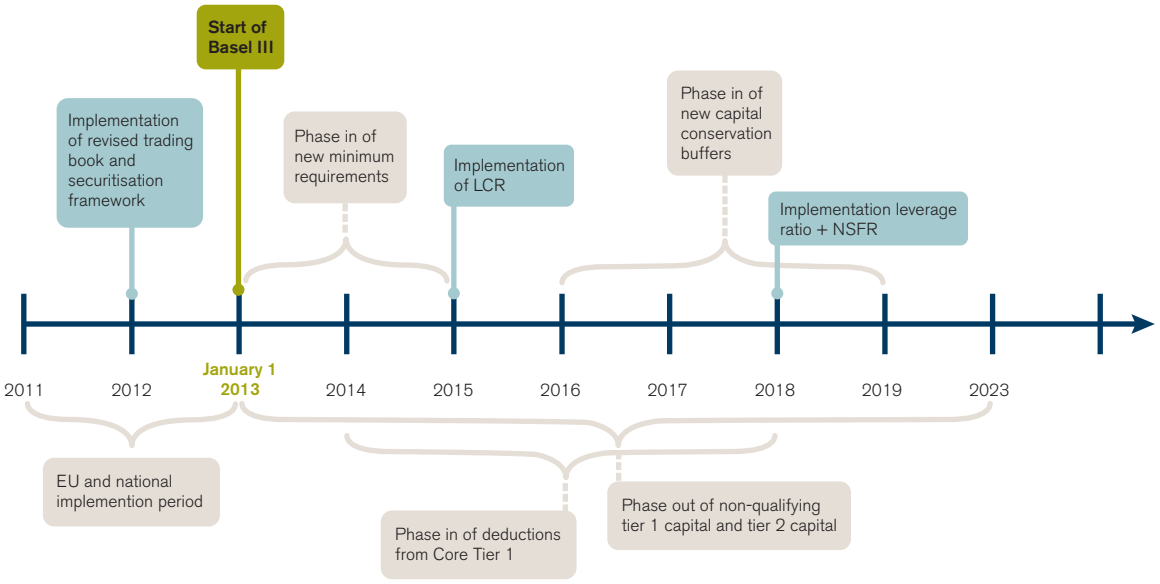
During 2010, the new capital and risk frameworks have been finalised and more clarity has evolved concerning the main elements of the new regulatory requirements for capital and risk – the Basel III and Solvency II frameworks. Nordea is well prepared to meet new regulatory requirements.

12.1 Basel III – new regulatory framework for financial institutions

In December 2009, the Basel Committee on Banking Supervision (BCBS) launched a proposal for capital and liquidity reform, often referred to as Basel III. In February 2010, the EU Commission launched a European proposal, which was based on the December 2009 proposal from the Basel Committee. During February to April 2010, a Quantitative Impact Study was conducted by the industry and responses on the proposals were sent to the Basel Committee and European Commission. Nordea participated in the Quantitative Impact Study and also actively participated in different industry organisations to communicate Nordea's view on the proposal. Nordea also sent a separate response to the Basel Committee and European Commission in April 2010.

In November 2010, the G20 leaders endorsed the key principles of the Basel III framework and in December 2010, the final Basel III framework was released from the Basel Committee. The framework included a number of clarifications and some amendments to the earlier proposals during the year. During 2011 and 2012, the implementation process within EU and the Nordic countries will be intense in order to meet the ambitious start date of the revised regulatory framework in 2013. This implementation process can include national deviations to the standards proposed by the Basel Committee. In figure 21, the expected implementation and transitional arrangements are illustrated.

Figure 21 Overview of the Basel III implementation and transitional arrangements



The Basel III framework consists of three main elements (capital, leverage and liquidity) which are further described in this chapter. Also, some other regulations are being implemented and/or are under consideration, which is further elaborated upon in section 12.3.

12.1.1 Revised capital regulation

The Basel III proposal includes several key initiatives, which change the current Basel II framework that has been in effect since 2007.

1) Capital base: Increased quality, consistency and transparency of the capital base.

The regulatory deductions should mainly be applied to the common equity component, which in the current framework have been applied to other parts of the capital base. These changes are phased in between 2014 to 2018. In chapter 11, the capital base composition is presented, in accordance with the current regulations.

The required features for instruments to be eligible as Tier 1 and Tier 2 capital will be stricter. For example, instruments with incentives to redeem (e.g. step up clauses) are not eligible. Capital instruments that do not contain the required features will gradually phased out between 2013 to 2023.

The overall impact on Nordea's capital base is estimated to be limited.

2) RWA: The risk coverage is further strengthened.

Already before the Basel III framework was launched, the Basel Committee had decided on certain changes to the current Basel II framework. These changes concern increased capital requirement for the trading book and re-securitisation activities, and are expected to be implemented already in December 2011 throughout Europe.

For internal models the most important changes are an introduction of a stressed VaR capital requirement (added on top of the ordinary VaR), an additional Incremental Risk Charge (IRC) for non-securitised products covering both default and migration risks and a Comprehensive Risk Charge (CRC) for securitised products in the correlation trading book. The standardised method is also subject to higher capital requirement where the capital charge factor for specific equity risk under the standardised method is increased to 8%.

The impact of the new market risk framework is estimated to double the current market risk capital. The capital requirement for the part of the portfolio calculated with the internal model approach is estimated to increase with 300-400%. However, the impact may vary over time.

As part of the Basel III framework, the capital requirement for counterparty credit risk in OTC derivatives will be increased. In particular, a new capital requirement for risk of changes in the Credit Value Adjustment (CVA) is suggested. The CVA is an adjustment to the fair value of OTC derivatives reflecting the risk that counterparties are not able to fulfil their obligations towards Nordea. The capital requirement for CVA risk represents the volatility in the adjusted fair value of derivatives due to changes in the credit spreads of counterparties. The credit spread can for instance increase due to deterioration (or just a change in the expectations of a deterioration) of a counterpart's credit quality (down rating).

The new capital requirement for CVA risk will be introduced in addition to the current capital requirement for the default risk associated with the counterparties in OTC derivative contracts. The CVA risk charge is intended to cover losses related to changes in the value of derivatives rather than the losses that materialise if the counterparties are in default.

The recent financial crises has shown that financial firms are more interrelated than the Basel II parameters has accounted for. To respond to this, the Basel III framework, increased the capital requirement for credit risk exposures to banks, insurance companies and other financial intermediaries.

3) New minimum requirements and capital buffer requirements

The Basel Committee has increased the minimum capital ratio's that banks should at all times hold (i.e. minimum 4.5% core tier 1 ratio, 6% tier 1 ratio and 8% capital ratio). In addition, a capital conservation buffer of 2.5% on top of these minimum thresholds is introduced. If banks do not meet this buffer, constraints will be imposed on the banks capital distribution, such as dividends. Also, in periods of excess credit growth, banks will be required to hold an additional countercyclical buffer (0 to 2.5%) without facing restrictions. These new thresholds will be phased in gradually from 2013 to 2018, see figure 22. The Basel Committee is also considering an extra capital surcharge for systemically important financial institutions, but the proposal is not finalised at this point in time.

12.1.2 New leverage regulation

The Basel Committee has proposed that the risk sensitive capital framework should be supplemented with a non-risk based measure, the leverage ratio. The ratio will be calculated as the Tier 1 capital divided by the exposure (on and off balance sheet exposures, with some adjustments for certain items such as derivatives). A minimum leverage ratio of 3% will be evaluated during a parallel run period. Based on the results any final adjustments would be carried out in the first half of 2017 with a view to migrating to a legally binding restriction in January 2018.

12.1.3 New liquidity regulations

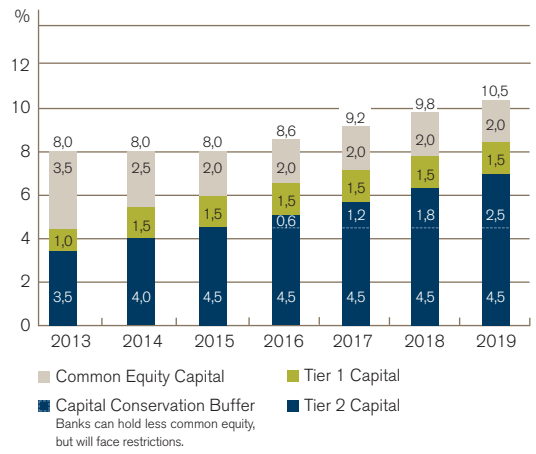
The objective of the liquidity reform is to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill-over from the financial sector to the real economy. The Basel Committee has developed two new quantitative 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 ongoing monitoring and in communicating this exposure among home and host supervisors.

In the finalised version published end of December 2010, the Basel Committee has somewhat redefined the original contents of LCR and NSFR and informed about the phase-in arrangements. Both LCR and NSFR will be subject to an observation period and will include a review clause to address any unintended consequences. After the observation period, LCR will be introduced on January 2015 and NSFR will move to minimum standard by January 2018.

Although Basel Committee is prepared to make revisions to specific components of the above standards, the required qualitative principles on liquidity risk management have reached matured phase with released Nordic regulations during 2010. The regulations cover among others issues; liquidity strategy, degree of risk tolerance, incorporation of liquidity costs, measurement and management process, segregation of duties, IT systems, funding strategy, intraday risk management, contingent liquidity, collateral management, conducting stress tests, contingency funding plan, liquidity buffers and public disclosure. Banks need to meet these requirements in the beginning of 2011.

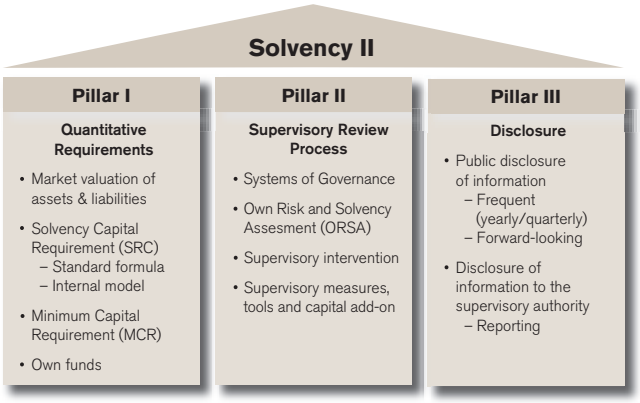
Figure 22: New buffers and transitional arrangements defined by the Basel Committee



12.2 Solvency II – new regulatory framework for insurance companies

New regulation is also approaching the insurance business – Solvency II. The regulation replaces most of the current EU directives for Life insurance and is expected to be in force by 1st of January 2013. The three main objectives are firstly; to have a forward looking Risk based Solvency Capital assessment, replacing the old "volume based" capital requirement framework. Secondly, to ensure that the risk ownership is anchored in Executive Management and Board of Directors and finally to ensure that the risk measurement and governance is embedded into business operations and strategic planning.

The Solvency II framework - likewise Basel III - consists of three pillars:



Pillar I outline a valuation standard for assets and liabilities and lays out the capital requirements that firms will be required to meet for all risks, in particular insurance, credit, market and operational risk. Capital requirements may be calculated using a standard formula, or, if firms have supervisory approval, they may use their own internal models for risk measurement. The standard formula requires use of "stochastic simulation technique" to calculate the insurance liabilities, when the products have embedded options and guarantees.

Pillar II is the supervisory review process that focuses on evaluating the adequacy of capital and risk management systems and processes. Supervisors may decide a firm should hold additional capital against any risks not adequately covered in Pillar I.

Pillar III disclosures will harness market discipline by requiring firms to publish more comprehensive information of their risk and capital management.

In 2009 the Solvency II Framework Directive was approved by the EU Parliament and European Council. This is the so called Level 1 legislation. In January 2010 the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) handed over there final advice for implementing measures to the EU Commission. The EU commission is working on a draft consolidated implementing measures that is expected to come in a public hearing in spring 2011 and it is expected to be finalised by the EU commission end 2011. (This is the Level 2 legislation.)

At the same time CEIOPS – from 1st January 2011 acting as a European Financial Supervisory Authority named EIOPA is working on the Level 3 advices. These activities include issuing supervisory standards, recommendations and guidelines to enhance convergent and effective application of the regulations and to facilitate cooperation between national supervisors. First Level 3 guidance was published in January 2010 (pre application process for internal models - CP80) and final Level 3 advice is expected to be completed by CEIOPS end March 2012. Subsequently, the new regulation will be implemented in national legislation.

During 2010, a Quantitative Impact Study (QIS5) was conducted throughout Europe. Nordea Life & Pensions participated in this study.

12.3 Other regulations

There are other regulations under consideration and implementation, which require close monitoring and assessment of the impact. Example of key regulatory changes under consideration with potential impact on the capital adequacy is specific regulation for Systemically Important Financial Institutions (SIFIs), new accounting rules and new EU regulation for dealing with failing banks.

- The Financial Stability Board (a worldwide standard setter) has identified as a priority the need for more intense and effective supervision particularly as it relates to systemically important financial institutions (SIFIs). During 2011, further regulatory developments can be expected including what type of special regulation that SIFIs will be subject to and what institutions to define as SIFIs.
- Nordea's accounting policies under 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) and leasing (IAS 17), although also other changes might/will have a significant impact. The final standards are expected to be published during the second quarter 2011, but the effective dates have, for the predominant part, not yet been defined.
- The European Commission intends to come forward with a legislative proposal dealing with failing banks before summer of 2011. The framework includes tools for planning, crisis prevention and early intervention by supervisors. The main focus is on supervisory authories' intervention, additional requirements related to funding (in particular bail-in debt) and living wills (recovery and resolution planning).

13. Appendix

13.1 Government guarantee scheme

The Nordic governments have established a number of measures in response to the global financial crisis. The measures were presented during the autumn 2008 and the beginning of 2009. Similar to many stability packages within EU, the measures include the following elements: implementation of a general framework for giving state support to ailing credit institutions, the creation of a stabilisation fund, a temporary guarantee program and a recapitalisation scheme. Nordea welcomes the actions taken by the Nordic governments to stabilise the markets.

Denmark

Nordea decided for commercial reasons that Nordea Bank Danmark A/S would participate in the Danish guarantee scheme launched in early October 2008. The scheme was valid for two years until end of September 2010 and guaranteed the claims of unsecured senior creditors against losses in participating banks. The cost for the Danish guarantee scheme for Nordea during 2010 has been EUR 136m in annual commission expense and an additional EUR 100m reported as loan losses. Following the successful rights offering in April 2009, Nordea has chosen not to apply for hybrid loans from the Danish state under the Act on State-Funded Capital Injections, i.e. Nordea does not participate in the second Danish scheme.

In October 2010, "Bankpakke III" was launched. This enables the Danish state owned company "Finansiel Stabilitet A/S" to instantly take over ailing banks in an adapted bankruptcy procedure. The scheme is backed financially by a new loss guarantee of appr. 400 mEUR provided proportionally by the banking sector in accordance with the contributions to the Deposit Guarantee Scheme.

Finland

Nordea did not participate in the Finnish scheme.

Norway

The Norwegian stabilization scheme includes a swap facility for banks whereby government bonds can be exchanged for covered bonds. Due to the stabilisation of the credit markets, it was decided in end 2009 that no more auctions regarding the swap facility would be held until further notice. In addition to the swap facility, a scheme to provide core capital and subordinated loans was established by the Norwegian government. Nordea has not participated as a borrower under the latter scheme.

Sweden

Nordea has not participated in the Swedish government's stability measures. However, in order to facilitate the Swedish State's subscription in Nordea's rights offering through the Recapitalisation scheme, Nordea in 2009 signed an agreement with the Swedish National Debt Office. The funding for the State's participation thus came from the Stabilisation Fund. The fund is to be built up with fees from banks and other credit institutions. The total stability fee for Nordea was EUR 20m during 2010 and approximately the double amount is expected for 2011 since the fee was halved for 2010.

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

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

- Pillar 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. In order to prevent large short-term effects on capital requirements, the regulators have introduced transition rules (also known as capital floor) for all institutions implementing the new capital adequacy reporting. The transition rules, in force 2007-2009 with prolongation at least to the end of 2011, mark the lowest eligible capital base and relate directly to the capital requirements calculated under Basel I regulations. During 2007 the capital requirement was no less than 95% of the capital requirement calculated under Basel I regulations. For 2008 and 2009, the amount of capital requirement was allowed to be 90% respectively 80% of the capital requirement calculated under Basel I regulations. The transition rules have been prolonged, at least for 2010 and 2011, and the capital requirement is not allowed to be below 80% of the capital requirement calculated under Basel I regulations.

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

Minimum capital requirements = Capital base / RWA
where, Minimum capital requirements ≥ 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 is introduced as a new risk type in the CRD. The table below identifies the approaches available for calculating RWA in each risk type in accordance with the CRD:

Primary approaches in the CRD

Approaches for reporting capital requirements

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

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

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

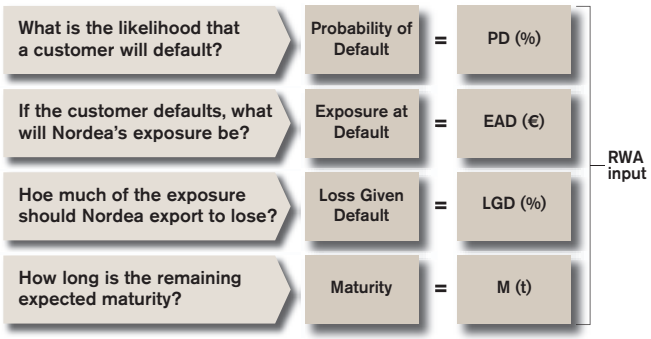
Below is an overview of the key parameters used in calculation of RWA in pillar I.

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.

Figure: Key parameters in the RWA calculation



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
- Market risk
- Operational risk

13.3 Exposure classes for Credit risk

A diversified credit portfolio can be divided into the exposure classes defined by the CRD. The basis for calculation of the EAD in the RWA formula is the division of exposure classes. Nordea is approved to use the FIRB approach for the exposure classes: institution, corporate, Retail and other non-credit obligation assets. For the remaining exposure classes Nordea used the Standardised Approach in 2010. 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[2] 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 guidelines.

Retail exposure
Exposure to small and medium sized entities (with an exposure of less than EUR 250k) and to private individuals is included in the retail exposure class and defined in accordance to Nordea's internal guidelines for scoring.

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

13.3.2 Standardised exposure classes

Central governments and central banks
Exposure to central governments and central banks is, subject to national discretion, treated with low risk if the counterparty is within European Economic Area (EEA) member states. Subject to national discretion, the risk weight of 0% is, for the majority of this exposure, applied in Nordea.

Regional governments and local authorities
Exposure to regional governments and local authorities is included in this exposure class. 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 that is secured by mortgages on residential or commercial real estate is included in this exposure class. 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.

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

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. Exposure reported as short-term claims receives a risk weight based on the short term external rating of the institution. Short-term exposure to institutions and corporate 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 supervisory authorities. However, this exposure class is not used for exposure to institutions treated according to the central government risk weighted method.
- Other items
  1. Tangible assets, prepayments and accrued income where no counterpart can be determined, holdings of equity etc are assigned a risk weight of 100%.
  2. Cash are assigned a 0% risk weight.

13.4 Calculation of RWA

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

13.4.1 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 and input fixed by the financial authorities supervisory for LGD, EAD and maturity.

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

13.4.1.1 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. An off-balance product, such as a credit facility, does not contain the same risk as an on-balance exposure, since it is rarely fully utilised at the time of the customer's default. A CCF is multiplied to the off-balance amount to estimate how much of the exposure will be drawn at default. In the FIRB approach the CCFs are fixed by financial supervisory authorities.

13.4.1.2 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.

13.4.1.3 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. When setting the LGD to fixed levels the CRD has taken into account downturn in the economy.

The LGD value in the retail IRB approach is based on internal estimates. LGD estimates are based on the experience and practices in Nordea as well as the external environment in which the bank operates. Nordea uses LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. The LGD pools are based on collateral types. These codes are mapped to LGD pools depending on country and customer type (household or SME).

13.4.1.4 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 purposes. Furthermore the collateral management process and the terms in the collateral agreements have to fulfil the minimum requirements (such as procedures for monitoring of market values, insurance and legal certainty) in the capital adequacy regulations. Collateral items and guarantees which can reduce the capital requirement are called eligible collateral. The eligibility requirements are explicitly mentioned in the CRD for physical exposure in FIRB, which are currently used for corporate and institution exposure. Financial supervisory authorities may permit the use of other physical collaterals only if two specific requirements are met in addition to the general minimum requirements listed further down in the document. The first requirement is that there is a liquid market and the second that there are established market prices.

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

1. Adjusted exposure amount
   The comprehensive method for financial collateral such as cash, bonds and stocks. The exposure amount is adjusted with regards to the financial collateral. The size of the adjustment depends on the volatility of the collateral and the type of exposure. Nordea uses volatility adjustments specified by the financial supervisory authorities (supervisory haircuts).
2. Adjusted PD (substitution of PD)
   The substitution method is used for guarantees, which implies that the PD for the customer is substituted. This means that the credit risk in respect of the customer is substituted by the credit risk of the guarantor and the risk thereby reduced. Hence, an exposure fully guaranteed will be assigned the same capital requirement as if the loan was initially granted to the guarantor rather than the customer. The PD value of exposure is adjusted if the capital requirement for both the customer and the guarantor is calculated according to the IRB approach.
3. Adjusted LGD
   The LGD value is reduced if the exposure in the IRB approach (i.e. to large corporate and institutions) is fully collateralised with real estates (commercial and residential), other physical collateral or receivables. The size of the LGD adjustment is stipulated by the CRD in the FIRB approach. The LGD value in the retail IRB approach is based on internal estimates.
4. Adjusted risk weight
   Netting agreements are mainly used for transactions in derivatives in the trading book. The exposure value is adjusted so that the capital requirements for credit risk reflect only the net position of derivative contracts with positive and negative values under the netting agreement. Netting across product categories is not used.

Nordea uses a wide variety of risk mitigation techniques in several different markets which contribute to risk diversification and credit protection. The different credit risk mitigation techniques such as collateral, guarantees, netting agreements and covenants are used to reduce the credit risk. All credit mitigation activities are not recognised for capital adequacy purposes since they are not defined as eligible, i.e. covenants. Loan documentations and similar agreements can include covenants such as financial ratios that the debtor has to comply with. Receivables with an original maturity of more than one year are not eligible for capital adequacy purposes. Another example is assets that could not be sold in a liquid market. Such assets could be pledged but are not assigned any value in the credit process, nor in the regulatory capital calculations.

13.4.1.5 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 types on-balance, off-balance and derivatives. For securities financing the maturity parameter is 0.5 years.

13.4.2 Standardised approach

The parts remaining in the standardised approach are foreign branches, subsidiaries in Poland, Luxemburg and Russia and the retail exposure in the finance companies as well as exposure towards sovereigns. The standardised measures credit risk pursuant to fixed risk weight and is the least sophisticated capital calculations. The application of risk weight in standardised is given by financial supervisory authorities and is based on the exposure class to which the exposure is assigned. Some exposure classes are derived from the type of counterparty while others are based on the asset type, product type, collateral type or exposure size.

The EAD of an on-balance sheet exposure in the standardised 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.

In calculating RWA with the standardised approach, external rating may be used as an alternative to use the fixed risk weight. The external ratings must come from eligible external credit assessment institutions.

List of abbreviations

ADF	Actual Default Frequency
AIRB	Advanced Internal Rating Based approach
ALCO	Asset and Liability Committee
ALM	Asset Liability Management
BCBS	Basel Committee on Banking Supervision
CCF	Credit Conversion Facto
CCO	Chief Credit Officer
CDO	Collateralised Debt Obligation
CDS	Credit Default Swap
CEBS	Committee of European Bank Supervisors
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
CLN	Credit Linked Notes
CLS	Continuous Linked Settlement
CMO	Collateralised Mortgage Obligations
CP	Commercial Paper
CRD	EU's Capital Requirements Directive
CRC	Comprehensive Risk Charge
CRO	Chief Risk Officer
CVA	Credit Value Adjustment
EAD	Exposure at Default
EC	Economic Capital
ECC	Executive Credit Committee
EEA	European Economic Area
EL	Expected Loss
EP	Economic Profit
ERAT	Environmental Risk Assessment Tool
EU	European Union
EV	Economic Value
FFFS	Finansinspektionens Författningssamling (The Swedish FSA's directive)
FIRB	Foundation Internal Rating Based approach
FSA	Financial Supervisory Authority
FTD	First-to-Default
FX	Foreign Exchange
GCC	Group Credit Committee
GEM	Group Executive Management
GEM CC	Group Executive Management Credit Committee
GICS	Global Industries Classification Standard
GVC	Group Valuation Committee
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standard
IRB	Internal Rating Based approach
IRC	Incremental Risk Charge
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LTV	Loan to Value
MCEV	Market Consistent Embedded Value model
MCR	Minimum Capital Requirement
NLP	Nordea Life and Pensions
NSFR	Net Stable Funding Ratio
OTC	Over The Counter (derivatives)
ORX	An international database for incidents
PD	Probability of Default
PIT	Point-in-Time
QIS	Quantitative Impact Study
QRA	Quality and Risk Analysis
RWA	Risk Weighted Amount
S&P	Standard & Poor's
SA	Standardised Approach
SIFI	Systemically Important Financial Institutions
SIIR	Structural Interest Income Risk
SME	Small and Medium-sized Enterprises
SPE	Special Purpose Entity
SPRAT	Social and Political Risk Assessment Tool
SREP	Supervisory Review and Evaluation Process
SRC	Solvency Capital Requirement
SRP	Supervisory Review Process
TTC	Through-the-Cycle
tVaR	Tail-VaR
VaR	Value at Risk