



Capital and Risk Management (Pillar III) Report

Nordea Group 2012

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Nordea hereby presents its capital position and how the size and composition of the capital base is related to the risks as measured in risk-weighted assets (RWA). The national capital adequacy legislation is based on Directive 2006/48/EC of the European Parliament and of the Council, commonly referred to as the Capital Requirements Directive (the CRD), which is in turn based on the Basel II framework issued by the Basel Committee on Banking Supervision. This Pillar III disclosure follows the Swedish Capital Adequacy and Large Exposure Act (2006:1371) and the Swedish Financial Supervisory Authority's regulation and general guide-lines regarding public disclosure of information concerning capital adequacy and risk management (FFFS 2007:5, 2010:12, 2011:3 and 2011:46), which are based on the CRD. This report constitutes a comprehensive disclosure on risks, risk management and capital management. In a summarised form, the disclosure is also presented in Nordea Group's Annual Report 2012. The Pillar III disclosure is made for the Nordea Group and for the subgroups Nordea Bank Danmark Group, Nordea Bank Finland Group and Nordea Bank Norge Group as well as Nordea Bank Polska S.A. These reports are presented on information is published quarterly, included in the quarterly report for the entity. The format, frequency and content of the disclosures follow, to as large extent as possible with regards to local legislation, a common set-up in Nordea. Nordea has stated the common principles in a policy and instruction for disclosing information on capital adequacy in the Nordea Group.

1. Highlights of 2012

Nordea continued to show a solid risk position and improved in capital ratios as well as in credit quality in 2012. This was reflected in an increased core tier 1 capital ratio to 13.1%, a slightly positive overall effect from rating migration and a loan loss ratio of 28bp, broadly in line with Nordea's credit risk appetite. Nordea has set a new capital policy, which sets targets for the core tier 1 ratio to be above 13% and for the total capital ratio to be above 17%.

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

Nordea is confident and well-prepared for the future due to strong profitability, solid quality in its well-diversified credit portfolio, a strong capital position and a diversified funding base. Nordea is fully compliant with the liquidity coverage ratio (LCR) requirements, both on Group level and on EUR and USD currency level. Nordea will be able to meet the CRD IV/CRR capital requirements in due time for implementation.

Continued solid credit quality and strong risk management

Credit quality remained overall solid in 2012 with a loan loss ratio of 28bp, which is broadly in line with the credit risk appetite over a cycle. This loan loss level included continued elevated levels of loan loss provisions in certain segments in Denmark and in shipping. The effect from migration in the portfolio was overall slightly positive. Impaired loans ratio increased to 188bp. In 2012, the credit exposure decreased by 1%.

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 VaR in 2012 decreased to an average of EUR 43m (EUR 72m).

Capital ratios already at strong levels – new capital policy established

The core tier 1 capital ratio excluding transition rules, increased further in 2012, due to strong profit generation of the Group as well as RWA efficiency activities, to reach 13.1% by the end of 2012 (last year 11.2%).

Nordea has established a new capital policy, which states that, no later than 1 January 2015, the target for the core tier 1 capital ratio is to be above 13% and for the total capital ratio to be above 17%. The core tier 1 capital ratio is expected to stay above 13% during 2013 and onwards, including the effects from regulatory changes and model rollouts. The dividend policy remains unchanged. Excess capital is expected to be distributed to shareholders.

The capital policy is based on management's current best view on capitalisation although there is still uncertainty regarding the final outcome of the CRD IV/CRR. The targets are considered minimum targets under normal business conditions, as the regulatory framework is dynamic through the cycle.

Strong funding name maintained, high long-term funding activity and LCR compliant

In the funding and liquidity risk area, Nordea maintained its position as one of the strongest names. Nordea, by virtue of its well-recognised name and strong rating, was able to actively use all its funding programmes during 2012 and has continued to see an inflow of new investor names, both from Europe and from the US. Approximately EUR 29bn was issued in long-term debt during 2012, excluding Danish covered bonds (last year EUR 32bn).

Nordea is fully compliant with the liquidity coverage ratio (LCR) requirements, with LCR at year-end on Group level of 127%, in EUR 181% and in USD 283%.

CRD IV/CRR – new regulations for capital and liquidity risk

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

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

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

2. Governance of risk and capital management

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

2.1 The financial group 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 ensuring sufficient capital within all entities and subgroups. This report focuses on the financial group due to the Pillar III legislation, however risks in the insurance business are 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) and its 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 2.1 at the end of this chapter discloses the undertakings that have been consolidated and deducted from the capital base.

2.2 Risk and capital management

2.2.1 Risk and capital management principles and control

2.2.1.1 Board of Directors and Board Risk Committee The Board of Directors has the ultimate responsibility for limiting and monitoring the Group's risk exposure as well as for setting targets for the capital ratios and risk appetite. Risk is measured and reported according to common principles and policies approved by the Board of Directors, which also decides on policies for credit, market, liquidity, business, life and operational risk management as well as the ICAAP (for further information on the ICAAP, refer to chapter 10). All policies are reviewed at least annually.

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

The Board Risk Committee assists the Board of Directors

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

2.2.1.2 Responsibility of CEO and GEM

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

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

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

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

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

2.2.1.3 Responsibility of CRO and CFO

Figure 2.1 illustrates Nordea's governance structure of risk, liquidity and capital management.

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

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

Figure 2.1 Governance of risk, liquidity and capital management





Group Corporate Centre (Head: CFO) Risk management framework Liquidity management framework Capital management framework Capital adequacy framework Monitoring and reporting

2.2.2 Risk appetite

Risk appetite within Nordea is defined as the level and nature of risk that the bank is willing to take in order to pursue the articulated strategy on behalf of shareholders, and is defined by constraints reflecting the views of shareholders, debt holders, regulators and other stakeholders.

(Head: CRO)

The Board of Directors is ultimately responsible for the overall risk appetite of the Group and for setting principles for how risk appetite is managed. The Board Risk Committee assists the Board of Directors in fulfilling these responsibilities by reviewing the development of the risk profile in relation to risk appetite and making recommendations regarding changes to the Group's risk appetite.

Nordea's risk appetite framework is based on explicit top-down risk appetite statements ensuring comprehensive coverage of key risks faced by the Group. These statements collectively define the boundaries for Nordea's risk-taking activities and help identify areas with scope for additional risk taking. The statements are approved by the Board of Directors, and set the basis for the risk reporting structure. Moreover, the framework supports management decision processes such as planning and target setting.

The risk appetite framework considers key risks relevant to Nordea's business activities and is on an aggregate level represented in terms of credit risk, market risk, operational risk, solvency, compliance/non-negotiable risks and liquidity risk. Figure 2.2 presents an overview of the risk appetite

measures of Nordea.

The risk appetite framework includes the cascading of risk appetite levels to business areas and segments in terms of allocated risk level thresholds and operational risk limits. On these levels Group Risk Management supports the business areas with setting risk limits that reflect the overall risk appetite, decided by the Board of Directors.

Figure 2.2 Overview of the risk appetite measures

Stress testing is an integral component within the risk appetite framework. Stress tests used within the risk appetite framework ensure alignment between scenarios used in the regulatory capital framework and the risk appetite framework, and therefore the planning and target setting process.

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 the consequences of the risks. Management of risk is proactive, emphasising training and risk awareness. The Nordea Group maintains a high standard of risk management by means of applying available techniques and methodology to its own needs.

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

Risk appetite reporting is done quarterly to the Risk Committee, GEM, the Board Risk Committee and the Board of Directors.

Detailed risk information, covering all risks as well as capital adequacy for the consolidated group, is regularly reported to Risk Committee, GEM and Board of Directors. In addition, the Board of Directors in each legal entity regularly receives local risk reporting. The internal capital

requirement includes all types of risks and is regularly reported to ALCO.

Group Internal Audit independently evaluates the processes regarding risk and capital management in accordance with the annual audit plan.

2.2.4 Different risk types within capital adequacy

There are different risk types within the CRD. These are described in further detail below.

2.2.4.1 Risks in Pillar I

Pillar I, which forms the base for the regulatory capital requiremens, covers three risk types – credit risk, market risk and operational risk:

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

2.2.4.2 Risks in Pillar II

In Pillar II, additional risks that are not included in Pillar I, are measured and assessed. These are managed and measured although they are not included in the calculation of the minimum capital requirements. In the calculation of economic capital (EC) Pillar II risks as well as risk in the life insurance operations are included. Examples of Pillar II risk types that are included in the EC framework are business risk, interest rate risk in the banking book and concentration risk;

- Business risk is the earnings volatility inherent in all business due to changes in the economic and competitive environment. Business risk in the EC framework is calculated based on the observed volatility in historical profit and loss that is attributed to business risk.
- Interest rate risk in the banking book consists of exposures deriving from the balance sheet (mainly lending to public and deposits from public) and from Group Treasury's investment and liquidity portfolios. The interest rate

risk inherent in the banking book is measured in several ways on a daily basis and in accordance with the financial supervisory authorities' requirements.

- Pension risk is included in market risk in the EC framework and includes equity risk, interest rate risk and FX risk in the Nordea-sponsored defined benefit pension plans.
- Life insurance risk is the risk posed by changes in mortality rates, longevity rates and disability rates.
- Real estate risk consists of exposure to owned and leased properties and is included in market risk in the EC framework.
- Concentration risk is the credit risk related to the degree of diversification in the credit portfolio and includes both single name concentration risk and sector/geography concentration risk. Concentration risk is included in the EC framework.

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

2.3 Roll-out plan

Nordea is approved by the financial supervisory authorities to use the Foundation Internal Rating Based (FIRB) approach for corporate and institution exposure classes in the Nordic countries. Nordea is also approved to use the Internal Rating Based (IRB) approach for the retail exposure class in the Nordic countries (with the exception of the finance companies which were not applied for).

During 2012, FIRB approval was received for corporate and institutional exposure classes held by Nordea Bank AB and its subsidiary Nordea Bank Finland Abps in their International Units and branches in Estonia, Latvia and Lithuania.

In December 2012, Nordea was approved by the Swedish and Finnish FSAs to use the internal model method (IMM) for calculating regulatory capital for counterparty credit risk. As of 31 December 2012, Nordea was also in the process of obtaining Advanceed IRB (AIRB) approval for their corporate and institution exposure classes in the Nordic countries.

The standardised approach is currently used for the remaining portfolios however Nordea aims to continue the roll-out of the IRB approaches in the forthcoming years.

Table 2.1 Specification over undertakings consolidated/deducted from the Nordea Group, 31 December 2012

	Number of shares	Book value FURm	Voting power of holding	Domicile	Consolidation
Crown we downaling on included in the Nordon Crown		Dorum	nonunig	Domicile	incutod
Nordea Bank Finland Plc	1 030 800 000	5 956	100%	Holeinki	nurchasa mathad
Nordea Dank Finland Fic	1,030,800,000	5,950	100 /0	Tielsiiiki E	purchase method
Nordea Finance Finland Ltd			100%	Espoo	purchase method
Nordea Bank Danmark A/S	50,000,000	4,010	100%	Copenhagen	purchase method
Nordea Finans Danmark A/S			100%	Høje Taastrup	purchase method
Nordea Kredit Realkreditaktieselskab			100%	Copenhagen	purchase method
Fionia Asset Company A/S			100%	Copenhagen	purchase method
Nordea Bank Norge ASA	551,358,576	2,818	100%	Oslo	purchase method
Nordea Eiendomskreditt AS			100%	Oslo	purchase method
Nordea Finans Norge AS			100%	Oslo	purchase method
Privatmegleren AS			100%	Oslo	purchase method
Nordea Bank Polska S.A.	55,061,403	363	99%	Gdynia	purchase method
OOO Promyshlennaya Companiya Vestcon	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	241	100%	Stockholm	purchase method
Nordea Bank S.A.	999,999	454	100%	Luxembourg	purchase method
Nordea Finans Sverige AB (publ)	1,000,000	116	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	232	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
Nordea Life Holding AB	1,000	707	100%	Stockholm	purchase method
Other companies		1			purchase method
Total included in the capital base		17,659			

Number of shares	Book value EURm	Voting power of holding	Domicile	Consolidation method
	1,236	100%	Stockholm	
	1,236			
	191	23%	Oslo	
	2	20%	Espoo	
	13	39%	Copenhagen	
	0			
	206			
	Number of shares	Book value EURm 1,236 1,237 1,238 1,238 1,239 1,231 1,231 1,232 1,233 1,234 1,235 1,235 <	Book value EURm Voting power of holding 1,236 100% 1,236 100% 1,236 2 191 23% 2 20% 13 39% 0 206	Number of shares Book value EURm Voting power of holding Domicile 1,236 100% Stockholm 1,236 100% Stockholm 1,236 100% Stockholm 1,236 23% Oslo 2 20% Espoo 13 39% Copenhagen 0 206 206

3. Capital position

Nordea strengthened its capital position during 2012. As part of the New Normal strategy, Nordea undertook RWA efficiency activities which served to decrease RWA by EUR 7.9bn. The capital position was further improved due to strong profit generation and an increased total core tier 1 ratio of 190bp during the year.

3.1 Capital adequacy assessment

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

The internal capital adequacy assessment process (ICAAP) is established to determine internal capital requirements that reflect all risks and to assess capital adequacy.

3.2 Regulatory capital requirements and RWA

Regulatory capital requirements are defined in the Capital Requirements Directive (the CRD – EU Directive 2006/48/ EC – which is the consolidated version incorporating the latest amendments, CRD III). The capital adequacy figures presented in this report follow the CRD definitions.

Table 3.1 presents an overview of Nordea's capital requirements and RWA as of December 2012, split by risk types and with comparison to previous year. Of the RWA, credit risk accounts for approximately 86%, while operational risk accounts for 10% and market risk 4%.

The table also includes information about the approaches used for calculation of the RWA. Out of the total RWA for credit risk exposure, 84% of the exposure has been calculated under the IRB approach and 16% under the standardised approach.

Total RWA for credit risk, market risk and operational risk of EUR 167.9bn is adjusted with an additional 46.6bn due to transition rules, ending at a total RWA of EUR 214.5bn including transition rules. The drivers behind the development of RWA are disclosed in Figure 3.1.

RWA excluding transition rules decreased by EUR 17.3bn during 2012. The FX effect had a negative impact during 2012 and increased RWA by EUR 1.9bn as both the SEK and the NOK strengthened considerably against the EUR during the year. The general credit quality in all IRB portfolios improved resulting in a reduction of RWA of EUR 3.4bn. Additionally, the decreased volumes (excluding roll-outs effects) in the corporate and institution portfolios contributed to a lower RWA. The standardised portfolio increased RWA (excluding roll-outs effects) as a result of higher risk weights for housing loans denominated in foreign currencies in Poland.

Nordea also continued its efficient capital and RWA management activities which served to decrease RWA by EUR 7.9bn. A main contributing factor is the roll-outs effect where Nordea has received approval to use a IRB approach. Nordea received FIRB approval for the corporate and institution portfolio in International Units which decreased RWA by EUR 3.1bn. The corporate and institution portfolios in the Baltics were also approved for FIRB, which served to reduce RWA by an additional EUR 1.6bn. Other examples of RWA efficiency activities are improved collateral sourcing, enhanced treatment of guarantees as well as usage of centralised clearing for derivative exposures.

3.3 New capital policy

Nordea has established a new capital policy, which states that, no later than 1 January 2015, the target for the core tier 1 capital ratio is to be above 13% and for the total capital ratio to be above 17%. The core tier 1 capital ratio is expected to stay above 13% during 2013 and onwards, including the effects from regulatory changes and model rollouts. The dividend policy remains unchanged. Excess capital is expected to be distributed to shareholders.

The capital policy is based on management's current best view on capitalisation although there is still uncertainty regarding the final outcome of the CRD IV/CRR. The targets are considered minimum targets under normal business conditions, as the regulatory framework is dynamic through the cycle.

Figure 3.1 Drivers behind the development of RWA excluding transition rules

Table 3.1 Capital requirements and RWA

	2012		2011		
	Capital		Capital		
EURm	requirements	RWA	requirements	RWA	
Credit risk	11,627	145,340	12,929	161,604	
IRB	9,764	122,050	9,895	123,686	
– of which corporate	7,244	90,561	6,936	86,696	
– of which institution	671	8,384	897	11,215	
– of which retail	1,737	21,710	1,949	24,367	
- of which retail SME	915	11,439	1,041	13,017	
- of which retail mortgage	721	9,007	800	10,005	
- of which retail other	101	1,264	108	1,345	
– of which other	112	1,395	113	1,408	
Standardised	1,863	23,290	3,034	37,918	
– of which sovereign	34	426	43	536	
– of which institution	47	583	90	1,127	
– of which corporate	732	9,160	1,885	23,557	
– of which retail	860	10,752	795	9,934	
– of which other	190	2,369	221	2,764	
Market risk	506	6,323	652	8,144	
 of which trading book, Internal Approach 	312	3,897	390	4,875	
 of which trading book, Standardised Approach 	138	1,727	206	2,571	
- of which banking book, Standardised Approach	56	699	56	698	
Operational risk	1,298	16,229	1,236	15,452	
Standardised	1,298	16,229	1,236	15,452	
Sub total	13,431	167,892	14,817	185,200	
Additional capital requirement according to transition rules	3,731	46,631	3,087	38,591	
Total	17,162	214,523	17,904	223,791	

Table 3.2 Key capital adequacy figures

EURbn	Q4 2012	Q3 2012	Q2 2012	Q1 2012	Q4 2011
RWA including transition rules	214.5	223.3	222.6	223.7	223.8
RWA excluding transition rules	167.9	179.0	181.3	182.3	185.2
Capital requirement including transition rules	17.2	17.9	17.8	17.9	17.9
Core tier 1 capital	22.0	21.8	21.3	21.1	20.7
Tier 1 capital	24.0	23.8	23.3	23.0	22.6
Capital base	27.3	27.3	26.0	25.9	24.8
Capital ratios excluding transition rules					
Core tier 1 capital ratio	13.1%	12.2%	11.8%	11.6%	11.2%
Tier 1 capital ratio	14.3%	13.3%	12.8%	12.6%	12.2%
Capital ratio	16.2%	15.3%	14.3%	14.2%	13.4%
Capital adequacy quotient (Capital base/capital requirement)	2.0	1.9	1.8	1.8	1.7
Capital ratios including transition rules					
Core tier 1 capital ratio	10.2%	9.8%	9.6%	9.4%	9.2%
Tier 1 capital ratio	11.2%	10.7%	10.5%	10.3%	10.1%
Capital ratio	12.7%	12.2%	11.7%	11.6%	11.1%
Capital adequacy quotient (Capital base/capital requirement)	1.6	1.5	1.5	1.4	1.4

3.4 Capital ratios

The Group's core tier 1 capital ratio excluding transition rules was 13.1% at the end of 2012, representing a 190bp improvement since 2011. Improved capital ratios were achieved through efficient RWA management in combination with strong profit generation.

The tier 1 capital ratio ended at 14.3% (12.2%), while the corresponding capital ratio ended at 16.2% which is an increase from 13.4% in 2011. The core tier 1 capital ratio including transition rules was 10.2% (9.2%), while the tier 1 capital ratio and the capital ratio including transition rules were 11.2% (10.1%) and 12.7% (11.1%) respectively.

Table 3.2 shows the yearly and quarterly capital adequacy development during 2012, both including and excluding transition rules.

Figure 3.2 illustrates the development of the core tier 1 ratios while Figure 3.3 shows the drivers behind the development of the capital ratio excluding transition rules.

3.5 Internal Guarantee

On the 21st of December 2012 Nordea Bank AB (publ) entered into a guarantee agreement with its wholly-owned subsidiary Nordea Bank Finland Plc. The agreement will transfer the credit risk attached to an identified portfolio of corporate exposures held by Nordea Bank Finland Plc to Nordea Bank AB (publ). The agreement implies that Nordea Bank AB (publ) guarantees the majority of the credit risk exposures in the exposure class IRB corporate in Nordea Bank Finland Plc. As a result, the risk weighted assets will decrease in the Nordea Bank Finland Plc and increase in Nordea Bank AB (publ.). All effects of the guarantee are eliminated on the consolidated Nordea Group level and it thereby do not affect the figures in this report.

3.6 Financial conglomerate

Nordea is part of the Sampo conglomerate and falls under the same supervisory authority (the Finnish FSA) as the Sampo Group in accordance to the Act on the Supervision of Financial and Insurance Conglomerates (2004/699), based on Directive 2002/87/EC.

Figure 3.2 Development of core tier 1 capital adequacy ratios

4. Credit risk

The overall credit quality in Nordea's portfolio is solid and continued to improve in 2012. Nordea's credit portfolio is well diversified both in terms of industry sectors and geography. Impaired loans and loan losses increased in 2012, mainly concentrated to two specific areas; Denmark and the shipping segment.

4.1 Credit risk management 4.1.1 Governance of credit risk

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

Within the powers-to-act granted by the Board of Directors, credit risk limits are approved by credit decisionmaking bodies on different levels in the organisation. Customer rating and the size of the exposure determine at what level the decision will be made. The Group Executive Management Credit Committee decides on proposals for the largest exposures and proposals related to major principle issues however responsibility for the credit risk lies within each customer responsible unit. See Figure 4.1 for the credit decision-making structure for main operations.

4.1.2 Management of credit risk

Credit risk is defined as the risk of loss if customers fail to fulfil their agreed obligations and the pledged collateral does not cover existing claims. The credit risk stems mainly from various forms of lending, but also from issued guarantees and documentary credits, such as letters of credit where Nordea has potential claims on the customers. Furthermore, credit risk includes counterparty credit risk, transfer risk and settlement risk. Counterparty credit risk is the risk that the counterpart in an FX, interest, commodity, equity or credit derivative contract defaults prior to maturity of the contract at which time Nordea has a claim on the counterpart. Settlement risk is the risk of losing the principal on a financial contract, due to a counterpart's default during the settlement process. Further information about counterparty credit risk and settlement risk is available in section 4.4.5. Transfer risk is a credit risk attributable to the transfer of money from the country where the borrower is domiciled, and is affected by changes in the economic and political situation of the countries concerned. See section 4.8.3 for further information about transfer risk.

For monitoring the distribution of a portfolio, improving risk management and defining a common strategy, there are specific industry credit policies and principles in place that establish requirements and caps. The concentration risk in specific industries is monitored by industry monitoring

Figure 4.1 Credit decision-making structure for main operations

*Making decisions and allocations within limits approved by ECC

groups. Industry credit policies are established for industries where at least two of the following criteria are fulfilled:

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

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

- Shipping, Oil and Offshore
- Energy
- Leveraged buy-out
- Hedge fund
- Commercial real estate

Industry credit principles apply to:

- Forest
- Telecom
- Aircraft

All industry credit policies are approved by the Executive Credit Committee and confirmed annually by the Board Risk Committee. The industry credit principles are approved by Group Credit Committee Wholesale Banking and confirmed by Executive Credit Committee.

Decisions regarding credit risk limits for customers and customer groups are made by the relevant decision-making bodies on different levels within the Group. The responsibility for credit risk lies within the customer responsible unit, which continuously assesses customers' ability to fulfil their obligations and identifies deviations from agreed conditions and weaknesses in the customers' performance. In addition to building strong customer relationships and understanding each customer's financial position, monitoring of credit risk is based on all available information about the customer and macroeconomic factors. Information such as late payments data, behavioural scoring and rating migration are important parameters in the internal monitoring process. If new information indicates the need, the customer responsible unit must reassess the rating and assess whether the customer's repayment ability is threatened. If it is considered unlikely that the customer will be able to repay his/her debt obligations in full and the situation cannot be satisfactorily remedied, the customer must be tested for impairment. See section 4.1.6 for more details on impairment.

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

The follow-up of individual work-out cases is part

of the quarterly risk review process. In this process the impairment of individual customers and customer groups is also assessed and the actions related to handling of work-out customers are reviewed and followed up.

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

4.1.3 Measurement of credit risk

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

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

4.1.4 Credit risk appetite

Nordea's risk appetite framework forms the basis for a holistic risk reporting structure and supports key decision processes such as strategy, planning and target setting.

The credit risk appetite statements are defined in terms of credit risk concentration (limits for single names, specific industries and geographies), long-term credit quality (expected loss), short-term credit quality (probability of default) and loan losses under plausible stress scenarios.

4.1.5 Credit risk mitigation and collateral policy

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

Pledging of collateral is the main credit risk mitigation method.

Local instructions emphasise that national practice and routines are timely and prudent in order to ensure that collateral items are controlled by Nordea and that loans and pledge agreements as well as collaterals are legally enforceable. Nordea is therefore entitled to liquidate collateral in the event of the obligor's default and 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 (the four Nordic countries, the Baltics, Poland and Russia)
- Other tangible assets such as machinery, equipment, vehicles, vessels, aircrafts and trains
- Inventory, accounts receivable and assets pledged under floating charge
- Financial collateral such as listed shares, listed bonds and other specific securities
- Deposits
- Guarantees
- Insurance policies (capital assurance with surrender value)

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

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

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

4.1.6 Definition and methodology of impairment

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

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

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

4.2 Link between the balance sheet and credit risk exposure

This section discloses the link between the loan portfolio as defined by accounting standards and exposure as defined in 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 14.2 and 14.3.

Original exposure is the exposure before taking into account substitution effects stemming from credit risk mitigation, credit conversion factors (CCFs) for off-balance sheet exposure and allowances within the standardised approach. In this report, however, exposure is defined as exposure at default (EAD) for IRB exposure and exposure value for standardised exposure, unless otherwise stated. In accordance with the CRD, credit risk exposure presented in this report is divided between exposure classes where each exposure class is divided into exposure types as follows:

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

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

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

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

4.2.1 On-balance sheet items

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

- Market risk related items in the trading book, such as certain interest-bearing securities and pledged instruments.
- Repos, derivatives and securities lending. These transactions are either included in the calculation of market risk

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

Other assets and propaid expanses	5,425	20.067	55	-332	-3,093	7 185	100%	7 185
Derivatives	118,789	0	-118,660	-129	0 3.093	0		0
Interest-bearing securities and pledged instruments	102,909	-22,680	0	-23,120	0	57,108	100%	57,108
Loans to the public	346,251	-4,502	-26,178	-571	3,029	318,028	100%	317,409
Loans to central banks and credit institutions	18,574	0	-8,146	-2	5	10,431	100%	10,431
Cash and balances with central banks	36,060	0	0	-1	0	36,060	100%	36,060
EURm On-balance sheet items	Balance sheet (accounting)	Items related to market risk	derivatives, securities lending	Life insurance operations	Other	Original exposure	Credit Conversion Factor %	Exposure ¹

Off-balance sheet items in the Annual Report	Balance sheet (accounting)	Life insurance operations	Included in derivatives & sec fin	Included in CRD off-balance
Assets pledged as security for own liabilities	164,902	-21,312	-143,590	
Other assets pledged	4,367	0	-4,366	
Contingent liabilities	21,157	-51		21,106
Commitments	86,207	-661	-40	85,506
Total	276.632	-22,023	-147,997	106.612

Total	106,612	7,026	113,638		47,966
Other (leasing and documentary credits)	1,420	20	1,440	27%	387
Guarantees	20,024	1	20,025	60%	11,925
Loan commitments	11,704	2,722	14,426	32%	4,589
Checking accounts	20,540	4,198	24,738	22%	5,540
Credit facilities	52,925	85	53,009	48%	25,525
Off-balance sheet items in the CRD	(from AR)	(not in AR) ²	Exposure	Factor %	Exposure
	in CRD	Included	Original	Credit	
	Included				

Derivatives Securities Financing Transactions	34,456	99%	34,263
& Long Settlement Transactions	2,170	100%	2,170
Total credit risk (CRD definition)	579,076		512,591

The on-balance sheet 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.
 Off-balance sheet exposures included in the CRD but not included in the Annual Report (AR), such as exposures related to undrawn credit facilities which are unconditionally cancellable.

in the trading book or reported as separate exposure types (derivatives or securities financing).

- Life insurance operations (due to solvency regulation).
- Other, mainly allowances, intangible assets and deferred tax assets.

4.2.2 Off-balance sheet items

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

- Life insurance operations (due to solvency regulation).
- Assets pledged as security for own liabilities and Other assets pledged (apart from leasing). These transactions are reported as securities financing (i.e. a separate exposure type).
- Derivatives.

4.2.3 Derivatives and securities financing

Derivatives can be both on-balance (i.e. positive fair value) and off-balance (i.e. nominal amounts) in accordance with accounting standards. However, in the CRD, the derivatives and securities financing are reported as separate exposure types. Also, repurchase agreements and securities lending/borrowing transactions are in the balance sheet calculated based on nominal value. In the CRD calculations these exposure types are determined net of the collateral value.

4.3 Development of exposure and RWA

This section includes an overview of the credit risk portfolio distribution. For more detailed information on the principles for RWA calculations under the IRB and standardised approaches see appendix 14.2 and 14.3.

Table 4.2 shows the original exposure, the exposure, the average risk weight, RWA and the capital requirements, distributed by exposure class. Some exposure classes have been merged in the table due to insignificant exposure.

During the year, total exposures decreased by EUR 3.8bn or 0.7%, despite the development in FX rates which increased the exposure amount reported in euro during 2012.

The IRB portfolio increased and the standardised portfolio decreased due to Nordea receiving permission to calculated RWA under the Foundation IRB (FIRB) approach.

In the IRB portfolio, the decrease in institutions exposures was mainly driven by reduced derivative exposures, which decreased both as a result of changes in market values as well as in terms of nominal amounts.

The increase in the IRB corporate portfolio derived from the roll-out of corporate portfolios in the Baltics and International Units as well as FX effects.

The retail IRB portfolio increased in exposure during 2012 driven by the mortgage portfolio and FX effects.

Despite increased IRB exposures, the IRB credit risk RWA decreased by EUR 1.6bn as a result of improved risk weights in all IRB exposure classes. The total average risk weight in the IRB corporate portfolio was 52% at the end of 2012 and 14% in the IRB retail portfolio. The decrease was to a large extent driven by credit quality improvements such as positive rating migration as well as improved collateral coverage. Additionally, RWA efficiency activities were undertaken, which contributed to a further decrease in RWA.

In the standardised portfolio, exposures decreased by 11.9% or EUR 15bn. The main reason was the rollout of corporate and institution portfolios to the IRB approach. The retail portfolio decreased, however this was largely offset by increases in the exposures secured by real estate. Exposures increased towards central governments and central banks, which have a risk weight of 0%. Overall, these changes had a positive impact on the average risk weight in the standardised portfolio.

4.4 Credit risk exposure 4.4.1 Exposure by exposure type

Table 4.3 shows exposures split by exposure classes and exposure types for 2012 and 2011 respectively. As of year-end 2012, 78% of the total credit risk exposure was calculated using the IRB approach. The main part of the exposure is within the IRB corporate and IRB retail portfolios.

During 2012, a slight decrease was seen on total exposure level primarily due to decreases in the corporate and institutions portfolios. The largest shift in total exposures is related to on-balance sheet exposures in the corporate portfolio, which carried a risk weight of 100% before the roll-out to the IRB approach. Therefore the largest decrease in RWA is related to the corporate portfolio in the standardised portfolio. Further details on these roll-outs can be found in section 2.3.

Derivative exposures, especially within the insitutions portfolio significantly decreased during the year. See section 4.4.5 for further information.

The average quarterly exposure split by exposure type and exposure class is shown in Table 4.4.

4.4.2 Exposure by geography

Nordea is geographically well diversified as no market accounts for more than 26% of the total exposure, as can be seen in Table 4.5. The exposures in Sweden and Finland represent 25% and 26% of the total exposure in the Group respectively, while Denmark accounts for 22% and Norway 16%.

The increase in corporate IRB exposures is mainly referable to the International Units and the Baltic countries where exposures moved from the standardised approach to the IRB approach. The increase in the IRB retail portfolio was largely due to increased lending to the the Nordic countries.

In Finland, the decrease in the IRB portfolio is attributable to lower institution and corporate exposures. For institutions the decrease is a result of decreased derivative exposures. In all other countries the total IRB exposures increased compared to previous year. The figures in Table 4.5 are based on where the exposure is booked and does not take the internal guarantees between the parent company and its subsidiaries into account.

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

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes	1	1	0		1
Institution	65,803	63,852	13%	8,384	671
Corporate	224,280	175,203	52%	90,560	7,245
Retail	166,610	160,583	14%	21,710	1,737
– of which mortgage	132,549	130,478	9%	11,440	915
– of which other retail	30,601	27,091	33%	9,007	721
– of which SME	3,460	3,014	42%	1,264	101
Other non-credit obligation assets	1,899	1,396	100%	1,395	112
Total IRB approach	458,592	401,034	30%	122,050	9,764
Standardised exposure classes					
Central government and central banks	65,868	70,409	1%	356	28
Regional governments and local authorities	11,556	9,348	1%	70	6
Institution	1,748	1,784	33%	583	47
Corporate	14,583	9,155	100%	9,160	733
Retail	13,217	7,580	75%	5,709	457
Exposures secured by real estate	7,429	7,350	69%	5,043	403
Other ¹	6,084	5,931	40%	2,369	189
Total standardised approach	120,484	111,557	21%	23,290	1,863
Total	579,076	512,591	28%	145,341	11,627

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 requirements for credit risk, split by exposure class, 31 December 2011

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
Institution	71,394	68,992	16%	11,215	897
Corporate	209,684	164,365	53%	86,696	6,936
Retail	160,195	155,025	16%	24,367	1,949
– of which mortgage	125,001	124,020	10%	13,017	1,041
– of which other retail	31,599	27,912	36%	10,005	800
– of which SME	3,595	3,093	43%	1,345	108
Other non-credit obligation assets	1,921	1,408	100%	1,408	113
Total IRB approach	443,194	389,790	32%	123,686	9,895
Standardised exposure classes					
Central government and central banks	64,070	68,357	1%	456	36
Regional governments and local authorities	10,404	9,278	1%	80	6
Institution	5,034	4,704	24%	1,127	90
Corporate	32,771	23,546	100%	23,557	1,886
Retail	16,924	11,198	75%	8,399	672
Exposures secured by real estate	3,534	3,469	44%	1,535	123
Other ¹	6,253	6,023	46%	2,764	221
Total standardised approach	138,990	126,575	30%	37,918	3,034
Total	582,185	516,365	31%	161,604	12,929

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

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes			0		
Institution	40,492	1,592	1,354	20,414	63,852
Corporate	130,770	34,165	672	9,596	175,203
Retail	151,578	8,930	1	75	160,583
– of which mortgage	127,344	3,134			130,478
– of which other retail	21,913	5,136		43	27,091
– of which SME	2,320	661	1	32	3,014
Other non-credit obligation assets	1,392	4			1,396
Total IRB approach	324,231	44,692	2,027	30,085	401,034
Standardised exposure classes					
Central governments and central banks	66,901	1,327	86	2,096	70,409
Regional governments and local authorities	6,856	714	22	1,756	9,348
Institution	1,592	156	34	3	1,785
Corporate	8,189	922	0	43	9,155
Retail	7,455	122	1	2	7,580
Exposures secured by real estate	7,334	16	0	0	7,350
Other ¹	5,633	17	0	279	5,929
Total standardised approach	103,961	3,274	143	4,178	111,557
Total exposure	428,192	47,966	2,170	34,263	512,591

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 exposure class and exposure type, 31 December 2011

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	37,869	1,675	1,159	28,289	68,992
Corporate	120,527	32,080	688	11,070	164,365
Retail	144,341	10,563	0	121	155,025
– of which mortgage	120,088	3,932	0	0	124,020
– of which other retail	21,889	5,932	0	91	27,912
– of which SME	2,364	699	0	30	3,093
Other non-credit obligation assets	1,404	4		0	1,408
Total IRB approach	304,141	44,322	1,847	39,480	389,790
Standardised exposure classes					
Central governments and central banks	65,297	1,271	225	1,564	68,357
Regional governments and local authorities	7,518	594	2	1,164	9,278
Institution	4,341	315	0	48	4,704
Corporate	18,158	4,927	0	461	23,546
Retail	10,920	278	0	0	11,198
Exposures secured by real estate	3,460	9	0	0	3,469
Other ¹	5,768	3	10	242	6,023
Total standardised approach	115,462	7,397	237	3,479	126,575
Total exposure	419,603	51,719	2,084	42,959	516,365

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

FURm	On-balance	Off-balance	Securities	Derivatives	Total
LORM	Sheet hems	Sheet hellis	intarientg	Derivatives	Iotai
IRB exposure classes					
Institution	37,112	1,653	1,199	26,662	66,627
Corporate	128,875	33,246	696	10,235	173,051
Retail	149,084	10,465	1	104	159,654
– of which mortgage	124,933	4,003			128,936
– of which other retail	21,796	5,788		72	27,656
– of which SME	2,355	674	1	32	3,062
Other non-credit obligation assets	1,394	5	0		1,399
Total IRB approach	316,465	45,369	1,896	37,001	400,731
Standardised exposure classes					
Central governments and central banks	58,881	1,291	182	1,708	62,062
Regional governments and local authorities	7,126	684	8	1,376	9,194
Institution	1,904	131	37	5	2,077
Corporate	11,337	1,424	9	190	12,960
Retail	8,373	139	1	1	8,513
Exposures secured by real estates	6,288	13	0	0	6,301
Other ¹	5,776	21	26	273	6,096
Total standardised approach	99,684	3,703	263	3,553	107,203
Total exposure	416,149	49,072	2,159	40,554	507,934

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.

Average quarterly exposure during 2011, split by exposure class and exposure type

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	31,756	1,740	1,770	23,079	58,345
Corporate	117,110	33,485	256	8,598	159,449
Retail	140,421	11,771	0	85	152,277
– of which mortgage	117,035	3,650			120,684
– of which other retail	20,970	7,428		56	28,454
– of which SME	2,416	693	0	29	3,138
Other non-credit obligation assets	1,414	8			1,422
Total IRB approach	290,701	47,004	2,026	31,762	371,493
Standardised exposure classes					
Central governments and central banks	41,655	831	226	1,814	44,526
Regional governments and local authorities	7,089	540	0	800	8,429
Institution	3,517	232		57	3,806
Corporate	17,896	4,864		332	23,092
Retail	10,887	411		0	11,298
Exposures secured by real estates	3,011	11			3,022
Other ¹	5,029	8	26	607	5,670
Total standardised approach	89,084	6,897	252	3,610	99,843
Total exposure	379,785	53,901	2,278	35,372	471,336

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

FUD	Nordic	- of which	- of which	- of which	- of which	Baltic	D 1 1			m . 1	Total
EURm	countries	Denmark	Finland	Norway	Sweden	countries	Poland	Russia	Other ²	Total	2011
IRB exposure classes											
Institution	61,183	6,380	29,972	7,882	16,948	66			2,603	63,852	68,992
Corporate	159,619	38,515	38,991	36,924	45,189	4,580			11,003	175,203	164,365
Retail	160,583	51,393	32,116	30,965	46,109					160,583	155,025
 of which mortgage 	130,478	37,346	26,631	26,457	40,044					130,478	124,020
– of which other retail	27,091	13,368	4,510	4,183	5,031					27,091	27,912
– of which SME	3,014	679	975	325	1,034					3,014	3,093
Other non-credit obligation assets	1,334	482	148	211	493	36			26	1,396	1,408
Total IRB approach	382,719	96,770	101,226	75,983	108,740	4,682	0	0	13,633	401,034	
Total IRB approach 2011	389,790	96,174	112,212	72,847	108,557	0	0	0	0		389,790
Standardised exposure classe	S										
Central governments and central banks	49,973	12,322	24,140	4,994	8,518	813	1,816	464	17,344	70,409	68,357
Regional governments and local authorities	9,175	983	3,344	251	4,598	173				9,348	9,278
Institution	346	1	310	17	18	18	1,152	200	69	1,785	4,704
Corporate	383	64	157	2	160	1,234	2,040	4,614	884	9,155	23,546
Retail	6,506	710	3,103	1,130	1,563	766	179	46	84	7,580	11,198
Exposures secured by real estate	494		494			1,970	4,126	381	379	7,350	3,469
Other ¹	5,143	1,371	994	314	2,463	220	146	335	85	5,929	6,023
Total standardised approach	72,019	15,450	32,542	6,708	17,320	5,194	9,459	6,040	18,844	111,557	
Total standardised approach 2011	74,764	14,110	37,635	6,888	16,131	9,035	8,911	6,549	27,317		126,575
Total exposure	454,739	112,220	133,768	82,691	126,059	9,876	9,459	6,040	32,477	512,591	
Total exposure 2011	464,554	110,284	149,847	79,735	124,688	9,035	8,911	6,549	27,317		516,365

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.

Includes International Units, which received IRB approval in 2012.

4.4.3 Exposure by industry

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

The IRB corporate portfolio is well diversified between industries. The real estate management and investment sector is the largest sector which together with other financial institutions are the only sectors that account for more than 5% of the total exposure of EUR 513bn. During the year, the exposure class IRB institution increased exposures to other financial institutions and decreased exposures to banks. The largest relative decrease was found within the telecommunication equipment industry, while the largest relative increase showed up within IT software, hardware and services. The largest nominal increase and decrease appeared in retail mortgage and banks respectively.

Table 4.7 shows the IRB corporate exposure split by

industry and geography. The table illustrates Nordea's diversification of the corporate portfolio and its cross-border business model.

4.4.3.1 Specification of exposure against central government and central banks

Nordea applies the standardised approach for exposure to central governments and central banks. In this approach, the rating from an eligible rating agency is converted to a credit quality step (the mapping is defined by the financial supervisory authorities). Each credit quality step corresponds to a fixed risk weight. Nordea uses Standard & Poor's as eligible rating agency. Table 4.8 presents the central government and central bank exposure distributed by credit quality step. Out of the total exposure of EUR 70bn, 99% of the exposure was towards central governments and central banks within the highest credit quality step, resulting in no RWA due to its risk weight of 0%. The increase in exposure is related to holdings in high-rated sovereign bonds as well as increased exposures guaranteed by sovereigns or central banks.

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

		IRB app	oroach		Standa	rdised approacl	n		
EURm	Institution	Corporate	Retail	Other non-credit obligation assets	Central governments and central banks	Regional government and local authorities	Other ¹	Total	Total 2011
Retail mortgage			130,478				7,350	137,828	127,489
Other retail			27,091				7,580	34,671	39,111
Central and local governments					27,964	9,348		37,312	36,141
Banks	42,161				42,445		456	85,062	94,411
Industry sector									
- Construction and engineering		5,405	351				107	5,863	5,893
 Consumer durables (cars, appliances, etc.) 		5,273	58				54	5,385	5,651
– Consumer staples									
(food, agriculture, etc.)		13,810	165				148	14,124	12,621
– Energy (oil, gas, etc.)		4,671	1				83	4,754	4,433
– Health care and pharmaceuticals		2,155	108				149	2,412	2,635
– Industrial capital goods		5,240	22				82	5,344	5,840
– Industrial commercial services		15,959	513				220	16,692	19,636
– IT software, hardware and services		1,842	66				37	1,944	1,598
– Media and leisure		2,785	251				23	3,059	2,973
 Metals and mining materials 		1,101	6				4	1,111	1,289
 Paper and forest materials 		3,129	27				12	3,168	3,529
- Real estate management and invest-			425				270	16 161	45.026
Ineni Datail trada		43,030	433 E42				162	40,401	43,030
- Ketali trade		12,001	545				272	13,300	13,010
- Shipping and offshore		15,005	/				273	14,005	13,441
- relecontinuncation equipment		431	1				25	2 002	2 080
- relecontinumcation operators		1,972	4 144				208	4 850	2,000
- Utilities (distribution		8 3 3 7	144				365	8 716	8 685
Other financial institutions	21 601	13.056	14 65				1 115	35 927	35 804
Other materials (chemical	21,091	13,030	05				1,113	55,721	55,004
building materials, etc.)		6,875	84				192	7,150	7,613
– Other		6,675	149	1,396			12,682	20,903	21,506
Total exposure	63,852	175,203	160,583	1,396	70,409	9,348	31,799	512,591	-
Total exposure 2011	68,992	164,365	155,025	1,408	68,357	9,278	48,940		516,365

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.

4.4.4 Specification of off-balance sheet exposure

The distribution of off-balance sheet exposure is specified in Table 4.9. The off-balance sheet exposure is presented as original exposure, in other words before the application of CCFs.

The total off-balance sheet volume decreased by 3% in 2012. The decrease was driven by lower volumes in the corporate and institutions portfolios as well as the shift from standardised to IRB exposure classes as part of the roll-outs.

The overall exposure, RWA and capital requirements split by exposure type are shown in Table 4.10, where the exposure for derivatives stems from counterparty credit risk. The information in the table includes exposures from both the IRB and standardised portfolios. The table shows that off-balance sheet items have a smaller effect on RWA than on-balance sheet items. At the end of 2012, only 20% of the total credit risk RWA stems from off-balance sheet items and derivatives, which is slightly less than in 2011. RWA for off-balance sheet items was 14% of the total RWA, while RWA for on-balance sheet items, including securities financing, was 80% of total RWA.

IRB corporate constitutes 68% of the total original offbalance sheet exposure. A large parts refers to revocable credit facilities.

The reason that an off-balance sheet exposure amount

Table 4.7 IRB corporate exposure split by industry and geography, 31 December 2012

					Baltic	International		
EURm	Denmark	Finland	Norway	Sweden	countries	Units	Total	Total 2011
Construction and engineering	521	1,355	2,113	871	208	337	5,405	4,889
Consumer durables (cars, appliances, etc.)	434	1,092	1,536	1,624	58	530	5,273	4,824
Consumer staples (food, agriculture, etc.)	7,189	1,815	2,950	938	384	534	13,810	11,569
Energy (oil, gas, etc.)	14	1,017	1,157	1,824	119	539	4,671	3,758
Health care and pharmaceuticals	292	388	226	1,041	26	181	2,155	2,043
Industrial capital goods	670	2,358	313	1,128	11	760	5,240	4,939
Industrial commercial services	4,672	3,296	3,652	3,887	152	300	15,959	17,824
IT software, hardware and services	426	428	288	522	3	175	1,842	1,290
Media and leisure	556	665	668	787	76	32	2,785	2,521
Metals and mining materials	20	360	258	422	7	34	1,101	1,241
Paper and forest materials	238	1,288	77	999	24	502	3,129	3,232
Real estate management and investment	7,561	9,347	10,949	16,142	1,401	256	45,656	43,124
Retail trade	4,198	2,879	1,960	2,658	408	498	12,601	11,898
Shipping and offshore	939	1,143	5,818	1,461	1	4,440	13,803	8,784
Telecommunication equipment	9	396	1	5	0	40	451	585
Telecommunication operators	242	482	302	879	16	53	1,972	1,972
Transportation	745	1,050	899	1,295	340	78	4,407	3,620
Utilities (distribution and production)	1,583	2,723	1,830	1,448	554	200	8,337	7,795
Other financial institutions	3,574	3,229	956	4,538	42	716	13,056	14,770
Other materials (chemical, building materials, etc.)	671	2,430	845	2,192	229	507	6,875	6,633
Other	3,960	1,251	127	528	522	288	6,675	7,053
Total exposure	38,515	38,991	36,924	45,189	4,580	11,003	175,203	
Total exposure 2011	39,367	43,668	36,180	45,150				164,365

Table 4.8 Exposure to central governments and central banks, distributed by credit quality step

EURm Credit quality step	Standard & Poor's rating	Risk weight	31 December 2012 Exposure	31 December 2011 Exposure
1	AAA to AA-	0%	69,436	67,557
2	A+ to A-	20%	385	247
3	BBB+ to BBB-	50%	514	235
4 to 6 or blank	BB+ and below, or without rating	100-150%	74	318
Total			70,409	68,357

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

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

The average CCF can vary between periods without having an effect on RWA. The decreased average CCF for IRB retail, seen in Table 4.11, was mainly driven by updated CCF values as part of the yearly validation process.

4.4.5 Counterparty credit risk

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

Derivative contracts are financial instruments, such as

Table 4.9 Original off-balance sheet exposure splitby exposure class

EURm	31 December 2012	31 December 2011
IRB exposure classes		
Institution	3,507	3,658
Corporate	77,379	72,125
Retail	13,904	14,702
– of which mortgage	5,205	4,913
– of which other retail	7,657	8,651
– of which SME	1,042	1,138
Other non-credit obligation assets	11	11
Total IRB approach	94,801	90,496
Standardised exposure classes		
Central government and central banks	1,538	1,265
Regional governments and local authorities	5,485	4,718
Institution	309	1,028
Corporate	5,808	13,889
Retail	5 <i>,</i> 558	5,804
Exposures secured by real estate	84	74
Other	56	23
Total standardised approach	18,838	26,801
Total	113,638	117,297

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

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

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

4.4.5.1 Pillar I method for counterparty credit risk

In December 2012, Nordea was approved by the FSAs in Sweden and Finland to use the internal model method (IMM) for calculating the regulatory capital for counterparty credit risk (CCR) in accordance with the credit risk framework in the CRD. As the approval was given in late December, Nordea will implement the IMM approach for regulatory capital in the first quarter of 2013. The method is used for FX and interest rate products which constitute the predominant share of the CCR exposures in Nordea, while the mark-to-market method, also called the current exposure method (CEM), is used for the remaining products. The IMM method implies that the exposure amount is calculated as a factor 1.4 times the effective expected positive exposure calculated one year ahead in time.

The expected exposure profile is calculated for IMM approved trades by simulating a large set of future scenarios for the underlying price factors and then revaluating the trade in each scenario at different time horizons.

In these calculations, netting is done of the exposure on contracts within the same legally enforceable netting agreement. Moreover, procedures are in place to take account for specific wrong-way risk (i.e. situations where the future exposure to a specific counterparty is positively correlated with the counterparty's probability of default due to the nature of the transactions with the counterparty).

By the end of 2012, Nordea used the CEM method for derivative exposures, which is calculated as the sum of current exposure (replacement cost) and potential future exposure. The potential future exposure is an estimate reflecting possible changes in the future market value of the individual contract during the remaining lifetime of the contract and is measured as the notional principal amount multiplied by an add-on factor. The size of the add-on factor depends on the contract's underlying asset and time to maturity.

Table 4.12 shows the exposures as well as the RWA, split by exposure classes. The decrease in exposure during 2012 is a combination of both decreased market values and potential future exposures. Market values decreased due to changes in interest rates and exchange rates, which affect interest rate derivatives and FX derivatives. A weakening of the USD against the most significant currencies in Nordea (SEK, DKK and NOK) also caused market values to decrease. Exposures were also reduced as a result of improved netting possibilities in the derivative portfolio.

Potential future exposure decreased as a result of decreased notional amounts for derivatives. As the potential future exposure also changes with respect to maturity of the underlying derivatives, this component also had an effect on total exposure.

In addition, during 2012, a large part of Nordea's existing interest rate-related OTC derivatives towards the largest interbank counterparties were transferred to LCH Clearnet. This serves to reduce both the market value and the potential future exposure value.

4.4.5.2 Counterparty credit risk for internal credit limit purposes Counterparty credit risk for internal credit limit purposes is for the main part of Nordea's OTC derivatives exposure calculated using a simulation model which is based on the internal model method (IMM). The model used for internal limit purposes, in contrast to the model used for the calculation of regulatory capital, is based on a stressed calibration. Model parameters are based on data from a specific three-year period, including a one-year period identified to have the most significant increase in credit spreads in

Table 4.10 Exposure, RWA and capital requirements split by exposure type, 31 December 2012

EURm	On-balance sheet items ¹	Off-balance sheet items	Derivatives	Total	Total 2011
Original exposure	430,981	113,638	34,456	579,076	582,185
EAD	430,362	47,966	34,263	512,591	516,365
RWA	116,402	20,371	8,568	145,341	161,604
Capital requirements	9,312	1,630	685	11,627	12,929
Average risk weight	27%	42%	25%	28%	31%

1) Includes securities financing.

Table 4.11 Average credit conversion factor and off-balance sheet exposure split by IRB exposure class,31 December 2012

EURm	Exposure after substitution effects ¹	Exposure	CCF	CCF 2011
Institution	3,784	1,592	42%	42%
Corporate	75,977	34,165	45%	45%
Retail	13,868	8,930	64%	72%
– of which mortgage	5,204	3,134	60%	80%
– of which other retail	7,626	5,136	67%	69%
– of which SME	1,038	661	64%	62%

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

Table 4.12 Counterparty credit risk exposures and RWA split by exposure class

	31 December 201	12	31 December 201	1
EURm	Exposure	RWA	Exposure	RWA
IRB exposure classes				
Institution	20,414	3,567	28,289	6,029
Corporate	9,596	4,857	11,070	5,174
Retail	75	25	121	47
Total IRB approach	30,085	8,449	39,480	11,250
Standardised exposure classes				
Central government and central banks	2,096	73	1,564	69
Other	2,083	46	1,915	492
Total standardised approach	4,178	119	3,479	561
Total exposure	34,263	8,568	42,959	11,811

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

recent times. Thereby general wrong-way risk is taken into account in the counterparty credit risk management.

Table 4.13 presents the counterparty credit risk for different types of counterparties.

As of December 2012, the current exposure net (after close-out netting and collateral reduction) was EUR 11bn and the pre-settlement risk ("worst-case-scenario") was EUR 44bn, comprised of both simulated and non-simulated trades.

For internal capital purposes (EC framework), the main part of the counterparty credit risk exposure is calculated using a measure referred to as expected positive exposure, which is based on the internal simulation model

On traded OTC contracts, Nordea performs fair value

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

4.4.5.3 Regulatory development

Nordea proactively upgrades its counterparty credit risk framework in order to be compliant with the expected regulatory developments. One of the main expectations for regulatory development is the addition of capital to be held for potential counterparty migration termed credit valuation adjustment (CVA) risk.

Table 4.13 Counterparty credit risk exposures (internal), split by type of counterparty

	31 Decem		31 December 2011	
EURm	Current exposure net	Pre-settlement risk	Current exposure net	Pre-settlement risk
Public entities	1,695	4,608	1,049	4,183
Institution	1,969	21,662	2,293	20,607
Corporate	7,396	18,023	7,585	20,120
Total	11,060	44,294	10,927	44,910

Table 4.14 Mitigation of counterparty credit risk exposures

	31 December 2012				31 December 2011			
	Current	Reduction from closeout netting	Reduction from held	Current	Current	Reduction from closeout netting	Reduction from held	Current
EURm	(gross)	agreements	collateral	(net)	(gross)	agreements	collateral	(net)
Total	208,055	189,142	7,853	11,060	168,971	150,676	7,368	10,927

4.4.5.4 *Mitigation of counterparty credit risk exposure*

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

Table 4.14 shows counterparty credit risk mitigated through closeout netting and collateral agreements.

As of December 2012, Nordea had 1,241 (+14%) financial collateral agreements. The effects of closeout netting and collateral agreements are considerable, as 95% (94%) of the current exposure (gross) was eliminated by the use of these risk mitigation techniques.

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

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

The ten largest counterparties, measured on current exposure net, account for around 12% (11%) of the total current exposure net, and consists of a mix of financial institutions, public and corporate counterparties, all with high credit quality.

Nordea began clearing repo trades through central clearing in 2011. In 2012, additional focus was put on reducing Nordea's bilateral OTC derivative exposures by using central clearing for interest rate swaps and forward-rate agreements. Central clearing may increase the transaction costs of derivative trades, but reduces Nordea's bilateral counterparty exposure and counterparty credit risk.

4.4.5.5 Settlement risk

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

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

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

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

4.4.6 Other items

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

4.5 Rating and scoring

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

4.5.1 Rating and scoring definition

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

- The credit approval process
- Calculation of RWA
- Calculation of economic capital 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 the risk of customer default. The rating scale in Nordea consists of 18 grades from 6+ to 1– for non-defaulted customers and three grades from 0+ to 0– for defaulted customers. The default risk of each rating grade is quantified by a one-year PD. Rating grades 4– and better are comparable to investment grade as defined by rating agencies such as Moody's and Standard & Poor's (S&P). Rating grades 2+ and lower are considered as weak or critical, and require special attention.

The mapping of the internal ratings to S&P's rating scale, shown in Table 4.15, 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.

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 downgraded as soon as new information indicates a need for it. The consistency and transparency of the ratings are ensured by the use of rating models. A rating model is a set of specified and distinct rating criteria which, given a set of customer characteristics, produces a rating. It is based on the predictability of customers' future performance based on their characteristics.

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

Models used in the household segment and for small

Table 4.15 Indicative mapping between internal ratings and the S&P rating scale

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

corporate customers are based on scoring, which is a statistical technique used to predict the probability of customer default. The models are based on internal data and take into account customer characteristics as well as behavioural information of the customer. The models are used to support both the credit approval process, e.g. automatic approvals or decision support, and the risk management process, e.g. "early warning" for high risk customers and monitoring of portfolio risk levels. As a supplement to the scoring models, credit bureau information is used in the credit process. The scoring models are also used to predict PDs, in order to calculate the economic capital and RWA for customers. The risk grade scale used for scored customers in the retail portfolio in order to represent the scores, consists of 18 grades; A+ to F– for non-defaulted customers and three grades from 0+ to 0– for defaulted customers.

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

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

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

4.5.2 Point-in-time vs. through-the-cycle

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

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

4.5.3 Rating and risk grade distribution

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

In December 2012, the PD scale related to the corporate and institutional exposures was changed due to the Baltic countries becoming approved for IRB and as a result, PD for the rating grades 3-, 2+ and 2 increased by 5bp, 72bp and 16bp respectively.

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

As shown in Table 4.16, the average PD in the IRB institution portfolio was maintained at last year's level despite the PD scale being changed. Average LGD decreased, which explains the lower average risk weight.

4.5.3.2 Rating grade distribution of the IRB corporate portfolio Figure 4.3 shows the rating grade distribution of the IRB corporate portfolio. In December 2012, approximately 79% (78%) of the IRB corporate exposure was found in the rating grades 4– and above.

Average PD increased from 0.59% to 0.62% in 2012 as result of migration and effects from changes in the PD scale as well as increased IRB exposures due to roll-outs. The average PD for the IRB coporate portfolio, distrubuted by industry is shown in Figure 4.4.

The IRB corporate exposure in rating grades below 4– decreased during 2012, while exposures in the ratings grades 4– and above increased. Average risk weights and average LGD was unchanged compared to previous year. Table 4.17 shows the IRB corporate exposure distributed by rating grade.

4.5.3.3 Risk grade distribution of the IRB retail portfolio Figure 4.5 shows the risk grade distribution of the IRB retail portfolio. As of end 2012, approximately 92% (89%) of the retail exposure was found in the risk grades C– and above. For retail mortgage and retail other the corresponding share is 94% (93%) and 85% (85%) respectively and for SME 59% (58%).

The average PD decreased from 0.84% to 0.73% in 2012. The LGD also decreased which resulted in lower average risk weights compared with previous year. Tables 4.18 and 4.19 show the IRB retail exposure distributed by risk grade.

Figure 4.2 Exposure distributed by rating grade, IRB institution

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4.5.4 Rating and scoring migration

The rating and risk grade distribution changes mainly due to three factors:

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

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

Figures 4.6 to 4.8 show the rating/risk grade migration for institution, corporate and retail customers during 2012, based on existing customers at the year-ends 2011 and 2012. Migration is shown both in terms of number of customers and exposure. The RWA changes due to rating/ risk grade migration, reflecting the impact of pro-cyclicality in the Pillar I capital requirement calculations of the IRB approaches.

Figure 4.4 Average PD per industry for the IRB corporate portfolio

Figure 4.5 Exposure distributed by risk grade, IRB retail

Out of the total exposure in the institution portfolio approximately 14% (20%) migrated up or down during 2012. This corresponds to approximately 27% (32%) of the number of counterparts. Compared to 2011, Nordea experienced less migration during 2012.

In the corporate portfolio approximately 44% (51%) migrated either up or down in 2012 with respect to exposure and 50% (53%) in terms of number of customers.

Approximately 54% (67%) of the retail portfolio exposure migrated up or down during 2012, which corresponds to approximately 58% (65%) of customers.

On an overall level, migration had a positive impact on credit risk RWA during 2012 and reduced IRB credit risk RWA by approximately 1.5%. This calculation does not take into account the changes in exposure distribution nor rating distribution of lost and new customers or customers who defaulted during the year.

4.6 Collateral and maturity

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

4.6.1 Loss given default

Table 4.20 shows the exposure secured by eligible collateral, guarantees and credit derivatives, split by exposure class. As of year-end 2012, approximately 41% (37%) of the total exposure was secured by eligible collateral, while the corresponding figure for the IRB portfolio was 50% (49%). The relative share of collateralised exposure remains stable.

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% and the LGD value for unsecured senior exposure is 45%. The LGD values for the retail portfolio are based on an internal model, and divided in pools of collateral that are based on historical loss data.

During 2012, the average LGD in IRB exposure class corporate remained stable at 41% while the average LGD in both institutions and retail exposure classes decreased to 22% (26%) and 17% (18%) respectively.

Average LGD in the retail portfolio improved as a result of increased residential real estate lending. The decrease in average LGD in IRB institutions was due to a higher share of covered bonds in relation to the total exposure.

4.6.1.1 Guarantees and credit derivatives

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

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

Central governments and municipalities guarantee approximately 83% of the total guaranteed exposure. Exposure guaranteed by these guarantors has an average risk weight of 0%.

6% of the guarantors are IRB institutions, of which 100% have a rating of 5 or higher. IRB corporate accounts for 11% of the guarantors, where 100% have a guarantor with a rating of 5 or higher.

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

4.6.1.2 Collateral distribution

Table 4.21 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

	31	31 December 2012			31 December 2011			
EURm Rating grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight		
6+	0.03%	7,096	9%	0.03%	4,930	9%		
6	0.03%	4,136	7%	0.03%	4,734	7%		
6–	0.05%	17,217	9%	0.05%	23,201	10%		
5+	0.07%	24,574	10%	0.07%	22,024	13%		
5	0.10%	3,445	21%	0.10%	4,939	27%		
5–	0.16%	4,386	19%	0.16%	5,004	28%		
4+	0.24%	1,358	40%	0.24%	1,941	39%		
4	0.35%	848	51%	0.35%	1,094	59%		
4–	0.53%	357	62%	0.53%	357	70%		
3+	0.81%	82	81%	0.81%	359	75%		
3	1.19%	24	103%	1.19%	73	101%		
3–	2.06%	51	107%	2.01%	94	122%		
2+	4.35%	19	152%	3.63%	7	144%		
2	6.32%	9	172%	6.16%	11	171%		
2–	9.86%	21	190%	9.86%	27	201%		
1+	14.79%	14	223%	14.79%	10	219%		
1	20.71%	0	254%	20.71%	2	254%		
1–	26.93%	0	263%	26.93%	1	263%		
	0.09%1	63,637	13%	0.09%1	68,808	16%		

Table 4.16 IRB institution exposure, distributed by rating grade

Exposure includes only rated customers. 1) Exposure-weighted PD.

Table 4.17 IRB corporate exposure, distributed by rating grade

	31	December 2012		31	December 2011	
EURm Rating grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
6+	0.03%	3,559	14%	0.03%	3,116	14%
6	0.03%	2,351	13%	0.03%	2,293	13%
6-	0.05%	6,197	18%	0.05%	5,462	18%
5+	0.07%	10,013	23%	0.07%	10,910	23%
5	0.10%	14,241	27%	0.10%	12,848	27%
5–	0.16%	17,241	36%	0.16%	15,685	37%
4+	0.24%	23,674	45%	0.24%	20,294	45%
4	0.35%	28,313	54%	0.35%	28,033	55%
4-	0.53%	25,997	65%	0.53%	24,112	64%
3+	0.81%	15,105	77%	0.81%	14,981	77%
3	1.19%	10,254	86%	1.19%	9,922	85%
3–	2.06%	5,566	95%	2.01%	6,295	97%
2+	4.35%	2,098	118%	3.63%	2,132	112%
2	6.32%	808	135%	6.16%	958	132%
2–	9.86%	288	139%	9.86%	354	148%
1+	14.79%	476	196%	14.79%	193	162%
1	20.71%	229	227%	20.71%	110	177%
1–	26.93%	130	227%	26.93%	87	201%
	0.62%1	166,543	53%	0.59%1	157,785	53%

Exposure includes only rated customers. 1) Exposure-weighted PD.

	31	31 December 2012			31 December 2011			
EURm Risk grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight		
A+	0.08%	60,644	3%	0.08%	50,602	3%		
А	0.11%	19,204	4%	0.11%	17,822	5%		
A–	0.16%	14,569	6%	0.16%	13,638	6%		
B+	0.22%	11,816	8%	0.22%	11,801	8%		
В	0.31%	9,959	11%	0.31%	10,508	11%		
В-	0.43%	11,607	13%	0.43%	12,265	14%		
C+	0.60%	5,951	17%	0.60%	7,431	17%		
С	0.84%	6,216	21%	0.84%	6,497	22%		
C-	1.17%	4,998	26%	1.17%	4,974	27%		
D+	1.64%	2,903	30%	1.64%	3,707	31%		
D	2.30%	2,359	35%	2.30%	3,065	36%		
D-	3.20%	1,624	42%	3.20%	2,523	44%		
E+	4.47%	1,732	45%	4.47%	2,439	50%		
Е	6.30%	2,369	54%	6.30%	3,051	56%		
Е-	8.79%	452	57%	8.79%	560	63%		
F+	12.28%	375	62%	12.28%	582	65%		
F	17.19%	241	72%	17.19%	237	75%		
F–	24.04%	1,243	84%	24.04%	1,108	86%		
	0.73%1	158,261	11%	0.84%1	152,810	13%		

Exposure includes only scored customers. 1) Exposure-weighted PD.

Table 4.19 Exposure towards IRB retail sub-exposure classes, distributed by risk grade

		31 December 2012				31 December 2011			
EURm		Retail				Retail			
Risk grade	PD scale	mortgage	Other retail	SME	PD scale	mortgage	Other retail	SME	
A+	0.08%	54,976	5,304	363	0.08%	45,711	4,565	326	
А	0.11%	16,579	2,586	39	0.11%	15,331	2,456	35	
A-	0.16%	12,073	2,468	29	0.16%	11,203	2,406	29	
B+	0.22%	9,313	2,463	39	0.22%	9,279	2,481	41	
В	0.31%	7,469	2,420	70	0.31%	7,932	2,518	58	
В-	0.43%	8,752	2,771	84	0.43%	9,216	2,971	78	
C+	0.60%	4,288	1,519	144	0.60%	5,486	1,776	169	
С	0.84%	4,390	1,561	265	0.84%	4,527	1,713	257	
C-	1.17%	3,214	1,163	621	1.17%	3,113	1,259	602	
D+	1.64%	1,812	760	330	1.64%	2,453	901	353	
D	2.30%	1,547	595	217	2.30%	2,048	787	230	
D-	3.20%	1,004	458	161	3.20%	1,645	668	210	
E+	4.47%	1,069	513	149	4.47%	1,670	602	167	
E	6.30%	1,397	873	98	6.30%	1,770	1,159	122	
Е-	8.79%	261	104	87	8.79%	323	140	97	
F+	12.28%	246	99	30	12.28%	355	194	33	
F	17.19%	159	60	21	17.19%	156	64	17	
F-	24.04%	718	469	57	24.04%	726	347	35	
		129,267	26,189	2,805		122,944	27,007	2,859	

Figure 4.6a Institution re-rated exposure

Figure 4.8a Retail re-scored exposure at default (%)

Figure 4.6b Institution re-rated number of customers (%)

Figure 4.8b Retail re-scored number of customers (%)

Toriginal guarantees and credit- of which secured by weightedAverage LGDInstitution65,80363,8524267,60422.2%22222130,95516.6%17- of which mortgage132,549130,478128,54812.3%1332922333333333333333333333333333333333 <t< th=""><th>Total standardised approach 2011</th><th>138,990</th><th>126,575</th><th>682</th><th>3,511</th><th></th><th></th></t<>	Total standardised approach 2011	138,990	126,575	682	3,511		
EURm Original exposure Exposure Exposure - of which and credit derivatives Average secured by collateral Average weighted Average and credit Corporate 128,548 10,055 166,610 160,583 2,919 128,548 12.3% 132.3% - of which other retail 30,601 27,091 2,386 709 22.9% 22.9% - of which SME 3,460	Total standardised approach	120,484	111,557	540	8,168		
EURm Original exposure - of which Exposure Average and credit Average secured by collateral Average U Average weighted Average and credit Average Average Average Average and credit Average Average Average Average Average Ave	Other ¹	6,082	5,929	2	1		
EURm Original exposure - of which Exposure - of which and credit and credit secured by derivatives Average weighted collateral Average LGD Average Weighted IRB exposure classes - - - of which secured by - of which weighted - of which other retail - of which other retail - of which other retail - of which of size - of which SME - of which SME - of which SME - of which size	Exposures secured by real estate	7,429	7,350	0	7,350		
EURm Original exposure - of which Exposure Average and credit secured by derivatives Average weighted collateral Average Weighted LGD Average Weighted UGD IRB exposure classes -	Retail	13,217	7,580	98			
Original exposure- of which secured by secured by collateralAverage weightedAverage tesI of which mortgage166,610160,5832,919130,95516.6%17133- of which SME3,4603,0145321,69922.9%2323<	Corporate	14,583	9,155	1	779		
Built of guarantees and credit- of which secured by secured byAverage weightedAverage MeightedI of which mortgage132,428175,00363,8524267,60422.2%232323202324	Institution	1,749	1,785	1	38		
Original exposure- of which and credit and credit derivativesAverage weighted LGDAverage weighted LGDIRB exposure classesInstitution65,80363,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40Retail166,610160,5832,919130,95516.6%17- of which mortgage132,549130,478128,54812.3%13- of which other retail30,60127,0912,38670936.6%37- of which SME3,4603,0145321,69922.9%23Other non-credit obligation assets1,8991,39602n.a.Total IRB approach458,592401,03411,815202,391Standardised exposure classesCentral government and central banks65,86870,4094371	Regional governments and local authorities	11,556	9,348	0	0		
EURm Original exposure Summer Exposure - of which and credit derivatives Average secured by collateral Average weighted LGD Average weighted LGD IRB exposure classes Institution 65,803 63,852 426 7,604 22.2% 25 Corporate 224,280 175,203 8,470 63,829 40.9% 40 Retail 166,610 160,583 2,919 130,955 16.6% 17 - of which mortgage 132,549 130,478 128,548 12.3% 13 - of which SME 30,601 27,091 2,386 709 36.6% 37 - of which SME 3,460 3,014 532 1,699 22.9% 23 Other non-credit obligation assets 1,899 1,396 0 2 n.a. Total IRB approach 458,592 401,034 11,815 202,391 5 Standardised exposure classes Standardised exposure classes 5 5 5 5	Central government and central banks	65,868	70,409	437	1		
Original exposure- of which guarantees and credit secured by collateralAverage weighted LGDAverage weighted LGDIRB exposure classesExposurederivatives- of which derivativesAverage weighted LGDAverage weighted LGDIRS exposure classes224,28063,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40Retail166,610160,5832,919130,95516.6%17- of which mortgage132,549130,478128,54812.3%13- of which other retail30,60127,0912,38670936.6%37- of which SME3,4603,0145321,69922.9%23Other non-credit obligation assets1,8991,39602n.a.Total IRB approach458,592401,03411,815202,3911	Standardised exposure classes						
EURm Original exposure Exposure Generation and credit derivatives - of which secured by derivatives Average weighted LGD Average LGD Average L	Total IRB approach 2011	443,194	389,790	11,017	189,795		
Burnantees guarantees and credit secured by collateralAverage weighted LGDAverage weighted LGDIRB exposure classesInstitution65,80363,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40Retail166,610160,5832,919130,95516.6%17- of which mortgage132,549130,478128,54812.3%13- of which SME3,4603,0145321,69922.9%23Other non-credit obligation assets1,8991,39602n.a.	Total IRB approach	458,592	401,034	11,815	202,391		
EURmOriginal exposureSecured by exposureAverage and credit derivativesAverage weighted LGDAverage weighted LGDIRB exposure classesExposure24267,60422.2%25Institution65,80363,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40Retail166,610160,5832,919130,95516.6%17- of which mortgage132,549130,478128,54812.3%13- of which other retail30,60127,0912,38670936.6%37- of which SME3,4603,0145321,69922.9%23	Other non-credit obligation assets	1,899	1,396	0	2	n.a.	n.a.
EURm Original exposure Exposure and credit and credit derivatives - of which secured by collateral Average weighted LGD Average weighted LGD IRB exposure classes Exposure 2426 7,604 22.2% 25 Institution 65,803 63,852 426 7,604 22.2% 25 Corporate 224,280 175,203 8,470 63,829 40.9% 40 Retail 166,610 160,583 2,919 130,955 16.6% 17 - of which mortgage 132,549 130,478 128,548 12.3% 13 - of which other retail 30,601 27,091 2,386 709 36.6% 37	– of which SME	3,460	3,014	532	1,699	22.9%	23.9%
EURm Original exposure Exposure Guarantees and credit derivatives - of which secured by collateral Average weighted LGD Average LGD Average LGD Average LGD Aver	– of which other retail	30,601	27,091	2,386	709	36.6%	37.7%
Burnantees guarantees and credit secured by derivatives- of which weighted LGDAverage weighted LGDAverage weighted LGDIRB exposure classesExposure65,80363,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40Retail166,610160,5832,919130,95516.6%17	– of which mortgage	132,549	130,478		128,548	12.3%	13.1%
EURmOriginal exposureguarantes secured by derivatives- of which weighted LGDAverage weighted LGDIRB exposure classesInstitution65,80363,8524267,60422.2%25Corporate224,280175,2038,47063,82940.9%40	Retail	166,610	160,583	2,919	130,955	16.6%	17.7%
EURmOriginal exposureguarantees American of and credit- of which weightedAverage weighted LGDAverage weighted LGDIRB exposure classesInstitution65,80363,8524267,60422.2%25	Corporate	224,280	175,203	8,470	63,829	40.9%	40.9%
EURm Original and credit secured by weighted weig EURm exposure Exposure derivatives collateral LGD LGD IRB exposure classes IRB exposure Exp	Institution	65,803	63,852	426	7,604	22.2%	25.9%
Burante by guarantees - of which Average Average Original and credit secured by weighted weig EURm exposure Exposure derivatives collateral LGD LGD	IRB exposure classes						
secured by	EURm	Original exposure	Exposure	secured by guarantees and credit derivatives	- of which secured by collateral	Average weighted LGD	Average weighted LGD 2011

Table 4.20 Exposure secured by collateral, guarantees and credit derivatives, split by exposure class, 31 December 2012

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.

items in relative terms. Financial collateral saw the largest relative increase. Commercial real estate and other physical collateral also increased during the year while residential real estate and receivables decreased somewhat in relative terms. Real estate is commonly used as collateral for credit risk mitigation purposes. There is no certain concentration of real estate collateral to any region within the Nordic and Baltic countries. Other physical collateral consists mainly of ships.

4.6.1.3 Valuation principles of collateral

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

Valuation and hence eligibility is based on the following principles:

- Market value is assessed; markets must be liquid, public prices must be available and the collateral is expected to be liquidated within a reasonable time frame.
- A reduction of the collateral value is to be considered if the type, location or character (such as deterioration and obsolescence) of the asset indicates uncertainty regarding the sustainability of the market value. Assessment of the collateral value also reflects the previously experienced volatility of market.

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

A common way to analyse the value of the collateral is to measure the loan-to-value (LTV) ratio, i.e. the credit extended divided by the market value of the collateral pledged. In Table 4.22, retail mortgage exposures are distributed by LTV range up to the top LTV bucket based on the LTV ratio. In 2012, the retail mortgage exposure increased in the LTV buckets representing LTV below 50%.

4.6.2 Maturity

IRB exposure split by maturity, defined as remaining maturity, is presented in Table 4.23.

The distribution of exposures in the corporate and institutions portfolio remained stable with respect to maturity.

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

Table 4.21 Distribution of collateral, IRB portfolios

Total	100.0%	100.0%
Other physical collateral	6.0%	5.9%
Commercial real estate	17.5%	17.3%
Residential real estate	70.7%	71.5%
Receivables	1.2%	1.2%
Financial collateral	4.7%	4.1%
	31 Dec 2012	31 Dec 2011

Table 4.22 Loan-to-value distribution, retail mortgage exposure, on-balance

	31 Dec 2012		31 Dec 20	11
EURbn	Exposure	%	Exposure	%
<50%	97.4	76.5	92.0	76.6
50-70%	20.7	16.3	19.5	16.2
70-80%	5.6	4.4	5.3	4.4
80–90%	2.3	1.8	2.2	1.9
>90%	1.2	1.0	1.2	1.0
Total	127.3	100	120.1	100.0

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.

During 2012, Nordea changed the method for calculating LTV. This was done in order to obtain a consistent method across the Group. As a result, the figures for 2011 have been restated with respect to the figures presented in last year's report.

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

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

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

Table 4.24 shows the average PD based on Nordea's current PD scale and weighted with the number of customers for each exposure class. Table 4.24 also shows the average actual default frequency (ADF), calculated as the customerweighted default frequency for the corporate and institution portfolio and the retail portfolio respectively.

Table 4.25 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.

In Table 4.26, the EL is compared to the actual gross and net losses. EL has been calculated using the definition

Table 4.23 IRB exposure split by maturity, 31 December 2012

EURm	Institution	Corporate	Retail	
< 1 year	39,640	49,813	86,226	
1–3 years	16,262	29,703	10,628	
3–5 years	5,039	46,353	6,142	
> 5 years	2,911	49,333	57,587	
Total exposure	63,852	175,203	160,583	

IRB exposure split by maturity, 31 December 2011

EURm	Institution	Corporate	Retail
< 1 year	43,420	43,817	57,815
1–3 years	15,003	27,698	3,692
3–5 years	4,458	32,734	5,154
> 5 years	6,111	60,116	88,364
Total exposure	68,992	164,365	155,025

Table 4.24 Obligor-weighted PD vs. ADF, 2012

	Average PD	Average ADF
Retail	1.25%	1.08%
Corporate & Institution	1.39%	1.23%

Table 4.25 Estimated vs. realised LGD, 2012

	LGD					
	Estimated ¹ %	Realised average%				
Retail	16.5%	11.8%				

1) Defaulted customers are not included.

in the economic capital framework, in which defaulted exposure receive 0% EL and the internal LGD and CCF estimates for corporate and institution exposure have been used. The figures represent the full-year outcomes. The EL ratio used for calculating risk-adjusted profit was on average 19bp, excluding the sovereign and institution exposure classes. This value is calculated as the average value of the four quarters of 2012.

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

4.8 Loan portfolio, impaired loans and loan losses 4.8.1 Loan portfolio

Nordea's total loans increased by 3% to EUR 346bn during 2012 (EUR 337bn). The overall increase is attributable to an increase of 5% in the household portfolio and a decrease of 1% in the corporate portfolio. The portion of total lending to corporate customers decreased to 53% (54%) while the portion of household customers increased to 46% (45%).

Table 4.26 Expected loss vs. gross loss and net loss

	Retail ho	usehold				
EURm	Mortgage	Other	Corporate ¹	Institution	Government	Total
2012						
EL	-107	-184	-388	-25	-2	-706
Gross loss	-152	-381	-1,131	-13	0	-1,676
Net loss	-62	-191	-676	-4	0	-933
2011						
EL	-123	-212	-407	-26	-2	-771
Gross loss	-103	-314	-1,061	0	0	-1,478
Net loss	-61	-201	-472	0	0	-735
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

1) Includes SME retail.

The portfolio is geographically well diversified with no market accounting for more than 30% of total lending. Of the Nordic countries, Finland has the largest share of lending with approximately 27% or EUR 92bn. Lending in the Baltic countries constitutes 2.4% (2.5%) and the shipping industry 3.3% (3.6%) of the Group's total lending. Lending to companies owned by private equity funds constitutes less than 3% of lending, of which 99% are senior loans. For a further breakdown of the loan portfolio by geography refer to the Annual Report.

4.8.1.1 Lending to corporate customers

Loans to corporate customers, shown in Table 4.30, increased by 1% to EUR 183bn (EUR 181bn). The industries that increased the most in 2012 were consumer staples, real estate and other, while the sectors that decreased the most were industrial commercial services, financial institutions and retail trade. The three largest industries account for approximately 21% (19%) of total lending. Real estate remains the largest industry in the lending portfolio, at EUR 45.4bn (EUR 44.8bn).

The distribution of loans to corporates by size of loans, seen in Table 4.27, shows a high degree of diversification where approximately 69% (67%) of the corporate volume represents loans up to EUR 50m per customer.

The real estate portfolio, shown in Table 4.28, predominantly consists of relatively large and financially strong companies, with 80% (76%) 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. 36% or EUR 16.4bn of lending to the real estate industry is to companies located in Sweden and more than 40% is to companies involved mainly in residential real estate.

The shipping portfolio, shown in Table 4.29, is well diversified by type of vessel, has a focus on large and financially robust industrial players and exhibits strong credit quality, with an average rating of slightly below 4. Nordea is a leading bank to the global shipping and offshore sector with strong brand recognition and a world leading loan syndication franchise. Reflecting Nordea's global customer strategy, there is an even distribution between Nordic and non-Nordic customers. The approach to the industry remains unchanged with conservative terms and a countercyclical lending policy.

Loans to shipping and offshore decreased by 7% to EUR 11.4bn (EUR 12.2bn) in 2012. The tanker, dry cargo and container market have been weak due to lower global demand and growth. This has affected freight rates negatively and caused further deterioration of collateral, resulting in additional loan loss provisions. The reduced investment appetite for shipping assets and banks' lower willingness to lend to shipping companies has made restructurings more difficult.

In other shipping segments, the situation is more stable. Nordea has the work-out resources to handle problem customers and resources for early identification of new potential risk customers

4.8.1.2 Lending to household customers

In 2012, lending to household customers increased by 5% to EUR 159bn (EUR 151bn), mortgage loans increased by 8% to EUR 129bn, and consumer loans decreased by 4% to EUR 29bn. The proportion of mortgage loans of total household loans was 82% (80%), of which the Nordic market accounts for 94%.

4.8.2 Impaired loans

In Table 4.30–4.33 impaired loans, loan losses and allowances are distributed and stated according to the International Financial Reporting Standard (IFRS) as in the Annual Report, which differs somewhat from the CRD (further explained in section 4.2).

Impaired loans gross increased 35% during the year to

Table 4.27 Loans to corporate customers, split by size of loan

	31 December 201	12	31 December 2011		
Loan size, EURm	Loans EURbn	%	Loans EURbn	%	
0-10	78.9	43.2	75.6	41.7	
10-50	46.2	25.3	44.9	24.8	
50-100	21.8	11.9	21.6	11.9	
100-250	25.1	13.8	24.0	13.2	
250-500	8.8	4.8	13.2	7.3	
500-	2.0	1.1	1.9	1.0	
Total	182.8	100%	181.2	100%	

Table 4.28 Loans and total exposure for the real estate management industry, split by geography

	31 December 201	2	31 December 2011		
EURbn	Loans	%	Loans	%	
Denmark	7.9	17.4	7.3	16.3	
Finland	7.9	17.3	8.0	17.9	
Norway	10.6	23.3	10.0	22.2	
Sweden	16.4	36.2	17.0	38.0	
Baltic countries	1.4	3.1	1.4	3.1	
Poland	0.3	0.7	0.4	0.8	
Russia	0.6	1.2	0.4	1.0	
Other	0.3	0.7	0.3	0.6	
Total	45.4	100%	44.8	100%	

Table 4.29 Loans to the shipping and offshore industry, split by segment

	31 December 2	012	31 December 2011		
EURbn	Loans	%	Loans	%	
Bulk carriers	1.2	10.5	1.4	11.1	
Product tankers	0.8	6.6	1.1	9.0	
Crude tankers	1.4	12.6	1.5	12.6	
Chemical tankers	0.9	7.8	0.9	7.3	
Gas tankers	1.1	9.5	1.0	8.2	
Other shipping	2.6	23.1	2.8	22.9	
Offshore and oil services	3.4	29.8	3.5	28.9	
Total	11.4	100.0%	12.2	100.0%	

EUR 6,905m from EUR 5,125m, corresponding to 188bp of total loans. The increase is mainly explained by the development in Shipping and in Denmark. 58% (60%) of impaired loans gross are performing and 42% (40%) are non-performing. Impaired loans net, after allowances for individually assessed impaired loans, increased to EUR 4,505m (EUR 3,233m), corresponding to 123bp of total loans. Allowances for individually assessed loans increased to EUR 2,400m (EUR 1,892m) and allowances for collectively assessed loans decreased to EUR 448m (EUR 579m). The decrease in allowances for collectively assessed loans follows positive rating migration. The ratio of individual allowances to cover impaired loans was unchanged at 35%, while total allowances in relation to impaired loans gross decreased to 41% (48%). The industries with the largest

increases in impaired loans were shipping and offshore, consumer staples, real estate as well as household mortgages. Provisions for off-balance sheet items decreased to EUR 84m in 2012 (EUR 162m in 2011, of which EUR 69m related to the Danska Inskydergarantin).

During 2012, forbearances, such as negotiated terms of interests/maturities due to borrowers' financial distress were on a slightly higher level than in 2011. Typically, impairment testing is undertaken in forbearance situations.

Table 4.31 shows impaired loans split by geography and industry. The increase in impaired loans is mainly related to Denmark where an increase in impaired loans by 53% to EUR 3,759m (2,489m) was seen in 2012. Due to the prolonged difficult economic environment the housing market remains weak. Core fundamentals in Danish

Table 4.30	Loans, impaired loans,	allowances and	provisioning	ratios, split b	y customer t	type,
	31 December 2012					

EURm	Loans after allowances 2011	Loans after allowances 2012	Impaired loans before allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Specific allowances	Provisioning ratio
To central banks and							
credit institutions	51,865	18,574	24	0.13	-4	-24	116%
- of which central banks	40,614	8,005					
– of which credit institutions	11,251	10,569	24	0.23	-4	-24	116%
To the public	337,203	346,251	6,880	1.97	-444	-2,375	41%
– of which corporate	181,221	182,774	4,911	2.66	-287	-1,736	41%
Energy (oil, gas, etc.)	4,984	4,814	0	0.00	-4	0	
Metals and mining materials	1,984	1,906	56	2.90	-6	-13	35%
Paper and forest materials	2,512	2,129	8	0.35	-5	-4	109%
Other materials (building materials, etc.)	5,929	5,753	362	6.07	-22	-189	58%
Industrial capital goods	2,022	1,950	32	1.58	-8	-41	153%
Industrial commercial services, etc.	16.007	13.876	488	3.47	-14	-183	40%
Construction and civil							
engineering	4,951	4,739	247	5.08	-16	-109	51%
Shipping and offshore	12,172	11,419	871	7.44	-40	-255	34%
Transportation	4,505	4,616	70	1.52	-8	-23	44%
Consumer durables							
(cars, appliances, etc.)	3,455	3,277	77	2.30	-7	-48	72%
Media and leisure	2,803	2,985	115	3.78	-4	-57	53%
Retail trade	11,559	11,136	369	3.26	-20	-158	48%
Consumer staples (food,	11 910	10 727	022	716	20	246	20%
Health care and pharmacouticals	2 088	1 976	952 27	1.10	-20	-240	2970 41%
Financial institutions	2,000	1,970	157	1.30	-2	-9	41 /0 50%
Paal astate management	12,547	45 274	687	1.51	- 7	-85	25%
IT software bardware and	44,023	43,374	087	1.01	-03	-100	3370
services	1,505	1,738	93	5.25	-2	-38	43%
Telecommunication equipment	175	144	5	3.68	0	-5	94%
Telecommunication operators	1,229	1,384	41	2.92	-2	-12	35%
Utilities (distribution and							
production)	5,406	5,908	19	0.33	-5	-6	56%
Other	28,744	33,033	256	0.77	-21	-75	38%
- of which household	150,960	158,831	1,969	1.23	-157	-640	40%
Mortgage financing	120,354	129,498	964	0.74	-77	-116	20%
Consumer financing	30,606	29,333	1,004	3.36	-80	-523	60%
– of which public sector	5,023	4,646	0	0.00	0	0	104%
Total loans in the banking operations	389,068	364,825	6,905	1.88	-448	-2,400	41%
Loans in the life insurance operations	878	571					
Total loans including life							
insurance operations	389,946	365,396	6,905	1.88	-448	-2,400	41%

Provisions for off-balance sheet items for 2012 were EUR 16m for credit institutions and EUR 68m related to lending to the public.

EURm	Total 2011	Total 2012	Denmark	Finland	Norway	Sweden	Baltic countries	Poland	Russia	Allowances	Provisioning ratio
Energy (oil, gas, etc.)	0	0	0	0	0	0	0	0	0	4	
Metals and mining materials	6	56	1	1	54	0	0	0	0	19	35%
Paper and forest materials	7	8	4	2	2	0	0	0	0	8	109%
Other materials (buil- ding materials, etc.)	282	362	27	143	75	82	16	7	13	211	58%
Industrial capital goods	73	32	18	13	0	0	0	0	0	48	153%
Industrial commer- cial services, etc.	311	488	279	141	20	26	20	3	0	197	40%
Construction and engineering	189	247	104	41	26	10	10	39	18	125	51%
Shipping and off- shore	427	871	293	329	195	54	0	0	0	295	34%
Transportation	66	70	35	22	3	4	0	7	0	31	44%
Consumer durables (cars, appliances, etc.)	186	77	44	28	1	2	1	0	0	55	72%
Media and leisure	110	115	54	47	5	7	2	0	0	61	53%
Retail trade	354	369	175	140	11	15	22	5	0	178	48%
Consumer staples (food, agriculture, etc.)	548	932	888	18	7	3	11	1	4	274	29%
Health care and											
pharmaceuticals	20	27	12	13	2	0	0	0	0	11	41%
Financial institutions	275	157	135	16	1	4	0	0	0	92	59%
Real estate	506	687	324	17	114	17	217	0	0	243	35%
IT software, hard- ware and services	60	93	25	46	4	18	0	0	0	40	43%
Telecommunication	_	_		_						_	0.40/
equipment	5	5	0	5	0	0	0	0	0	5	94%
operators	1	41	0	0	40	0	0	0	0	14	35%
Utilities (distribution and productions)	6	19	14	1	5	0	0	0	0	11	56%
Other, public and organisations	185	256	205	42	0	0	9	0	0	97	38%
Corporate	3,616	4,911	2,636	1,064	565	243	307	62	34	2,023	41%
Household mortgages	439	964	531	73	41	61	201	54	4	193	20%
Household	1.037	1 004	592	235	40	126		з	Q	603	60%
Public sector	1,007	1,004	0	255	01-	120	0	0	0	005	104%
Total impaired loans	5.092	6.880	3.759	1,372	646	429	508	120	47	0	101/0
Allowances	2,443	2.820	1.397	618	283	212	192	75	38	2.820	
Provisioning ratio	48%	41%	37%	45%	44%	49%	38%	62%	81%	-,5	

Table 4.31 Impaired loans gross and allowances split by geography and industry, 31 December 2012

During 2012, the definition of impaired loans was changed slightly and as a result, figures for 2011 have been restated.

The table does not include credit institutions.

economy are still relatively strong with expected moderate GDP growth 2013, strong public financials, low interest rate, low unemployment level and the number of house-hold mortgage customers facing problems is limited. Most corporates are however financially strong with a relatively good outlook.

4.8.3 Loan losses

Table 4.32 shows the specification of loan losses according to the Annual Report, as well as the changes in the allowance accounts. Loan losses increased to EUR 933m in 2012 from EUR 735m in 2011. This corresponded to a loan loss ratio of 28bp (23bp last year). The development over
Table 4.32 Reconciliation of allowance accounts for impaired loans, 2012

EURm	Individually assessed	Collectively assessed	Total
Opening balance, 1 Jan 2012	-1,892	-579	-2,471
Provisions	-1,314	-130	-1,444
Reversals	368	247	615
Changes through the income statement	-945	117	-829
Allowances used to cover write-offs	454		454
Reclassification	-21	21	0
Currency translation differences	5	-7	-2
Closing balance, 31 Dec 2012	-2,400	-448	-2,848

Table 4.33 Loan losses, 2012

EURm	New provisions and write-offs	Reversals and recoveries	Net loan losses	Loan loss ratio bps
To credit institutions	-13	9	-4	1
– of which central banks				
– of which credit institutions	-13	9	-4	1
To the public	-1,663	734	-929	28
– of which corporate	-1,131	454	-676	37
Energy (oil, gas, etc.)	-1	4	3	-
Metals and mining materials	-14	1	-14	68
Paper and forest materials	-11	2	-9	38
Other materials (building materials, etc.)	-78	34	-44	74
Industrial capital goods	-41	34	-7	34
Industrial commercial services, etc.	-66	38	-28	18
Construction and civil engineering	-80	24	-56	112
Shipping and offshore	-251	10	-241	198
Transportation	-15	11	-4	9
Consumer durables (cars, appliances, etc.)	-34	38	4	-
Media and leisure	-25	11	-14	50
Retail trade	-96	59	-37	32
Consumer staples (food, agriculture, etc.)	-143	56	-87	74
Health care and pharmaceuticals	-4	2	-2	11
Financial institutions	-24	31	7	-
Real estate management	-86	37	-49	11
IT software, hardware and services	-33	18	-15	102
Telecommunication equipment	0	0	0	-
Telecommunication operators	-13	0	-13	103
Utilities (distribution and production)	-5	1	-3	6
Other	-111	44	-67	23
– of which household	-533	280	-253	17
Mortgage financing	-152	90	-62	5
Consumer financing	-381	190	-191	62
- of which public sector	0	0	0	0
Total	-1,676	743	-933	24

Table 4.34 Past due loans, not impaired,31 December 2012

-
3
5
7
3
3
2

Past due loans, not impaired, 31 December 2011

EURm	Corporate customers	Household customers
6–30 days	920	991
31–60 days	186	329
61–90 days	114	127
>90 days	222	306
Total	1,443	1,754
Past due loans, not impaired, in %	0.85	1.25

Table 4.35 Transfer risk exposure

Total	2,367	2,548
Africa	157	163
Middle East	468	375
Latin America	771	965
Eastern Europe and CIS	222	134
Asia	748	911
EURm	31 Dec 2012	31 Dec 2011

The figure for Latin America 2011 has been restated as there was an error in last year's reporting.

time is shown in Figure 4.9. Nordea's risk appetite is 25bp over the cycle. As shown in Table 4.33, the loan loss ratio was 24bp when lending to the public as well as credit institutions is included (22bp).

Loan losses were mainly concentrated to two specific areas; Denmark and shipping. In other areas, loan losses are relatively stable at low levels. EUR 676m relates to corporate customers (EUR 481m) and EUR 253m (EUR 263m) relates to household customers, of which EUR 191m is loan losses relating to consumer loans (EUR 201m). Within corporates the main losses were in sectors shipping and offshore, consumer staples and construction and civil engineering. Challenges remained within shipping with ship values continuing to fall throughout the year resulting in increased losses. The provisioning level is in Denmark explained by certain overleveraged Danish households and agriculture customers. Loan losses in Norway, Sweden and Finland were at low levels in 2012.

Collective net loan losses were positive EUR 131m following positive rating migration during the year. In the operations in the Baltic countries, the loan loss ratio was 4bp (14bp).

Figure 4.9 Annualised net loan losses



Table 4.34 shows loans past due 6 days or more, that are not considered impaired, split by corporate and household customers. Past due loans to corporate customers that are not considered impaired were at end of 2012 EUR 1,929m, down from EUR 1,443m one year ago, while past due loans for household customers stayed largely unchanged at EUR 1,773m (EUR 1,754m).

To recognise the risk related to lending to developing countries, Nordea carries transfer risk allowance and provisions for non-investment grade rated countries. The transfer risk exposure is dominated by relatively few countries and is primarily short-term and trade related. As can be seen in Table 4.35, Latin America and Asia account for the majority of the transfer risk exposure where Brazil, China, Republic of Korea and India contribute the most reflecting these countries' importance for Nordea's corporate customers. The total transfer risk allowance and provisions at the end of 2012 was EUR 22m, up from EUR 13m 2011.

5. Market risk

The market risk taking activities of Nordea are primarily focused on the Nordic and European markets. The total consolidated market risk for the Group, as measured by VaR, was EUR 43m on average in 2012, compared to EUR 73m in 2011. At the end of 2012, total VaR was EUR 31m. The total market risk, measured by VaR is primarily driven by interest rate risk.

5.1 Market risk management

5.1.1 Governance of market risk

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

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

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

5.1.2 Management of market risk

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

Nordea Markets and Group Treasury are the key con-

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

5.1.2.1 Structural market risks

Structural FX risk arises primarily from investments in subsidiaries and associated enterprises denominated in foreign currencies. The general principle is to hedge this risk by matched funding, although exceptions from this principle may be made in markets where matched funding is impossible to obtain, or can be obtained only 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 currency in Nordea's legal entities must be hedged at least monthly.

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

5.1.2.2 Other market risks in Nordea

Market risk on Nordea's account also arises from the Nordea-sponsored defined benefit pension plans for employees (pension risk) and from the investment of policyholders' money with guaranteed minimum yields in Nordea Life & Pensions (NLP). The latter is described in chapter 9.

5.1.3 Measurement of market risk

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

5.1.3.1 Value-at-Risk

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

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

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

5.1.3.2 Stressed VaR

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

5.1.3.3 Incremental Risk Measure (IRM)

The IRM measures the risk of losses due to credit migration or default of issuers of tradable corporate debt or credit derivatives held in the trading book. Nordea's IRM model is based on Monte Carlo simulations and measures risk at a 99.9% probability level over a one-year horizon.

5.1.3.4 Comprehensive Risk Measure (CRM)

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

5.1.3.5 Stress testing

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

- Historical stress tests. These are conducted by identifying the most adverse scenario for the current portfolio from a data set covering a significantly longer time period than the ordinary VaR model. Separate historical stress tests are also conducted where the current portfolio is exposed to the market movement from selected historical events with significant stress in financial markets.
- 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.
- Sensitivity tests, where rates, prices, and/or volatilities are shifted markedly to emphasise 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.
- Reversed stress tests. These assess and try to identify the type of events that could lead to losses equal to or greater than a pre-defined level.

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

While these stress tests measure the risk over a shorter time horizon, market risk is also a part of Nordea's comprehensive firm-wide ICAAP stress test, which measures the risk over a three-year horizon. For further information on group-wide stress tests, see chapter 10.

5.1.4 Market risk appetite

The market risk appetite in Nordea is expressed through risk appetite statements issued by the Board of Directors. The market risk appetite statements are defined in terms of market risk share of economic capital, maximum reported market risk loss per quarter and maximum economic market risk loss per quarter.

Compliance with the risk appetite is ensured by the cascading of market risk limits throughout the organisation and through the use of stop-loss rules.

For more information on the risk appetite framework in Nordea see section 2.2.2.

5.2 Consolidated market risk for the Nordea Group

The consolidated market risk for the Nordea Group presented in Table 5.1 includes both the trading book and the banking book. Total VaR was EUR 31m at the end of 2012 (EUR 47m at the end of 2011) and demonstrated a considerable diversification effect between interest rate, equity, credit spread and foreign exchange risk. Commodity risk was at an insignificant level.

5.3 Market risk for the trading book

The market risk for the trading book is presented in Table

5.2. Total VaR was EUR 18m at the end of 2012 (EUR 23m at the end of 2011). The main contributor to total VaR was interest rate risk. Interest rate VaR was EUR 15m (EUR 21m), with the largest part of the interest rate sensitivity stemming from interest rate positions in DKK, SEK and EUR.

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

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

Nordea uses the internal model approach to calculate the market risk capital requirements for the predominant part of the trading book. However, for specific interest rate risk relating to Danish mortgage bonds and for specific equity risk relating to structured equity options, the market risk capital requirements are calculated using the standardised approach. The use of the internal model approach in the Group's legal entities is shown in Table 5.3.

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

By the end of 2012, RWA and capital requirements for market risk were EUR 6,323m (EUR 8,144m) and EUR 506m (EUR 652m) respectively as shown in Table 5.4. RWA was significantly reduced during the year as a consequence of reduced risk levels in the trading book (mainly interest rate risk).

5.4.1 Backtesting and validation of risk models

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

Table 5.1 Consolidated market risk for the Nordea Group, 31 December 2012

EURm	Measure	31 Dec 2012	2012 high	2012 low	2012 avg	31 Dec 2011
Total risk	VaR	30.8	67.1	28.6	43.2	47.2
– Interest rate risk	VaR	35.9	74.6	28.2	42.3	37.9
– Equity risk	VaR	10.6	11.6	1.9	5.6	6.1
– Credit spread risk	VaR	15.9	19.3	8.1	12.9	11.2
– Foreign exchange risk	VaR	13.2	16.5	2.8	8.0	5.0
Diversification effect		60%	60%	15%	37%	22%

Table 5.2 Market risk for the trading book, 31 December 2012

EURm	Measure	31 Dec 2012	2012 high	2012 low	2012 avg	31 Dec 2011
Total risk	VaR	18.0	46.0	11.6	26.7	22.6
– Interest rate risk	VaR	15.4	38.4	9.1	21.7	21.2
– Equity risk	VaR	3.9	4.3	0.5	2.0	1.2
– Credit spread risk	VaR	10.7	13.5	5.4	8.5	6.1
– Foreign exchange risk	VaR	13.7	17.3	2.4	7.4	4.2
Diversification effect		59%	59%	16%	34%	31%
Total stressed VaR	sVaR	39.9	76.0	29.6	46.2	63.6

Table 5.3 Methods for calculating capital requirements

	Interest rate risk		Equit		
	General	Specific	General	Specific	FX risk
Nordea Group	IA	IA^1	IA	IA ¹	IA
Nordea Bank Danmark	IA	SA	IA	SA	IA
Nordea Bank Finland	IA	IA^1	IA	IA^1	IA
Nordea Bank Norge	IA	SA	IA	SA	IA

IA: internal model approach, SA: standardised approach.

1) The capital requirement for specific interest rate risk from Danish mortgage bonds and specific equity risk from structured equity options is calculated according to the standardised approach.

	Trading book, IA		Trading	Trading book, SA		Banking book, SA		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	
Interestrate risk ¹	1,070	86	1,298	104			2,368	189	
Equity risk	106	9	317	25			423	34	
Foreign exchange risk	298	24			699	56	997	80	
Commodity risk			112	9			112	9	
Diversification effect	-600	-48					-600	-48	
Stressed Value-at-Risk	1,770	142					1,770	142	
Incremental risk charge	763	61					763	61	
Comprehensive risk charge	489	39					489	39	
Total	3,897	312	1,727	138	699	56	6,323	506	

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

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

RWA and capital requirements for market risk, 31 December 2011

	Tradin	g book, IA	Trading	Trading book, SA		Banking book, SA		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	
Interest rate risk ¹	1,272	102	1,618	129			2,890	231	
Equity risk	56	4	929	74			985	79	
Foreign exchange risk	208	17			698	56	906	72	
Commodity risk			24	2			24	2	
Diversification effect	-447	-36					-447	-36	
Stressed Value-at-Risk	2,081	166					2,081	166	
Incremental risk charge	787	63					787	63	
Comprehensive risk charge	917	73					917	73	
Total	4,875	390	2,571	206	698	56	8,144	652	

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



Figure 5.1 Backtest of VaR for the trading book 2012: Profit/loss (actual, excluding commisions) against one-day VaR

compared to one-day VaR figures. Figure 5.1 shows the VaR backtest of the trading book for 2012.

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

5.5 Interest rate risk in the banking book

Interest rate risk in the banking book is monitored daily by measuring and monitoring VaR on the banking book and by controlling interest rate sensitivities, which measure the immediate effects of interest rate changes on the economic values of assets, liabilities and off-balance sheet items. As of end 2012, the interest rate VaR in the banking book was EUR 30m (EUR 26m). Table 5.5 shows the net effect on economics values of a parallel shift in rates of up to 200bp.

5.6 Structural Interest Income Risk (SIIR)

SIIR is the amount by which Nordea's accumulated net interest income would change during the next 12 months if all interest rates were to change by one percentage point.

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

Nordea's SIIR management is based on policy statements resulting in different SIIR measures and organisational procedures.

Policy statements focus on optimising financial structure, balanced risk taking and reliable earnings growth, identification of all significant sources of SIIR, measurement under stressful market conditions and adequate public information.

Group Treasury has the responsibility for the operational management of SIIR.

5.6.1 SIIR measurement methods

Nordea's SIIR is measured through dynamic simulations by calculating several net interest income scenarios and comparing the difference between these scenarios. Several interest rate scenarios are applied, but the basic measures for SIIR are the two scenarios (increasing rates and decreasing rates). These scenarios measure the effect on Nordea's net interest income for a 12 month period of a one percentage point change in all interest rates as shown in Table 5.6, which also covers repricing gaps over 12 months. The balance sheet is assumed to be constant over time, however main elements of customer behaviour and Nordea's decision-making process concerning own rates are taken into account.

5.6.2 SIIR analysis

At the end of the year, the SIIR for increasing market rates was EUR 442m (EUR 179m) and the SIIR for decreasing market rates was EUR –492m (EUR –276m). These figures

imply that net interest income would increase if interest rates rose and decrease if interest rates fell. The methodology for deriving SIIR figures was improved in the beginning of 2012 which explains the large changes in SIIR since 2011 as the figures have not been restated.

5.7 Equity risk in the banking book

Table 5.7 shows equity holdings in the banking book split by the intention of the holding. All equities in the table are carried at fair value. The portfolio of illiquid alternative investments is included with a fair value of EUR 584m (EUR 638m), of which hedge funds EUR 173m, private equity funds EUR 277m, credit funds EUR 115m and seed-money investments EUR 19m. All four types of investments are spread over a number of funds.

5.8 Determination of fair value of financial instruments

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

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

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

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

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

The valuation models applied by Nordea are consistent with accepted economic methodologies for pricing financial instruments, and incorporate the factors that market

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

EURm	+200bp	+100bp	+50bp	-50bp	-100bp	–200bp
DKK	-136.8	-68.0	-33.9	34.0	68.4	148.5
EUR	-68.2	-33.6	-16.4	11.8	23.2	66.0
SEK	-45.4	-24.8	-12.8	13.2	26.6	45.1
NOK	-39.9	-20.1	-10.1	10.3	20.8	40.8
RUB	-21.5	-10.7	-5.4	5.4	10.7	21.5
CHF	-6.9	-3.5	-1.7	1.7	3.5	6.9
Total	-314.6	-158.6	-79.3	75.4	151.2	324.7

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.

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

	Interest rate fixing period							
Group balance sheet	Within 3 months	3–6 months	6–12 months	1–2 years	2–5 years	>5 years	No repricing	Total
502,776	304,590	21,744	21,983	21,476	36,197	18,683	78,103	502,776
174,644	0	0	0	0	0	0	174,644	174,644
677,420	304,590	21,744	21,983	21,476	36,197	18,683	252,747	677,420
448,242	228,751	30,488	11,817	24,618	44,959	30,872	76,737	448,242
229,178	0	0	0	0	0	0	229,178	229,178
677,420	228,751	30,488	11,817	24,618	44,959	30,872	305,915	677,420
	-27,967	10,501	-4,035	-1,713	11,731	11,258		
	47,872	1,756	6,131	-4,855	2,969	-930	-53,168	
		49,628	55,759	50,905	53,874	52,944	-225	
	Group balance sheet 502,776 174,644 677,420 448,242 229,178 677,420	Group balance Within 3 months 502,776 304,590 174,644 0 677,420 304,590 448,242 228,751 229,178 0 677,420 228,751 229,178 0 677,420 228,751 448,242 236,751 448,242 236,751 229,178 0 677,420 228,751	Group balance sheet Within 3 months 3–6 months 502,776 304,590 21,744 174,644 0 0 677,420 304,590 21,744 448,242 228,751 30,488 229,178 0 0 677,420 228,751 30,488 229,178 0 0 677,420 228,751 30,488 229,178 10,501 10,501 677,420 47,872 1,756	Group balance Within 3 months 3-6 months 6-12 months 502,776 304,590 21,744 21,983 174,644 0 0 0 677,420 304,590 21,744 21,983 448,242 228,751 30,488 11,817 229,178 0 0 0 677,420 228,751 30,488 11,817 229,178 0 0 0 677,420 228,751 30,488 11,817 229,178 0 0 0 677,420 228,751 30,488 11,817 -27,967 10,501 -4,035 47,872 1,756 6,131 49,628 55,759 55,759	Group balance sheet Within 3 months 3-6 months 3-6 months 6-12 months 1-2 years 502,776 304,590 21,744 21,983 21,476 174,644 0 0 0 0 677,420 304,590 21,744 21,983 21,476 448,242 228,751 30,488 11,817 24,618 229,178 0 0 0 0 677,420 228,751 30,488 11,817 24,618 229,178 0 0 0 0 677,420 228,751 30,488 11,817 24,618 229,178 0 0 0 0 677,420 228,751 30,488 11,817 24,618 -27,967 10,501 -4,035 -1,713 47,872 1,756 6,131 -4,855 49,628 55,759 50,905 50,905	Interest rate fixing period Group balance sheet Within 3 months 3–6 months 3–6 months 6–12 months 1–2 years 2–5 years 502,776 304,590 21,744 21,983 21,476 36,197 174,644 0 0 0 0 0 677,420 304,590 21,744 21,983 21,476 36,197 448,242 228,751 30,488 11,817 24,618 44,959 229,178 0 0 0 0 0 677,420 228,751 30,488 11,817 24,618 44,959 229,178 0 0 0 0 0 0 677,420 228,751 30,488 11,817 24,618 44,959 229,178 0 0 0 0 0 0 0 677,420 228,751 30,488 11,817 24,618 44,959 -27,967 10,501 -4,035 -1,713	Group balance sheet Within 3 months 3-6 months 3-6 months 6-12 months 1-2 years 2-5 years >5 years 502,776 304,590 21,744 21,983 21,476 36,197 18,683 174,644 0 0 0 0 0 0 677,420 304,590 21,744 21,983 21,476 36,197 18,683 174,644 0 0 0 0 0 0 677,420 304,590 21,744 21,983 21,476 36,197 18,683 448,242 228,751 30,488 11,817 24,618 44,959 30,872 229,178 0 0 0 0 0 0 0 677,420 228,751 30,488 11,817 24,618 44,959 30,872 677,420 228,751 30,488 11,817 24,618 44,959 30,872 -27,967 10,501 -4,035 -1,713 11,731	Group balance Within 6-12 months 1-2 years 2-5 years >5 years repricing 502,776 304,590 21,744 21,983 21,476 36,197 18,683 78,103 174,644 0 0 0 0 0 174,644 677,420 304,590 21,744 21,983 21,476 36,197 18,683 78,103 174,644 0 0 0 0 0 0 174,644 677,420 304,590 21,744 21,983 21,476 36,197 18,683 252,747 448,242 228,751 30,488 11,817 24,618 44,959 30,872 76,737 229,178 0 0 0 0 0 229,178 677,420 228,751 30,488 11,817 24,618 44,959 30,872 305,915 677,420 228,751 30,488 11,817 24,618 44,959 30,872 305,915 -27,967

SIIR impact of increasing interest rates for the year 2013

Impact ¹	429	1	12
Cumulative SIIR impact	429	430	442

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

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

EURm	Book value	Fair value	Unrealised gains/losses ³	Realised gains/losses ³	Capital requirements
Investment portfolio ¹	626	626	45	8	50
Other ²	161	161	-6	3	13
Total	787	787	39	11	63

Of which listed equity holdings, 29.
 Of which listed equity holdings, 132.
 Result for 2012.

Table 5.8 Determination of fair value of assets and liabilities split by valuation method (Nordea Group, excluding Nordea Life & Pensions), 31 December 2012

	Quoted prices in active markets for same instrument	Valuation technique using observable data	Valuation technique using non-observable data	
EURm	(Level 1)	(Level 2)	(Level 3)	Total
Assets				
Loans to credit institutions	34	8,422	-	8,456
Loans to the public	-	79,255	-	79,255
Debt securities	43,825	28,382	399	72,606
Shares	7,874	-	1,164	9,038
Derivatives	19	116,620	1,916	118,555
Other assets	-	7,810	-	7,810
Prepaid expenses and accrued income		25	-	25
Liabilities				
Deposits by credit institutions	-	19,858	-	19,858
Deposits and borrowings from the public	-	24,300	-	24,300
Debt securities in issue	31,296	7,572	-	38,868
Derivatives	53	112,566	1,584	114,203
Other liabilities	4,873	7,050	-	11,923
Accrued expenses and prepaid income	-	470	-	470

participants consider when setting a price. New valuation models are subject to approval and all models are reviewed regularly.

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

Table 5.8 shows fair value of Nordea's assets and liabilities by valuation method as of 31 December 2012.

5.8.1 Compliance with requirements applicable to exposure in the trading book

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

Nordea's 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 credit 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. During 2012, a group-wide scenario analysis process was introduced, putting focus on extreme operational risks.

6.1 Operational risk management

6.1.1 Governance of operational risk

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

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

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

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

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

6.1.2 Management of operational risk

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

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

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

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

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

6.1.3 Measurement of operational risk

6.1.3.1 Key processes

Risk and control self-assessment

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

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

The purpose of the RCSA is to verify whether Nordea

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

Incident reporting

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

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

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

Figure 6.1 shows incidents reported over the last six years (2007–2012) distributed by ORX event type.

Scenario analysis process

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

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

Other processes

Nordea has developed more task-specific risk management processes in the 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

Figure 6.1 Distribution of incidents reported, 2007–2012



new products as well as material changes to existing products.

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

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

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

6.1.3.2 Key reports

Group risk map

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

Semi-annual reporting on operational and compliance risks

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

6.1.4 Operational risk appetite

The risk appetite framework for operational risk and compliance covers:

- operational risk, as measured by status of mitigating actions for top risks, expected operational risk losses and reputational impact, defined by the number of customer complaints
- compliance/non-negotiable risks, as measured by compliance with regulatory requirements and the number of breaches of internal policies and/or external regulations.

6.2 Capital requirements for operational risk

The capital requirements for operational risk is calculated according to the standardised approach, in which all of the institution's activities are divided into eight standardised business lines and a defined beta coefficient is multiplied by the gross income for each business line. The capital requirements for operational risk for 2012 amounts to EUR 1,298m (EUR 1,236m). The capital requirements for operational risk are updated on a yearly basis.

7. Securitisation and credit derivatives

Nordea's role in securitisation has been limited to that of being a sponsor of various schemes together with some limited trading on credit derivatives. Nordea has not participated in securitisation as originator and hence has not transferred loans nor their risk outside of Nordea. Nordea uses the models introduced by CRD III to calculate capital requirements for credit derivatives.

7.1 Introduction to securitisation and credit derivatives trading

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

Banks can play several roles in securitisation. First, they can act as originators by having assets they themselves originated 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 banks can themselves invest in these securities or create these exposures in credit derivatives markets.

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

single names evolves it has been customary to talk about correlation trading in this context. The market risk created by Nordea's correlation trading is described in further detail in section 7.3.

7.2 Traditional securitisations where Nordea acts as sponsor

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

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

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

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

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 (CLNs) and collateralised mortgage obligations.

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

Nordea holds a small amount of CLNs issued by the

Table 7.1 Special	purpose entities	where Nordea	is the sponsor,	31 December 2012
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EURm		Duration	Accounting treatment	Book	Nordea's investment ¹	Total assets
Kalmar Structured Finance A/S	Credit-linked note	<1 years	Consolidated	Trading	1	23
Viking ABCP Conduit	Receivables Securitisation	<5 years	Consolidated	Banking	1,230	1,326
Total					1,231	1,349

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

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

7.2.2 Securitisations of customer assets

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

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

There was no outstanding commercial paper issue at year-end 2011 nor 2012. The credit facility results in an RWA of EUR 614m (EUR 697m), which is included within the credit risk framework of Nordea's banking book.

7.3 Credit derivatives trading

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

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

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

Table 7.2 and Table 7.3 list the outstanding notional of

credit default swaps (CDSs) and CDOs at the end of 2012, split by bought and sold positions.

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 part of Nordea Bank Finland Plc.

The risk positions in correlation trading are integrated in Nordea's consolidated market risk management and are as such subject to:

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

The total market risk capital requirement for the correlation trading portfolio was EUR 63.5m as of end 2012. The component of this capital requirement derived from the comprehensive risk measure was EUR 39.1m.

Table 7.2 Credit default swaps (CDSs)¹, 31 December 2012

	Total gross notional	Total gross notional
EURm	sold	bought
Single-name CDS: Investment grade	4,856	5,374
Single-name CDS: Non-investment grade	3,423	3,182
Multi-name CDS: indices	9,899	11,266
Multi-name CDS: Non-investment grade		
indices	3,162	3,474
Total	21,340	23,296

1) As of 31st December, all CDS positions were part of the trading book.

Table 7.3 Collateralised debt obligations (CDOs) -Exposure (excl. NLP)¹, 31 December 2012

	Bought	Sold
Notionals EURm	protection	protection
CDOs, gross	1,833	2,314
Hedged exposures	1,442	1,444
CDOs, net ²	391 ³	870 ⁴
Of which:		
– Equity	53	173
– Mezzanine	80	148
– Senior	258	549

1) First-to-default swaps are not classified as CDOs and are therefore not included in the table. Net bought protection amounts to EUR 214m (EUR 218m) and net sold protection to EUR 50m (EUR 53m). Both bought and sold protection are predominantly investment grade.

 Net exposure disregards exposure where bought and sold tranches are completely identical in terms of reference pool attachment, detachment, maturity and currency.
 Of which investment grade EUR 349m (EUR 181m) and sub-investment grade EUR 42m (EUR 0m).

4) Of which investment grade EUR 769m (EUR 873m), sub-investment grade EUR 101m (EUR 0m) and not rated EUR 0m (EUR 0m).

8. Liquidity risk and funding

During 2012, Nordea continued to benefit from its focus on prudent liquidity risk management, in terms of maintaining a diversified and strong funding base and had access to all relevant financial markets and was able to actively use all of its funding programmes. Nordea issued approximately EUR 29bn in long-term debt, of which EUR 12bn in the Swedish, Finnish and Norwegian markets for covered bonds. Furthermore, Nordea is LCR compliant in all currencies combined as well as separately in USD and EUR.

8.1 Liquidity risk management

8.1.1 Governance of liquidity risk

Group Treasury is responsible for pursuing Nordea's liquidity strategy, managing liquidity and for compliance

with Group-wide liquidity risk limits set by the Board of Directors and the Risk Committee. Group Treasury develops the liquidity risk management frameworks, which consist of policies, instructions and guidelines for the Group, as well as defines the principles for pricing liquidity risk.

8.1.2 Management of liquidity risk

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

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

In Table 8.1 Nordea's funding sources are presented. As of year-end 2012, the total volume utilised under shortterm programmes was EUR 57.2bn (EUR 66.8bn) with the

Liability type	Interest rate base	Average maturity (years)	EURm
Deposits by credit institutions			
– shorter than 3 months	Euribor, etc.	0.0	52,721
– longer than 3 months	Euribor, etc.	1.0	2,705
Deposits and borrowings from the public			
– Deposits on demand	Administrative	0.0	122,052
– Other deposits	Euribor, etc.	0.3	78,626
Debt securities in issue			
– Certificates of deposits	Euribor, etc.	0.3	18,627
– Commercial papers	Euribor, etc.	0.2	38,524
 Mortgage covered bond loans 	Fixed rate, market-based	7.5	84,198
– Other bond loans	Fixed rate, market-based	3.3	42,992
Derivatives		n.a.	114,203
Other non-interest bearing items		n.a.	41,440
Subordinated debentures			
 Dated subordinated debenture loans 	Fixed rate, market-based	6.8	5,219
 Undated and other subordinated debenture loans 	Fixed rate, market-based	n.a.	2,578
Equity			28,216
Total			632,100
Liabilities to policyholders			45,320
Total, including life insurance operations			677,420

Table 8.1 Funding sources, 31 December 2012

Table 8.2 Assets and liabilities split by currency, 31 December 2012

EURbn	EUR	DKK	NOK	SEK	USD	Other	Not distributed	Total
Cash and balances with								
central banks	12.8	10.5	0.8	1.2	17.0	1.8		44.1
Loans to the public	90.4	79.0	52.6	88.8	22.6	12.9		346.3
Loans to credit institutions	2.7	0.9	0.6	2.0	4.2	0.2		10.6
Interest-bearing securities including treasury bills	22.2	17.7	6.4	18.7	10.1	2.4	25.4	102.9
Other assets including derivatives							173.6	173.6
Total assets	128.2	108.1	60.4	110.7	53.8	17.2	199.0	677.4
Deposits and borrowings from the public	63.0	43.5	26.8	47.3	11.5	8.5		200.7
Deposits by credit								
institutions	15.2	4.7	3.9	5.0	20.6	6.1		55.4
Debt securities in issue	42.2	39.0	7.2	33.1	43.6	19.1		184.3
– of which CDs & CPs	6.9	4.3	0.1	0.7	32.4	12.9		57.2
 of which covered bonds 	13.6	33.3	6.8	27.3	2.3	0.9		84.2
– of which other bonds	21.7	1.5	0.4	5.2	8.9	5.3		43.0
Subordinated liabilities	3.6				3.3	0.8		7.8
Other liabilities including							201.0	201.0
Equity							28.2	28.2
Total liabilities								
and equity	124.1	87.2	37.9	85.5	79.0	34.5	229.2	677.4
Position not reported on		10.2	22.2	25.0	25.2	45.0		
the balance sheet	-4.6	-19.3	-22.3	-25.2	25.3	17.2		
Net position, currencies	-0.5	1.6	0.2	-	0.1	-0.1		

Table 8.3 Maturity analysis¹ for assets and liabilities, 31 December 2012

EURbn	<1 month	1–3 months	3–12 months	1–2 years	2–5 years	5–10 years	>10 years	Not specified ²	Total
Cash and balances with						j	<u>,</u>	1	
central banks	44.1								44.1
Loans to the public	69.5	9.4	21.1	20.1	77.4	50.2	98.5		346.3
Loans to credit institutions	7.2	1.0	1.0	0.5	0.5	0.3			10.6
Interest-bearing securities including treasury bills	77.5							25.4	102.9
Other assets including derivatives								173.6	173.6
Total assets	198.3	10.4	22.1	20.6	77.9	50.5	98.6	199.0	677.4
Deposits and borrowings from the public	29.9	15.2	13.2	1.7	0.5	0.3		139.8	200.7
Deposits by credit institutions	43.4	9.3	2.2	0.2	0.2	0.1			55.4
Debt securities in issue	14.0	29.5	29.6	27.2	51.9	14.6	17.6		184.3
– of which CDs & CPs	13.5	26.0	16.6	1.0					57.2
 of which covered bonds 	0.2	0.2	9.3	17.6	32.6	6.8	17.6		84.2
 of which other bonds 	0.3	3.2	3.6	8.7	19.2	7.8			43.0
Subordinated liabilities						5.2		2.6	7.8
Other liabilities including derivatives								201.0	201.0
Equity								28.2	28.2
Total liabilities and equity	87.3	54.0	44.9	29.1	52.6	20.2	17.6	371.6	677.4

1) Maturity analysis is based on both contractual and behavioural information of remaining maturity of items. Amortisation is included in the time bucket corresponding to the estimated cash flow date.2) Includes items which are lacking specific timing of cash flows.



Figure 8.1 Maturity of assets and liabilities, split by currency, 31 December 2012

average maturity being 0.2 years. The total volume under long-term programmes was EUR 127.2bn (113.1bn) with the average maturity being 6.1 years. Figure 8.1 and Table 8.2 and 8.3 show the balance sheet decomposed by currency and maturity.

Nordea's liquidity risk management includes stress testing and a business continuity plan for liquidity management. Stress testing is defined as the evaluation of potential effects on a bank's liquidity situation under a set of exceptional but plausible events. The stress testing framework also includes survival horizon metrics (see section 8.1.3), which represents a combined liquidity risk scenario (idiosyncratic and market-wide stress).

8.1.3 Measurement of liquidity risk

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

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

During 2011, the survival horizon metric was introduced. The metric is composed of the liquidity buffer and funding gap risk cash flows, and includes expected behavioural cash flows from contingent liquidity drivers. Survival horizon defines the short-term liquidity risk appetite of the Group (see section 8.1.4) and expresses the excess liquidity after a 30-day period without access to market funding.

The Board of Directors has set the limit for minimum survival without access to market funding to 30 days.

The structural liquidity risk of Nordea is measured and limited by the Board of Directors through the net balance of stable funding (NBSF), which is defined as the difference between stable liabilities and stable assets. These liabilities primarily comprise retail deposits, bank deposits and bonds with a remaining term to maturity of more than 12 months, as well as shareholders' equity, while stable assets primarily comprise retail loans, other loans with a remaining term to maturity longer than 12 months and committed facilities. The CEO in GEM has set as a target that the NBSF should always be positive, which means that stable assets must be funded by stable liabilities.

8.1.4 Liquidity risk appetite

The Board of Directors defines the liquidity risk appetite by

Table 8.4 Liquidity buffer split by type of asset and currency, 31 December 2012

	Currency distribution, market values in EURm					
Type of asset	SEK	EUR	USD	Other	Sum	
Cash and balances with central banks	1,005	12,711	16,971	13,378	44,065	
Balances with other banks	942	0	0	25	967	
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks ²	1,804	5,159	5,300	3,966	16,230	
Securities issued or guaranteed by municipalities or other public sector entities ²	846	428	372	281	1,928	
Covered bonds issued by the own bank or related unit ²	62	3,212	0	9,560	12,834	
Covered bonds issued by other bank or financial institute ²	7,626	8,632	351	9,110	25,719	
Securities issued by non-financial corporates ²	0	0	0	0	0	
Securities issued by financial corporates, excluding covered bonds ²	125	220	2,090	103	2,538	
All other eligible and unencumbered securities	0	35	195	10	240	
Total liquidity buffer ¹	12,411	30,397	25,279	36,432	104,519	
Adjustments to Nordea's official buffer. Cash and balances with other banks/central banks (-), central bank						
haircuts(-)	-2,150	-13,054	-17,132	-8,396	-40,732	
Total liquidity buffer (Nordea definition)	10,261	17,343	8,148	28,036	63,788	

According to Swedish Bankers' Association's definition 2011-10-07.
 0-20 % risk weight.

Table 8.5 Historical quarterly development of the liquidity buffer, 31 December 2012

EURm Type of asset	Q4/12	Q3/12	Q2/12	Q1/12	Q4/11	Q3/11
Cash and balances with central banks	44.1	33.4	36.9	28.8	41.3	7.3
Balances with other banks	1.0	1.7	0.1	0.0	0.0	1.9
Securities issued or guanranteed by sovereigns, central banks or multilateral development banks ²	16.2	18.3	15.9	12.9	20.8	19.1
Securities issued or guaranteed by municipalities or other public sector entities ²	1.9	1.2	1.2	0.5	0.4	
Covered bonds issued by the own bank or related unit ²	12.8	14.6	13.6	14.7	15.2	14.5
Covered bonds issued by other bank or financial institute ²	25.7	25.4	22.0	24.0	23.4	23.4
Securities issued by non-financial corporates ²				0.1		
Securities issued by financial corporates, excluding covered bonds ²	2.5	2.4	3.3	3.3	3.5	
All other eligible and unencumbered securities	0.2	0.4	0.2	0.1	0.1	1.8
Total liquidity buffer ¹	104.5	97.4	93.1	84.2	104.8	68.1
Adjustments to Nordea's official buffer. Cash and balances with other banks/central banks (-), central bank haircuts(-)	-40.7	-32.8	-25.4	-23.9	-40.7	-6.3
Total liquidity buffer (Nordea definition)	63.8	64.6	67.8	60.3	64.0	61.8

1) According to Swedish Bankers' Association's definition 2011-10-07.

2) 0-20% risk weight.

setting limits for the liquidity risk measures applied by the Group. The most central measure is survival horizon, which defines the risk appetite by setting the minimum survival of one month under institution-specific and market-wide stress scenarios with limited mitigation actions.

8.2 Liquidity risk and funding analysis

The short-term liquidity risk remained at moderate levels throughout 2012. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 30 days, was EUR +10.1bn (EUR -5.8bn). Nordea's liquidity buffer is highly liquid, consisting only of securities eligible for pledging with the central bank as shown in Table 8.4. Table 8.5 shows the quarterly development of the liquidity buffer range. Measured daily, the liquidity buffer ranged between EUR 57.3bn – 68.9bn (EUR 51.3 – 65.0bn) throughout 2012, with an average buffer size of EUR 63.1bn (EUR 59.3bn). Survival horizon was in the range EUR 23.2-68.0bn (EUR 8.3 – 50.9bn) throughout the year with an average of EUR 47.2bn. The target of maintaining a positive NBSF was comfortably achieved throughout 2012 and the yearly average for the NBSF was EUR 54.1bn (EUR 48.4bn). The methodology for deriving NBSF was changed during 2012 and therefore the figure for 2011 is not directly comparable as it has not been restated. The NBSF is shown in Table 8.6.

Table 8.6 Net balance of stable funding,31 December 2012

Stable liabilities and equity	EURbn
Tier 1 and tier 2 capital	27.5
Secured/unsecured borrowing	115.9
Stable retail deposits	31.4
Less stable retail deposits	61.2
Wholesale deposits	84.3
Total stable liabilities	320.2

Stable assets

Wholesale and ratail leans >1V	238/
wholesale and retail loans >11	250.4
Long-term lending to banks and financial companies	1.5
Other illiquid assets	9.8
Total stable assets	249.6
Off-balance sheet items	2.7
Net balance of stable funding (NBSF)	67.9

9. Risk and capital in the life and pensions operation

The nature of life insurance leads Nordea Life & Pensions (NLP) to take risks that are quite different to those faced in the banking operation. The main risks in Nordea's life and pensions operation are market risks and life insurance risks.

9.1 Risk management system and governance

The Nordea Group has issued a market risk policy, where the direct exposure from market risk to Nordea's own Profit and Loss (P/L) account as well as asset and liability market risks are included.

Group Risk Management has the operational responsibility of the development and maintenance of group-wide risk framework. NLP has its own risk management function which measures and monitors market risk, solvency ratios, financial buffer levels and risk limits with respect to the life insurance operations. The ALM risk position (risk on P/L, solvency ratios and financial buffer) is reported weekly to senior management in the Nordea Group on a legal entity level and on a consolidated level for the life and pensions operation. In addition, market risk for the separated equity capital of the legal entities in the life and pensions operation is estimated and reported daily by Group Risk Management.

The solvency ratios for the consolidated life and pensions operation (Nordea Life Holding AB) are reported to GEM monthly and to supervisors quarterly. Economic capital is measured and reported to Group Risk Management and Group executive Management quarterly.

9.2 Asset and liability management

The "ALM square" has been the central risk and capital management concept of NLP since 2003. It has been adopted to ensure that the four objectives (P/L, economic value & capital, legal requirements and customers) are taken into consideration when optimising the rate of return to policyholders, given the level of risk taken, whilst simultaneously creating long-term value for the life and pensions operation. The ALM square is illustrated in Figure 9.1.

Table 9.1 shows the assets and liabilities as of 31 December 2012 on an IFRS basis. The development of assets and liabilities is determined predominantly by in- and outflows of insurance premiums, claims and investment returns.

9.3 Key risks in the life and pensions operation 9.3.1 Market risk

The market risk exposures on the Nordea Group from NLP is defined as the P/L risk resulting from movements in market rates and prices, and is measured with the following methodologies:

Asset/liability market scenario-based risk method: Measures the market risk stemming primarily from



Figure 9.1 The ALM square

Table 9.1 Assets and liabilities of Nordea Life & Pensions, 31 December 2012

Assets	2012 EURm	2011 EURm
Investment properties	3,261	3,523
Shares	17,152	13,730
Alternative investments	2,915	2,938
Debt securities – At fair value	20,541	20,560
Debt securities - Held to maturity	2,359	2,282
Deposits and treasury bills	3,907	4,639
Other assets	2,475	1,927
Total assets	52,610	49,599
Liabilities and equity	2012 EURm	2011 EURm
Traditional provisions	23,399	23,572
Collective bonus potential	1,923	1,311
Unit-linked provisions	7,168	4,899
Investment contracts	12,106	10,226
Other insurance provisions	723	706
Other liabilities	5,142	6,974
Shareholders equity	1,619	1,388
Subordinated loans	530	523
Total liabilities and equity	52,610	49,599

changes in fees and profit sharing or losses by not meeting the guarantees or the crediting to the policyholders

VaR market risk method: Measures the market risk from the investment of equity capital and subordinated funding separated from policyholders' assets.

Table 9.2 shows the effect on policyholders and Nordea's own account from market risks. The sensitivity to movements in interest rates has an effect on Nordea's own account due to the current level of the financial buffers and the current low level of interest rates.

9.3.2 Life insurance risk

Life insurance risk is defined as the risk on P/L that the NLP operation is facing, stemming from unexpected changes in mortality, longevity and disability rates. The

	31 Dec	2012	31 Dec 2011		
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	-149	-131	-148	-92	
Mortality – decreased living with 1 year	271	9	227	18	
Disability – 10% increase	-24	-14	-34	-7	
Disability – 10% decrease	36	0	34	7	
50 bp increase in interest rates	-486	4	-208	83	
50 bp decrease in interest rates	370	-4	200	-98	
12% decrease in all share prices	-845	-9	-713	-82	
8% decrease in property value	-193	-31	-194	-46	
8% loss on counterparts	-67	0	-39	0	

Table 9.2 Life insurance risk and market risk in the life insurance operations

Table 9.3 Investment return, traditional life insurance

	31 Dec 2012		31 Dec	2011
EURm	URm AUM return		AUM	Investment return
Interest-bearing securities and deposits	19,810	7.5%	19,100	7.4%
Shares	6,278	7.4%	5,416	-4.4%
Alternative investments	2,726	11.1%	2,867	4.7%
Investment property	3,175	4.5%	3,182	4.9%
Total return	31,989	7.4%	30,565	4.8%

sensitivity on the financial accounts from these risks is shown in Table 9.2.

9.3.3 Investment risk/return (liability driven)

For the life and pensions operation, the return on investments is significant for the Traditional portfolio and to some extent the New Traditional portfolio since policyholders have been promised a guaranteed benefit or an absolute return (either a yearly guarantee or at maturity). As NLP is carrying the risk of not fulfilling the guarantees to policyholders, a separate liability driven investment unit is in place with the focus on ensuring optimal ALM decisions in respect to both strategic as well as tactical aspects.

The figures in Table 9.3 represent the consolidated legal life companies. The assets under management (AUM) are affected by the investment return and the in- and outflows to the different asset classes. The low interest rate environment and the turbulent financial markets during 2012 resulted in a total investment return for the traditional business of 7.4%.

9.3.4 Mitigation of guarantees

Insurance provisions and provisions on investment contracts divided into guarantee levels is shown in Table 9.4. For policies with a guarantee, the average embedded guarantee for 2012 is unchanged compared to 2011 at 2.22%. Migration initiatives, transferring custumers from the traditional products to unit-linked, combined with a strong sale of unit-linked (no guarantees) in 2012 increased technical provisions with 'no guarantees' by 41%.

9.4 Capital management and solvency position 9.4.1 Development of financial buffers

For policyholders, the financial buffers express the potential for receiving a bonus on top of the guarantees within the Traditional portfolio. For shareholders, the financial buffers are important as they offer a P/L protection against insufficient investment returns. For NLP, a moderate financial buffer level is a prerequisite in order to achieve a stable P/L due to the mostly fee-based business models. At low financial buffer levels, risk increases and higher P/L volatility can be expected.

The financial buffers developed positively during 2012 as shown in Table 9.5 and Figure 9.2. The increase in the financial buffer was primarily driven by the positive investment returns illustrated in Table 9.3. In addition, the Danish FSA changed the discount curve used for valuating the technical provisions in June 2012 resulting in lower technical provisions and higher financial buffers.

9.4.2 Market Consistent Embedded Value (MCEV) NLP measures its value towards the Nordea Group by

using a Market Consistent Embedded Value (MCEV) approach.

The MCEV approach is used to quantify the net present value of the dividend stream arising from the in-force business consistently with the price that these future dividend streams could achieve in an arms-length commercial transaction.

During 2012, the life and pensions operation experienced an increase in the MCEV value of EUR 1,048m compared to 2011. The development is shown in Table 9.6 and in Table 9.7. The main drivers behind the development were; strengthened financial buffers, higher than expected earnings during the year, increased asset values and continuous inflow of profitable new business. On the other hand

Table 9.4 Insurance provisions (technical provisions) and provision on investment contracts divided into guarantee levels (technical interest rates)

31 Dec 2012		00/	0.00/	2 50/	50/	m . 11. 1. 1.
EURm	none	0%	0-3%	3-5%	>5%	Total liabilities
Technical provision	15,336	4,031	13,186	9,568	503	42,674
31 Dec 2011						
EURm	none	0%	0-3%	3-5%	>5%	Total liabilities
Technical provision	10,868	3,647	13,627	10,380	176	38,697

The guarantees above 5% in 2012 includes EUR 309 m of technical provision for the Polish Business. The guarantee is provided on a short term basis only and is backed by a deposit with the corresponding level of interest.

Table 9.5 Financial buffers

	Financial buffers		% of guaranteed l	iabilities
EURm	31 Dec 2012	31 Dec 2011	31 Dec 2012	31 Dec 2011
Denmark	470	254	3.0	1.7
Norway	192	133	3.4	2.6
Sweden	580	446	19.3	17.0
Finland	681	478	27.1	13.3
Total	1,923	1,311	7.5	5.1

Table 9.6 MCEV development

		31 Dec 2012			31 Dec 2011		
EURm	Traditional	Unit-linked	Total	Traditional	Unit-linked	Total	
Denmark	689	222	911	250	171	421	
Finland	630	589	1,219	393	406	800	
Norway	645	238	883	630	191	821	
Poland	24	262	286	29	169	198	
Sweden	83	382	465	42	434	475	
Total	2,069	1,693	3,762	1,343	1,371	2,714	

Table 9.7 MCEV movement analysis

EURm	MCEV 2012Q4	New business	Financial effects	Expected earnings	Other	FX effect	MCEV 2011Q4
Denmark	910	75	-244	28	634	-3	421
Finland	1,219	71	-56	38	366	0	800
Norway	883	14	-28	29	0	48	821
Poland	285	6	-43	10	89	26	198
Sweden	464	8	-2	20	-49	13	475
Total	3,762	173	-373	125	1,040	83	2,714

the continously falling interest rates resulted in a negative impact on the MCEV which put additional pressure on the predicted ability to generate future profit in some of the traditional portfolios. New business sales contributed with EUR 173m to MCEV in 2012.

The MCEV sensitivities are illustrated in Table 9.8.

The sensitivity to interest movements varies between countries due to differences in local accounting rules. The high Danish interest rate and equity sensitivities are due to both the very low financial outlook and the new contribution principles that were introduced at the beginning of 2011, with a slight offset from the introduction of the new Danish FSA liability discount curve during 2012. The Finnish and Polish businesses are similarly affected towards upwards and downwards movements in interest rates. However, this would not be the case for each of the underlying products.

9.4.3 Economic capital

NLP's economic capital is included in the Nordea Group economic capital solution, described in chapter 10.

9.4.4 Solvency capital and solvency ratio

The solvency ratio as of 31 December 2012 is 167% with

Assumption change	Scenario	Denmark	Finland	Norway	Poland	Sweden	Total
Yield curve change	IntRates –100bp	-58.1%	0.4%	-11.5%	-0.9%	5.7%	-17.1%
	IntRates –50bp	-24.7%	0.0%	-3.9%	-0.2%	2.6%	-7.3%
	IntRates +50bp	18.2%	0.1%	1.4%	-0.2%	-2.4%	4.2%
	IntRates +100bp	31.4%	0.4%	1.2%	-0.7%	-4.9%	7.3%
Equity return 1st year	EquityReturn +10%	3.2%	8.4%	4.3%	3.3%	5.5%	4.9%
1 7 7	EquityReturn –10%	-3.8%	-8.3%	-4.4%	-3.0%	-5.6%	-5.9%
Admin costs (relative change)	AdminCost +10%	-2.0%	-0.8%	-3.0%	-2.1%	-6.2%	-2.8%
	AdminCost -10%	2.0%	0.8%	2.9%	2.4%	6.3%	2.0%
Surrender rates (relative change)	Surrender +10%	2.1%	-1.0%	-1.2%	-1.0%	-1.4%	-0.7%
	Surrender –10%	-2.3%	1.1%	1.3%	1.3%	1.4%	-0.1%
Pay-up rates (relative change)	Lapse +10%	-1.0%	-0.2%	-0.5%	-0.3%	-1.6%	-1.1%
	Lapse –10%	1.1%	0.2%	0.5%	0.5%	1.8%	0.3%

Table 9.9 Solvency I Capital / Ratio

EURm	2012	2011
Tier 1 capital	1,554	1,165
Tier 2 capital	530	523
Solvency capital	2,084	1,688
Less: Solvency requirement	-1,250	-1,233
Solvency balance	834	455
Solvency ratio (%)	167	137

a solvency balance of EUR 834m. The improvement of EUR 379m in the solvency balance was mainly driven by increased tier 1 capital of EUR 389m. The consolidated solvency position is illustrated in Table 9.9.

Figure 9.2 Financial buffers compared to insurance provisions, rolling 12 months



10. ICAAP and internal capital requirement

The recent financial turmoil has increased the focus on banks' internal capital evaluation processes and their capability to assess the solvency needed to cover losses and other cyclical effects. During 2012, financial supervisors and central banks performed several stress tests and capital reviews of the Nordea Group and its peers. The results of these, together with the EBA capital review exercise confirm that Nordea is well capitalised.

10.1 ICAAP

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

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

The capital ratios and capital forecasts for the Nordea Group and its legal entities are regularly monitored by Group Risk Management. The current capital situation and forecasts are reported to the ALCO, Risk Committee, GEM and the Board of Directors. Capital requirements and capital adequacy are thoroughly reviewed and documented annually in Nordea's ICAAP report, which is ultimately decided and signed off by the Board of Directors.

10.1.1 Capital planning and capital policy

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

Nordea's capital policy determines target capitalisation levels in Nordea. Nordea reviewed its capital policy in light of new regulatory proposals and market perception in the beginning of 2013. The current capital position and capital policy is described in chapter 3.

Additional policies reflecting Nordea's target capital allocation in terms of core tier 1, tier 1 instruments and tier 2 capital are also in place. The policies 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 and deciding on the capitalisation and prepares proposals for decision by the CEO in GEM when needed.

10.1.2 Conclusion of ICAAP and SREP

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

10.2 Internal capital requirements

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

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

By considering the stress test results in the assessment of internal capital requirements, the pro-cyclical effects inherent in the risk-adjusted capital calculations of the economic capital and IRB approaches are addressed.

Regulatory buffers are expected to be introduced with the implementation of CRD IV. This might lead to higher capitalisation requirements than what is determined in the internal capital requirement. Should the regulatory capital requirement come to exceed the internal capital requirement, additional capital will be held to meet regulatory requirements with a margin.

10.2.1 Economic capital (EC)

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

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

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

As of end 2012, the total EC of Nordea equals EUR 17.9bn. Figure 10.1 shows the EC distributed by business area and risk type. Notably, credit risk accounts for 65% of the total EC. EC increased by EUR 0.2bn during the year. The main drivers were an increase market risk due to historically low interest rates negatively affecting the liabilities in Nordea's sponsored defined benefit pension plans and NLP. This increase was partly offset by reduced credit risk due to improved credit quality and reduced corporate exposure volumes.

10.2.2 Stress tests and recapitalisation exercise

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

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

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

Nordea carries out reverse stress tests of various recovery

Figure 10.1 EC distributed by risk type



EC distributed by business area



environments in relation to the development of the recovery and resolution plan. Several stand-alone stress tests for each risk type such as market risk and liquidity risk are also carried out (see chapters 5 and 8 for further details).

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

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

- Scenario development and translation
- Calculation
- Analysis and reporting.

These steps are described further in the sections following.

10.2.2.1 Scenario development and translation

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

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

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

As an example, in the annual stress test, the scenario is translated into an impact on the parameters listed in Table 10.1.

10.2.2.2 Calculation

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

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

Stressed figures for loan losses, net profit and dividend from the stressed financial statements are used to calculate the effect on the capital base components. The capital base is set in relation to the regulatory capital or EC in order to calculate the effect on capital ratios during a stress scenario. Figure 10.2 shows 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 ALCO and the Risk Committee, which review the details of the stress tests and implications on future capital need. The results, showing the implications of the stress tests on the adequacy of existing capital are distributed to GEM and the Board of Directors. A similar governance process is used for the subgroups 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 potential economic downturns and other stress events. Business area involvement in defining and assessing the stress tests is seen as important in order to increase the risk awareness throughout the organisation and the understanding of the relation between capital requirements and exposure to material risks.

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

Table 10.1 Parameters in the annual stress test

Parameter	Impact
Volumes	Volumes in deposits and lending are adjusted according to the growth assumptions associated with the set of macro parameter values defined for each scenario.
Margins	The margins are adjusted according to the development of the credit spread and the maturity of the portfolio.
Net interest income	Net interest income figures are adjusted according to the change in volume and margins in deposits and lending.
Net fee and commission income	Net fee and commission income is adjusted for changes in fees and commissions from activities in Asset Management.
Funding cost	Changes in funding costs deriving from liquidity risk is incorporated and increases the cost of long-term and short-term funding and reduces the net interest income.
Loan losses	Bottom-up model based on stressed credit ratings, stressed point-in-time PDs and stressed collateral values. The model covers both specific and collective provisions. An addition is made for idi- osyncratic losses.
Exposures	Exposures are adjusted with the volume and growth expectations as well as the loan losses.
Rating migration	Each year a new rating distribution is created for each portfolio. This includes stress testing of the financial statements for the majority of corporate customers which results in a new rating according to the rating model.
Probability of default	The PD values are stressed in order to reflect increases in defaults, simulating the existing process for defining prob- ability 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 10.2 Calculation process



11. Capital base

The quality of Nordea's capital base improved during 2012 following strong profit generation, which served to increase the core tier 1 capital of the capital base. Nordea also redeemed and issued tier 2 instruments during the year to maintain a balanced capital structure. Core tier 1 capital, considered as capital of the highest quality, comprises 81% of Nordea's capital base.

11.1 Capital base definition

Capital for regulatory purposes, the capital base, is determined in accordance with the CRD and Swedish legislation and is based on equity as reported under applicable accounting standards in the balance sheet, see Table 11.1.

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

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

Tier 1 capital consists of both core tier 1 capital (paid-in shareholder capital and retained earnings) and undated subordinated debt. Tier 2 capital consists mostly of dated/ undated subordinated loans. A summary of items included in the capital base is available in Table 11.2.

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

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

Sections 11.2 to 11.4 provide 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, net of regulatory required deductions made directly to tier 1 capital. The capital recognised as core tier 1 capital holds the ultimate characteristics for loss absorbance defined from a "going concern" perspective and represents the most subordinated claim in the event of liquidation. Tier 1 capital is defined as core tier 1 capital and capital of the same or close to the character of eligible capital and eligible reserves. Tier 1 capital can include a limited component of undated subordinated capital loans.

11.2.1 Eligible capital and eligible reserves

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

The eligible capital and eligible reserves, considered as the capital of highest quality, constitute the predominant share (92%) of tier 1 capital in Nordea.

11.2.2 Tier 1 instruments subject to limits

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

For tier 1 loans, conditions specify appropriation in order to avoid being obliged to enter into liquidation. To the extent that may be required to avoid liquidation, the principal amounts of tier 1 loans (together with accrued interest) would be written down and converting such amount into a conditional capital contribution.

As of year-end 2012, the undated tier 1 instruments included in the capital base of the Nordea Group constitute only 8% of tier 1 capital.

11.2.3 Deductions from tier 1 capital

11.2.3.1 Proposed/actual dividend

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

Table 11.1 Bridge between IFRS equity and core tier 1 capital

EURm	31 December 2012	31 December 2011
Balance sheet equity	28,216	26,120
Valuation adjustments for NLP and available-for-sale assets	-949	-757
Sub total	27,267	25,363
Dividend	-1,370	-1,048
Goodwill	-2,346	-2,269
Other intangible assets	-748	-717
Deferred taxes	-201	-169
Cash flow hedges	16	-123
Shortfall deduction (50%)	-554	-243
Deduction for investments in credit institutions (50%)	-103	-117
Core tier 1 capital (net of deductions)	21,961	20,677

Table 11.2 Summary of items included in capital base

EURm	31 December 2012	31 December 2011
Tier 1 canital		
Paid-up capital	4.050	4.047
Share premium	1,050	1,047
Fligible capital	5 130	5 127
Reserves	19,028	17 /78
Minority interacts	5	17,470
Income from current year	3 120	2 627
Eligible reserves	22 153	2,027
Core tior 1 capital (before deductions)	22,155	20,113
Subordinated capital loans	1 992	1 964
Proposed/actual dividend	1,370	1,048
Deferred tay assets	-201	-1,040
Intangible assets	-2.01	-107
Deductions for investments in credit institutions	-5,074 -103	-2,700
IRB provisions shortfall (_)	-554	_243
Deductions	-5.322	-4 563
Tier 1 capital (net after deductions)	23 953	22 641
- of which subordinated capital	1 992	1 96/
- of which suborumated capital	21 961	20.677
of which core her r cupital (let of deductions)	21,701	20,077
Tier 2 capital		
Undated subordinated loans	708	723
Dated subordinated loans	4,676	3,197
Other additional own funds	56	4
Tier 2 capital (before deductions)	5,440	3,924
Deductions for investments in credit institutions	-103	-117
IRB provisions excess (+) / shortfall (-)	-554	-243
Deductions	-657	-360
Tier 2 capital (net after deductions)	4,783	3,564
Holdings in insurance undert., reinsurance	-1,236	-1,211
Pension assets in excess of related liabilities	-226	-156
Capital base	27,274	24,838

11.2.3.2 Deferred tax assets

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

11.2.3.3 Goodwill and other intangible assets

A significant part of deducted intangible assets constitutes goodwill and other intangible assets related to IT software and development.

11.2.3.4 Deductions for investments in credit institutions Deductions must be made for equity holdings and some other types of contributions to institutions that are not consolidated into the financial group (in Nordea foremost associated companies). By the end of 2012, the total amount was EUR 206m and as stipulated by regulation, 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital.

11.2.3.5 IRB provisions shortfall

In accordance with Swedish legislation, the differences between actual IRB provisions made for the related exposure and expected loss are adjusted for in the capital base. A negative difference (when the expected loss amount is larger than the provision amount) is defined as a shortfall and by the end of 2012 this equalled EUR 1,108m. According to the CRD, the shortfall is to be deducted equally from 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 RWA to be neutralised in a Basel I perspective.

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

11.2.3.6 Cash flow hedges

Recognised changes in the value of equity arising from cash flow hedges are not eligible for inclusion in the capital base. In Table 11.1 the impact of EUR 16m is disclosed. In Table 11.2 the adjustment has been made to eligible reserves.

11.2.4 Changes in tier 1 capital in 2012

Core tier 1 capital increased by EUR 1.3bn during 2012. The main countributing factor was profit for the period, net of the proposed dividend, of EUR 1.8bn, which was partly offset by deductions. During 2012, Nordea did not issue any new undated tier 1 instruments nor were any contracts called. At the end of the year, Nordea had EUR 2.0bn in undated tier 1 instruments outstanding. Table 11.3 shows the booked outstanding amounts of undated tier 1 instruments included in tier 1 capital.

11.3 Tier 2 capital

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

11.3.1 Tier 2 – Subordinated loans

Tier 2 capital consists mainly of subordinated debt. Tier 2 capital includes two different types of subordinated loan capital; undated loans and dated loans. According to the regulation, tier 2 capital may not exceed tier 1 capital and dated tier 2 loans must not exceed 50% the of tier 1 capital. The limits are set net of deductions.

The basic principle for subordinated debt in the capital base is the order of priority in case of a default or bankruptcy situation. Under such conditions, the holder of the subordinated loan would be repaid after other creditors, but before shareholders. The share of outstanding loan amount possible to include in tier 2 capital related to dated loans is reduced if the remaining maturity is less than five years.

During 2012, Nordea issued two new tier 2 loans of EUR 750m and USD 1000m respectively. As of year-end Nordea held EUR 4.7bn in dated subordinated loans and EUR 0.7bn in undated subordinated loans. Table 11.3 shows the booked outstanding amounts of undated and dated loans included in the capital base. Call date is where the issuer has the legal right to redeem 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 may deviate from capital amounts used in the capital base due to swap arrangements and adjustments for maturities.

11.3.2 Other tier 2 capital

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 therefore only has a minor impact on tier 2 capital from such items.

11.3.3 Deductions from tier 2 capital

11.3.3.1 Deductions for investments in credit institutions Deductions must be made for equity holdings and some other types of contributions to institutions that are not consolidated into the financial group (in Nordea foremost associated companies). The regulation stipulates 50% to be deducted from tier 1 capital and 50% to be deducted from tier 2 capital.

11.3.3.2 IRB provisions excess (+) / shortfall (-)

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

Table 11.3 Dated and undated loans

Undated loans, tier 1

Total	1.971	1,992				
Nordea Bank AB	500	500	04	N/A	Mar 13	Ν
Nordea Bank AB	88	73	05	N/A	Oct 35	Y
Nordea Bank AB	176	144	05	N/A	Mar 35	Y
Nordea Bank AB	455	500	05	N/A	Apr 15	Y
Nordea Bank AB	376	376	09	N/A	Mar 15	Y
Nordea Bank AB	376	398	09	N/A	Mar 15	Y
Issuer	Book value, EURm	Capital base 31 December 2012	Start	Maturity	Call date	Step-up

The loans with step-up refer to categories in FFFS 2007:1 regulation, chapter 7 §16c. The loan without step-up is categorised according to §16b. Given the attributes of the loans and the size of other tier 1 components, the full value of the loans can be included as tier 1 capital contribution according to current regulation.

Undated loans, tier 2

Issuer	Book value, EURm	Capital base 31 December 2012	Start	Maturity	Call date	Step-up
Nordea Bank Norge ASA	152	152	86	N/A	May 13 ¹	Ν
Nordea Bank Finland Plc	367	468	04	N/A	Jul 14	Y
Nordea Bank Finland Plc	88	88	99	N/A	Feb 29	Y
Total	607	708				

Dated loans, tier 2

Issuer	Book value, EURm	Capital base 31 December 2012	Start	Maturity	Call date	Step-up
				, , , , , , , , , , , , , , , , , , ,		1 1
Nordea Bank AB	939	939	11	May 21		Ν
Nordea Bank AB	500	500	08	Sep 18	Sep 13 ¹	Y
Nordea Bank AB	746	746	12	Feb 22	Feb 17	Ν
Nordea Bank AB	996	996	10	Mar 20		Ν
Nordea Bank AB	746	746	10	Mar 21		Ν
Nordea Bank AB	749	749	12	Sep 22		Ν
Total	4,676	4,676				
Grand total	7,254	7,375				
Nordea Bank AB Nordea Bank AB Nordea Bank AB Nordea Bank AB Nordea Bank AB Total Grand total	500 746 996 746 749 4,676 7,254	500 746 996 746 749 4,676 7,375	08 12 10 10 12	Sep 18 Feb 22 Mar 20 Mar 21 Sep 22	Sep 13 ¹ Feb 17	

1) First call date has passed.

11.3.4 Changes in tier 2 capital in 2012

During the year, Nordea's tier 2 capital increased by EUR 1.5bn. The increase was due to two new dated tier 2 loans being issued. The deduction from the shortfall increased during the period.

11.4 Deductions from the capital base 11.4.1 Holdings in insurance undertakings

Due to a transition rule in effect until end of 2012, holdings in insurance undertakings are fully deducted from the capital base.

11.4.2 Other deductions

Surplus net value of pension plans for employees should

under certain circumstances be deducted from the capital base. At the end of 2012 the surplus values of the plans reached EUR 226m.

11.5 Changes in the capital base 2012

Figure 11.1 illustrates the main changes in the capital base during 2012. The predominant part of the increase over the year, relates to core tier 1 capital stemming from profit.

11.6 Capital transferability and restrictions

The Nordea Group may transfer capital within its legal entities without material restrictions. International transfers of capital between legal entities are normally possible after approval by the local regulator and are of importance in

governing the capital position of the Group. The guarantee schemes introduced within the EU in 2008 limit the transferability of capital under certain circumstances, which serves to impact cross-border financial groups. No such restrictions were however directly affecting Nordea as per end of 2012.

11.7 Development of the capital base

Figure 11.2 illustrates the increase in the capital base over the last eleven years and the developments of its main components; core tier 1, undated subordinated capital and tier 2 capital net of deductions.

Figure 11.1 Drivers behind the development of the capital base, 2012



Figure 11.2 Development of the capital base, 2001–2012



12. New regulations

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

12.1 Forthcoming regulatory framework

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

12.2 Basel III and the CRD IV/CRR

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

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

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

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

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

12.2.1 Proposed capital regulation

12.2.1.1 Capital base

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

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

- 12.2.1.2 Regulatory minimum capital requirements
- CRD IV/CRR requires banks' to comply with the following minimum capital ratios:
- Core tier 1 capital ratio of 4.5%
- Tier 1 capital ratio of 6%
- Capital ratio of 8.0%

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

12.2.1.3 Capital buffers

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

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

12.2.1.4 Proposed new capital requirements for Swedish banks In November 2011, the Swedish authorities (the Ministry of Finance, the FSA and the central bank) published the capital requirements that they advocate for the major Swedish banks. The requirements state that at least 10% of RWA should be covered by core tier 1 capital by 1 January 2013 and 12% by 1 January 2015. The Swedish authorities thereby make a stricter interpretation of CRD IV/CRR than most other countries.

12.2.2 Risk-weighted assets (RWA)

RWA will mainly be affected by additional requirements related to counterparty credit risk and an introduction of an asset correlation factor for exposures towards financial institutions. In addition, the Swedish FSA has issued a proposal to increase the risk weights for residential mortgage by introducing a 15% risk weight floor on portfolio level within Pillar II. The possible introduction of a risk weight floor is also under discussion in Norway. It is, however, still unclear whether or not the other Nordic countries will follow the Swedish FSA on this matter.

For banks calculating RWA according to the IRB approach, a floor was previously introduced, stipulating that the RWA should not be less than 80% of the Basel I calculated RWA. This floor was expected to end December 2012. The current proposal is to extend these transition rules until at least 31 December 2014.

12.2.2.1 Counterparty credit risk

The largest change to the calculation of RWA relates to the changes made to the calculation of counterparty credit risk.

The changes are mainly made in the introduction of a capital charge for credit valuation adjustment risk (CVA risk) and a capital charge for exposures to central counterparties (CCPs).

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

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

12.2.2.2 Asset correlation factor

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

12.2.3 Leverage regulation

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

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

The Swedish FSA has progressed faster in liquidity regulations and published their LCR requirement in November 2012. The Swedish regulator's LCR requirement should be complied with from 1 January 2013 and is applied on all currencies combined, but also separately for USD and EUR.

12.2.5 Reporting requirements

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

12.3 Crisis management and Recovery and Resolution

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

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

12.3.1 Recovery and resolution plan

In November 2012, the FSB and the Basel Committee identified 29 global systemically important banks (G-SIBs). Nordea was identified as the only G-SIB in the Nordic region.

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

A recovery plan documents the ability of the institution to recover from a situation where its business model is so challenged by the economic environment that it is necessary to revise the strategy of the institution in order to avoid reaching a point of non-viability. Resolution plans are to be made by the authorities and their purpose is to document how the institution can be resolved in case the recovery plan does not prevent the institution from reaching the point of non-viability.

Recovery plans and resolution plans for G-SIBs must be compiled by end of Q1 2013 by the latest. Nordea has set up a unit within Group Risk Management, and delivered its recovery plan to the Swedish FSA on 20 June, 2012.

12.4 Banking union

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

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

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

12.5 Separation of trading activities

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

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

12.6 Trading book review

In May 2012, the Basel Committee published a consultative document on a fundamental review of the trading book. The aim is to strengthen the resilience to markets risks due to observed weaknesses during the crisis. The review is at an early stage and an analysis of its impact on Nordea requires a range of assumptions. The review sets out a potential definition of the scope of the trading book and proposes either a trading evidence-based approach or a valuation-based approach. In addition, the proposal is to strengthen the relationship between the standardised and internal model-based approaches.

12.7 Solvency II

New regulation is also approaching the insurance business – Solvency II. The Solvency II directive published in 2009 is expected to remain largely unchanged apart from the date of implementation. However, a few but important areas, such as the clarification of principles for valuation of long-term guarantees, are still under negotiation within the trilogue.

The three main objectives of Solvency II are:

- To have a forward-looking risk-based solvency capital assessment and replacing the old "volume-based" capital requirement framework.
- To ensure that the risk ownership is anchored with executive management and the Board of Directors.
- To ensure that the risk measurement and governance is embedded into business operations and strategic planning.

12.8 Accounting standards

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

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

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

13.1 The Board Remuneration Committee

The Board Remuneration Committee is responsible for preparing and presenting proposals to the Board of Directors on remuneration issues. This includes proposals regarding the Nordea Remuneration Policy and supplementing instructions, guidelines for remuneration to the executive officers to be decided by the Annual General Meeting as well as the remuneration for the Group CEO, the Group Chief Audit Executive and also Group Compliance Officer and Head of Group Credit Control. At least annually, the Committee follows up on the application of the Nordea Remuneration Policy and supplementing instructions through an independent review by Group Internal Audit.

13.2 Remuneration risk analysis

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

13.2.1 Effective and balanced risk management

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

- Ensuring that the Remuneration Policy, instructions and schemes, etc. are approved at the relevant organisational level, supported by analyses of potential financial as well as non-financial consequences, where relevant.
- Having clear governance and approval processes for all compensation elements, including the grandparent principle (i.e. the decision concerning personal remuneration is also approved by a manager's manager), and by having most compensation paid as fixed compensation.
- Requiring that the main variable remuneration elements are based on a pre-determined set of well-defined financial as well as non-financial success criteria, including Nordea Group criteria.
- Having divisional pools defined by a share of divisional economic profit.

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

13.2.2 The governance and structure of the remuneration schemes

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

In the second half of 2009 Nordea engaged external consultants to perform a review of key issues in respect of bonus structures, principles, and levels. Although certain changes and improvements were recommended, the review concluded that Nordea has reasonably well-structured bonus schemes, when evaluated against new international guidelines. The gaps identified were addressed by Nordea. In 2010, a follow-up review was conducted, concluding a need for a shift in the balance between variable and fixed compensation due to new regulations and per 1 January 2011 Nordea introduced caps on individual variable compensation. In 2012, another follow-up review was conducted only resulting in minor bonus model calibrations due to organisational changes in one bonus unit.

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

13.2.3 Performance measurement and control defines remunerations

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

The risk of employee fraud, such as the manipulation results, is always present. Nordea mitigates employee fraud risk through its internal control framework which includes the following elements: values and management culture, goal orientation and follow-up, a clear and transparent organisational structure, segregation of duties, the four-eye principle, quality and efficiency of internal communication and an independent evaluation process.

13.2.4 Annual review of all remuneration schemes Nordea meets reputational challenges by performing an annual review of all remuneration schemes, aiming at

having competitive remuneration schemes, while at the same time ensuring that these schemes are based on the Group's business strategies and goals. Nordea also meets the challenge by disclosing relevant information in terms of policies and principles, specific schemes, amount in respect of variable remuneration in the Group, as well as total compensation to executive management and the Board of Directors.

13.3 Bonus schemes risk analysis

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

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

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

The Board of Directors decides new or revised bonus schemes and outcome of divisional bonus pools on proposal by the Board Remuneration Committee. Group Executive Management has responsibility for the implementation of the agreed bonus schemes. Nordea applies a stringent process to ensure that compensation for individuals does not encourage excessive risk taking behaviour. To supplement the division level assessment, there is an approval process for significant bonuses to individuals, with the CEO's approval required for bonuses exceeding a predetermined level.

13.4 Additional disclosures on remuneration

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

14. Appendix

14.1 General description of Pillar I, II and III

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

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

The regulatory capital requirements are calculated using the following formula:

Minimum capital requirements = Capital base/RWA where,

Minimum capital requirements $\geq 8\%$

The Basel II framework is built on three pillars:

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

14.1.1 Pillar I

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

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

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

 The Advanced IRB (AIRB) calculations are based on internal estimates for PD, LGD, CCF and maturity.
Pillar I also encompasses the design, implementation, validation, oversight and performance of the credit risk classification systems.

14.1.2 Pillar II

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

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

The SRP is designed to ensure that institutions identify their material risks and allocate adequate capital, and employ sufficient management processes, to support the risks taken. The SRP also encourages institutions to develop and employ better risk management techniques in monitoring and measuring risk in addition to the credit risk, market risk and operational risk in the CRD. The ICAAP allows banks to review their risk management policies and capital positions relative to the risks they take. In ICAAP, the institution ensures that it has sufficient available capital to meet regulatory and internal capital requirements, even during periods of economic or financial stress. The ICAAP covers all components of risk management, from daily risk management of material risk to the more strategic capital management of the Group and its legal entities. The SREP constitutes the supervisory review of the institutions' capital management and the assessment of their internal controls and governance.

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

14.1.3 Pillar III

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

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

14.2 IRB approach

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

14.2.1 IRB exposure classes

14.2.1.1 Institution exposure

Exposure to credit institutions and investment firms is classified as exposure to institutions. In addition, exposure to regional governments, local authorities and multilateral development banks is classified as exposure to institutions unless it is treated as exposure to sovereigns¹ according to regulations issued by the authorities.

14.2.1.2 Corporate exposure

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

14.2.1.3 Retail exposure

Exposure to SMEs (with an exposure of less than EUR 250k²) and to private individuals are included in the retail exposure class and defined in accordance to Nordea's internal guidelines for scoring.

14.2.1.4 Other non-credit obligation assets

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

14.2.2 Calculation of RWA in IRB approach

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

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

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

14.2.2.1 Exposure at default (EAD)

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

14.2.2.2 Probability of default (PD)

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

14.2.2.3 Loss given default (LGD)

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

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

LGD values in the AIRB approach are calculated using similar internal calculations as for the retail IRB portfolio.

14.2.2.4 Credit risk mitigation

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

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

14.2.2.5 Maturity

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

14.3 Standardised approach

14.3.1 Standardised exposure classes

14.3.1.1 Central governments and central banks Exposure to regional governments and central banks is treated as low risk if the counterparty is within the Eurpean Econonomic area and has a high rating.

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

Sovereigns include central governments, central banks, regional governments, local authorities and other public sector entities.
EUR 100k in Baltic countries, Poland and Russia.

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

14.3.1.4 Corporate exposure

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

14.3.1.5 Retail exposure

Retail exposure is assigned a risk weight of 75%.

14.3.1.6 Exposure secured by real estate

Exposure secured by mortgages on residential real estate is assigned a risk weight of 35%³. 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 regulation differs between the Nordic countries.

14.3.1.7 Other

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

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

14.3.2 Calculation of RWA in the standardised approach

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

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

³⁾ Except for Polish exposures secured by real estate denominated in foreign currency, which have a risk weight of 100% according to local regulations.

List of abbreviations

ADF	Actual Default Frequency	GEM CC	Group Executive 1
ALCO	Asset and Liability Committee		Credit Committee
ALM	Asset and Liability Management	GICS	Global Industries
AML	Anti-money laundering	GVC	Group Valuation (
BCBS	Basel Committee on Banking Supervision	HLEG	High-level expert
AUM	Assets under management	IAS	International Acco
CCF	Credit Conversion Factor	ICAAP	Internal Capital A
CCO	Chief Credit Officer		Assessment Proce
CCP	Central Counterparties	IFRS	International Fina
CCR	Counterparty credit risk	IMM	Internal Model M
CEM	Current Exposure Method	IRB	Internal Rating Ba
CDO	Collateralised debt obligation	IRM	Incremental Risk
CDS	Credit default swap	KPI	Key performance
CEO	Chief Executive Officer	KYC	Know your custor
CFO	Chief Financial Officer	LCR	Liquidity Coverag
CLN	Credit-linked notes	LGD	Loss given defaul
CLS	Continuous Linked Settlement	LTV	Loan-to-value
СМО	Collateralised mortgage obligations	MCEV	Market-Consisten
СР	Commercial paper	NBSF	Net balance of sta
CRD	The EU's Capital Requirements Directive	NLP	Nordea Life & Pei
CRM	Comprehensive Risk Measure	NSFR	Net stable funding
CRMVC	Credit Risk Model Validation Committee	ORSA	Own Risk and Sol
CRO	Chief Risk Officer	OTC	Over-the-counter
CVA	Credit valuation adjustment	ORX	Operational Risko
D-SIBs	Domestic Systemically Important Banks	P/L	Profit and loss
EAD	Exposure at default	PD	Probability of defa
EBA	European Banking Authority	PIT	Point-in-time
EC	Economic capital	QIS	Quantitative Impa
ECC	Executive Credit Committee	ORA	Ouality and Risk
EEA	European Economic Area	RCSA	Risk and Control
EL	Expected loss	RWA	Risk-weighted ass
EMU	European Monetary Union	S&P	Standard & Poor's
EP	Economic profit	SIBs	Systemically Impo
ERAT	Environmental Risk Assessment Tool	SIIR	Structural Interest
EU	European Union	SME	Small and mediur
EV	Economic value	SPE	Special Purpose E
FFFS	Finansinspektionens Författningssamling	SPRAT	Social and Politica
	(The Swedish FSA's directive)	SREP	Supervisory Revie
FIRB	Foundation Internal Rating Based approach	SRP	Supervisory Revie
FSA	Financial Supervisory Authority	TTC	Through-the-cycle
FSB	Financial Stability Board	VaR	Value-at-Risk
FX	Foregin exchange	, and t	variate at rabit
G-SIBs	Global Systemically Important Banks		
GCCR	Group Credit Committee Retail Banking		
GCCW	Group Credit Committee Wholesale Banking		
GEM	Group Executive Management		
JUIL	Storp Encourre management		

GEM CC	Group Executive Management
	Credit Committee
GICS	Global Industries Classification Standard
GVC	Group Valuation Committee
HLEG	High-level expert group
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy
	Assessment Process
IFRS	International Financial Reporting Standard
IMM	Internal Model Method
IRB	Internal Rating Based approach
IRM	Incremental Risk Measure
KPI	Key performance indicators
KYC	Know your customer
LCR	Liquidity Coverage Ratio
LGD	Loss given default
LTV	Loan-to-value
MCEV	Market-Consistent Embedded Value
NBSF	Net balance of stable funding
NLP	Nordea Life & Pensions
NSFR	Net stable funding ratio
ORSA	Own Risk and Solvency Assessment
OTC	Over-the-counter
ORX	Operational Riskdata eXchange Association
P/L	Profit and loss
PD	Probability of default
PIT	Point-in-time
QIS	Quantitative Impact Study
QRA	Quality and Risk Analysis
RCSA	Risk and Control Self-Assessment
RWA	Risk-weighted assets
S&P	Standard & Poor's
SIBs	Systemically Important Banks
SIIR	Structural Interest Income Risk
SME	Small and medium-sized enterprises
SPE	Special Purpose Entity
SPRAT	Social and Political Risk Assessment Tool
SREP	Supervisory Review and Evaluation Process
SRP	Supervisory Review Process
TTC	Through-the-cycle
VaR	Value-at-Risk