Capital and Risk Management (Pillar III) Report

Nordea Group 2013

Contents

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 guidelines 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 2013.

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

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

1. Highlights of 2013

Nordea continued to show a solid risk position with decreased net loan losses to a loan loss ratio of 21bp and an overall stable rating migration during 2013. Capital ratios strengthened further, with the core tier 1 capital ratio increasing to 14.9% by the end of the year. Nordea's capital policy sets targets for the core tier 1 ratio to be above 13%. Including the impact from CRR/CRD IV, to be implemented in 2014, core tier 1 ratio was as of end 2013 13.9%. In January 2014, Nordea was approved for the Advanced IRB approach for the Nordic portfolios, which is expected to affect the core tier 1 capital ratio positively by 0.7 %-points.

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, driven partly by measures taken by the central banks. Nordea is confident and well-prepared for the future in light of strong profitability, solid quality in its well-diversified credit portfolio, a strong capital position and a diversified funding base.

In 2013, Nordea made an agreement to divest the Polish operations. The transaction is expected to be completed during 2014 and until then, the Polish business is included as discontinued operations in the financial statements of the Nordea Group (for instance, in the loan loss ratios). However, in this Pillar III report, the exposures in Poland are included.

Continued solid credit quality and decreased net loan loss ratio to 21bp

Nordea's credit quality remained overall solid in 2013 with an overall stable rating migration and with a loan loss ratio of 21bp (for the continuing operations, i.e. excluding Poland), which is slightly above Nordea's ten year average of 16bp. The loan loss level remained elevated due to loan loss provisions in geographical segment Denmark and in the industry segment Shipping segment, although stabilisation and improvement has been seen. The impaired loans ratio decreased to 179bp while credit exposures decreased by 6% to EUR 480bn.

Nordea's market risk-taking activities are primarily focused on the Nordic and European markets. The Group's market risk is to a large extent driven by interest rate risk. Total consolidated market risk for the Group, as measured by VaR, increased to EUR 74m on average in 2013 (EUR 43m).

Further strengthened capital ratios – above the levels set in the capital policy

The core tier 1 capital ratio excluding transition rules strengthened further in 2013 due to strong profit generation of the Group as well as RWA efficiency activities, to reach 14.9% by the end of 2013 (last year 13.1%). In January 2014, Nordea was approved for the Advanced IRB approach for the majority of the corporate exposures in the main banks in the Nordic countries. This is expected to have a positive effect of 0.7 %-points on the core tier 1 ratio. Including the impact from CRR/CRD IV, to be implemented in 2014, the core tier 1 ratio was 13.9% at the end of 2013 (excluding the positive effect from the Advanced IRB approval). Nordea is currently steering the bank towards a core tier 1 capital ratio of 14-14.5%, including the effects from CRR/CRD IV the AIRB model approval and Norwegian risk weights for mortgage lending.

Nordea's capital policy 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 capital ratio to be above 17%. The capital policy is based on management's current best view on capitalisation. 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 of its funding programmes during 2013. Approximately EUR 23bn was issued in long-term debt during 2013, excluding Danish covered bonds (last year EUR 29bn).

Nordea is fully compliant with the liquidity coverage ratio (LCR) requirements, with LCR at year-end on Group level of 117%, in EUR 140% and in USD 127%.

CRR/CRD IV and other new regulations

In Nordea, there is a strong focus on capital, liquidity and risk management and Nordea is well-prepared to meet the new regulatory environment, further described in Chapter 12.

Figure 1.1 Key risks within Nordea

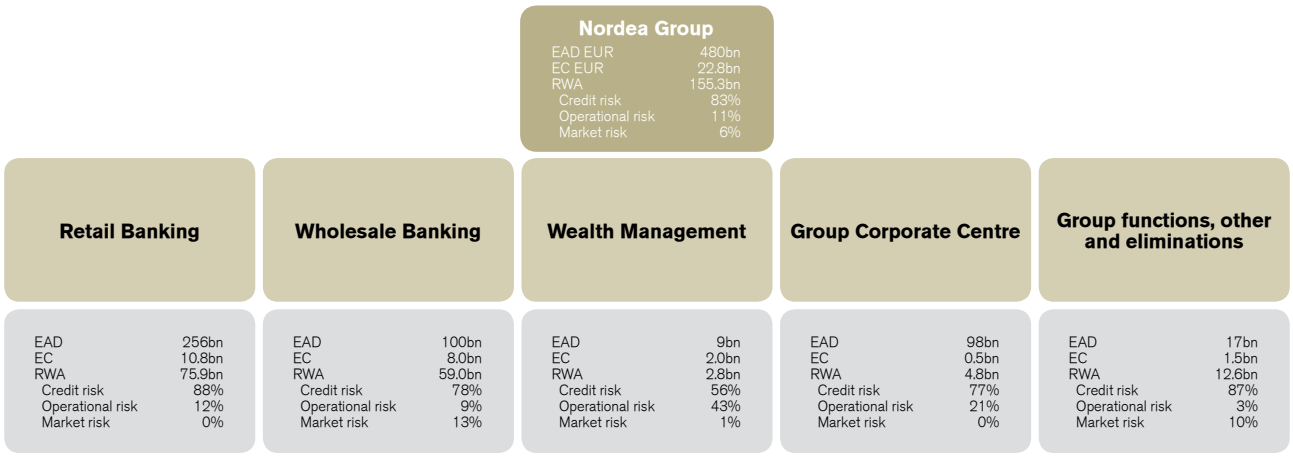
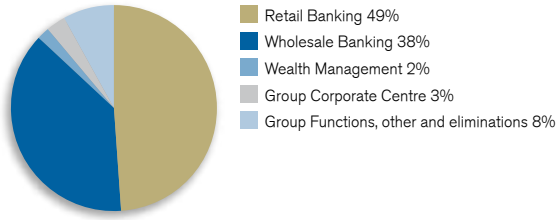


Figure 1.2 Breakdown of RWA distributed by Business Area



Distribution of risks within the Group

Figure 1.1 shows the distribution of exposure at default (EAD), economic capital (EC) and risk-weighted assets (RWA) per Business Area within the Nordea Group as of December 31, 2013. The main part of EAD, EC and RWA originates from credit risk in Retail Banking and Wholesale Banking. Figure 1.2 shows the distribution of RWA by Business Area.

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 entrenched 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. Risks in insurance subsidiaries, which are not part of the Financial Group, are described separately, in chapter 9.

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 different treatment to that for accounting purposes. 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

Risk and capital management in the Nordea Group is governed by principles and procedures stated in charters, policies, instructions and guidelines in effect throughout the organisation. All legal entities are subject to the same internal control and risk management environment through the organisation of the business. Each Business Area is responsible for managing the risks within its operations, which includes identification, control, mitigating actions and reporting. Group Risk Management consolidates and monitors risk on Group level.

Nordea monitors aggregated risks via specific committees, as well as through reporting to Group Executive Management (GEM), the Board of Directors and the local bank boards. More specifically, Nordea's risks and capital are monitored by the Risk Committee and the Asset and Liability Committee (ALCO).

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 risk, counterparty credit risk, market risk, liquidity risk, life insurance risk, business risk 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 depending 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 of the bank and the Group.

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

The ALCO, chaired by the Chief Financial Officer (CFO), prepares issues of major importance concerning the Group's financial operations and balance sheet risks as well as capital management and liquidity management either for decision by the CEO in GEM or for recommendation by the CEO in GEM and for decision by the Board of Directors. ALCO also decides on certain issuances and capital injections for all wholly-owned legal entities within the Group. The Asset and Liability Committee has established sub-committees for its work and decision-making within specific risk areas.

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. The unit heads 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

Figure 2.1 Governance of risk, liquidity and capital management

Figure 2.2 Overview of the risk appetite measures

Risk type	Metric
Credit risk	Single customer concentration
	Industry concentration
	Geographic concentration
	Expected loss
	Loan loss
	Probability of default
Market risk	Market risk share of economic capital
	Maximum reported market risk loss per quarter
	Maximum economic market risk loss per quarter
Operational risk	Monitor top risks
	Operational risk loss
	Reputational impact
Solvency	Tier 1 capital ratio
	Leverage ratio
	Target credit rating
Liquidity risk	Survival horizon
	Net Balance of Stable Funding
Compliance & non-negotiable risks	Regulatory requirements
	Internal policy and external regulatory breaches

major credit risk limits and industry policies for the Group. Credit risk limits are granted as individual limits for customers or consolidated customer groups as well as industry limits for certain defined industries.

2.2.1.3 Responsibility of Group Risk Management and Group Corporate Centre

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. Group Corporate Centre, headed by the CFO, is responsible for the capital policy, the composition of the capital base, the capital adequacy framework (including the IRB framework) and for liquidity risk management.

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.

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.

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.

Stress testing is an integral component within the framework. Stress tests 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

Table 2.1 Specification over undertakings consolidated/deducted from the Nordea Group, 31 December 2013

	Number of shares	Book value EURm	Voting power of holding	Domicile	Consolidation method
Group undertakings included in the Nordea Group					
Nordea Bank Finland Plc	1,030,800,000	5,959	100%	Helsinki	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	2,733	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	343	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	1,998	100%	Stockholm	purchase method
Nordea Fonder AB	15,000	242	100%	Stockholm	purchase method
Nordea Bank S.A.	999,999	455	100%	Luxembourg	purchase method
Nordea Finans Sverige AB (publ)	1,000,000	124	100%	Stockholm	purchase method
Nordea Eijendomsinvestering A/S	1,000	29	100%	Copenhagen	purchase method
Nordea Investment Management AB	12,600	237	100%	Stockholm	purchase method
Nordea IT Polska S.p.z.o.o.	100	40	100%	Warsaw	purchase method
Nordea Funds Oy/Ab/Ltd	3,350	174	100%	Helsinki	purchase method
Nordea Life Holding AB	1,000	719	100%	Stockholm	purchase method
Other companies		1			purchase method
Total included in the capital base		**17,723**			

	Number of shares	Book value EURm	Voting power of holding	Domicile	Consolidation method
Group undertakings deducted from the capital base					
Nordea Life Holding AB, including subordinated debts from parent company		1,233	100%	Stockholm	
Total Group undertakings deducted from the capital base		**1,233**			
Over 10% investments in credit institutions deducted from the capital base					
Eksportfinans ASA		184	23%	Oslo	
NF Fleet Oy		3	20%	Espoo	
LR Realkredit A/S		10	39%	Copenhagen	
Other		1			
Total investments in credit institutions deducted from the capital base		**198**			

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 of segregation of duties and independence. Monitoring and reporting of risk is conducted on a daily basis for market risk, counterparty credit risk, liquidity risk and on a monthly and quarterly basis for credit risk and operational risk.

Risk appetite reporting is presented 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 the Risk Committee, GEM and the Board of Directors. In addition, the Board of Directors in each legal entity regularly receives local risk reporting. Nordea's 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.

3. Capital position

Nordea further strengthened its capital position during 2013 and undertook RWA efficiency activities which served to decrease RWA by EUR 7.8bn. In addition, the capital position further improved due to strong profit generation and resulted in an increased total core tier 1 ratio of 180bp during the year.

3.1 Capital adequacy assessment

Banks need to keep sufficient capital to cover all risks taken over a foreseeable future. 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 protection against unexpected losses that arise as a result of 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

The regulatory capital requirements that the Nordea Group fell under on the balance date for this report, 31 December 2013, are based on the consolidated version of the Capital Requirements Directive (CRD); EU Directive 2006/48/EC (including 2009/111/EC and 2010/76/EU).

Table 3.1 presents an overview of Nordea's capital requirements and RWA as of end December 2013, split by risk type and with comparison to previous year. Of the RWA, credit risk accounts for approximately 83%, while operational risk accounts for 11% and market risk 6%. The table also includes information about the approaches used for calculation of the RWA. Out of the RWA for credit risk,

Table 3.1 Capital requirements and RWA

	2013		2012	
EURm	Capital requirements	RWA	Capital requirements	RWA
Credit risk	**10,376**	**129,705**	**11,627**	**145,340**
IRB	8,965	112,061	9,764	122,050
– of which institution	468	5,848	671	8,384
– of which corporate	6,787	84,844	7,244	90,561
– of which retail	1,588	19,848	1,737	21,710
- of which mortgage	862	10,772	915	11,440
- of which other retail	622	7,778	721	9,007
- of which SME	104	1,298	101	1,264
– of which other	122	1,521	112	1,395
Standardised	1,412	17,644	1,863	23,290
– of which sovereign	34	428	34	426
– of which institution	49	611	47	583
– of which corporate	301	3,768	732	9,160
– of which retail	862	10,776	860	10,752
– of which other	165	2,061	190	2,369
Market risk	**700**	**8,753**	**506**	**6,323**
– of which trading book, Internal Approach	410	5,131	312	3,897
– of which trading book, Standardised Approach	186	2,321	138	1,727
– of which banking book, Standardised Approach	104	1,301	56	699
Operational risk	**1,344**	**16,796**	**1,298**	**16,229**
Standardised	1,344	16,796	1,298	16,229
Sub total	**12,420**	**155,254**	**13,431**	**167,892**
Additional capital requirement according to transition rules	4,318	53,969	3,731	46,631
Total	**16,738**	**209,223**	**17,162**	**214,523**

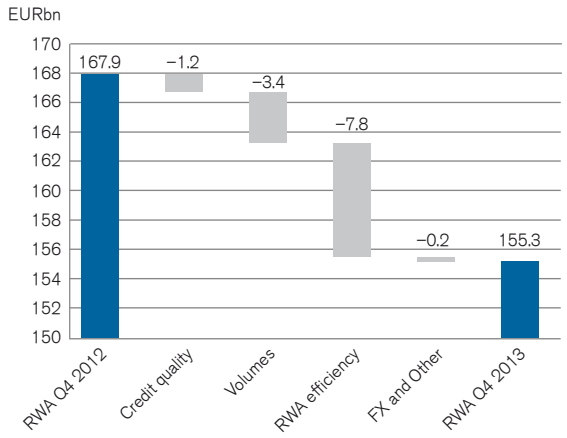
The breakdown of IRB figures for retail 2012 have been restated.

77% of the exposure has been calculated under the IRB approach and 23% under the standardised approach, see Table 4.2.

Total RWA for credit risk, market risk and operational risk of EUR 155.3bn is adjusted with an additional 53.9bn due to transition rules, ending at a total RWA of EUR 209.2bn including transition rules. The drivers behind the development of RWA are disclosed in Figure 3.1.

RWA excluding transition rules decreased by EUR 12.6bn during 2013. General credit quality in all IRB portfolios improved, resulting in a reduction of RWA by EUR 1.2bn. Decreased volumes, mainly in the corporate portfolio, contributed to lower RWA by another 3.4bn. Nordea also continued its efficient capital and RWA management activities which served to decrease RWA by EUR 7.8bn. Examples of RWA efficiency activities include improved collateral sourcing, enhanced treatment of guarantees as well as roll-out of the corporate and institution portfolios in Russia during the year. The effects of FX served to decrease RWA, mainly as a result of depreciation of the SEK and the NOK against the EUR. Most of the FX effect was however countered by an increase in market risk RWA.

Figure 3.1 Drivers behind the development of RWA excluding transition rules



3.2.1 Current capital base

The capital base for 2013 is determined in accordance with the CRD and Swedish legislation and is the sum of tier 1 capital and tier 2 capital net after deductions and excludes capital from entities not included in the Financial Group. Tier 1 capital consists of both core tier 1 capital and undated subordinated debt. Tier 2 capital consists mostly of subordinated loans.

As shown in Table 3.2, the capital base as of end 2013 was EUR 28.0bn, of which core capital tier 1 represented EUR 23.1bn. Tier 1 and tier 2 capital net after deductions was EUR 1.3bn and EUR 3.6bn respectively. See chapter 11 for further details regarding the capital base.

3.3 Capital ratios

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.

Table 3.2 Development of key capital adequacy figures

EURbn	Q4 2013	Q3 2013	Q2 2013	Q1 2013	Q4 2012
RWA including transition rules	209.2	211.4	211.7	217.6	214.5
RWA excluding transition rules	155.3	159.6	161.6	168.3	167.9
Capital requirement including transition rules	16.7	16.9	16.9	17.4	17.2
Core tier 1 capital	23.1	23.0	22.6	22.2	22.0
Tier 1 capital	24.4	24.3	23.9	23.6	24.0
Capital base	28.0	28.0	28.1	27.8	27.3
Capital ratios excluding transition rules					
Core tier 1 capital ratio	14.9%	14.4%	14.0%	13.2%	13.1%
Tier 1 capital ratio	15.7%	15.3%	14.8%	14.0%	14.3%
Capital ratio	18.1%	17.5%	17.4%	16.5%	16.2%
Capital adequacy quotient (Capital base/capital requirement)	2.3	2.2	2.2	2.1	2.0
Capital ratios including transition rules					
Core tier 1 capital ratio	11.0%	10.9%	10.7%	10.2%	10.2%
Tier 1 capital ratio	11.7%	11.5%	11.3%	10.9%	11.2%
Capital ratio	13.4%	13.2%	13.3%	12.8%	12.7%
Capital adequacy quotient (Capital base/capital requirement)	1.7	1.7	1.7	1.6	1.6

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

The Group's core tier 1 capital ratio excluding transition rules was 14.9% at the end of 2013, representing a 180bp improvement since 2012 (13.1%). Improved capital ratios were achieved through efficient RWA management in combination with strong profit generation. The tier 1 capital ratio excluding transition rules ended at 15.7% (14.3%), while the corresponding capital ratio ended at 18.1% (16.2%).

The core tier 1 capital ratio including transition rules was 11.0% (10.2%), while the tier 1 capital ratio and the capital ratio including transition rules were 11.7% (11.2%) and 13.4% (12.7%) respectively at the end of the year.

Table 3.2 shows the yearly and quarterly capital adequacy development during 2013, 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.

3.3.1 Capital policy

In the beginning of 2013, Nordea reviewed its capital policy in light of the new regulatory developments. The policy states the target, for the core tier 1 capital ratio, is to be above 13% and the total capital ratio to be above 17%.

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

3.4 Leverage ratio

The leverage ratio, which is a new measure introduced in the CRR, is presented in Table 3.3. It is a non-risk based measure introduced to monitor/measure excessive build-up of leverage on credit institutions' balance sheets and thus aims at containing the cyclicality of lending. The leverage ratio is calculated by dividing tier 1 capital (according to the CRR definition) by assets (both on-balance and off-balance sheet), with adjustments for derivatives and securities financing transactions.

3.5 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.

Table 3.3 Leverage ratio

EURm	31 Dec 2013
Tier 1 capital (CRD IV definition)	24,269
Leverage ratio assets	562,855
Leverage ratio	4.3%

Figure 3.2 Development of core tier 1 capital adequacy ratios

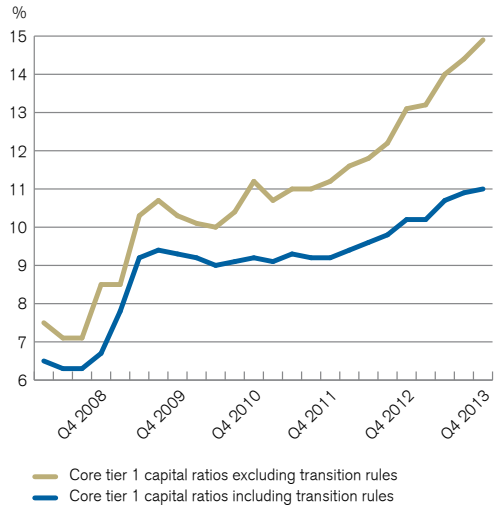
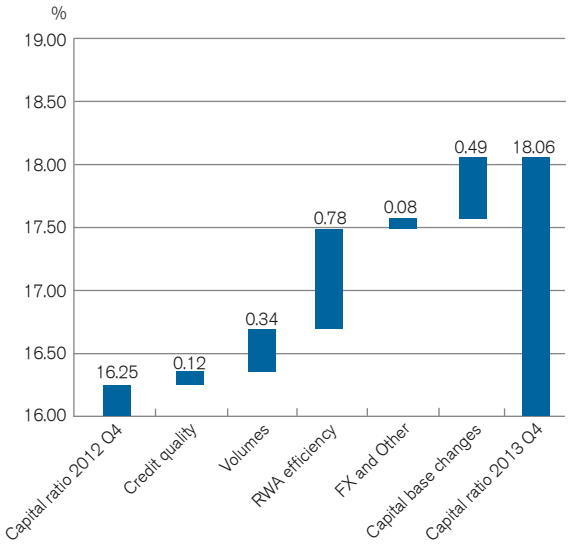


Figure 3.3 Drivers behind the development of the capital ratio



4. Credit risk

The overall credit quality in Nordea's portfolio is solid and continued to improve in 2013. Nordea's credit portfolio is well diversified both in terms of industry groups and geography. Both impaired loans and loan losses decreased in 2013, mainly due to improved conditions in the shipping segment.

4.1 Management, governance and measurement 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.

4.1.1 Management of credit 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. The concentration risk in specific industries is monitored by industry monitoring groups. Industry credit policies are established for industries where at least two of the following criteria are fulfilled:

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

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

- Shipping, Oil and Offshore
- Energy
- Leveraged buy-out
- Financial institutions
- Commercial real estate

Industry credit principles apply to:

- Forest
- Telecom
- Aircraft
- Hedge Funds

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 the 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 4.9.2 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 credit 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. A project to develop the Environmental Social Governance (ESG) risk assessment tools and processes is on-going. The aim is to move towards a risk based approach to identify and focus our efforts on potential higher risk cases. 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.

4.1.1.1 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.

4.1.1.2 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 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 collateral type. In the calculation of RWA, the collateral must fulfil certain eligibility criteria.

For large credit 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.

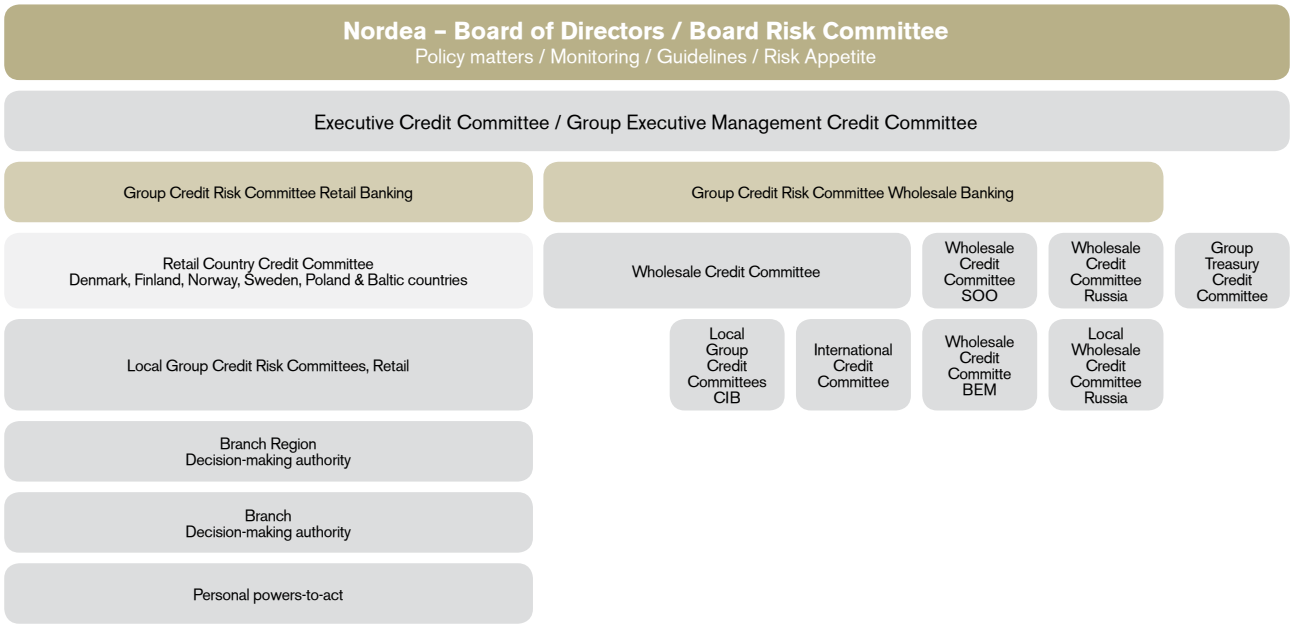
Covenants in credit agreements serve as a complement to both secured and unsecured exposures. All exposures of substantial size and complexity include appropriate covenants. Financial covenants are designed to highlight early warning signs and are closely monitored.

4.1.2 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 decision-making bodies on different levels in the organisation. The rating and exposure of the customer determine at what level the decision will be made (see Figure 4.1). The Group Executive Management Credit Committee decides on proposals for the largest exposures and proposals related to major principle issues. Responsibility for the credit risk lies within each customer responsible unit.

Figure 4.1 Credit decision-making structure for main operations



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 retail customers.

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 into 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 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 collateral.

4.3 Credit risk approach

Nordea is approved by financial supervisory authorities to use the IRB approach for the main part of the credit portfolio.

As of the balance day for this report, Nordea used the FIRB approach for calculating the capital requirements in the institution and corporate exposure classes as well as the IRB approach for the retail exposure classes in the main banks in Sweden, Denmark, Norway and Finland.

Also in the Finance companies in Denmark, Norway, Finland and Sweden as well as in Nordea Bank Russia, the Baltic branches in Latvia, Lithuania, Estonia and in the International units, Nordea is approved to use the Foundation IRB approach for the corporate and institution exposure classes.

Other legal entities and exposure classes are reported according to the standardised approach.

In January 2014 Nordea was approved to use the AIRB approach for the majority of the corporate exposures for the main banks in the Nordics. Nordea aims to continue the roll-out of the IRB approaches in the forthcoming years. Acquisitions of new portfolios are treated under the standardised approach until approved for the IRB approach by the supervisory authorities.

4.4 Development of exposure and RWA

This section includes an overview of the credit risk portfolio distribution. For more detailed information on the

Table 4.1 Specification of on-balance sheet and off-balance sheet items for the Nordea Group, 31 December 2013

EURm On-balance sheet items	Balance sheet (accounting)	Assets held for sale[3]	Items related to market risk	Repos, derivatives, securities lending	Life insurance operations	Other	Original exposure	Exposure adjustment[1]	Exposure
Cash and balances with central banks	33,529	554	0	0	–1	0	34,082		34,082
Loans to central banks and credit institutions	22,512	77	0	–6,605	–546	–17	15,421	0	15,421
Loans to the public	342,451	6,144	–4,388	–39,159	0	2,159	307,207	-1,249	305,958
Interest-bearing securities and pledged instruments	96,889	1,534	–25,523	0	–20,859	0	52,042	0	52,042
Derivatives	70,992	2	0	–70,840	–154	0	0		0
Intangible assets	3,246	65	0	0	–324	–2,987	0		0
Other assets and prepaid expenses	60,815	–8,377	–18,632	–65	–28,008	–386	5,347	0	5,347
Total	**630,434**	**0**	**–48,543**	**–116,669**	**–49,892**	**–1,231**	**414,099**		**412,850**

Off–balance sheet items in the Annual Report	Off-balance sheet (accounting)	Life insurance operations	Included in derivatives & sec fin	Included in CRD off-balance
Assets pledged as security for own liabilities	177,310	–21,081	–156,229	
Other assets pledged	4,575	0	–4,575	
Contingent liabilities	20,870	–46		20,824
Commitments	79,599	–547	–40	79,013
Total	**282,355**	**–21,674**	**–160,844**	**99,836**

Off-balance sheet items in the CRD	Included in CRD off-bal. (from AR)	Included in CRD (not in AR)[2]	Original Exposure	Credit Conversion Factor %	Exposure
Credit facilities	51,607	68	51,676	47%	24,146
Checking accounts	18,975	4,400	23,375	23%	5,346
Loan commitments	8,294	7,129	15,422	31%	4,843
Guarantees	19,681	2	19,683	59%	11,669
Other (leasing and documentary credits)	1,279	34	1,314	26%	347
Total	**99,836**	**11,633**	**111,469**		**46,351**

Derivatives and securities financing	Original Exposure	Exposure adjustment[1]	Exposure
Derivatives	18,372	-214	18,158
Securities Financing Transactions & Long Settlement Transactions	2,196		2,196
Total credit risk (CRD definition)	**546,135**		**479,555**

1) The on-balance exposures can have a lower EAD than original exposure due to provisions in the standardised approach, financial collateral in the standardised approach and residual value for leasing in the IRB approach, that are deducted from the original exposure when calculating EAD.
2) Off-balance exposures included in the CRD but not included in the Annual Report (AR), such as exposures related to undrawn credit facilities which are unconditionally cancellable as well as exposures against Nordea Life Group.
3) Assets held for sale are disclosed separately in the balance sheet but are included line by line in original exposure. The figures relate to the divestment of the Polish business.

principles for RWA calculations under the IRB and standardised approaches see appendix 14.2 and 14.3.

Table 4.2 shows original exposure, exposure, 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 2013, total exposure decreased by EUR 33.0bn or 6.4%, where the major part related to the IRB portfolio. Lower exposure in the IRB institutions portfolio was mainly driven by Nordea receiving approval to use IMM, which served to reduce derivatives exposures. Under the IMM, collaterals decrease the exposure instead of reducing the LGD. The reduced IRB corporate exposure related to lower volumes as well as FX effects where the NOK, SEK and USD all depreciated against the EUR.

Also IRB retail exposures decreased during 2013, driven primarily by FX effects and decreased volumes towards Other retail and retail SME.

Average risk weights in the IRB corporate and IRB retail exposure classes also decreased, which in combination with lower exposure, resulted in an IRB credit risk RWA reduction of EUR 10.0bn. The average risk weights in the IRB corporate and IRB retail portfolios were 51% (52%) and 12% (14%) at the end of 2013. This was largely driven by portfolio composition changes in the IRB corporate as well as favourable rating migration and improved collateral coverage reducing the exposure weighted LGD in IRB retail. Additionally, RWA efficiency activities were undertaken, which contributed to a further decrease in RWA.

In the standardised portfolio, exposure decreased by 0.9% or EUR 1.0bn. Exposure for the corporate portfolio decreased mainly due to FIRB approval for the Russian portfolio however this was largely offset by an increase in the exposure towards central governments and central banks.

The average risk weight in the standardised portfolio decreased by 5% during the period, mainly as a result of the portfolio composition changes between corporate and central governments and central bank exposures.

4.5 Credit risk exposure

4.5.1 Exposure by exposure type

Table 4.3 shows exposures split by exposure class and exposure type for 2013 and 2012 respectively. As of year-end 2013, 77% 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 2013, total exposures decreased primarily due to lower exposures in the corporate and institutions portfolios. Derivative exposures, especially within the institutions portfolio, significantly decreased during the year due to IMM approval.

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

4.5.2 Exposure by geography

Nordea is geographically well diversified and as of end 2013, no market accounts for more than 25% of the total exposure, as can be seen in Table 4.5. The exposures in Sweden and Finland represent 25% and 23% of the total exposure in the Group respectively, while Denmark accounts for 23% and Norway 16%.

In all the Nordic countries the total IRB exposures decreased in 2013 compared to 2012. In Finland, the lower exposure in the IRB portfolio is attributable to decreases in institution and corporate exposures. For institutions the decrease relates mainly to derivative exposures as well as decreased lending. The majority of the Russian exposures moved from SA to IRB due to FIRB approval for the institution and corporate portfolios.

4.5.3 Exposure by industry

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

The 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 480bn. During the year, the exposure class IRB institution decreased exposures to other financial institutions and banks. The largest relative decrease was found within the other, public and organisations industry, while the largest relative increase showed up within other materials (chemical, building materials, etc.). 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.

4.5.3.1 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 75bn, 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.

4.5.4 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 2% in 2013.

The overall exposure, RWA and capital requirements split by exposure type are shown in Table 4.10, where the ex-

Table 4.2 Capital requirements for credit risk, split by exposure class, 31 December 2013

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
Institution	43,304	41,093	14%	5,848	468
Corporate	216,026	166,887	51%	84,844	6,787
Retail	165,171	159,470	12%	19,848	1,588
– of which mortgage	133,919	132,174	8%	10,772	862
– of which other retail	27,837	24,327	32%	7,778	622
– of which SME	3,415	2,969	44%	1,298	104
Other non-credit obligation assets	1,955	1,533	99%	1,521	122
Total IRB approach	**426,456**	**368,983**	**30%**	**112,061**	**8,965**
Standardised exposure classes					
Central government and central banks	70,568	74,881	0%	258	21
Regional governments and local authorities	10,876	9,168	2%	170	14
Institution	1,764	1,740	35%	611	49
Corporate	9,756	3,768	100%	3,769	301
Retail	13,424	7,933	75%	5,949	476
Exposures secured by real estate	7,432	7,347	66%	4,826	386
Other[1)]	5,860	5,735	36%	2,061	165
Total standardised approach	**119,679**	**110,572**	**16%**	**17,644**	**1,412**
Total	**546,135**	**479,555**	**27%**	**129,705**	**10,376**

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 2012

EURm	Original exposure	Exposure	Average risk weight	RWA	Capital requirement
IRB exposure classes					
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.

Table 4.3 Exposure split by exposure class and exposure type, 31 December 2013

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	32,995	1,216	1,218	5,665	41,093
Corporate	124,389	33,538	739	8,221	166,887
Retail	150,407	8,968	1	95	159,470
– of which mortgage	128,891	3,283			132,174
– of which other retail	19,266	4,999	0	62	24,327
– of which SME	2,249	686	1	33	2,969
Other non-credit obligation assets	1,527	6			1,533
Total IRB approach	**309,317**	**43,727**	**1,958**	**13,980**	**368,983**
Standardised exposure classes					
Central governments and central banks	71,631	1,263	137	1,850	74,881
Regional governments and local authorities	7,088	689	10	1,382	9,168
Institution	1,699	39		2	1,740
Corporate	3,249	506		14	3,768
Retail	7,821	109		2	7,933
Exposures secured by real estate	7,331	16			7,347
Other[1)]	4,713	2	91	929	5,735
Total standardised approach	**103,532**	**2,624**	**238**	**4,178**	**110,572**
Total exposure	**412,850**	**46,351**	**2,196**	**18,158**	**479,555**

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 2012

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
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.

Table 4.4 Average quarterly exposure during 2013, split by exposure class and exposure type

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	34,600	1,513	1,246	6,117	43,476
Corporate	125,762	33,848	603	9,324	169,537
Retail	150,725	9,234	3	84	160,047
– of which mortgage	128,380	3,271	0	0	131,651
– of which other retail	20,051	5,288	3	51	25,393
– of which SME	2,295	674	1	33	3,003
Other non-credit obligation assets	1,461	5	0	0	1,466
Total IRB approach	**312,549**	**44,599**	**1,852**	**15,525**	**374,525**
Standardised exposure classes					
Central governments and central banks	63,651	1,404	341	1,997	67,393
Regional governments and local authorities	6,914	612	5	1,438	8,970
Institution	1,745	88	0	2	1,835
Corporate	6,431	936	0	71	7,438
Retail	7,672	107	0	5	7,784
Exposures secured by real estates	7,216	20	0	0	7,236
Other[1)]	4,975	5	126	662	5,769
Total standardised approach	**98,604**	**3,173**	**472**	**4,175**	**106,424**
Total exposure	**411,152**	**47,771**	**2,325**	**19,700**	**480,949**

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 2012, split by exposure class and exposure type

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Institution	37,768	1,632	1,248	24,694	65,342
Corporate	131,435	33,768	692	9,866	175,761
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	1,391	4	0	0	1,396
Total IRB approach	**319,678**	**45,870**	**1,940**	**34,664**	**402,152**
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	**419,362**	**49,572**	**2,204**	**38,217**	**509,356**

1) Administrative bodies and non-commercial undertakings, multilateral developments banks, past due items, short-term claims, covered bonds, and other items. Associated companies not included in exposure. The figures for 2012 have been restated.

Table 4.5 Exposure split by exposure class and geography, 31 December 2013

EURm	Nordic countries	– of which Denmark	– of which Finland	– of which Norway	– of which Sweden	Baltics	Poland	Russia	Other[2]	Total	Total 2012
IRB exposure classes											
Institution	38,205	6,304	14,327	5,944	11,630	145		194	2,549	41,093	63,852
Corporate	148,217	37,378	37,681	33,522	39,636	4,695		4,262	9,713	166,887	175,203
Retail	159,470	51,147	32,954	27,577	47,791					159,470	160,583
– of which mortgage	132,174	38,234	28,689	23,380	41,870					132,174	130,478
– of which other retail	24,327	12,293	3,283	3,882	4,869					24,327	27,091
– of which SME	2,969	620	982	315	1,052					2,969	3,014
Other non-credit obligation assets	1,478	260	167	259	793	41			13	1,533	1,396
Total IRB approach	**347,370**	**95,090**	**85,129**	**67,302**	**99,850**	**4,881**	**0**	**4,456**	**12,275**	**368,983**	
Total IRB approach 2012	**382,719**	**96,770**	**101,226**	**75,983**	**108,740**	**4,682**	**0**	**0**	**13,633**		**401,034**
Standardised exposure classes											
Central governments and central banks	46,953	13,885	16,981	6,057	10,030	555	1,116	152	26,104	74,881	70,409
Regional governments and local authorities	8,938	1,367	2,880	104	4,587	174	2	55		9,168	9,348
Institution	554	1	535	13	5	4	971	104	107	1,740	1,785
Corporate	389	68	159	98	64	873	1,903	63	541	3,768	9,155
Retail	6,611	856	3,086	1,141	1,528	963	211	64	84	7,933	7,580
Exposures secured by real estate	513		513			2,146	3,874	418	396	7,347	7,350
Other[1]	5,280	1,178	2,150	507	1,445	196	131	47	81	5,735	5,929
Total standardised approach	**69,237**	**17,356**	**26,303**	**7,919**	**17,659**	**4,911**	**8,208**	**902**	**27,313**	**110,572**	
Total standardised approach 2012	**72,019**	**15,450**	**32,542**	**6,708**	**17,320**	**5,194**	**9,459**	**6,040**	**18,844**		**111,557**
Total exposure	**416,608**	**112,445**	**111,433**	**75,221**	**117,509**	**9,792**	**8,208**	**5,358**	**39,589**	**479,555**	
Total exposure 2012	**454,739**	**112,220**	**133,768**	**82,691**	**126,059**	**9,876**	**9,459**	**6,040**	**32,477**		**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.
2) Includes International Units, which received IRB approval during 2012.

posure 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 do on-balance sheet items. At the end of 2013, only 20% of the total credit risk RWA stems from off-balance sheet items and derivatives, which is unchanged since 2012. RWA for off-balance sheet items represented 15% of the total RWA, while RWA for on-balance sheet items, including securities financing, represented 80%.

IRB corporate constitutes 69% of the total original off-balance sheet exposure. A large part refers to revocable credit facilities.

Off-balance exposures are converted to on-balance equivalents 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 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 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 increased average CCF for IRB retail, seen in Table 4.11, was mainly driven by real estate loans.

4.5.5 Counterparty credit risk

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

Derivative contracts are financial instruments, such as futures, forwards, swaps or options that derive their value from underlying interest rates, currencies, equities, credit spreads or commodity prices. The derivative contracts are often traded over the counter (OTC), which means the

Table 4.6 Exposure split by industry group and by main exposure class, 31 December 2013

	IRB approach				Standardised approach				
EURm	Institution	Corporate	Retail	Other non-credit obligation assets	Central governments and central banks	Regional government and local authorities	Other[1)]	Total	Total 2012
Retail mortgage			132,174				7,347	139,521	137,828
Other retail			24,327				7,933	32,259	34,671
Central and local governments					29,802	9,168		38,970	37,312
Banks	25,938				45,079		1,438	72,456	85,062
Industry group									
Construction and engineering		4,967	338				145	5,450	5,863
Consumer durables (cars, appliances, etc.)		4,672	57				16	4,745	5,385
Consumer staples (food, agriculture, etc.)		13,223	156				121	13,500	14,124
Energy (oil, gas, etc.)		4,847	1				29	4,877	4,754
Health care and pharmaceuticals		1,621	108				123	1,852	2,412
Industrial capital goods		5,170	21				38	5,229	5,344
Industrial commercial services		14,034	532				482	15,048	16,692
IT software, hardware and services		1,761	69				13	1,843	1,944
Media and leisure		2,594	246				63	2,903	3,059
Metals and mining materials		997	6				11	1,015	1,111
Other financial institutions	15,155	12,046	68				306	27,575	35,927
Other materials (chemical, building materials, etc.)		8,028	81				220	8,329	7,150
Other, public and organisations		7,121	132	1,533			6,842	15,627	20,903
Paper and forest materials		2,955	28				27	3,010	3,168
Real estate management and investment		43,043	441				368	43,852	46,461
Retail trade		11,600	521				164	12,285	13,308
Shipping and offshore		12,628	7				151	12,786	14,083
Telecommunication equipment		466	1				0	468	453
Telecommunication operators		1,863	4				148	2,015	2,002
Transportation		4,313	138				362	4,813	4,859
Utilities (distribution and production)		8,938	14				174	9,127	8,716
Total exposure	**41,093**	**166,887**	**159,470**	**1,533**	**74,881**	**9,168**	**26,523**	**479,555**	
Total exposure 2012	**63,852**	**175,203**	**160,583**	**1,396**	**70,409**	**9,348**	**31,799**		**512,591**

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.

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.

4.5.5.1 Pillar I method for counterparty credit risk

Nordea has approval from the FSAs in Sweden and Finland to use the internal model method (IMM) for calculating the regulatory counterparty credit risk (CCR) exposure in accordance with the credit risk framework in the CRD. Nordea implemented the IMM approach 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

Table 4.7 IRB corporate exposure split by industry group and geography, 31 December 2013

EURm	Denmark	Finland	Norway	Sweden	Russia	Baltic countries	International Units	Total	Total 2012
Construction and engineering	488	1,211	1,771	827	31	313	326	4,967	5,405
Consumer durables (cars, appliances, etc.)	314	945	1,619	1,401	12	56	325	4,672	5,273
Consumer staples (food, agriculture, etc.)	7,633	1,817	2,367	634	52	232	488	13,223	13,810
Energy (oil, gas, etc.)	15	688	1,385	1,575	396	168	621	4,847	4,671
Health care and pharmaceuticals	291	402	161	562	69	20	116	1,621	2,155
Industrial capital goods	656	2,651	289	929	0	12	633	5,170	5,240
Industrial commercial services	4,702	2,942	2,499	3,422	9	119	341	14,034	15,959
IT software, hardware and services	293	396	237	495	39	2	299	1,761	1,842
Media and leisure	516	636	567	752	2	74	47	2,594	2,785
Metals and mining materials	22	267	195	385	101	6	22	997	1,101
Other financial institutions	3,203	3,177	1,087	4,194	0	12	373	12,046	13,056
Other materials (chemical, building materials, etc.)	626	2,341	556	1,962	1,941	184	419	8,028	6,875
Other, public and organisations	3,264	1,533	815	614	4	762	128	7,121	6,675
Paper and forest materials	248	1,352	43	897	157	29	228	2,955	3,129
Real estate management and investment	7,752	8,973	9,949	14,069	670	1,315	314	43,043	45,656
Retail trade	3,911	2,750	1,572	2,549	113	374	332	11,600	12,601
Shipping and offshore	869	1,047	5,500	1,355	0	0	3,856	12,628	13,803
Telecommunication equipment	2	364	0	62	0	0	38	466	451
Telecommunication operators	181	307	678	593	60	2	41	1,863	1,972
Transportation	553	1,049	843	1,119	200	509	40	4,313	4,407
Utilities (distribution and production)	1,840	2,832	1,389	1,240	405	507	726	8,938	8,337
Total exposure	**37,378**	**37,681**	**33,522**	**39,636**	**4,262**	**4,695**	**9,713**	**166,887**	
Total exposure 2012	**38,515**	**38,991**	**36,924**	**45,189**		**4,580**	**11,003**		**175,203**

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 2013 Exposure	31 December 2012 Exposure
1	AAA to AA–	0%	74,331	69,436
2	A+ to A–	20%	149	385
3	BBB+ to BBB–	50%	345	514
4 to 6 or blank	BB+ and below, or without rating	100–150%	56	74
Total			**74,881**	**70,409**

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).

For the remaining part, Nordea uses the CEM method for derivative exposures, which is calculated using a standardised method for 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 life of the contract and is measured as the notional principal amount multiplied by an add-on factor. The size of the add-on factor, stipulated by the FSA, depends on the contract's underlying asset and time to maturity.

Table 4.12 shows exposures as well as RWA, split by exposure class. The decrease in exposure during 2013 is a combination of both decreased market values and the implementation of the IMM method. Market values decreased due to changes in interest rates and exchange rates, which affect interest rate derivatives and FX derivatives. A strengthening of the EUR against the most significant currencies in Nordea (SEK, NOK and USD) also caused markets values to decrease.

Nordea continues to clear interest rate derivatives and

repos with central counterparties, mainly via LCH Clearnet and Eurex. This serves to reduce both the current exposure and the potential future exposure.

4.5.5.2 Counterparty credit risk for internal credit limit purposes

Table 4.9 Original off-balance sheet exposure split by exposure class

EURm	31 December 2013	31 December 2012
IRB exposure classes		
Institution	3,410	3,507
Corporate	77,026	77,379
Retail	13,583	13,904
– of which mortgage	5,028	5,205
– of which other retail	7,491	7,657
– of which SME	1,064	1,042
Other non-credit obligation assets	14	11
Total IRB approach	**94,032**	**94,801**
Standardised exposure classes		
Central government and central banks	1,282	1,538
Regional governments and local authorities	4,909	5,485
Institution	96	309
Corporate	5,635	5,808
Retail	5,425	5,558
Exposures secured by real estate	88	84
Other	2	56
Total standardised approach	**17,437**	**18,838**
Total	**111,469**	**113,638**

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 CCR exposure) 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 recent times. Thereby general wrong-way risk is taken into account in counterparty credit risk management. In addition, the exposures included in IMM are subject to daily and periodic stress tests with the aim to identify adverse scenarios affecting exposures on counterparty, industry and country level.

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

As of December 2013, the current exposure net (after close-out netting and collateral reduction) was EUR 9.1bn and the pre-settlement risk (current exposure and potential future exposure) was EUR 44.9bn, comprised of both simulated and non-simulated trades.

On traded OTC contracts, Nordea performs fair value adjustments, which are adjustments to the counterparty credit risk exposure made 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.

The IMM is also used for internal capital purposes (EC framework).

Table 4.10 Exposure, RWA and capital requirements split by exposure type, 31 December 2013

EURm	On-balance sheet items[1)]	Off-balance sheet items	Derivatives	Total	Total 2012
Original exposure	416,294	111,469	18,372	546,135	579,076
EAD	415,045	46,351	18,158	479,555	512,591
RWA	103,665	20,071	5,969	129,705	145,341
Capital requirements	8,293	1,606	478	10,376	11,627
Average risk weight	25%	43%	33%	27%	28%

1) Includes securities financing.

Table 4.11 Average credit conversion factor and off-balance sheet exposure split by IRB exposure class, 31 December 2013

EURm	Exposure after substitution effects[1)]	Exposure	CCF	CCF 2012
Institution	3,247	1,216	37%	42%
Corporate	75,649	33,538	44%	45%
Retail	13,545	8,968	66%	64%
– of which mortgage	5,028	3,283	65%	60%
– of which other retail	7,458	4,999	67%	67%
– of which SME	1,059	686	65%	64%

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 2013		31 December 2012	
EURm	Exposure	RWA	Exposure	RWA
IRB exposure classes				
Institution	5,665	1,638	20,414	3,567
Corporate	8,221	4,056	9,596	4,857
Retail	95	37	75	25
Total IRB approach	**13,980**	**5,731**	**30,085**	**8,449**
Standardised exposure classes				
Central government and central banks	1,850	88	2,096	73
Other	2,328	150	2,083	46
Total standardised approach	**4,178**	**238**	**4,178**	**119**
Total exposure	**18,158**	**5,969**	**34,263**	**8,568**

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

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

	31 December 2013		31 December 2012	
EURm	Current exposure net	Pre-settlement risk	Current exposure net	Pre-settlement risk
To central banks and credit institutions	**1,215**	**14,459**	**1,285**	**13,486**
– of which credit institutions	1,048	13,667	1,130	12,721
– of which central banks	167	792	154	765
To the public	**7,860**	**30,406**	**9,775**	**30,808**
– of which corporate	7,692	29,369	9,591	30,016
Construction and engineering	84	168	119	167
Consumer durables (cars, appliances, etc.)	67	337	76	257
Consumer staples (food, agriculture, etc.)	259	575	371	670
Energy (oil, gas, etc.)	11	97	13	163
Health care and pharmaceuticals	109	336	205	448
Industrial capital goods	70	469	79	375
Industrial commercial services, etc.	679	1,963	1 067	2 422
IT software, hardware and services	11	46	19	44
Media and leisure	75	261	116	235
Metals and mining materials	9	72	34	109
Other financial institutions	2,288	12,051	1 235	11 173
Other materials (chemical, building materials, etc.)	59	254	113	540
Other, public and organisations	1,232	5,547	1 825	5 377
Paper and forest materials	99	300	105	321
Real estate management and investment	1,419	2,680	2 295	3 168
Retail trade	189	625	248	749
Shipping and offshore	187	824	239	859
Telecommunication equipment	2	48	0	45
Telecommunication operators	106	445	153	508
Transportation	263	902	502	886
Utilities (distribution and production)	474	1,369	776	1 500
– of which public sector	168	1,037	184	792
Total	**9,075**	**44,865**	**11,060**	**44,294**

Table 4.14 Mitigation of counterparty credit risk exposures

	31 December 2013				31 December 2012			
EURm	Current exposure (gross)	Reduction from closeout netting agreements	Reduction from held collateral	Current exposure (net)	Current exposure (gross)	Reduction from closeout netting agreements	Reduction from held collateral	Current exposure (net)
Total	**139,002**	**121,483**	**8,444**	**9,075**	**208,055**	**189,142**	**7,853**	**11,060**

4.5.5.3 Regulatory development
Nordea proactively upgrades its counterparty credit risk framework in order to be compliant with 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.

4.5.5.4 Mitigation of counterparty credit risk exposure
To reduce exposure towards single counterparties, risk mitigation techniques are used. The most common is the use of closeout netting agreements, which allows 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 2013, Nordea had 1,267 financial collateral agreements, representing an increase of 2% on last year. The effects of closeout netting and collateral agreements are considerable, as 93% (95%) 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 downgrading. Separate credit guidelines are in place for handling financial collateral agreements.

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

The ten largest counterparties, measured on current exposure net, account for around 10% (12%) of the total current exposure net, and consists of a mix of financial institutions, public and corporate counterparties, all with high credit quality.

4.5.5.5 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 was 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 to minimise 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.

4.5.6 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.

4.6 Rating and scoring
4.6.1 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 (but not limited to):

- 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 statistical to purely expert-based, 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 in the retail SME segment 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 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 models' ability to distinguish default risk on a relative basis, and cardinal accuracy, i.e. the ability to predict default levels.

The Parameters, Scoring and Rating Models Validation Subcommittee, a sub-committee to both ALCO and the Risk Committee, is responsible for the approval of the annual rating and scoring model validations, as well as approval of proposals concerning the credit risk model validation framework.

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

4.6.2 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.

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

4.6.3 Rating and risk grade distribution

4.6.3.1 Rating grade distribution of the IRB institution portfolio

Figure 4.2 shows the rating grade distribution of the IRB institution portfolio. In December 2013, 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 increased from 0.09% to 0.10%, which together with the increased average LGD explains the higher average risk weight.

4.6.3.2 Rating grade distribution of the IRB corporate portfolio

Figure 4.3 and Table 4.17 show the rating grade distribution of the IRB corporate portfolio. In December 2013, approximately 82% (79%) of the IRB corporate exposure was found in the rating grades 4– and above.

Average PD decreased from 0.62% to 0.59% mainly as a result of portfolio composition changes. The average PD for the IRB corporate portfolio, distributed by industry is shown in Figure 4.4.

4.6.3.3 Risk grade distribution of the IRB retail portfolio

Figure 4.5 shows the risk grade distribution of the IRB retail portfolio. As of end 2013, approximately 92% (92%) of the retail exposure was found in the risk grades C– and

Table 4.16 IRB institution exposure, distributed by rating grade

EURm	31 December 2013			31 December 2012		
Rating grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
6+	0.03%	4,705	6%	0.03%	7,096	9%
6	0.03%	3,917	7%	0.03%	4,136	7%
6–	0.05%	12,092	8%	0.05%	17,217	9%
5+	0.07%	12,805	13%	0.07%	24,574	10%
5	0.10%	2,705	20%	0.10%	3,445	21%
5–	0.16%	2,638	21%	0.16%	4,386	19%
4+	0.24%	857	50%	0.24%	1,358	40%
4	0.35%	682	61%	0.35%	848	51%
4–	0.53%	280	71%	0.53%	357	62%
3+	0.81%	56	90%	0.81%	82	81%
3	1.19%	24	102%	1.19%	24	103%
3–	2.06%	54	122%	2.06%	51	107%
2+	4.35%	11	141%	4.35%	19	152%
2	6.32%	43	172%	6.32%	9	172%
2–	9.86%	9	195%	9.86%	21	190%
1+	14.79%	14	123%	14.79%	14	223%
1	20.71%	1	254%	20.71%	0	254%
1–	26.93%	8	263%	26.93%	0	263%
	0.10%[1)]	**40,900**	**14%**	**0.09%[1)]**	**63,637**	**13%**

1) Exposure-weighted PD.

Table 4.17 IRB corporate exposure, distributed by rating grade

EURm	31 December 2013			31 December 2012		
Rating grade	PD scale	Exposure	Average risk weight	PD scale	Exposure	Average risk weight
6+	0.03%	4,286	14%	0.03%	3,559	14%
6	0.03%	2,968	14%	0.03%	2,351	13%
6–	0.05%	5,166	18%	0.05%	6,197	18%
5+	0.07%	9,080	23%	0.07%	10,013	23%
5	0.10%	17,142	29%	0.10%	14,241	27%
5–	0.16%	17,484	37%	0.16%	17,241	36%
4+	0.24%	22,120	45%	0.24%	23,674	45%
4	0.35%	27,798	55%	0.35%	28,313	54%
4–	0.53%	23,534	65%	0.53%	25,997	65%
3+	0.81%	13,203	78%	0.81%	15,105	77%
3	1.19%	7,337	85%	1.19%	10,254	86%
3–	2.06%	4,266	96%	2.06%	5,566	95%
2+	4.35%	2,651	126%	4.35%	2,098	118%
2	6.32%	1,064	139%	6.32%	808	135%
2–	9.86%	276	138%	9.86%	288	139%
1+	14.79%	277	184%	14.79%	476	196%
1	20.71%	149	194%	20.71%	229	227%
1–	26.93%	166	241%	26.93%	130	227%
	0.59%[1)]	**158,964**	**52%**	**0.62%[1)]**	**166,543**	**53%**

1) Exposure-weighted PD.

above. For retail mortgage and other retail the corresponding share is 94% (94%) and 86% (85%) respectively and for SME 61% (59%).

The average PD decreased from 0.73% to 0.67%. Favourable risk grade migration and decreased average LGD resulted in a lower average compared with previous year. Tables 4.18 and 4.19 show the IRB retail exposure distributed by risk grade.

4.6.4 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 changes to customers' financial situation and other company-specific factors. Risk grade migration is among other things affected by macroeconomic development and the customers' repayment capacity.

Figures 4.6 to 4.8 show the rating/risk grade migration for institution, corporate and retail customers during 2013, based on existing customers at the years' ending 2012 and 2013. 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. Out of the total exposure in the institution portfolio approximately 11% (14%) migrated up or down during the year, corresponding to approximately 20% (27%) of the number of counterparts. Compared to 2012, Nordea experienced less migration in 2013.

In the corporate portfolio approximately 41% (44%) migrated either up or down with respect to exposure and 50% (50%) in terms of number of customers.

Approximately 55% (54%) of the retail portfolio exposure migrated up or down, corresponding to approximately 58% (58%) of customers.

On an overall level, migration had a positive impact on credit risk RWA and reduced IRB credit risk RWA by approximately 0.7%. 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.

4.7 Collateral and maturity

4.7.1 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, approximately 43% (41%) of the total exposure was secured by eligible collateral. The corresponding

Figure 4.2 Exposure distributed by rating grade, IRB institution

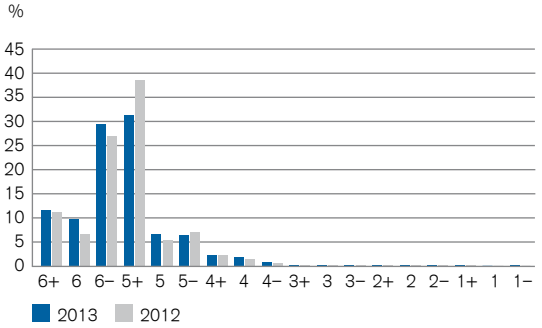


Figure 4.3 Exposure distributed by rating grade, IRB corporate

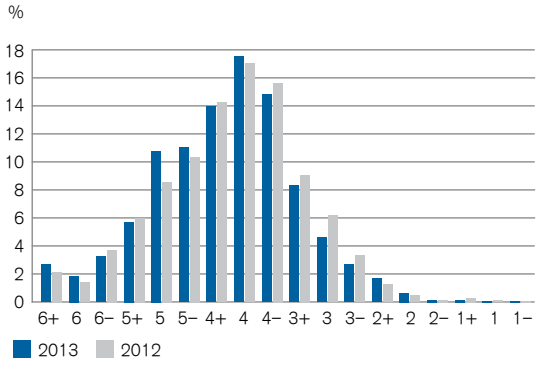


Figure 4.4 Average PD per industry for the IRB corporate portfolio

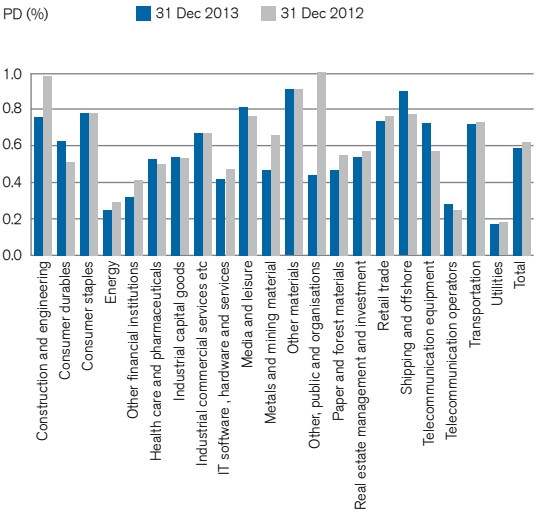


Table 4.18 IRB retail exposure, distributed by risk grade

EURm Risk grade	31 December 2013 PD scale	 Exposure	 Average risk weight	31 December 2012 PD scale	 Exposure	 Average risk weight
A+	0.08%	67,939	3%	0.08%	60,644	3%
A	0.11%	19,306	4%	0.11%	19,204	4%
A–	0.16%	12,122	6%	0.16%	14,569	6%
B+	0.22%	10,879	8%	0.22%	11,816	8%
B	0.31%	9,738	10%	0.31%	9,959	11%
B–	0.43%	9,764	13%	0.43%	11,607	13%
C+	0.60%	5,853	16%	0.60%	5,951	17%
C	0.84%	4,744	20%	0.84%	6,216	21%
C–	1.17%	4,479	25%	1.17%	4,998	26%
D+	1.64%	2,709	30%	1.64%	2,903	30%
D	2.30%	2,099	35%	2.30%	2,359	35%
D–	3.20%	1,316	41%	3.20%	1,624	42%
E+	4.47%	1,591	45%	4.47%	1,732	45%
E	6.30%	2,235	54%	6.30%	2,369	54%
E–	8.79%	434	59%	8.79%	452	57%
F+	12.28%	330	61%	12.28%	375	62%
F	17.19%	206	70%	17.19%	241	72%
F–	24.04%	1,165	84%	24.04%	1,243	84%
	0.67%[1)]	**156,908**	**10%**	**0.73%**[1)]	**158,261**	**11%**

1) Exposure-weighted PD.

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

EURm Risk grade	31 December 2013 PD scale	 Retail mortgage	 Other retail	 SME	31 December 2012 PD scale	 Retail mortgage	 Other retail	 SME
A+	0.08%	61,746	5,868	324	0.08%	54,976	5,304	363
A	0.11%	16,664	2,596	46	0.11%	16,579	2,586	39
A–	0.16%	10,042	2,038	42	0.16%	12,073	2,468	29
B+	0.22%	8,733	2,104	42	0.22%	9,313	2,463	39
B	0.31%	7,551	2,087	100	0.31%	7,469	2,420	70
B–	0.43%	7,412	2,182	170	0.43%	8,752	2,771	84
C+	0.60%	4,330	1,321	202	0.60%	4,288	1,519	144
C	0.84%	3,488	1,040	216	0.84%	4,390	1,561	265
C–	1.17%	3,056	865	558	1.17%	3,214	1,163	621
D+	1.64%	1,780	649	279	1.64%	1,812	760	330
D	2.30%	1,367	520	211	2.30%	1,547	595	217
D–	3.20%	871	301	144	3.20%	1,004	458	161
E+	4.47%	1,012	442	137	4.47%	1,069	513	149
E	6.30%	1,375	749	110	6.30%	1,397	873	98
E–	8.79%	224	112	97	8.79%	261	104	87
F+	12.28%	227	70	33	12.28%	246	99	30
F	17.19%	144	46	16	17.19%	159	60	21
F–	24.04%	686	433	46	24.04%	718	469	57
		130,711	**23,423**	**2,774**		**129,267**	**26,189**	**2,805**

Figure 4.5 Exposure distributed by risk grade, IRB retail

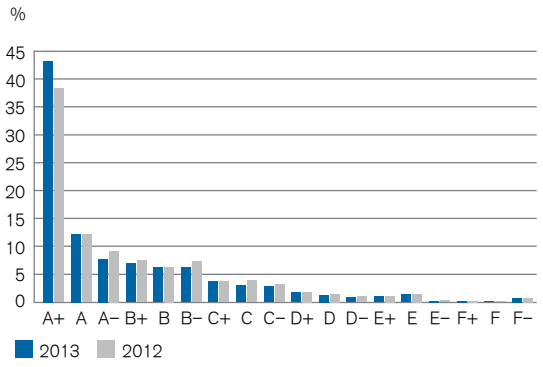


figure for the IRB portfolio was 54% (50%). The relative share of collateralised exposure remains stable.

Under the FIRB approach, LGD estimates are predefined by legislation. For instance, exposure fully secured by real estate collateral is assigned an LGD of 35%. 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 into pools of collateral based on historical loss data.

During 2013, the average LGD in IRB exposure class corporate remained stable at 41% (41%) while the average LGD in institutions increased slightly to 23% (22%). In contrast, the average LGD in the retail exposure class decreased to 16% (17%).

Average LGD in the retail portfolio decreased as a result of increased residential real estate lending. The increase in average LGD in IRB institutions was due to that Nordea got approval to use the IMM for calculating the regulatory counterparty credit risk (CCR) exposure (see section 4.4 for further explanation).

4.7.1.1 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 is A– (S&P's rating scale) or better.

Central governments and municipalities guarantee approximately 82% of the total guaranteed exposure. Exposure guaranteed by these guarantors has an average risk weight of 0%. 4% of total guaranteed exposure is guaranteed by IRB institutions. The remainder is guaranteed by IRB corporate guarantors, all 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.

4.7.1.2 Collateral distribution

Table 4.21 presents the distribution of collateral used in the capital adequacy calculation process. The table shows real estate to constitute a major share of eligible collateral items in relative terms. The real estate collateral category also saw the largest relative increase during the year. Commercial real estate and other physical collateral also increased while financial collateral and receivables decreased in relative terms. Real estate is commonly used as collateral for credit risk mitigation purposes. There is no concentration of real estate collateral to any particular region within the Nordic and Baltic countries. Other physical collateral consists mainly of ships.

4.7.1.3 Valuation principles of collateral

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

Valuation and hence eligibility of collaterals 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 2013, the retail mortgage exposure increased in the LTV buckets representing LTV below 50%.

4.7.2 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.

4.8 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.

Figure 4.6a Institution re-rated exposure at default (%)

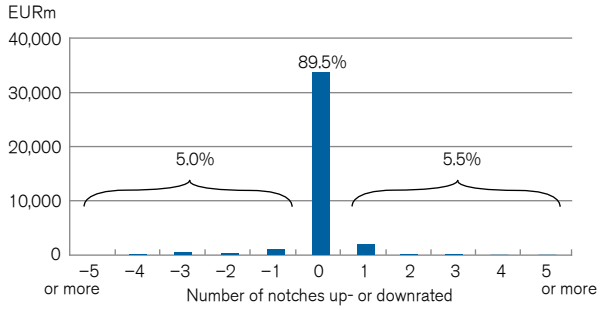


Figure 4.6b Institution re-rated number of customers (%)

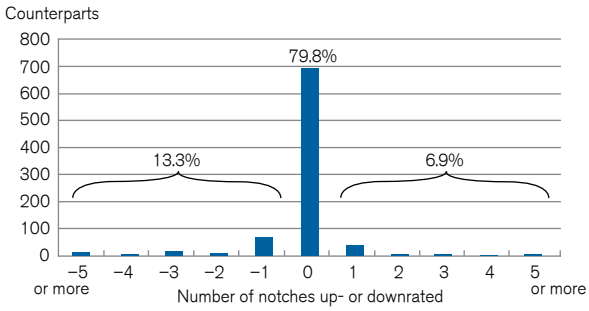


Figure 4.7a Corporate re-rated exposure at default (%)

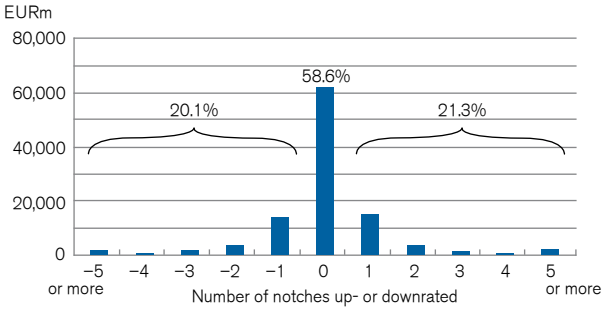


Figure 4.7b Corporate re-rated number of customers (%)

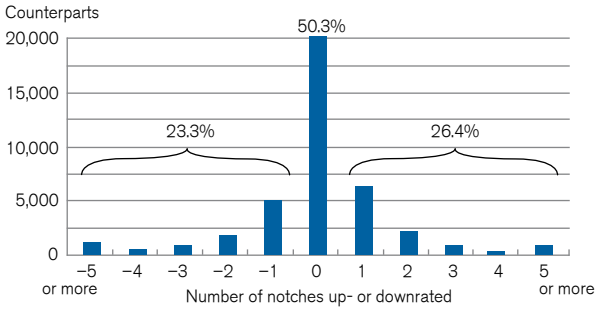


Figure 4.8a Retail re-scored exposure at default (%)

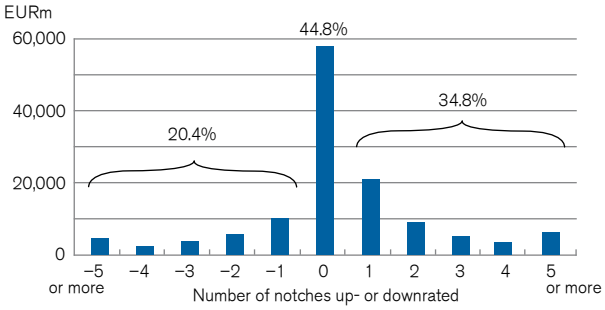


Figure 4.8b Retail re-scored number of customers (%)

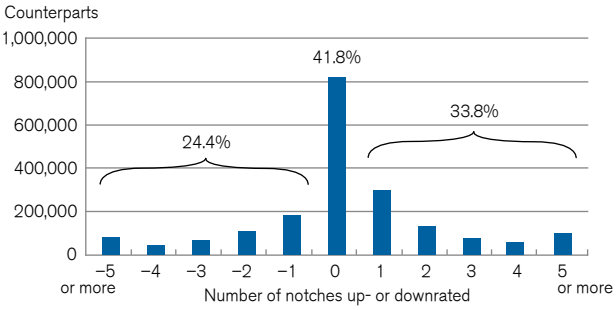


Table 4.20 Exposure secured by collateral, guarantees and credit derivatives, split by exposure class, 31 December 2013

EURm	Original exposure	Exposure	– of which secured by guarantees and credit derivatives	– of which secured by collateral	Average weighted LGD	Average weighted LGD 2012
IRB exposure classes						
Institution	43,304	41,093	703	348	22.7%	22.2%
Corporate	216,026	166,887	8,482	64,349	41.3%	40.9%
Retail	165,171	159,470	2,722	132,753	16.1%	16.6%
– of which mortgage	133,919	132,174		130,095	12.3%	12.3%
– of which other retail	27,837	24,327	2,235	915	35.9%	36.6%
– of which SME	3,415	2,969	487	1,744	24.1%	22.9%
Other non-credit obligation assets	1,955	1,533	1	13	n.a.	n.a.
Total IRB approach	**426,456**	**368,983**	**11,909**	**197,463**		
Total IRB approach 2012	**458,592**	**401,034**	**11,815**	**202,391**		
Standardised exposure classes						
Central government and central banks	70,568	74,881	477	1		
Regional governments and local authorities	10,876	9,168	0	0		
Institution	1,764	1,740	0	2		
Corporate	9,756	3,768	0	826		
Retail	13,424	7,933	64			
Exposures secured by real estate	7,432	7,347	0	7,347		
Other [1)]	5,860	5,735	2	1		
Total standardised approach	**119,679**	**110,572**	**543**	**8,177**		
Total standardised approach 2012	**120,484**	**111,557**	**540**	**8,168**		

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

Table 4.21 Distribution of collateral, IRB portfolios

	31 Dec 2013	31 Dec 2012
Financial collateral	1.4%	4.7%
Receivables	1.1%	1.2%
Residential real estate	72.5%	70.7%
Commercial real estate	18.5%	17.5%
Other physical collateral	6.4%	6.0%
Total	**100.0%**	**100.0%**

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

	31 Dec 2013		31 Dec 2012	
EURbn	Exposure	%	Exposure	%
<50%	99.2	77.0	97.4	76.5
50–70%	20.9	16.2	20.7	16.3
70–80%	5.5	4.3	5.6	4.4
80–90%	2.1	1.7	2.3	1.8
>90%	1.2	0.9	1.2	1.0
Total	**128.9**	**100**	**127.3**	**100**

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

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 customer-weighted default frequency for the corporate and institution portfolio and the retail portfolio respectively.

Table 4.25 shows estimated and realised LGD for retail

Table 4.23 IRB exposure split by maturity

	31 December 2013			31 December 2012		
EURm	Institution	Corporate	Retail	Institution	Corporate	Retail
< 1 year	17,974	42,299	85,365	39,640	49,813	86,226
1-3 years	12,827	37,436	9,821	16,262	29,703	10,628
3-5 years	5,999	35,344	8,540	5,039	46,353	6,142
> 5 years	4,293	51,808	55,743	2,911	49,333	57,587
Total exposure	**41,093**	**166,887**	**159,470**	**63,852**	**175,203**	**160,583**

Table 4.24 Obligor-weighted PD vs. ADF, 2013

	Average PD	Average ADF
Retail	1.24%	1.07%
Corporate & Institution	1.48%	1.27%

Table 4.25 Exposure-weighted estimated vs. realised LGD & EAD for the retail IRB portfolio, 2013

	Estimated	Realised
Retail LGD	16.1%[1)]	10.1%
Retail CCF[2)]	57.1%	55.4%

1) Defaulted customers not included.
2) Only for exposures with an off-balance part.

IRB exposures. Estimated vs realised LGD for the corporate portfolio where Nordea received AIRB approval in January 2014 are 27.6% vs 13.6%. The estimated vs realised CCF for the corporate portfolio are 55.3% and 38.2% respectively. Realised LGD and CCF values for the retail and corporate portfolio are averages based on at least 5 and 7 years of data respectively. The estimated values includes a downturn add-on and a safety margin, hence the difference between estimated and realised values.

In Table 4.26, the EL is compared to the actual gross and net losses. EL has been calculated using the definition 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 full-year outcomes. During 2013, the EL framework was revised and the LGD and CCF estimates were updated to reflect the average historical actual losses over a 10 year horizon (16bp of lending for 2002 – 2012). Consequently, the EL for retail, corporate and institutional portfolios has decreased. Figures for 2011 and 2012 have been restated according to the current framework. The EL ratio used for calculating risk-adjusted profit was on average 13bp of EAD, excluding sovereign and institution exposure classes. This value is calculated as the quarterly average of 2013. EL in reation to total lending for the same portfolios, as of end 2013, was 12.3bp.

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.

The Parameters, Scoring and Rating Models Validation Subcommittee, a sub-committee to ALCO and the Risk Committees in Nordea, is responsible for the approval of the annual validation of the parameters, as well as approval of proposals concerning the validation framework.

4.9 Loan portfolio, impaired loans and loan losses

4.9.1 Loan portfolio

Nordea's total loans increased by 1% to EUR 349bn during 2013 (EUR 346bn). The overall increase is attributable to an increase of 1% in the corporate portfolio. Also the public sector portfolio increased while the household portfolio decreased by 1%. The portion of total lending to corporate customers remained unchanged at 53% while the share of total lending to household customers decreased to 45% (46%) and public sector increased to 2% (1%).

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 almost 30% or EUR 104bn. Lending in the Baltics constitutes 2.2% (2.4%) and the shipping segment 2.8% (3.3%) 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.

4.9.1.1 Lending to corporate customers

Loans to corporate customers, shown in Table 4.30, increased by 1% to EUR 185bn (EUR 183bn). The industries that increased the most in 2013 were Financial institutions and Other, public and organisation, while the sectors that decreased the most were Real estate, Shipping and Industrial commercial services. In terms of concentration, the three largest industries account for approximately 20% (21%) of total lending. Real estate remains the largest industry in the loan portfolio, at EUR 42.7bn (EUR 45.4bn).

The distribution of loans to corporates by size of loans, shown in Table 4.27, shows a high degree of diversification where approximately 71% (69%) 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 84% (80%) 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

Table 4.26 Expected loss vs. gross loss and net loss

	Retail household					
EURm	Mortgage	Other	Corporate[1)]	Institution	Government	**Total**
2013						
EL	–42	–120	–266	–10	–2	**–439**
Gross loss	–165	–294	–870	–84	0	**–1,412**
Net loss	–88	–126	–474	–73	0	**–761**
2012						
EL	–69	–119	–323	–21	–2	**–533**
Gross loss	–152	–381	–1,131	–13	0	**–1,676**
Net loss	–62	–191	–676	–4	0	**–933**
2011						
EL	–80	–137	–339	–22	–2	**–579**
Gross loss	–103	–314	–1,061	0	0	**–1,478**
Net loss	–61	–201	–472	0	0	**–735**

1) Includes SME retail.

customers. 35% or EUR 14.8bn of lending to the real estate industry is to companies located in Sweden and approximately 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 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 counter-cyclical lending policy.

Loans to shipping and offshore decreased by 11% to EUR 10.2bn (EUR 11.4bn) in 2013. The tanker, dry cargo and container market were weak also in 2013, primarily due to oversupply of vessels, although an improvement has been seen in freight rates for large dry bulk vessels. 2013 was the last year of large deliveries of new tonnage, which should have a stabilising effect on these market segments in the medium term. The weak freight rates in certain shipping segments caused further deterioration in collateral values, resulting in additional loan loss provisions but at lower levels than in 2012.

4.9.1.2 Lending to household customers

In 2013, lending to household customers decreased by 1% to EUR 157bn (EUR 159bn), mortgage loans decreased slightly to EUR 129.0bn (EUR 129.5bn), and consumer loans decreased by 3% to EUR 28bn (EUR 29bn). The proportion of mortgage loans of total household loans was unchanged at 82%, of which the Nordic market accounts for 94% (94%).

4.9.2 Impairment

4.9.2.1 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 and 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.

4.9.2.2 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

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

	31 December 2013		31 December 2012	
Loan size, EURm	Loans, EURbn	%	Loans, EURbn	%
0-10	83.7	45.2	78.9	43.2
10-50	47.0	25.4	46.2	25.3
50-100	18.3	9.9	21.8	11.9
100-250	23.4	12.6	25.1	13.8
250-500	9.8	5.3	8.8	4.8
500-	2.9	1.6	2.0	1.1
Total	**185.2**	**100%**	**182.8**	**100%**

Table 4.28 Loans to the real estate management industry, split by geography

	31 December 2013		31 December 2012	
EURbn	Loans	%	Loans	%
Denmark	8.1	18.9	7.9	17.4
Finland	7.8	18.4	7.9	17.3
Norway	9.5	22.2	10.6	23.3
Sweden	14.8	34.7	16.4	36.2
Baltic countries	1.4	3.3	1.4	3.1
Poland	0.1	0.3	0.3	0.7
Russia	0.6	1.5	0.6	1.2
Other	0.3	0.7	0.3	0.7
Total	**42.7**	**100%**	**45.4**	**100%**

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

	31 December 2013		31 December 2012	
EURbn	Loans	%	Loans	%
Bulk carriers	1.1	11.0	1.2	10.5
Product tankers	0.9	8.6	0.8	6.6
Crude tankers	1.2	11.4	1.4	12.6
Chemical tankers	0.8	7.4	0.9	7.8
Gas tankers	1.3	12.3	1.1	9.5
Other shipping	2.4	23.2	2.6	23.1
Offshore and oil services	2.7	26.1	3.4	29.8
Total	**10.2**	**100.0%**	**11.4**	**100.0%**

Report, which differs somewhat from the CRD (further explained in section 4.2).

Impaired loans gross decreased by 3% during the year to EUR 6,704m from EUR 6,905m, corresponding to 179bp (188bp) of total loans. The decrease in impaired loans was mainly related to improved conditions for the shipping sector. In Shipping impaired loans decreased by EUR 350m during 2013. Impaired loans within households increased by EUR 88m to EUR 2,057m driven mainly by the development in Denmark.

58% (58%) of impaired loans gross are performing and 42% (42%) are non-performing. Impaired loans net, after allowances for individually assessed impaired loans, decreased to EUR 4,221m (EUR 4,505m), corresponding to 113bp of total loans. Allowances for individually assessed loans increased to EUR 2,483m (EUR 2,400m) and allowances for collectively assessed loans decreased to EUR 434m (EUR 448m). The ratio of individual allowances to cover impaired loans increased to 37% (35%), while total allowances in relation to impaired loans gross increased to 43% (41%). The industries with the largest increases in impaired loans were Financial institutions and Real estate as well as the household sector. Shipping was the industry with the largest decrease. Provisions for off-balance sheet items decreased to EUR 65m in 2013 (EUR 84m).

Impairment testing is typically undertaken in forbearance situations. Forbearances are negotiated terms of interests/maturities due to borrowers' financial distress.

Table 4.30 Loans, impaired loans, allowances and provisioning ratios, split by customer type, 31 December 2013

EURm	Loans after allowances 2012	Loans after allowances 2013	Impaired loans before allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Specific allowances	Total provisioning ratio
To central banks and credit institutions	**18,574**	**22,589**	**24**	**0.11**	**3**	**24**	**111%**
– of which central banks	8,005	11,768		0.00			
– of which credit institutions	10,569	10,821	24	0.23	3	24	111%
To the public	**346,251**	**348,595**	**6,680**	**1.90**	**431**	**2,458**	**43%**
– of which corporate	182,774	185,189	4,623	2.47	326	1,766	45%
Construction and engineering	4,739	4,378	257	5.72	13	103	45%
Consumer durables (cars, appliances, etc.)	3,277	3,022	79	2.55	4	68	92%
Consumer staples (food, agriculture, etc.)	12,737	12,499	815	6.38	32	233	33%
Energy (oil, gas, etc.)	4,814	4,542	2	0.05	3	2	225%
Financial institutions	11,883	12,904	272	2.08	3	129	48%
Health care and pharmaceuticals	1,976	1,512	30	1.99	1	10	35%
Industrial capital goods	1,950	2,090	73	3.45	5	31	48%
Industrial commercial services, etc.	13,876	12,885	432	3.31	26	157	42%
IT software, hardware and services	1,738	1,689	86	4.96	4	33	44%
Media and leisure	2,985	2,838	120	4.14	4	54	48%
Metals, and mining materials	1,906	1,555	77	4.81	9	31	52%
Other materials (chemical, building materials, etc.)	5,753	5,246	358	6.60	22	154	49%
Other, public and organisations	33,033	43,561	132	0.30	20	88	82%
Paper and forest materials	2,129	1,987	50	2.50	4	19	45%
Real estate management and investment	45,374	42,667	751	1.75	71	217	38%
Retail trade	11,136	10,252	402	3.85	26	166	48%
Shipping and offshore	11,419	10,198	521	4.99	69	177	47%
Telecommunication equipment	144	55	4	6.95	0	2	60%
Telecommunication operators	1,384	1,223	80	6.23	1	66	84%
Transportation	4,616	4,474	71	1.57	6	23	40%
Utilities (distribution and production)	5,908	5,613	10	0.17	3	5	77%
– of which household	158,831	157,309	2,057	1.30	105	692	39%
Mortgage financing	129,498	128,972	1,025	0.79	44	157	20%
Consumer financing	29,333	28,336	1,032	3.57	62	535	58%
– of which public sector	4,646	6,098	0	0.00	0	0	212%
Total loans in the banking operations	**364,825**	**371,185**	**6,704**	**1.79**	**434**	**2,483**	**44%**
Loans in the life insurance operations	571						
Total loans including life insurance operations	**365,396**	**371,185**	**6,704**	**1.79**	**434**	**2,483**	**44%**

Provisions for off-balance sheet items for 2013 were EUR 10m for credit institutions and EUR 55m for lending to the public.

Table 4.31 Impaired loans gross and allowances split by geography and industry, 31 December 2013

EURm	Total 2012	Total 2013	Denmark	Finland	Norway	Sweden	Baltic countries	Poland	Russia	Allowances	Total provisioning ratio
To the public											
– of which corporate	4,911	4,623	2,462	1,201	362	259	273	57	15	2,092	45%
Construction and engineering	247	257	135	49	20	11	4	38	0	117	45%
Consumer durables (cars, appliances, etc.)	77	79	39	24	3	12	1	0	0	73	92%
Consumer staples (food, agriculture, etc.)	932	815	779	19	8	5	0	1	3	265	33%
Energy (oil, gas, etc.)	0	2	0	2	0	0	0	0	0	5	225%
Financial institutions	157	272	214	56	1	1	0	0	0	131	48%
Health care and pharmaceuticals	27	30	17	12	0	2	0	0	0	11	35%
Industrial capital goods	32	73	6	56	1	11	0	0	0	35	48%
Industrial commercial services, etc.	488	432	246	130	14	26	16	0	0	184	42%
IT software, hardware and services	93	86	29	53	0	3	0	0	0	38	44%
Media and leisure	115	120	61	49	5	3	2	0	0	58	48%
Metals, and mining materials	56	77	1	44	30	0	2	0	0	40	52%
Other materials (chemical, building materials, etc.)	362	358	59	186	17	70	14	6	11	176	49%
Other, public and organisations	256	132	96	31	0	0	5	0	0	107	81%
Paper and forest materials	8	50	5	1	1	43	0	0	0	23	45%
Real estate management and investment	687	751	389	30	94	26	210	3	0	287	38%
Retail trade	369	402	179	174	7	20	19	2	0	192	48%
Shipping and offshore	871	521	166	255	80	20	0	0	0	246	47%
Telecommunication equipment	5	4	0	4	0	0	0	0	0	2	60%
Telecommunication operators	41	80	1	0	79	0	0	0	0	67	84%
Transportation	70	71	35	24	1	4	0	6	0	29	40%
Utilities (distribution and production)	19	10	7	1	1	0	1	0	0	7	77%
– of which household	**1,968**	**2,057**	**1,216**	**335**	**60**	**173**	**179**	**82**	**11**	**797**	**39%**
Mortgage financing	964	1,025	591	95	24	52	179	79	4	201	20%
Consumer financing	1,004	1,032	625	239	35	121	0	3	7	597	58%
– of which public sector	0										
Total impaired loans	**6,879**	**6,680**	**3,677**	**1,535**	**421**	**432**	**453**	**140**	**26**		
Allowances	**2,820**	**2,890**	**1,461**	**646**	**295**	**190**	**168**	**98**	**26**	**2,890**	
Total provisioning ratio	**41%**	**43%**	**40%**	**42%**	**70%**	**44%**	**37%**	**70%**	**100%**		

Table 4.31 shows impaired loans split by geography and industry. A slightly more positive development of the Danish economy is expected in 2014 and 2015, although with geographical differences and variations between industries. Moreover, the economy is still fragile and uncertainty is high. Private consumption and the housing market remain the key drivers for a sustainable and significant improvement and consumers have become more optimistic in recent months. The housing market has also developed positively with prices increasing, although primarily in the larger cities.

The core fundamentals of the Danish economy are relatively favourable with strong public finances, low interest rates, stable, low unemployment, and a limited number of household mortgage customers in difficulty. Most corporates are financially strong with a relatively good outlook, but companies dependent on the domestic market (especially retailers and wholesalers) are being challenged. Loan losses remain at an elevated level, although with a declining trend.

The continuing moderate economic development has impact on the Finnish economy. Small and medium sized companies are likely to suffer more from the weakening private consumption though no significant change in un-

Table 4.32 Reconciliation of allowance accounts for impaired loans

EURm	Individually assessed	Collectively assessed	Total
Opening balance, 1 Jan 2013	–2,400	–448	–2,848
Changes through the income statement	–599	–48	–647
– of which Provisions	–996	–188	–1,184
– of which Reversals	397	140	537
Allowances used to cover write-offs	511		511
Reclassification	–42	42	0
Currency translation differences	47	20	67
Closing balance, 31 Dec 2013	**–2,483**	**–434**	**–2,917**

For loan losses directly recognised through the income statement (not affecting the allowance accounts), refer to the note "Net loan losses" in the Annual Report.

Table 4.33 Loan losses, split by customer type, 2013

EURm	New provisions and write-offs	Reversals and recoveries	Net loan losses	Loan loss ratio bps
To cental banks and credit institutions	**0**	**10**	**10**	**—**
– of which central banks	0	0	0	0
– of which credit institutions	0	10	10	—
To the public	**–1,412**	**641**	**–771**	**22**
– of which corporate	–953	395	–558	30
Construction and engineering	–55	30	–26	59
Consumer durables (cars, appliances, etc.)	–29	6	–23	76
Consumer staples (food, agriculture, etc.)	–73	34	–40	32
Energy (oil, gas, etc.)	–2	0	–1	3
Financial institutions	–52	29	–24	18
Health care and pharmaceuticals	–3	3	0	1
Industrial capital goods	–12	18	6	—
Industrial commercial services, etc.	–76	55	–22	17
IT software, hardware and services	–9	12	2	—
Media and leisure	–18	10	–8	28
Metals, and mining materials	–19	0	–19	121
Other materials (chemical, building materials, etc.)	–67	42	–24	47
Other, public and organisations	–55	28	–27	6
Paper and forest materials	–21	3	–18	93
Real estate management and investment	–133	49	–84	20
Retail trade	–105	43	–61	60
Shipping and offshore	–118	20	–98	109
Telecommunication equipment	0	1	1	—
Telecommunication operators	–92	1	–91	747
Transportation	–10	9	–1	2
Utilities (distribution and production)	–2	2	0	0
– of which household	–459	246	–213	14
Mortgage financing	–165	77	–88	7
Consumer financing	–294	169	–126	44
– of which public sector	0	0	0	—
Total	**–1,412**	**651**	**–761**	**21**

Table 4.34 Past due loans, not impaired

EURm	31 December 2013 Corporate customers	31 December 2013 Household customers	31 December 2012 Corporate customers	31 December 2012 Household customers
6-30 days	714	974	1,157	1,168
31-60 days	317	316	358	315
61-90 days	66	126	80	137
>90 days	160	124	334	153
Total	1,257	1,539	**1,929**	**1,773**
Past due loans, not impaired, divided by loans to the public after allowances, %	**0.68**	**0.98**	**1.06**	**1.12**

Figure 4.9 Annualised net loan loss ratio

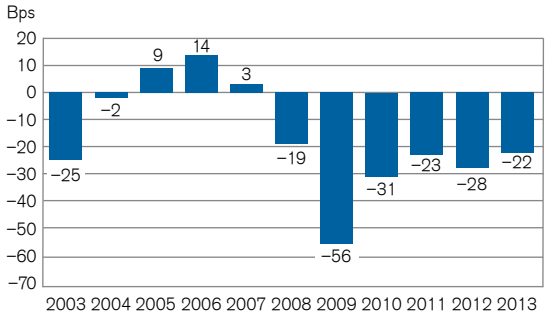


Table 4.35 Transfer risk exposure

EURm	31 Dec 2013	31 Dec 2012
Asia	331	748
Eastern Europe and CIS*	10	222
Latin America	227	771
Middle East	180	468
Africa	26	157
Total	**774**	**2,367**

* Commonwealth of Independent States.

employment has taken place. Even if some pick-up in exports is expected going forward, the direct positive impact on GDP will be weaker than earlier anticipated as the large industrial companies continue to move their production to low cost countries. However, household debt continues on moderate level and the quality of Nordea's retail and corporate portfolios is considered stable.

4.9.3 Loan losses

Tables 4.32 and 4.33 show the specification of loan losses according to the Annual Report, as well as the changes in the allowance accounts. Loan losses in lending to the public decreased to EUR 771m in 2013, corresponding to a loan loss ratio of 22bp (28bp). The development of loan losses over time is shown in Figure 4.9. The loan loss ratio was 21bp when lending to credit institutions is also included (24bp).

Loan losses are relatively stable at low levels. EUR 558m relates to corporate customers (EUR 676m) and EUR 213m (EUR 253m) relates to household customers. Within corporates the main losses were in the industries Shipping and Telecom. Within households, the major share of loan losses were in Denmark. Household loan losses in Norway, Sweden and Finland were at low levels in 2013.

Collective net loan losses were EUR 41m in 2013 compared to positive loan losses of EUR 131m in 2012. The loan loss ratio in the operations in the Baltic countries was 27bp (4bp).

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 2013 EUR 1,257m, down from EUR 1,929m one year ago, while past due loans for household customers decreased to EUR 1,539m (EUR 1,773m).

4.9.3.1 Transfer risk

To recognise the risk related to lending to developing countries, Nordea carries transfer risk allowance and provisions for non-investment grade rated countries outside of the EU and Nordea's home markets (including Russia). The transfer risk exposure is primarily short-term and trade related. The total risk exposure has been reduced significantly from previous years as countries have obtained investment grade status and lending to some countries have decreased notably (Brazil for instance). The largest transfer risk exposures are India, Brazil and Turkey reflecting these countries' importance for Nordea's corporate customers. The total transfer risk allowance and provisions at the end of 2013 was EUR 13m, compared to EUR 22m in 2012. Transfer risk exposure is shown in Table 4.35.

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 74m on average in 2013, compared to EUR 43m in 2012. At the end of 2013, total VaR was EUR 148m. The total market risk, measured by VaR is primarily driven by interest rate risk.

5.1 Management, governance and measurement 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).

5.1.1 Management of market risk

Nordea Markets and Group Treasury are the key contributors 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.

5.1.1.1 Structural market risks

Structural FX risk arises from investments in subsidiaries and associated enterprises denominated in foreign currencies. The general principle is to hedge investments 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. Currency translation differences in the Group's equity is generally a factor of equity and goodwill in foreign currency less net investment hedges and tax.

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).

5.1.1.2 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.

5.1.1.3 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.

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

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

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. 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 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. Since the relevant period with stressed markets will depend on the positions currently held in the portfolio, the level of stressed VaR in relation to the ordinary VaR is monitored continuously. Further analysis may be conducted if deemed necessary, which may lead to a change of the period. The specific period to be used is at least evaluated once every year.

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:

- 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.

Subjective stress tests and sensitivity 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.

5.2 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 148m at the end of 2013 (EUR 31m). The increase in total VaR over the year is mainly related to the increase in interest rate VaR which is a reflection of changed positions and an increased interest rate level. Interest rate VaR was EUR 153m (EUR 36m), with the largest part of the interest rate sensitivity stemming from interest rate positions in EUR and SEK. The diversification effect between risk categories has decreased significantly. This is to a large extent a consequence of the significant increase in interest rate VaR relative to the other risk categories. 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 36m at the end of 2013 (EUR 18m). The increase in total VaR over the year is mainly related to the increase in interest rate VaR which is a reflection of changed positions and an increased interest rate level. Interest rate VaR was EUR 37m (EUR 15m), with the largest part of the interest rate sensitivity stemming from interest rate positions in EUR, SEK and DKK.

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 calculating the capital requirements for market risk 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 mortgage bonds, for specific equity risk relating to structured equity options and for commodity risk, 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 2013, RWA and capital requirements for market risk were EUR 8,753m (EUR 6,323m) and EUR 700m (EUR 506m) respectively as shown in Table 5.4. RWA has increased during the year mainly as a consequence of increased interest rate risk calculated both under the internal model approach as well as the standardised approach, in addition the FX risk outside the trading book also increased.

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

Table 5.1 Consolidated market risk for the Nordea Group, 31 December 2013

EURm	Measure	31 Dec 2013	2013 high	2013 low	2013 avg	31 Dec 2012
Total risk	VaR	148.0	162.7	31.9	74.3	30.8
– Interest rate risk	VaR	153.3	166.3	36.5	81.5	35.9
– Equity risk	VaR	5.6	12.6	2.1	4.9	10.6
– Credit spread risk	VaR	17.5	26.0	8.1	17.3	15.9
– Foreign exchange risk	VaR	7.4	14.1	2.7	7.3	13.2
Diversification effect		20%	55%	13%	36%	60%

Table 5.2 Market risk for the trading book, 31 December 2013

EURm	Measure	31 Dec 2013	2013 high	2013 low	2013 avg	31 Dec 2012
Total risk	VaR	36.3	46.2	11.7	22.4	18.0
– Interest rate risk	VaR	37.2	48.4	9.4	22.1	15.4
– Equity risk	VaR	5.8	6.5	1.9	3.4	3.9
– Credit spread risk	VaR	14.0	21.4	5.9	13.0	10.7
– Foreign exchange risk	VaR	4.7	12.1	2.3	5.2	13.7
Diversification effect		42%	66%	28%	50%	59%
Stressed VaR	sVaR	76.8	83.2	35.8	49.8	39.9

Table 5.3 Methods for calculating capital requirements

	Interest rate risk		Equity risk		
	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.

Table 5.4 RWA and capital requirements for market risk, 31 December 2013

	Trading book, IA		Trading book, SA		Banking book, SA		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk[1)]	1,667	133	1,796	144			3,462	277
Equity risk	160	13	276	22			436	35
Foreign exchange risk	243	19			1,301	104	1,544	124
Commodity risk			249	20			249	20
Diversification effect	–1,061	–85					–1,061	–85
Stressed VaR	2,698	216					2,698	216
Incremental risk charge	1,003	80					1,003	80
Comprehensive risk charge	421	34					421	34
Total	**5,131**	**410**	**2,321**	**186**	**1,301**	**104**	**8,753**	**700**

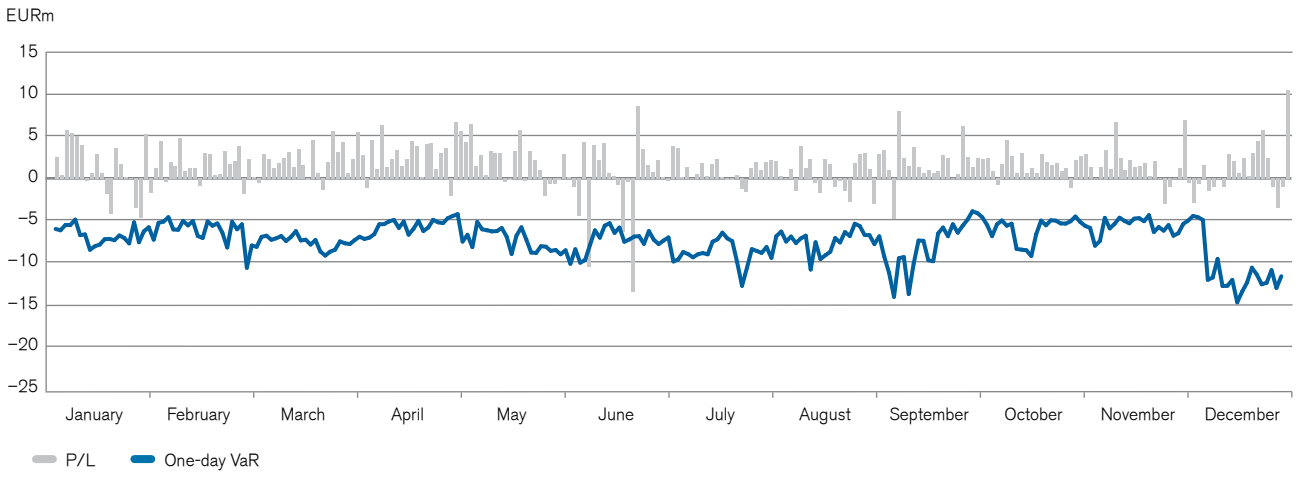
1) Interest rate risk in the column Trading Book IA includes both general and specific interest-rate risk which is elsewhere referred to as interest-rate VaR and credit spread VaR.

RWA and capital requirements for market risk, 31 December 2012

	Trading book, IA		Trading book, SA		Banking book, SA		Total	
EURm	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
Interest rate risk[1)]	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 VaR	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**

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 2013: Profit/loss (actual, excluding commisions) against one-day VaR



hypothetical profit/loss and actual profit/loss (hypothetical profit/loss is the profit/loss that would have been realised if the positions in the portfolio had been held constant during the following trading day). The profit/loss is in the backtest compared to one-day VaR figures. Figure 5.1 shows the VaR backtest of the trading book for 2013.

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 2013, the interest rate VaR in the banking book was EUR 129m (EUR 30m). 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 409m (EUR 442m) and the SIIR for decreasing market rates was EUR –466m (EUR –492m). These figures imply that net interest income would increase if interest rates rose and decrease if interest rates fell.

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 497m (EUR 584m), of which private equity funds EUR 259m, hedge funds EUR 117m, credit funds EUR 100m and seed-money investments EUR 21m. 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 in IFRS 13 as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. 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 finan-

Table 5.5 Interest rate sensitivities for the banking book, instantaneous interest rate movements, 31 December 2013

EURm	+200bp	+100bp	+50bp	–50bp	–100bp	–200bp
EUR	–153.4	–76.5	–38.3	38.6	78.4	163.3
DKK	–94.2	–47.0	–23.5	23.7	47.6	99.6
SEK	–46.3	–27.8	–17.2	16.6	28.4	37.6
NOK	–42.1	–21.1	–10.5	10.5	21.1	42.1
USD	42.9	20.6	9.6	–7.7	–15.4	–38.2
RUB	–26.4	–13.2	–6.6	6.6	13.2	26.4
Total	**–322.2**	**–166.4**	**–87.3**	**89.0**	**174.6**	**333.5**

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 2013

		Interest rate fixing period							
EURm	Group balance sheet	Within 3 months	3–6 months	6–12 months	1–2 years	2–5 years	>5 years	No repricing	Total
Interest-bearing assets	503,660	299,730	23,602	19,093	23,231	39,807	27,421	70,776	503,660
Non-interest bearing assets	126,774	0	0	0	0	0	0	126,774	126,774
Total assets	**630,434**	**299,730**	**23,602**	**19,093**	**23,231**	**39,807**	**27,421**	**197,550**	**630,434**
Interest-bearing liabilities	455,443	226,292	32,684	13,342	24,673	44,311	31,063	83,076	455,443
Non-interest bearing liabilities	174,991	0	0	0	0	0	0	174,991	174,991
Total liabilities and equity	**630,434**	**226,292**	**32,684**	**13,342**	**24,673**	**44,311**	**31,063**	**258,067**	**630,434**
Off-balance sheet items, net		**–27,967**	**10,501**	**–4,035**	**–1,713**	**11,731**	**11,258**		
Exposure		**45,471**	**1,419**	**1,716**	**–3,155**	**7,226**	**7,616**	**–60,517**	
Cumulative exposure			**46,890**	**48,606**	**45,450**	**52,676**	**60,292**	**-225**	

SIIR impact of increasing interest rates for the year 2013

Impact[1)]	398	7	4
Cumulative SIIR impact	398	404	409

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

Table 5.7 Equity holdings in the banking book, 31 December 2014

EURm	Book value	Fair value	Unrealised gains/losses[3)]	Realised gains/losses[3)]	Capital requirement
Investment portfolio[1)]	539	539	45	27	43
Other[2)]	75	75	–2	6	6
Total	**614**	**614**	**43**	**33**	**49**

1) Of which listed equity holdings, Book value EUR 6m.
2) Of which listed equity holdings, Book value EUR 69m.
3) Result for 2013.

Table 5.8 Determination of fair value of assets and liabilities split by valuation method (Nordea Group, excluding Nordea Life & Pensions), 31 December 2013

EURm	Quoted prices in active markets for same instrument (Level 1)	Valuation technique using observable data (Level 2)	Valuation technique using non-observable data (Level 3)	Total
Assets				
Loans to central banks and credit institutions		7,217		7,217
Loans to the public		92,425		92,425
Debt securities	47,635	24,863	374	72,872
Shares	9,009	3	998	10,010
Derivatives	67	69,335	1,436	70,838
Other assets		6,122		6,122
Prepaid expenses and accrued income		20		20
Liabilities				
Deposits by credit institutions		24,639		24,639
Deposits and borrowings from the public		32,547		32,547
Debt securities in issue	35,121	6,955		42,076
Derivatives	35	64,490	1,399	65,924
Other liabilities	8,939	7,923	1	16,863
Accrued expenses and prepaid income		456		456

cial instruments, and incorporate the factors that market 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 2013.

5.8.1 Compliance with requirements applicable to exposure in the trading book

The directive 2006/49/EC outlines requirements for systems and controls. These systems and controls must be of sufficient quality to provide prudent and reliable valuation estimates. Nordea complies in all material aspects with these requirements. Overall valuation principles and processes are governed by the valuation policy, which is developed and maintained by the Group Valuation Committee. The product control organisations in the individual business units are responsible for performing valuation controls in accordance with the policy. 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 IFRS 13. Requirements in the CRD that are not supported by IFRS 13 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.

6.1 Management, governance and measurement of operational risk

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

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

6.1.1 Management of operational risk

The Policy for Internal Control and Risk Management in the Nordea Group states that the management of operational 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.

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

6.1.1.1 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.

6.1.2 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 for the management of operational risks in Nordea is the three lines of defence where the first line of defence is represented by the business organisation. Group Operational Risk and Compliance represents the second line of defence and has defined a common set of standards (Group Directives, processes and reporting) in order to manage operational risks. The network of risk and compliance officers (RCOs) ensures the implementation and roll-out of the common standards by advising the business organisation on how to manage operational and compliance risks and by monitoring and reporting on them. The RCOs work together with the business but is part of second line of defence. Group Internal Audit, representing the third line of defence, provides assurance to the Board of Directors on the risk management, control and governance processes.

A new operating model for operational risk management was established in 2013 and ensures both the independence of the risk and compliance officers and strengthens the cooperation between first and second line of defence. An Operational Risk and Compliance Committee which is a subcommittee to the Group's Risk Committee has been established and the main duties of the committee is to prepare proposals for the Risk Committee on framework, planning and policies and to approve activity plans and various risk assessments. The committee is chaired by the Chief Operational Risk Officer.

Improvements of anti-money laundering processes and routines have been a focus area since 2012 and in 2013 a Group-wide AML programme was established with a programme management office responsible for reporting on progress within the various AML related projects and initiatives across the Group.

A Group-wide BCM programme was also established during 2013 in order to improve the current BCM framework and it will run for three years. The programme includes several work streams, including a review of the existing operating model and governance structure, creation and verification of a Business Impact Analysis model and process, development of crisis management framework and improvement of governing policies.

Nordea uses external risk transfer in the form of insurance, including reinsurance, 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.

6.1.3 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 RCSA process is executed in the operational and compliance risk system where an operational risk library is used. The 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, scenario analysis, 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 identify, assess and prioritise operational risks as well as plan mitigating actions for prioritised risks and it provides for an overview of the overall risk picture. The results are used as input to the annual Operational and Compliance Risk Map. Furthermore, the purpose of the control assessment part 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 (end of April – beginning of September) 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 improvements rather than merely a status report

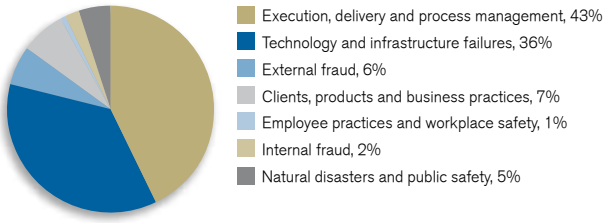
Incident reporting

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 and compliance risk system by the risk and compliance officer in order to ensure consistent quality in the process. Nordea's operational risk library is used for categorising all incidents and the taxonomy reflects the Operational Riskdata eXchange Association's (ORX) reporting requirements. 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 operational and compliance risk map and the semi-annual compliance report. Figure 6.1 shows incidents reported over the last seven years (2007–2013) distributed by ORX event type.

Figure 6.1 Distribution of incidents reported, 2007–2013



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 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. Conducting a QRA is mandatory as part of the product approval process.

The Group-wide Scenario Analysis process aims to put 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 evaluate the potential financial impact of certain risks. The process has been run since 2012 and Nordea aims to further integrate this process in the existing RCSA process.

The two awareness programmes, one targeting senior management and one group-wide, which were introduced in 2011 will continue during 2014 with updated existing modules as well as launch of new topics. Modules about preventing bribery and corruption and AML, counter-terrorist financing and sanctions risk management has been run during 2013 and they were both part of the Group-wide programme. Both programmes were mandatory and aimed to set the tone at the top and to increase the awareness of operational and compliance risk-related threats and challenges throughout the organisation. The next module which is about Operational Risk, will be launched in early 2014.

6.1.3.2 Key reports

Operational and compliance risk map

The results from the RCSA process and the identification of top risks represent the main input to the Operational and compliance risk map. In the first part of the report, the Group's overall risk picture is illustrated in a dashboard including the RCSA results, results from scenario analysis process and Group loss data as well as an assessment of the development of each risk category in the Group's operational risk library. The second part of the report supplies a risk overview for each of the business areas in the Group with a business area specific dashboard together with a 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 Operational and compliance risk map is submitted to the Risk Committee, GEM, the Board Risk Committee and the Board of Directors on an annual basis.

Semi-annual compliance report

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 the Risk Committee, GEM, the Board Risk Committee, the Board Audit Committee and the Board of Directors.

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 requirement for operational risk for 2013 amounts to EUR 1,344m (EUR 1,298m). 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 or their risk outside of Nordea.

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 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 sponsored various securitisation schemes which are described in the following section. Nordea is also acting as an intermediary in the credit derivatives market, especially in Nordic names. In addition to becoming exposed to the credit risk of a single entity, credit derivatives trading often involves buying and selling protection for collateralised debt obligation (CDO) tranches. These can be characterised as credit risk-related financial products, the risk of which depends on the risk of a portfolio of single entities ('a reference portfolio') as well as the subordination. Subordination defines the level of defaults in the reference portfolio after which further defaults will create a credit loss for the investor in the CDO tranche. Because hedging CDO tranches always involves a view on how the correlation between the credit risk of single names evolves it has been customary to talk about correlation trading in this context. The market risk created by Nordea's correlation trading is described in further detail in section 7.3.

7.2 Traditional securitisations where Nordea acts as sponsor

Nordea sponsors a limited number of SPEs. These SPEs have been established to facilitate or secure customer transactions, either to enable investments in structured credit products or with the purpose of supporting trade receivable or account payable securitisation for Nordea corporate customers. During the year, Nordea has sponsored two SPEs, however at year end, Nordea only sponsored one SPE, 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 or 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 reduced to zero at year-end 2013.

7.2.2 Securitisations of customer assets

The Viking ABCP Conduit (Viking) was established with

Table 7.1 Special purpose entities where Nordea is the sponsor, 31 December 2013

EURm		Duration	Accounting treatment	Book	Nordea's investment[1)]	Total assets
Viking ABCP Conduit	Receivables Securitisation	< 5 years	Consolidated	Banking	1,369	1,428
Total					**1,369**	**1,428**

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

the purpose of supporting trade receivable or accounts payable securitisations to core Nordic customers. The SPEs purchase trade receivables (the only asset class purchased) and fund the purchases either by issuing commercial paper via the established asset-backed commercial paper programme or by drawing on the liquidity facilities. Nordea provided liquidity facilities of maximum EUR 1,646m at year-end 2013 (EUR 1,691m) out of which EUR 1,369m (EUR 1,230m) 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 approach as if it was to provide liquidity directly to the underlying customer.

There was no outstanding commercial paper issue year-end 2012 or 2013. The liquidity facility results in an RWA of EUR 665m (EUR 614m), 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 2013, 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 capital requirement for the comprehensive risk charge specific to the correlation book amounted to 33.7m (39.1m) as of end 2013 for both Nordea Bank Finland and the Nordea Group.

Table 7.2 Credit default swaps (CDSs), 31 December 2013

EURm	Total gross notional sold	Total gross notional bought
Single-name CDS: Investment grade	14,994	15,650
Single-name CDS: Non-investment grade	3,877	4,329
Multi-name CDS: Investment grade indices	6,780	6,846
Multi-name CDS: Non-investment grade indices	4,221	3,747
Total	**29,872**	**30,572**

As of December 31, 2013, all CDS positions (except EUR 1m gross sold of multi-name non-investment grade) were part of the trading book.

Table 7.3 Collateralised debt obligations (CDOs) – Exposure (excl. NLP)[1)], 31 December 2013

Notionals EURm	Bought protection	Sold protection
CDOs, gross	1,266	1,587
Hedged exposures	965	966
CDOs, net[2)]	**301[3)]**	**621[4)]**
Of which:		
– Equity	57	102
– Mezzanine	108	306
– Senior	136	213

1) First-to-default swaps are not classified as CDOs and are therefore not included in the table. Net bought protection amounts to EUR 47m (EUR 214m) and net sold protection to EUR 18m (EUR 50m). Both bought and sold protection are predominantly investment grade.
2) Net exposure disregards exposure where bought and sold tranches are completely identical in terms of reference pool attachment, detachment, maturity and currency.
3) Of which investment grade EUR 150m (EUR 349m) and sub-investment grade EUR 151m (EUR 42m).
4) Of which investment grade EUR 326m (EUR 769m), sub-investment grade EUR 286m (EUR 101m) and not rated EUR 0m (EUR 0m).

8. Liquidity risk and funding

During 2013, 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 23bn in long-term debt, of which EUR 12bn in the Swedish, Finnish and Norwegian markets for covered bonds. The Swedish FSA introduced the Liquidity Coverage Ratio (LCR) requirement in the beginning of the year, and Nordea is LCR compliant in all currencies combined and separately in USD and EUR.

8.1 Management, governance and measurement 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.

8.1.1 Management of liquidity risk

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 2013, the total volume utilised under short-term programmes was EUR 52.3bn (EUR 57.2bn) with the average maturity being 0.2 (0.2) years. The total volume under long-term programmes was EUR 133.3bn (127.2bn) with the average maturity being 5.8 (6.1) years. Tables 8.2

Table 8.1 Funding sources, 31 December 2013

Liability type	Interest rate base	Average maturity (years)	EURm
Deposits by credit institutions			
– shorter than 3 months	Euribor, etc.	0.0	57,082
– longer than 3 months	Euribor, etc.	1.4	2,086
Deposits and borrowings from the public			
– Deposits on demand	Administrative	0.0	121,857
– Other deposits	Euribor, etc.	0.3	82,270
Debt securities in issue			
– Certificates of deposits	Euribor, etc.	0.2	16,329
– Commercial papers	Euribor, etc.	0.2	35,975
– Mortgage covered bond loans	Fixed rate, market-based	7.0	90,818
– Other bond loans	Fixed rate, market-based	3.2	42,481
Derivatives		n.a.	65,925
Other non-interest bearing items		n.a.	32,006
Subordinated debentures			
– Dated subordinated debenture loans	Fixed rate, market-based	7.4	4,107
– Undated and other subordinated debenture loans	Fixed rate, market-based	n.a.	2,438
Equity			29,209
Total			**582,583**
Liabilities to policyholders			47,851
Total, including life insurance operations			**630,434**

Table 8.2 Assets and liabilities split by currency, 31 December 2013

EURbn	EUR	DKK	NOK	SEK	USD	Other	Not distributed	Total
Cash and balances with central banks	4.9	12.1	2.0	0.4	25.7	0.7		45.9
Loans to the public	97.1	87.1	46.5	86.8	19.5	11.6		348.6
Loans to credit institutions	2.2	1.7	0.2	2.1	4.0	0.7		10.8
Interest-bearing securities including treasury bills	21.2	18.7	6.3	19.3	8.9	0.6	23.4	98.4
Other assets including derivatives							126.8	126.8
Total assets	**125.3**	**119.7**	**55.0**	**108.6**	**58.2**	**13.5**	**150.2**	**630.4**
Deposits and borrowings from the public	69.8	44.8	23.4	46.4	10.4	9.4		204.1
Deposits by credit institutions	14.7	7.9	2.1	8.0	19.3	7.2		59.2
Debt securities in issue	43.1	39.1	6.7	34.0	44.0	18.9		185.6
– of which CDs & CPs	3.9	2.3	0.2	1.2	32.6	12.2		52.3
– of which covered bonds	18.8	35.7	6.0	27.3	2.1	0.9		90.8
– of which other bonds	20.4	1.1	0.5	5.5	9.3	5.8		42.5
Subordinated liabilities	3.0				2.9	0.6		6.5
Other liabilities including derivatives							145.8	145.8
Equity							29.2	29.2
Total liabilities and equity	**130.5**	**91.8**	**32.1**	**88.4**	**76.5**	**36.1**	**175.0**	**630.4**

and 8.3 and Figure 8.1 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).

8.1.1.1 Liquidity risk appetite

The Board of Directors defines the liquidity risk appetite by 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.

8.1.2 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.

8.1.3 Measurement of liquidity risk

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

Since 2011, the survival horizon metric is being used. 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 sections 2.2.2 and 8.1.1.1) 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

Table 8.3 Maturity analysis[1] for assets and liabilities, 31 December 2013

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 central banks	45.9								45.9
Loans to the public	71.5	12.6	25.3	23.9	58.0	43.7	113.6		348.6
– of which repos	29.7	4.0	5.2	0.2					39.2
Loans to credit institutions	8.4	0.6	0.7	0.3	0.6	0.1			10.8
Interest-bearing securities including treasury bills	75.0							23.4	98.4
Other assets including derivatives								126.8	126.8
Total assets	**200.8**	**13.2**	**26.1**	**24.3**	**58.7**	**43.8**	**113.6**	**150.2**	**630.4**
Deposits and borrowings from the public	34.8	14.5	11.5	3.5	0.7	0.4		138.8	204.1
Deposits by credit institutions	47.3	9.0	2.5	0.3					59.2
Debt securities in issue	15.8	26.0	32.6	23.5	55.4	14.6	17.9		185.6
– of which CDs & CPs	15.8	22.3	13.9	0.2	0.2				52.3
– of which covered bonds		1.2	13.8	18.4	32.2	7.3	17.9		90.8
– of which other bonds		2.5	4.9	4.9	23.0	7.3			42.5
Subordinated liabilities						4.1		2.4	6.5
Other liabilities including derivatives								145.8	145.8
Equity								29.2	29.2
Total liabilities and equity	**97.8**	**49.5**	**46.5**	**27.2**	**56.1**	**19.1**	**17.9**	**316.3**	**630.4**

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. Amortisation are included in time bucket corresponding the estimated cash flow date
2) Includes items which are lacking specific timing of cash flows.

Table 8.4 Net balance of stable funding, 31 December 2013

Stable liabilities and equity	EURbn
Tier 1 and tier 2 capital	28.0
Secured/unsecured borrowing > 1Y	117.9
Stable retail deposits	31.3
Less stable retail deposits	61.0
Wholesale deposits < 1Y	73.2
Total stable liabilities	**311.6**
Stable assets	
Wholesale and retail loans >1Y	247.2
Long-term lending to banks and financial companies	1.0
Other illiquid assets	11.6
Total stable assets	**259.8**
Off-balance sheet items	**2.5**
Net balance of stable funding (NBSF)	**49.2**

survival without access to market funding to 30 days.

Since 2013 the Liquidity Coverage Ratio (LCR) according to Swedish rules is being used. The Board of Directors has set the limit for minimum LCR level.

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. NBSF is shown in Table 8.4.

8.2 Liquidity risk and funding analysis

Nordea's liquidity buffer is highly liquid, consisting only of securities eligible for pledging with the central bank as shown in Table 8.5.

The short-term liquidity risk remained at moderate levels throughout 2013. The average funding gap risk, i.e. the average expected need for raising liquidity in the course of the next 30 days, was EUR +16.8bn (EUR +10.1bn).

Figure 8.1 Maturity of assets and liabilities, split by currency, 31 December 2013

Table 8.5 Liquidity buffer split by type of asset and currency, 31 December 2013

	Currency distribution, market values in EURm				
Type of asset	SEK	EUR	USD	Other	Sum
Cash and balances with central banks	367	4,871	25,742	14,871	45,851
Balances with other banks	1,838	0	0	547	2,385
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks[2)]	2,113	6,342	5,419	2,530	16,404
Securities issued or guaranteed by municipalities or other public sector entities[2)]	1,196	667	977	440	3,279
Covered bonds issued by the own bank or related unit[2)]	59	1,414	0	6,591	8,064
Covered bonds issued by other bank or financial institute[2)]	6,539	9,843	451	10,515	27,348
Securities issued by non-financial corporates[2)]	0	141	12	3	156
Securities issued by financial corporates, excluding covered bonds[2)]	188	80	2,233	64	2,564
All other eligible and unencumbered securities[3)]	0	156	4	385	544
Total liquidity buffer[1)]	**12,299**	**23,514**	**34,838**	**35,945**	**106,596**
Adjustments to Nordeas official buffer: Eligible but encumbered securities (+), cash and balances with other banks/central banks (-), central banks haircuts (-)	–2,548	–5,189	–26,027	–7,077	–40,841
Total liquidity buffer (Nordea definition)	**9,751**	**18,325**	**8,812**	**28,868**	**65,756**

1) According to Swedish Bankers´ Association´s definition 2011-10-07.
2) 0-20% risk weight.
3) All other eligible and unemcumbered securites held by Group Treasury.

Table 8.6 Historical quarterly development of the liquidity buffer, 31 December 2013

EURm **Type of asset**	Q4/13	Q3/13	Q2/13	Q1/13	Q4/12	Q3/12
Cash and balances with central banks	45.9	35.3	36.6	39.4	44.1	33.4
Balances with other banks	2.4	2.4	0.5	1.4	1.0	1.7
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks[2)]	16.4	16.3	14.6	15.5	16.2	18.3
Securities issued or guaranteed by municipalities or other public sector entities[2)]	3.3	3.4	3.1	2.8	1.9	1.2
Covered bonds issued by the own bank or related unit[2)]	8.1	14.1	13.8	14.5	12.8	14.6
Covered bonds issued by other bank or financial institute[2)]	27.3	26.1	26.6	25.2	25.7	25.4
Securities issued by non-financial corporates[2)]	0.2					
Securities issued by financial corporates, excluding covered bonds[2)]	2.6	2.4	2.7	2.5	2.5	2.4
All other eligible and unencumbered securities	0.5	0.2	0.9	0.4	0.2	0.4
Total liquidity buffer[1)]	**106.6**	**100.3**	**98.8**	**101.6**	**104.5**	**97.4**
Adjustments to Nordea's official buffer. Cash and balances with other banks/central banks (-), central bank haircuts(-)	–40.8	–33.9	–32.6	–34.7	–40.7	–32.8
Total liquidity buffer (Nordea definition)	**65.8**	**66.4**	**66.1**	**66.9**	**63.8**	**64.6**

1) According to Swedish Bankers´ Association´s definition 2011-10-07.
2) 0-20% risk weight.

Table 8.7 LCR sub-components

EURbn	Total	EUR	USD
Liquid assets level 1	65	13	32
Liquid assets level 2	29	8	0
Liquid assets total	**94**	**20**	**33**
Customer deposits	38	10	5
Market borrowing*	80	26	23
Other cash outflows**	10	2	1
Cash outflows total	**128**	**39**	**29**
Lending to non-financial customers	7	3	0
Other cash inflows	41	22	3
Cash inflows total	**48**	**25**	**4**
LCR	**117%**	**140%**	**127%**

LCR = Liquid assets / (Cash outflows – Cash inflows)
* Corresponds to Chapter 4, Articles 10-13 in Swedish LCR regulation, containing e.g. portion of corporate deposits, market funding, repos and other secured funding
** Corresponds to Chapter 4, Articles 14-25, containing e.g. unutilised credit and liquidity facilities, collateral need for derivatives and derivative outflows.

Table 8.8 Asset encumbrance

EURm	Encumbered assets*	Unencumbered assets
Assets	**134,110**	**355,661**
Cash, loans & receivables with central banks		45,297
Loans	118,413	234,236
– of which household (mortgage & consumer)	102,995	56,009
– of which corporate & institutions	11,776	176,060
– of which public sector	3,641	2,167
Debt securities		66,534
– of which issued by credit institutions		44,597
– of which issued by general governments		19,190
– of which issued by other		2,747
Instruments pledged as collateral for repos	9,575	
Assets pledged as collateral for derivatives**	6,122	
Equity instruments		9,594
Other assets		**140,664**
– of which derivatives		70,994
– of which life assets		49,813
Total assets		**630,434**
Encumbered assets / (Total assets - Derivatives - Life assets)		26%
Unencumbered assets / Unsecured debt securities in issue***		375%

* Includes all assets in covered pool pledged for covered bonds of EUR 90.8bn, but reported on a net basis due to internal holdings. Multifamily houses in Nordea Hypotek are reported as household.
** Assets pledged according to CSA agreements, gross (3-year, High 9,554m, Low 3,255m, Average 6,239m).
*** Q4 2013: EUR 94.8bn

Table 8.6 shows the quarterly development of the liquidity buffer. Measured daily, the liquidity buffer ranged between EUR 58.2bn – 72.5bn (EUR 57.3 – 68.9bn) throughout 2013, with an average buffer size of EUR 64.4bn (EUR 63.1bn).

Survival horizon was in the range of EUR 49.0 – 68.2bn (EUR 23.2 – 68.0bn) throughout the year with an average of EUR 59.0bn (EUR 47.2bn).

The Liquidity Coverage Ratio (LCR) for the Nordea Group was at the end of 2013 117% (127%) with a yearly average of 130%. The LCR in EUR was 140% (181%) and in USD 127% (283%), with yearly averages of 199% and 138%, respectively. Table 8.7 shows that liquid assets exceed the net cash outflows during 30 days in stressed conditions for all currencies combined as well as in EUR and USD separately.

The target of maintaining a positive NBSF (see Table 8.4) was comfortably achieved throughout 2013 with a yearly average NBSF of EUR 52.8bn (EUR 54.1bn)

Asset encumbrance is defined as a preferential claim on the asset by another party, and is shown in Table 8.8. An asset shall be treated as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise or credit enhance any transaction from which it cannot be freely withdrawn.

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/solvency 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 2013 on an IFRS basis. The development of assets and liabilities is determined predominantly by in- and outflows of insurance premiums, claims and investment returns.

Figure 9.1 The ALM square

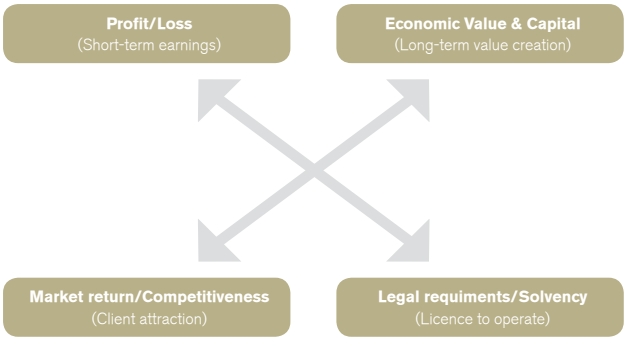


Table 9.1 Assets and liabilities of Nordea Life & Pensions, 31 December 2013

Assets	2013 EURm	2012 EURm
Investment properties	3,367	3,261
Shares	20,524	17,152
Alternative investments	3,154	2,915
Debt securities – At fair value	19,609	20,541
Debt securities – Held to maturity	2,163	2,359
Deposits and treasury bills	3,396	3,907
Other assets	2,031	2,475
Total assets	**54,244**	**52,610**

Liabilities and equity	2013 EURm	2012 EURm
Traditional provisions	20,619	23,399
Collective bonus potential	2,897	1,923
Unit-linked provisions	9,577	7,168
Investment contracts	14,080	12,106
Other insurance provisions	678	723
Other liabilities	4,369	5,142
Shareholders equity	1,508	1,619
Subordinated loans	515	530
Total liabilities and equity	**54,244**	**52,610**

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 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 lapses, mortality, longevity, disability rates and

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

Sensitivites EURm	31 Dec 2013 Effect on policyholders	31 Dec 2013 Effect on Nordea's own account	31 Dec 2012 Effect on policyholders	31 Dec 2012 Effect on Nordea's own account
Mortality – increased living with 1 year	–180	–77	–149	–131
Mortality – decreased living with 1 year	253	–1	271	9
Disability – 10% increase	–27	–22	–24	–14
Disability – 10% decrease	44	5	36	0
50 bp increase in interest rates	–416	12	–486	4
50 bp decrease in interest rates	517	–12	370	–4
12% decrease in all share prices	–1,027	–43	–845	–9
8% decrease in property value	–241	–2	–193	–31
8% loss on counterparts	–24	–1	–67	0

Table 9.3 Investment return, traditional life insurance

EURm	31 Dec 2013 AUM	31 Dec 2013 Investment return	31 Dec 2012 AUM	31 Dec 2012 Investment return
Interest-bearing securities and deposits	16,841	–0.7%	19,810	7.5%
Shares	6,871	9.3%	6,278	7.4%
Alternative investments	2,783	6.5%	2,726	11.1%
Investment property	2,965	5.1%	3,175	4.5%
Total return	**29,460**	**2.9%**	**31,989**	**7.4%**

costs of servicing contracts. The sensitivity on the financial accounts from some of 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 Market Return 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 2013 resulted in a total investment return for the traditional business of 2.9%.

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 2013 is relatively unchanged at 2.1% (2.22% in 2012). Migration initiatives, transferring customers from the traditional products to unit-linked, combined with a strong sale of unit-linked (no guarantees) in 2013 increased technical provisions with 'no guarantees' by 27%.

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 2013 as shown in Table 9.5 and Figure 9.2. The increase in the financial buffer was primarily driven by the profits arising from unit-linked business in Finland and the increase in the interest rate yield curve used for discounting in Sweden.

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 2013, the life and pensions operation experienced an increase in the MCEV value of EUR 938m compared to 2012. The development is shown in Table 9.6 and in Table 9.7. The main drivers behind the development were; increase in interest rates experienced during the year, strengthened financial buffers, higher than expected earnings during the year, increased asset values and continuous inflow of profitable new business. New business sales contributed with EUR 255m to MCEV in 2013.

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

31 Dec 2013 EURm	none	0%	0–3%	3–5%	>5%	Total liabilities
Technical provision	**19,429**	**3,885**	**12,166**	**8,047**	**143**	**43,670**

31 Dec 2012 EURm	none	0%	0–3%	3–5%	>5%	Total liabilities
Technical provision	**15,336**	**4,081**	**13,186**	**9,568**	**503**	**42,674**

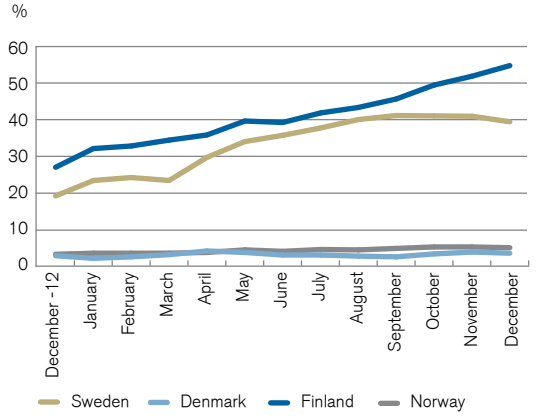
Insurance claims provisions are EUR 420m in 2013 and EUR 463m in 2012. The guarantees above 5% includes, in 2012, EUR 309m of technical provision for the Polish business. The guarantee is provided on a short term basis only and is backed by a money market account with the corresponding level of interest. The Polish business is not included in the figures for 2013.

Table 9.5 Financial buffers

	Financial buffers		% of guaranteed liabilities	
EURm	31 Dec 2013	31 Dec 2012	31 Dec 2013	31 Dec 2012
Denmark	534	470	3.7%	3.0%
Norway	259	192	5.2%	3.4%
Sweden	1,091	580	39.5%	19.3%
Finland	1,023	681	54.8%	27.1%
Total	**2,897**	**1,923**	**12.8%**	**7.5%**

In 2012, the guarantees above 5% includes EUR 309m of technical provision for the Polish business. The guarantee is provided on a short term basis only and is backed by a money market account with the corresponding level of interest.

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



Regulatory changes in Norway and Poland have impacted the MCEV value negatively. In Norway, new mortality tables were introduced during 2013. In Poland, 51.5% of assets will be transferred to the public Social Insurance Institution under new regulation in force 1 February 2014. The impact of the Polish legislation is uncertain as policyholders will also need to choose where to invest their pension savings by July 2014.

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 sensitivity of the Danish business to changes in interest rates has reduced since 2012 due to the improved financial outlook over the year.

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 end of 2013 is 173% with a solvency balance of EUR 856m. The improvement of EUR 22m in the solvency balance on the 2012 figure was mainly driven by a reduced solvency requirement of EUR 79m due to the move away from guaranteed business. The figures are after the dividend payment of EUR 300m. The consolidated solvency position is illustrated in Table 9.9.

Table 9.6 MCEV development

	31 Dec 2013			31 Dec 2012		
EURm	Traditional	Unit-linked	Total	Traditional	Unit-linked	Total
Denmark	1,117	204	1,321	689	222	911
Finland	670	977	1,647	630	589	1,219
Norway	677	364	1,041	645	238	883
Poland	0	89	89	24	262	286
Sweden	146	456	602	83	382	465
Total	**2,610**	**2,090**	**4,700**	**2,069**	**1,693**	**3,762**

The contribution from the Polish Life business has been excluded from the MCEV calculation in 2013, due to divestment (transaction subject to regulatory approval).

Table 9.7 MCEV movement analysis

EURm	MCEV 2012 Q4	New business	Financial effects	Expected earnings	Other	FX effect	MCEV 2013 Q4
Denmark	910	26	397	19	–31	0	1,321
Finland	1,219	178	35	42	173	0	1,647
Norway	883	28	61	33	181	–145	1,041
Poland	285	1	6	10	–212	–2	89
Sweden	464	21	50	18	66	–17	602
Total	**3,762**	**255**	**549**	**121**	**177**	**–164**	**4,700**

The contribution from the Polish Life business has been excluded from the MCEV calculation in 2013, due to divestment (transaction subject to regulatory approval).

Table 9.8 MCEV sensitivity analysis

Assumption change	Scenario	Denmark	Finland	Norway	Poland	Sweden	Total
Yield curve change	IntRates –100bp	–27.8%	1.0%	–15.1%	–26.7%	3.5%	–12.5%
	IntRates –50bp	–11.3%	0.4%	–5.8%	–12.5%	1.6%	–5.1%
	IntRates +50bp	7.4%	–0.1%	3.2%	9.7%	–1.6%	3.3%
	IntRates +100bp	11.9%	–0.1%	5.0%	18.3%	–3.3%	5.2%
Equity return 1st year	EquityReturn +10%	3.0%	6.8%	3.2%	11.7%	3.8%	4.9%
	EquityReturn –10%	–4.2%	–6.8%	–3.6%	–11.7%	–3.9%	–5.4%
Admin costs (relative change)	AdminCost +10%	–3.4%	–0.9%	–3.1%	–2.9%	–4.3%	–2.3%
	AdminCost –10%	3.3%	0.9%	3.0%	2.9%	4.4%	2.3%
Surrender rates (relative change)	Surrender +10%	0.5%	–1.5%	–0.9%	–0.2%	–2.0%	–0.7%
	Surrender –10%	–0.7%	1.5%	0.9%	0.2%	2.2%	0.7%
Pay-up rates (relative change)	Lapse +10%	–0.7%	–0.1%	–0.7%	0.0%	–1.6%	–0.6%
	Lapse –10%	0.8%	0.1%	0.8%	0.0%	1.8%	0.6%

The contribution from the Polish Life business has been excluded from the MCEV calculation in 2013, due to divestment (transaction subject to regulatory approval).

Table 9.9 Solvency I Capital / Ratio

EURm	2013	2012
Tier 1 capital	1,515	1,554
Tier 2 capital	512	530
Solvency capital	**2,027**	**2,084**
Less: Solvency requirement	–1,171	–1,250
Solvency balance	**856**	**834**
Solvency ratio (%)	**173**	**167**

10. ICAAP and internal capital requirement

The Internal Capital Adequacy Assessment Process (ICAAP) aims to ensure that the Group keeps sufficient available capital to cover all risks taken over a foreseeable future, including during periods of stress. The level of capital needs to be adequate from an internal perspective as well as from the perspective of regulators, as well as market participants.

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 firm-wide perspective on a regular basis and on an ad hoc basis for specific areas or segments. The process includes a regular dialogue with 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 Corporate Centre. The current capital situation and forecasts are reported to 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, the introduction of new capital adequacy regulations and to accommodate strategic and business objectives.

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 2014, 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 risks defined by the CRD and risks internally defined by quantitative models (under Pillar II).

The following risk types are included under Pillar II:

- Business risk is the earnings volatility inherent in all business due to changes in the economic and competitive environment. Business risk 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 is measured in several ways on a daily basis and in accordance with the financial supervisory authorities' requirements.
- Pension risk is included in the market risk framework and includes equity risk, interest rate risk and FX risk in the Nordea-sponsored defined benefit pension plans.
- Real estate risk consists of exposure to owned and leased properties and is included in the market risk 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.

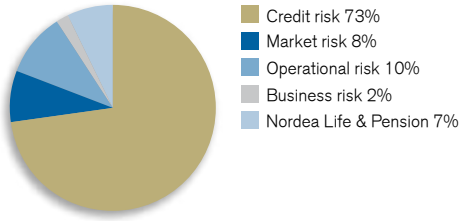
Liquidity risk is a Pillar II risk, however it is not included in

the capital framework, instead it is mitigated through active management of liquidity. Liquidity risk is the risk of being able to meet liquidity commitments only at increased costs, or ultimately, being unable to meet obligations as they fall due. The liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk

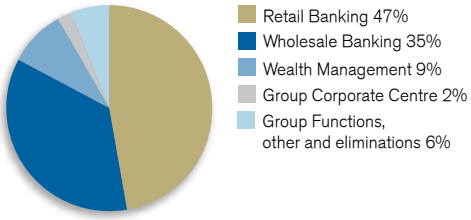
In addition to calculating risk capital for its various risk types, Nordea conducts a comprehensive capital adequacy stress test to analyse the effects of a series of global and local shock scenarios. The results of the stress tests are considered in Nordea's internal capital requirements as buffers 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 introduced with the implementation of CRD IV, however uncertainty remains with regards to local implementation. This might lead to future capitalisation requirements that are higher than the current internal assessment.

Figure 10.1 EC distributed by risk type



EC distributed by business area



10.2.1 Economic capital (EC)

EC is input in the EP framework which is calculated as risk adjusted profit less cost of equity. EP drives and supports the operational decision making process in Nordea to support performance management and shareholder value creation.

Nordea's EC model is based on the same risk components as the ICAAP but also includes risks in the insurance businesses. Pillar II closes the gap between regulatory capital and EC by improving the risk sensitivity of regulatory capital measurement. In addition to the risk types under Pillar II, the insurance business and thus the EC framework also include the life insurance risk, which is the risk posed by changes in mortality rates, longevity rates and disability rates.

EC is calculated for the legal group whereas the ICAAP, which is governed by the CRD, covers only the Financial Group.

EC has during 2013 been further aligned to core tier 1 capitalisation requirements anticipated in forthcoming regulation. For 2014, additional capital items will be introduced in the EC to reduce the gap between legal equity and allocated capital.

As of end 2013, the total EC of Nordea equals EUR 22.8bn (EUR 23.8bn as of 2012, restated). Figure 10.1 shows the EC distributed by Business Area and risk type. Notably, credit risk accounts for 73% of the total EC. EC decreased by EUR 1.0bn during the year (based on restated figures). The main drivers were a decrease in credit risk due to FX-movements, improved credit quality and reduced corporate exposure volumes. This was partly offset by a slight increase in market risk due to historically low interest rates negatively affecting the liabilities in Nordea's sponsored defined benefit pension plans and NLP as well as increased operational risk due to increased income in 2012.

10.2.2 Stress testing governance and framework

Stress testing governance and framework are important due to the vital role of capital for Nordea's management and profitability. Thus an adequate governance structure is required for the stress testing process. Key responsibilities include Group Executive Management (GEM) and the legal entity boards' engagement in the internal assessment of capital (ICAAP) stress testing. In addition, the Executive Management of Group Risk Management (GREM) and the Asset and Liability Committee/Risk Committee review in details the stress test performed and potential implications for future capital.

Capital adequacy stress testing is carried out annually during the first quarter, using end-of-year data. Ad hoc stress testing may be carried out throughout the year when necessary. In order to determine the adequacy of capital for the Nordea Group throughout the scenarios, Key financial targets , which are stated in Nordea's capital policy, are also considered. As long as the capital policy is fulfilled during the scenarios, the adequacy of existing capital can be supported.

The key measure for determining the stress test impact is the core tier 1 ratio and how it develops during the scenarios. The stress test capital impact is defined as the percentage drop in core tier 1 ratio in the most stressed year. The impact is then analysed in relation to capital policy, regulatory buffers and internal capital requirements.

10.2.2.1 Stress tests performed

During 2013, Nordea performed internal stress tests in order to evaluate general effects of an economic downturn scenario 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.

As part of the ICAAP and the capital planning process, firm-wide stress tests are used as an important risk management tool in order to determine how severe unexpected changes in the business and macro environment will affect the capital need. The stress 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 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 to ensure a forward-looking element.

The general stress test process may be divided into the following three steps:

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

These steps are described further in the sections following.

10.2.2.2 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 changes of a few selected 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 new 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.

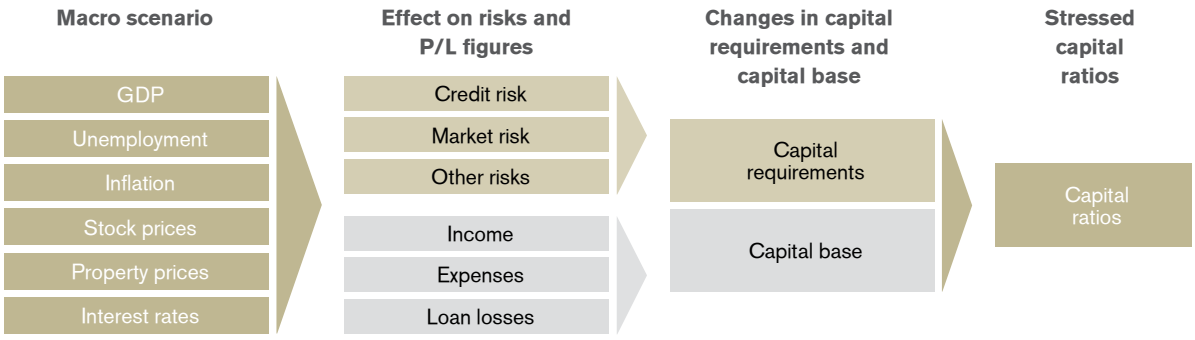
10.2.2.3 Calculation

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

Table 10.1 Parameters in the annual stress test

Parameter	Impact
Volumes	Lending volumes are dependent on lending growth specified in the scenario and on inflow to default and loss provisions. Deposit volumes are given directly by the Rolling Financial Forecast (RFF).
Margins	Corporate lending margins are country and rating specific and therefore sensitive to rating migrations. Retail margins are country specific and split by mortgage lending and other lending. Defaulted (but performing) customers are assigned a lower margin. Deposit margins are given by the RFF.
Net interest income	Net interest income figures are adjusted according to the change in volume and margins for deposits and lending, as well as increased funding cost (see below).
Funding cost	Changes in funding costs are derived from the assumption of Nordea being down-rated. The increased funding cost, due to a lower rating, reduces net interest income.
Net fee and commission income	Net fee and commission income is calculated according to product mix. Commission income is assumed to follow market movements and is adjusted according to changes in the stock index, whereas other items are adjusted according to changes in GDP.
Operating expenses	Operating expenses are assumed to be constant except for variable salary expenses, which are adjusted according to changes in net profit the previous year.
Loan losses	Loan losses are calculated based on a bottom-up, EL-based model. The EL-calculations are carried out on stressed rating distributions, stressed point in time PD curves and stressed LGD values (see below). The model covers both collective and specific provisions. The loan loss model consists of two components that cover losses related to (i) a general macroeconomic scenario and (ii) industry specific and idiosyncratic loss events.
P/L effect of Operational and Market Risk	Stressed losses related to operational risk and market risk are calculated using assumed loss distributions and correlations between the risk types.
Rating/Scoring Migration	For corporate customers, rating migrations are calculated on customer level based on stressing their financial statements for each year and scenario. For retail and bank customers, rating/scoring migrations are calculated based on central macro-economic variables per year and scenario.
Probability of default	Stressed PD values are calculated on customer level based on the stressed rating/scoring migrations (see above). For loan loss calculations point in time PDs are used. The point in time PDs are dependent on the severity of the macroeconomic scenario. In addition the PDs contain an add-on factor to reflect industry specific and idiosyncratic risk.
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.
Risk-weighted assets (RWA)	Credit risk RWA is calculated on customer/exposure level based on stressed PDs and LGDs. RWA is also dependent on changes in volumes (EAD) which are a function of lending growth and inflow to default.

Figure 10.2 Calculation process



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.

Stressed figures for loan 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. Together with 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.

10.2.2.4 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.

11. Capital base

The quality of Nordea's capital base improved during 2013 following strong profit generation, which served to increase core tier 1 capital. Core tier 1 capital, considered as capital of the highest quality, comprises 82% of Nordea's capital base. Nordea also redeemed a tier 2 instrument during the year to maintain a balanced capital structure.

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 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.

Tier 1 capital consists of both core tier 1 capital (paid-in shareholder capital and retained earnings) and other tier 1 (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.

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 core 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.

Tier 1 instruments comprise only 8% of tier 1 capital in Nordea; that is, the predominant share of tier 1 capital consists of capital considered as of the highest quality.

11.2.2 Tier 1 instruments subject to limits

The inclusion of 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.

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.

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 2013, the total amount was EUR 198m and as stipulated by regulation, 50% should be deducted from tier 1 capital and 50% should be deducted from tier 2 capital.

Table 11.1 Bridge between IFRS equity and core tier 1 capital

EURm	31 December 2013	31 December 2012
Balance sheet equity	**29,209**	**28,216**
Valuation adjustments for NLP and available-for-sale assets	–859	–949
Sub total	**28,350**	**27,267**
Dividend	–1,734	–1,370
Goodwill	–2,176	–2,346
Other intangible assets	–811	–748
Deferred taxes	–68	–201
Cash flow hedges	19	16
Shortfall deduction (50%)	–369	–554
Deduction for investments in credit institutions (50%)	–99	–103
Core tier 1 capital (net of deductions)	**23,112**	**21,961**

Table 11.2 Summary of items included in capital base

EURm	31 December 2013	31 December 2012
Tier 1 capital		
Paid-up capital	4,050	4,050
Share premium	1,080	1,080
Eligible capital	**5,130**	**5,130**
Reserves	20,120	19,028
Minority interests	2	5
Income from current year	3,116	3,120
Eligible reserves	**23,238**	**22,153**
Core tier 1 capital (before deductions)	**28,368**	**27,283**
Subordinated capital loans	**1,949**	**1,992**
Proposed/actual dividend	–1,734	–1,370
Deferred tax assets	–68	–201
Intangible assets	–2,987	–3,094
Deductions for investments in credit institutions	–99	–103
IRB provisions shortfall (–)	–369	–554
Deductions for investments in insurance companies	–616	0
Total deductions to Tier 1	**–5,873**	**–5,322**
Tier 1 capital (net after deductions)	**24,444**	**23,953**
– of which subordinated capital	1,949	1,992
– of which investments in insurance companies	–616	0
– of which core tier 1 capital (net of deductions)	23,112	21,961
Tier 2 capital		
Undated subordinated loans	682	708
Dated subordinated loans	4,107	4,676
Other additional own funds	81	56
Tier 2 capital (before deductions)	**4,870**	**5,440**
Deductions for investments in credit institutions	–99	–103
IRB provisions excess (+) / shortfall (–)	–369	–554
Deductions for investments in insurance companies	–616	–1,236
Pension assets in excess of related liabilities	–190	–226
Total deductions to Tier 2	**–1,274**	**–2,119**
Tier 2 capital (net after deductions)	**3,596**	**3,321**
Capital base	**28,040**	**27,274**

Table 11.3 Dated and undated loans

Undated loans, tier 1

Issuer	Book value, EURm	Capital base 31 December 2013	Start	Maturity	Call date	Step-up
Nordea Bank AB	361	386	09	N/A	Mar 15	Y
Nordea Bank AB	361	361	09	N/A	Mar 15	Y
Nordea Bank AB	435	484	05	N/A	Apr 15	Y
Nordea Bank AB	138	144	05	N/A	Mar 35	Y
Nordea Bank AB	69	73	05	N/A	Oct 35	Y
Nordea Bank AB	500	500	04	N/A	Mar 14[1]	N
Total Undated tier 1	**1,864**	**1,949**				

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 2013	Start	Maturity	Call date	Step-up
Nordea Bank Norway ASA	145	145	86	N/A	May 14[1)]	N
Nordea Bank Finland Plc	360	468	04	N/A	Jul 14	Y
Nordea Bank Finland Plc	69	69	99	N/A	Feb 29	Y
Total Undated tier 2	**574**	**682**				

Dated loans, tier 2

Issuer	Book value, EURm	Capital base 31 December 2013	Start	Maturity	Call date	Step-up
Nordea Bank AB	899	899	11	May 21		N
Nordea Bank AB	747	747	12	Feb 22	Feb 17	N
Nordea Bank AB	996	996	10	Mar 20		N
Nordea Bank AB	746	746	10	Mar 21		N
Nordea Bank AB	718	718	12	Sep 22		N
Total Dated loans	**4,107**	**4,107**				
Grand Total	**6,545**	**6,738**				

1) First call date has passed.

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. By the end of 2013, the expected loss was EUR 3,483m and the IRB shortfall equalled EUR 738m. 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 19m is disclosed. In Table 11.2 the adjustment has been made to eligible reserves.

11.2.3.7 Holdings in insurance undertakings
Due to the expiry of a transition rule in 2013, holdings in insurance undertakings are now equally deducted from additional tier 1 capital as well as tier 2 capital.

11.2.4 Changes in tier 1 capital in 2013
Core tier 1 capital increased by EUR 1.2bn during 2013. The main contributing factor for tier 1 capital was profit for the period, net of the proposed dividend, partly offset by the expired transitional rule which moved 50% of the insurance undertakings deduction to tier 1. During 2013, Nordea did not issue any new undated tier 1 instruments nor were any contracts called. At the end of the year, Nordea had EUR 1.9bn 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 2013, Nordea called EUR 500m of its tier 2 loans. As of year-end Nordea held EUR 4.1bn 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.

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 11.2.3.5 for further explanation.

11.3.3.3 Holdings in insurance undertakings
Due to the expiry of a transition rule, holdings in insurance undertakings are no longer fully deducted from the capital base. The holdings are deducted equally from tier 1 and tier 2 capital.

11.3.3.4 Other deductions
Surplus net value of pension plans for employees should under certain circumstances be deducted from the capital base. At the end of 2013 the surplus values of the plans reached EUR 190m.

Figure 11.1 Drivers behind the development of the capital base, 2013

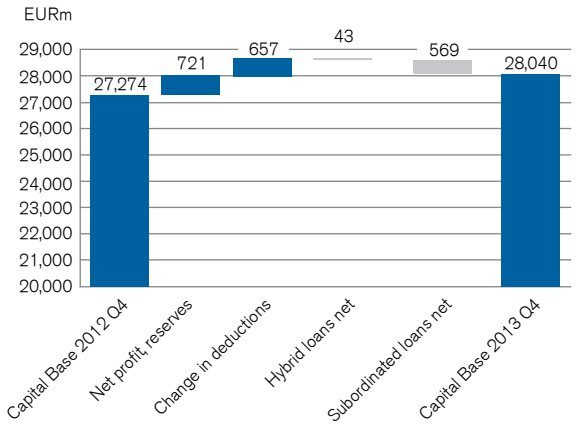
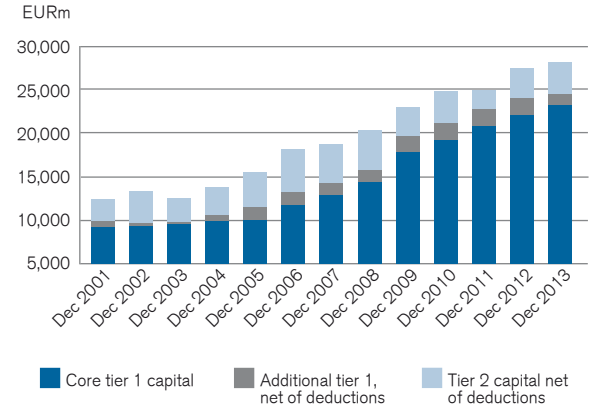


Figure 11.2 Development of the capital base, 2001–2013



11.3.4 Changes in tier 2 capital in 2013

During the year, Nordea's tier 2 capital before deductions decreased by EUR 0.6bn, which was mainly due to one dated tier 2 loan being called in September 2013 . The shortfall deduction as well as the changed treatment of investments in insurance undertakings significantly reduced the deductions made against tier 2 capital.

11.4 Changes in the capital base 2013

Figure 11.1 illustrates the main changes in the capital base during 2013. The predominant part of the increase over the year, relates to core tier 1 capital stemming from profit and reduced deductions, this is somewhat countered by the called tier 2 loan.

11.5 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 2013.

11.6 Development of the capital base

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

12. New regulations

The final version of the Capital Requirement Directive IV (CRD IV) and Capital Requirement Regulation (CRR) for the European financial market was published in June 2013. The Directive will be implemented through national law within all EU member states during 2014, pending on national processes, while the Regulation will become applicable in all EU countries from 1 January 2014 directly through the European process. In Norway, which is not a member of the European Union, the implementation time table is not decided since the CRD IV/CRR is yet to be agreed within the EEA.

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 a new framework for dealing with bank failure (crisis management), a proposal for a Banking Union (including the already agreed single supervisory mechanism and the single resolution mechanism), a review regarding treatment of the trading book from the Basel Committee on Banking Supervision (Fundamental review of the Trading Book), a potential proposal regarding a structural reform primarily related to trading activities as well as changes to accounting regulation that will have an effect on capital and risk. Furthermore, data and reporting requirements for banks are expected to increase substantially.

12.2 Basel III and the CRD IV/CRR

In December 2010, the Basel Committee on Banking Supervision (BCBS) issued rules of new global regulatory standards on credit institutions capital adequacy, leverage and liquidity, collectively referred to as Basel III. These standards have now been 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. CRD IV/CRR will consist of a Directive and a Regulation:

- The Directive, CRD IV, covers areas such as authorisation of banks, principles for prudential supervision including Pillar II rules, corporate governance, capital buffers, sanctions and remuneration.
- The Regulation, CRR, contains detailed requirements covering own funds, capital requirements for credit risk, market risk and operational risk, large exposures, liquidity, leverage ratio, and disclosure requirements.

The CRR is intended to set a single rule book for all banks in the EU, avoiding diverging national rules. However, the on-going national implementation of the Directive and of the national options possible in the CRR shows that there will be differences between different countries.

The EBA, with its objective to play a leading role in the creation of the single rule book for the EU banking system, issues 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 and 2013.

12.2.1 Capital regulation

12.2.1.1 Own funds

The CRR includes a revised definition of own funds, intending to increase the quality of capital, hence create better loss-absorbing capacity. Own funds is the sum of tier 1 capital and tier 2 capital. Tier 1 capital consists of common equity tier 1 capital (paid-in shareholder capital and retained earnings) and additional tier 1 (undated subordinated debt). Tier 2 capital consists predominantly of dated/undated subordinated loans. In common terms, tier 1 capital can absorb losses without an institution being required to close down it business activities, and tier 2 capital can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors. The requirements for inclusion of instruments in common equity tier 1 (CET1) capital are stricter and the details have also been further regulated by technical standards from the EBA. Also, the CRR applies deductions mainly to CET 1 (under the previous framework important deductions have been applied to other parts of own funds as well).

According to the CRR the changes should gradually be phased-in until 2024. However, the CRR also opens up for local regulators to phase in deductions faster. The required features of capital instruments to be eligible as additional tier 1 and tier 2 capital will also be stricter. For example, instruments with incentives to redeem (e.g. step-up clauses) will not be eligible. Instruments that do not contain the required features should be gradually phased-out until 2022. The regulation opens up for local regulators to phase out instruments that are not fully compliant faster.

12.2.1.2 Regulatory minimum capital requirements
The CRR requires banks to comply with the following minimum capital ratios:
- Common equity tier 1 capital ratio of 4.5%
- Tier 1 capital ratio of 6%
- Capital ratio of 8%

The minimum CET1 capital ratio and the minimum tier 1 capital ratio should be gradually phased-in until 2015. Again, the framework opens up for faster implementation by national regulators.

12.2.1.3 Capital buffers
CRD IV introduces a number of capital buffer requirements. The capital buffers are expressed in relation to RWA and represent additional capital to be held on top of minimum regulatory requirements. The levels and the phasing-in of the buffer requirements are subject to national discreation.

A mandatory capital conservation buffer of 2.5% to be met with CET1 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 in national jurisdictions when excess credit growth is judged to be associated with a build-up of system wide risk. The countercyclical capital buffer should also be met with CET1 and the institution specific buffer will be in the range of 0-2.5%. Supervisory authorities shall also require that globally systemically important institutions (G-SIIs) hold buffers of additionally 1-3.5% CET1. In addition, CRD IV allows for a systemic risk buffer (SRB) to be added as well as a buffer for other systemically important institutions (O-SIIs). These buffers should be seen in conjunction with the other buffers and should also be met with CET1. The O-SII buffer can be set up to 2% and the SRB can be set up to 3% for a banks all exposures and up to 5% for a banks domestic exposures. Breaching these buffer requirements will restrict banks' capital distribution, such as the payment of dividends.

12.2.2 Risk-weighted assets (RWA)
RWA will mainly be affected by additional requirements related to counterparty credit risk, the introduction of an asset correlation factor for exposures towards financial institutions and a multiplication factor for exposures to SMEs. Several countries are also discussing the introduction of higher risk weights or other restrictions on mortgage lending.

For banks calculating RWA according to the IRB approach, a risk-weight floor was previously in place, stipulating that RWA should not be less than 80% of the RWA calculated under Basel I. This floor was expected to end December 2012 however the CRR extends these transition rules until 31 December 2017.

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 by 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. 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 CRR introduces 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 segments is substantial.

12.2.2.3 Risk weight for SMEs
In order to encourage lending to SMEs, the risk weights for SMEs will be reduced. The capital requirement for credit risk for exposures to SMEs shall therefore be multiplied with the factor 0.7619. The definition includes exposures in both the standardised and IRB approaches in the exposure classes retail, corporate and secured by real estate. The annual turnover for the SME must be below EUR 50m and the total amount owed (for the group of connected clients) shall not exceed EUR 1.5m excluding claims secured by residential real estate.

12.2.3 Leverage ratio
The CRR introduces a non-risk based measure, the leverage ratio, in order to limit an excessive build-up of leverage on credit institutions' balance sheets in an attempt to contain the cyclicality of lending. The impact of the ratio will be monitored by the supervisory authorities 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 off-balance sheet exposures, with adjustments for certain items such as derivatives and securities financing transactions).

In January 2014, the BCBS published the leverage ratio

framework. The final version is more in line with the CRR compared to the consultation paper that was issued during summer 2013.

12.2.4 Liquidity regulations

The objective of the liquidity reform is to improve the banking sector's ability to absorb liquidity shocks arising from financial and economic stress, thus reducing the risk of spill-over from the financial sector to the real economy. In the CRD IV/CRR two new quantitative liquidity standards have been introduced: liquidity coverage ratio (LCR) and net stable funding ratio (NSFR). LCR requires that a bank shall hold liquidity buffers which are adequate to face any possible imbalance between liquidity inflows and outflows under gravely stressed conditions over a period of 30 days. NSFR requires that a bank shall ensure that long term obligations are adequately met with a diversity of stable funding instruments under both normal and stressed conditions. CRD IV/CRR does not contain detailed rules for NSFR. BCBS published detailed proposals for NSFR in 2010 and changed proposals on 12 January 2014. According to the BCBS proposals, a bank's Available Stable Funding (ASF) shall be at least equal to its Required Stable Funding (RSF). ASF and RSF are determined by pre-specified factors. Both LCR and NSFR will be subject to an observation period in CRD IV/CRR. After the observation period, LCR will be phased-in from January 2015 (60% in 2015, 70% in 2016, 80% in 2017, 100% in 2018) while NSFR might be introduced as a minimum standard by 2018.

The Swedish FSA has progressed faster in liquidity regulations and implemented their LCR requirement already in the beginning of 2013 (all currencies combined, but also separately for USD and EUR). It is expected that the content of Swedish LCR will be aligned with the EU LCR by 2015.

12.2.5 Reporting requirements

The EBA has by mandate in the CRR developed 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 have required additional data gathering, extensive IT implementations and changes to reporting templates. The new Corep reporting will be mandatory when the CRR comes into force.

12.2.6 Nordic implementation

As mentioned, CRD IV needs to be implemented into national laws and regulations before entering into force. A number of countries have stated that they will not be able to implement CRD IV by 1 January 2014 and in Sweden and Finland the current expected date for implementation is 1 July 2014.

The CRR will however enter into force at 1 January 2014 in all EU countries. Within CRR there are a number of national options that can be implemented into national legislation/regulation should the national authorities choose to do so and during the autumn and winter a number of consultations on national implementation of CRD IV/CRR has been issued in the Nordic countries. Since Norway is not a member of the European Union, the implementation time table is not yet decided and the CRD IV/CRR is yet to be agreed within the EEA.

12.2.6.1 Denmark

In October, a political agreement was reached concerning the regulation of systemically important financial institutions and on the level of capital requirement. In November this was also submitted in a consultation from Finanstilsynet. The agreement states that the capital requirement for all banks will be the minimum 4.5% CET1, the capital conservation buffer of 2.5% CET1 and also the countercyclical capital buffer that is to be phased-in from 2015 to 2019 and that can be set up to 2.5% CET1 from 2019. In addition to this, a buffer requirement for systemically important institutions will be phased-in between 2015 to 2019. Based on the most recent financial statements, seven institutions have been identified (of which Nordea Bank Danmark is one) and the buffer requirement for Nordea Bank Danmark is currently set to 2% CET1. In addition to this there is also a possible Pillar II requirement that is set on an individual basis. The new requirements are suggested to enter into force 31 March 2014.

In December Finanstilsynet also consulted on the national implementation of the CRD IV which suggests that the rules will enter into force from 31 March 2014.

12.2.6.2 Finland

CRD IV will be implemented by a new act on credit institutions, expected to enter into force 1 July 2014. The draft government bill for the new act was issued for comments in November 2013. The draft includes new requirements on governance and risk management in credit institutions. It is also suggested that the countercyclical capital buffer (up to 2.5% CET1) and a capital conservation buffer (2.5% CET1) will be applicable from 1 January 2015 and that a buffer requirement for systemically important institutions of 2% CET1 will be applicable from 1 January 2016.

12.2.6.3 Norway

Since Norway is not a member of the EU, the CRD IV/CRR will be implemented through the EEA agreement. Currently the CRD IV/CRR is being negotiated within the EEA agreement and therefore nor the CRD IV, nor the CRR will enter into force on 1 January 2014 in Norway. Hence the current rules still apply. However, new levels of capital requirement were decided already in June 2013 to be applicable from 1 July 2013. According to the new rules, financial institutions shall have a CET1 capital ratio of at least 4.5%. In addition, institutions must have a capital conservation buffer of at least 2.5% CET1 and a systemic risk buffer of

2% CET1. The systemic risk buffer will be raised from 2% to 3% from 1 July 2014.

Furthermore, all systemically important institutions must hold an additional buffer of 1% CET1 from 1 July 2015 and 2% from 1 July 2016. Nordea Bank Norge is considered a systemically important institution according the Norwegian rules.

In addition to the specific capital requirements, a new regulation was introduced in October 2013, giving the authorisation to determine a countercyclical buffer. The countercyclical buffer will range between 0 and 2.5% CET1 as a main rule and the Ministry of Finance shall each quarter make a decision on the level of the countercyclical buffer based on advice from the Norwegian Central Bank. On 12 December the Ministry of Finance decided to set the buffer rate to 1% CET1 to be applicable from 30 June 2015.

In October 2013 the Ministry of Finance also adopted a new regulation regarding the risk weights for residential mortgage for IRB banks. The regulation increases the LGD floor from the current 10% to 20%.

12.2.6.4 Sweden

In September 2013 the Swedish expert committee appointed by the Government presented the proposal for legislative amendments necessary to implement CRD IV in Sweden. As communicated by Swedish authorities already in 2011 the CET1 requirement for the four large Swedish banks will be 10% in 2014 and 12% from 2015. On top of this there will be the countercyclical capital buffer and the Pillar II requirement. The Swedish Government has also communicated that the SFSA will be the authority responsible for the countercyclical capital buffer.

In November the SFSA published their report "Risks in the financial system 2013". In the report the SFSA states that it believes that raising the risk weight floor for residential mortgages to 25% would be a sound decision. The current risk weight floor of 15% was introduced by the SFSA in May 2013.

12.3 Crisis management and Recovery and Resolution

During 2011, the FSB published "Key Attributes of Effective Resolution Regimes for Financial Institutions". The Bank Recovery and Resolution Directive (BRRD) is the EU implementation of the FSB guidelines, and were finally agreed upon in December 2013. The Banking Union regulation, parts of which is currently being drafted, implements the BRRD for the Euro zone (and potential opt-in) countries, and introduces single standards for resolution banks. 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 minimise 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 BRRD outlines the tools and powers available to the relevant authorities in the EU, which are aimed at both preventing bank defaults, as well as handling banks in crises, while maintaining financial stability.

12.3.1 Recovery and resolution plan

In November every year, the FSB and the BCBS identifies global systemically important institutions. The November 2013 report lists 29 institutions and Nordea was for the second time identified as the only institution in the Nordic region.

Global systemically important institutions are required to submit recovery plans aimed at establishing recovery planning processes to reduce the probability of default, while authorities are required to establish credible and operational resolution plans.

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. In December 2013 the Parliament and the Council ensured, by key legislation, that the European Central Bank (ECB) will be responsible for the supervision of banks in the framework of the Single Supervisory Mechanism (SSM). This is the first effective step in creating the banking union.

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 ECB's decisions.

In order to increase consistency and efficiency of supervisory practices, the EBA will continue to develop the single rule book applicable to all 27 member states. It will also ensure that regular stress tests are carried out to assess the resilience of European banks.

The SSM, as agreed by the Parliament and the Council, also establishes rules on the governance and responsibility of the ECB which should ensure a separation between its tasks as a supervisor and its monetary policy functions.

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

12.5 Separation of trading activities

In February 2012, the EU Commission established a high-level expert group (HLEG) with the task to assess whether additional reforms on the structure of individual banks should be considered. The HLEG answer to the task was presented in a report in October 2012 and suggested mandatory separation of proprietary trading and other high-risk trading activities from the normal banking activities. The main purpose would be to separate certain particularly risky parts of financial activities from deposit taking activities within a banking group. The underlying objective 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.

During 2013 the Commission has been working on a legislative proposal and an impact study with the aim of presenting the proposal early 2014.

12.6 Trading book review

In October 2013, the BCBS published the second 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 sets out a potential definition of the scope of the trading book and proposes 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. Agreement has been reached on the Omnibus II Directive, including the treatment of "long-term guarantees" between the trilogue parties and principles for the application of transitional rules. This provides a way forward for a consistent prudential framework for insurance regulation across Europe, from 1 January 2016.

The 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
- ensure that the risk ownership is anchored with executive management and the Board of Directors
- ensure that the risk measurement and governance is embedded into business operations and strategic planning.
- to strengthen the supervision of insurance groups

EIOPA has in addition published guidelines covering Pillar II and Pillar III considerations which will apply for the period up till full Solvency II application. These aim to harmonise the potentially different regulatory approaches of countries and to help the industry prepare for Solvency II.

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) and Leasing (IAS 17), although other changes might/will also significantly impact Nordea. The finalisation dates and effective dates for these 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

Nordea Remuneration Policy and its underlying instructions, systems, schemes and processes are aligned with and support efficient risk management. The risk of excessive risk taking is limited by:

- Ensuring that the Remuneration Policy, instructions and systems etc. are approved at the relevant organisational level, supported by analyses of potential financial as well as non-financial consequences.
- Having a "Steering Committee for updating Nordea's implementation of internal and local remuneration instructions" with representatives from the business, Group Legal and Group Operational Risk and Compliance to support Group Executive Management in these issues.
- Having clear governance and approval processes for all remuneration components, including the grandparent principle and involvement of control functions, and by having most remuneration paid as fixed compensation.
- Requiring that the main variable remuneration components are based on a pre-determined set of well-defined financial as well as non-financial success criteria, including Nordea Group criteria.
- Having divisional Bonus pools mainly defined by a share of divisional Economic Profit.

Risks related to the remuneration schemes and 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, including the involvement of relevant risk and control functions, and thereby reduces 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 from Oliver Wyman 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, measured against new international guidelines. The gaps identified were addressed by Nordea. In autumn 2010, a follow-up review was conducted, concluding a need for a shift in the balance between variable and fixed compensation due to new regulations.

In second half of 2012 Oliver Wyman was again engaged to review Bonus structures in the light of regulatory and market development and expected future changes. No regulatory gaps were identified but Nordea addressed proposed Bonus structure calibrations.

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.

There is always a risk of fraudulent actions by one or

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

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 being explicitly based on defined performance measures. Divisional financial performance is measured as risk-adjusted profits, explicitly incorporating capital and funding costs, and is adjusted for multi-period revenue effects and minimum required profit. In the event of weak or negative overall results for the Nordea Group, bonus pools can be adjusted downwards at the discretion of the Board of Directors. As such, individual compensation is determined based on detailed performance evaluations covering a range of financial and non-financial factors.

Inappropriate individual bonuses are prevented through both caps on the percentage of risk-adjusted profit that can be paid out, as well as individual caps. Nordea has introduced deferral programmes for the staff in the risk analysis defined as Identified Staff. Care is taken to ensure that control and compliance staff employed in divisions with bonus schemes are competitively rewarded although not eligible for bonus.

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

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.

Over the years, amendments have been made to the first version of the CRD regulation. The amendments were implemented at the end of 2010 and 2011 and strengthened the large exposure regime, increased the quality of the capital base and added stricter securitisation regulation. The final version of the Capital Requirement Directive (CRD IV) and Capital Requirement Regulation (CRR), which was published in June 2013, require 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 Directive will be implemented through national law within all EU countries during 2014, while the Regulation will become applicable in all EU countries from 1 January 2014.

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 (SA), where calculation of credit risk is close to Basel I regulation, except an additional possibility to use external ratings for counterparties and a wider use of financial collateral. RWA is calculated by multiplying the exposure with a 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. For the Retail IRB approach (RIRB), maturity is not included in the calculations.

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, pension risk, real estate risk and concentration risk. These are covered either by capital or risk management and mitigation processes under Pillar II. In the calculation of economic capital (EC), Pillar II risks as well as risk in the life insurance operations are included. Liquidity risk is not included in the EC framework, but instead mitigated through the active management of liquidity. 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 non-credit obligation assets. For the remaining exposure classes, Nordea used the standardised approach in 2013. 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 sovereigns[1] 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 250k[2] 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. Under the RIRB approach, maturity is not included in the RWA calculation.

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

2) EUR 100k in Baltic countries and Poland.

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 member states and/or 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 if there is no differences in risk weight between the government and the local authority (with the exception of Norway, where a risk weight of 20% is applied).

14.3.1.3 Institution exposure
Exposure to institutions is assigned a risk weight by an eligible rating agency depending on the credit quality steps of the central government in the jurisdiction (although risk weight cannot be lower than 20%). Specific rules determine how to treat an exposure where no rating by an eligible rating agency exists. The rating cannot be lower than that of the central government in the jurisdiction of the institution.

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 mortgage on immovable property
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 public sector entities
- Exposure to multilateral development banks
- Exposure to named international organisations
- Exposures in default
- High risk exposures
- Equity exposures
- Short-term claims.

14.3.2 Calculation of RWA in the standardised approach

The standardised approach remains in use for portfolios in Poland and Luxemburg 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
AIRB	Advanced Internal Ratings Based approach
ALCO	Asset and Liability Committee
ALM	Asset and Liability Management
AML	Anti-money laundering
AR	Annual Report
AUM	Assets under management
BCBS	Basel Committee on Banking Supervision
BEM	Banks and emerging markets
CCF	Credit Conversion Factor
CCO	Chief Credit Officer
CCP	Central Counterparties
CCR	Counterparty credit risk
CDO	Collateralised debt obligation
CDS	Credit default swap
CEM	Current Exposure Method
CET1	Common equity tier 1
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIB	Coporate and Institutional banking
CLN	Credit-linked notes
CLS	Continuous Linked Settlement
CMO	Collateralised mortgage obligations
CP	Commercial paper
CRD	The EU's Capital Requirements Directive
CRM	Comprehensive Risk Measure
CRO	Chief Risk Officer
CVA	Credit valuation adjustment
EAD	Exposure at default
EBA	European Banking Authority
EC	Economic capital
ECC	Executive Credit Committee
EL	Expected loss
EMU	European Monetary Union
EP	Economic profit
ERAT	Environmental Risk Assessment Tool
EU	European Union
EV	Economic value
FFFS	Finansinspektionens Författningssamling (The Swedish FSA's directive)
FIRB	Foundation Internal Rating Based approach
FSA	Financial Supervisory Authority
FSB	Financial Stability Board
FX	Foreign exchange
G-SII	Global systemically important institutions
GCCR	Group Credit Committee Retail Banking
GDP	Gross Domestic Product
GCCW	Group Credit Committee Wholesale Banking
GEM	Group Executive Management
GEM CC	Group Executive Management Credit Committee
GICS	Global Industries Classification Standard
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 Ratings Based approach
IRM	Incremental Risk Measure
KPI	Key performance indicators
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
O-SII	Other systemically important institutions
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
RCO	Risk and Compliance Officer
RWA	Risk-weighted assets
S&P	Standard & Poor's
SA	Standardised approach
SIIR	Structural Interest Income Risk
SME	Small and medium-sized enterprises
SOO	Shipping, oil and offshore
SPE	Special Purpose Entity
SPRAT	Social and Political Risk Assessment Tool
SREP	Supervisory Review and Evaluation Process
SRP	Supervisory Review Process
SSM	Single Supervisory Mechanism
TTC	Through-the-cycle
VaR	Value-at-Risk