Nordea

Capital and Risk Management Report 2017

Provided by Nordea Bank AB on the basis
of its consolidated situation

Executive summary

2017 was a year with economic growth in all four Nordic home markets and lower volatility than for long time. Meanwhile asset inflation remained on the high side, partly supported by low or negative interest rates. There are risks beneath the surface, and it is important to remain prudent. Nordea has during the year initiated a re-domiciliation process of the parent company from Sweden to Finland, in order to move into the Banking Union banking environment and regulations. Sweden continued to show strong growth, Finland stayed on the growth path, Denmark showed a better growth rate and Norway showed a strong resilience in the mainland economy.

Nordea has delivered robust results, although lower than last year, with EUR 4.0bn operating profit, solid credit quality and return on equity of 9.5%, despite the negative interest rates. Nordea is confident and well-prepared for the future in light of strong and stable profitability, solid quality in its well- diversified credit portfolio, a strong capital position and a diversified funding base.

Key ratios

Common equity Tier 1 (CET1) capital ratio

19.5%

CET1 capital ratio increased mainly due to solid profit generation and further de-risking.

Total capital ratio

25.2%

Issuance of an AT1 bond of EUR 750m at a record-low coupon of 3.5%.

Net loan loss ratio

12bps

Net loan loss ratio improved further during the year.

Credit risk exposure change

–0.9%

Slight drop in Credit risk exposure to EUR 495bn (EUR 499bn).

Liquidity coverage ratio

147%

Group LCR decreased to 147% in 2017 (159%).

Initiated process to re-domicile the parent company from Sweden to Finland

On 6 September 2017, the Board of Directors decided to initiate a re-domiciliation process of the parent company of Nordea Bank from Sweden to Finland through a downstream merger, with the main rationale being to move into Eurozone and the Banking Union and thereby obtain more stable and predictability banking environment and regulations. The re-domiciliation is subject to shareholders' decision at the AGM and regulatory approvals and the merger date is tentatively 1 October 2018.

Further strengthened capital ratios – solid profit generation and an AT1 issuance in EUR with record-low coupon

The CET1 capital ratio was further strengthened in 2017 through solid profit generation of the Group in combination with a continued de-risking and lower REA as a result, reaching 19.5% by the end of 2017 (18.4%). In November 2017, Nordea issued an AT1 bond of EUR 750m, with a record-low coupon of 3.5%. The Group's tier 1 capital ratio was 22.3% and the total capital ratio was 25.2% at year-end.

Continued improved credit quality with a net loan loss ratio of 12bps

Nordea's credit quality remained overall solid and improved further in 2017 with stable rating and scoring migration and a net loan loss ratio of 12bps, (last year 15bps) below Nordea's long-term average of 16bps. Continued stabilisation was seen in Denmark and a stable development is seen in Finland and Sweden and overall in mainland Norway, as well as in the household portfolios in all Nordic countries. The risk level has decreased further as de-risking has taken place e g in Russia and shipping and offshore – although still elevated risk in oil and offshore exposures. The impaired loans ratio increased somewhat to 1.86% (1.74%), while credit risk exposures dropped slightly to EUR 495bn. The Group's market risk, which is mainly driven by interest rate risk measured by VaR was low also in 2017, EUR 11m on average in the trading book and EUR 52m on average in the banking book.

Strong funding name maintained, strong LCR and NSFR above 100%, all issuer rating outlooks stable – at AA- level

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 funding programmes during 2017. Approximately EUR 15bn was issued in long-term debt during 2017, excluding Danish covered bonds (last year EUR 23bn). Nordea had a strong liquidity coverage ratio (LCR), with an LCR at year-end on Group level of 147% (159%), 257% in EUR and 170% in USD. All three major senior unsecured issuer ratings are at AA-level with stable outlook.

Figure 1.1 Development of key capital adequacy ratios

During the period 2001 to 2017, the total own funds increased by EUR 19.4bn. The increase was mainly driven by retained profit and the implementation of Basel II in 2007 and CRR/CRD IV in 2014 as well as implementation of capital buffer requirements which requires higher capital ratios. CET1 capital has increased by EUR 15.4bn, AT1 capital increased by EUR 2.7bn and T2 capital increased by EUR 1.3bn.

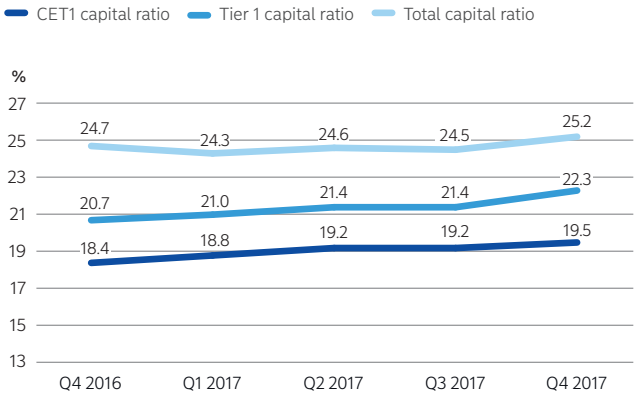
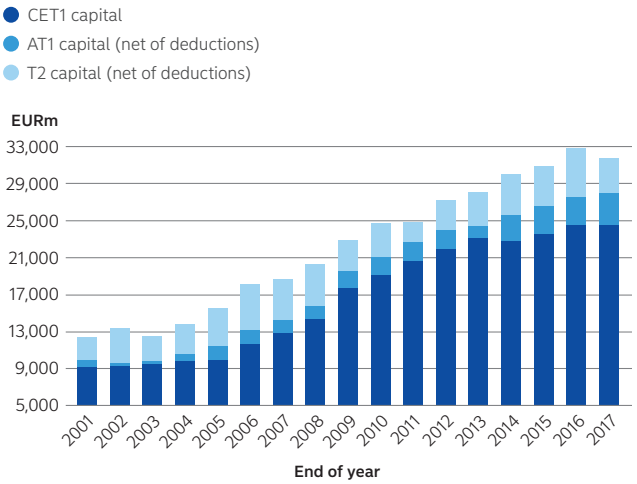


Figure 1.2 Development of own funds

During the year, REA both excluding and including Basel I floor have decreased. The main driver was reduced credit risk, mainly in the corporate portfolio. Common Equity Tier 1 capital remained relatively flat during the year whereas Tier 1 capital increased by EUR 0.5bn, mainly as a result of the issuance of a new AT1 instrument. Total Own Funds decreased by EUR 1.2bn during the year, this was a result of amortisation of Tier 2 loans.



Nordea Bank AB (publ) with Swedish corporate registration number 516406-0120 provides these public disclosures according to Part Eight of Regulation (EU) No 575/2013, commonly referred to as the Capital Requirements Regulation (CRR), on the basis of its consolidated situation (hereinafter referred to as simply "Nordea").

This disclosure constitutes a comprehensive disclosure on risks, risk management and capital management. It includes disclosures, or references to other disclosures, required according to Part Eight of the CRR and by EBA guidelines and standards on disclosure requirements. Information exempted from disclosure due to being non-material, proprietary or confidential can be found in Part 1, table 12.5. Information on risk and capital management can also be found in financial reports and on www.nordea.com, a navigation table for the information can be found in Part 1, table 12.3. Accompanying this report are the required disclosures for the subsidiaries Nordea Kredit Realkreditaktieselskab, Nordea Hypotek AB ("Nordea Hypotek"), Nordea Mortgage Bank Plc, Nordea Nordea Eiendomskreditt AS and Nordea Finans AS.

The subsidiaries' disclosures are included as appendices and will be released on www.nordea.com on the publication date of each subsid iary's Annual Report.

Nordea Bank AB and its subsidiaries have adopted a formal policy to assure compliance with the disclosure requirements and has established policies for assessing the appropriateness of these disclosures, including their verification and frequency.

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.

Nordea's Board of Directors, by attesting this report , approve of the for mal statement of key risks in Part 1 section 1 and formally declare the ade quacy of risk management arrangements given
statement and the declaration are made in accordance with CRR Article 435(1).

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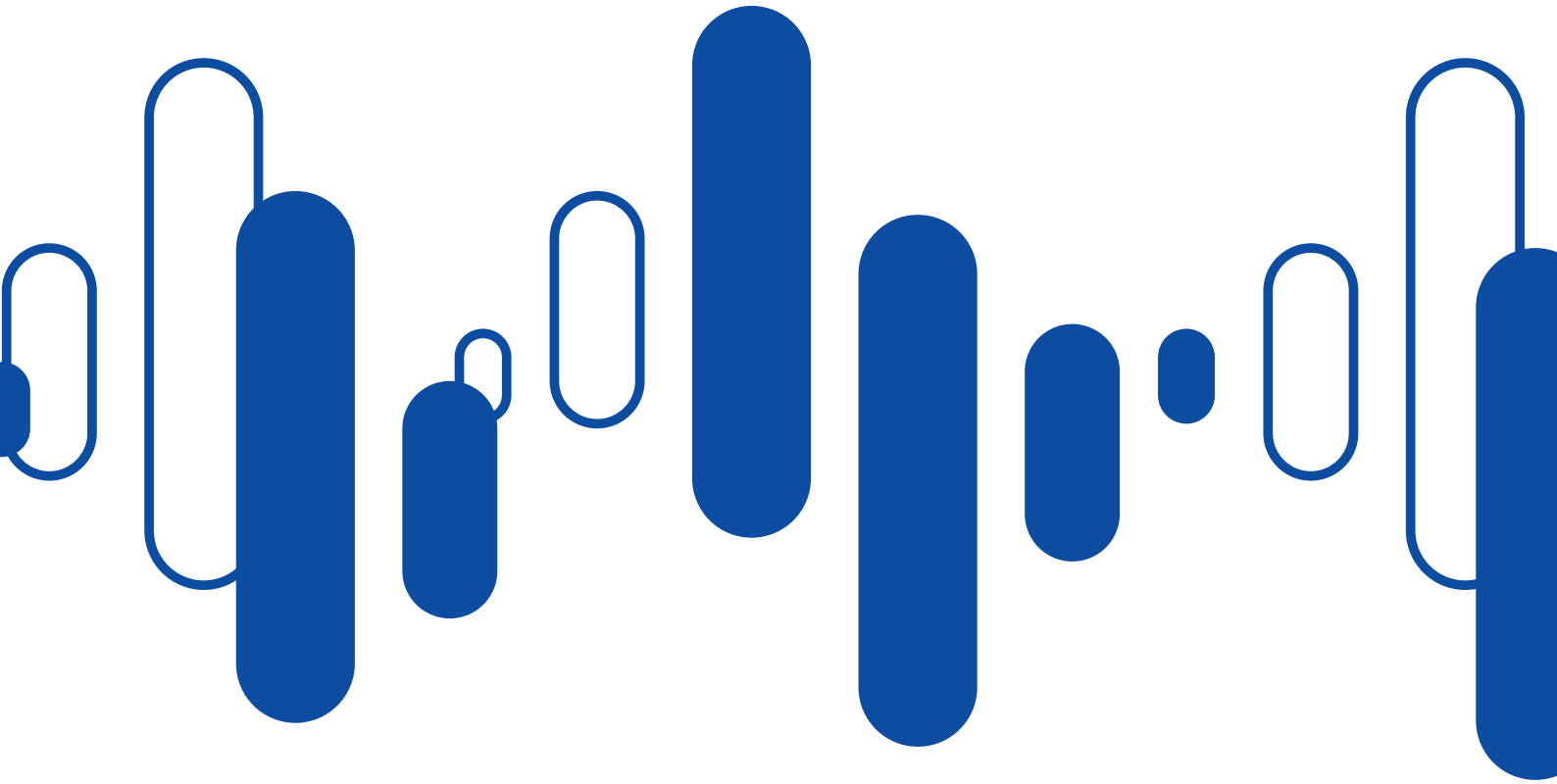
PART 1 Year end results and analysis

Quantitative information accompanied by qualitative analysis of the year end results of the Nordea Group



1. Board of Directors Risk Statement

Nordea's business model is well diversified with Credit Risk representing the largest risk category in terms of 84% of REA.

1.1 The Nordea Group

The Nordea Group is the largest financial services group in Northern Europe with a market capitalisation of approximately EUR 40.6bn, total assets of EUR 582bn and a CET1 capital ratio of 19.5%. The Group has leading positions within corporate and institutional banking as well as personal and private banking. It is also the leading provider of asset management, life and pension products in the Nordic countries.

With approximately 600 branch locations, call centres in all Nordic countries and highly competitive online and mobile banking platforms, the Nordea Group has the largest distribution network in the Nordic region. Nordea Group furthermore has the largest customer base of any financial services group in the Nordic region with approximately 10 million household customers and around 0.5 million corporate customers.

1.2 Risk Appetite

Nordea currently has the following capital ratios: CET1 capital ratio 19.5%, Tier 1 capital ratio 22.3% and total capital ratio 25.2%. Risk capacity is set on an annual basis as the maximum level of risk Nordea is deemed able to assume given its capital, its risk management and control capabilities, and its regulatory constraints. The risk appetite within Nordea is then defined as the aggregate level and types of risk Nordea is willing to assume within its risk capacity, and in line with its business model, to achieve its strategic objectives. Regular controlling and monitoring of risk exposures is carried out to ensure that risk taking activity remains within risk appetite.

1.3 Key risks in Nordea's operations

Nordea has a well-diversified business model. Risks are spread over a number of countries, industries and customer types. Most of Nordea's risks originate from Wholesale Banking, Commercial & Business Banking and Personal Banking, representing approximately 80% of the total risk exposure amount (REA). The remainder originates mainly from Group Functions.

Credit risk (including Credit Value Adjustment risk) is Nordea's dominant risk category representing approximately 84% of REA. For credit risk, Nordea aims to have a well-diversified credit portfolio that is adapted to the structure of Nordea's home markets and economies. 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) and short-term forward-looking credit quality (loan losses under plausible stress scenarios).

Corporate and retail exposures currently represent 48% and 19% respectively of Nordea's total REA. The housing markets as well as the general portfolio quality of the corporate segments are currently stable, and loan losses remain at a low level in all of Nordea's markets. Housing markets in Norway and Sweden are however sensitive to changes in market conditions and still exposed to regulatory initiatives. Within the corporate segment, the largest exposures in terms of REA are towards the real estate and shipping segments.

Operational risk is Nordea's second largest risk category representing 13% of REA. During 2017 total losses due to operational risks were approximately EUR 20m compared to REA of EUR 16.8bn attributed to operational risk at end Q4 2017. Operational risk appetite statements are defined in terms of mitigating actions for important risks, key risk indicators and operational risk losses.

Market risk is the third largest risk category within Nordea, representing 3% of REA. Income derived from market risk positions counterbalanced the risks taken by a wide margin in 2017. Market risks are governed in the risk appetite frame work by limits on VaR, stressed losses on trading and banking books, including Structural FX, in terms of the maximum reported market risk loss within one year in a severe but plausible stress event equivalent to an impact on the Common Equity Tier 1 (CET1) ratio.

Nordea adheres to a liquidity risk appetite whereby there must be sufficient liquidity to cover potential cash outflows during a stress event. Specifically, the liquidity risk appetite is set such that Nordea holds a liquidity buffer which is sufficient to (1) survive a minimum of 3 months under a combined market-wide and idiosyncratic stress scenario; (2) ensure an internal LCR (based on internal stress tests) of at least 105 %; and (3) ensure a regulatory LCR of at least 105%.Throughout 2017, Nordea maintained a strong liquidity position with all metrics remaining well above risk appetite thresholds.

1.4 Material transactions

During 2017, no transactions of a sufficiently material nature to impact on Nordea's risk profile or the distribution of risks on the Nordea Group were carried out.

Table 1.1 Distribution of exposure, Risk Exposure Amount (REA), capital requirement and Economic Capital (EC)in Business Areas, 31 December 2017

	EURbn	Exposure	%	REA	CAR	%	EC	%
Total Nordea Group	Credit risk[1] [2]	475.6	100%	105.5	8.4	84%	18.3	69%
	Market risk			3.5	0.3	3%	0.9	4%
	Operational risk			16.8	1.3	13%	3.1	12%
	Nordea Life & Pension						1.8	7%
	Other[3]						2.5	9%
	Total, % of Nordea Group	**475.6**	**100%**	**125.8**	**10.1**	**100%**	**26.7**	**100%**
Personal Banking	Credit risk[1]	164.8	100%	20.2	1.6	80%	4.9	63%
	Market risk						0.1	1%
	Operational risk			4.9	0.4	20%	1.0	13%
	Nordea Life & Pension						0.4	5%
	Other[3]						1.3	17%
	Total, % of Nordea Group	**164.8**	**35%**	**25.2**	**2.0**	**20%**	**7.7**	**29%**
Commercial & Business Banking	Credit risk[1]	96.1	100%	30.2	2.4	91%	4.9	79%
	Market risk						0.0	1%
	Operational risk			3.1	0.2	9%	0.6	10%
	Nordea Life & Pension						0.1	2%
	Other[3]						0.6	9%
	Total, % of Nordea Group	**96.1**	**20%**	**33.3**	**2.7**	**26%**	**6.2**	**23%**
Wholesale Banking	Credit risk[1]	87.3	100%	33.1	2.7	80%	5.6	73%
	Market risk			3.5	0.3	8%	0.5	7%
	Operational risk			4.6	0.4	11%	0.8	10%
	Nordea Life & Pension						0.1	1%
	Other[3]						0.7	9%
	Total, % of Nordea Group	**87.3**	**18%**	**41.2**	**3.3**	**33%**	**7.8**	**29%**
Wealth Management	Credit risk[1]	8.5	100%	3.9	0.3	69%	0.3	14%
	Market risk						0.0	1%
	Operational risk			1.7	0.1	31%	0.1	7%
	Nordea Life & Pension						1.3	67%
	Other[3]						0.2	11%
	Total, % of Nordea Group	**8.5**	**2%**	**5.6**	**0.4**	**4%**	**1.9**	**7%**
Group Functions, Other and Eliminations	Credit risk[1] [2]	118.8	100%	18.0	1.4	88%	2.6	83%
	Market risk			0.0	0.0	0%	0.3	8%
	Operational risk			2.5	0.2	12%	0.6	19%
	Nordea Life & Pension						0.0	0%
	Other[3]						-0.3	-10%
	Total, % of Nordea Group	**118.8**	**25%**	**20.5**	**1.6**	**16%**	**3.2**	**12%**

1) Includes CVA Risk, securitisation positions and other credit risk adjustments.
2) Includes Article 3 buffer of 1.5 EURbn.
3) Capital deductions and internal allocations.

2. Regulatory development

2.1 Current regulatory framework for capital adequacy

The Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation (CRR) entered into force on the 1st of January 2014, followed by the Bank Recovery and Resolution Directive (BRRD) on the 15th of May 2014. The Regulation became applicable in all EU countries on the 1st of January 2014, while the directives were implemented through national law within all EU member states from 2014, through national processes.

10.1.1 Regulatory minimum capital requirements

The CRR requires banks to comply with the following minimum capital requirements in relation to REA:

- CET1 capital ratio of 4.5%
- Tier 1 capital ratio of 6%
- Total capital ratio of 8%

2.1.2 Capital buffers

CRD IV contains a number of capital buffer requirements. The capital buffer requirements are expressed in relation to REA to be covered by CET1 capital 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 discretion.

The mandatory buffers introduced are the capital conservation buffer (CCoB) of 2.5%, the countercyclical capital buffer (CCyB) and the buffer for globally systemically important institutions (G-SII) of 1-3.5%. The institution specific CCyB will, under normal circumstances, be in the range of 0-2.5%, depending on the buffer rate in the countries where the institution has their relevant exposures. 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 capital. The O-SII buffer can be set up to 2% and the SRB can be set up to 3% for all exposures and up to 5% for domestic exposures. These buffers are to be seen as a combined buffer. The combined buffer requirement is the sum of the CCoB, CCyB and;

- where the SRB is applicable for all exposures, the highest of the SRB and the highest SII buffer,
- where the SRB is applicable only on domestic exposures, the sum of the highest SII buffer and the SRB.

Breaching the combined buffer requirement will restrict banks' capital distribution, such as the payment of dividends, in accordance with the regulations on maximum distributable amount (MDA).

2.1.3 Swedish implementation of minimum

Table 2.1 Expected capital requirement

Percent (%)	2016	2017	2018	2019
Minimum capital requirement	**8.0**	**8.0**	**8.0**	**8.0**
- CET1	4.5	4.5	4.5	4.5
- T1	6.0	6.0	6.0	6.0
- Own funds	8.0	8.0	8.0	8.0
Combined buffer requirement	**6.0**	**6.3**	**6.3**	**6.3**
- of which CCoB	2.5	2.5	2.5	2.5
- of which CCyB	0.5	0.7	0.7[1]	0.7[1]
- of which SIFI/SRB	3.0	3.0	3.0	3.0
Total Own funds requirement excl. Pillar II	**14.1**	**14.2**	**14.2**	**14.2**

1) Assuming unchanged CCyB rates.

2.1.4 Basel I floor

From the implementation of Basel II in 2007, banks using internal models have been required to calculate the Basel I floor on the capital requirements as regulated prior to 2007. From 2009 the floor has been 80% of the Basel I requirement. According to the CRR the application of the Basel I floor expire from 1 January 2018.

2.1.5 Nordic implementation

Both the CRD IV/CRR and the BRRD allow for national implementation of some parts, which is why there are some differences in the implementation in the different countries.

2.1.5.1 Denmark

Firstly, the CCoB is phased-in from 2016 to 2019, where the buffer in 2017 was 1.25% and The CCyB is phased-in from 2015 to 2019, however the buffer has been set to 0%. Secondly, the SRB requirement for systemically important institutions is phased-in between 2015 and 2019. Nordea Kredit Realkreditaktieselskab was on the 2nd of January 2017 identified as systemically important and is subject to a 1.5% SRB requirement when fully phased-in. The buffer in 2017 was 0.9%.

Thirdly, there is also a possible Pillar II requirement that is set on an individual basis. CRR gives national authorities the possibility to implement some of the changes within a transition period until 2019. The Danish FSA used such an option regarding the deduction of the IRB shortfall, which before CRR was deducted from tier 1 and tier 2 (50%/50%) but is phased-in gradually to a 100% deduction in CET1. In addition, transitional rules regarding unrealised gains and losses and deduction for defined pension assets included in CET1 are also implemented.

As part of the implementation of BRRD in Denmark, mortgage institutions such as Nordea Kredit Realkreditaktieselskab, have to fulfil a debt buffer requirement of 2%. The requirement is being phased-in starting on the 15th of June 2016 with 0.6%, increased to 1.2% in June 2017, further increased to 1.6% from June 2018, 1.8% from June 2019 and

fully implemented in June 2020. The debt buffer can be fulfilled using CET1 or tier 2 capital instruments as well as senior debt instruments that fulfil certain criteria.

2.1.5.2 Finland

In Finland, the CCoB requirement is set to 2.5%. The O-SII buffer for credit institutions operating in Finland may be set to 0–2%. Nordea Mortgage Bank Plc has been defined as O-SII and the O-SII buffer is set to 0.5% from the 1st of July 2018. The Board of the Financial Supervisory Authority (FSA) has the power to impose binding macroprudential policy requirements and has decided to set the CCyB to 0%.

The Finnish Act on Credit institutions has been amended to give the Finnish FSA the mandate to apply the systemic risk buffer from the 1st of January 2019. A decision has also been taken to apply a minimum risk weight of 15% for residential mortgages in Finland applicable to credit institutions that have adopted the Internal Ratings Based (IRB) approach. The implementation enters into force from the 1st of January 2018 and is according to article 458 of the CRR which allows authorities to target asset bubbles in the residential sector by increasing the risk weights within Pillar I.

2.1.5.3 Norway

In Norway, the CRR and CRD IV and its related regulatory standards and guidelines are not entirely implemented. A Norwegian BRRD regulation and a deposit guarantee scheme was proposed on the 21st of June 2017 and a tentative date is settled for first treatment in the Standing Committee on Finance and Economic Affairs on the 6th of March 2018. The main provisions from CRD IV/CRR rules have been implemented into Norwegian regulation. However, some major deviations from CRD IV/CRR are that the Basel I floor related to REA is not removed as of January the 1st 2018 and that the capital reduction applied to the SME segment is not implemented, as well as several other technical calculation rules.

During November and December 2017, the Ministry of Finance has given the Norwegian FSA the mandate to prepare a draft proposal for implementing the remaining part of CRR and CRD IV as well as proposing new Norwegian floor requirements based on the finalised Basel III framework. The leverage ratio requirement entered into force on the 30th of June 2017. All Norwegian institutions are subject to a leverage ratio requirement of minimum 3% tier 1 capital. Banks are subject to additional 2% requirement, and systemically important institutions (SIIs) must hold additional 1%. For Nordea Eiendomskreditt AS and Nordea Finans AS the leverage ratio requirement is 3% tier 1 capital.

The minimum capital requirements are harmonised with a minimum CET1 capital ratio of 4.5%, a minimum tier 1 ratio of 6% and a minimum total capital ratio of 8%. In addition, a CCoB of 2.5% and a SRB of 3% apply. The CCyB was increased to 2% from the 31st of December 2017.

2.1.5.4 Sweden

The minimum CET1 requirement for the four large Swedish banks is 12% from 2015. This includes a minimum 4.5% Pillar I requirement, a CCoB to 2.5%, a SRB of to 3% and an extra SRB of 2% in Pillar II. In addition to the 12%, a CCyB rate of 2% and Pillar II add-ons for other risks and a 25% risk weight floor for residential mortgages, is applied on top. In 2015 the Swedish FSA announced that Nordea, at a Group level, was identified as a G-SII as well as an O-SII. However, neither the G-SII buffer (1%) nor the O-SII buffer (2%) will increase Nordea´s buffer requirement since Nordea is already obliged to hold a SRB of 3%.

The Swedish FSA has implemented a Liquidity Coverage Requirement (LCR) in addition to the CRR requirement where large Swedish banks have been required to fulfil the requirement also for Euro and US-dollar. This requirement will be removed from the 1st of January 2018 when the CRR requirement to fulfil the LCR on aggregate currencies will apply. The Swedish FSA is, however, also suggesting replacing the requirement to fulfil LCR for specific currencies with a Pillar II requirement.

On December the 20th 2017, the Swedish National Debt Office (SNDO) formally decided on plans for how banks are to be managed in a crisis and on the minimum requirement for own funds and eligible liabilities (MREL) to be applied from the 1st of January 2018. The MREL requirement for Nordea Group is 7.1% of total liabilities and own funds (28.9% of REA), and recapitalisation amount is 4% of total liabilities and own funds (16.5% of REA).

2.1.6 Regulation after a change of domicile

As communicated in September 2017, Nordea has initiated a re-domiciliation of the parent company to Finland. A change of domicile to Finland means that Nordea will be subject to Finnish legislation and ECB supervision. A change of domicile will also mean that the Single Resolution Board (SRB) will set the MREL requirement for Nordea. In December 2017, the SRB published an updated MREL policy paper that will serve as a basis for setting the MREL targets for banks under the remit of SRB.

2.2 Proposal on amended CRR, CRD IV and BRRD

In November 2016 the European Commission published a proposal amending the BRRD, and the CRD IV and the CRR. The proposals are now being discussed in the European Parliament and the Council before negotiations in the so called Trilogue can start, where the European Commission, Parliament and Council need to agree before the proposal can be finalised and adopted. The amendments to the CRR, being a regulation, will be directly applicable in all EU countries once implemented, whereas amendments to the CRD IV and BRRD, being directives, need to be implemented into national legislation before being applicable. The time for implementation is uncertain given the upcoming negotiations but it is stated that the amendments will start entering into force in 2019 at the earliest, with some parts being implemented later and subject to phase-in.

The proposal contains, among other things, a review of the MREL requirement, a review of the market risk requirements (so called Fundamental Review of the Trading Book, FRTB), the introduction of NSFR, the introduction of a leverage ratio requirement and amendments to the Pillar II framework.

2.2.1 TLAC / MREL

The Financial Stability Board (FSB) published in November 2015 the Total Loss-absorbing Capacity Term Sheet ('the TLAC standard'), which requires Global Systemically Important Banks (G-SIBs), referred to as G-SIIs in EU legislation, to have a sufficient amount of highly loss absorbing (“bailinable”) liabilities to ensure smooth and fast absorption of losses and recapitalisation in resolution. The TLAC standard is included in the proposed amendments to the CRR, building on the existing framework of the BRRD which includes the MREL. The purpose of MREL is to achieve the same objective as for the TLAC standard, although it is technically different from the TLAC standard and is applied for both G-SIIs and non G-SII institutions in EU.

According to the proposal for amending BRRD, both G-SIIs and non G-SIIs should meet the so-called firm specific MREL requirement decided by the resolution authorities. The requirement should not exceed the sum of the loss absorption amount and re-capitalisation amount, both of which are determined by the minimum capital requirement of 8% and the Pillar II capital requirement. On top of the firm specific

MREL requirement, the resolution authorities can also decide to impose a MREL guidance, the breach of which does not automatically lead to MDA restrictions.

The TLAC requirement for G-SIIs needs to be met by eligible instruments that are subordinated. In addition, the resolution authorities can decide to require non G-SIIs to meet the firm specific MREL requirement by subordinated eligible instruments. In order to make it possible for banks to issue eligible instruments in a cost efficient and harmonised way, the European Commission proposed in November 2016 to introduce a new insolvency hierarchy for non-preferred senior debt. The negotiations of the proposal have been finalised within the EU. The new insolvency hierarchy for non-preferred senior debt needs to be implemented at national level on the 1st of January 2019 at the latest.

2.2.2 Pillar II

The proposed changes to the rules governing Pillar II introduces a split of Pillar II add-ons into Pillar II Requirements (P2R) and Pillar II Guidance (P2G), where the P2R will increase the MDA level while the P2G is a soft measure that does not affect the MDA level. Given how the current Pillar II framework has been implemented by the Swedish FSA ("fully flexible Pillar II guidance approach"), the suggested approach from the European Commission might result in a change to the existing Pillar II practice.

2.2.3 Net Stable Funding Ratio (NSFR)

The European Commission proposes to introduce a binding NSFR that requires institutions to finance their long-term activities (assets and off-balance sheet items) with stable funding. The NSFR proposal aligns NSFR governance, compliance and supervisory actions with the EU LCR, specifically;

- institutions are required to comply with NSFR requirements daily under both normal and stressed conditions,
- institutions are required to ensure consistency between currency denomination of available stable funding (ASF) and required stable funding (RSF),
- supervisors are allowed to set limits on significant currencies,
- the NSFR requirement is applied on individual and consolidated basis (possibility to receive a waiver for individual requirements), and
- intragroup funding should receive symmetrical ASF and RSF factor.

Institutions will be required to comply with NSFR two years after the revisions enter into force, expected earliest from mid-2020 depending on negotiations.

Generally, the suggested NSFR is aligned with the Basel Committee on Banking Supervision (BCBS) standard, but the European Commission has included some adjustments as recommended by the European Banking Authority (EBA) to ensure that the NSFR does not hinder the financing of the European real economy.

2.2.4 Leverage ratio

The CRR introduced a non-risk based measure, the leverage ratio, to limit an excessive build-up of leverage on credit institutions' balance sheets in an attempt to contain the cyclicality of lending. The leverage ratio is calculated as the tier 1 capital divided by an exposure measure, comprising of on-balance and off-balance sheet exposures with adjustments for certain items such as derivatives and securities financing transactions.

The proposal introduces a binding leverage ratio requirement of 3% of tier 1, harmonised with the international BCBS standard. It further includes amendments to the calculation of the exposure measure with regards to exposures to public development banks, pass-through loans and officially granted export credits. Additionally, the initial margin received from clients for derivatives cleared through a Qualifying Central Counterparty (QCCP) can be excluded from the exposure measure.

2.2.5 Standardised Approach for Counterparty Credit Risk (SA-CCR)

In March 2014, the BCBS published a standard on a new standardised method to compute the exposure value of derivatives exposures, the so-called Standardised Approach for Counterparty Credit Risk, to address the shortcomings of existing standardised methods. The implementation of SA-CCR in the proposal is accomplished by removing the existing Standardised Approach and the Mark-to-Market Method and replacing them with the new SA-CCR.

2.2.6 Market risk

In January 2016, the BCBS concluded its work on the fundamental review of the trading book (FRTB) and published a new standard on the treatment of market risk. The European Commission's proposal incorporates the FRTB rules into EU regulation with some adjustments compared to the Basel version, such as postponing implementation to 2021 and including a three-year phase-in period.

The key features of the framework include a revised boundary for trading book and non-trading book (banking book) exposures, a revised internal model approach and a revised standardised approach. The revised internal model approach includes a shift from value-at-risk to an expected shortfall measure of risk under stress and the incorporation of the risk of market illiquidity. The revised standardised approach is composed of three components; the sensitivities-based method, the residual risk add-on and the default risk charge.

2.2.7 Small and Medium-sized Enterprises (SME) supporting factor

The European Commission proposes an extended SME supporting factor. The current SME supporting factor provides a capital reduction of 23.81% for exposures up to EUR 1.5 million towards SMEs. The proposal extends this discount with an additional 15% reduction for the part above the EUR 1.5 million threshold, intended to further stimulate the lending to SMEs.

2.2.8 Fast track of IFRS 9, creditor hierarchy and large exposures

In November 2017, an agreement was reached on some of the proposals in the review in a so called fast tracking process.

While the BCBS is currently considering the longer-term regulatory treatment of the IFRS 9 international accounting standard, the fast track agreement introduces EU transitional arrangements to mitigate the potentially significant negative impact on CET1. The transitional period will have a duration of 5 years starting from the 1st of January 2018. Institutions shall decide if to apply the transitional arrangements and inform the competent authority of its decision by the 1st of February 2018 at the latest. Institutions are also required to publicly disclose this decision.

The fast track also includes amendments of the BRRD on the ranking of unsecured debt instruments in insolvency proceedings (bank creditor hierarchy). The amendment makes it possible for banks to issue the new type of subordinated liabilities to meet the MREL requirement. Finally, the fast track also provides for a three-year phase-out of an exemption from the large exposure limit for banks' exposures to public sector debt denominated in the currency of another member state. These agreements will enter into force on January the 1st 2018.

2.3 Finalised Basel III framework ('Basel IV')

Basel III is a global, regulatory framework on bank capital adequacy, stress testing, and liquidity risk. In December 2017, the final parts of the Basel III framework, often called the Basel IV package, was published. The Basel IV package will be applied from 2022 and includes revisions to credit risk, operational risk, credit valuation adjustment (CVA) risk, leverage ratio and the introduction of a new output floor. In addition, revisions to market risk (the so called Fundamental Review of the Trading Book) that was agreed in 2016 will be implemented together with the Basel IV package.

On credit risk, the package includes revisions to both the IRB approach, where restrictions to the use of IRB for certain exposures are implemented, as well as to the standardised approach. For operational risk, the three approaches currently existing will be removed and replaced with one standardised approach to be used by all banks. On CVA risk, the internally modelled approach is removed and the standardised approach is revised. The package also includes the implementation of a minimum leverage ratio requirement of 3% tier 1 capital with an additional leverage ratio buffer requirement for Global systemically important banks (G-SIB) of half the G-SIB capital buffer requirement. Changes to leverage ratio also includes a revised leverage ratio exposure definition relevant for derivatives and central bank reserves.

An output floor is to be set to 72.5% of the standardised approaches on an aggregate level, meaning that the capital requirement under the floor will be 72.5% of the total Pillar I REA calculated with the standardised approaches for credit-, market- and operational risk. The floor will be phased-in with 50% from 2022 to be fully implemented from the 1st of January 2027.

Before being applicable to Nordea, the Basel IV package needs to be implemented into EU regulations and will therefore be subject to negotiations between the EU Commission, Council and Parliament which might result in EU regulations deviating from the Basel IV package.

3. Capital position

Table 3.1 Summary of items included in own funds

During the quarter, CET1 capital decreased by EUR 0.2bn driven by decreased retained earnings due to OCI and increased deductions in intangible assets, but remained relatively flat over the full year. Tier 1 capital increased by EUR 0.5bn during the year, of which EUR 0.7bn was seen in the last quarter as a result of the issuance of a new AT1 instrument somewhat countered by the movements in CET1 capital. Total own funds increased EUR 0.3bn during the quarter as a result of the Tier 1 increase offset by regulatory amortisation. Year over year, own funds decreased EUR 1.2bn, however, mainly as a result of amortisation and called T2 loans. Amortisation is only a regulatory prudential adjustment, the loans are still included in the balance sheet to the full amount.

EURm	31 Dec 2017[3]	30 Sep 2017[3]	31 Dec 2016[3]
Calculation of own funds			
Equity in the consolidated situation	31,799	31,263	31,533
Proposed/actual dividend	-2,747	-2,005	-2,625
Common Equity Tier 1 capital before regulatory adjustments	29,052	29,259	28,908
Deferred tax assets	-0		
Intangible assets	-3,834	-3,754	-3,435
IRB provisions shortfall (-)	-291	-223	-212
Deduction for investments in credit institutions (50%)			
Pension assets in excess of related liabilities[1]	-152	-279	-240
Other items, net	-259	-323	-483
Total regulatory adjustments to Common Equity Tier 1 capital	-4,536	-4,579	-4,370
Common Equity Tier 1 capital (net after deduction)	24,515	24,679	24,538
Additional Tier 1 capital before regulatory adjustments	3,514	2,809	3,042
Total regulatory adjustments to Additional Tier 1 capital	-21	-19	-25
Additional Tier 1 capital	3,493	2,790	3,017
Tier 1 capital (net after deduction)	28,008	27,470	27,555
Tier 2 capital before regulatory adjustments	4,903	5,119	6,541
IRB provisions excess (+)	95	90	78
Deduction for investments in credit institutions (50%)			
Deductions for investments in insurance companies	-1,205	-1,205	-1,205
Pension assets in excess of related liabilities			
Other items, net	-54	-51	-65
Total regulatory adjustments to Tier 2 capital	-1,164	-1,166	-1,192
Tier 2 capital	3,738	3,953	5,349
Own funds (net after deduction)[2]	31,747	31,423	32,904

1) Based on conditional FSA approval.

2) Own funds adjusted for IRB provision, i.e. adjusted own funds equal EUR 31 943m by 31 Dec 2017.

3) Including profit of the period.

Own funds, excluding profit

EURm	31 Dec 2017	30 Sep 2017	31 Dec 2016
Common Equity Tier 1 capital, excluding profit	23,854	24,160	23,167
Total own funds, excluding profit	31,086	30,903	31,533

Table 3.2 Flow statements of movements in own funds

Own funds as of year-end 2017 was EUR 31.7bn (32.9bn in 2016), of which CET1 capital constituted EUR 24.5bn (24.5bn), Additional Tier 1 capital EUR 3.5bn (3.0bn) and Tier 2 capital EUR 3.7bn (5.3bn).

During 2017, Nordea's CET1 capital remained relatively flat. A new AT1 loan of EUR 0.75bn was issued by Nordea Bank AB during the period which mainly explains the increase of AT1 capital. The increase was slightly offset by FX-effects. There has been one redemption of a Tier 2 instrument during the year. Unfavourable FX-effects and amortisation of Tier 2 instruments further decreased Tier 2 capital. Amortisation is only a regulatory prudential adjustment, the loans are still included in the balance sheet to the full amount.

EURm	Amount
Common Equity Tier 1, 31 December 2016	24,538
Profit attributable to owners of the parent	3,408
Dividend	-2,747
Change in goodwill and intangible assets	-399
Change in IRB provision shortfall deduction	-79
Change in prudential filters	197
Change in unrealised gains on AFS	
Other	-402
Common Equity Tier 1, 31 December 2017	24,515
Additional Tier 1 capital, 31 December 2016	3,017
New hybrid loans	750
Redeemed hybrid loans	
FX effect	-269
Change in Amount that exceeds the limits for AT1 grandfathering	
Other adjustments	-5
Additional Tier 1 capital, 31 December 2017	3,493
Tier 2 capital, 31 December 2016	5,349
New subordinated loans	
Redeemed subordinated loans	-750
FX effect	-310
Change in Excess on the limit of AT1 grandfathered instruments	
Change in deduction due to significant investment	
Change in IRB provision excess add-on	17
Other adjustments	-568
Tier 2 capital, 31 December 2017	3,738
Total own funds, 31 December 2017	31,747

Figure 3.3 CET 1 requirement build-up (%)

Nordea's Internal Capital Requirement (ICR) was EUR 13.3bn at the end of the year. The ICR should be compared to the own funds, which was EUR 31.7bn at the end of the fourth quarter. The ICR is calculated based on a Pillar I plus Pillar II approach and also includes a buffer for economic stress. In addition, supervisors require Nordea to hold capital for other risks, identified and communicated as part of the Supervisory Review and Evaluation Process (SREP).

The outcome of the 2017 SREP, indicated that the CET1 requirement in Q3 2017 was 17.4%. The CET1 requirement is assessed to be 17.6% as of year-end 2017. The final capital requirement for 2017 is expected to be disclosed by the SFSA on the 23rd of February 2018. The combined buffer requirement consists of a 3% systemic risk buffer, a 2.5% capital conservation buffer and a countercyclical buffer of approximately 0.8%. The Pillar II other part consists of the SFSA standardised benchmark models for Pillar II risks as well as other Pillar II add-ons as a result of the SREP.

The Pillar II add-ons, including risk weight floors, do not affect the maximum distributable amount (MDA) level, at which automatic restrictions on distributions linked to the combined buffer requirement would come into effect, unless a formal decision on Pillar II has been made. A formal decision on Pillar II has not been made. In Q3 2017 the MDA level was 10.6%, in Q4 2017 it is assessed to increase to 10.8% following the increase in the countercyclical capital buffer rate in Norway.

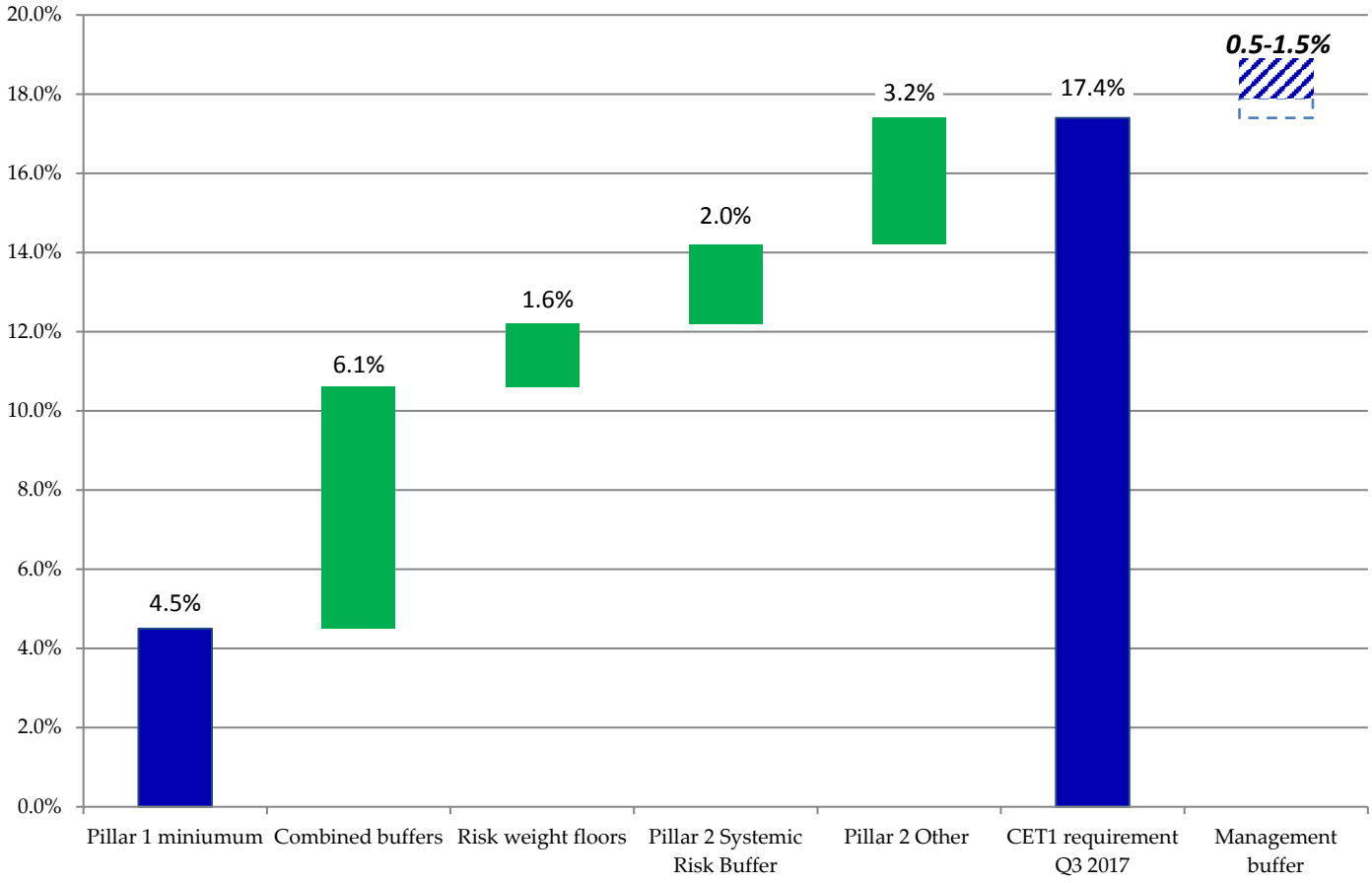
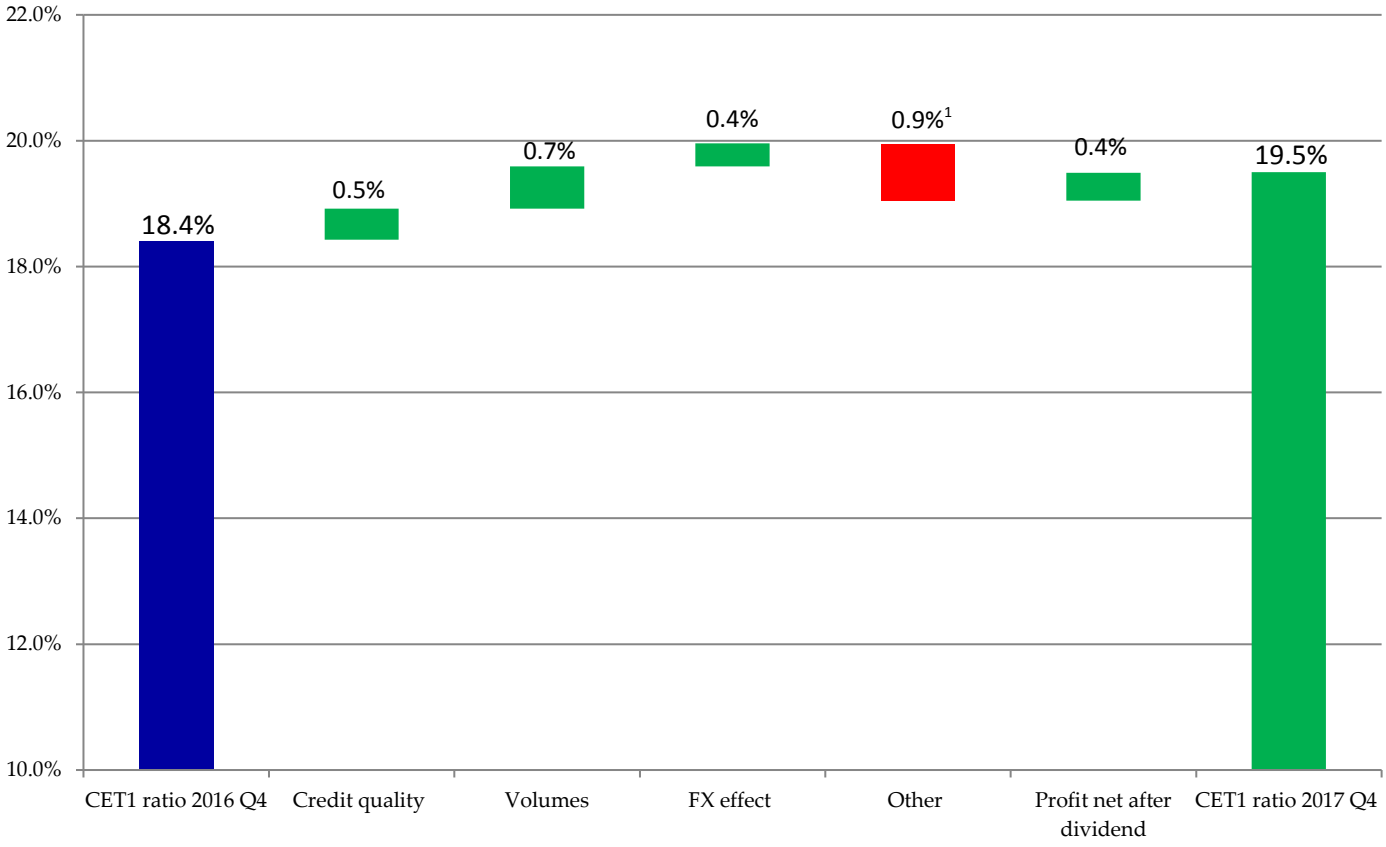


Figure 3.4 Drivers behind the development of the CET1 capital ratio

The CET1 ratio has increased to 19.5% in Q4 2017 from 18.4% in Q4 2016. The reduced average risk weight in credit risk increased the ratio with 0.5 percentage points mainly stemming from the corporate portfolio. The volume effect increased the ratio by 0.7 percentage points which was also mainly stemming from the corporate portfolio where loan volumes decreased. The FX effect decreased the ratio by 0.4 percentage point. Other changes decreased the ratio by 0.9 percentage points and profit net dividend increased the ratio by 0.4 percentage points.



1) Mainly related to PD updates

Table 3.5 Bridge between IFRS equity and CET1 capital

A bridge between IFRS equity and CET1 capital is provided in the table below. Nordea's CET1 capital remained relatively flat over the period. Increased balance sheet equity together with lower pension and prudential deductions were offset by increased intangible asset deductions and a higher proposed dividend.

EURm	31 Dec 2017	31 Dec 2016
Balance sheet equity	33,316	32,410
Valuation adjustment for non-CRR companies	-765	-877
Other adjustments	-694	
CET1 before deductions	31,857	31,533
Dividend[1]	-2,747	-2,625
Goodwill	-1,862	-1,946
Intangible assets	-1,972	-1,489
Shortfall deduction	-291	-212
Pension deduction	-152	-240
Prudential filters	-252	-449
Transitional adjustments		
Other deductions	-65	-34
Common Equity Tier 1 capital	24,515	24,538

1) Proposed dividend for 2017.

Table 3.6 Capital ratios

The CET1 capital ratio including profit increased by 110bps, driven by a decrease in Basel III REA of EUR 7.2bn.

Capital ratios

%	31 Dec 2017	31 Dec 2016
Common Equity Tier 1 capital ratio, including profit	19.5	18.4
Tier 1 capital ratio, including profit	22.3	20.7
Total capital ratio, including profit	25.2	24.7
Common Equity Tier 1 capital ratio, excluding profit	19.0	17.4
Tier 1 capital ratio, excluding profit	21.7	19.7
Total capital ratio, excluding profit	24.7	23.7

Capital ratios including Basel I floor

%	31 Dec 2017	31 Dec 2016
Common Equity Tier 1 capital ratio, including profit	12.3	11.5
Tier 1 capital ratio, including profit	14.0	12.9
Total capital ratio, including profit	15.8	15.3
Common Equity Tier 1 capital ratio, excluding profit	11.9	10.8
Tier 1 capital ratio, excluding profit	13.7	12.2
Total capital ratio, excluding profit	15.5	14.7

Leverage Ratio

	31 Dec 2017	31 Dec 2016
Tier 1 capital, EURm[1]	27,286	26,812
Tier 1 capital, transitional definition, EURm[1]	28,008	27,555
Leverage ratio exposure, EURm	538,338	555,688
Leverage ratio, transitional definition, percentage	5.2	5.0
Leverage ratio, percentage	5.1	4.8

1) Figures include profit of the period.

Table 3.7 Minimum capital requirements

Percent (%)	Minimum Capital requirements	CCoB	CCyB	Maximum of SII and SRB	Capital Buffers total	Total requirement
Common Equity Tier 1 capital	4.5	2.5	0.7	3.0	6.2	10.7
Tier 1 capital	6.0	2.5	0.7	3.0	6.2	12.2
Own funds	8.0	2.5	0.7	3.0	6.2	14.2
EURm						
Common Equity Tier 1 capital	5,660	3,144	929	3,773	7,847	13,507
Tier 1 capital	7,547	3,144	929	3,773	7,847	15,394
Own funds	10,062	3,144	929	3,773	7,847	17,909

Table 3.8 EU OV1: Overview of REA

The table provides an overview of total REA in Pillar 1 and Basel 1 floor. It also shows that credit risk (excluding counterparty credit risk) accounts for the largest risk type with approximately 76% of Pillar I REA at year end 2017. Operational risk and counterparty credit risk (including CVA) account for the second and third largest risk types respectively. The Pillar 1 REA decreased EUR 7.4bn year on year and EUR 2.5bn quarter on quarter. The decrease over the year reflects improved credit quality and reduced market risk, partly offset by PD/ADF implementation and the IRB sovereign roll-out.

	REA			Minimum capital requirement
EURm	31 Dec 2017	30 Sep 2017	31 Dec 2016	31 Dec 2017
Credit risk (excluding counterparty credit risk) (CCR)	95,532	98,975	97,111	7,643
Of which standardised approach (SA)[1]	13,391	11,606	12,484	1,071
Of which foundation IRB (FIRB) approach	14,115	17,598	14,144	1,129
Of which advanced IRB approach	68,025	69,770	70,484	5,442
Of which AIRB	47,173	48,747	48,585	3,774
Of which Retail RIRB	20,852	21,023	21,899	1,668
Of which Equity IRB under the simple risk-weight or the IMA				
Counterparty credit risk	7,303	8,409	11,287	584
Of which Marked to market[2]	831	884	2,067	66
Of which Original exposure				
Of which standardised approach				
Of which internal model method (IMM)	4,717	5,149	6,888	377
Of which Financial collateral simple method (for SFTs)	526	1,119	502	42
Of which exposure amount for contributions to the default fund of a CCP	22	19	32	2
Of which CVA	1,208	1,238	1,798	97
Settlement risk	0	3	0	0
Securitisation exposures in banking book (after the cap)	850	836	828	68
Of which IRB supervisory formula approach (SFA)	850	836	828	68
Market risk	3,520	3,142	4,474	282
Of which standardised approach (SA)	1,075	953	1,532	86
Of which IMA	2,444	2,190	2,942	196
Large exposures				
Operational risk	16,809	16,809	16,873	1,345
Of which Standardised Approach	16,809	16,809	16,873	1,345
Amounts below the thresholds for deduction (subject to 250% risk weight)	265	128	84	21
Article 3 CRR Buffer	1,500		2,500	120
Pillar 1 total	125,779	128,303	133,157	10,062
Basel 1 floor adjustment	76,645	78,077	82,655	6,132
Total	202,424	206,380	215,812	16,194

1) Excluding amounts below the thresholds for deduction (subject to 250% risk weight).

2) Excludes exposures to CCPs.

Table 3.9 Flow Statement of REA

From Q4 2016 to Q4 2017, REA decreased by EUR 7.4bn. Credit risk factors and market risk factors were the main drivers of the decrease, contributing to a REA decrease of EUR 6.4bn and 1.0bn, respectively. Within credit risk the main drivers were book size decreases and book quality improvements, both to a large extent seen in the corporate portfolio. Furthermore, foreign currency effects, caused by relative strenghtening of the euro, reduced total REA. This reduction was largely observed in the Swedish and Norwegian portfolios. Market risk exposures decreased by EUR 1.0bn, mainly driven by decreased FX exposures and IRB trading book exposures. Model and methodology changes, mainly PD implementations and the IRB sovereign roll-out, constituted the main offsetting effects among credit risk factors and overall.

EURm	Amount
Total REA, 31 December 2016	133.2
Credit risk factors	-6.4
Book size (Exposure growth)	-4.5
Book quality	-3.0
Model & methodology changes	6.1
Regulation	0.0
Foreign currency translation effects	-3.5
Securitisation	0.0
Additional buffer, Article 3	-1.0
Other	-0.6
Market risk factors	-1.0
Model & methodology changes	
Regulation	
Movements in risk levels	-1.0
Operational risk factors	-0.1
Changes in Beta factors	
Income related changes	-0.1
Total REA, 31 December 2017	125.8

4. Linkages

Table 4.1 EU LI 1: Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

			Carrying values of items				
EURm	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation [1,2]	Subject to the credit risk framework	Subject to the counterparty credit risk framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital[3]
Assets							
Cash and balances with central banks	43,081	44,554	44,554				
Loans to central banks	4,796	4,796	4,487	309		309	
Loans to credit institutions	8,592	6,398	2,669	3,730		1,822	-1
Loans to the public	310,158	319,762	291,156	23,084	6,813	23,084	-1,292
Interest bearing securities	75,294	64,377	50,267			14,110	
Financial instruments pledged as collateral	6,489	6,489	2,325			4,164	
Shares	17,180	5,313	608			4,705	
Assets in pooled schemes and unit-linked investment contracts	25,879	3,895				3,895	
Derivatives	46,111	47,378		47,378		45,682	
Fair value changes of the hedged items in portfolio hedge of interest rate risk	163	163				163	
Investments in associated undertakings and joint ventures	1,235	1,038	1,038				
Intangible assets	3,983	3,834					3,834
Properties and equipment	624	584	584				
Investment properties	1,448	37	37				
Deferred tax assets	118	122	122				0
Current tax assets	121	120	120				
Retirement benefit assets	250	250					250
Other assets	12,441	13,301	1,121			11,822	359
Prepaid expenses and accrued income	1,463	1,453	1,343			106	4
Assets held for sale	22,186	2					2
Total assets	581,612	523,866	400,431	74,501	6,813	109,861	3,157
Liabilities							
Deposits by credit institutions	39,983	41,329		9,396		5,891	31,933
Deposits and borrowings from the public	172,434	178,466	1,792	9,075		9,075	167,599
Deposits in pooled schemes and unit-linked investment contracts	26,333	4,317					4,317
Liabilities to policyholders	19,412						
Debt securities in issue	179,114	181,069				4,987	176,082
Derivatives	42,713	44,864		44,864		43,758	
Fair value changes of the hedged items in portfolio hedge of interest rate risk	1,450	1,450				1,450	
Current tax liabilities	389	382					382
Other liabilities	28,515	27,659				13,400	14,259
Accrued expenses and prepaid income	1,603	1,616					1,616
Deferred tax liabilites	722	591					591
Provisions	329	327					327
Retirement benefit obligations	281	260					260
Subordinated liabilities	8,987	8,987					8,987
Liabilities held for sale	26,031						
Total equity	33,316	32,549					32,549
Total liabilities	581,612	523,866	1,792	63,335		78,561	438,901

1) The amounts shown in the second column do not always equal the sum of the amounts shown in the remaining columns of the table, since there are items that attract capital charges according to more than one risk framework. These items are derivatives and repurchase agreements which are shown in the market and counterparty credit risk framework.

2) Including Luminor values according to the proportional method.

3) Provisions for loans are shown in the last column as negative values.

Table 4.2 EU LI 2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

The following table provides information regarding the main sources of differences between the accounting carrying values and regulatory exposures. Additionally, off-balance sheet amounts are included in the exposure amounts considered for requlatory purposes, while the items that are subject to deductions from capital are not risk weighted and are thus excluded from the table below.

	a	b	c	d	e
		Items subject to:			
EURm	Total[1]	Credit risk framework	Counterparty credit risk framework	Securitisation framework [2,3]	Market risk framework[4]
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI 1)	520,710	400,431	74,501	6,813	109,861
Liabilities carrying amount under the regulatory scope of consolidation (as per template EU LI1)	84,965	1,792	63,335		78,561
Total net amount under the regulatory scope of consolidation	435,745	398,639	11,166	6,813	31,300
Off-balance sheet amounts (pre CRM and CCF)	99,874	97,046		2,827	
Differences due to different netting rules	24,727		24,727		
Differences due to considerations for provisions in Standardised Approach	-119	-119			
Differences due to regulatory future exposures	14,302		14,302		
Differences due to credit mitigation techniques (CRMs), with substitution effects on the exposure	-27,359	6	-27,365		
Differences due to Credit Conversion Factor (CCF)	-51,564	-50,323		-1,241	
Differences due to the use of financial collateral in Standardised Approach	-889	-889			
Other differences not stated above	-19,109	18			-31,300
Exposure amounts considered for regulatory purposes	475,608	444,379	22,830	8,400	

1) Total values in column a may not equal the sum of the remaining columns in this table (b to e) as certain items are treated under both the counterparty credit risk as well as the market risk framework (as per template EU LI 1).

2) As Nordea's securitisation position is synthetic, all is classified as on-balance according to the securitisation framework. But as the securitisation is including e.g. loan promises, an off-balance part is deducted, stemming from adjustments related to Credit Conversion Factors (CCFs).

3) Sponsor activities are not included in the table above (although are included in the Securitisation chapter).

4) Exposure at default is not calculated under the market risk framework, resulting in a difference between carrying values and exposure amounts considered for regulatory purposes. Therefore the total amount of carrying values according to the market risk framework is deducted in the final line Other differences not stated above.

5. Credit risk

Table 5.1 Original Exposure split by exposure class and exposure type

At year-end 2017, 95% of total credit risk exposures were calculated using the IRB approach. IRB exposures consist mainly of retail and corporate exposures. Compared to year-end 2016, IRB exposures have increased by EUR 63bn, driven by the roll out of the sovereign IRB model and transfer Nordea's Baltic exposures to Luminor Bank. Luminor is proportionally consolidated into Nordea and uses the standardised approach. The increase was offset by lower exposures towards corporates and, to a lesser extent, retail customers.

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Sovereign	72,676	5,659	1,662	3,969	83,967
Institution	33,452	3,378	1,339	4,502	42,671
Corporate	109,910	59,301	1,168	7,861	178,241
- of which advanced	98,646	55,845			154,491
Retail	163,017	22,304	2	78	185,400
- of which mortgage	137,187	9,433			146,621
- of which other retail	23,517	11,918	2	45	35,482
- of which SME	2,312	953		32	3,298
Other non-credit obligation assets	2,761	60	3	12	2,835
Total IRB approach	381,816	90,702	4,174	16,423	493,115
Standardised exposure classes					
Central government and central banks	2,420	60		7	2,486
Regional governments and local authorities	125	10			135
Institution	260	24	1,217	921	2,423
Corporate	3,301	2,280		248	5,829
Retail	4,550	2,439		7	6,996
Exposures secured by real estate	3,041	1,464			4,505
Other[1]	3,126	67			3,193
Total standardised approach	16,823	6,344	1,217	1,183	25,567
Total	398,639	97,046	5,391	17,605	518,682

1) Includes exposures classes past due items, items belonging to regulatory high-risk categories, other items and equity.

Table 5.2 Average quarterly original exposure during 2017, split by exposure class and exposure type

The table shows average quarterly exposures by exposure class and type. It provides a comprehensive picture of the average original exposures during the year. Average numbers are broadly in line with year end numbers, with some distinctions. The largest relative changes are in the standardised portfolio, with the average quarterly value of EUR 51.7bn, which is higher than the end year value of EUR 25.6bn. The difference is driven by the the IRB sovereign roll-out, moving sovereign exposures from the standardised approach to IRB. This was slightly offset by the transfer of exposures to Luminor Bank, which includes previous Baltic exposures of Nordea. Luminor is proportionally consolidated into Nordea and uses the standardised approach. Under IRB, apart from sovereign, the portfolio with the largest difference between average and year end is the corporate portfolio, which has seen reductions in size throughout the year.

EURm	On-balance sheet items	Off-balance sheet items	Securities financing	Derivatives	Total
IRB exposure classes					
Sovereign	62,913	4,481	1,558	3,138	72,090
Institution	35,967	3,256	2,075	4,771	46,069
Corporate	114,499	61,273	1,805	9,133	186,710
- of which Advanced	101,128	57,122			158,250
Retail	164,531	22,653	15	81	187,279
- of which mortgage	138,752	9,659			148,411
- of which other retail	23,452	12,034	15	52	35,553
- of which SME	2,327	960		28	3,315
Other non-credit obligation assets	3,120	45	1	3	3,169
Total IRB approach	381,030	91,708	5,454	17,126	495,317
Standardised exposure classes					
Central government and central banks	23,378	236	597	548	24,759
Regional governments and local authorities	798	1,363		475	2,637
Institution	151	7	1,958	1,868	3,984
Corporate	2,603	1,745		231	4,579
Retail	4,400	2,440		13	6,853
Exposures secured by real estate	3,069	1,601			4,670
Other[1]	3,867	68	239	40	4,214
Total standardised approach	38,266	7,461	2,794	3,175	51,696
Total	419,296	99,169	8,248	20,301	547,014

1) Includes exposures classes administrative bodies and non-commercial undertakings, multilateral developments banks, international organisations, past due items, items belonging to regulatory high-risk categories, other items and equity.

Table 5.3 Minimum capital requirements for credit risk, split by exposure class

The table shows a comprehensive overview of regulatory exposures and capital requirements split by exposure class. IRB exposures remain the largest component of REA, comprising EUR 88.0bn (86%) of a EUR 101.9bn total (compared to 94bn of 108bn last year). The largest capital requirements result from corporate exposures under the IRB approach.

EURm	Original exposure	Exposure	Average risk weight	REA	Capital requirement
IRB exposure classes					
Sovereign	83,967	82,141	2%	1,869	150
Institution	42,671	40,127	15%	6,163	493
Corporate	178,241	143,580	40%	57,004	4,560
- of which advanced	154,491	123,021	38%	47,173	3,774
Retail	185,400	178,595	12%	20,888	1,671
- of which mortgage	146,621	143,598	8%	11,452	916
- of which other retail	35,482	32,019	26%	8,398	672
- of which SME	3,298	2,978	35%	1,038	83
Other non-credit obligation assets	2,835	2,550	80%	2,034	163
Total IRB approach	493,115	446,993	20%	87,958	7,037
Standardised exposure classes					
Central government and central banks	2,486	2,484	11%	281	22
Regional governments and local authorities	135	133	5%	7	1
Institution	2,423	2,306	7%	172	14
Corporate	5,829	3,324	98%	3,264	261
Retail	6,996	4,560	71%	3,225	258
Exposure secured by real estate	4,505	4,388	56%	2,458	197
Other[1]	3,193	3,020	150%	4,529	362
Total standardised approach	25,567	20,216	69%	13,935	1,115
Total	518,682	467,209	22%	101,893	8,151

1) Includes exposures classes past due items, items belonging to regulatory high-risk categories, other items and equity.

Table 5.4 Exposure secured by collaterals, guarantees and credit derivatives, split by exposure class

At the end of 2017, the share of total exposure secured by eligible collateral remained stable, 45% (44%). The corresponding figure for the IRB portfolio was 45% (56%). The decrease is mainly driven by the inclusion of sovereign exposures, that utilise relatively less collateral than retail or corporate, in the IRB portfolio. Approximately 3% (3%) of total exposure was secured by guarantees and credit derivatives.

EURm	Original exposure	Exposure	- of which secured by guarantees and credit derivatives	- of which secured by collateral	Average weighted LGD[1]
IRB exposure classes					
Sovereign	83,967	82,141	522	893	45.0%
Institution	42,671	40,127	188	114	20.3%
Corporate	178,241	143,580	10,840	59,960	30.3%
- of which Advanced	154,491	123,021	10,354	56,450	28.0%
Retail	185,400	178,595	2,248	142,036	17.2%
- of which secured by immovable property	146,621	143,598		138,424	14.4%
- of which other retail	35,482	32,019	1,849	2,121	29.3%
- of which SME	3,298	2,978	399	1,491	24.2%
Other non-credit obligation assets	2,835	2,550	18	52	
Total IRB approach	493,115	446,993	13,817	203,055	26.8%
Standardised exposure classes					
Central government and central banks	2,486	2,484			
Regional governments and local authorities	135	133			
Institution	2,423	2,306	17	82	
Corporate	5,829	3,324	9	717	
Retail	6,996	4,560	38	103	
Exposures secured by real estate	4,505	4,388		4,388	
Other[2]	3,193	3,020	23		
Total standardised approach	25,567	20,216	87	5,290	
Total	518,682	467,209	13,903	208,346	

1) IRB total average LGD is excluding other non-credit obligation assets.

2) Includes exposures classes past due items, items belonging to regulatory high-risk categories, other items and equity.

Table 5.5 EU CRB-B: Total and average net amount of exposures

The size of the IRB assets increased EUR 55bn as a result of the IRB sovereign roll-out portfolio, moving exposures from these standardised portfolios. The increase in the IRB portfolio was slightly offset by lower volumes in the corporate IRB portfolio.

EURm	Net exposure at the end of the period	Average net exposure over the period
IRB approach		
Central governments or central banks	78,332	67,393
Institutions	36,829	39,222
Corporates	167,278	173,724
- of which Specialised Lending	427	637
- of which SME	55,599	55,073
Retail	184,871	186,695
- of which Secured by real estate property	147,825	149,624
- of which SME	1,254	1,271
- of which Non-SME	146,571	148,353
- of which Other Retail	37,046	37,070
- of which SME	1,975	1,976
- of which Non-SME	35,071	35,094
Equity		
Other non-credit obligation assets	2,818	3,162
Total IRB approach	470,129	470,196
Standardised approach		
Central governments or central banks	2,486	24,732
Regional governments or local authorities	135	2,262
Public sector entities	41	286
Multilateral Development Banks		452
International Organisations		103
Institutions	391	415
Corporates	5,565	6,591
- of which SME	1,069	1,190
Retail	6,977	7,916
- of which SME	1,645	1,969
Secured by mortgages on immovable property	4,502	6,570
- of which SME	10	18
Exposures in default	489	539
Items associated with particularly high risk	503	470
Covered bonds		
Claims on institutions and corporates with a short-term credit assessment		
Collective investments undertakings (CIU)		
Equity exposures	1,173	1,217
Other exposures	847	1,385
Total standardised approach	23,109	52,939
Total	493,238	523,135

Table 5.6 EU CRB-C: Geographical breakdown of exposures

The table EU CRB-C displays credit risk exposures by exposure class and domicile. Out of total net exposures treated under the IRB approach, 84% are within the Nordic countries. For IRB retail, Nordic countries make out 99%. For the IRB corporate exposures, the Nordic countries hold a 83% share compared to 79% at year-end 2016, and the total net exposures have decreased by EUR 17bn. In the IRB sovereign portfolio, the Nordic countries have a 53% share, whereas the US amounts to EUR 28bn, or 36% of total IRB sovereign. The US share of total IRB and standardised has somewhat decreased, from 8% at year end 2016 to 7%. in 2017 For IRB institutions, the major part of exposures stems from bond positions, which are concentrated to the Nordic countries. The standardised portfolio accounts for 5% of total net exposures, decreased from 20% in 2016. The significant decrease is predominantly explained by IRB sovereign roll-out during 2017, i.e. exposures previously treated under the standardised approach are now included in the IRB portfolio.

	Net exposures									
	Nordic countries	of which Denmark	of which Finland	of which Norway	of which Sweden	Baltic countries	Russia	USA	Other geograph-ical areas	Total
IRB approach										
Central governments or central banks	41,464	6,369	21,934	2,525	10,636		209	28,345	8,314	78,332
Institutions	30,891	14,544	169	5,404	10,775	2	3	587	5,346	36,829
Corporates	138,904	40,696	31,434	30,854	35,920	2,142	2,318	3,083	20,831	167,278
of which Specialised Lending	299	5	204	76	13				129	427
of which SME	53,975	19,016	12,325	11,130	11,503	148		34	1,442	55,599
Retail	183,064	51,597	43,789	32,917	54,760	49	14	219	1,526	184,871
of which Secured by real estate property	146,552	41,544	29,320	27,011	48,676	27	10	175	1,062	147,825
of which SME	1,254	91	972	71	119					1,254
of which Non-SME	145,298	41,453	28,348	26,940	48,557	27	10	175	1,062	146,571
of which Other Retail	36,512	10,053	14,469	5,907	6,084	22	4	44	464	37,046
of which SME	1,878	252	1,023	246	357	2	1	4	90	1,975
of which Non-SME	34,635	9,801	13,446	5,661	5,727	19	3	40	374	35,071
Equity										
Other non-credit obligation assets	2,520	878	405	331	905		45	251	2	2,818
Total IRB approach	396,844	114,084	97,731	72,031	112,997	2,193	2,588	32,485	36,019	470,129
Standardised approach										
Central governments or central banks	125	9	18		98	1,488	2		871	2,486
Regional governments or local authorities						135				135
Public sector entities						41				41
Multilateral Development Banks										
International Organisations										
Institutions	228	3	1	206	18	50	3	1	108	391
Corporates	202	145	9	5	44	2,799	40	1	2,523	5,565
of which SME	7	5	1		1	1,025			37	1,069
Retail	4,609	1,200	6	1,004	2,399	1,428	2	4	934	6,977
of which SME	752	85	3	195	468	845	2	3	44	1,645
Secured by mortgages on immovable property	12	1	7	2	1	2,502	3	2	1,984	4,502
of which SME						10				10
Exposures in default	12	2		4	6	453	1		22	489
Items associated with particularly high risk	79	70	3		6	18		100	306	503
Covered bonds										
Claims on institutions and corporates with a short-term credit assessment										
Collective investments undertakings (CIU)										
Equity exposures	1,092	32	26	220	814	4		3	75	1,173
Other exposures	503	34	36	387	47	259			84	847
Total standardised approach	6,863	1,496	107	1,827	3,433	9,176	51	111	6,908	23,109
Total	403,706	115,581	97,837	73,858	116,430	11,369	2,639	32,596	42,928	493,238

Table 5.7 EU CRB-D: Concentration of exposures by industry

Table CRB-D shows exposure split by industry group 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 industry groups where the group "real estate management and investment" has the largest share of total corporate exposures. Together with the second largest corporate exposure industry group - other financial institutions - they account for 35% of total IRB corporate exposure. The retail portfolio consists mainly of residential mortgages classified under "other, public and organisations" industry group, which accounts for 98% of total retail IRB exposure. During 2017, sovereign exposures were rolled out under the IRB approach and are fully allocated to the industry group "Other, public and organisations".

	Construction and engineering	Consumer durables (cars, appliances, etc.)	Consumer staples (food, agriculture etc.)	Energy (oil, gas, etc.)	Health care and pharmaceuticals	Industrial capital goods	Industrial commercial services	IT software, hardware and services	Media and leisure	Metals and mining materials	Other financial institutions	Other materials (chemical, building materials, etc.)	Other, public and organisations	Paper and forest materials	Real estate management and investment	Retail trade	Shipping and offshore	Telecommunication equipment	Telecommunication operators	Transportation	Utilities (distribution and production)	Total
IRB approach																						
Central goverments or central banks													78,332									78,332
Institutions											36,829											36,829
Corporates	7,264	4,139	11,404	3,469	1,647	6,344	15,589	2,342	2,464	1,305	15,241	6,812	5,896	1,992	43,976	12,253	10,759	559	2,088	4,361	7,373	167,278
Retail	321	53	210	5	92	32	432	86	216	10	60	96	181,346	55	1,183	445	16	2	6	175	31	184,871
Equity																						
Other non-credit obligations													2,818									2,818
Total IRB approach	7,585	4,192	11,614	3,474	1,739	6,376	16,020	2,428	2,680	1,315	52,131	6,908	268,392	2,047	45,159	12,698	10,776	561	2,093	4,536	7,404	470,129
Standardised approach																						
Central governments or central banks									12				2,475									2,486
Regional governments or local authorities				2	0			1	0				132		0					0		135
Public sector entities	0		0	0	1		0	0	1				35		2	0				0	1	41
Institutions			0	0				30					352		8	0				0	0	391
Corporates	249		155	187	10		528	65	49	23	22		2,838	0	483	644			8	280	25	5,565
Retail	263	9	261	6	23	7	232	53	57	9	4	22	5,502	11	61	251	21	0	1	176	9	6,977
Secured by mortgages on immovable property	1		2		0		1	1	1		1,420		3,072		1	3				1		4,502
Exposures in default	43	0	8	2	0	0	72	2	5	1	0	0	114	0	96	114				28	2	489
Items associated with particularly high risk	0							10			422		58		12							503
Equity exposures	0				0		0	0			130		1,043		0							1,173
Other exposures	11	1	5	0	2	1	13	4	4	1	0	2	769	0	3	21	0	0	0	9	1	847
Total standardised approach	568	11	431	198	37	8	846	165	129	33	1,999	24	16,389	11	666	1,034	21	1	9	493	37	23,109
Total	8,152	4,203	12,045	3,672	1,775	6,384	16,866	2,593	2,809	1,348	54,130	6,932	284,781	2,058	45,826	13,732	10,797	562	2,102	5,030	7,441	493,238

Table 5.8 EU CRB-E: Maturity of exposures

EU CRB-E discloses net exposure values for on-balance sheet exposures. For exposures treated under the IRB approach, about 47% are in the >5 years bucket. For corporate IRB, most exposures are within the one to five year bucket, whereas sovereign IRB exposures are predominantly in the on demand category, mainly explained by accounts at central banks. Sovereign exposures in the standardised approach are mainly explained by exposures stemming from the consolidation of Luminor. Remaining parts include for instance deferred tax assets (DTAs) subject to risk weighting.

	Net exposure value					
	On demand	>= 1 year	> 1 year <= 5 years	>5 years	No stated maturity	Total
IRB approach						
Central governments or central banks	46,706	6,918	14,360	3,785	903	72,673
Institutions	1,567	5,954	23,148	2,071	711	33,452
Corporates	455	32,483	42,994	26,118	5,930	107,980
- of which Specialised Lending		45	48	135	0	229
- of which SME	42	12,633	14,858	14,694	3,376	45,602
Retail	19	3,007	9,156	145,996	4,392	162,569
- of which Secured by real estate property	12	1,670	5,635	130,703	196	138,217
- of which SME	0	96	261	642	81	1,080
- of which Non-SME	12	1,574	5,373	130,062	115	137,137
- of which Other Retail	7	1,336	3,521	15,308	4,181	24,352
- of which SME	1	156	541	304	196	1,198
- of which Non-SME	6	1,185	2,981	14,996	3,987	23,155
Equity						
Other non-credit obligation assets	1	666	1,822	268	0	2,758
Total IRB approach	48,748	49,029	91,481	178,238	11,936	379,432
Standardised approach						
Central governments or central banks	687	701	34	1,065		2,486
Regional governments or local authorities	0	9	62	64		135
Public sector entities		35	6	0		41
Multilateral Development Banks						
International Organisations						
Institutions	61	266	61	1		389
Corporates	68	1,544	2,250	243	0	4,106
- of which SMEs	10	362	629	68		1,069
Retail	33	588	2,404	1,665	125	4,815
- of which SMEs	21	293	1,101	160	5	1,580
Secured by mortgages on immovable property	0	22	68	2,953		3,043
- of which SMEs		1	2	6		10
Exposures in default	30	246	152	59	2	488
Items associated with particularly high risk		16	2		485	503
Covered bonds						
Claims on institutions and corporates with a						
Collective investments undertakings (CIU)						
Equity exposures		1	2		1,170	1,173
Other exposures	1	181	577	2	85	847
Total standardised approach	879	3,609	5,618	6,053	1,867	18,027
Total	49,628	52,638	97,099	184,291	13,803	397,459

Table 5.9 EU CR1-A: Credit quality of exposures by exposure class and instrument

Nordea's total net value exposure at the end of 2017 was EUR 493.2bn, out of which EUR 470.1bn (95.3%) was treated under the internal ratings based approach and EUR 23.1bn (4.7%) under the standardised approach. Defaulted exposures are mainly seen in the corporate portfolio, with a higher proportion of defaulted in the corporate SME subportfolio.

	a	b	c	e	f	g
	Original exposures		Specific credit risk adjustment (allowances)	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
IRB approach						
Central governments or central banks		78,335	4			78,332
Institutions	0	36,829	0	0	0	36,829
Corporates	5,813	163,399	1,933	-43	-292	167,278
of which Specialised Lending	40	391	4			427
of which SME	2,324	54,148	872	-3	-39	55,600
Retail	2,265	183,056	450	-68	3	184,871
of which Secured by real estate property	1,342	146,536	53	-4	-1	147,825
of which SME	27	1,230	3	0	0	1,254
of which Non-SME	1,315	145,306	50	-25	-5	146,571
of which Other Retail	923	36,520	397			37,046
of which SME	114	1,894	32			1,975
of which Non-SME	809	34,626	364			35,071
Equity						
Other non-credit obligation assets	6	2,814	3			2,818
Total IRB approach	8,084	464,434	2,389	-111	-290	470,129
Standardised approach						
Central governments or central banks	0	2,486	0	0	0	2,486
Regional governments or local authorities	0	135	0			135
Public sector entities		41	0			41
Multilateral Development Banks						
International Organisations						
Institutions	0	398	8	0	0	391
Corporates	11	5,573	19	-3	-7	5,565
- of which SME		1,085	16			1,069
Retail	12	6,978	13	-12	-1	6,977
- of which SME	10	1,638	3	0	0	1,645
Secured by mortgages on immovable property	3	4,502	3	0	0	4,502
- of which SME	0	9	0			10
Exposures in default	587	26	125			489
Items associated with particularly high risk		517	15			503
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective investments undertakings (CIU)						
Equity exposures		1,173	0			1,173
Other exposures		847	0			847
Total standardised approach	614	22,678	183	-15	-7	23,109
Total	8,697	487,112	2,572	-126	-297	493,238
- of which loans	7,706	337,397	159			344,944
- of which debt securities		51,883				51,883
- of which off-balance sheet exposures	990	96,057	91		-31	96,955

Table 5.10 EU CR1-B: Credit quality of exposures by industry or counterparty types

The largest sectors in Nordea, in terms of net values, were Other, public and organisations, Other financial institutions and Real estate management with EUR 285bn (58%), 54bn (11%) and 46bn (9%), respectively. The industry sectors with the most defaulted exposures were Other, public and organisations, Energy (oil, gas, etc.) and Consumer staples (food, agriculture etc.) with EUR 2.3bn (27%), 1.1bn (13%) and 0.9bn (11%) respectively.

	a	b	c	e	f	g
	Original exposures					
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment (allowances)	Accumulated write-offs	Credit risk adjustment charges of the period	(a+b-c)
Construction and engineering	251	7,956	55	-3	-17	8,152
Consumer durables (cars, appliances, etc.)	365	3,913	75	0	-20	4,203
Consumer staples (food, agriculture etc.)	947	11,303	205	-7	16	12,045
Energy (oil, gas, etc.)	1,115	2,761	204	-4	-153	3,672
Health care and pharmaceuticals	8	1,769	2	-1	1	1,775
Industrial capital goods	78	6,337	32	0	-20	6,384
Industrial commercial services	390	16,590	116	-7	-26	16,864
IT software, hardware and services	44	2,567	26	0	1	2,585
Media and leisure	43	2,775	9	-2	4	2,809
Metals and mining materials	52	1,313	17	0	3	1,348
Other financial institutions	324	53,983	176	-8	-48	54,130
Other materials (chemical, building materials, etc.)	355	6,679	102	-1	-18	6,932
Other, public and organisations	2,334	283,579	1,120	-82	-5	284,793
Paper and forest materials	21	2,039	1	0	1	2,058
Real estate management and investment	779	45,215	168	-1	-12	45,826
Retail trade	507	13,349	125	-7	-21	13,732
Shipping and offshore	749	10,129	81	-2	40	10,797
Telecommunication equipment	1	561	1	0	0	562
Telecommunication operators	41	2,070	9	0	-7	2,102
Transportation	129	4,926	25	-1	-6	5,030
Utilities (distribution and production)	163	7,299	22	0	-11	7,441
Total	8,697	487,112	2,572	-126	-297	493,238

Table 5.11 EU CR1-C: Credit quality of exposures by geography

Nordea's credit risk exposures are mainly concentrated in the Nordic region. Nordea's total net exposures amount to EUR 493bn, of which EUR 404bn equivalent to 82% percent is in the Nordic area. The largest single countries are Sweden, Denmark and Finland, with EUR 116bn (24%), EUR 116bn (23%) and EUR 98bn (20%) of net values respectively. The largest amount of defaulted exposures are in Denmark at EUR 3bn, mainly corporate and retail exposures.

	a	b	c	e	f	g
	Original exposures					
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment (allowances)	Accumulated write-offs (write-offs not covered by allowances)	Credit risk adjustment charges of the period (allowances used to cover write-offs)	Net values (a+b-c)
Nordic countries	6,554	399,226	2,179	-114	-207	403,601
- of which Denmark	3,048	113,488	994	-28	-47	115,542
- of which Finland	1,704	96,594	476	-36	-11	97,822
- of which Norway	1,369	72,991	510	-14	-117	73,849
- of which Sweden	433	116,153	186	-35	-31	116,400
Baltic countries	562	10,872	157	-8	-5	11,278
United States	10	32,593	6		6	32,597
Poland	12	2,224	0			2,236
Russia	77	2,624	33	0	-12	2,667
Other	1,482	39,574	209	-4	-79	40,846
Total	8,697	487,112	2,572	-126	-297	493,238

Table 5.12 EU CR1-D: Ageing of past-due exposures

Past due is defined as a loan payment that has not been made as of its due date. Past due 6 days or more amounted to EUR 3.6bn at the end of 2017. 43 % of total past due loans are within the interval 6-30 days.

	Gross carrying values					
EURm	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
Loans	1,535	434	227	298	339	737
Debt securities						
Total	1,535	434	227	298	339	737

Table 5.13 EU CR1-E: Non-performing and forborne exposures

At the end of 2017 non-performing loans amounted to EUR 7.4bn. With non-performing means customers that are scored or rated 0-, 0 or 0+ or/and past due more than 90days. Forborne non-performing amounted to EUR 3.1bn. Total Accumulated impairment and provisions and negative fair value adjustments due to credit risk amounted at the end of 2017 to EUR 2.5bn.

	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
				Of which non-performing				On performing exposures		On non-performing exposures			
EURm		Of which performing but past due > 30 days and <= 90 days	Of which performing forborne		Of which: defaulted	Of which: impaired	Of which: forborne		Of which: forborne		Of which: forborne	Of which non-performing forborne	Of which: forborne
Debt securities	36,460												
Loans and advances	354,325	819	2,538	7,370	7,370	6,391	3,140	-490	-3	-2,015	-877	4,626	1,620
Off-balance sheet exposures	102,396		406	1,018	1,023	245	1,907	0		91		17	19

Table 5.14 EU CR2-A: Changes in stock of general and specific credit risk adjustments

Accumulated Specific credit risk adjustment had a closing balance of EUR 2.5bn at the end of 2017. Business combinations, including acquisitions and disposals of subsidiaries of EUR 50m intends provision and reversels steeming from Baltics first three quarters of the year. Nordea does not have general credit risk adjustment due to use of IFRS accounting. General credit risk adjustment does not apply for Nordea.

EURm	Accumulated Specific credit risk adjustment
Opening balance	-2,470.9
Increases due to amounts set aside for estimated loan losses during the period	-975.2
Decreases due to amounts reversed for estimated loan losses during the period	651.1
Decreases due to amounts taken against accumulated credit risk adjustments	309.5
Impact of exchange rate differences	45.1
Business combinations, including acquisitions and disposals of subsidiaries	-50.1
Other adjustments	-2.6
Closing balance	-2,493.2
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	55.0
Specific credit risk adjustments recorded directly to the statement of profit or loss	-125.7

Table 5.15 EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities

Impaired loans gross in the Group increased to EUR 6.4bn, opening balance was EUR 5.5bn. Main changes are explained by a increase of new defaulted customers of EUR 1.6bn, decrease of defaulted customers turning to non-defaulted EUR 0.7bn and write-offs of EUR 0.5bn.

EURm	Gross carrying value impaired exposures
Opening balance	5,549
Loans and debt securities that have defaulted or impaired since the last reporting period	1,604
Returned to non-defaulted (and non-impaired) status	-708
Amount written off	-468
Other changes	414
Closing balance	6,391

Table 5.16 Loans, impaired loans, allowances and provisioning ratios, split by customer type

EURm	Loans after allowances 2016	Loans after allowances 2017	Impaired loans before allowances	Impaired loans in % of loans	Allowances for collectively assessed loans	Individual allowances	Total provision-ing ratio
To central banks and credit institutions	20,261	13,574	0	0.00	1	8	>100%
- of which central banks	11,235	4,807			0	0	
- of which credit institutions	9,026	8,767	0	0.01	1	8	>100%
To the public	317,689	316,078	6,390	2.01	411	2,073	39%
- of which corporate	152,964	150,210	4,495	2.95	295	1,678	44%
Construction and engineering	5,158	4,893	168	3.37	8	84	55%
Consumer durables (cars, appliances, etc.)	1,611	2,228	213	9.25	7	73	37%
Consumer staples (food, agriculture, etc.)	10,796	10,078	749	7.27	21	211	31%
Energy (oil, gas, etc.)	2,678	1,965	860	39.02	28	210	28%
Financial institutions	13,600	15,409	353	2.27	2	126	36%
Health care and pharmaceuticals	1,393	1,423	15	1.04	1	5	40%
Industrial capital goods	1,959	1,661	60	3.47	22	38	100%
Industrial commercial services, etc.	11,738	11,330	358	3.11	11	158	47%
IT software, hardware and services	1,634	1,956	52	2.60	2	30	63%
Media and leisure	2,472	2,379	36	1.50	2	21	66%
Metals and mining materials	856	713	41	5.60	2	20	53%
Other materials (chemical, building materials, etc.)	4,589	4,119	280	6.58	8	128	49%
Other, public and organisations	3,166	5,034	29	0.57	15	70	>100%
Paper and forest materials	1,610	1,331	7	0.53	2	2	55%
Real estate management and investment	41,142	42,501	540	1.26	61	170	43%
Retail trade	9,003	9,141	327	3.51	12	152	50%
Reversed repurchase agreements	19,176	16,292			0	0	
Shipping and offshore	10,494	8,380	275	3.22	81	93	63%
Telecommunication equipment	76	29	1	4.39	0	1	51%
Telecommunication operators	1,044	893	15	1.62	1	32	>100%
Transportation	3,659	3,473	85	2.43	6	30	42%
Utilities (distribution and production)	5,109	4,982	31	0.61	1	24	84%
- of which household	161,099	161,156	1,895	1.17	116	394	27%
Mortgage financing	133,341	133,378	1,053	0.79	50	101	14%
Consumer financing	27,759	27,777	842	2.99	66	293	43%
- of which public sector	3,626	4,712					
Total loans	337,950	329,652	6,391	1.92	411	2,081	39%
- of which in the life insurance operation	375	0					

Provisions for off-balance sheet items for 2017 were EUR 0m for credit institutions and EUR 91m for lending to the public.

Table 5.17 Credit risk adjustments, split by customer type

	Specific credit risk adjustments charges					
	Individually assessed		Collectively assessed		Total	
EURm	Provisions	Reversals	Provisions	Reversals	Provisions	Reversals
To central banks and credit institutions			-1	1	-1	1
- of which central banks						
- of which credit institutions			-1	1	-1	1
To the public	-814	392	-160	258	-974	650
- of which corporate	-658	258	-146	238	-805	497
Construction and engineering	-26	11	-3	3	-29	14
Consumer durables (cars, appliances, etc.)	-19	4	-2	11	-21	15
Consumer staples (food, agriculture, etc.)	-44	36	-2	24	-46	60
Energy (oil, gas, etc.)	-163	14	-15	11	-178	25
Financial institutions	-55	13	0	-7	-55	6
Health care and pharmaceuticals	-1	2	-1	1	-2	3
Industrial capital goods	-23	4	-2	2	-25	6
Industrial commercial services, etc.	-58	26	-7	8	-65	34
IT software, hardware and services	-10	12	-2	1	-12	12
Media and leisure	-5	5	-3	4	-8	9
Metals and mining materials	-2	4	-2	1	-3	5
Other materials (chemical, building materials, etc.)	-40	15	0	5	-40	21
Other, public and organisations	-19	30	-23	32	-42	62
Paper and forest materials	-1	1	-1	1	-2	1
Real estate management and investment	-52	15	-18	20	-70	35
Retail trade	-69	37	-5	6	-74	43
Reversed repurchase agreements	0	0	0	0	0	0
Shipping and offshore	-39	26	-57	111	-97	137
Telecommunication equipment	0	0	0	0	0	0
Telecommunication operators	-7	0	0	0	-8	0
Transportation	-12	4	-3	2	-14	6
Utilities (distribution and production)	-12	0	-1	1	-13	2
- of which household	-156	134	-14	19	-169	153
Mortgage financing	-61	40	-10	9	-71	49
Consumer financing	-94	94	-4	10	-98	104
- of which public sector	0	0	0	0	0	0
Total loans	-814	392	-161	259	-975	651
- of which in the life insurance operations						

Table 5.18 Loan losses, split by customer type

EURm	New provisions and write-offs	Reversals and recoveries	Net loan losses	Loan loss ratio bps
To central banks and credit institutions	-1	1		
- of which central banks				
- of which credit institutions	-1	1		
To the public	-1,192	765	-426	13
- of which corporate	-916	551	-365	25
Construction and engineering	-44	19	-25	51
Consumer durables (cars, appliances, etc.)	-37	16	-20	91
Consumer staples (food, agriculture, etc.)	-72	80	8	
Energy (oil, gas, etc.)	-182	25	-157	798
Financial institutions	-72	15	-58	29
Health care and pharmaceuticals	-3	3	0	
Industrial capital goods	-26	6	-20	119
Industrial commercial services, etc.	-77	48	-29	25
IT software, hardware and services	-13	14	1	
Media and leisure	-10	12	2	
Metals and mining materials	-3	7	3	
Other materials (chemical, building materials, etc.)	-42	22	-20	49
Other, public and organisations	-34	31	-3	2
Paper and forest materials	-3	3	0	
Real estate management and investment	-78	51	-27	6
Retail trade	-85	51	-34	37
Reversed repurchase agreements				
Shipping and offshore	-99	137	38	
Telecommunication equipment	0	0	0	
Telecommunication operators	-8	0	-7	84
Transportation	-16	8	-8	24
Utilities (distribution and production)	-13	2	-11	22
- of which household	-275	214	-61	4
Mortgage financing	-81	53	-28	2
Consumer financing	-194	162	-32	12
- of which public sector	0	0	0	0
Total	-1,193	766	-427	13

Table 5.19 Impaired loans to the public: gross, allowances and past due loans not impaired split by geography and industry

EURm	Total 2016	Total 2017	Denmark	Finland	Norway	Sweden	Russia	Outside Nordic	Allowances	Total provisioning ratio	Past due loans, not impaired
To the public											
- of which corporate	3,533	4,495	1,753	568	1,008	242	26	899	1,974	44%	971
Construction and	160	168	98	28	22	7	0	12	92	55%	62
Consumer durables (cars,	123	213	28	27	142	15	0	2	80	37%	41
Consumer staples (food, agriculture, etc.)	909	749	689	50	1	1	0	9	232	31%	104
Energy (oil, gas, etc.)	116	860	0	2	338	0	7	514	239	28%	11
Financial institutions	284	353	246	6	57	41	0	3	128	36%	23
Health care and pharmaceuticals	18	15	10	4	1	0	0	0	6	40%	9
Industrial capital goods	34	60	21	31	0	5	0	3	60	100%	10
Industrial commercial services, etc.	392	358	116	49	47	66	0	81	170	47%	117
IT software, hardware and services	65	52	25	27	0	0	0	0	33	63%	8
Media and leisure	63	36	19	9	4	0	0	4	24	66%	15
Metals and mining materials	63	41	0	11	28	0	0	2	22	53%	4
Other materials (chemical, building materials, etc.)	220	280	65	161	11	22	0	20	136	49%	13
Other, public and organisations	19	29	10	2	1	0	0	17	85	293%	264
Paper and forest materials	7	7	5	1	0	1	0	0	4	55%	5
Real estate management and investment	400	540	213	74	97	0	19	137	231	43%	167
Retail trade	331	327	162	61	27	67	0	10	164	50%	73
Reversed repurchase agreements											
Shipping and offshore	244	275	22	4	187	0	0	63	174	63%	3
Telecommunication equipment	1	1	0	1	0	0	0	0	1	51%	0
Telecommunication operators	16	15	0	9	4	2	0	0	32	217%	1
Transportation	45	85	21	12	26	4	0	22	36	42%	35
Utilities (distribution and production)	23	31	2	1	17	11	0	0	26	84%	4
- of which household	2,008	1,895	864	653	139	153	0	87	510	27%	1,454
Mortgage financing	1,126	1,053	458	363	115	60	0	57	151	14%	1,026
Consumer financing	882	842	405	290	24	93	0	30	359	43%	429
- of which public sector	0	0	0	0	0	0	0	0	0	0%	5
Total impaired loans	5,541	6,390	2,616	1,221	1,147	394	26	986			
Past due loans	2,114	2,430	493	703	598	196	0	440			2,430
Allowances	2,424	2,484	846	461	485	295	33	363	2,484		
Total provisioning ratio	44%	39%	32%	38%	42%	75%	130%	37%			

Table 5.20 Reconciliation of allowance accounts for impaired loans

	Specific credit risk adjustments		
EURm	Individually assessed	Collectively assessed	Total
Opening balance	-1,952.8	-518.2	-2,470.9
Changes through the income statement	-421.6	97.5	-324.1
- Of which Provisions	-813.3	-162.0	-975.2
- Of which Reversals	391.7	259.5	651.1
Allowances used to cover write-offs	309.5		309.5
Reclassificaitons	-45.2	-7.5	-52.8
Currency translation differences	31.9	13.2	45.1
Closing balance	-2,078.2	-415.0	-2,493.2

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 5.21 EU CR3: Credit risk mitigation techniques – overview

Nordea's share of exposures that have at least one Credit Risk Mitigation (CRM) mechanism (collateral, financial guarantees, credit derivatives) associated with them exceeds exposures that do not benefit from any CRM mechanism. 56% of Nordea's share of exposures have at least one CRM mechanism at year end 2017. The majority of exposures are secured by collaterals, mainly real estate.

EURm	Exposures unsecured - carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Loans	126,895	225,504	204,365	10,476	60
Total debt securities	51,866	17		17	
Total exposures	178,761	225,521	204,365	10,493	60
- of which defaulted	2,787	4,923	3,945	393	

Table 5.22 EU CR4: Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects

The table shows that out of the total exposure amount pre CCF and CRM of EUR 23bn (EUR 103bn in 2016), approximately 73% of the exposure is on-balance exposure (88% in 2016). A EUR 67bn decrease of the sovereign asset classes was the largest driver of differences from 2016. This was primarily caused by the IRB Sovereign roll-out.

EURm	Exposures before CCF and CRM		Exposures post-CCF and CRM			
Asset classes	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	REA	REA density
Central governments or central banks	2,427	60	2,454	30	281	11%
Regional governments or local authorities	125	10	128	5	7	5%
Public sector entities	41	0	52	0	3	6%
Institutions	366	24	268	14	77	27%
Corporate	3,285	2,280	2,671	487	3,098	98%
Retail	4,538	2,439	4,418	136	3,224	71%
Secured by mortgages on immovable property	3,038	1,464	2,965	1,422	2,458	56%
Exposures in default	422	66	404	26	592	138%
Exposures associated with particularly high risk	503		503		754	150%
Equity	1,173		1,173		2,598	221%
Other items	847		846		582	69%
Total	16,765	6,344	15,882	2,121	13,673	76%

Table 5.23 EU CR5: Standardised approach - credit risk exposures by regulatory portfolio and risk

Exposures shown are on- and off-balance sheet exposures post conversion factor and post risk mitigation techniques. At the end of 2017, the total exposure amount was EUR 18.0bn, down significantly from EUR 97.8bn in 2016. The largest reduction took place in the 0% risk weight bucket, which decreased from EUR 82.6bn to EUR 2.6bn. This reduction was caused by the IRB Sovereign roll-out. Remaining exposures are predominately held in the 100% and 75% risk weight bucket, mainly corporate and retail exposures, respectively. Sovereign exposures which receive a 250% risk weight consist of deferred tax assets (DTAs) which rely on future profitability and arise from temporary differences. These remain in the standardised portfolio after the IRB sovereign roll-out.

EURm	Risk weight														
Exposure classes	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Other	Total
Central governments or central banks	2,363									15		106				2,484
Regional governments or local authorities	99				34											133
Public sector entities	46				0		7									52
Institutions					219		60			3						282
Corporate										3,157	1					3,158
Retail									4,559							4,559
Secured by mortgages on immovable property						2,968				1,420						4,388
Exposures in default										156	290					446
Associated with particularly high risk											503					503
Equity										223		950				1,173
Other items	81				44					311		6			404	846
Total	2,588				297	2,968	66		4,559	5,286	794	1,061			404	18,025

Table 5.24 Standardised exposure classes, distributed by credit quality step

The table presents the exposures and the equivalent S&P ratings. Following Nordea's sovereign IRB roll-out during 2017, original exposure in central governments and central banks has decreased to EUR 2.5bn. The lowest credit quality step includes Deferred Tax Assets (DTAs), subject to a risk weight of 100% or 250%, depending on the nature of the tax asset. Furthermore, exposures towards institutions all fall under the highest credit quality step.

EURm			Original Exposure		Exposure	
Credit quality step	Standard & Poor's rating	Risk weight	31 Dec 2017	31 Dec 2016	31 Dec 2017	31 Dec 2016
(a) Central Governments or Central banks						
1	AAA to AA-	0%	2,365	72,647	2,363	76,164
2	A+ to A-	20%		295		287
3	BBB+ to BBB-	50%		0		0
4 to 6 or blank	BB+ and below, or without rating	100-250%	122	739	122	250
Total			2,486	73,682	2,484	76,701
(b) Regional Governments or local authorities						
1	AAA to AA-[1]	0% - 20%[1]	135	11,606	133	8,488
2	A+ to A-	50%		5		5
3 to 6 or blank	BBB+ and below, or without rating	100-250%		18		18
Total			135	11,629	133	8,511
(c) Public sector entites						
1	AAA to AA-[1]	0% - 20%[1]	15	1,552	46	1,357
2	A+ to A-	50%	27		7	
3 to 6 or blank	BBB+ and below, or without rating	100-250%				
Total			41	1,552	52	1,357
(d) Multilateral Developments Banks						
1	AAA to AA-[2]	0% - 20%[2]		2,249		2,237
2	A+ to A-	50%				
3 to 6 or blank	BBB+ and below, or without rating	100-250%		33		26
Total				2,282		2,263
(e) Institutions[3]						
1	AAA to AA-	20%	304	66	219	66
2	A+ to A-	50%	74	0	60	0
3 to 6 or blank	BBB+ and below, or without rating	100-150%	20	28	3	28
Total			398	94	282	94
(f) Corporates						
1	AAA to AA-	20%				
2	A+ to A-	50%				
3 to 4	BBB+ to BB-	100%	5,768	4,215	3,322	2,157
5 to 6 or blank	B+ and below, or without rating	150%	61	133	2	3
Total			5,829	4,347	3,324	2,160

1) Includes exposures treated as exposures to the central government, regional government or local authority as provisioned by CRR and that

2) Includes exposures to specific entities and receives a 0%-risk weight as provisioned by CRR.

3) Excludes exposures towards CCPs.

Table 5.25 EU CR6: Credit risk exposures by portfolio and PD scale (EU CR6)

EURm PD scale	Original on-balance sheet gross exposure	Off-balance exposure pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density	EL	Value adjustments and Provision
Total												
0.00 to < 0.15	223,163	42,507	49%	247,767	0.06%	1,354,192	27.0%	2.2	14,876	6%	27	1
0.15 to < 0.25	45,844	11,899	56%	52,287	0.18%	591,716	21.6%	2.5	7,289	14%	21	2
0.25 to < 0.50	49,012	20,417	49%	58,606	0.35%	474,571	26.1%	2.5	17,704	30%	53	14
0.50 to < 0.75	18,466	5,545	47%	20,312	0.65%	161,846	25.7%	2.7	8,412	41%	34	12
0.75 to < 2.50	20,729	6,263	50%	23,189	1.27%	414,755	24.2%	2.6	10,020	43%	71	46
2.50 to < 10.00	11,655	2,675	45%	11,786	4.88%	206,950	27.0%	2.6	8,212	70%	154	84
10.00 to < 100	3,031	414	50%	2,985	20.07%	79,183	23.8%	2.5	2,447	82%	138	64
100 (Default)	7,154	923	9%	6,929	100.00%	94,213	26.6%	2.6	11,162	161%	1,996	2,163
Total	379,055	90,642	49%	423,861	2.12%	3,377,426	26.0%	2.4	80,122	19%	2,494	2,387
Sovereigns - FIRB (approach 03)												
0.00 to < 0.15	72,076	5,580	16%	76,253	0.00%	1,506	45.0%	1.6	1,548	2%	1	0
0.15 to < 0.25												
0.25 to < 0.50	209			209	0.29%	3	45.0%	1.3	91	44%	0	
0.50 to < 0.75	0	5	36%	2	0.61%	3	45.0%	2.6	1	82%	0	0
0.75 to < 2.50	101	40	75%	5	1.27%	4	45.0%	2.5	5	106%	0	0
2.50 to < 10.00	105	5	1%	23	5.18%	14	45.0%	2.5	37	161%	1	0
10.00 to < 100	185	30	75%	19	22.48%	4	45.0%	2.5	39	211%	2	3
100 (Default)												
Total	72,676	5,659	16%	76,510	0.01%	1,534	45.0%	1.6	1,721	2%	3	4
Institutions - FIRB (approach 03)												
0.00 to < 0.15	30,638	2,137	25%	31,238	0.06%	746	15.3%	2.5	3,037	10%	3	0
0.15 to < 0.25	1,577	223	48%	1,691	0.15%	94	14.5%	2.5	233	14%	0	0
0.25 to < 0.50	900	569	5%	930	0.28%	253	42.8%	2.5	523	56%	1	0
0.50 to < 0.75	178	139	30%	214	0.57%	86	44.9%	2.5	185	87%	1	0
0.75 to < 2.50	71	206	33%	117	1.91%	146	45.0%	2.5	158	135%	1	0
2.50 to < 10.00	87	100	24%	94	4.99%	160	44.8%	2.5	168	178%	2	0
10.00 to < 100	0	4	24%	1	15.59%	12	41.7%	2.5	3	251%	0	0
100 (Default)	0	0	20%	0	100.00%	1	45.0%	2.5			0	
Sub-total	33,452	3,378	23%	34,285	0.09%	1,498	16.3%	2.5	4,307	13%	8	0
Corporate - FIRB (approach 03) and Specialised Lending												
0.00 to < 0.15												
0.15 to < 0.25												
0.25 to < 0.50	8			8	0.31%	1	45.0%	2.5	4	58%	0	
0.50 to < 0.75												
0.75 to < 2.50	13			13	1.04%	1	45.0%	2.5	13	99%	0	
2.50 to < 10.00												
10.00 to < 100												
100 (Default)												
Sub-total	21			21	0.77%	2	45.0%	2.5	17	84%	0	

EURm PD scale	Original on-balance sheet gross exposure	Off-balance exposure pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density	EL	Value adjustments and Provision
Corporate - AIRB (approach 06) and Specialised Lending												
0.00 to < 0.15	16	61	27%	33	0.09%	2	35.3%	4.3	10	32%	0	
0.15 to < 0.25	26	2	69%	27	0.18%	3	35.2%	2.5	7	27%	0	
0.25 to < 0.50	184	22	23%	172	0.37%	6	34.2%	3.6	108	63%	0	
0.50 to < 0.75	7	12	57%	14	0.67%	3	13.4%	2.2	3	22%	0	
0.75 to < 2.50	18			18	1.53%	2	35.6%	4.2	20	113%	0	
2.50 to < 10.00	24			24	5.25%	3	31.4%	2.5	20	84%	0	
10.00 to < 100												
100 (Default)	23	18	0%	23	100.00%	4	22.5%	1.9	43	190%	4	4
Sub-total	296	114	26%	310	8.03%	23	32.5%	3.4	211	68%	5	4
Corporate - FIRB (approach 03), Non-SME, Excluding Specialised Lending												
0.00 to < 0.15	3,099	425	16%	3,409	0.07%	1,496	43.8%	2.5	842	25%	1	0
0.15 to < 0.25	702	295	6%	695	0.18%	710	43.0%	2.5	290	42%	0	0
0.25 to < 0.50	2,190	642	9%	2,220	0.34%	1,861	43.2%	2.5	1,321	60%	3	2
0.50 to < 0.75	587	331	7%	597	0.67%	756	43.0%	2.5	487	82%	2	1
0.75 to < 2.50	500	405	13%	536	1.15%	917	43.2%	2.5	526	98%	3	2
2.50 to < 10.00	916	315	2%	622	4.44%	676	41.3%	2.5	865	139%	11	9
10.00 to < 100	13	12	0%	13	16.15%	92	41.7%	2.5	27	217%	1	1
100 (Default)	95	32	0%	76	100.00%	124	44.1%	2.5			34	38
Sub-total	8,102	2,457	9%	8,169	1.56%	6,632	43.3%	2.5	4,359	53%	54	52
Corporate - FIRB (approach 03), SME, Excluding Specialised Lending												
0.00 to < 0.15	598	160	6%	739	0.09%	2,274	42.5%	2.5	158	21%	0	0
0.15 to < 0.25	313	126	17%	343	0.18%	1,331	42.1%	2.5	106	31%	0	0
0.25 to < 0.50	767	218	2%	810	0.35%	3,368	42.2%	2.5	364	45%	1	0
0.50 to < 0.75	469	115	2%	473	0.67%	1,743	41.7%	2.5	280	59%	1	0
0.75 to < 2.50	455	149	2%	458	1.24%	2,248	41.5%	2.5	320	70%	2	1
2.50 to < 10.00	395	154	3%	375	4.55%	1,985	41.3%	2.5	358	95%	7	3
10.00 to < 100	73	46	0%	70	17.43%	671	40.6%	2.5	106	152%	5	5
100 (Default)	71	33	1%	71	100.00%	287	40.9%	2.5			29	26
Sub-total	3,142	1,000	4%	3,339	3.38%	13,907	41.9%	2.5	1,692	51%	46	36
Corporate - AIRB (approach 06), Non-SME, Excluding Specialised Lending												
0.00 to < 0.15	13,237	18,161	50%	21,042	0.09%	3,445	30.8%	2.5	4,024	19%	6	0
0.15 to < 0.25	7,727	6,284	51%	10,409	0.18%	1,996	30.5%	2.6	3,154	30%	6	1
0.25 to < 0.50	17,766	14,401	49%	23,413	0.35%	5,486	28.9%	2.5	9,410	40%	24	9
0.50 to < 0.75	6,478	3,499	47%	7,403	0.67%	2,135	28.5%	3.1	4,325	58%	14	6
0.75 to < 2.50	4,202	2,896	45%	5,004	1.24%	2,458	30.2%	2.8	3,700	74%	19	21
2.50 to < 10.00	2,696	948	50%	2,657	4.80%	1,563	29.7%	2.8	2,792	105%	37	35
10.00 to < 100	141	75	55%	150	17.56%	232	30.4%	2.5	243	162%	8	19
100 (Default)	2,770	556	0%	2,590	100.00%	619	29.8%	2.8	4,321	167%	852	913
Sub-total	55,017	46,819	49%	72,667	4.09%	17,934	29.8%	2.6	31,970	44%	965	1,004

EURm PD scale	Original on-balance sheet gross exposure	Off-balance exposure pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density	EL	Value adjustments and Provision
Corporate - AIRB (approach 06), SME, Excluding Specialised Lending												
0.00 to < 0.15	15,514	2,813	50%	17,850	0.06%	12,623	24.8%	2.5	1,760	10%	3	0
0.15 to < 0.25	3,887	1,133	54%	4,845	0.18%	3,865	26.0%	2.5	981	20%	2	0
0.25 to < 0.50	10,472	2,490	56%	12,890	0.35%	10,237	25.6%	2.5	3,718	29%	12	2
0.50 to < 0.75	4,951	810	54%	5,383	0.67%	4,239	25.7%	2.5	2,072	38%	9	4
0.75 to < 2.50	3,555	763	56%	4,005	1.25%	4,998	25.8%	2.5	1,882	47%	13	17
2.50 to < 10.00	2,402	642	54%	2,617	5.07%	4,105	25.7%	2.5	1,701	65%	34	20
10.00 to < 100	482	113	42%	496	17.20%	1,155	25.5%	2.5	483	97%	22	15
100 (Default)	2,070	146	0%	1,957	100.00%	1,386	27.2%	2.5	2,394	122%	742	777
Sub-total	43,333	8,912	53%	50,044	4.65%	42,608	25.4%	2.5	14,992	30%	837	836
Retail - RIRB (approach 06) - secured by immovable property, non SME												
0.00 to < 0.15	82,150	7,199	69%	87,146	0.09%	640,722	13.9%	2.5	2,753	3%	11	0
0.15 to < 0.25	27,205	1,154	62%	27,924	0.19%	202,186	15.3%	2.5	1,734	6%	8	0
0.25 to < 0.50	12,669	545	64%	13,018	0.36%	99,381	14.9%	2.5	1,259	10%	7	1
0.50 to < 0.75	4,311	150	61%	4,403	0.60%	33,865	15.2%	2.5	624	14%	4	0
0.75 to < 2.50	7,640	340	64%	7,856	1.23%	60,916	14.9%	2.5	1,745	22%	14	1
2.50 to < 10.00	1,149	29	89%	1,175	5.23%	8,146	15.0%	2.5	623	53%	9	2
10.00 to < 100	751	12	95%	763	22.73%	6,992	15.0%	2.5	671	88%	26	3
100 (Default)	1,311	4	63%	1,313	100.00%	11,619	15.3%	2.5	2,043	156%	30	43
Sub-total	137,187	9,433	68%	143,598	1.29%	1,063,827	14.4%	2.5	11,452	8%	108	50
Retail - RIRB (approach 06) - secured by immovable property, SME												
0.00 to < 0.15	114	14	43%	120	0.11%	2,786	17.6%	2.5	4	4%	0	0
0.15 to < 0.25	299	20	40%	307	0.18%	5,428	17.6%	2.5	16	5%	0	0
0.25 to < 0.50	90	19	59%	101	0.37%	1,647	17.3%	2.5	9	9%	0	0
0.50 to < 0.75	102	23	60%	116	0.60%	2,013	17.2%	2.5	15	13%	0	0
0.75 to < 2.50	386	87	52%	431	1.30%	8,344	17.7%	2.5	97	22%	1	0
2.50 to < 10.00	51	8	54%	56	3.79%	1,096	17.4%	2.5	23	42%	0	0
10.00 to < 100	15	1	60%	16	24.50%	309	17.3%	2.5	13	81%	1	0
100 (Default)	25	2	65%	27	100.00%	638	18.3%	2.5	48	180%	2	3
Sub-total	1,083	175	52%	1,174	3.41%	22,261	17.6%	2.5	226	19%	4	3
Retail - RIRB (approach 06) - other, non -SME												
0.00 to < 0.15	5,715	5,948	71%	9,927	0.09%	1,149,476	30.5%	2.5	739	7%	3	0
0.15 to < 0.25	4,087	2,651	73%	6,019	0.19%	545,125	30.6%	2.5	762	13%	4	0
0.25 to < 0.50	3,724	1,440	71%	4,744	0.36%	435,549	29.5%	2.5	879	19%	5	1
0.50 to < 0.75	1,331	368	68%	1,580	0.60%	140,056	29.5%	2.5	391	25%	3	1
0.75 to < 2.50	3,171	939	72%	3,848	1.39%	348,881	28.2%	2.5	1,275	33%	15	3
2.50 to < 10.00	3,493	364	62%	3,718	4.79%	175,980	25.3%	2.5	1,463	39%	46	12
10.00 to < 100	1,290	104	70%	1,363	19.90%	72,056	25.9%	2.5	810	59%	69	16
100 (Default)	705	104	65%	773	100.00%	83,159	30.8%	2.5	2,057	266%	283	331
Sub-total	23,517	11,918	71%	31,973	4.14%	2,950,282	29.2%	2.5	8,375	26%	427	364
Retail - RIRB (approach 06) - other, SME												
0.00 to < 0.15	4	8	67%	10	0.10%	2,209	34.3%	2.5	1	9%	0	0
0.15 to < 0.25	20	10	63%	27	0.20%	3,328	36.7%	2.5	4	14%	0	0
0.25 to < 0.50	36	72	74%	89	0.39%	6,827	31.1%	2.5	16	18%	0	0
0.50 to < 0.75	52	93	81%	128	0.60%	7,416	27.8%	2.5	27	21%	0	0
0.75 to < 2.50	616	438	64%	897	1.48%	41,798	28.1%	2.5	280	31%	4	1
2.50 to < 10.00	336	110	80%	425	5.05%	24,346	27.9%	2.5	163	38%	6	2
10.00 to < 100	80	17	85%	94	21.29%	4,387	26.6%	2.5	51	54%	5	2
100 (Default)	84	29	54%	100	100.00%	6,385	28.6%	2.5	256	256%	21	28
Sub-total	1,230	778	69%	1,772	8.82%	96,696	28.3%	2.5	799	45%	36	32

Table 5.26 EU CR9: IRB approach - Backtesting of PD per exposure class

The table shows the backtesting of probability of default (PD) and the validation of the reliability of the PD calculations. PD and actual default frequency (ADF) are calculated per exposure class. The percentages of Risk Exposure Amount (REA) that Institution, Corporate and Retail IRB portfolio stand for are 6%, 55% and 20%, respectively. The exposure class and PD range are specified in column a and b, respectively. Column d and e contain, the exposure-weighted average PD per exposure class and the simple arithmetic average PD at the end of reporting period, respectively. Column f illustrates the migration of obligors between PD buckets during the reporting period by showing the number of obligors at the end of previous and the reporting period per PD range. Column g shows number of obligors who defaulted in the year including new obligors who were not funded at the beginning of period and defaulted during the reporting period. Obligors who defaulted at the beginning of the reporting period shall not be included in this report. Column h depicts the percentages of new obligors within each range of column g. Column i displays the five-year historical average ADF per PD bucket. Column i and e jointly project an indication on the performance of our current regulatory PD in application in the medium term. Since the Advanced Internal-Ratings Based (AIRB) approach was first implemented on part of the Corporate exposure class in 2014, the existing available historical reporting data gives a mere three-year average in column i.

a	b	d	e	f		g	h	i
				Number of obligors				
Exposure class	PD range	Weighted average PD	Arithmetic averaged PD by obligors	2016	2017	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
Retail RIRB	0.00 to < 0.15	0.09%	0.09%	585,518	622,212	138	0.00%	0.04%
Of which secured by	0.15 to < 0.25	0.19%	0.19%	203,691	204,685	158	0.00%	0.11%
immovable property	0.25 to < 0.50	0.36%	0.36%	132,085	99,616	266	0.00%	0.24%
	0.50 to < 0.75	0.60%	0.60%	43,564	35,495	141	0.00%	0.42%
	0.75 to < 2.50	1.23%	1.26%	81,570	68,383	571	0.01%	0.83%
	2.50 to < 10.00	5.17%	4.85%	13,664	9,147	760	0.10%	5.58%
	10.00 to < 100	22.77%	23.71%	7,029	7,254	1,259	0.84%	19.13%
	100 (Default)	100.00%	100.00%	13,086	12,257			

a	b	d	e	f		g	h	i
				Number of obligors				
Exposure class	PD range	Weighted average PD	Arithmetic averaged PD by obligors	2016	2017	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
Retail RIRB	0.00 to < 0.15	0.09%	0.09%	1,123,280	1,151,685	384	0.00%	0.05%
Of which other retail	0.15 to < 0.25	0.19%	0.19%	509,556	548,453	479	0.00%	0.12%
	0.25 to < 0.50	0.36%	0.36%	508,013	442,376	1,408	0.00%	0.26%
	0.50 to < 0.75	0.60%	0.60%	171,903	147,472	905	0.00%	0.52%
	0.75 to < 2.50	1.40%	1.33%	433,712	390,679	3,714	0.02%	0.89%
	2.50 to < 10.00	4.82%	4.91%	224,974	200,326	5,038	0.07%	2.55%
	10.00 to < 100	19.99%	21.13%	91,180	76,443	8,369	1.04%	9.10%
	100 (Default)	100.00%	100.00%	89,140	89,544			

a	b	d	e	f		g	h	i
				Number of obligors				
Exposure class	PD range	Weighted average PD	Arithmetic averaged PD by obligors	2016	2017	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
Corporate FIRB	0.00 to < 0.15	0.08%	0.09%	3,819	3,554	4	0.00%	0.15%
	0.15 to < 0.25	0.18%	0.18%	5,022	2,040	1	0.00%	0.07%
	0.25 to < 0.50	0.35%	0.36%	2,955	5,200	5	0.00%	0.17%
	0.50 to < 0.75	0.67%	0.67%	2,872	2,508	7	0.00%	0.25%
	0.75 to < 2.50	1.19%	1.26%	4,711	3,251	19	0.02%	0.83%
	2.50 to < 10.00	4.48%	4.78%	1,726	2,778	70	0.17%	6.10%
	10.00 to < 100	17.23%	18.11%	443	799	18	0.00%	6.51%
	100 (Default)	100.00%	100.00%	504	411			

a	b	d	e	f		g	h	i
				Number of obligors				
Exposure class	PD range	Weighted average PD	Arithmetic averaged PD by obligors	2016	2017	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
Corporate AIRB	0.00 to < 0.15	0.08%	0.07%	15,829	16,076	5	0.01%	0.04%
	0.15 to < 0.25	0.18%	0.18%	14,541	5,864	22	0.00%	0.10%
	0.25 to < 0.50	0.35%	0.35%	8,007	15,722	29	0.24%	0.21%
	0.50 to < 0.75	0.67%	0.67%	7,215	6,377	9	0.00%	0.30%
	0.75 to < 2.50	1.24%	1.26%	10,103	7,458	79	0.02%	0.98%
	2.50 to < 10.00	4.94%	4.54%	3,555	5,669	181	0.37%	8.03%
	10.00 to < 100	17.28%	18.38%	772	1,387	62	0.00%	9.78%
	100 (Default)	100.00%	100.00%	2,216	2,009			

a	b	d	e	f		g	h	i
				Number of obligors				
Exposure class	PD range	Weighted average PD	Arithmetic averaged PD by obligors	2016	2017	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
Institution FIRB	0.00 to < 0.15	0.06%	0.07%	734	747		0.00%	0.00%
	0.15 to < 0.25	0.15%	0.15%	213	92		0.00%	0.00%
	0.25 to < 0.50	0.28%	0.31%	133	251		0.00%	0.00%
	0.50 to < 0.75	0.57%	0.57%	100	87		0.00%	0.00%
	0.75 to < 2.50	1.91%	1.51%	170	147		0.00%	0.12%
	2.50 to < 10.00	4.99%	7.41%	134	160		0.00%	0.14%
	10.00 to < 100	15.59%	16.74%	14	12		0.00%	0.00%
	100 (Default)	100.00%	100.00%	2	1			

Table 5.27 Comparison on parameter estimates against actual outcomes

The table displays the comparison between EL and actual losses and estimated and realised LGD and CCF for IRB exposures. Estimated EL follows the calculation rules defined in the CRR. Actual loss is the net loss and the figures represent full year outcomes. LGD measures the net present value of the nominal loss including costs caused by a customer's default. CCF is a statistical multiplier used to predict the EAD by predicting the drawdown of the off-balance exposure. Nordea's CCF estimates are based on internal data regarding drawings prior to default. Realised LGD and CCF values for the retail portfolio are based on a minimum of seven default years and a three years' work-out period. For the corporate portfolio the averages are also based on at least seven years of data. Estimated LGD and CCF are the available reporting data at the date in question. The estimated values include a downturn add-on and a safety margin, hence the difference between estimated and realised values.

	Expected loss		CCF		LGD	
	Estimated	Actual	Estimated	Realised	Estimated	Realised
2017						
Retail	-225	-48	61.2%	55.8%	17.4%	10.0%
Of which secured by immovable property	-80	-16	42.6%	39.7%	14.5%	7.7%
Of which other retail	-145	-32	66.3%	60.2%	29.8%	20.1%
Corporate[1]	-313	-321	60.7%	53.4%	30.3%	14.6%
Institution	-14	0	n/a	n/a	n/a	n/a
Government	-4	0	n/a	n/a	n/a	n/a
2016						
Retail	-245	-74	55.2%	50.2%	17.3%	9.5%
Of which secured by immovable property	-90	-28	42.1%	38.9%	14.2%	6.9%
Of which other retail	-155	-46	58.9%	53.3%	31.5%	21.3%
Corporate[1]	-334	-427	61.2%	53.3%	30.8%	13.8%
Institution	-20	0	n/a	n/a	n/a	n/a
Government	0	0	n/a	n/a	n/a	n/a
2015						
Retail	-268	-144	55.8%	49.5%	17.2%	9.8%
Of which secured by immovable property	-100	-49	42.8%	39.2%	13.9%	7.0%
Of which other retail	-168	-95	59.5%	52.5%	31.4%	22.0%
Corporate[1]	-295	-345	60.4%	53.9%	31.1%	14.3%
Institution	-20	10	n/a	n/a	n/a	n/a
Government	0	0	n/a	n/a	n/a	n/a

1) Includes SME Retail

Table 5.28 Exposure weighted average PD and LGD, IRB exposure classes (excl. defaulted exposures)

Parameters are calculated excluding defaulted exposures. In the retail exposure class, average PD is lowest in Sweden (0.26%) and highest in Russia (1.46%). Similarly, average LGD is lowest in Sweden (12.4%) but highest in Norway (20.7%). In the Nordics, retail PD in the Finnish portfolio improved from 1.58% to 1.29% compared to 2016. In the corporate portfolio, average PD improved in the Norwegian portfolio while PD increased in the Danish and Finnish portfolios. In the institutions exposure class, the most significant change was seen in the Finnish portfolio where average PD decreased from 0.21% to 0.14%.

	Denmark		Finland		Norway		Sweden		Baltic countries		Russia		US		Other	
Percent (%)	PD	LGD	PD	LGD	PD	LGD	PD	LGD	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Sovereign	0.00%	45.0%	0.00%	44.9%	0.00%	45.0%	0.01%	44.9%	0.01%	45.0%	0.29%	45.0%	0.00%	45.0%	0.05%	45.0%
Institution	0.09%	12.0%	0.14%	26.1%	0.08%	16.5%	0.05%	15.9%	0.11%	45.0%	0.04%	45.0%	0.10%	45.0%	0.19%	43.1%
Corporate	0.67%	28.4%	0.76%	30.1%	0.63%	30.5%	0.45%	29.9%	0.33%	43.0%	0.34%	42.3%	0.27%	31.5%	0.83%	32.0%
- of which advanced	0.69%	26.6%	0.73%	27.8%	0.64%	28.9%	0.44%	27.1%	0.56%	30.4%	0.34%	34.4%	0.26%	31.4%	0.79%	30.6%
Retail	0.65%	20.3%	1.29%	17.3%	0.51%	20.7%	0.26%	12.4%	1.31%	20.6%	1.46%	15.6%	0.86%	15.9%	0.84%	16.9%
- of which secured by immovable property	0.53%	16.9%	0.60%	13.9%	0.18%	19.7%	0.21%	9.9%	0.43%	13.3%	0.72%	12.2%	0.43%	13.1%	0.45%	13.1%
- of which other retail	1.11%	35.1%	2.79%	24.9%	1.93%	24.6%	0.58%	32.6%	2.24%	23.3%	3.58%	23.1%	2.81%	29.3%	1.93%	27.3%
- of which SME	2.14%	22.0%	2.61%	22.2%	2.66%	28.5%	1.92%	29.9%	2.15%	37.3%	1.89%	34.5%	3.83%	32.1%	2.12%	32.3%
Other non-credit obligation assets	2.26%	43.5%	2.39%	43.3%	1.88%	38.5%	2.32%	44.1%			5.19%	45.0%	2.50%	45.0%	2.50%	44.8%
Total exposure-weighted IRB 2017	0.55%	23.6%	0.80%	28.3%	0.49%	25.5%	0.29%	21.0%	0.35%	42.5%	0.45%	42.5%	0.05%	44.0%	0.47%	37.4%
Total exposure-weighted IRB 2016	0.59%	23.2%	1.20%	21.2%	0.58%	24.3%	0.29%	19.6%	0.39%	39.5%	0.51%	43.7%	0.33%	36.7%	0.77%	35.6%

Table 5.29 EU CR7: Effect on REA of credit derivatives used as CRM techniques

The total amount of pre-credit derivatives REA at the end of Q4 2017 amounted to EUR 85.7bn, corresponding to a gross REA relief of EUR 3.6bn (EUR 2.7bn net of REA held on securitised positions). Outside of the synthetic securitisation of certain corporate exposures, Nordea does not use credit derivatives as a credit risk mitigation technique in the banking book.

EURm	Pre-credit derivatives REA	Actual REA
Exposures under Foundation IRB		
Central governments and central banks	1,721	1,721
Institutions	4,307	4,307
Corporates - SME	1,692	1,692
Corporates - Specialised Lending	17	17
Corporates - Other	4,359	4,359
Exposures under Advanced IRB		
Corporates - SME	16,010	14,992
Corporates - Specialised Lending	211	211
Corporates - Other	34,515	31,970
Retail - Secured by real estate SME	226	226
Retail - Secured by real estate non-SME	11,452	11,452
Retail - Other SME	799	799
Retail - Other non-SME	8,375	8,375
Other non credit-obligation assets	2,019	2,019
Total	85,703	82,141

Table 5.30 EU CR8: REA flow statements of credit risk exposures under IRB

Over the full year, REA decreased by EUR 2.5bn, driven mainly by favourable foreign currency effects, caused by EUR appreciation against the SEK, NOK and USD. Additionally, decreased portfolio size and improved asset quality mainly in the corporate portfolio, further contributed to the REA decrease. The main offsetting effect came from model updates, such as the PD/ADF implementation and a move of sovereign exposures from the standardised to the IRB portfolio. During the latest quarter, total IRB REA decreased by EUR 5.2bn, mainly driven by improved asset quality and by the move of a large part of Nordea's Baltic exposures from IRB to standardised within the new Baltic bank, Luminor.

EURm	REA	Capital requirement
REA 2016 Q4	84,627	6,770
Asset size	-2,302	-184
Asset quality	-2,233	-179
Model updates	6,161	493
Methodology and policy	0	0
Acquisitions and disposals	-1,170	-94
Foreign exchange movements	-3,097	-248
Other	156	12
REA 2017 Q4	82,141	6,571

	REA	Capital requirement
REA 2017 Q3	87,369	6,990
Asset size	-834	-67
Asset quality	-1,488	-119
Model updates	0	0
Methodology and policy	0	0
Acquisitions and disposals	-1,170	-94
Foreign exchange movements	-998	-80
Other	-738	-59
REA 2017 Q4	82,141	6,571

Table 5.31 Distribution of collateral

The table shows that residential real estate accounts for 74% of total eligible collateral, a slight increase from 72% in 2016. Commerical real estate decreased marginally from 18% in 2016 to 17% in 2017. For the other collateral categories, the proportions remained relatively stable in 2017.

	31 December 2017	31 December 2016
Financial collateral	1.2%	1.4%
Receivables	0.9%	1.0%
Residential real estate	73.6%	71.9%
Commercial real estate	16.6%	17.8%
Other physical collateral	7.6%	8.0%
Total	100.0%	100.0%

6. Counterparty credit risk

Table 6.1 Counterparty credit risk exposures and REA split by exposure class

During 2017, total exposure has decreased by EUR 10.8bn, resulting in a corresponding REA decrease of EUR 3.4bn. The total risk weight for counterparty credit risk exposures has decreased to 26.7% by the year-end 2017, compared to 28.2% at the end of 2016. Following Nordea's IRB sovereign roll-out during 2017, sovereign exposures previously treated under the standardised approach moved to the IRB approach. The remaining EAD of EUR 7m for year-end 2017 stems from the proportional consolidation of Luminor. Exposures towards CCPs decreased during the year by EUR 4.0bn of which trade exposures and default fund contributions accounted for EUR 3.8bn and EUR 0.2bn respectively.

	31 December 2017		31 December 2016	
EURm	Exposure	REA	Exposure	REA
IRB exposure classes				
Sovereign	5,631	147		
Institution	5,842	1,857	6,227	2,215
Corporate	9,030	3,762	14,542	6,254
Retail	79	36	84	34
Other non-credit obligation assets	15	15		
Total IRB approach	20,597	5,818	20,853	8,503
Standardised exposure classes				
Central government and central banks	7		3,582	59
Regional Governments or local authorities			2,194	157
Other	2,227	278	6,998	770
of which cleared through CCPs	2,025	95	6,059	457
Total standardised approach	2,234	278	12,775	986
Total	22,830	6,096	33,628	9,489

Exposures include derivatives as well as securities financing transactions.
Luminor Bank CCR exposures of EUR 42m are not considered in the table

Table 6.2 EU CCR 1 Analysis of counterparty credit risk by approach

Nordea is using two methodologies when calculating the counterparty credit risk amounts. These methodologies are the mark to market and Internal Model Method (IMM). For Securities Financing Transactions (SFT) Nordea is using the financial collateral simple method. During Q4 REA decreased by approximately EUR 1,092m mostly driven by lower repo volumes as of year-end. Furthermore lower asset size of the CCR portfolio has also brought REA down during the last quarter of 2017.

EURm	Notional	Replace-ment cost/ Current market value	Potential future value	EEPE	Multiplier	EAD post-CRM	REA
Mark to market		902	2,024			2,927	836
Original exposure							
Standardised approach							
Internal Model Method (for derivatives and SFTs)			5,064	10,395	1.4	14,553	4,717
Of which securities Financing Transactions							
Of which derivatives & Long Settlement Transactions			5,064	10,395	1.4	14,553	4,717
Of which from Contractual Cross Product Netting							
Financial collateral simple method (for SFTs)						5,309	526
Financial collateral comprehensive method (for SFTs)							
VaR for SFTs							
Total							6,079

Luminor Bank CCR exposures of EUR 42m are not considered in the table

Table 6.3 EU CCR2 Credit valuation adjustment (CVA) capital charge

For credit valuation adjustment (CVA) capital charge, Nordea is using two different methodologies: advanced and standardised method. Around 81% of the CVA REA is calculated using the advanced method and the rest using the standardised method. The REA for advanced method comes from two components, where the VaR component accounts for around 20% of the exposure and stressed VaR accounts for the rest (80%). The decrease in CVA REA in second-half 2017 (-EUR 268m) was mainly due to lower exposure in the CCR portfolio as well as increased hedging activity.

EURm	Exposure value	REA
Total portfolios subject to the Advanced Method	2,965	963
(i) VaR component (including the 3×multiplier)		188
(ii) Stressed VaR component (including the 3×multiplier)		775
All portfolios subject to the Standardised Method	1,654	219
Based on Original Exposure Method		
Total subject to the CVA capital charge	4,619	1,182

Table 6.4 EU CCR8 Exposures to central counterparties

The decrease in exposure for OTC derivatives was mainly driven by Initial Margin which is now segregated due to an updated legal opinion and hence the Initial Margin is no longer part of the corresponding EAD calculation. A decrease in security financing transactions was mainly driven by lower repo exposure.

EURm	EAD (post-CRM)	REA
Exposures to QCCPs (total)		95
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	1,905	52
(i) OTC derivatives	330	20
(ii) Exchange-traded derivatives	352	7
(iii) Securities financing transactions	1,223	25
(iv) Netting sets where cross-products netting has been approved		
Segregated initial margin	638	
Non-segregated initial margin		
Pre-funded default fund contribution	119	22
Alternative calculation of own funds requirements for exposures	2	22
Exposures to non-QCCPs (total)		

Table 6.5 EU CCR3 Standardised approach - Counterparty credit risk exposures by regulatory portfolio and risk

EU CCR3 provides a breakdown of counterparty credit risk (CCR) by exposure class and risk weight. The total CCR credit exposure amount decreased from EUR 12.8bn in 2016 to EUR 2.2bn by year end 2017. The decrease was predominantely in the 0% risk weight bucket as a result of the IRB sovereign roll-out. Nordea's remaining exposures in 2017 are mainly in the 2% risk weight bucket. Exposures with a 2% risk weight consists exclusively of trade exposures with CCPs.

EURm	Risk weight											
Exposure classes[1]	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	Other	Total
Institutions	46	1,829			75							75	2,025
Corporate										165	1		166
Retail									1				1
Total	46	1,829			75				1	165	1	75	2,191

Luminor Bank CCR exposures of EUR 42m are not considered in the table

Table 6.6 EU CCR4 Counterparty credit risk exposures by portfolio and PD scale

On an overall level, the CCR portfolio under the IRB approach decreased in EAD by EUR 5.1bn since the second quarter of 2017. The relative change to lower PD buckets is also visible by the average PD decreasing approximately 6 bps to a portfolio average of 1%. The REA from defaulted exposures below stems from IRB retail exposures. In the Sovereigns FIRB portfolio, all exposures remain in the lowest PD range. EAD has decreased by EUR 1.6bn compared to Q2 2017. The REA density has increased about 30 bps, partly explained by increased average maturity. For Institutions, 83% of exposures are in the lowest PD range (79% in Q2 2017). Total EAD has decreased by EUR 1.6bn, driven by exposures in lower PD ranges. REA density has improved somewhat, from 33% to 32%, driven by lower average PD. In the Corporate - FIRB, Non-SME, Excluding Specialised Lending portfolio, the EAD post CRM and post-CCF decreased by EUR 1.6bn since Q2 2017, with a corresponding REA reduction of EUR 0.5bn, resulting in an increased REA density of 42% from 40%. This move was observed despite a reduction in the portfolio average PD of 35 bps (from 2.16% to 1.81%). In the Corporate - FIRB, SME, Excluding Specialised Lending portfolio EAD decreased by EUR 0.3bn, however REA remained relatively flat with lower volumes being offset by a slight increase in REA density.

Total

PD scale	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density
0.00 to < 0.15	14,822	0.04%	2,411	44.7%	2.0	2,246	15%
0.15 to < 0.25	1,055	0.17%	870	45.0%	2.2	425	40%
0.25 to < 0.50	3,052	0.35%	1,975	43.1%	2.3	1,769	58%
0.50 to < 0.75	756	0.67%	884	44.9%	2.5	581	77%
0.75 to < 2.50	491	1.28%	1,426	44.6%	2.4	465	95%
2.50 to < 10.00	230	3.66%	860	44.8%	2.0	289	126%
10.00 to < 100	11	17.13%	172	44.5%	2.5	19	177%
100 (Default)	166	100.00%	207	44.9%	2.5	10	6%
Total	20,582	1.00%	8,805	44.5%	2.1	5,803	28%

Sovereigns - FIRB (approach 03)

PD scale	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density
0.00 to < 0.15	5,631	0.00%	327	45.0%	1.9	147	3%
0.15 to < 0.25							
0.25 to < 0.50							
0.50 to < 0.75							
0.75 to < 2.50							
2.50 to < 10.00							
10.00 to < 100							
100 (Default)							
Sub-total	5,631	0.00%	327	45.0%	1.9	147	3%

Luminor Bank CCR exposures of EUR 42m are not considered in the table

Institutions - FIRB (approach 03)

PD scale	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density
0.00 to < 0.15	4,868	0.06%	143	44.1%	2.0	1,266	26%
0.15 to < 0.25	200	0.15%	39	45.0%	2.1	92	46%
0.25 to < 0.50	681	0.33%	67	36.6%	2.2	387	57%
0.50 to < 0.75	23	0.57%	15	45.0%	2.5	22	97%
0.75 to < 2.50	11	1.37%	11	45.0%	2.5	13	126%
2.50 to < 10.00	59	2.62%	5	45.0%	0.6	76	129%
10.00 to < 100							
100 (Default)							
Sub-total	5,842	0.13%	280	43.3%	2.0	1,857	32%

Corporate - FIRB (approach 03), Non-SME, Excluding Specialised Lending

PD scale	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density
0.00 to < 0.15	3,555	0.06%	808	45.0%	2.0	712	20%
0.15 to < 0.25	689	0.18%	230	45.0%	2.1	276	40%
0.25 to < 0.50	1,866	0.35%	643	45.0%	2.3	1,128	60%
0.50 to < 0.75	469	0.67%	258	45.0%	2.5	394	84%
0.75 to < 2.50	309	1.29%	221	45.0%	2.3	324	105%
2.50 to < 10.00	83	3.41%	156	45.0%	2.5	116	139%
10.00 to < 100	2	17.07%	6	45.0%	2.5	5	243%
100 (Default)	108	100.00%	39	45.0%	2.5		
Sub-total	7,083	1.81%	2,361	45.0%	2.2	2,955	42%

Corporate - FIRB (approach 03), SME, Excluding Specialised Lending

PD scale	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	REA	REA density
0.00 to < 0.15	756	0.06%	1,003	45.0%	2.5	119	16%
0.15 to < 0.25	159	0.18%	442	45.0%	2.5	56	35%
0.25 to < 0.50	494	0.36%	1,129	45.0%	2.5	251	51%
0.50 to < 0.75	253	0.67%	551	45.0%	2.4	161	64%
0.75 to < 2.50	141	1.19%	578	45.0%	2.5	113	80%
2.50 to < 10.00	80	4.60%	498	45.0%	2.5	92	115%
10.00 to < 100	8	16.89%	129	45.0%	2.5	13	169%
100 (Default)	55	100.00%	149	45.0%	2.5		
Sub-total	1,947	3.40%	4,479	45.0%	2.5	807	41%

Table 6.7 EU CCR7: REA flow statements of CCR exposures under the IMM

The decrease in REA for the period is mainly driven by maturing trades which has lowered the asset size of the CCR portfolio. Lower exposure towards FX derivatives has also contributed to lower REA for the quarter mostly originating from a weaker USD since last reporting date.

EURm	REA amounts	Capital require-ments
REA, 29 September 2017	5,149	412
Asset size	-210	-17
Credit quality of counterparties	15	1
Model updates (IMM only)	0	0
Methodology and policy (IMM only)	0	0
Aquisition and disposals	0	0
Foreign exchange movements	-147	-12
Interest rate movements	-46	-4
Other	-43	-3
REA, 29 December 2017	4,717	377

Table 6.8 CCR5-A: Impact of netting and collateral held on exposure values

Lower fair values since last reporting date translated into lower netting benefits and collateral accordingly. Note that collateral held (d) is the residual between (c) and (e) why excess collateral received is not recognised. This reflects the actual risk mitigation coming from held collateral. At the end of the year the current exposure net (after close-out netting and collateral reduction) was EUR 8.5bn.

EURm	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	168,885	153,492	15,393	7,698	7,694
SFTs	36,344	15,844	20,501	19,667	834
Cross-product netting					
Total	205,229	169,335	35,893	27,365	8,528

Luminor Bank CCR exposures of EUR 42m are not considered in the table

Table 6.9 CCR5-B: Composition of collateral for exposures to CCR

Collateral used in derivative transactions reflects the total amounts of posted and received collateral on the day of reporting. For the SFT's the trade collateral (the counterparties obligation in the transaction) is included as collateral. The most significant change in second half 2017 is the increase in segregated posted collateral for OTC derivatives which stems from the regulatory requirement of exchanging Initial Margin for non-centrally cleared derivatives.

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
EURm	Segregated	Unsegregated	Segregated	Unsegregated		
Cash		8,025		8,170	35,078	44,256
Government bonds		667	637	858	25,050	21,332
Mortgage bonds		94	53	676	11,876	10,838
Bonds		38		59	5,222	3,561
Equity						1,322
Total		8,823	690	9,764	77,226	81,310

Luminor Bank CCR exposures of EUR 42m are not considered in the table

Table 6.10 EU CCR6: Credit derivatives exposures

EURm	Credit derivative hedges: Protection bought	Credit derivative hedges: Protection sold
Notionals		
Credit default swaps	39,760	38,610
Credit options	280	
Total notionals	40,040	38,610
Fair values		
Positive fair value (asset)	1,970	39
Negative fair value (liability)	78	1,897

Luminor Bank CCR exposures of EUR 42m are not considered in the table

7. Market risk

Table 7.1 REA and minimum capital requirements for market risk

By the end of the year 2017, REA and capital requirements for market risk were EUR 3.5bn (EUR 4.5bn) and EUR 0.3bn (EUR 0.3bn) respectively as shown in table below. The reduction in REA is explained partly by a decrease in the banking book risk using the standardised approach where foreign exchange risk is the main driver. Additional reduction in REA is further explained by reduced trading book risk under the internal model approach. Interest rate risk and equity risk were the main drivers, accompanied by a lowered comprehensive risk measure.

	Trading book IA		Trading book SA		Banking book SA		Total	
EURm	REA	Capital requirement	REA	Capital requirement	REA	Capital requirement	REA	Capital requirement
Interest rate risk and other[1]	557	45	918	73			1,475	118
Equity risk	150	12	108	9			259	21
Foreign exchange risk	281	22					281	22
Commodity risk			49	4			49	4
Settlement risk								
Diversification effect	-475	-38					-475	-38
Stressed Value-at-Risk	1,043	83					1,043	83
Incremental Risk Measure	477	38					477	38
Comprehensive Risk Measure	411	33					411	33
Total	2,444	196	1,075	86			3,520	282

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

Table 7.2 Market risk for the banking book

Total risk measured by VaR is driven by interest rate risk in Liquid Assets. From 2016 to 2017 the VaR decreased by EUR 13m due to lower interest rate volatility in the sample period for 2017 in VaR.

EURm	Measure	31 Dec 2017	2017 High	2017 Low	2017 avg	31 Dec 2016
Total risk	VaR	46	68	38	51	59
Interest rate risk	VaR	48	68	40	51	58
Equity risk	VaR	3	6	1	3	1
Credit spread risk	VaR	1	2	1	1	2
Foreign exchange risk	VaR	3	3	1	2	5
Inflation risk	VaR					
Diversification effect	VaR	15.0%	20.0%	5.0%	12.0%	10.0%

Table 7.3 Equity holdings in the banking book

EURm	Book value	Fair value	Unrealised gains/losses	Realised gains/losses	Capital requirement
Investment portfolio[1]	555	555	71		44
Other[2]	49	60	-40	6	4
Total	604	615	31	6	48

1) Of which listed equity holdings, book value 2m
2) Of which listed equity holdings, book value 25m

Table 7.4 Net Interest Income sensitivities for the banking book, instantaneous interest rate movements

In the analysis of SIIR, risk reduction in the decreasing rates scenario stems primarily from Euro denominated positions.

EURm	+100bp	-100bp
DKK	183	-196
EUR	414	-214
SEK	212	-245
NOK	-3	-47
CHF	-6	6
USD	16	-21
OTH	-5	2
Total	810	-716

Table 7.5 Interest rate sensitivities for the banking book, instantaneous interest rate movements

Banking book OCI/P&L has gained from decreasing rates, primarily from bonds in liquid assets. The results for EUR have different signs compared to the other currencies due to interest rate futures position, hedging the reset risk of interest rate swaps.

EURm	+100bp	+50bp	-50bp	-100bp
DKK	-92	-46	45	88
SEK	-85	-43	45	90
EUR	43	20	-17	-34
NOK	-31	-16	16	31
USD	-6	-3	3	6
Total	-173	-88	92	183

Table 7.6 Market risk for the trading book

Total risk measured by VaR was low in 2017 due to reduced exposure across all asset classes. Highs were reached in Q3 driven by increased exposure for higher interest rates. Peak total stressed VaR was driven by EUR/USD FX option risk. As the options expired late November, end of year VaR was at similar level as end 2016. The comprehensive risk measure (CRM) started off 2017 at an elevated level, slightly higher than on 31 December 2016. CRM decreased during 2017 due to bought protection as well as a re-scope of portfolios in May 2017. The average incremental risk measure was lower than the value at end 2016, but it increased at end of 2017 mainly from expiry of a large pool of short CDSs in December. 2017 high was primarily driven by short dated sold options on German bond futures in May.

EURm	Measure	31 Dec 2017	2017 High	2017 Low	2017 avg	31 Dec 2016
Total risk		11	25	7	13	16
Interest rate risk		10	24	6	11	12
Equity risk		3	8	2	3	5
Credit spread risk		4	8	3	5	6
Foreign exchange risk		5	23	2	6	4
Diversification effect		50%	66%	27%	49%	42%
Total stressed VaR		25	70	10	23	21
Incremental Risk Measure		38	45	9	19	23
Comprehensive Risk Measure		20	70	9	33	65

Table 7.7 EU MR1: Market risk under standardised approach

Compared to Q2 2017, total market risk under the standardised approach decreased by EUR 0.2bn. This was predominately driven by interest rate risk which decreased REA by EUR 0.1bn, mainly due to position changes in mortgage bonds. Foreign exchange risk is zero for the period because the ratio between the total open net positions and total own funds is below the 2 % threshold, in accordance to Article 351 of the Capital Requirements Regulation (CRR).

EURm	REA	Capital requirements
Outright products[1]	989	79
Interest rate risk (general and specific)	918	73
Equity risk (general and specific)	53	4
Foreign exchange risk		
Commodity risk	18	1
Options	86	7
Simplified approach		
Delta-plus method		
Scenario approach	86	7
Securitisation		
Total	1,075	86

1) Outright products refer to positions in products that are not optional.

Table 7.8 EU MR2-A: Market risk under the internal models approach

By the end of 2017, the Value-at-Risk (VaR) amounts to EUR 513m which corresponds to a decreased of EUR 12m from Q2 2017. The decrease in VaR is mainly driven by lower levels of interest rate risk throughout the second half of 2017. The total stressed Value at Risk (sVaR) increased with EUR 115m, mainly due to higher levels of credit spread risk and foreign exchange risk compared to Q2. Furthermore, the Incremental Risk Method (IRM) increased with EUR 178m driven by the last measure in Q4 compared to 12 weeks average in Q2. Lastly, the Comprehensive Risk Method (CRM) increased with EUR 46m driven by the 12 weeks average. The increase in CRM can furthermore be explained by higher levels of CRC throughout Q4 primarily driven by position changes.

EURm	REA	Capital requirements
VaR (higher of values a and b)	513	41
Previous day's VaR (Article 365 (1)(VaRt-1))	143	11
Average of daily VaR (article 365 (1)) on each of the preceding 60 business days (VaRavg) x multiplication factor ((mc) in accordance with article 366)	513	41
SVaR (higher of values a and b)	1,043	83
Latest SVaR (Article 365 (2) (sVARt-1)	307	25
Average of the SVaR (article 365 (2)) during the preceding 60 business days (sVaRavg) x multiplication factor (ms) (article 366)	1,043	83
Incremental risk charge - IRC (higher of values a and b)	477	38
Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)	477	38
Average of the IRC number over the preceding 12 weeks	185	15
Comprehensive risk method - CRM (higher of values a,b and c)	411	33
Most recent risk number for the correlation trading portfolio (article 377)	254	20
Average of the risk numbers for the correlation trading portfolio over the preceding 12-weeks	411	33
8% of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338 (4))	351	28
Total	2,444	196

Table 7.9 EU MR2-B: REA flow statements of market risk exposures under the IMA

By the end of 2017, REA amounted to EUR 2.4bn which corresponds to an increase of EUR 255m from Q3, whereof EUR 16m stemmed from methodology changes going into effect in December 2017. The decrease in the VaR REA was primarily driven by lower levels of interest rate risk. The increase in sVaR is mainly driven by higher levels of foreign exchange risk and from a methodology change. The Incremental Risk Method (IRM) increased with EUR 178m primarily driven by expiring CDS contracts by the end of 2017. Lastly, the increase in the Comprehensive Risk Method (CRM) was mainly stemming from position changes.

EURm	VaR	SVaR	IRM	CRM	Other	Total REA	Total capital requirements
REA as at end of previous reporting period	595	1,006	228	361		2,190	175
Regulatory adjustment							
REA at end of day previous quarter	595	1,006	228	361		2,190	175
Movement in risk levels	-82	20	250	51		239	19
Model updates/changes							
Methodology and policy	-1	16				16	1
Aquisitions and disposals							
Foreign exchange movements							
Other							
REA at end of day previous quarter	513	1,043	477	411		2,444	196
Regulatory adjustment							
REA as at end of current reporting period	513	1,043	477	411		2,444	196

Table 7.10 EU MR3: IMA values for trading portfolios

The VaR remained stable throughout the second half of 2017. The increased maximum value in sVaR was driven by higher levels of credit spread risk and foreign exchange risk, which also contributed to a slightly higher sVaR average. The Incremental Risk Charge (IRC) remained relatively stable during the period, however the increase in period end 2017 was driven by expired CDS contracts. The decrease in comprehensive risk capital charge (CRC) towards period end stemmed from position changes.

	EURm
VaR (10 day 99%)	
Maximum	21
Average	12
Minimum	7
Period end	11
SVaR (10 day 99%)	
Maximum	70
Average	24
Minimum	12
Period end	25
IRC (10 day 99%)	
Maximum	41
Average	14
Minimum	9
Period end	38
Comprehensive capital charge (99.9%)	
Maximum	50
Average	31
Minimum	9
Period end	20

Figure 7.11 EU MR4: Comparison of VaR estimates with gains/losses

The figure shows the VaR backtest of the trading book for 2017. The VaR models are considered being of a satisfactory quality if less than five exceptions are recorded within the last 250 banking days. By the end of Q4 2017, both backtests based on actual profit/loss and hypothetical profit/loss were in the green zone, with two and one exceptions, respectively, during the last 250 days. The backtest deciding the capital multiplier is the one with the highest number of exceptions based on hypothetical profit/loss or actual profit/loss.

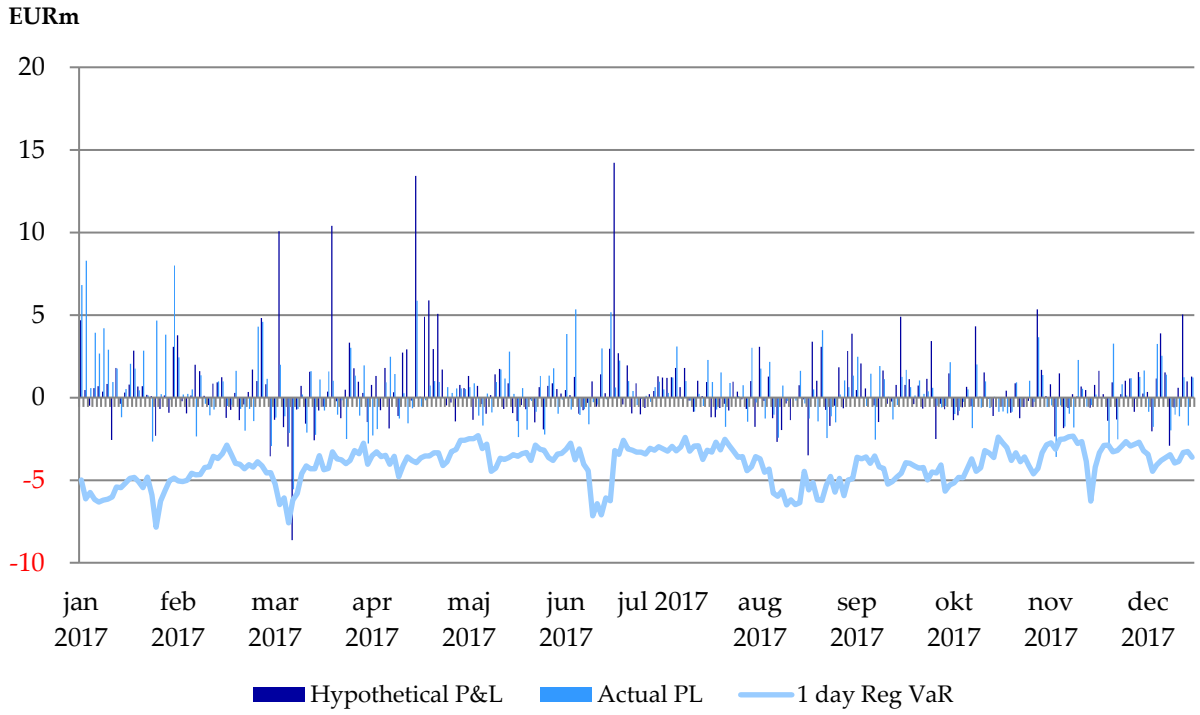


Table 7.12 Repricing gap analysis, scenario of a one percentage point increase in all interest rates

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 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.

		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	Non-repricing	Total
Interest bearing assets		268,721	36,867	22,288	17,120	34,748	22,695		402,440
Non-interest bearing assets								179,173	179,173
Total assets	581,612	268,721	36,867	22,288	17,120	34,748	22,695	179,173	581,612
Interest-bearing liabilities		173,532	35,087	8,240	19,859	54,667	31,373		322,758
Non-interest bearing liabilities								258,854	258,854
Total liabilities and equity	581,612	173,532	35,087	8,240	19,859	54,667	31,373	258,854	581,612
Off-balance sheet items, net		6,256	-19,412	-12,731	2,271	15,748	7,841		
Exposure		888	-81	3					
Cumulative exposures		888	807	810					
SIIR Impact[1] of increasing interest rates 2017		810							

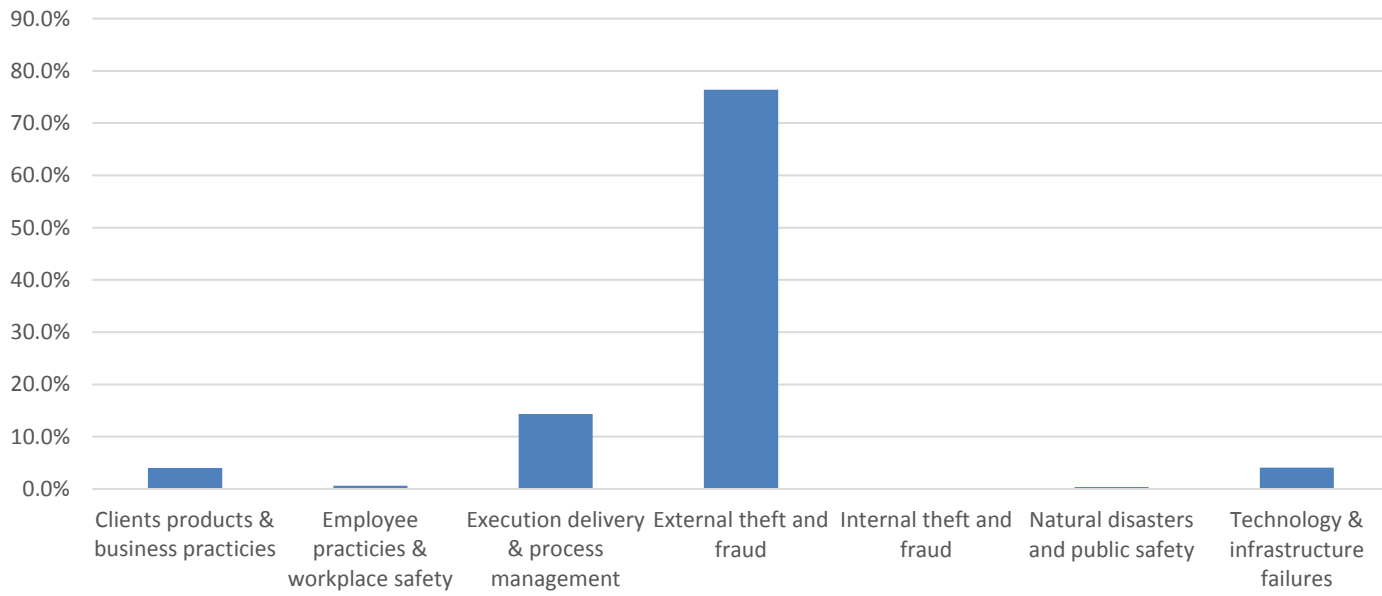
1) Impact is calculated based on +100bps change on exposure

8. Operational risk

Figure 8.1 Operational risk incidents

Figure 8.1 Operational risk incidents

Operational risk is inherent in all activities performed by Nordea. Nordea's capital requirement for operational risk for 2017 amounted to EUR 1,344m. The capital requirement for operational risk is calculated on an annual basis. The figure below shows incidents distributed according to the operational risk event type categories. All categories remain stable compared to 2016. External theft and fraud remains the category with the highest number of incidents because of the high number of card fraud incidents included in this category. The total number of incidents amounted to approximately 25,500 in 2016 and approximately 26,000 in 2017, corresponding to a 2.2 percent increase.



9. Securitisation

Table 9.1 Securitisation positions - by capital approach

The REA of Nordea's securitisation position is fully calculated using the IRB approach, where a supervisory formula method is applied. Based on the estimated exposure value of EUR 8.4bn, the REA of the securitisation position is EUR 850m.

	Banking book			
	Exposure values		REA	
EURm	Securitisation	Resecuritisation	Securitisation	Resecuritisation
IRB approach				
Supervisory formula method	8,400		850	
Total	8,400		850	

Table 9.2 Total amount of outstanding exposures securitised where Nordea is originator - asset value and impairment charges
The total amount of outstanding securitisation exposures where Nordea stands as an originator, measured as exposure at default after concentration adjustment, amounts to EUR 8.4bn as shown in the table below. Recognised losses amounted to EUR 146t at year end 2017.

	Banking book					
EURm	Traditional	Synthetic	Total	Of which past due	of which deducted from own funds or risk-weighted at 1250%	Recognised losses
Loans to corporates or SME's		8,400	8,400	2		0
Total (originator)		8,400	8,400	2		0

Table 9.3 Special purpose entities where Nordea is the sponsor

The Special Purpose Entities (SPEs) in the table 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 in the Nordea credit risk framework. 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 mark to market method.

EURm	Type	Securitisation	Duration	Accounting treatment	Book	Nordea's loans to SPEs	Total assets of SPEs
Viking ABCP Conduit	Traditional	Receivables Securitisation	< 5 years	Consolidated	Banking	895	923
AR Finance[1]	Traditional	Receivables Securitisation	< 5 years	Consolidated	Banking	122	125
Total						1,017	1,048

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

10 Liquidity

Table 10.1 LIQ 1, LCR Disclosures

Nordea Group's short liquidity risk exposure measured by Liquidity Coverage Ratio (LCR) according to EBA Delegated act remained on good and stable levels throughout 2017, quarterly averages ranging between 163 - 164%.

	Total unweighted value (average)				Total weighted value (average)			
EURm	31 Mar 2017	30 Jun 2017	30 Sep 2017	31 Dec 2017	31 Mar 2017	30 Jun 2017	30 Sep 2017	31 Dec 2017
Number of data points used in the calculation of averages	7	10	12	12	7	10	12	12
High-quality liquid assets								
Total high-quality liquid assets (HQLA)					113,089	115,503	115,444	114,046
Cash-outflows								
Retail deposits & deposits from small business customers	88,347	88,090	87,878	87,089	6,210	6,133	6,057	5,932
- Of which stable deposits	66,687	67,451	68,182	68,912	3,334	3,373	3,409	3,446
- Of which less stable deposits	21,660	20,639	19,696	18,177	2,875	2,760	2,648	2,486
Unsecured wholesale funding	117,085	119,767	120,706	120,755	58,460	60,334	60,190	60,725
- Of which Operational deposits (all counterparties) and deposits in networks of cooperative banks	45,330	45,223	45,323	44,693	10,477	10,412	10,395	10,211
- Of which Non-operational deposits (all counterparties)	60,162	62,324	62,727	62,871	36,389	37,703	37,141	37,324
- Of which unsecured debt	11,594	12,219	12,655	13,190	11,594	12,219	12,655	13,190
Secured wholesale funding					2,775	2,470	2,357	2,090
Additional requirements	49,722	49,811	50,939	51,197	13,358	13,051	13,290	12,715
Outflows related to derivative exposures and other collateral requirements	12,212	11,668	11,554	10,506	9,747	9,425	9,641	9,021
- Of which credit and liquidity facilities	37,510	38,143	39,385	40,691	3,611	3,626	3,649	3,693
- Of which other contractual funding obligations	2,675	2,905	3,100	3,152	2,396	2,592	2,742	2,761
- Of which other contingent funding obligations	61,495	60,890	59,663	58,017	3,533	3,437	3,309	3,207
Total cash outflows					86,730	88,017	87,944	87,430
Cash inflows								
Secured lending (e.g. reverse repos)	34,139	33,870	32,982	32,746	2,472	2,263	2,137	1,923
Inflows from fully performing exposures	9,475	9,946	10,528	11,207	4,710	4,952	5,235	5,666
Other cash inflows	14,882	14,328	14,233	13,466	9,940	9,807	9,971	9,693
Total cash inflows	58,496	58,145	57,743	57,418	17,122	17,022	17,343	17,282
Inflows subject to 75% cap	58,496	58,145	57,743	57,418	17,122	17,022	17,343	17,282

	Total adjusted value			
Liquidity buffer	113,089	115,503	115,444	114,046
Total net cash outflows	69,609	70,995	70,602	70,148
Liquidity coverage ratio (%)	163%	163%	164%	163%

Table 10.2 LCR sub-components

Liquidity Coverage Ratio (LCR) according to Swedish FSA's definition remained on good level at 147%. Short term liquidity risk in main currencies was also maintained at comfortable levels.

	Combined		USD		EUR	
EURm	After factors	Before factors	After factors	Before factors	After factors	Before factors
Liquid assets level 1	67,028	67,028	30,024	30,024	24,300	24,300
Liquid assets level 2	30,281	35,624	1,897	2,232	3,149	3,705
Cap on level 2						
A. Liquid assets total	97,309	102,653	31,921	32,256	27,449	28,005
Customer deposits	44,312	167,339	10,304	15,557	10,430	49,044
Market borrowing [1, 2]	27,947	46,357	14,262	17,241	4,126	12,361
Other cash outflows	16,229	56,617	687	5,906	3,010	16,532
B. Cash outflows total	88,488	270,313	25,253	38,704	17,566	77,936
Lending to non-financial customers	7,531	15,062	488	975	1,740	3,479
Other cash inflows	14,897	41,604	6,042	6,942	5,130	12,760
Limit on inflows						
C. Cash inflows total	22,428	56,667	6,529	7,917	6,870	16,239
Liquidity coverage ratio [A/(B-C)]	147%		170%		257%	

1) Corresponds to chapter 4, articles 10-13 in the Swedish LCR regulation, containing e.g. portion of corporate deposits, market funding, repos and other secured funding

2) Corresponds to chapter 4, articles 14-25 in the Swedish LCR regulation, containing unutilised credit and liquidity facilities, collateral need for derivatives and derivative outflows.

Table 10.3 Liquidity buffer split by type of asset and currency

	Currency distribution, market values in EURm				
Type of asset	SEK	EUR	USD	Other CCY	Total
Cash and balances with central banks	107	20,060	22,935	4,775	47,877
Balances with other banks		0		1	1
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks[1)]	2,484	2,536	6,929	3,165	15,113
Securities issued or guaranteed by municipalities or other public sector entities [1)]	0	271	948	244	1,464
Covered bonds issued by other bank or financial institute [1)]	8,593	2,849	1,031	17,048	29,520
Covered bonds issued by the own bank or related unit [1)]		244		837	1,081
Securities issued by non-financial corporates [1)]		22	97		118
Securities issued by financial corporates, excluding covered bonds[2)]	257	214	527	2	1,000
All other eligible and unencumbered securities [2)]					
Total liquidity buffer[3)]	11,440	26,195	32,468	26,072	96,175
Adjustments to Nordeas official buffer: Eligible but encumbered securities (+), cash and balances with other banks/central banks (-), central banks haircuts (-)	1,521	-309	-2,253	4,246	3,205
Total liquidity buffer (Nordea definition)	12,961	25,886	30,215	30,318	99,379

[1)] 0-20 % risk weight.

[2)] All other eligible and unencumbered securites held by Group Treasury.

[3)] According to Swedish Bankers´ Association's definition 2011-10-07.

Table 10.4 Historical quarterly development of the liquidity buffer

Liquidity buffer remained on good level throughout 2017. The exposure is focused on Nordic and core (EUR & USD) central bank cash, government bonds and Nordic covered bonds.

Type of asset	Q4/17	Q3/17	Q2/17	Q1/17	Q4/16
Cash and balances with central banks	47,877	54,300	69,010	66,200	43,500
Balances with other banks	1	300	10	100	-
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks [1]	15,113	18,500	18,920	19,500	21,400
Securities issued or guaranteed by municipalities or other public sector entities [1]	1,464	5,200	5,150	5,300	5,100
Covered bonds issued by other bank or financial institute [1]	29,520	28,700	29,830	30,300	22,700
Covered bonds issued by the own bank or related unit [1]	1,081	400	130	900	1,000
Securities issued by non-financial corporates [1]	118	600	200	500	3,000
Securities issued by financial corporates, excluding covered bonds [2]	1,000	800	550	400	300
All other eligible and unencumbered securities [2]	-	-	-	-	-
Total liquidity buffer [3)]	96,175	108,700	123,810	123,200	97,000
Adjustments to Nordeas official buffer: Eligible but encumbered securities (+), cash and balances with other banks/central banks (-), central banks haircuts (-)	3,205	1,500	5,937	5,160	12,808
Total liquidity buffer (Nordea definition)	99,379	110,200	129,747	128,360	109,808

[1)] 0-20 % risk weight

[2)] All other eligible and unencumbered securites held by Group Treasury

[3)] According to Swedish Bankers´ Association's definition 2011-10-07

Table 10.5 Encumbered and unemcumbered assets

The main source of encumbrance for Nordea is covered bond issuance programs where the required overcollateralization levels are defined according to the relevant statutory regimes. Other contributors to encumbrance are derivatives and repos where the activity is concentrated to Sweden. Historically, the evolution of asset encumbrance for Nordea has been stable over time which illustrates the fact that the asset encumbrance for Nordea is a reflection of a structural phenomenon of the Scandinavian financial markets and savings behavior. Major part of the unencumbered assets are loans and the rest are equity instruments, debt securities and other assets.

	Carrying amount of encumbered assets	of which EHQLA and HQLA	Fair value of encumbered assets	of which EHQLA and HQLA	Carrying amount of unencumbered assets	of which EHQLA and HQLA	Fair value of unencumbered assets	of which EHQLA and HQLA
Assets of the reporting institution	161,632	44,126			405,213	109,645		
Equity instruments	1,527	0			6,580	0		
Debt securities	22,039	16,707	19,652	16,707	54,712	50,857	54,712	50,857
of which: covered bonds	7,024	6,489	7,024	6,489	28,335	27,127	28,335	27,795
of which: asset-backed securities	0	0	0	0	0	0	0	0
of which: issued by general governments	9,267	9,055	9,267	9,055	16,000	14,917	16,000	14,917
of which: issued by financial corporations	12,193	6,807	12,193	6,807	36,420	32,224	36,420	32,224
of which: issued by non-financial corporations	636	446	636	446	1,719	1,302	1,719	1,302
Other assets	25,153	25,153			61,578	0		

Collateral received

	Encumbered		Unencumbered	
	Fair value of encumbered collateral received or own debt securities issued	of which notionally eligible EHQLA and HQLA	Fair value of encumbered collateral received or own debt securities issued	of which notionally eligible EHQLA and HQLA
Collateral received by the reporting institution	17,690	17,150	43,713	40,054
Loans on demand	0	0	0	0
Equity instruments	1	0	1,502	0
Debt securities	17,689	17,150	14,804	12,648
of which: covered bonds	5,733	5,503	5,717	5,209
of which: asset-backed securities	0	0	0	0
of which: issued by general governments	11,135	10,848	7,558	6,944
of which: issued by financial corporations	5,733	5,482	6,022	5,205
of which: issued by non-financial corporations	618	616	760	668
Loans and advances other than loans on demand	0	0	22,454	22,454
Other collateral received	0	0	4,734	4,734
Own debt securities issued other than own covered bonds or asset-backed securities	0	0	18	0
Own covered bonds and asset-backed securities issued and not yet pledged			2,165	2,165
Total assets, collateral received and own debt securities issued	179,266	61,276		

Sources of encumbrance

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	165,455	177,724
of which: covered bonds issued	108,099	110,103

Table 10.6 Net balance of stable funding

The aim of always maintaining a positive NBSF was comfortably achieved throughout 2017, totalling to 70.4bn at the end of the year.

	EURm
Stable liabilities and equity	
Tier 1 and tier 2 capital	33,315
Secured/unsecured borrowing > 1y	124,346
Stable retail deposits	65,117
Less stable retail deposits	15,767
Wholesale deposits < 1y	72,934
Total stable liabilities	311,479
Stable assets	
Wholesale and retail loans > 1y	232,920
Long-term lending to banks and financial companies	1,845
Other illiquid assets	4,230
Total stable assets	238,996
Off-balance sheet items	2,092
Net balance of stable funding (NBSF)	70,392

Table 10.7 Funding sources

During 2017, Nordea continued to benefit from its prudent liquidity risk management, in terms of maintaining a diversified and strong funding base and a diversified liquidity buffer. As of year-end 2017, the total volume utilised under short-term programmes was EUR 35.2bn with an average maturity of 0.2 years. The total volume under long-term programmes was EUR 152.9bn with an average maturity of 6.2 years.

Liability type	Interest rate base	Average maturity (years)	EURm
Deposits by credit institutions			
- shorter than 3 months	Euribor, etc.	0.0	35,589
- longer than 3 months	Euribor, etc.	2.3	4,394
Deposits and borrowings from the public			
- Deposits on demand	Administrative	0.0	140,873
- Other deposits	Euribor, etc.	0.1	31,561
Debt securities in issue			
- Certificates of deposits	Euribor, etc.	0.3	10,743
- Commercial papers	Euribor, etc.	0.2	24,441
- Mortgage covered bond loans	Fixed rate, market-based	7.3	106,714
- Other bond loans	Fixed rate, market-based	3.0	37,216
Derivatives			42,713
Other non-interest bearing items			85,654
Subordinated debentures			
- Dated subordinated debenture loans	Fixed rate, market-based	4.9	5,942
- Undated and other subordinated debenture loans	Fixed rate, market-based		3,045
Equity			33,316
Total			562,201
Liabilities to policyholders			19,412
Total, including life insurance operations			581,612

Table 10.8 Assets and liabilities split by currency

Nordea Group's loan portfolio remained focused on four Nordic markets. Strong and diversified funding base was maintained across all main currencies throughout 2017.

EURm	EUR	DKK	NOK	SEK	USD	Other	Not distributed	Total
Cash balances with central banks	20,060	2,958	1,555	107	22,935	262		47,877
Loans to the public	78,226	77,540	47,390	87,744	16,813	2,445		310,158
Loans to credit institutions	4,155	91	427	1,140	2,188	592		8,592
Interest-bearing securities including treasury bills	14,992	20,263	7,940	15,776	11,262	368	11,181	81,782
Derivatives	29,728	4,750	2,114	4,249	3,826	1,445		46,111
Other assets							87,092	87,092
Total assets	147,160	105,603	59,425	109,016	57,025	5,111	98,273	581,612
Deposits and borrowings from the	52,746	39,585	21,976	41,267	14,027	2,832		172,434
Deposits by credit institutions	10,056	2,319	5,106	3,507	17,633	1,363		39,983
Debt securities in issue	43,061	50,343	7,986	36,474	23,818	17,433		179,114
- of which CD & CPs	8,420	-	19	2,472	13,270	11,003		35,184
- of which covered bonds	18,153	49,914	6,991	30,809		847		106,714
- of which other bonds	16,487	428	976	3,193	10,548	5,583		37,216
Subordinated liabilities	4,031		128	635	3,781	412		8,987
Derivatives	26,742	4,569	1,762	3,509	4,871	1,258		42,712
Other liabilities							105,066	105,066
Equity	21,546	4,733	2,906	3,596	71	464		33,316
Total liabilities and equity	158,182	101,549	39,863	88,988	64,202	23,762	105,066	581,612
Position not reported on the balance sheet	11,022.3	-4,107.5	-19,570.2	-20,154.2	7,128.7	18,494.6		
Net position, currencies		-53.5	-8.7	-126.5	-48.8	-156.0		

Table 10.9 Maturity analysis for assets and liabilities

EURm	<1 months	1-3 months	3-12 months	1-2 years	2-5 years	5-10 years	>10 years	Not specified	Total
Cash and balances with central	47,877								47,877
Loans to the public	49,014	11,338	24,409	21,938	55,036	41,971	106,453		310,158
- of which repos	14,924	978	389						16,292
Loans to credit institutions	4,776	918	1,420	534	924	21	0		8,592
- of which repos	3,070	348							3,418
Interest-bearing securities including treasury bills	70,601							11,181	81,782
Derivatives								46,111	46,111
Other assets								87,092	87,092
Total assets	172,269	12,255	25,829	22,471	55,960	41,992	106,453	144,384	581,612
Deposits and borrowings from the public	21,932	4,580	4,249	687	101	0		140,884	172,434
- of which repos	5,946	1,067	2						7,015
Deposits by credit institutions	30,665	4,925	786	49	3,553	5			39,983
- of which repos	6,051	1,421	82						7,553
Debt securities in issue	12,257	13,748	34,498	28,723	56,450	11,949	21,488		179,114
-of which CDs & CPs	10,623	12,894	10,339	1,328					35,184
-of which covered bonds	1,380	622	17,915	20,448	38,887	6,416	21,047		106,714
-of which other bonds	254	233	6,244	6,947	17,563	5,533	441		37,216
Subordinated liabilities					3,659	2,282		3,045	8,987
Derivatives								42,712	42,712
Other liabilities								105,066	105,066
Equity								33,316	33,316
Total liabilities and equity	64,854	23,253	39,534	29,459	63,763	14,236	21,488	325,024	581,612

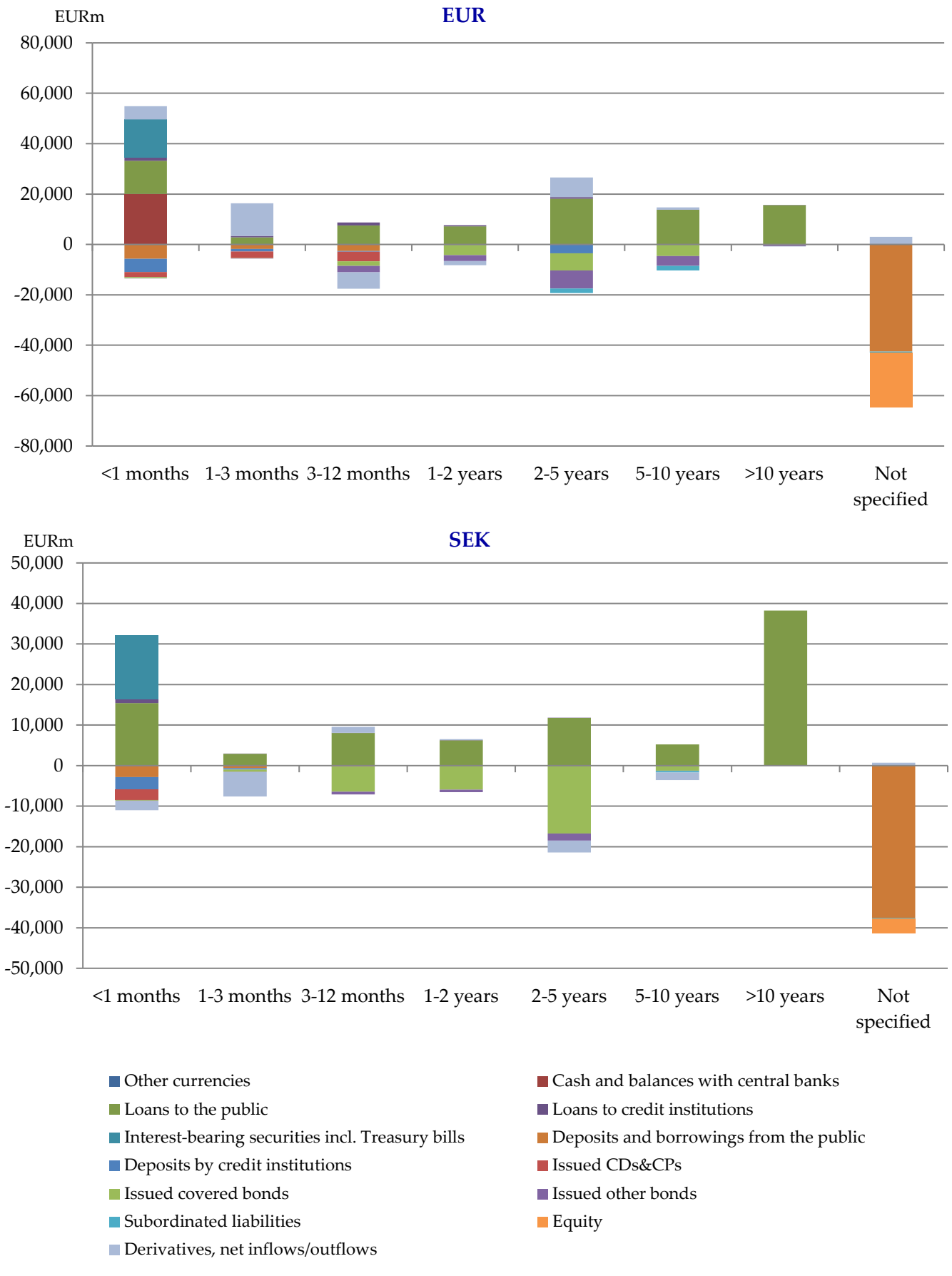
Maturity analysis is based on both contractual and behavioural information of remaining maturity of items.

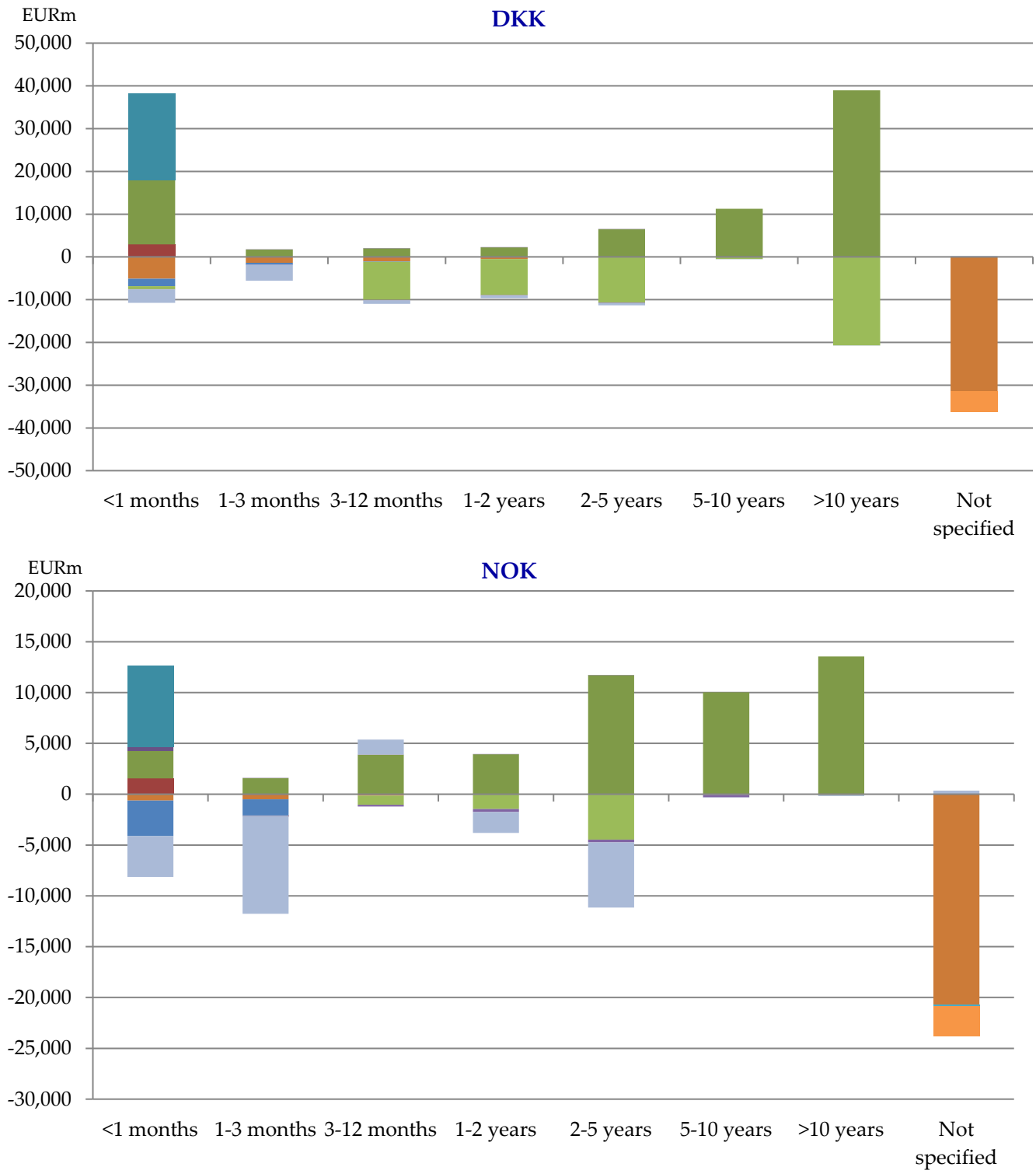
Amortisation are included in time bucket corresponding the estimated cash flow date.

Time bucket 'Not specified' includes items which are lacking specific timing of cash flows.

Figure 10.10 Maturity analysis of assets and liabilities, split by currency

During 2017, Nordea continued to benefit from its prudent liquidity risk management, in terms of maintaining a diversified and strong funding base and a diversified liquidity buffer in all of the main currencies.

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Other currencies
Cash and balances with central banks
Loans to the public
Loans to credit institutions
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Deposits and borrowings from the public
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Issued covered bonds
Issued other bonds
Subordinated liabilities
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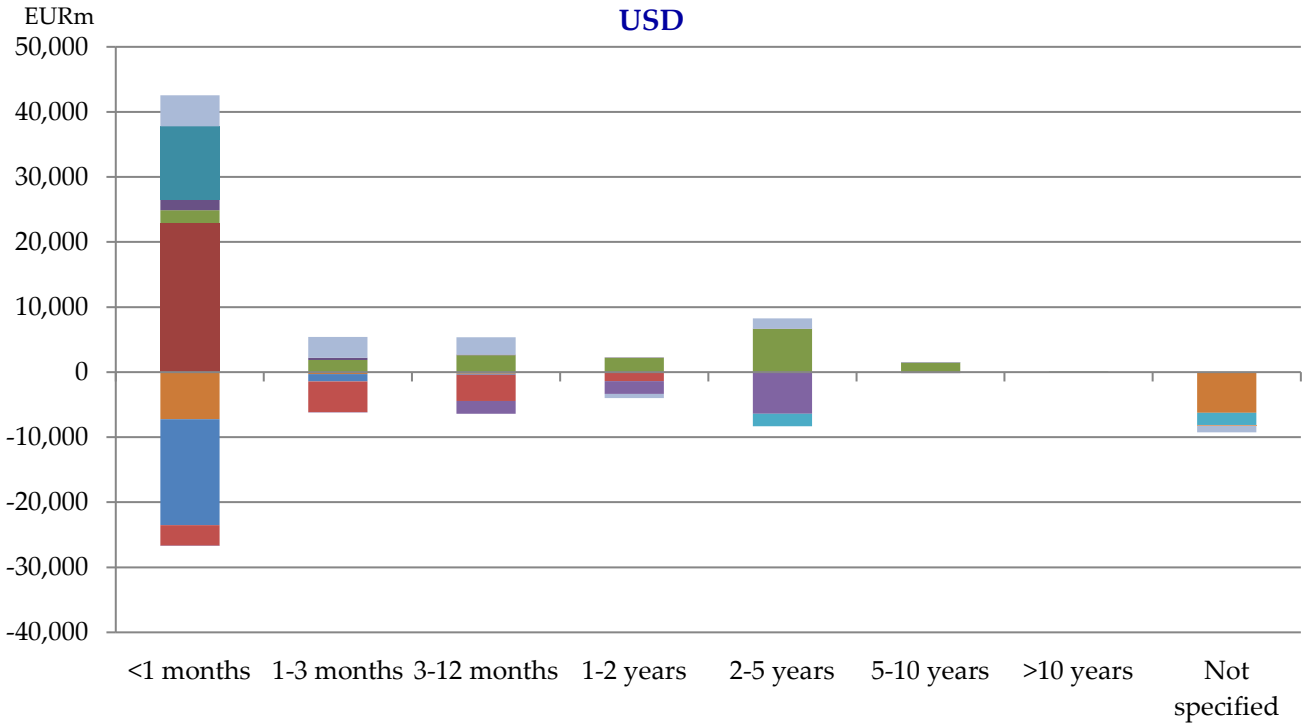
Derivatives, net inflows/outflows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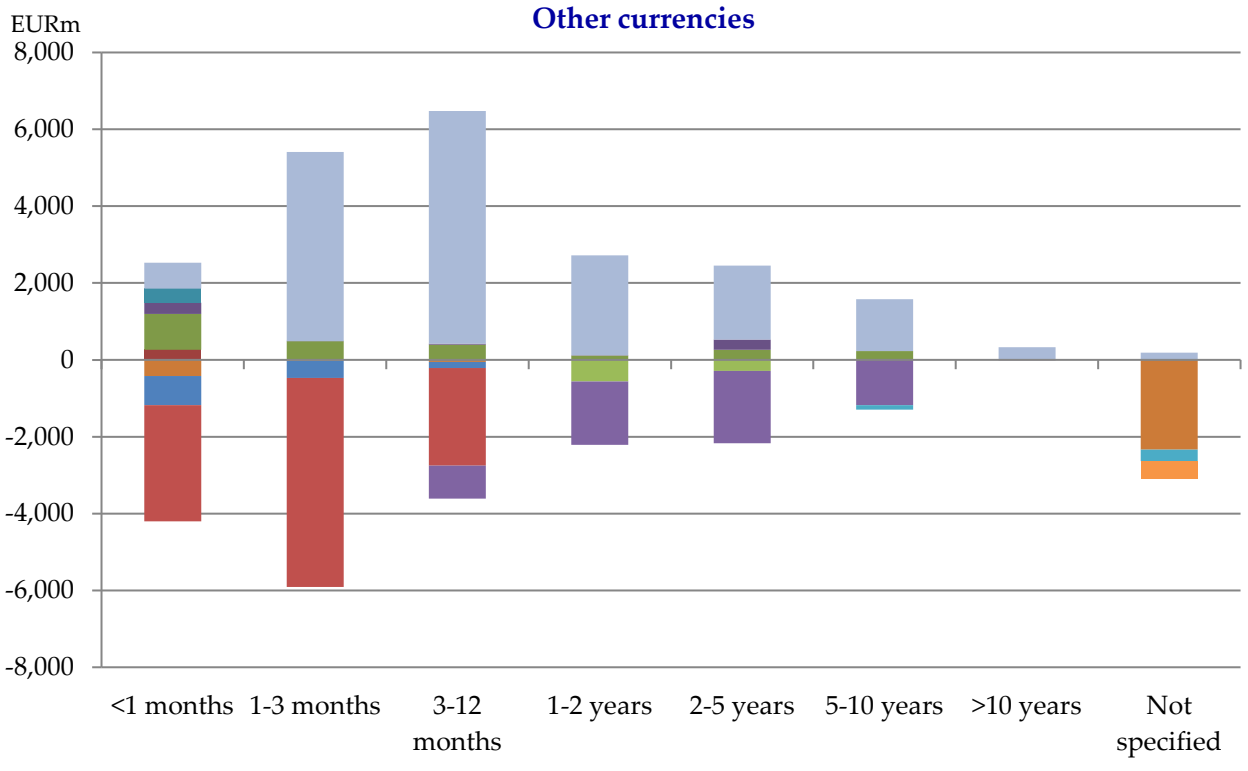
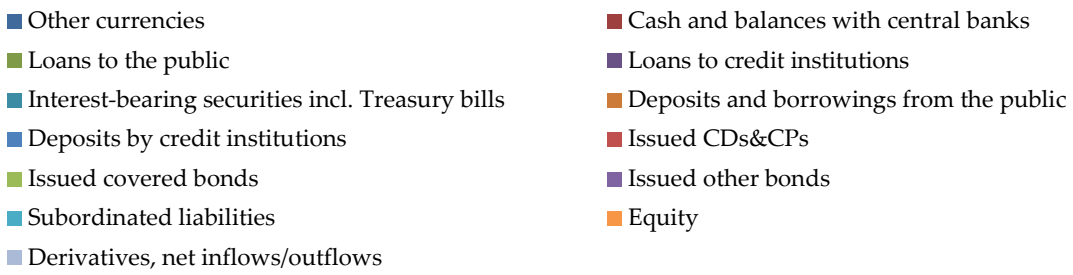
>10 years
Not specified


Other currencies
EURm
8,000
6,000
4,000
2,000
0
-2,000
-4,000
-6,000
-8,000
<1 months
1-3 months
3-12 months
1-2 years
2-5 years
5-10 years
>10 years
Not specified


Other currencies
Cash and balances with central banks
Loans to the public
Loans to credit institutions
Interest-bearing securities incl. Treasury bills
Deposits and borrowings from the public
Deposits by credit institutions
Issued CDs&CPs
Issued covered bonds
Issued other bonds
Subordinated liabilities
Equity
Derivatives, net inflows/outflows

11. Nordea Life and Pensions

Table 11.1 Assets and liabilities of NLP

The table shows NLP asset and liabilities at 31 December 2017 on an IFRS basis. The development of assets and liabilities is determined predominantly by in- and outflows of insurance premiums, claims, investment returns and holding of capital in NLP.

EURm	31 Dec 2017	31 Dec 2016
Assets		
Investment properties	1,436	3,104
Shares	6,328	16,350
Alternative investments	1,220	3,170
Debt securities - At fair value	8,138	17,511
Debt securities - Held to maturity	3,000	2,721
Bonds pledged as collateral		3,702
Deposits and treasury bills	1,217	1,869
Financial assets backing investment contracts without risk and guarantees	22,016	19,240
Other financial assets	327	3,918
Other assets	605	1,180
Assets held for sale	30,478	
Total assets	74,764	72,765
Liabilities		
Traditional provisions	6,263	19,124
Collective bonus potential	2,243	3,606
Unit-linked provisions	6,922	14,239
Investment contracts with guarantees	3,486	3,527
Investment contracts without risk and guarantees	22,016	19,240
Other insurance provisions	498	714
Other financial liabilities	501	8,156
Other liabilities	283	879
Liabilities held for sale	29,536	
Shareholders' equity	1,643	1,955
Minority interest	168	
Subordinated loans	1,206	1,325
Total liabilities and equity	74,764	72,765

Assets and Liabilities held for sale, include assets and liabilities In Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, where in December 2017 further 45% of the shares was communicated to be sold to the costumer owned association Norliv. The final transaction is subject to approval from the Danish Financial Supervisory Authority and the antitrust authorities.

Table 11.2 Effects of market risk on NLP

The table shows the sensitivity of the financial accounts from changes in market risks with the impact split between the effect on policyholders and Nordea Group's own account.

	31 Dec 2017[1]		31 Dec 2016	
EURm	Effect on policyholders	Effect on Nordea Group's Account	Effect on policyholders	Effect on Nordea Group's Account
50 bp increase in interest rates	-266.1	-2.9	-713.3	-3.2
50 bp decrease in interest rates	266.9	2.9	701.6	2.7
12% decrease in all shares	-724.1	-1.3	-1,274.5	-2.6
8% decrease in property values	-106.3	-0.6	-204.6	-1.1
8% loss of counterparties	-4.7	0.0	-7.5	0.0

"+" means that policyholders liabilities or Nordea Group's account (profit/equity) increase and "-" means that policyholders liabilities or Nordea Group's account (profit/equity) decrease

1) 31. Dec 2017 is exclusive Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, which is reclassified to 'assets held for sale'.

Table 11.3 Effects of life and insurance risks

The table shows the sensitivity of the financial accounts from changes in life insurance risk with the impact split between the effect on policyholders and Nordea Group's own account. Increases in mortality and disability rates have a small negative impact on Nordea Group's own account due to the contract type and buffer.

	31 Dec 2017[1]		31 Dec 2016	
EURm	Effect on policyholders	Effect on Nordea Group's Account	Effect on policyholders	Effect on Nordea Group's Account
Mortality - increased living with 1 year	23.4	-18.7	28.0	-21.5
Mortality - decreased living with 1 year	-0.5	0.4	-5.8	4.5
Disability - 10% increase	9.4	-7.5	12.3	-9.5
Disability - 10% decrease	-6.4	5.1	-8.5	6.5

"+" means that policyholders liabilities or Nordea Groups account (profit/equity) increase and "-" means that policyholders liabilities or Nordea Group's account (profit/equity) decrease

1) 31. Dec 2017 is exclusive Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, which is reclassified to 'assets held for sale'.

Table 11.4 Investment return, traditional life insurance

Table shows investment return of the traditional business for the consolidated life companies. The assets under management (AuM) are affected by the investment return and the in- and outflows of business.

	31 Dec 2017[1]		31 Dec 2016	
EURm	AuM	Investment return	AUM	Investment return
Interest-bearing securities and deposits	7,401	4.8%	15,071	6.2%
Shares	1,480	8.8%	5,660	5.4%
Alternative investments	473	11.4%	2,017	1.2%
Investment property	866	9.3%	2,699	6.0%
Total return	10,220	5.9%	25,447	5.6%

1) 31. Dec 2017 is exclusive Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, which is reclassified to 'assets held for sale'.

Table 11.5 Insurance provisions (technical provisions) and provisions on investment contracts divided into guarantee levels (technical interest rates)

The table shows the insurance provisions and provisions on investment contracts divided into guarantee levels.

EURm	None	0%	0-2%	2-3%	3-4%	>4%	Total liabilities
31 Dec 2017[1]							
Technical provisions	7,006	1,502	2,924	2,185	2,225	825	16,667
31 Dec 2016							
Technical provisions	14,341	2,373	8,966	3,518	4,041	3,653	36,892

1) 31. Dec 2017 is exclusive Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, which is reclassified to 'assets held for sale'.

Table 11.6 Financial buffers

The table shows the development in the financial buffers for NLP.

	Financial buffers		% of guaranteed liabilities	
EURm	31 Dec 2017[1]	31 Dec 2016	31 Dec 2017	31 Dec 2016
Denmark		1,327		10.7%
Norway	317	275	6.8%	5.5%
Sweden	1,150	1,137	45.6%	43.2%
Finland	1,197	1,114	59.9%	51.8%
Total	2,664	3,853	28.8%	17.3%

1) 31. Dec 2017 is exclusive Nordea Liv & Pension, livsforsikringsselskab A/S, Denmark, which is reclassified to 'assets held for sale'.

Table 11.7 Solvency sensitivity, 30 November 2017

EURm	NLP
Solvency position[1]	169%
Equity drops 12%	174%
Interest rates down 50bp	169%
Interest rates up 50bp	173%

1) The solvency position at 30 November 2017 does not include an anticipated dividend of EUR 300m. The dividend was approved by the Nordea Life Holding Board of Directors on 18 December 2017 and will be reflected in the year-end figures.

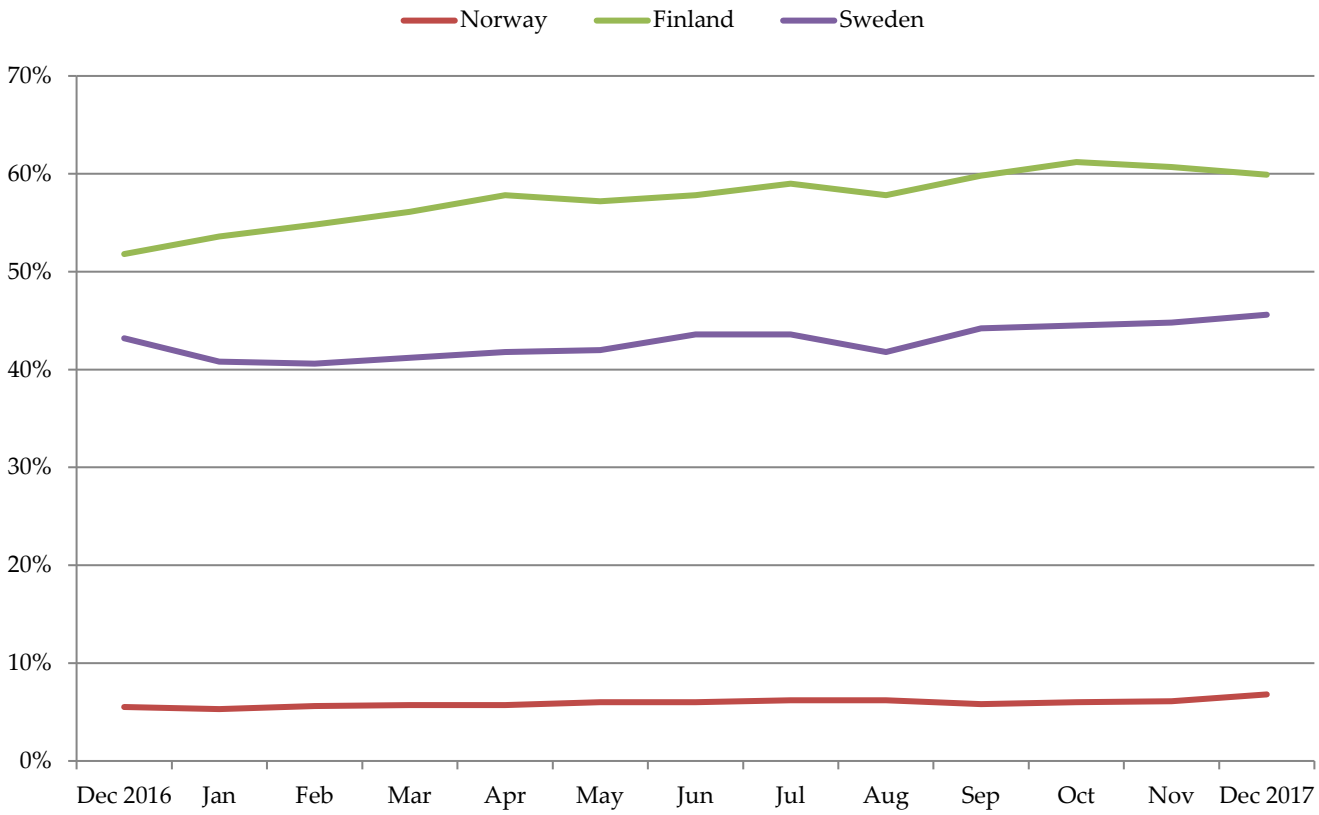
Table 11.8 Solvency position, 30 November 2017

EURm	NLP
Solvency capital requirement	2,674
Own funds	4,516
Solvency margin	1,842
Solvency position	169%

*The solvency position at 30 November 2017 does not include an anticipated dividend of EUR 300m. The dividend was approved by the Nordea Life Holding Board of Directors on 18 December 2017 and will be reflected in the year-end figures.

Figure 11.9 Financial buffers compared to insurance provisions, rolling 12 mths

The figure shows the development of the financial buffers during 2017. The level has been stable throughout the year for all entities.



12. Other tables

Table 12.1 Transitional own funds disclosure template

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
Common Equity Tier 1 capital: instruments and reserves				
1	Capital instruments and the related share premium accounts	5,130	26 (1), 27, 28, 29, EBA list	
	of which: Instrument type 1	4,050	EBA list 26 (3)	
	of which: Instrument type 2		EBA list 26 (3)	
	of which: Instrument type 3		EBA list 26 (3)	
2	Retained earnings	23,625	26 (1) (c)	
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	-319	26 (1)	
3a	Funds for general banking risk		26 (1) (f)	
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1		486 (2)	
	Public sector capital injections grandfathered until 1 January 2018		483 (2)	
5	Minority Interests (amount allowed in consolidated CET1)		84, 479, 480	
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	661	26 (2)	
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	29,097		
Common Equity Tier 1 (CET1) capital: regulatory adjustments				
7	Additional value adjustments (negative amount)	-244	34, 105	
8	Intangible assets (net of related tax liability) (negative amount)	-3,834	36 (1) (b), 37, 472 (4)	
9	Empty Set in the EU	NA		
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	0	36 (1) (c), 38, 472 (5)	
11	Fair value reserves related to gains or losses on cash flow hedges	46	33 (a)	
12	Negative amounts resulting from the calculation of expected loss amounts	-291	36 (1) (d), 40, 159, 472 (6)	
13	Any increase in equity that results from securitised assets (negative amount)		32 (1)	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-73	33 (b)	
15	Defined-benefit pension fund assets (negative amount)	-152	36 (1) (e) , 41, 472 (7)	
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-32	36 (1) (f), 42, 472 (8)	
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)		36 (1) (g), 44, 472 (9)	

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)		36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)		36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79, 470, 472 (11)	
20	Empty Set in the EU	NA		
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative		36 (1) (k)	
20b	of which: qualifying holdings outside the financial sector (negative amount)		36 (1) (k) (i), 89 to 91	
20c	of which: securitisation positions (negative amount)		36 (1) (k) (ii) 243 (1) (b) 244 (1) (b) 258	
20d	of which: free deliveries (negative amount)		36 (1) (k) (iii), 379 (3)	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in 38 (3) are met) (negative amount)		36 (1) (c), 38, 48 (1) (a), 470, 472 (5)	
22	Amount exceeding the 15% threshold (negative amount)		48 (1)	
23	of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities		36 (1) (i), 48 (1) (b), 470, 472 (11)	
24	Empty Set in the EU	NA		
25	of which: deferred tax assets arising from temporary differences		36 (1) (c), 38, 48 (1) (a), 470, 472 (5)	
25a	Losses for the current financial year (negative amount)		36 (1) (a), 472 (3)	
25b	Foreseeable tax charges relating to CET1 items (negative amount)		36 (1) (l)	
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment			
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468			
	Of which: …filter for unrealised loss on AFS debt instruments		467	39
	Of which: …filter for unrealised loss 2		467	
	Of which: …filter for unrealised gain on AFS debt instruments		468	177
	Of which: …filter for unrealised gain 2		468	
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR		481	
	Of which: …		481	
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)		36 (1) (j)	
28	Total regulatory adjustments to Common equity Tier 1 (CET1)	-4,581		
29	Common Equity Tier 1 (CET1) capital	24,515		

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
Additional Tier 1 (AT1) capital: instruments				
30	Capital instruments and the related share premium accounts	2,806	51, 52	
31	of which: classified as equity under applicable accounting standards	750		
32	of which: classified as liabilities under applicable accounting standards	2,056		
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	722	486 (3)	
	Public sector capital injections grandfathered until 1 January 2018		483 (3)	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties		85, 86, 480	
35	of which: instruments issued by subsidiaries subject to phase out		486 (3)	
36	Additional Tier 1 (AT1) capital before regulatory adjustments	3,528		
Additional Tier 1 (AT1) capital: regulatory adjustments				
37	Direct and indirect holdings by an institution of own AT1 Instruments (negative amount)	-35	52 (1) (b), 56 (a), 57, 475 (2)	
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)		56 (b), 58, 475 (3)	
39	Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)		56 (c), 59, 60, 79, 475 (4)	
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10% threshold net of eligible short positions) (negative amount)		56 (d), 59, 79, 475 (4)	
41	Regulatory adjustments applied to additional tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)			
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013 Of which shortfall		472, 472(3)(a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)	
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013		477, 477 (3), 477 (4) (a)	

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
	Of which items to be detailed line by line, e.g. Reciprocal cross holdings in Tier 2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc			
41c	Amount to be deducted from or added to Additional Tier 1 capital with regard to additional filters and deductions required pre- CRR		467, 468, 481	
	Of which: …possible filter for unrealised losses		467	
	Of which: …possible filter for unrealised gains		468	
	Of which: …		481	
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)		56 (e)	
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	-35		
44	Additional Tier 1 (AT1) capital	3,493		
45	Tier 1 capital (T1 = CET1 + AT1)	28,008		
	Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	4,669	62, 63	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	241	486 (4)	
	Public sector capital injections grandfathered until 1 January 2018		483 (4)	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties		87, 88, 480	
49	of which: instruments issued by subsidiaries subject to phase out		486 (4)	
50	Credit risk adjustments	95	62 (c) & (d)	
51	Tier 2 (T2) capital before regulatory adjustments	5,005		
	Tier 2 (T2) capital: regulatory adjustments			
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-61	63 (b) (i), 66 (a), 67, 477 (2)	
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)		66 (b), 68, 477 (3)	
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)		66 (c), 69, 70, 79, 477 (4)	
54a	Of which new holdings not subject to transitional arrangements			
54b	Of which holdings existing before 1 January 2013 and subject to transitional arrangements			

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-1,205	66 (d), 69, 79, 477 (4)	
56	Regulatory adjustments applied to tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)			
56a	Residual amounts deducted from Tier 2capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013		472, 472(3)(a), 472 (4), 472 (6), 472 (8) (a), 472 (9), 472 (10) (a), 472 (11) (a)	
	Of which shortfall			
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013		475, 475 (2) (a), 475 (3), 475 (4) (a)	
	Of which items to be detailed line by line, e.g. reciprocal cross holdings in at1 instruments, direct holdings of non significant investments in the capital of other financial sector entities, etc			
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre CRR		467, 468, 481	
	Of which: …possible filter for unrealised losses		467	
	Of which: …possible filter for unrealised gains		468	
	Of which: …		481	
57	Total regulatory adjustments to Tier 2 (T2) capital	-1,266		
58	Tier 2 (T2) capital	3,738		
59	Total capital (TC = T1 + T2)	31,747		
59a	Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013(i.e. CRR residual amounts)			
	Of which: …items not deducted from CET1 (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line, e.g. Deferred tax assets that rely on future profitability net of related tax liablity, indirect holdings of own CET1, etc)		472, 472 (5), 472 (8) (b), 472 (10) (b), 472 (11) (b)	
	Of which: …items not deducted from AT1 items (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line, e.g. Reciprocal cross holdings in T2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc)		475, 475 (2) (b), 475 (2) (c), 475 (4) (b)	

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
	Items not deducted from T2 items (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line, e.g. Indirect holdings of own t2 instruments, indirect holdings of non significant investments in the capital of other financial sector entities, indirect holdings of significant investments in the capital of other financial sector entities etc)		477, 477 (2) (b), 477 (2) (c), 477 (4) (b)	
60	Total risk weighted assets	125,779		
Capital ratios and buffers				
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	19.5%	92 (2) (a), 465	
62	Tier 1 (as a percentage of risk exposure amount)	22.3%	92 (2) (b), 465	
63	Total capital (as a percentage of risk exposure amount)	25.2%	92 (2) (c)	
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	6.3%	CRD 128, 129, 130	
65	of which: capital conservation buffer requirement	2.5%		
66	of which: countercyclical buffer requirement	0.8%		
67	of which: systemic risk buffer requirement	3.0%		
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	2.0%	CRD 131	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	15.0%	CRD 128	
69	[non relevant in EU regulation]	NA		
70	[non relevant in EU regulation]	NA		
71	[non relevant in EU regulation]	NA		
Amounts below the thresholds for deduction (before risk weighting)				
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	211	36 (1) (h), 45, 46, 472 (10) 56 (c), 59, 60, 475 (4) 66 (c), 69, 70, 477 (4)	
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	946	36 (1) (i), 45, 48, 470, 472 (11)	

EURm		(A) Amount at disclosure date	(B) regulation (EU) no 575/2013 article reference	(C) Amounts subject to pre-regulation treatment or prescribed residual amount of regulation, (EU) no 575/2013
74	Empty Set in the EU			
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)		36 (1) (c), 38, 48, 470, 472 (5)	
Applicable caps on the inclusion of provisions in Tier 2				
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)		62	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach		62	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	95	62	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	533	62	
Capital instruments subject to phase-out arrangements (only				
80	Current cap on CET1 instruments subject to phase out arrangements		484 (3), 486 (2) & (5)	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)		484 (3), 486 (2) & (5)	
82	Current cap on AT1 instruments subject to phase out arrangements	788	484 (4), 486 (3) & (5)	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)		484 (4), 486 (3) & (5)	
84	Current cap on T2 instruments subject to phase out arrangements	443	484 (5), 486 (4) & (5)	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)		484 (5), 486 (4) & (5)	

Table 12.2 Leverage ratio disclosure templates

Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

	EURm	Applicable Amounts
1	Total assets as per published financial statements	581,612
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-57,746
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	
4	Adjustments for derivative financial instruments	-15,607
5	Adjustments for securities financing transactions "SFTs"	-3,167
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	37,862
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	
7	Other adjustments	-4,617
8	Total leverage ratio exposure	538,338

Table LRCom: Leverage ratio common disclosure

	EURm	CRR leverage ratio exposures
	On-balance sheet exposures (excluding derivatives and SFTs)	
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	449,365
2	(Asset amounts deducted in determining Tier 1 capital)	-4,617
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	444,748
	Derivative exposures	
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	7,585
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	26,218
EU-5a	Exposure determined under Original Exposure Method	
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-6,340
8	(Exempted CCP leg of client-cleared trade exposures)	
9	Adjusted effective notional amount of written credit derivatives	38,794

10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-34,486
11	Total derivative exposures (sum of lines 4 to 10)	31,771
	Securities financing transaction exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	37,231
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-14,003
14	Counterparty credit risk exposure for SFT assets	730
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	
15	Agent transaction exposures	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	23,957
	Other off-balance sheet exposures	
17	Off-balance sheet exposures at gross notional amount	99,874
18	(Adjustments for conversion to credit equivalent amounts)	-62,012
19	Other off-balance sheet exposures (sum of lines 17 to 18)	37,862
	Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)	
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	
	Capital and total exposures	
20	Tier 1 capital	28,008
21	Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	538,338
	Leverage ratio	
22	Leverage ratio	5.2%
	Choice on transitional arrangements and amount of derecognised	
EU-23	Choice on transitional arrangements for the definition of the	Transitional
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	

LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	449,365
EU-2	Trading book exposures	42,238
EU-3	Banking book exposures, of which:	407,127
EU-4	Covered bonds	29,097
EU-5	Exposures treated as sovereigns	74,985
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	157
EU-7	Institutions	4,598
EU-8	Secured by mortgages of immovable properties	139,964
EU-9	Retail exposures	28,619
EU-10	Corporate	107,990
EU-11	Exposures in default	5,456
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	16,261

LRQua: Free format text boxes for disclosure on qualitative items

1	Description of the processes used to manage the risk of excessive leverage	The risk of excessive leverage is included in the Group's planning, monitoring and resource allocation processes, and is monitored by the Group Board and CEO. The leverage ratio as defined in the CRD IV/CRR is further an integrated part of the Risk Appetite framework and the Capital management framework for which internal limits and targets are set.
2	Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers	The leverage ratio has decreased slightly from 4.6% in Q4 2015 to 4.5% in Q2 2016. During the period, total leverage ratio exposure increased mainly as a result of increased exposures to central banks. This was partially offset by an increase in Tier 1 capital primarily the result of continued profit generation.

Table 12.3 Capital and risk information guide

Reference	Capital and Risk Management report	Annual report	www.nordea.com
Quantification			
End of year results			
Minimum capital requirements	part 1, table 3.8	pages 54 and note G38	
Business area results	part 1, table 1.1	page 40-42	Nordea.com > Latest interim results > Factbook
Development of REA	part 1, table 3.9	page 56 and note G38	
Development of Own funds	part 1, table 3.2	page 56-57	
Capital ratios	part 1, figure 3.7-3.8 and table 11.1	page 136	
Leverage ratio	part 1, table 11.2	page 138	
Capital requirements parameters			
Credit Risk	part 1, section 5	page 45-50, note G46	
Counterparty Credit Risk	part 1, section 6	page 50, note G46 page 168	
Market Risk	part 1, section 7	page 50-51	
Operational Risk	part 1, section 8	page 51-52, G38 page 137	
Securitisations	part 1, section 9	page 57, 137, 166	
Liquidity Risk	part 1, section 10	page 54-55	
Frameworks			
Governance, measurement, management and mitigation of risks			Nordea.com > About Nordea > Corporate Governance >
Credit Risk	part 2, section 2	page 45-50	
Counterparty Credit Risk	part 2, section 2.6	page 50	
Market Risk	part 2, section 3	page 50-51	
Operational Risk	part 2, section 4	page 51	
Compliance Risk	part 2, section 4	page 52	
Liquidity Risk	part 2, section 6	page 54-55	
Securitisations	part 2, section 7	page 57, note G38 & G46	
Life and pensions operation	part 2 section 9	page 56	
Capital	part 2	page 55-57, note G38	
Indicators of global systemic importance			Nordea.com > Investor relations > Reports and presentations > Other regulatory disclosures > G-SIB/G-SII
Capital instruments			Nordea.com > Investor relations > Reports and presentations > Capital instruments
New regulations	part 1, section 2	page 58	
Remuneration	part 2, section 5	page 69-72	nordea.com > About Nordea > Corporate Governance > Remuneration > Nordea's Remuneration Policy

Table 12.4 Table of reference to Part Eight of Regulation (EU) No 575/2013

CRR ref.	High level summary	Reference
Title I: General Principles		
Article 431	Scope of disclosure requirement	
1	General disclosure requirements.	This report and disclosures at nordea.com addresses the requirement.
2	Requirement to disclose operational risk information.	Part 1, section 8 and part 2, section 4.
3	Requirement to have a formal policy to comply with the disclosure requirements.	Nordea Bank AB and its subsidiaries have adopted formal policies for complying with the disclosure requirements and has established policies for assessing the appropriateness of these disclosures, including their verification and frequency.
4	On request, an explanation of rating decisions to the loan applicants.	Could be provided upon request.
Article 432	Non-material, proprietary or confidential information	
(1) - (4)	Institutions may, under certain conditions, omit information that is not material, proprietary or confidential.	Part 1. Table 11.3
Article 433	Frequency of disclosure	
	Requirements on frequency of Pillar 3 disclosures.	The disclosures are made annually in conjunction with the date of publication of Nordea Group's financial statements. For items where more frequent disclosures are assessed needed, information is given in the interim financial reports or on the Investor Relations pages on www.nordea.com.
Article 434	Means of disclosures	
1	Medium for Pillar 3 disclosures and cross-reference for synonymous information.	This table, table 11.1 and throughout the text where applicable.
2	Indicate location of equivalent dislosures that could satisfy both CRR and accounting or similar	Table 11.1.
Title II: Technical criteria on transparency and disclosure		
Article 435	Risk management objectives and policies	
(1) (a)	Risk management strategies.	Part 2. Sections 1.1, 2.1, 3.1, 4.1, 4.2, 6.1, 7.1 and 9.1
(1) (b)	Organisation and governance.	Part 2. Sections 1, 2.1.2, 3.1, 3.2 , 4, 6.1.3, 7, 9 and figures 1.1, 1.2, 2.1
(1) (c)	Reporting systems.	Part 2, section 1.2.3, 1.4, 1.5, 2.1, 3.2, 4.1, 4.2, 4.3, 4.4, 6.1.4, 7.2 and 8
(1) (d)	Hedging policies	Part 2, section 2.1.5 and section 2.6.3
(1) (e)	Management declaration on risk adequacy.	Part 2,page 124
(1) (f)	Risk profile.	Part 1, section 1
(2) (a) - (e)	Disclosures regarding governance arrangements.	Nordea.com > About Nordea > Corporate Governance
Article 436	Scope of application	
(a)	Name of the institution.	Part 1, Executive Summary - footer in the end.
(b) (i)-(iv)	Outline of the differences in the basis of consol -idation for accounting and prudential purposes	Part 1, table 4.1 and 4.2
(c)	Practical or legal impediments to transfer funds between parent and subsidiaries.	Part 2, section 8.1.1

(d)	Capital shortfalls in subsidiaries outside the scope of consolidation.	N/A
(e)	Making use of articles on derogations from a) prudential requirements (Article 7) and b) liquidity requirements for individual subsidiaries/entities (Article 9).	N/A
Article 437	Own funds	
(1) (a)	General disclosure requirements regarding own funds.	Part 1, table 10.1
(1) (b)		Nordea.com > Investor relations > Reports and presentations > Capital instruments
(1) (c)		Nordea.com > Investor relations > Reports and presentations > Capital instruments
(1) (d) (i)-(iii)		Part 1, table 10.2
(1) (e)		Part 1, table 10.2
(1) (f)		N/A
Article 438	Capital requirements	
(a)	Summary of the approach to assessing adequacy of capital to its activities.	Part 2, section 8
(b)	Upon demand from the authorities, result of the ICAAP.	ICAAP results are presented on a voluntary basis in Part 1, figures 2.1 and 2.2
(c) - (f)	Own funds requirements for credit risk (Standardised and IRB approach), market and operational risk.	Part 1, table 2.2
Article 439	Exposure to counterparty credit risk	
(a)	Methodology for credit limits and internal capital allocation for counterparty credit risk.	Part 2, sections 2.6.4
(b)	Policies for securing collateral and establishing credit reserves.	Part 2, sections 2.4 and 2.6.3
(c)	Policies for wrong-way risk exposures.	Part 2, sections 2.6.1 and 2.6.4
(d)	Impact of any collateral postings upon credit rating downgrade.	Part 2, section 2.6.3
(e)	Net derivative credit exposure built-up.	Part 2, tables 6.2-6.4 and 6.8-6.9
(f)	Methods for exposure value measurement.	Part 2, tables 6.1 and 6.3-6.4
(g)	Notional value of credit derivatives hedges and distribution of current credit exposure by type of exposure.	Part 2, table 6.10
(h)	Notional amounts of credit derivatie transactions and distribution of credit derivatives products.	Part 2, table 6.10
(i)	Estimate of alfa if the institution has received permission of the competent authorities to estimate alfa.	N/A
Article 440	Capital buffers	
(1) - (2)	Geographical distribution and amount of institution-specific countercyclical capital buffer.	Part 1, table 11.10
Article 441	Indicators of global systemic importance	
(1) - (2)	Indicator values used for determing the score of the institution.	Nordea.com > Investor relations > Reports and presentations > Other regulatory disclosures > G-SIB/G-SII

Article 442 Credit risk adjustments		
(a)	Definitions of 'past due' and 'impaired'.	Part 2, section 2.7
(b)	Methodology used for determining specific and general credit risk adjustments.	Part 2, section 2.7
(c)	The total amount of original exposures and the average amount of the exposures over the period per exposure class.	Part 1, tables 3.4-3.5
(d)	Exposures distributed by exposure class and geography.	Part 1, table 5.6 and 5.25
(e)	Distribution of exposures by industry broken down by exposure classes.	Part 1, table 5.7
(f)	The residual maturity breakdown of all the exposures, broken down by exposure classes.	Part 1, table 5.8
(g) (i) - (iii)	Breakdown of impaired exposures and past due exposures, specific and general credit risk adjustments, charges for the period, by exposure class and counterparty type.	Part 1, table 5.4, 5.12 and 5.16-5.20
(h)	Impaired and past due exposures broken down by geographical areas.	Part 1, table 5.19
(i) (i) - (v)	Reconciliation of changes in the specific and general credit risk adjustments for impaired exposures covering description of the type of adjusments, the opening balances, the amounts taken against the credit risk adjustments and the amounts that have ben set aside for estimated probable losses on the exposures.	Part 1, table 5.4 and 5.20, Nordea has no general credit risk adjustments
Article 443 Unencumbered assets		
	Disclosure on unencumbered assets according to EBA Guidelines EBA/GL/2014/03	Part 1, table 10.5
Article 444 Use of ECAIs		
(a)	Names of nominated ECAIs.	Part 2, section 2.3.2
(b)	The Exposure classes for which each ECAI is used.	N/A
(c)	Description of the process for translating external ratings into credit quality steps.	Part 2, section 2.3.2
(d)	Mapping of external ratings from each nominated ECAI to the credit quality steps.	Part 2, figure 2.2
(e)	The exposure values before and after credit risk mitigation associated with each credit quality step.	Part 1, tables 5.22 and 6.5
Article 445 Exposure to market risk		
	Own Funds requirements for market risk.	Part 1, table 3.8
Article 446 Operational risk		
	Approach used to calculate Own Funds requirements for operational risk.	Part 1, figure 8.1 and part 2, section 4

Article 447	Exposures in equities not included in the trading book	
(a)	Differentiation between exposures based on their objectives.	Part 1, table 7.2
(b)	The balance sheet value, the fair value and, for those exchange-traded, a comparison to the market price where it is materially different from the fair value.	Part 1, table 7.2
(c)	The types, nature and amounts of equity exposures.	Part 1, table 7.2
(d)	Cumulative realised gains or losses arising from sales and liquidations in the period.	Part 1, table 7.2
(e)	Total unrealised gains or losses.	Part 1, table 7.2
Article 448	Exposure to interest rate risk on positions not included in the trading book	
(a)	Nature, key assumptions and frequency of measurement of the interest rate risk.	Part 1, tables 7.1-7.2, 7.4-7.5, 7.12 and part 2, section 3.3.8 and 3.3.10
(b)	The variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks, broken down by currency.	Part 1 tables 7.4-7.5
Article 449	Exposure to securitisation positions	
(a)	Objectives in relation to securitisation activity.	Part 2, section 7
(b)	Nature of other risks including liquidity risk inherent in securitised assets.	Part 2, section 7
(c)	Type of risks in terms of seniority of underlying securitisation positions and in terms of assets underlying those latter securitisation positions assumed and retained with re- securitisation activity.	Part 1, tables 9.1-9.3
(d) -(e)	Different roles played by the institution in the securitisation process and the extent of its involvement	Part 1 tables 9.1 and part 2, section 7
(f)	Description of the processes in place to monitor changes in the credit and market risk of securitisation exposures.	Part 2, sections 1.2, 2, and 3.2
(g)	Description of the institution's policy governing the use of hedging and unfunded protection to mitigate the risks of retained securitisation and re-securitisation exposures.	N/A
(h)	Approaches used to calculate REA for its securitisation activities.	Part 2, section 7
(i)	Types of SSPE that the institution, as sponsor, uses to securitise third-party exposures.	Part 1 table 7.6 and part 2, section 7
(j) (i) - (vi)	Summary of the institutions accounting policies for securitisations activities.	Part 2, section 7
(k)	Names of ECAIs used for securitisations.	Part 2, section 2.3.2
(l)	Description of Internal Assessment Approach.	N/A
(m)	Explanation of changes to any of the quantitative disclosures.	N/A

(n) (i) - (vi)	Information on banking and trading book securitisation exposures broken down by exposure type.	Part 1, tables 9.1-9.3, Nordea does not have any securitisation exposures in the trading book
(o) (i) - (ii)	Additional information on banking book and trading book securitisation exposures.	Part 1, tables 7.1-7.6, Nordea does not have any securitisation exposures in the trading book
(p)	Amount of impaired/past due assets securitised and the losses recognised related to banking book securitisations, by exposure type.	N/A
(q)	Outstanding exposures securitised by the institution and subject to a capital requirement for market risk, broken down into traditional/synthetic and by exposure type.	N/A
(r)	Whether the institution has provided support to securitisation vehicles and the impact on own funds.	N/A
Article 450	Remuneration policy	
1	Remuneration policy and practices:	Part 2, section 5, Nordea annual report pages 69-72 and Nordea.com > About Nordea > Corporate Governance > Remuneration > Nordea's Remuneration Policy
(1) (a)	- decision making of remuneration committee	See references above
(1) (b)	- link between pay and performance	See references above
(1) (c) - (f)	- criteria for performance measurement, variable components parameters	See references above
(1) (g) - (i)	- aggregate quantitative information including necessary splits	See references above
(1) (j)	- total remuneration for each member of the management body, upon request	Annual report, note G7
2	- quantitative information per member of the management body for significant institutions	Annual report, note G7
Article 451	Leverage	
(1) (a) - (e)	Leverage ratio and its components	Part 2, table 12.2

Title III: Qualifying requirements for the use of particular instruments or methodologies

Article 452	Use of the IRB Approach to credit risk	
(a)	Permission from the authority to use IRB approach.	Part 2, section 2
(b)	An explanation of:	
(b) (i)	Internal ratings and relation to external ratings.	Part 2, section 2.3.2
(b) (ii)	Use of internal ratings other than for calculating REA.	Part 2. section 2.1.5
(b) (iii)	The process for managing and recognising credit risk mitigation.	Part 2, section 2.1.5
(b) (iv)	Control mechanisms for rating systems.	Part 2. section 2.5
(c) (i) - (v)	Description of the internal ratings process, separately for each IRB exposure class.	Part 2, section 2.1.4
(d)	Exposure values, separately for each IRB exposure class.	Part 1, tables 5.1-5.5, 5.8, 5.10 and 5.24-5.25

(e) (i) - (iii)	For exposures towards IRB corporate and institutions, split of total exposure, 'Exposure-weighted average risk weight and Undrawn commitments per risk grade.	Part 1, table 5.25
(f)	Information on Retail exposures under the IRB approach.	Part 1, table 5.25
(g)	Actual specific credit risk adjustments during the period.	Part 1, tables 5.4 and 5.20
(h)	The factors that impacted on the loan losses during the period.	Part 1, Executive Summary and table 5.19
(i)	Historical comparison of parameter estimates against the realised outcomes.	Part 1, tables 5.26-5.27
(j) (i) - (ii)	PD and LGD for all IRB exposure classes, split down on relevant geographical locations.	Part 1, table 3.26
Article 453	Use of credit risk mitigation techniques	
(a)	Policies and processes for the use of on- and off-balance sheet netting.	Part 2, section 2.1.5
(b)	Policies and processes for collateral valuation and management.	Part 2, section 2.4
(c)	Main types of collateral.	Part 1, tables 5.21, 5.30-5.31 and 6.9
(d)	Types of guarantor and credit derivative counterparty and their creditworthiness.	Part 2, section 2.4
(e)	Information about market or credit risk concentrations within the credit mitigation taken.	Part 2, section 2.4
(f)	The exposure value covered by eligible collateral for exposures under the Standardised or Foundation IRB approach.	Part 1, table 5.4
(g)	Exposures covered by guarantees or credit derivatives.	Part 1, tables 5.4 and 5.21
Article 454	Use of the Advanced Measurement Approaches to operational risk	
	Description of the use of risk transfer mechanisms for the purpose of mitigation of operational risk.	N/A
Article 455	Use of Internal Market Risk Models	
(a) (i)	Characteristics of the models used.	Part 2, section 3.3
(a) (ii)	The methodologies used for the internal models for incremental default and migration risk and for correlation trading.	Part 2, section 3.3.3 and 3.3.4
(a) (iii)	Description of stress testing applied to the sub-portfolio.	Part 2, section 3.3.5
(a) (iv)	Approaches used for back-testing and validating the accuracy and consistency of the internal models.	Part 2, section 3.3.7
(b)	Scope of permission by the competent authority.	Part 2, table 3.1

(c)	Description of the extent and methodologies for inclusion in the trading book, comply with prudential valuation requirements.	Part 2, section 3.4
(d) (i) - (iii)	The highest, lowest and average of VaR, sVaR, Incremental risk charge and Comprehensive Risk Charge.	Part 1, table 7.10
(e)	The elements of the own fund requirements for market risk.	Part 1, table 7.1
(f)	Weighted average liquidity horizon for each sub-portfolio covered by the internal models.	Part 2, section 3.3.3 and 3.3.4
(g)	Comparison of the daily end-of-day VaR measures to the one-day changes of the portfolio's value.	Figure 7.11

Table 12.5 Information not disclosed due to non-materiality, proprietary or confidential nature

Regulatory reference	Reason for not including	Detailed reason for not including	Reference to information provided
EU GL OVA CRR 435 (1)(B) The approved limits to which the institutions is exposed to	Risk appetite limits are strictly confidential	Thresholds for risk appetite limits are not disclosed, they are of confidential strategic nature. The relevant supervisory authorities have access to the full report including limits.	The metrics, to which risk appetite limits apply, are stated in Part 2 section 1.4
Article 439 Counterparty credit risk and Article 445 Market risk	The information is immaterial	Information on Luminor's contribution to CCR and Market risk are not included in the tables splits for these risks, the amounts are immaterial.	Luminor CCR and market risk are part of the OV1 table
EBA RTS on CCB	The information is immaterial	Detailed information on domicile with 0 countercyclical buffer and less than 1% of Nordeas own fund contribution is not material countribition to the calculation of the Nordea CCyB rate.	Summary of these countries countribution to the CCyB calculation is included in table 12.10

Table 12.6 Loans to the real estate management industry, split by geography

	31 Dec 2017		31 Dec 2016	
EURm	Loans	%	Loans	%
Denmark	9,490	22.3	9,206	22.4
Finland	7,690	18.1	7,742	18.8
Norway	8,750	20.6	9,085	22.1
Sweden	15,850	37.3	14,461	35.1
Russia	145	0.3	648	1.6
Other	576	1.4		
Total	42,501	100%	41,142	100%

Table 12.7 Loans to the shipping and offshore industry, split by segment

	31 Dec 2017		31 Dec 2016	
EURm	Loans	%	Loans	%
Bulk carriers	1.190	14	1.354	13
Product tankers	0.586	7	0.757	7
Crude tankers	1.298	15	1.443	14
Chemical tankers	0.471	6	0.605	6
Gas Tankers	1.422	17	1.831	17
Other shipping	1.390	17	1.925	18
Offshore and oil services	2.024	24	2.579	25
Total	8.380	100.0%	10.494	100.0%

Table 12.8 Loans to corporate customers, split by size of loans

	31 Dec 2017		31 Dec 2016	
Loan size, EURm	Loans	%	Loans	%
0-10	66,769	44.5	68,265	44.6
10-50	36,363	24.2	37,309	24.4
50-100	19,598	13.0	19,892	13.0
100-250	17,027	11.3	17,655	11.5
250-500	5,897	3.9	4,727	3.1
500-	4,558	3.0	5,116	3.3
Total	150,210	100.0	152,964	100.0

Table 12.9 Loan-to-value distribution, retail mortgage exposure, on-balance

The loan-to-value (LTV) ratio is considered a useful measure to evaluate collateral's quality, i.e. the credit extended divided by the market value of the collateral pledged. In the table, IRB retail mortgage exposures are distributed by LTV buckets based on the LTV ratio.

	31 Dec 2017		31 Dec 2016	
EURbn	Exposure	%	Exposure	%
<50%	110	80.4	110	79.5
50-70%	20	14.7	21	15.0
70-80%	5	3.3	5	3.5
80-90%	1	1.0	2	1.4
>90%	1	0.5	1	0.7
Total	137	100.0	139	100.0

The exposure is continuously 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.

Countercyclical capital buffer

	General credit risk		Trading book exposures		Own funds requirement					
EURm	Standardised approach	IRB approach	Standardised approach	Internal models approach	General credit exposures	Trading book exposures	Securitisation exposures	Total	Own funds requirement weight	Counter-cyclical buffer rate
Countries with existing CCyB rate										
Czech Republic	0	39	0	0	2	0	0	2	0.0	0.5
Hong Kong	0	160	0	0	5	0	0	5	0.1	1.3
Iceland	0	160	0	10	3	0	0	3	0.0	1.3
Norway	1,618	56,427	1,093	1,015	1,293	14	0	1,307	16.8	2.0
Slovakia	0	31	0	0	1	0	0	1	0.0	0.5
Sweden	2,280	94,687	9,968	871	1,382	110	68	1,559	20.1	2.0
Sub-total	3,898	151,504	11,061	1,896	2,686	124	68	2,877	37.0	
Countries with own funds requirements weight 1% or above and no existing CCyB rate										
Denmark	1,091	89,673	7,443	1,824	1,850	55	0	1,905	24.5	
Estonia	1,781	1,077	0	3	132	0	0	132	1.7	
Finland	82	67,006	583	1,657	1,325	4	0	1,329	17.1	
Latvia	1,459	665	0	0	135	0	0	135	1.7	
Lithuania	2,993	410	1	0	188	0	0	188	2.4	
Luxembourg	1,265	1,186	26	300	109	1	0	109	1.4	
Poland	1,460	94	0	0	121	0	0	121	1.6	
Russia	43	2,008	1	0	85	0	0	85	1.1	
USA	106	2,309	29	86	84	6	0	90	1.2	
Bermuda	0	1,821	0	23	166	2	0	169	2.2	
Liberia	0	1,334	0	0	83	0	0	83	1.1	
Sub-total	10,279	167,585	8,084	3,894	4,277	68	0	4,346	55.9	
Countries with own funds requirement below 1% and no existing CCyB rate										
Sub-total	441	14,037	3,295	2,304	509	43	0	552	7.1	
Total	14,618	333,125	22,440	8,093	7,472	235	68	7,775	100	0.7

Table 12.11 LI3 Specification of undertakings Nordea version

			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consolidated nor deducted	Deducted	Description of entity	Domicile
Nordea Bank AB (publ)	**Nordea Finance Finland Ltd**	**100**	**Acquisition method**	**Full consolidation**			Credit institution	**Finland**
	Nordea Mortgage Bank Plc	100	Acquisition method	Full consolidation			Credit institution	Finland
	Nordea Funds Ltd	100	Acquisition method	Full consolidation			Financial institution	Finland
	Automatia Pankkiautomaatit Oy	33	Equity method	Equity method			Financial institution	Finland
Nordea Finance Finland Ltd	Tukirahoitus Oy	100	Acquisition method	Full consolidation			Financial institution	Finland
Nordea Bank AB (publ)	**Nordea Eiendomskreditt AS**	**100**	**Acquisition method**	**Full consolidation**			Credit institution	**Norway**
	Nordea Finans Norge	100	Acquisition	Full			Financial	Norway
	Eksportfinans ASA	23	Equity method	Equity method			Credit institution	Norway
	Nordea Utvikling AS	100	Acquisition	Full			Financial	Norway
Nordea Utvikling AS	Tomteutvikling Norge AS	100	Acquisition method	Full consolidation			Ancillary services under-taking	Norway
Nordea Bank AB (publ)	**Nordea Finans Danmark A/S**	**100**	**Acquisition method**	**Full consolidation**			Financial institution	**Denmark**
	Nordea Kredit Realkreditaktieselskab	100	Acquisition method	Full consolidation			Credit institution	Denmark
	LR-Realkredit A/S	39	Equity method	Equity method			Credit	Denmark
	Fionia Asset Company A/S	100	Acquisition method	Full consolidation			Financial institution	Denmark
Nordea Finans Danmark A/S	BH Finance K/S	100	Acquisition method	Full consolidation			Financial institution	Denmark
	NAMIT 10 K/S	100	Acquisition method	Full consolidation			Financial institution	Denmark
	UL Transfer Aps	100	Acquisition method	Full consolidation			Financial institution	Denmark
	DT Finance K/S	100	Acquisition method	Full consolidation			Financial institution	Denmark
	Tide Leasing 2012 K/S	100	Acquisition method	Full consolidation			Financial institution	Denmark
	BAAS 2012 K/S	100	Acquisition method	Full consolidation			Financial institution	Denmark

			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consoli-dated nor deducted	Ded-ucted	Description of entity	Domicile
Fiona Asset Company A/S	Ejendomsselskabet Vestre Stationsvej 7, Odense A/S	100	Acquisition method	Full consolidation			Ancillary services under-taking	Denmark
Nordea Bank AB (publ)	LLC Promyshlennaya Kompaniya Vestkon	**100**	**Acquisition method**	**Full consolidation**			Financial institution	**Russia**
Promyshlennaya Companiya Vestkon / Nordea Bank AB (publ)	Joint Stock Company Nordea Bank	100	Acquisition method	Full consolidation			Credit institution	Russia
Joint Stock Company Nordea Bank	Nordea Leasing LLC	100	Acquisition method	Full consolidation			Financial institution	Russia
Nordea Bank AB (publ)	**Nordea Hypotek AB (publ)**	**100**	**Acquisition method**	**Full consolidation**			Credit institution	**Sweden**
	Nordea Finans Sverige AB (publ)	100	Acquisition method	Full consolidation			Credit institution	Sweden
	Nordea Asset Management Holding AB	100	Acquisition method	Full consolidation			Financial institution	Sweden
	Bankomat AB	20	Equity method	Equity method			Financial institution	Sweden
	Getswish AB	20	Equity method	Equity method			Financial institution	Sweden
	Luminor Group AB	49.9	Equity method	Proportional consolidation			Credit institution	Sweden
Nordea Asset Management Holding AB	Nordea Investment Management AB	100	Acquisition method	Full consolidation			Investment firm	Sweden
	Nordea Investment Funds S.A.	100	Acquisition method	Full consolidation			Financial institution	Luxembourg
Nordea Investment Management AB	Nordea Investment Management North America Inc	100	Acquisition method	Full consolidation			Financial institution	USA
	Nordea Investment Management AG	100	Acquisition method	Full consolidation			Financial institution	Germany

			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consolidated nor deducted	Deducted	Description of entity	Domicile
Nordea Finans Sweden, Finland, Norway and Denmark	NF Techfleet AB	20	Equity method	Equity method			Financial institution	Sweden
Nordea Bank AB (publ)	**Nordea Bank S.A.**	**100**	**Acquisition method**	**Full consolidation**			**Credit insitution**	**Luxembourg**
Entities not included in the consolidation								
Nordea Bank AB	Nordea Life Holding AB including related subsidiaries and participations						Insurance entity	Sweden
	Axcel IKU Invest A/S				X		Immaterial financial institution, article 19	Denmark
	Bankomatcentralen AB				X		Immaterial financial institution, article 19	Sweden
	Betalo AB				X		Immaterial financial institution, article 19	Sweden
	Danbolig A/S				X		Non CRR	Denmark
	First Card AS				X		Non CRR	Norway
	Kiinteistö Oy Kaarenritva				X		Non CRR	Finland
	Kiinteistö Oy Kellokosken Tehtaat				X		Non CRR	Finland
	Myyrmäen Autopaikoitus Oy				X		Non CRR	Finland
	Nordea				X		Non CRR	Norway
	Nordea Global Trade Services Limited				X		Non CRR	Hong Kong
	Nordea Holding Abp				X		Non CRR	Finland

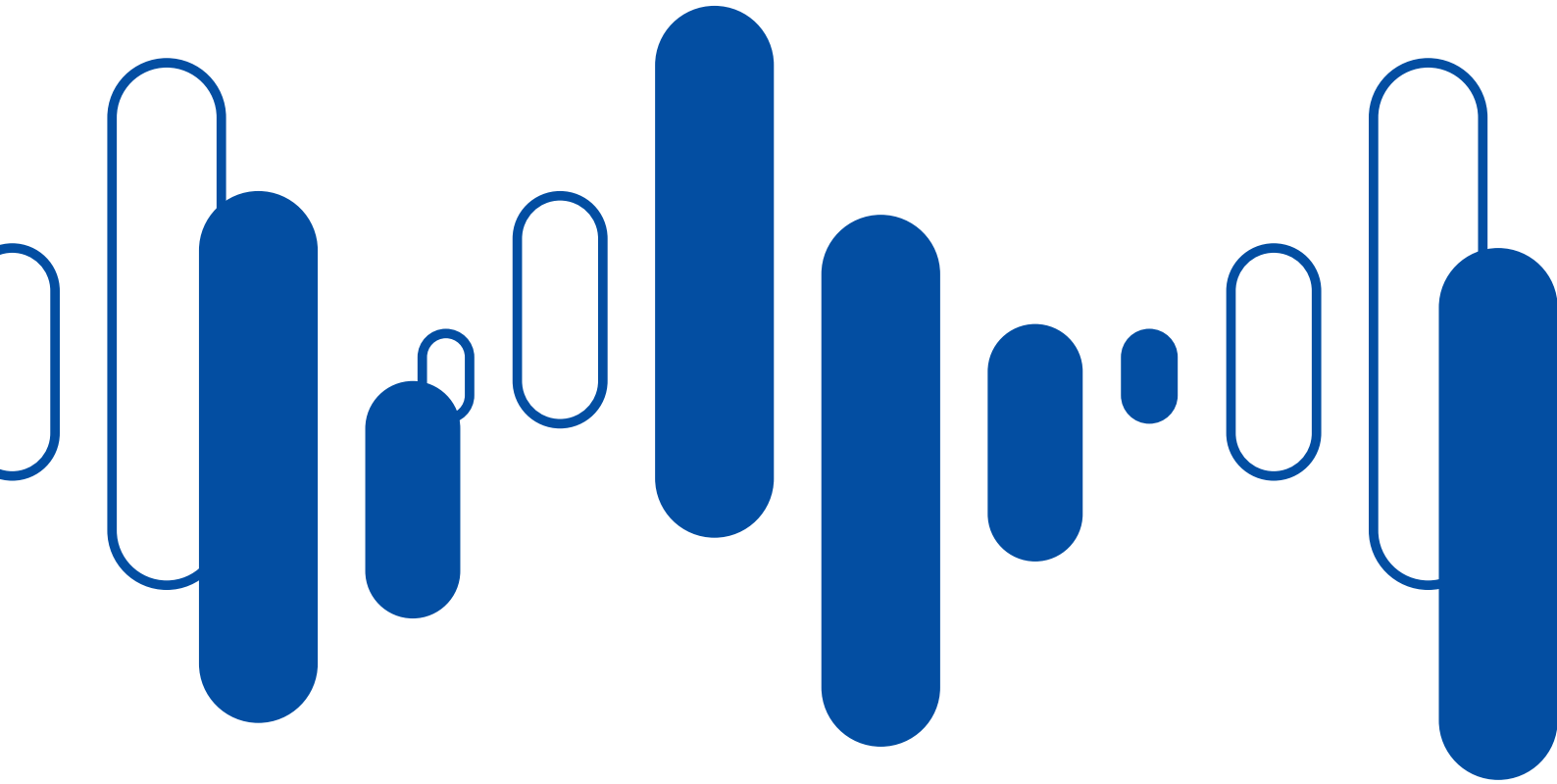
			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consolidated nor deducted	Deducted	Description of entity	Domicile
	Nordea Hästen Fastighetsförvaltning AB				X		Non CRR	Sweden
	Nordea Limited				X		Non CRR	Great Britain
	Nordea Markets				X		Non CRR	USA
	Nordea Putten Fastighetsförvaltning AB				X		Non CRR	Sweden
	Nordea Vallila Fastighetsförvaltning Ab				X		Non CRR	Finland
	Nordic Baltic Holding (NBH) AB				X		Non CRR	Sweden
	Privatmegleren AS				X		Non CRR	Norway
	Relacom Management AB				X		Non CRR	Sweden
	Securus Oy				X		Non CRR	Finland
	Structured Finance Servicer A/S				X		Non CRR	Denmark
	Suomen Luotto-osuuskunta				X		Non CRR	Finland
	Suomen Sviittiasunnot Oy				X		Non CRR	Finland
	Svenska e-fakturabolaget AB				X		Immaterial financial institution, article 19	Sweden
	Swipp Holding APS				X		Immaterial financial institution, article 19	Denmark
	Upplysningscentralen UC AB				X		Non CRR	Sweden
Nordea Asset Management Holding AB	Nordea Markets LLC				X		Non CRR	USA
Nordea Kredit Realkreditaktieselskab	E-nettet Holding A/S				X		Non CRR	Denmark
Nordea Finans Danmark A/S	Fleggaard Busleasing				X		Non CRR	Germany

			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consolidated nor deducted	Deducted	Description of entity	Domicile
Nordea Finance Finland Ltd	Koy Levytie 6				X		Immaterial financial institution, article 19	Finland
	Koy Raahen Tiiranpesä				X		Immaterial financial institution, article 19	Finland
	Koy Tulppatie 7				X		Immaterial financial institution, article 19	Finland
	Porin Sokos Koy				X		Immaterial financial institution, article 19	Finland
	NF Fleet Oy				X		Non CRR	Finland
Join Stock Company Nordea Bank	Lanvin				X		Immaterial financial institution, article 19	Russia
	Matis				X		Immaterial financial institution, article 19	Russia
Nordea Finans Sverige AB (publ)	NF Fleet AB				X		Non CRR	Sweden
Nordea Finans Norge AS	NF Fleet AS				X		Non CRR	Norway
Nordea Finans Danmark A/S	NF Fleet A/S				X		Non CRR	Denmark
Nordea Bank AB (publ) /	Nordea Do Brasil Representações LTDA				X		Non CRR	Brazil
Nordea Investment Funds S.A	Nordea Funds Service Germany Gmbh				X		Non CRR	Germany
	Nordea Asset Management Schweiz GmbH				X		Non CRR	Switzerland
Nordea Investment Management AB	Nordea Private Equity Holding A/S				X		Immaterial financial institution, article 19	Denmark

			Method of consolidation					
Owner	Company Name	Voting power of holding %	Accounting consolidation	Regulatory consolidation	Neither consolidated nor deducted	Deducted	Description of entity	Domicile
Nordea Private Equity Holding A/S	Nordea Private Equity I A/S				X		Immaterial financial institution, article 19	Denmark
	Nordea Private Equity II - EU Mezz A/S				X		Immaterial financial institution, article 19	Denmark
	Nordea Private Equity II - EU MM Buyout A/S				X		Immaterial financial institution, article 19	Denmark
	Nordea Private Equity II - Global A/S				X		Immaterial financial institution, article 19	Denmark
	Nordea Private Equity III - GLOBAL A/S				X		Immaterial financial institution, article 19	Denmark
	PWM Global PE III ApS				X		Immaterial financial institution, article 19	Denmark

PART 2 Risk Management, Methodologies and Governance

Information on common processes, methods and assumptions for assessing capital adequacy in the Nordea Group



1. Governance of risk and capital management

This chapter gives an overview of Nordea's governance structure as defined by the internal rules contained within Nordea's group directives, approved by the Board of Directors (BoD) of Nordea or within Nordea's group instructions, approved by the Chief Executive Officer (CEO) in Group Executive Management (GEM). The internal rules are reviewed at least annually and are applicable for all of Nordea, including all subsidiaries under supervision, unless local regulations specify otherwise.

1.1 Risk and capital management

The key principle for the management of risk in Nordea is the Three Lines of Defense (LoD), as illustrated in Figure 1.1.

The 1st LoD refers to all units and employees that are neither in the 2nd nor in the 3rd LoD.

The 1st LoD is responsible for the daily risk management and for compliance with applicable rules. All employees in the 1st LoD have a role of understanding and adhering to prudent risk management and for compliance with both external rules and regulation and Nordea's internal rules.

Group Risk Management and Control (GRMC) and Group Compliance (GC) represent the 2nd LoD responsible for maintaining Nordea's internal control framework, including its implementation across Nordea. GRMC implements the risk policies and controls Nordea's risk management framework and amongst other things ensures that all risks that Nordea is or could be exposed to, are identified, assessed, monitored, managed and reported on. Group Compliance is responsible for identifying compliance risks and performing monitoring and control to ensure that the risks are managed by the relevant functions.

Group Internal Audit (GIA) represents the 3rd LoD and is an independent and objective assurance function. GIA supports BoD and GEM in protecting the assets, reputation and sustainability of the organisation. This is done by assessing whether all significant risks are identified and appropriately reported by management and the risk functions to the BoD, its committees and GEM. Furthermore, GIA assesses whether all significant risks are adequately controlled, and challenges GEM to improve the effectiveness of governance, risk management and internal controls.

1.2 Risk and capital management principles and control

Risk and capital management in Nordea are governed by principles and procedures stated in Nordea's internal rules, in effect throughout the organisation. The BoD's group directives and the CEO's Group instructions define authorities and key responsibilities for themselves and other units. These internal rules form part of the Nordea internal control framework which all legal entities within Nordea are subject to.

Nordea monitors aggregated risks via specific committees, as well as through reporting to GEM, and BoD. More specifically, Nordea's risks, capital and liquidity are monitored by the Risk Committee and the Asset and Liability Committee (ALCO) respectively.

1.2.1 Board of Directors and Board Risk Committee

BoD has the ultimate responsibility for deciding on Nordea's risk appetite, comprising all of the bank's risk types. The BoD is also responsible for the risk strategy, setting the overall risk appetite limits and overseeing that Nordea has an adequate and effective internal control framework. BoD decides on the group directive on risk and the group directive on risk appetite which cover all risks that Nordea are or could be exposed to, including credit risk, counterparty credit risk, market risk, liquidity risk, operational risk, model risk, compliance risk and insurance risk. Risk is measured, managed and reported on according to common principles further covered by group instructions approved by the CEO.

In defining the group directive on risk, BoD decides on powers-to-act for major credit committees at different levels within the business areas (BAs). These authorisations vary for different decision-making levels, mainly in terms of the size of limits but also depending on the internal risk categorisation of customers.

Figure 1.1 Business Model and Internal Control Framework: Three Lines of Defence (LoD)

1st LoD	2nd LoD	3rd LoD
The business areas (BAs) and group functions (GFs) not in 2nd or 3rd LoD constitute the 1st LoD.	**Group Risk Management & Control (GRMC), Group Compliance (GC)**	**Group Internal Audit**
The first LoD is responsible for their own risk management and for operating their business in accordance with the internal control framework and within the set limits for risk exposure.	GRMC and GC are independent control functions with the purpose and authority to support and challenge 1st LoD in identifying and managing risk and compliance. GRMC and GC are responsible for maintaining the internal control framework and for monitoring its implementation.	GIA is an independent unit. GIA assesses the internal control framework, i.e. whether all significant risks are identified, appropriately reported and controlled. GIA supports the group BoD and GEM in protecting the assets, reputation and sustainability of the organisation.

The Board Risk Committee (BRIC) assists BoD in fulfilling its oversight responsibilities concerning the management and control of risk, risk frameworks and controls and processes associated with Nordea's operations. BRIC met on 7 occasions during 2017.

1.2.2 Responsibility of CEO, GEM and its committees

The CEO has overall responsibility for developing and maintaining effective risk, liquidity and capital management principles and control of Nordea.

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

ALCO, chaired by the Chief Financial Officer (CFO), and within the scope of resolutions adopted by the Group CEO in GEM or the Group Board, monitor and decide on principles for the performance management framework, the financial planning and coordinate balance sheet management activities. ALCO monitor and steer the Group's overall balance sheet, capital position and its development. Within their given mandate, ALCO also decides on certain issuances and capital injections for all legal entities consolidated by Nordea. ALCO has established sub-committees for its work and decision-making within specific risk areas. ALCO met on 12 occasions during 2017.

The Risk Committee, chaired by the Chief Risk Officer (CRO), oversees the management and control of Nordea's risks on an aggregate level and evaluates the sufficiency of the frameworks, controls and processes associated with the various risks. The Risk Committee furthermore decides, within the scope of resolutions adopted by BoD, the allocation of credit risk limits, market risk limits as well as liquidity risk limits, to the risk-taking units. These risk limits are informed by the risk appetite decided on by BoD. Unit heads allocate respective risk limits decided by the risk committee within their units and may introduce more detailed limits and/or require other risk mitigation techniques to be used, such as stop-loss rules. The Risk Committee has established sub-committees for its work and for decision-making within specific risk areas. The Risk Committee met on 16 occasions during 2017.

GEM Credit Committee is chaired by the CEO. As of January 2018, the Executive Credit Committee is chaired by the Head of Group Credit Risk Management (GCRM), while the Group Credit Committee Commercial and Business Banking and the Group Credit Committee Wholesale Banking are chaired by the Chief Credit Officer (CCO). These credit committees approve major internal credit risk limits constituting the maximum credit risk appetite on the customer in question. Individual credit decisions, within approved internal credit risk limits, are taken by the customer responsible units (CRUs). Internal credit risk limits are set individually for customers, or consolidated customer groups, as well as for certain defined industries.

Figure 1.2 Nordea's governance structure of risk management and compliance

1.2.3 Governance of risk management and compliance

The flow of risk related information from the BAs and the group functions to BoD, passes through Risk Committee and BRIC. Reporting from GC is presented directly to BoD and it is also discussed in the Board Operations and Compliance Committee (BOCC).

As of January 1st 2018, GRMC is organised in the following divisions: Group Credit Risk & Control, Group Market and Counterparty Credit Risk, Group Operational Risk, Balance Sheet Risk Controls, Risk Models, Enterprise-wide management, Group Risk Chief Operating Office, and the CRO Office. The flow of information starts with the divisions that monitor and analyse information on each respective risk type. Risks are presented to, and discussed in the Risk Committee and its sub committees. Information on risk is then brought to BRIC, where risk issues are discussed and prepared before being presented to BoD.

The other 2nd LoD function, GC, consists of central units as well as business area specific divisions, facilitating and overseeing the effectiveness and integrity of the group's compliance risk management. GC adds value to the group and its stakeholders by providing an independent view on compliance with applicable rules and regulations, largely based on monitoring activities conducted. Furthermore, GC advises and supports the 1st LoD on ways to effectively and efficiently manage compliance obligations.

1.3 Subsidiary governance

At a legal entity level, BoD is responsible for approving risk appetites and capital transactions, following proposals put forward by applicable committees in Nordea.

BoD has oversight responsibilities concerning the management and control of risk, risk frameworks as well as the controls and processes associated with the subsidiary's operations. In addition, there are risk management functions responsible for the risk management framework and processes within the subsidiary.

The CEO is a member of the Executive Management and part of the decision-making process at the legal entity level and is responsible for the daily operations.

1.4 Risk appetite

Nordea's risk capacity is defined as the maximum level of risk Nordea is deemed able to assume given capital, regulatory constraints, risk management and control capabilities. The risk appetite within Nordea is defined as the aggregate level and types of risk Nordea is willing to assume within the risk capacity, and in line with its business model, to achieve its strategic objectives.

The BoD is ultimately responsible for deciding on the group's risk strategy and the risk appetite framework (RAF). Updates should be done annually, with additional updates as needed. The updates should support that the risk appetite and risk strategy are in line with the business strategy, objectives, corporate culture and values. BRIC assists BoD in fulfilling these responsibilities by advising and supporting the BoD.

Nordea's RAF refers to the overall approach, including the internal rules framework, processes, controls, and systems through which risk appetite is established, communicated, and monitored. It includes a risk appetite statement (RAS), risk limits, and describes the roles and responsibilities of those overseeing the implementation and monitoring of the RAF. The RAS articulates the BoD approved risk appetite and is comprised of high level statements that link closely to the risk strategy. On a more granular level the RAS is specified in quantitative and qualitative statements, that express the levels and types of risk that Nordea is willing to take. Quantitative statements are articulated in specific risk metrics and related risk appetite limits and triggers.

Figure 1.3 presents an overview of Nordea's current RAS. Credit concentration metrics cover industries and geographic regions of particular size or importance. Stress test metrics are applied to credit and market risk metrics to ensure a forward-looking approach to risk management. Operational risk metrics are given in terms of status of group key risk indicators, actions to mitigate important risks, size of operational risk losses and incidents.

Nordea's RAF can be represented by an end-to-end process cycle with the following steps:

- *Risk capacity setting based on the capital position.* On an annual basis, the group's overall risk capacity is aligned with the financial and capital planning process, based on Nordea's risk strategy. The risk capacity is Nordea's capital position adjusted by an appropriate shock absorbing capacity.
- *Risk appetite allocation to risk type.* Risk appetite includes risk appetite limits for the main risk types that Nordea is or could be exposed to. Risk appetite triggers are also set for these main risk types, to act as early indicators for key decision-makers that the risk profile for a particular risk type is approaching its risk appetite limit.
- *Risk limit setting.* Measurable risk limits are established and set at an appropriate level to manage risk-taking effectively. They are articulated in terms of risk types and business lines, and set such that they ensure business is conducted within the risk appetite limit.
- *Monitoring and controlling risk exposures.* Regular controlling and monitoring of risk exposures compared to risk limits for financial risks are carried out to ensure that risk-taking activity remains within risk appetite. Regular reporting is carried out, including a follow-up of actions taken to remedy any breaches.

Figure 1.3 Overview of the risk appetite metrics and statements

Risk type	Metric
Credit risk	Top25 Client Group Limit
	Single client limit framework
	Industry limits
	Geographic limits
	Expected loss
	Stressed loan loss
	Underwriting Cap
	LBO limit
	Covenant Lite Cap
Counterparty Credit risk	Credit portfolio loss
	Max Settlement limit
Market risk	Group Management Total VaR
	Traded Risk Stress Loss
	Banking Book Stress Loss
	Structural FX CET1 ratio impact
	NLP Solvency Ratio
Liquidity risk	Survival Horizon 3M
	Internal LCR
	Regulatory LCR
Model risk	Qualitative model risk assessment
Solvency	Common Equity Tier 1 capital ratio
	Leverage ratio
Operational risk	Important risks
	Incidents and losses
	Group key risk indicators
Compliance	Compliance risk appetite

- *Reporting on risk appetite.* Management of breaches and follow-up on actions to remedy these. The reporting includes a consistent status indicator to communicate the current risk exposure compared to risk appetite limit for all risk types covered by the RAS, which are:
  - **Green:** Within risk appetite – No additional action is required.
  - **Amber:** Within risk appetite but the risk appetite trigger has been breached - Consideration of action to be taken to ensure the risk appetite limit is not breached.
  - **Red:** Outside risk appetite as the risk appetite limit has been breached – Remediation action must be taken. The breach is escalated and status of remediation actions is followed up on a monthly basis until the risk exposure is within appetite.

Nordea's end-to-end risk appetite process cycle is aligned with other strategic processes, including the Internal Capital Adequacy Assessment Process (ICAAP), Internal Liquidity Adequacy Assessment Process (ILAAP) and the Recovery and Resolution Plan. It is embedded in business processes and communicated across the organisation in order to meet Nordea's objectives of maintaining a sound risk culture. This includes, but is not limited to, ensuring a strong link between the assessed risk appetite and the business plans and bud-

gets, capital and liquidity position, systemic risk profile, recoverability and resolvability assessments as well as the incentive structures and remuneration framework.

The group risk appetite report, produced on a quarterly basis, compares the actual risk profile with the risk appetite and analyse drivers for change since last quarter. The analysis and status of the risk appetite is presented regularly to the Risk Committee, GEM, BRIC and BoD. Separate RAFs are in place for material subsidiaries.

1.5 Monitoring and reporting

Nordea's internal control framework is described in the group board directive on internal governance. The internal control framework is applicable for Nordea and includes the BoD and senior management responsibilities towards internal control, all group functions and BAs including outsourced activities and distribution channels.

The internal control framework is designed to ensure effective and adequate identification, measurement and mitigation of risks and compliance with laws, regulations, supervisory requirements and Nordea's internal rules. It is also designed to support efficient operations, prudent conduct of business, sound administrative and accounting procedures and reliability of financial and non-financial information.

The internal control process is carried out by the BoD, senior management, risk management functions, management and other staff at Nordea. It is based on five main components: control environment, risk assessment, control activities, information and communication as well as monitoring. It aims to create the necessary fundamentals for the entire organisation to contribute to the effectiveness and high quality of internal control through, for instance, clear definitions, assignments of roles and responsibilities and common tools and procedures.

As part of the overall internal control framework, one common Nordea risk management framework is continuously developed to ensure consistent processes for managing and controlling risks at Nordea. Management of risks includes all activities aiming at identifying, measuring, assessing, monitoring and controlling risks as well as measures to limit and mitigate the consequences of the risks. Management of risks are proactive and emphasise training and risk awareness. It is mandatory for Nordea employees to annually undergo a licence to work training. The online training includes information on code of conduct and interactive examples aimed at enhancing the Nordea risk culture. Nordea maintains a high standard of risk management by applying available techniques and methodologies to the bank's needs.

Monitoring and reporting of risk is conducted daily for market-, liquidity- and counterparty credit risk. Credit-, operational- and IT risk as well as capital adequacy is followed up on monthly.

Detailed risk information, covering all risks as well as capital adequacy, is regularly reported to the Risk Committee, GEM, BRIC and BoD. In addition to this, Nordea's compliance with regulatory requirements is reported to GEM and BoD. BoD and CEO in each legal entity receive local risk reporting on a regular basis.

2. Credit risk

Credit risk is defined as the potential for loss due to failure of borrowers to meet their obligations to clear a debt in accordance with agreed terms and conditions. The potential for loss is lowered by credit risk mitigation techniques. It stems mainly from various forms of lending, but also from issued guarantees and documentary credits. Credit risk also includes counterparty credit risk, transfer risk and settlement risk. This chapter discusses the governance, management and measurement of credit risk in broad terms.

2.1 Management of credit risk

Credits granted within Nordea conform to established common principles. The fundamental principles are outlined in the credit instructions for Nordea.

The key principles for managing Nordea's risk exposures are:

- a risk based approach, i.e. the risk management functions should be aligned to the nature, size and complexity of Nordea's business, ensuring that efforts undertaken are proportional to the risks in question;
- independency, i.e. the risk management function should be independent of the business it controls; and
- the three LoD, as further described in the group directive on internal governance.

The basis of credit risk management in Nordea is credit risk limits that are set for customer and customer groups. In addition, Nordea uses sector concentration risk limits for industries, segments, products and geographies. These limits are aggregated and assigned to units that are responsible for their continuous monitoring and development.

Credit decision making is delegated from the BoD down to various sub-levels of credit decision making authorities. All internal credit risk limits within Nordea are based on credit decisions or authorizations made by an Ultimate Decision Making Authority, with the right to decide upon that limit as evidenced in Nordea's powers to act.

Nordea's credit customers are continuously assessed and periodically reviewed based on internal rules dependent by segment, limit amounts and level of risk.

If credit weakness is identified in relation to a customer exposure it receives special attention in terms of more frequent review. In addition to continuous monitoring, an action plan is established outlining as to how to minimise the potential credit loss. If necessary, a special work-out team is set up to support the customer responsible units (CRU). A financial asset is credit impaired when one or more credit events have occurred with a detrimental impact on the estimated future cash flows.

The follow-up of individual work-out cases forms part of the quarterly credit risk review process managed by GCRM. In this process both the individual credit impairment and the collective credit impairment are also assessed.

Nordea has specific industry credit policies in place to monitor the distribution of the credit portfolio and to limit credit risk. 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 criterias 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 implemented industry credit policies for the following industries:
- Shipping, Oil and Offshore
- Energy
- Leveraged lending
- Financial institutions
- Commercial real estate
- Underwriting policy

All industry credit policies are approved annually by the Risk Committee and confirmed by BRIC.

The rating and scoring process is an integral part of Nordea´s credit risk management process (see section 2.3 for details).

2.1.1 Credit risk appetite

Nordea's RAF is described in section 1.4. For credit risk, Nordea aim to have a well-diversified credit portfolio that is adapted to the structure of Nordea home markets and economies.

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) and short-term forward-looking credit quality (loan losses under plausible stress scenarios).

Furthermore, the principles in Nordea sustainability policy guide the choice of which customers to serve and what transactions to finance.

2.1.2 Governance of credit risk

The main principle of credit risk management in Nordea is having a internal rules framework for credit risk which is approved independent of business decision-making and financial performance. The framework is approved by senior management and aligns the risk appetite with the credit risk strategy of the bank.

1st LoD – Group Credit Risk Management

GCRM has been established as a new credit risk management function within the 1st LoD independent from BAs as per 1 January 2017.

The main areas of responsibility for GCRM are:

- Ensure a harmonized, aligned and efficient process decreasing lead times and enable great customer experience
- Act as a competence centre, enabling high quality and maintaining the strong and compliant credit risk management in Nordea
- Meet the changes in the competitive environment and enable business opportunities through the digitalized market
- Review and approve rating assignment independently from BAs

2nd LoD – Group Credit Risk & Control (GCRC) and Risk Models (RiMO)

GCRC has been established as Nordea's new independent credit risk control unit as per 1 January 2017. From 1 September 2017, two units within GCRC (Group Credit Risk Models and the IRB Materiality team) were transferred to the newly established unit RiMO.

The main areas of responsibility for GCRC and RiMO are:

- Independent oversight, monitoring and control of credit risk
- Developing the 2nd LoD credit risk framework
- Proposing credit risk metrics and limits in RAF
- Advising on interpretation and implementation of existing and upcoming credit risk regulations
- Developing, maintaining and monitoring IRB parameters and internal models for rating and scoring
- Assessing materiality of changes to the IRB approach

2.1.3 Measurement of credit risk

1st LoD Responsibilities

In the 1st LoD, GCRM has the responsibility to establish accurate, concise, understandable and timely report on credit risk development in the portfolios, to relevant management bodies. Examples of reporting areas include:

- Credit risk review process
- Workout cases and fallen angles
- Customer segments and/or industries deep dives

2nd LoD Responsibilities

In the 2nd LoD, Group Credit Risk & Control (GCRC) is responsible for supporting prudent risk management and credit processes within the established credit risk appetite, models, policies and frameworks by providing one source of information for credit risk reporting.

Group Credit Risk Reporting (GCRR) is responsible for independently analysing and reporting the status and development of the credit risk in Nordea's portfolio and in the credit processes both externally (e.g. Nordea's financial reports and regulatory reporting) and internally (e.g. management reporting).

Credit risk reports provided by 2nd LoD are included in the monthly holistic risk report to the GEM and BoD, as well as in the quarterly reports to the BoDs in the relevant subsidiaries on behalf of the CRO. The regular reporting of the credit risk in the RAF for Nordea follow-up on the limits for credit risk set by BoD.

Credit risk is measured, monitored and segmented in several dimensions. Credit risk in lending is measured and presented as on-balance sheet loans as well as off-balance sheet items on customers and counterparts net after allowances. Nordea's loan portfolio is broken down by segment, industry and geography and reported monthly, quarterly and annually.

Credit risk is measured utilising internal credit risk IRB models for large portion of the portfolio. Standardised approach is used for the remaining portfolios not covered by the IRB models.

GCRR and the other analytical units are reconciling and using different IT-solutions and data sources in their analysing and reporting. The Common Data Warehouse and Capital Adequacy data warehouse are the primary data sources for the production of data. A business agreement exists between the Group Function Information & Reporting as application owner and GCRC as end-user of the data.

2.1.4 Credit risk in the capital adequacy framework

Central governments and central banks

Nordea uses the Foundation IRB (FIRB) approach to calculate risk-weighted exposure amounts (REA) for exposures to central governments and central banks.

Institutions

Nordea uses the FIRB approach to estimate and validate Probability of Default (PD) for exposures to institutional customers. The PD is based on internal data and validated annually. The validation includes both a quantitative and a qualitative assessment. The quantitative validation includes statistical tests to ensure that estimates remain valid when new data is added.

Estimates are based on the long-term default experience and adjusted by adding a margin of conservatism between the average PD and the Actual Default Frequency (ADF). This margin consists of two parts, one that compensates for statistical uncertainty and one constituting a business cycle adjustment of the rating models.

Corporate

Nordea uses the Advanced IRB (AIRB) approach to estimate and validate PD, Loss Given Default (LGD) and Credit Conversion Factor (CCF) parameters for exposures to corporate customers in the Nordic countries and in the international units. This includes exposures towards rated Small and Medium-sized Enterprises (SMEs) and specialised lending. The Foundation IRB approach is used to estimate and validate PD for exposures in the Nordic finance companies, Nordea Bank Russia and the Baltic branches, as well as derivative and securities lending exposures.

The PD is based on historical data and is validated annually. The validation includes both a quantitative and a qualitative assessment. The quantitative validation includes statistical tests to ensure that estimates remain valid when new data is added.

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 margin consists of two parts, one that compensates for statistical uncertainty and one constituting a business cycle adjustment of the rating models.

LGD estimates are based on historical loss experiences, measuring the net present value of the nominal loss including costs incurred by a customer's default. CCF estimates are based on historical data regarding drawings prior to default.

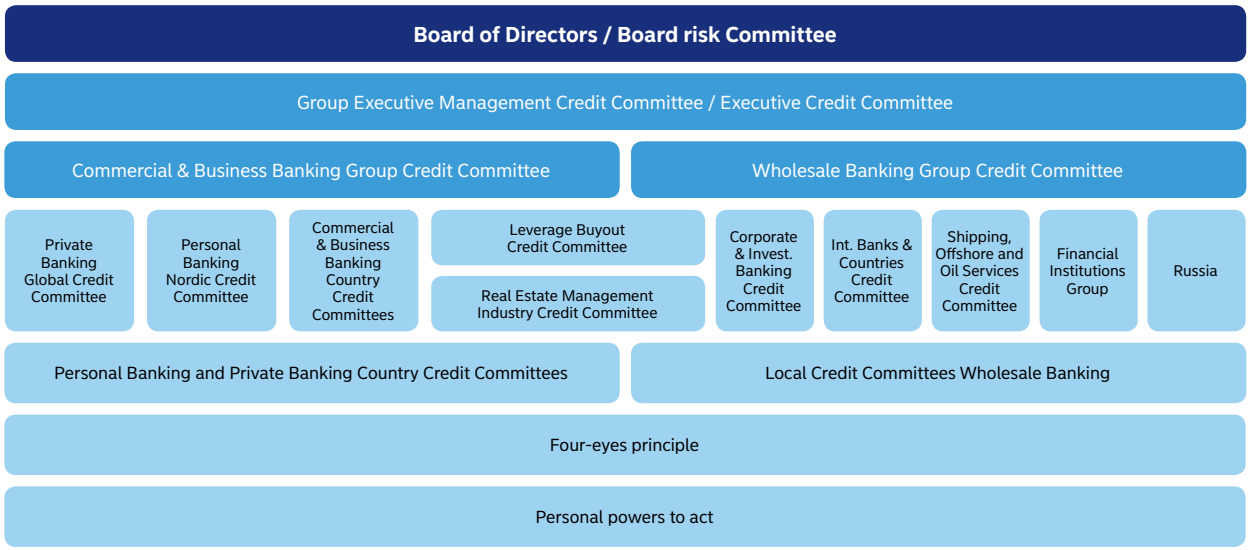
Retail

Nordea uses the Retail IRB (RIRB) approach to estimate and validate PD, LGD and CCF parameters for exposures to retail customers for Nordea Bank AB Nordic customers and mortgage companies, as well as Nordea Finance Finland. Other entities use the standardised approach to calculate REA for retail exposures.

The PD is based on internal data and validated annually. The validation includes both a quantitative and a qualitative validation. The quantitative validation includes statistical tests to ensure that estimates remain valid when new data is added. The PD and ADF for the Retail portfolio is based on the last validation year only, due to the point-in-time (PIT) methodology used for model calibration.

LGD estimates are based on historical loss experience,

Figure 2.1 Credit decision-making structure for main operations



measuring the net present value of the nominal loss including costs incurred by a customer's default. CCF estimates are based on historical data regarding drawings prior to default.

Equities

Nordea uses the standardised approach to calculate REA for exposures to equities in the banking book.

2.1.5 Credit risk mitigation

Credit risk mitigation is an inherent part of the credit decision process. In every credit decision and review, the market value of collaterals is considered as well as the adequacy of covenants and other risk mitigation techniques.

The market value of the collateral is defined as the estimated amount for which the asset would exchange between a buyer and seller under current market conditions. On this market value, a haircut is applied. The haircut is defined as a percentage by which the asset's market value is reduced ensuring a margin against loss. The margin reflects the adjustments needed to assess the cash proceeds when the collateral is liquidated in a forced sale situation. A maximum collateral ratio is set for each collateral type.

The same principles of calculation must be used for all exposures. For high risk customers, the foreclosure value may differ from the maximum collateral values and should be based on a realistic assessment for a certain asset at that time. Risk transfer to other creditworthy parties, through guarantees and insurance, shall be based on legally enforceable documentation.

With respect to large exposures, syndication of loans is the primary tool for managing concentration risk, while credit risk mitigation using credit default swaps is applied to a limited extent.

Covenants in credit agreements are an important credit risk mitigation add-on for both secured and unsecured exposures. Most exposures of substantial size and complexity include appropriate covenants. Financial covenants are designed to react to early warning signs and are carefully monitored.

Nordea use credit risk mitigation techniques related to real estate, vessels, financial collateral, cash collateral and other physical assets.

Nordea has permission to use the techniques for AIRB and RIRB approaches that fulfil the minimum requirements at both the time of application and on an ongoing basis.

2.2 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 Capital Requirements Regulation (CRR). The main differences are outlined in this section to illustrate the link between the different reporting methods.

Original exposure is the exposure before substitution effects stemming from credit risk mitigation, CCFs for off-balance sheet exposure and allowances within the standardised approach. Exposure is defined as exposure at default (EAD) for IRB exposure and exposure value for standardised exposure. In accordance with the CRR, credit risk exposures are 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, credit commitments and unutilised lines of credit)
- Securities financing (e.g. repurchase agreements and securities lending)
- Derivatives

Items presented in the Annual Report (AR) 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)

2.2.1 On-balance sheet items excluded from the capital requirement reporting

The following items are excluded from the balance sheet, when on-balance sheet exposure is calculated in accordance with the CRR:

- Balance sheet items not governed by the CRR, such as Nordea Life and Pension (NLP)
- Market risk related items in the trading book, such as certain interest-bearing securities and pledged instruments[1]
- Other, mainly allowances and intangible assets

2.2.2 Off-balance sheet items

The following off-balance sheet items specified in the AR are excluded when off-balance sheet exposure is calculated in accordance with the CRR:

- Non CRR related items, these items are not part of consolidated situation of CRR, e.g. NLP
- 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

2.2.3 Derivatives and securities financing

The fair value of derivatives is recognised on the balance sheet, while the nominal amount on derivatives are reported off-balance sheet in accordance with accounting standards. However, in the CRR, derivatives and securities financing are reported as separate exposure types. Also, repurchase agreements and securities lending/borrowing transactions are included in the balance sheet calculated based on nominal value. In the CRR, estimation of these exposure types is performed net of collateral.

2.3 Rating and scoring

2.3.1 Rating and scoring definition

The rating and scoring of customers aim to predict their PDs and to rank them according to their respective 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 REA
- Calculation of economic capital (EC) and expected loss (EL)
- Monitoring and reporting of credit risk
- Performance measurement using the economic profit (EP) framework
- Collective impairment assessment

2.3.2 Rating

A rating is an estimate that reflects the creditworthiness of a customer. The rating scale for exposure classes corresponding to corporates and institutions consists of 18 distinct grades for non-defaulted customers; from 6+ to 1- and three grades for defaulted customers from 0+ to 0-. For the sovereign exposure class, the rating scale for non-defaulted customers has two additional rating grades, 7 and 7+ and consists hence of 20 grades. The default risk of each rating grade is quantified as 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 internal ratings to S&P's rating scale is based on a predefined set of criterias, 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.

The consistency and transparency of the ratings are ensured using rating models. A rating model employs a set of specified and distinct rating criteria to produce a rating. These are called input factors and are, together with the criteria for assigning a customer to a specific rating model, the fundamental building blocks of a rating model. Typical input factors are financial factors, customer factors and qualitative factors.

Nordea has different rating models for different customer segments, e.g. real estate management, shipping, financial institutions and hedge funds. There are also risk rating frameworks for countries and project finance. Depending on the segment in question different methods, ranging from statistical to expert-based, have been used when developing rating models.

A rating is assigned in conjunction with credit proposals, reviews and the annual review of customers, approved independently by representatives from 1st LoD credit organisation. However, a customer is down-graded as soon as new information indicates the need for it. If the calculated rating is assessed and deemed to not reflect the risk of default, specific override arguments or exception rules can be used within the model to adjust the calculated rating.

2.3.3 Scoring

Models used for the retail exposure class are based on scoring, a statistical technique used to predict the PD. The risk grade scale for scored customers consists of 18 grades; A+ to F- for non-defaulted customers, and three grades from 0+ to 0– for defaulted customers.

Credit scoring models are based on internal Nordea data. To predict the future performance of customers, certain characteristics are defined based on the customer's previous performance, the products held and behavioural information. The models also take policy requirements and credit processes into account. The customers' credit risk behaviour scores and corresponding risk grades are recalculated monthly.

The models are used to support business processes, the credit approval process and the risk management process, including monitoring of various portfolio risks. In the credit process, for example, credit bureau information is used as a supplement.

Nordea takes a customer level approach, as opposed to a product-oriented approach, to scoring. To calculate the score, the customer's behaviour on all accounts/products, including potential joint commitments, is taken into consideration. The corresponding risk grade is assigned across all of the customer's facilities in Nordea. This scoring method supports the business process and risk management practice in Nordea.

Scorecards are segmented according to:

- Country
- Household / SME

1) 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).

- Product combination (mortgage, revolving credits, other retail exposure)
- Delinquency (depending on volumes), which in this context refers to the customers that are not compliant with the product specific terms and conditions

Scorecards are tailored to country specific variations, taking country specific product features, customer behaviour, macroeconomic development, debt collection process and national legislation into account. Different scorecards are used to score the household and SME portfolios, as these portfolios exhibit different payment and behavioural patterns. The household portfolio is in turn segmented into smaller sub-populations based upon product combinations held by the customer.

2.3.4 Rating and scoring migration

The rating and scoring distribution changes mainly due to three factors:

- Changes in rating/scoring for existing customers (migration)
- Different rating/scoring distribution of new customers compared to customers leaving Nordea
- Changes in exposure per rating/scoring for existing customers

The rating distribution is affected by macroeconomic developments, industry sector developments, changes in business opportunities and changes to customers' financial situation and other company-specific factors. Scoring distribution is among other things affected by macroeconomic development and the customers' repayment capacity.

The Risk Exposure Amount (REA) changes due to rating/scoring migration reflect the impact of pro-cyclicality in the Pillar I capital requirement calculations of the IRB approaches.

2.4 Collateral

Collateral management principles are governed through the collateral instruction owned by Group Credit Risk & Control in the 2nd LoD. There is a strong relationship between the data used for collateral management and the data used in calculating capital requirements.

Pledging of collateral is the main credit risk mitigation technique. For corporate exposures, the main collateral types are real estate mortgages, floating charges and leasing objects. Collateral coverage is higher for exposures to financially weaker customers than for those who are financially strong.

2.4.1 Valuation principles of collateral

Collaterals in Nordea shall always be valued in a conservative manner with current market values. Valuation and hence utility of collaterals is based on all the four following principles:

- Market value principle: The market value of the collateral must always be assessed. The market value is defined as the estimated amount for which the asset would exchange on the date of valuation between a buyer and a seller in an arm's-length transaction under current market conditions. Collateral may only be assessed as eligible where there is a liquid market with public prices readily available.
- Forced sale principle: The assessment of the collateral value must reflect that realization of collaterals is initiated by Nordea and takes place in a distressed situation and converted into cash within a reasonable short timeframe.

Reassessment principle: The value of the collateral shall be monitored in regular intervals depending on the type of collateral. More frequent monitoring shall be carried out where the market is subject to significant changes in conditions. If the type, location or character (such as deterioration and obsolescence) of the asset indicates uncertainty regarding the sustainability of the market value, the collateral value shall be reduced. Such assessment shall also reflect previously experienced volatility of market.

- Legal certainty principle: 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.
- Nordea monitors the value of its collaterals on a frequent basis and at least once every year. Monitoring should also include processes in place to secure timely and correct collateral registration, including updates in relevant systems. The monitoring process may use statistical information to assess when a significant change has occurred, and to identify the pledged properties for which a re-evaluation is required.

2.4.2 Collateral in the capital requirements calculation

Credit risk mitigation (CRM) constitutes a technique used by a credit institution to reduce the credit risk associated with an exposure which the credit institution continues to hold. CRM techniques can be divided into unfunded credit protection (such as guarantees and derivatives) and funded credit protection (such as financial collateral, receivables, other physical collateral, real estate etc.).

The collateral management in Nordea follows the specific collateral eligibility requirements in CRR and related guidelines, as well as national regulations, and includes valuation principles of collaterals, legal certainty, and other qualitative requirements that are connected to each collateral type.

2.5 Credit risk models validation and parameter estimation

Nordea's estimation and validation process installs quality controls in order to benchmark the performance of models, procedures and systems and thereby enhancing the accuracy of the parameters.

Rating and scoring models are validated quantitatively and qualitatively in the annual review process. The quantitative validation includes statistical tests of the models' discriminatory power, i.e. the models' ability to distinguish default risk, and absolute accuracy, i.e. the ability to predict default levels.

The rating models Nordea uses for the exposure classes corporate, institutional and sovereign have characteristics of both through-the-cycle (TTC) and point-in-time (PIT) ratings, whereas the scoring models Nordea uses for the retail exposure class are closer to PIT. A PIT rating system uses all currently available obligor-specific and aggregate information to assign obligors to risk grades.

An obligor's rating is expected to change as its economic prospects change. For a TTC rating system, 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 PD, LGD and CCF parameters are re-estimated annually by a quantitative and qualitative assessment. The quanti-

tative assessment includes statistical tests to ensure that the estimates remain valid when new data is added.

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

LGD estimates are based on historical losses. LGD measures the net present value of the expected loss including costs caused by a customer's default.

CCF is a statistical multiplier used to calculate EAD by predicting the drawdown of the off-balance exposure. Nordea's CCF estimates are based on internal data on drawings prior to default. For the corporate exposure class drawings after default are also taken into account in the estimation.

2.6 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. In addition, counterparty credit risk also appears in repurchasing agreements and other securities financing contracts.

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 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. Interest rate swaps and other derivatives are used in hedging activities of asset and liability mismatches in the balance sheet. Furthermore, Nordea may, within clearly defined risk limits, use derivatives to take open positions in the bank's operations. Derivatives affect counterparty credit risk, market risk as well as operational and liquidity risk.

Counterparty credit risk, including risks towards counterparty credit risk, is subject to credit limits like other credit exposures and is treated accordingly. To assess the counterparty credit risk towards Central Counterparties (CCPs), clearing limits are based on the potential size of the clearing related exposure on each CCP, taking regulatory requirements and the market development into account.

2.6.1 Pillar 1 method for counterparty credit risk

Nordea has approval from the Financial Supervisory Authorities (FSAs) in Sweden and Finland to use the Internal Model Method (IMM) to calculate the regulatory counterparty credit risk exposures in accordance with CRR. The method is used for standard FX and interest rate products which constitute the predominant share of the exposure.

The expected IMM exposure is calculated by simulating a large set of future scenarios for underlying price factors and then revaluing the contracts 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. Nordea uses a stressed calibration of the IMM for calculation of the counterparty credit risk exposures.

Moreover, automatic identification procedures are in place to identify potential specific wrong-way risk (SWWR), i.e. situations where the future exposure to a specific counterparty is positively correlated with the counterparty's PD due to the nature of the contracts with the counterparty. Under the IMM approach, simulated exposure is subject to a regulatory multiplier of 1.4 to reflect the potential for correlation in risk across the portfolio.

For the non-IMM approved part of the portfolio, Nordea uses the Current Exposure Method (CEM) for calculating the regulatory exposure, which is essentially the sum of current net exposure 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 contracts' underlying asset and time to maturity.

2.6.2 Credit Value Adjustment

Credit value adjustment (CVA) represents the market cost of hedging counterparty credit risk and the capital requirement, CVA risk charge, reflects the variability in CVA. Calculation of the CVA risk charge is based on either IMM exposure amounts that are used in the advanced CVA risk charge calculation or CEM exposure amounts that are used in the standardised CVA risk charge calculation.

2.6.3 Mitigation of counterparty credit risk exposure

To reduce exposure towards single counterparties, Nordea employs risk mitigation techniques. The most significant one is the use of legally enforceable closeout netting agreements, which allows Nordea to net positive and negative market values on contracts within the same agreement in the event of default of the counterparty. It is Nordea's policy to have legally enforceable closeout netting agreements in place with all trading counterparties, and thereby being able to fully account for netting.

Secondly, Nordea mitigates the exposure towards primarily banks, institutional counterparties and hedge funds by the use of financial collateral agreements, where collateral is placed or received to cover the current net exposure. The collateral is mainly cash (EUR, USD, DKK, SEK and NOK), but also government bonds and to a lesser extent mortgage bonds. Separate credit guidelines are in place for handling financial collateral agreements.

Nordea's financial collateral agreements do not normally contain any trigger dependent features, e.g. rating triggers. Some agreements though, still contain clauses that may require collateral postings in case of a Nordea downgrading; however, these would not impose any material impact on Nordea's liquidity and collateral preparedness. A three-notch downgrade of Nordea would trigger a collateral increase equivalent to approximately 3%.

In order to reduce bilateral counterparty credit risk, CCPs are increasingly used for clearing of OTC derivatives. By the end of 2017, CCPs were mainly used by Nordea to clear interest rate derivatives, repo transactions and to a smaller extent credit derivatives. Nordea continues to assess the possibility to clear more derivative volumes through CCPs in order to

further reduce bilateral counterparty credit risk and to comply with the clearing obligation. Nordea's policy is to use CCPs if possible.

As well as exposure risk mitigation methods described above, Nordea employs credit default swap protection to hedge CVA risk. Hedges that are deemed as eligible hedges under the CRR are used to offset EAD in the Standardised CVA method charge.

2.6.4 Counterparty credit risk for internal credit limit purposes

Counterparty credit risk for internal credit limit purposes is for the main part of the portfolio calculated using a simulation model, which is based on the IMM. 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.

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. Moreover, Group Market and Counterparty Credit Risk (GMCCR) does historical trend analysis to highlight correlation within the portfolio, between counterparty's exposure and rating. Thereby GMCCR undertakes systematic analysis and reporting of general wrong way risk (GWWR), where cases of GWWR are escalated to senior management. The significance of SWWR is determined through a number of checks assessing correlation and presence of mitigating parameters. Legal connection is decided based upon principles for customer consolidation as defined in the credit guideline. Transactions that are assessed to have 1) significant degree of SWWR and 2) legal connection, are named Eligible SWWR transactions and are subject to tightened monitoring and increased capital requirements as defined in the CRR.

2.6.5 Settlement risk

Settlement risk is a type of 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.

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 CLS (Continuous Linked Settlement) Bank, and member in the global FX clearing system run by CLS. The system eliminates settlement risk for FX trades in 18 different currencies between eligible counterparties in CLS.

For those counterparts and FX trades that are not eligible for CLS clearing, it is Nordea's policy to settle via in-house accounts. Only with specific credit approval from appropriate credit committee external settlement is allowed, and in those situations Nordea make use of bilateral payment netting in order to reduce the exchanged amounts to the greatest extent possible.

2.7 Impairments

2.7.1 Definition and methodology of impairment

Throughout the process of identifying and mitigating credit impairments, Nordea continuously reviews the quality of credit exposures. 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 a negative impact is likely on the customer's expected future cash flow to the extent that full repayment is unlikely (pledged collaterals taken into account). Non-significant customers can be treated as groups with a reserve belonging to a group of individually identified customers.

Exposures with individual assigned provisions 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 expected future cash flow, including the value of pledged collateral. Nordea recognises only specific credit risk adjustments (SCRA). SCRA comprise individually and collectively assessed provisions. SCRA during the year is referred to as loan losses, while SCRA in the balance sheet is referred to as allowances. Impaired exposures can be either servicing or non-servicing.

Exposures that are past due more than 90 days are regarded as defaulted and reported either as "non-servicing, impaired" or as "non-servicing, not impaired" depending on the deemed loss potential. If a customer recovers from being in default, the customer is seen as cured. Typically, this situation occurs if the customer succeeds in creating a balance in financials. In order to be cured the recovery should include the customer's total liabilities in Nordea and elsewhere, an established satisfactory repayment plan and an assessment that the recovery is underway.

Forbearance is negotiated terms or restructuring due to the borrower experiencing or about to experience financial difficulties. The intention with granting forbearance for a limited period of time is to ensure full repayment of the outstanding debt. Examples of negotiated terms are changes in amortisation profile, repayment schedule, customer margin as well as ease of financial covenants. Forbearance is undertaken on a selective and individual basis and followed by impairment testing. Loan loss provisions are recognised if necessary. Forborne rated customers without impairment charges are fully covered by either collateral and/or the net present value of future cash flows.

The definition of a restructured exposure used for the implementation of CRR Article 178 in terms of default is considered as relating to distressed restructuring and debt forgiveness while the definition of forbearance can be related to both defaulted and non-defaulted customers "experiencing or about to experience financial difficulties".

Nordea's impairment testing is based on a two-step procedure with both individual and collective assessment 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.

Collective impairment testing is performed for groups of customers not identified individually as impaired. The purpose of collective loan loss reserves is to account for value reductions in the performing credit portfolio due to loss events that have occurred. Nordea's model for collective provisions uses a statistical model as a baseline for assessing the amount of provisions needed for the parts of Nordea's portfolios that are not individually assessed. The collective provisioning model is based on migration of rated and scored customers in the credit portfolio. The assessment of collective impairment is built on an incurred loss concept, where the credit quality of each exposure is related to its initial credit quality. If the credit quality has deteriorated, collective provisions corresponding to a true and fair assessment of the expected loss is calculated by the model. Moreover, defaulted customers without individual provisions are also collectively assessed. The output of the model is complemented with an expert based analysis process to ensure adequate provisioning. The model is executed quarterly and the output is a result of a bottom up calculation, taking the latest portfolio development into account. Collective impairments are assessed quarterly for each legal unit/branch.

3. Market risk

Market risk is defined as the risk of losses related to Nordea's financial exposures resulting from changes in market rates and related assumptions that affect market value (i.e. changes to interest rates, credit spreads, FX rates, equity prices, commodity prices and option volatility).

3.1 Governance of market risk

Nordea's market risk management operates under the three LoD principle as follows:

- The BAs (1st LoD) are responsible for adhering to the market risk framework as set out by the 2nd LoD.
- Group Market and Counterparty Credit Risk (GMCCR) is responsible for setting out the market risk framework and independently measuring, monitoring, controlling and reporting the risk as the 2nd LoD.
- Group Internal Audit performs audits and provides additional assurance to stakeholders on the adequacy of internal controls and risk management processes, thereby constituting the 3rd LoD.

GMCCR within GRMC, has the responsibility for the development and maintenance of the Nordea market risk framework. The framework defines common management principles and policies for market risk management within Nordea. These principles and policies are approved by BoD.

The market risk framework is reviewed annually. The review includes all governance documentation, the RAF and all risk management strategies for market risk. In addition, the framework is reviewed ad hoc as new regulation, business strategies and market conditions require.

3.1.1 Market risk appetite

The market risk appetite in Nordea is expressed through risk appetite statements issued by BoD. The statements are defined for trading and banking books, including Structural FX, in terms of the maximum reported market risk loss in a severe but plausible stress event (over a one year horizon) as an acceptable equivalent impact against the Common Equity Tier 1 (CET1) ratio.

3.2 Management of market risk

Nordea Markets within Wholesale Banking, together with Group Treasury and ALM (TALM), within Group Finance and Treasury, are the key contributors to market risk in Nordea. Nordea Markets is responsible for customer-driven trading activities. TALM is responsible for long and short-term wholesale funding activities and investments for Nordea's own account, asset and liability management, liquidity portfolios, pledge/collateral account portfolios as well as all other banking activities. Nordea Markets and TALM are responsible for managing the risk under the framework as set by BoD and by GRMC through the Risk Committee.

GMCCR is an independent unit which is responsible for the independent measurement, monitoring, controlling and reporting of market risk in Nordea. GMCCR ensures that only approved products are traded within set limits.

Nordea takes market risks as part of the business model in supporting customer and client activity and is required to manage and control this exposure in adherence with the market risk appetite. To appropriately manage market risk in Nordea, the following policies, processes and strategies are employed:

- A comprehensive policy framework, outlined responsibilities and objectives explicitly outlined and clearly defined market risk appetite.
- Risk mandates, that specifies limits and restrictions on which instruments may be traded and by whom.
- A hedging strategy that outlines the approach to reduce risk when limit utilisations approach internally established thresholds. All hedges are monitored within the market risk framework.
- 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 processes that promote information sharing between trading and risk control.
- A framework for timely reporting to senior management on market risk. The Chief Risk Officer (CRO) receives reporting on Nordea's consolidated market risk daily, whereas Group Executive Management (GEM), BoD and associated risk committees receive reports monthly.
- A trading book/banking book boundary framework that is governed by a guideline to ensure that positions receive appropriate capital treatment. The trading strategies for the trading book, and the investment policy for the banking book, mandate activities and positions in the respective books that assure compliance with the boundary guideline and regulatory requirements. The 1st LoD BAs perform controls to verify that activities carried out are in compliance with the trading strategies and investment policy. GMCCR oversees and regularly challenges the control activities of the BAs in this regard.

3.3 Measurement and reporting of market risk

Nordea uses several risk measuring methods for market risk. Statistical methods used are VaR, stressed VaR, stress-testing, sensitivity analysis and scenario simulation. Non-statistical risk measurement methods are basis point values, net open FX positions and option key risk sensitivities. 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 form the Incremental Risk Measure (IRM) and the Comprehensive Risk Measure (CRM).

Market risk models are subjected to annual independent reviews by a model validation team which assesses the conceptual soundness, implementation and use of each model.

Market risk reporting is provided by a central market risk system, constructed internally by Nordea, which calculates Nordea's official market risk figures based on the position data delivered from back office systems. The aim of market risk reporting is to quantify total market risk for the whole Nordea group, including individual BAs.

The market risk system serves as a tool to control process-

es in market risk management, with position and risk figures. The 1st LoD, in conjunction with the 2nd LoD, provide/validate risk calculation of aggregated risk figures. For the trading book, these figures include sensitivities, VaR, stressed VaR, IRM and CRM, which are subject to limits set as part of the RAF reported to the senior management on a daily or weekly basis (IRM and CRM).

For the banking book, the aggregated risk figures include sensitivity analysis, VaR and stressed VaR reported on a daily basis and structural interest income risk (SIIR) reported on a monthly basis to senior management. The banking book risks are also subject to limits as part of the RAF.

3.3.1 Value-at-Risk (VaR)

Nordea calculates VaR using historical simulation. The current portfolio is revaluated using 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 historical observation period assumes equally weighted market prices. 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. Approval has been granted to Nordea to use this model.

Separate VaR figures are calculated for interest rate, credit spread, foreign exchange rate, equity and inflation risks. The total VaR includes all these risk categories and allows for diversification among them. The VaR figures include a combination of full revaluation and both linear positions and options. Linear products are calculated via a linear approach whereas options are calculated via full revaluation. When simulating potential movements in risk factors Nordea uses relative, absolute and mixed approaches depending on the risk factor. The model has been calibrated to generate a 99% VaR figure.

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 a 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 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 benefits and disadvantages of using longer or shorter time series in the calculation of VaR.

Nordea also utilises an internal VaR measurement, the Management VaR. Management VaR includes risk factors which are scheduled for use in the Regulatory VaR upon Financial Supervisory Authority (FSA) approval. In all other ways, the models are identical.

Table 3.1 Methods for calculating minimum capital requirements for market risk

	Interest rate risk		Equity risk		
	General	Specific	General	Specific	FX risk
Nordea	IA	IA[2]	IA	IA[2]	IA

IA:internal model approach, SA: standardised approach.

3.3.2 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. In addition, Stressed VaR is calculated as the average of the worst returns of the empirical distribution of market value changes. 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 is conducted if deemed necessary and could lead to a change in the period. The specific period to be used is, at least, evaluated once every year. Currently the stressed period covers the period after the collapse of Lehman Brothers, 2008-2009.

3.3.3 Incremental Risk Measure

Incremental risk measure (IRM) the risk of losses due to credit migration or defaults of issuers of tradable debt in bond and credit derivative positions held in the trading book. This measure captures credit risk for two separate types of issuers, corporates, including Nordea's own debt exposure, and sovereigns. Nordea's model translates migrations into credit spread changes for each issuer by defining a matrix of multiplication factors, and for each possible rating migration by multiplying this factor with the current level of the issuer's credit spread. A separate transition matrix is used for corporates and sovereigns respectively. The transition matrices contain the probabilities of migrations and default for each rating class where the rows state the current rating, and the columns state the new rating. This difference is crucial, since sovereign states tend to be more stable in credit ratings; the sovereign transition matrix is considerably more concentrated along the diagonal (which contains the probabilities of no rating migrations). The relation defining the value of the correlations is taken from the Internal Ratings Based Approach (IRB). Nordea's IRM model relies on Monte Carlo simulations and measures risk at a 99.9% probability level based on the predetermined regulatory one-year liquidity horizon.

3.3.4 Comprehensive Risk Measure

The Comprehensive Risk Measure (CRM) captures the total risk related to positions in credit correlation products, covering structured credit trading operations. 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.

The CRM model considers single-name credit spreads as lognormal processes. Credit spread is positively correlated through a credit market factor, such that scenarios with many defaults tend to be associated with spread widenings.

The model also uses a stochastic ratio recovery rate which

2) For specific interest rate risk relating mainly to bonds, equity risk relating to structured equity derivatives and fund-linked derivatives and for commodity risk, the market risk capital requirements are calculated using the standardised approach.

is correlated with the credit market factor driving the defaults. Nordea's CRM model is also based on Monte Carlo simulations and measures risk at a 99.9% probability level based on the predetermined regulatory one-year liquidity horizon. The model uses the same methodology for migration and default as the IRM, employing a driving market risk factor. In addition, it also captures recovery rate risk, correlation risk and CDS index/single-name basis risk. Recovery rate risk, correlation risk and CDS index/single-name basis risk are captured as separate stochastic processes which are correlated with the credit market factor. The model is run using full revaluation using the official front office pricing models.

The one-year capital horizon is used in the calculation for each trade even though a trade may expire before this period. The standardised CRM floor model is also subjected to annual independent reviews by model validation team which assess the conceptual soundness, implementation and use of the model.

3.3.5 Stress testing

Stress tests are important tools integrated into the market risk management framework. They are used to estimate the possible losses that may occur under extreme, but plausible, market conditions. The main types of stress tests utilised include:

- Subjective stress tests, where the portfolios are exposed to scenarios for financial developments that are deemed particularly relevant at a certain point in time. These scenarios are inspired by the financial, macroeconomic or geopolitical situation, or the current composition of the portfolio or a specific sub-portfolio.
- Sensitivity tests, where rates, spreads, prices, and/or volatilities are shifted to emphasise exposure to situations where historical correlations fail to hold.
- A sensitivity measure, where the potential loss stemming from a sudden default of an issuer of a bond or the underlying in a credit default swap is measured.
- Reverse stress tests, which assess and aim 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 monthly for the consolidated risk across the banking book and trading book across the different sub-portfolios. Reverse stress tests are conducted monthly for the trading book.

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

3.3.6 Capital requirement calculation for market risk

Market risk in a CRR 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 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 market risk capital requirements for the predominant part of the trading book. However, for specific interest rate risk relating mainly to mortgage bonds, equity risk relating to structured equity derivatives, fund-linked derivatives and for commodity risk, market risk capital requirements are calculated using the standardised approach.

3.3.7 Back-testing and validation of risk models

Back-testing of the VaR models is conducted daily. Back-tests are conducted using both hypothetical profit and loss (P/L) and actual P/L. Hypothetical P/L is the P/L that would have been realised if the positions in the portfolio had been held constant during the following trading day. The P/L is in the back-test compared to one-day VaR figures.

The models used in the calculation of the IRM and the CRM are subject to periodic validation on an annual basis. Topics in scope include an assessment of quantitative and qualitative reasonableness of the various data risk factors being modelled (distribution of defaults and credit migrations, dynamics of credit spreads, recovery rates and correlations, etc.). Input parameters are evaluated annually through a range of methods including, sensitivity tests and scenario analysis.

3.3.8 Interest rate risk in the banking book

Interest rate risk in the banking book is monitored daily by measuring and monitoring VaR 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.

The market risk of Nordea's banking book from movements in interest rates can materialise through both changes in the net present value (NPV) of future cash flow from financial instruments, and change in net interest rate income. The risk of changes in NPV of future cash flow from changing interest rates is measured by economic value (EV) risk measures, including the VaR and Stressed VaR described in sections 3.3.1-3.3.2, and by scenario simulation. The risk of a decrease in expected net interest income (NII) from changes in interest rates is measured via scenario simulation.

3.3.9 Structural market risk

Structural FX risk arises from the mismatch in currency composition between assets and capital. Hedging structural FX risk involves trade-off between reducing the impact of FX fluctuation on either capital ratios or equity. Nordea manage the volatility in the CET1 ratio while at the same time limiting the downside on the value of equity value.

Earnings and costs generated in foreign currencies or from foreign branches generate an FX exposure, which for individual Nordea legal entities is handled in each entity's FX position.

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 net interest income over time. This is structural interest income risk (SIIR) discussed below.

3.3.10 Structural Interest Income Risk

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 50 basis points.

SIIR reflects mismatches in balance sheet and off-balance sheet items due to differences in the interest rate repricing

periods, volumes or reference rates of assets, liabilities and derivatives.

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.

3.4 Compliance with requirements applicable to exposure in the trading book

Nordea complies with the CRR and complementing EU regulation for additional valuation adjustments (AVA) in the trading book by calculating;

- Price uncertainty
- Close-out costs
- Model risk
- Unearned credit spreads
- Investing and funding costs
- Concentrated positions
- Future administrative costs
- Early termination costs and operational risk

An AVA is calculated for all positions in Nordea accounted for at fair value, both in the trading book and banking book.

The CRR introduces requirements for clearly defined policies and procedures for determining which positions to include in the trading book for the purposes of calculating minimum capital requirements. Group Risk Executive Management has issued instructions referring to the CRR on this topic, which clearly define which positions to include in the trading book and specifies the monitoring and reporting principles for external capital adequacy purposes.

For further information on the valuation process, including the extent of mark-to-market and mark-to-model, a description of the independent price verification process and a description of valuation adjustments included in fair value see note 40 in the AR.

3.5 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 investment risks associated with Nordea Life & Pensions (NLP).

4. Operational and compliance risk

Nordea defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk. The risk of loss includes direct and indirect financial loss, impacts from regulatory sanctions, legal exposure, reputational damage and critical business process disruption. Nordea defines compliance risk as the risk of failure to comply with statutes, laws, regulations, business principles, rules of conduct, good business practices and related internal rules governing Nordea's activities subject to authorisation in any jurisdiction where Nordea operates, which could result in material financial or reputational loss to Nordea, regulatory remarks or sanctions.

Operational risks are inherent in all of Nordea's businesses and operations. Consequently, managers throughout Nordea are accountable for the operational risks related to their area of responsibility, and responsible for managing these within limits and risk appetite in accordance with the operational risk management framework. Group Operational Risk (GOR), constitutes the 2nd line of defense for operational risk and is responsible for developing and maintaining the overall operational risk management framework and is supporting the business in their implementation of the framework. GOR monitors and controls that operational risks are appropriately identified and mitigated, follow-up risk exposures towards risk appetite as well as assesses the adequacy and effectiveness of the operational risk management framework.

The focus areas for the control work performed by GOR is decided in the annual and quarterly planning process and covers several dimensions; business areas, key risk areas and operational risk processes. GOR is responsible to provide reports on operational risk to the CRO who reports regularly to the CEO and the BoD.

Nordea's risk appetite framework (RAF) is described in section 1.4. The RAF in Nordea, including risk appetite statements, is approved annually by the BoD. The risk appetite statements for operational risk are expressed in terms of:

- management of important risks;
- total loss amount of incidents and management of incidents, and
- management of key risk indicators (KRIs).

The risk appetite statement for compliance risk determines that Nordea aspires compliance with applicable laws, rules and regulations and has no appetite for material non-compliance with any applicable laws, rules and regulations.

Managers throughout Nordea are accountable for managing compliance risks within their areas of responsibility and jurisdictions. Group Compliance (GC) constitutes the 2nd line of defense for compliance risk and is responsible for developing and maintaining the framework for managing compliance risks, and for guiding the business in their implementation to ensure continuous adherence to the framework. Compliance activities are presented in the form of an annual Compliance oversight plan to the CEO and the BoD for approval. The plan represents a comprehensive approach to the compliance activities of the Group, combining GC's overall approach to key risk areas. The plan is supported by granular plans in each business area, legal entity and risk dimensions. GC reports key compliance risks, controls and recommendations to the CEO and the BoD on a quarterly basis.

4.1 Management of operational risk

Nordea's BoD level group directives on risk as well as on internal governance set out the general principles for management of risks in Nordea. Based on these principles, Nordea has established supporting CEO instructions and guidelines for operational and compliance risks that form the operational and compliance risk management frameworks. Management of operational and compliance risk includes all activities aimed at identifying, assessing, controlling, mitigating, monitoring and reporting risks. Risks are governed by limits set within the boundaries of the risk appetite.

The frameworks include processes supporting identification and assessment of operational and compliance risks. Risks are identified through various processes; examples are detailed in the following section and include the reporting of incidents, approval of changes, as well as regular risk assessment processes. Risks are then assessed by probability and impact, and based on the severity of the risk mitigating actions are established. Monitoring and controlling is an important part of risk management. Monitoring and control shall ensure for example that risks are appropriately identified and mitigated, that risk exposures are kept within limits and that risk management procedures are efficient and to ensure adherence to internal and external rules.

New and amended rules and regulations are identified in regulatory horizon scanning activities. The impact of new and amended regulation is assessed and appropriate implementation measures are taken in accordance with the framework for change risk management and approval.

Management of operational and compliance risks is proactive, emphasizing training and risk awareness. To ensure a consistent approach to risk and compliance training and communication, a joint risk and compliance training and culture team has been formed. Furthermore, a governance body has been established to define training needed both in the onboarding of staff as well as the continuous training of each employee to renew their licenses to work.

4.2 Key risk management processes

4.2.1 Risk and control self-assessment (RCSA) and compliance independent risk assessment

RCSA covering both compliance and operational risk is conducted on a yearly basis and covers all of Nordea. It is conducted in each business area and group function on at least divisional level. For risks identified in the RCSA, the level of risk and the controls in place to mitigate the risks, are assessed. If additional mitigating actions are required to reduce the risk exposure, these are identified and implemented.

Based on the self-assessment, Operational Risk Officers independently monitor and challenge the identified risks and management of these.

In parallel with the RCSA, Compliance Officers perform their own independent risk assessments based on a set of

identified key regulatory risks. For each identified risk, the significance of the risk is estimated and controls in place to mitigate the risk are assessed.

4.2.2 Scenario analysis

The Nordea scenario analysis framework focuses on operational risks with low probability, which have the potential to result in severe impact; i.e. tail risks. The objective is to challenge and extend Nordea's present understanding of its operational risk landscape; focusing on identifying risks which could cause severe financial losses or non-financial impacts to Nordea. Scenario analysis which facilitates a deeper understanding of identified tail risks and gaps in the existing control infrastructure, and provides a forum to propose changes to existing controls, develop new controls and discuss key risks beyond the multitude of events that are part of the typical business activity.

4.2.3 Change risk management and approval

A key part of the operational risk management framework is the management of operational risks when planning and conducting changes. The definition of a change in this context includes all new or changed products, services, markets, processes or IT systems or substantial changes to the operations or the organisation, including exceptional transactions and decommissioning.

The Change Risk Management and Approval (CRMA) process consists of an initial materiality assessment and a subsequent risk identification, assessment and mitigation. The required level of involvement of subject matter experts depends on the materiality level of the change. The CRMA process includes the involvement of both mandatory and relevant subject matter experts in the risk assessment to ensure a thorough and proper risk identification, assessment and management before a change.

4.2.4 Incident reporting

Incidents and security weaknesses are immediately handled to minimise damage. Upon detection of an incident, handling of the incident has first priority. Actions to reduce the impact should be taken without delay and long-term mitigating actions must be planned and executed in order to prevent or reduce the impacts of future incidents. Unit managers are responsible for the proper handling, documentation and reporting of incidents. Incident reporting is a Nordea process and the data from the process is stored in a common database. Incident reporting also contribute to embedding a sound risk culture in daily operations and to create awareness, so that all employees are observant to occurrences and risks that can turn into incidents, in order to prevent them from materialising.

4.2.5 Crisis management and business continuity

Crisis management and business continuity aims to build and maintain appropriate levels of resiliency and readiness for a wide range of expected and unexpected operational and financial risk events to minimise the impact of operational disruptions on the business. Through business continuity management, an organisation can recognise what needs to be done to protect its resources (e.g. people, premises, technology and information), supply chain, interested parties and reputation, before a disruptive incident occurs. It covers the broad scope from incidents handling via escalation procedures to crisis management in Nordea. As most service chains are supported by IT; applications, disaster recovery plans for technical infrastructure and IT systems are an essential part of business continuity management in Nordea.

4.2.6 Information security

Information security management is defined as the protection of information with respect to confidentiality, integrity and availability. Nordea has a documented information security framework consisting of instructions, guidelines, standards and procedures to support and enable the organisation to protect information against accidental or malicious disclosure, modification or destruction and to maintain availability. A Group Chief Information Security Officer leads and coordinates the information security work within the group operations and is accountable for the information security management system which ensures that the information security work is performed in a structured and methodical way.

4.2.7 Third party risk management

While Nordea may delegate day-to-day operational activities to third parties, it is Nordea's responsibility to maintain effective oversight and governance of the outsourced activities and third-party relationship.

Nordea's third party risk management framework ensures the risk management, due diligence and monitoring of its third parties throughout the life cycle of a relationship. The third-party risk assessment process is to be considered prior to engaging with a third party to safeguard Nordea and to understand and control the risks posed by the relationship, consistent with Nordea's risk appetite.

4.3 Reputational risk

Reputational risk in Nordea is defined as the risk of damage to trust in Nordea from our customers, employees, authorities, investors, partners and public with the potential for adverse economic impact.

Reputational risk is often an impact from, or a cause of, other types of risks, e.g. credit, liquidity, market, operational, compliance and legal risks inherent in the business.

Nordea has developed a reputational risk framework that includes guiding principles for managing reputational risk. The framework is strongly linked with the operational risk management framework, but also includes separate processes targeting the specific nature of reputational risk or impact on reputation.

4.4 Minimum own funds requirement for operational risk

Nordea's own funds requirements for operational risk are calculated according to the standardised approach. In this approach, the institution's activities are divided into eight standardised business lines and the gross income based indicator for each business line is multiplied by a predefined beta coefficient. The consolidated own funds requirement for operational risk is calculated as the average of the last three years' own funds requirements.

5. Remuneration

The Board Remuneration Committee (BRC) is responsible for preparing and presenting proposals to BoD on remuneration issues. This includes proposals regarding Nordea's remuneration policy and supplementing instructions and guidelines for remuneration to the executive officers to be decided by the Annual General Meeting as well as the remuneration for the Group CEO, members of GEM, including Group Compliance Officer (GCO) and Group Chief Risk Officer, and the Group Chief Audit Executive. The BRC follow up on the application of the remuneration policy and supplementing instructions, through an independent review by Group Internal Audit which is conducted at least annually.

5.1 Risk analysis and management for remuneration in Nordea

Nordea's remuneration components are evaluated annually to ensure compliance with both international and local remuneration regulations and guidelines. In addition to the evaluation of Nordea's remuneration components, the risk analysis addressing issues arising with respect to Nordea's remuneration policy was updated in March 2017. Key factors addressed include risks related to the governance and structure of the remuneration schemes, target-setting and measurement of results, as well as fraud and reputation. Focus of the analysis is the variable components that could potentially lead to a total compensation that might be considered high. Remuneration risk in Nordea is managed within the operational risk framework.

Nordea mitigates these risks by regularly reviewing the structure of the remuneration components, including the participants and potential payout amounts, and by disclosing relevant information to the public. Furthermore, Nordea has processes for target-setting, aligned with the Nordea's strategy, and predefined growth and development initiatives. The measurement of results is aligned with Nordea's overall performance measurement, and payout decisions are subject to separate processes and the Grandparent principle (approval by the manager's manager). Nordea also mitigates relevant risks by means of the 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, separation of duties, the four-eye principle, quality and efficiency of internal communication and an independent evaluation process.

The following principles are examples of what is further applied to ensure sound risk management:

- No employee in Nordea has a variable remuneration potential that exceeds 200% of the relevant person's fixed remuneration. The maximum ratio between the fixed and the variable remuneration for employees who are identified as having an impact on Nordea's risk profile under CRD IV (Identified Staff) is currently 100%.
- Guaranteed variable remuneration can be offered only in exceptional cases and then only in the context of hiring new staff, limited to the first year of employment and can only be paid if Nordea has a strong capital base.
- Remuneration packages related to compensation for contracts in previous employments must be aligned with Nordea's Remuneration Policy.
- Payments related to the early termination of a contract should reflect performance achieved over time and should be designed in a way that does not reward failure or misconduct.
- Employees engaged in control functions are compensated independently of the performance of the business unit(s) they control.

Performance-related remuneration (excluding profit sharing) for Identified Staff is partially deferred in accordance with domestic and international regulations and guidelines. This means that 40%-60% of variable remuneration is deferred for three to five years with disbursement during the deferral period on a pro-rata basis or slower. The first disbursement of deferred variable remuneration can take place one year into the deferral period at the earliest. 50% of the variable remuneration, 80% of EIP and GEM EIP, is indexed with Nordea's share price development.

Payment of variable remuneration to Identified Staff (excluding Profit Sharing), or to all employees if required according to national regulations, is conditional upon such payment being justified based on Nordea's, the relevant business unit's and the individual employee´s results. An adjustment, partly or down to zero, can occur if the person in question e.g. has violated internal or external regulations, participated in or been responsible for an action that has caused Nordea significant losses, or in the event of a significant downturn in Nordea's or the relevant business unit's financial results.

Employees are required to undertake to not use personal hedging strategies to undermine or eliminate the effects of deferred variable remuneration being partly or fully removed.

The Nordea remuneration policy and other detailed information on remuneration can be found at www.nordea.com.

6. Liquidity risk

Liquidity risk is the risk that Nordea is unable to service the cash flow obligations when they fall due; or unable to meet cash flow obligations without incurring significant additional funding costs. Nordea is exposed to liquidity risk in lending, investment, funding and other activities which could result in negative cash flow mismatches and an inability to liquidate assets or obtain adequate funding.

6.1 Management, governance and measurement of liquidity risk

The objective of liquidity risk management is to ensure that Nordea can meet cash flow obligations at all times, including on an intraday basis and across market cycles and during periods of stress.

6.1.1 Management of liquidity risk

Nordea's liquidity management and strategy is based on group board directive on risk and group CEO instructions on liquidity risk resulting in various liquidity risk measures, limits and organisational procedures.

Nordea is subject to various liquidity regulations on group and entity level. These regulations are intended to measure and monitor levels of liquidity risk and cover both short-term liquidity risk and long-term structural risk.

Liquidity stress testing is carried out to identify liquidity risk drivers and stress scenarios which could impair the Nordea's ability to meet cash-flow obligations when they come, due either because of scarce liquidity resources or significant increased costs in funding needed to generate liquidity.

An Internal Liquidity Adequacy Assessment Process (ILAAP) is undertaken at least annually for the Nordea Group as well as for some individual Nordea subsidiaries and branches. The ILAAP provides an assessment of liquidity adequacy through a comprehensive analysis of liquidity risk management practices in the respective entity.

Appropriate transfer pricing mechanisms are maintained to ensure that potential cash flows are subject to a market-based charge to incentivise behaviours which ultimately drive the development of the Nordea's balance sheet and liquidity profile.

The Global Liquidity Business Continuity Plan addresses the strategy for managing a liquidity crisis. The objective of the plan is to mitigate the impact of a stress event by assuring continuous access to a minimum level of liquidity needed to accommodate critical business activities.

6.1.2 Liquidity risk appetite

Nordea's RAF is described in section 1.4. For liquidity risk, the risk appetite is anchored to liquidity stress testing results over specified time horizons as well as regulatory requirements and has implications for nature and scope of activities undertaken by Nordea. In addition, the liquidity risk appetite determines the size of Nordea's liquidity buffers.

6.1.3 Governance of liquidity risk

TALM, in its role as 1st LoD, is responsible for pursuing Nordea's liquidity and funding strategy in compliance with the liquidity risk appetite. TALM manages and executes liquidity risk management processes, which include issuing funding and capital, managing liquidity buffers, and defining the principles for pricing liquidity risk. Group Risk Management and Control (GRMC), in its role as 2nd LoD, provides independent risk oversight of liquidity risk management at Nordea and is responsible for establishing the internal rules framework for managing liquidity risk and performing independent liquidity stress testing.

6.1.4 Measurement of liquidity risk

Liquidity risk management focuses on both short-term liquidity risk and long-term structural liquidity risk. 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 size is linked to liquidity stress testing results which form the basis of the liquidity risk appetite. The liquidity buffer consists of central bank cash and central bank eligible high-grade liquid securities that can be readily sold or used as collateral in funding operations.

A key internal measurement is the survival horizon, which defines the risk appetite by requiring that Nordea maintains sufficient liquidity to survive at least three months under a combined institution-specific and market-wide liquidity stress scenario with limited mitigation actions.

A key regulatory metric is the liquidity coverage ratio (LCR), that also defines the risk appetite based on Swedish FSA rules, which have been in place since 2013 and prescribe minimum LCR levels across all currencies and separately in USD and EUR; as well as rules mandated by the European Commission Delegated Act, which have been in effect since October 2015.

Additional metrics are in place for monitoring the liquidity and funding profiles at a more detailed level across Nordea as well as its subsidiaries and branches.

7. Securitisation and credit derivatives

In Q3 2016 Nordea entered a synthetic securitisation as originator referencing a portfolio of corporate and SME loans in Sweden and Denmark.

7.1 Introduction to securitisation and credit derivatives trading

The CRR defines securitisation as a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures and the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme. In a traditional securitisation, the ownership of the assets is transferred to a Special Purpose Entity (SPE), which in turn issues securities backed by these assets. In a synthetic securitisation, ownership of these assets does not change, however the credit risk is transferred to the investor using credit derivatives or financial guarantees.

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

Nordea is also acting as an intermediary in the credit derivatives market, especially Nordic names. In addition to becoming exposed to the credit risk of a single entity, credit derivative trading often involves buying and selling protection for 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. Because hedging 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 7.4.

7.2 Nordea as an originator

In Q3 2016, Nordea entered into a synthetic risk transfer trade referencing EUR 8.4bn of Nordea's loan portfolio. Under the transaction, investors agreed to invest in credit linked notes (CLN), linked to the junior credit risk of the portfolio.

The risk transfer was performed through a collateralised CDS structure, and no assets were derecognised from Nordea's balance sheet. Under the agreement, the buyers of the notes are responsible for a pre-agreed amount of incurred credit losses of the reference portfolio. The size of this credit loss protection is sufficient to cover expected and unexpected losses, relieving Nordea from the associated risks and thus qualifying as achieving Significant Risk Transfer (SRT).

The selected reference portfolio consists of approximately EUR 8.4bn in corporate and SME loans from over 3,000 borrowers across Sweden and Denmark, covering a wide range of industries and asset classes.

7.2.1 Relevant policies, regulation and associated risks

This section describes the risks associated with these types of transactions and the management of said risks. More broadly, Nordea's SRT policy outlines the principles for the effective and robust assessment, monitoring and management of such transactions in Nordea under relevant regulations. Furthermore, a risk mandate is articulated following discussions with the Swedish FSA (SFSA) outlining the Nordea's appetite in terms of associated REA in relation to the Nordea's credit risk REA. In addition, on the 29th of June SFSA published the capital assessment method for securitisations the authority decided to use within the Pillar II process. The framework relates to two parts. Firstly, it relates to flowback risks arising when the credit risk flows back to the banks and consequently become subject to a higher capital need. A sudden increase in the capital requirement could mean that banks would experience difficulties meeting their capital requirements. Secondly, SFSA introduced a cap on the amount of exposures that could be securitised in each exposure class and per country where the bank is systemically important.

As defined in the CRR, the term securitisation refers to a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, having the following characteristics:

- the transaction achieves SRT, in case of origination;
- payments in the transaction or scheme are contingent on the performance of the exposure or pool of exposures; and
- the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or risk transfer scheme.

Securitisation positions are subject to the regulatory accounting treatment defined in the CRR. Such positions held in the regulatory banking book or trading book are currently given weightings ranging from 7% to 1250% depending on their credit quality and subordination rank. In the role as originator, Nordea applies the Supervisory Formula Method when calculating the capital requirements for securitisation positions. Nordea follows the development of the securitisation regulation framework continuously to ensure strict adherence to regulation and, as appropriate, guidance.

7.2.2 Accounting policies related to securitisation transactions

Financial assets are derecognised from the balance sheet when the contractual rights to the cash flows from the financial asset expire or are transferred to another party. The rights

to the cash flows normally expire or are transferred when the counterparty has performed (e.g. repaying a loan to Nordea). Gains and losses are recognised when the assets are derecognised by comparing the carrying amount to the proceeds received.

Synthetic securitisations are generally defined as transactions where an institution buys protection using financial guarantees or credit derivatives where the exposures are not derecognised from the balance sheet. Nordea's general accounting policies for financial guarantees and derivatives applies in such cases.

Provisions are recognised when it is probable that Nordea will be required to provide financial support for securitised assets.

7.2.3 Accounting methods

Synthetic securitisations in the form of credit default swaps, as in the case of Nordea's Q3 2016 transaction, follow accounting recognition rules specific to trading derivatives. The securitisation transactions are derecognised when the contractual rights to the cash flows on the asset expire or when Nordea has transferred the contractual rights to receive the cash flows and substantially all of the risks and rewards linked to the ownership of the asset. Where Nordea has transferred the cash flows of a financial asset but has neither transferred nor retained substantially all the risks and rewards of its ownership and has effectively not retained control of the financial asset, Nordea derecognises it and, where necessary, recognises a separate asset or liability to cover any rights and obligations created or retained as a result of the asset's transfer. If Nordea has retained control of the asset, it continues to recognise it in the balance sheet to the extent of its continuing involvement in that asset.

When a financial asset is derecognised entirely, a gain or loss on disposal is recorded in the income statement for an amount equal to the difference between the carrying value of the asset and the payment received for it, adjusted where necessary for any unrealised profit or loss previously recognised directly in equity.

7.2.4 Monitoring of securitisation risks

Securitisation risks are monitored according to the internal rules established in Nordea, as per assets are recorded in the regulatory banking book (via credit risk and counterparty risk), and to specific governance processes for securitisations.

Structural risks, and foreign exchange risk associated with securitisation activities are monitored in the same way as for other Nordea assets.

The associated liquidity risk linked to securitisation activities is reflected centrally through the measure of the impact of these activities on the Nordea's liquidity ratios, stress tests and liquidity gaps.

Securitisation operational risks follow-ups are considered in Nordea's operational risks framework.

7.3 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.

7.4 Credit derivatives trading

Nordea acts as an intermediary in the credit derivatives market, mainly 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.

It is Nordea's policy that CDO positions are held in the trading book and booked at fair value in accordance with IFRS 13, meaning that they are either marked to market or marked to model depending on the availability of external prices. Model prices are derived based on standard industry methods. Inputs are available market prices and assumptions primarily relates to correlation.

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.

8. ICAAP and internal capital requirement

The Internal Capital Adequacy Assessment Process (ICAAP) aims to ensure that Nordea keeps sufficient available capital to cover all risks, both Pillar I and Pillar II, taken over a foreseeable future, including during periods of stress. The level of capital needs to be adequate from an internal and regulatory perspective, as well as from a market participant perspective.

8.1 ICAAP

The purpose of the ICAAP is to review the management, mitigation and measurement of material risks within the business environment 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, capital forecasts and capital requirement for Nordea and legal entities are regularly monitored by TALM. The current capital position and forecasts are reported to ALCO, Risk Committee, GEM and BoD. Capital requirements and capital adequacy are thoroughly reviewed and documented annually in Nordea's ICAAP report, which is ultimately decided on and signed off by BoD.

8.1.1 Capital planning and capital policy

The capital planning process is intended to ensure that Nordea and Nordea's legal entities have sufficient capital to meet regulatory requirements, support the credit rating, growth and strategic options. The process includes forecasts of capital requirements, available capital as well as the impact of new regulations. Capital planning is based on key components of the Nordea Financial Planning Framework, 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 Nordea and Nordea's legal entities. An active capital planning process ensures that Nordea can make necessary capital arrangements to accommodate strategic and business objectives, regardless of the state of the economy or the introduction of new capital adequacy regulations.

Nordea's capital policy determines target capitalisation levels in Nordea. The current capital position and target capitalisation are described in part 1, section 2.

The capital policy states that Nordea, under normal business conditions, should have capital ratios for CET1, Tier 1 and total capital that exceed the capital requirement as communicated by the Swedish FSA. The policy states that Nordea will maintain a management buffer of 50–150 bps above the CET1 requirement.

Capital transferability and restrictions

Nordea may transfer capital within its legal entities without material restrictions, subject to the general conditions for entities considered solvent with sufficient liquidity under local law and satisfying minimum capital adequacy requirements. 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 Nordea's entities.

8.1.2 Internal capital requirement (ICR) methodology

The internal capital requirement is calculated based on a Pillar I plus Pillar II approach. This methodology uses the Pillar I capital requirements for credit risk, CVA risk, market risk and operational risk as outlined in the CRR as the starting point for the risk assessment.

In Pillar II, risks not included in the CRR are considered, specifically concentration risk, interest rate risk in the banking book, market risk in internal defined benefit pension plans and real estate risk.

The following risk types are included under Pillar II:

- Interest rate risk in the banking book. This risk consists of exposures deriving from the balance sheet (mainly lending to public and deposits from public) and from TALM's investment and liquidity portfolios. Interest rate risk is measured and monitored daily and in accordance with the FSAs requirements. Monitoring is performed by controlling interest rate sensitivities, which measure the immediate effects of interest rate changes on the fair values of assets, liabilities and off-balance sheet items. The Pillar II charge for interest rate risk in the banking book is calculated based on daily VaR figures.
- Pension risk. The risk that Nordea-sponsored defined benefit pension plans become underfunded. The risk is captured via a stress testing model and is reported separately within Pillar II market risk
- Real estate risk. In Pillar II, real estate risk is market risk associated with Nordea's own real estate buildings.
- Concentration risk. This risk represents the credit risk related to the degree of diversification in the credit portfolio, i.e. the risk inherent in doing business with large customers or not being equally exposed across industries and regions. Pillar I credit risk calculations assume a well-diversified international bank. Nordea's exposures are well diversified but not to the same extent as a benchmark fully diversified international bank. The purpose of the concentration risk capital requirement add-on is to capture this difference.
- Risks that are given a temporary capital add on. As part of the ICAAP, Nordea identifies risks not previously captured in Pillar I or Pillar II. When new risks are identified, a temporary capital buffer within Pillar II is included in the internal capital requirement. The temporary capital add-ons

may later be incorporated into Pillar I, permanently into Pillar II or discontinued depending on nature of the 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 both global and local shock scenarios. The results of the stress tests are considered in Nordea's internal capital requirement as buffers for economic stress. By considering the stress test results in the assessment of internal capital requirements, the procyclical effects inherent in the risk-adjusted capital calculations of the EC and IRB approaches are addressed.

The rationales for the chosen Pillar I plus Pillar II approach are:

- The risk-based nature in the approach, where a significant majority of the Pillar I capital requirements is calculated by internal models, capture the inherent risks within Nordea's different asset classes.
- The approach combines models specified in the regulation with Nordea specific parameters and data in internal models assessed and approved by the supervisors. Hence, it allows Nordea to use scrutinised models based on best regulatory practice yet tailored with the specific risk profiles known for the individual Nordea portfolios.

In addition to the assessment of Pillar I risks, Nordea assesses risks not captured by the Pillar I framework.

In parallel to the risk based Pillar I plus Pillar II approach, Nordea use other analysis measures such as Basel I floor, large exposures and leverage ratio to understand and compare the nature of the risks within Nordea.

8.1.3 FSA capital add-ons under Pillar II

In addition to the regulatory minimum capital requirements, the SFSA requires Nordea to hold capital under Pillar II to cover additional risks, not covered in Pillar I.

Included in Pillar II are the risk weight floors for mortgage portfolios in Sweden and Norway. Included is also an additional requirement due to systemic risk on top of the buffers already in place in Pillar 1.

The capital requirement for the Pillar II risks covering concentration risk, interest rate risk in the banking book and risks in defined benefit pension plans is calculated according to standardised models developed by the Swedish FSA. The Swedish FSA has also introduced a maturity floor of 2.5 years under Pillar 2 for banks authorised to use the advanced IRB approach for exposures to corporates.

In addition, as part of the Supervisory Review and Evaluation Process (SREP), Nordea has received other requirements mainly related to inadequate 2nd LoD and its involvement in the governance of the IRB system and modelling. Included is also an add-on for operational risk from inspections relating to IT and key processes.

The Swedish FSA has stated that, under normal circumstances, there will be no formal decision on Pillar II capital requirements. The Pillar II requirement will thus not affect the level where the automatic restrictions on distribution will come into effect, the Minimum Distributable Amount (MDA) level.

8.2 Stress testing

Stress testing is important due to the vital role that capital plays for Nordea's profitability and resilience to stress. Thus, an adequate governance structure is required for the stress testing process. Key responsibilities include GEM, BRIC and the legal entity BoDs engagement in the ICAAP stress testing. In addition, ALCO/Risk Committee review in detail the stress test performed and potential implications for future capital.

Capital adequacy stress testing is carried out at least annually during the first quarter, using end-of-year data. Ad hoc stress testing can be carried out throughout the year when necessary. To determine the adequacy of capital for Nordea throughout the scenarios, key financial targets, which are stated in Nordea's capital policy, are also considered.

The key metric for determining the stress test impact is the CET1 ratio and how it develops during the scenarios. The stress test capital impact is defined as the percentage drop in the CET1 ratio in the most stressed year. In addition, the stress test capital add-on, defined as the CET1 capital needed to compensate for the increase in REA and for the reduction in capital due to negative net profit in the stress scenarios, is included as a capital buffer in the bank's internal capital requirement. The impact is then analysed in relation to capital policy, regulatory buffers and internal capital requirements.

8.2.1 Stress tests performed

During 2017, Nordea performed internal stress tests to evaluate the general impact of an economic downturn scenario as well as specific impact for different segments and high-risk areas. Nordea has also been subject to stress tests and capital review exercises performed by financial supervisors and central banks. The results of these stress tests did not change the assessment of Nordea's strong position and capacity to withstand financial stress.

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

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 part 2, sections 3 and 6 for further details).

Nordea continuously refines its stress testing methodologies and practises to ensure a forward-looking element.

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

- Scenario development and translation,
- calculation, and
- analysis and reporting.

The capital adequacy stress test covers all credit exposures to corporates, retail, institutions and sovereigns. Credit exposures data is sourced on transaction level from the same database as used for the regular reporting of REA and capital adequacy. The calculation of stressed loan losses and stressed REA is carried out bottom-up based on granular portfolio data from this data source.

8.2.2 Scenario development and translation

The annual ICAAP stress test is based on three-year global macroeconomic scenarios, broken down by the Nordic and Baltic countries, Russia and other major economies. The scenarios are designed to replicate shocks that are particularly relevant in the current macroeconomic environment and for stressing the main risks in Nordea. Stress scenarios are designed by economists in the Nordea Markets Fixed Income, Currencies and Commodities (FICC) Research division in each Nordic country. Nordea also uses its Group Financial Forecast (GFF) for complementary assumptions of the baseline scenario.

While the annual stress test is based on comprehensive macroeconomic scenarios that involve 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 their impact in support for capital planning.

After a scenario is developed and quantified, impacts are translated to relevant parameters and level of detail, and simulated. Advanced models in combination with expert judgment from BAs are used to determine the effect of the scenario.

As an example, in the annual stress test, the scenario is translated into impacts on the parameters listed in Table 8.1.

8.2.3 Calculation

The stressed figures and parameters from the scenario are used to calculate the effects on the regulatory capital requirements and the financial statements. Regulatory capital requirement is calculated based on the credit risk, market risk and operational risk according to the CRR 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 scenarios, are used in the calculation of loan losses. The loan loss calculation also covers idiosyncratic losses related to the exposure to single customers and industries. The loan loss model covers both specific and collective provisions. The stressed impact on other main items on the income statement, like net interest income and net fee and commission income, are also calculated. The resulting impact on net profit after dividend is used to calculate the impact on the own funds components. Own funds are set in relation to the stressed REA to calculate the impact on capital ratios during a stress scenario. Figure 8.1 shows the calculation process used in the stress test framework.

8.2.4 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, BRIC and BoD. A similar governance process is used for subgroups and legal entities.

The results of the stress tests support senior manage-

Table 8.1 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 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 increases 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 exposure amount (REA)	Credit risk REA is calculated on customer/exposure level based on stressed PDs and LGDs. REA is also dependent on changes in volumes (EAD) which are a function of lending growth and inflow to default.

ment's understanding of the implications of the current capital strategy given potential market shocks. Based on this information senior management are able to ensure that Nordea holds enough capital against the impact of potential economic downturns and other stress events. Business Area involvement in defining and assessing the stress tests is seen as important to increase risk awareness throughout the organisation and the understanding of the relation between capital requirements and exposure to material risks.

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

8.3 Economic capital (EC)

EC is a method for allocating the cost of holding capital as a result of risk taking and is a central component in the Value Creation Framework (VCF). The VCF supports the operational decision-making process in Nordea to enhance performance management and ensure shareholder value creation.

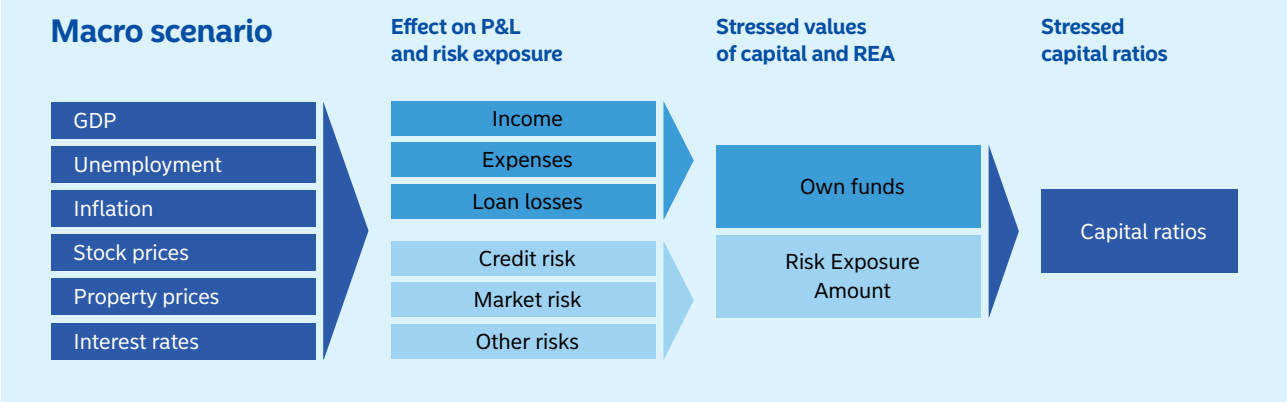
Nordea's EC model is based on the capital requirement as assessed and published by the SFSA. In addition, the EC framework also include the following items:

- Legal equity contribution of the insurance business (EC is thus calculated for the legal group whereas the regulatory minimum capital requirement covers only Nordea Bank AB based on its consolidated situation)
- Certain capital deductions where allocation keys have been agreed upon

For distribution of EC across risk types and BAs see table 1.1.

Going forward, changes to EC will mainly be driven by changes to the risk types featured in the capital requirements and continuous efforts to reduce the gap between legal equity and EC, i.e. the inclusion of further capital deductions.

Figure 8.1 Calculation process



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 NLP are market risks and life and health insurance risks.

9.1 Risk management system and governance

9.1.1 Risk management at NLP

NLP's risk management function is responsible for maintaining a consistent and coherent risk management system and control framework across NLP comprising strategies, processes and reporting procedures necessary to consistently identify, measure, monitor, manage and report on risk and its capital implications at individual and aggregate level in accordance with Nordea group directives. This is implemented through the following governing documents:

- NLP risk management strategy
- NLP risk appetite framework
- NLP risk management policy
- NLP capital policy

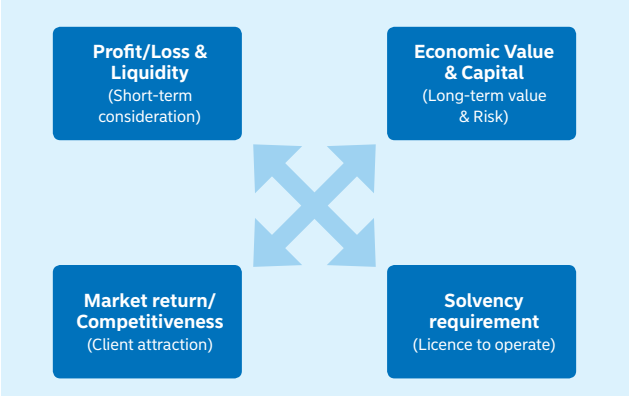
These governing documents are operationally embedded through the key risk and capital processes, regular reports to key stakeholders and additional instructions and documentations.

The NLP Group CRO is responsible for the risk management at Nordea Group level. Local CRO's are responsible for risk management as well as capital management relating to modelling, assessments and monitoring at a local entity level.

9.1.2 Framework for strategic risk & capital decisions

The Asset Liability Management (ALM) square is central to the implementation of NLP's risk management strategy in the day-to-day business. The ALM square sets out various considerations that should be balanced when making business decisions in NLP on short-term as well as long-term perspective including competitiveness, legal requirements, profitability and capital requirements which includes economic value and regulatory/solvency requirements.

Figure 9.1 The ALM square



9.2 Key risks in the life and pensions operation

Market risks and life & health insurance risks are the main risks that NLP faces.

The risks are mainly measured by solvency capital requirements, exposure measurement on investment assets, VaR analysis as well as stress and sensitivity analysis. The risks are monitored against the risk appetite and existing limits.

9.2.1 Market risk

Market risks arise at NLP mainly from the sensitivity of the value of assets and liabilities to changes in the level or volatility of market prices or rates.

Market risks in NLP also emerge from both participating savings products and unit-linked savings products, where the first is the largest contributor to the solvency capital requirement. In addition, NLP is exposed to market risk through the investment of the shareholder's equity.

Among market risks, equity, credit spread, interest rate and property risks are considered the most important for NLP.

NLP regularly monitors market risks by performing stress tests where standalone equity and interest rate shocks as well as combinations thereof are applied. NLP also performs a number of more specific macro-economic scenario analyses to reflect the current market environment.

The results of stress tests and scenario analyses are monitored against limits and targets set in the internal rules framework. For the participating saving portfolios, the market risk is also controlled through detailed local limits on exposure to asset classes according to the investment strategy.

Interest rate and equity risk is mitigated by applying different hedging and asset allocation strategies.

9.2.2 Life & health insurance risk

Life & health insurance risk is the risk of unexpected losses due to changes in the level, trend or volatility of mortality rates, longevity rates, disability rates and surrender/lapse rates. Among life & health insurance risk, lapse risk and longevity risk are considered the most important for NLP.

Lapse risk is linked to policyholder behavior and is mitigated through ensuring that products meet the customers' needs. Lapses are stress tested, monitored and reported monthly. The monitoring helps NLP to identify emerging trends.

Longevity risk is primarily controlled through setting appropriate tariffs and adjusting life parameters for trends and life expectancy. Annually the mortality rates and life expectancies are updated and benchmarked.

9.3 Capital management and solvency position

9.3.1 Solvency position

NLP is regulated under Solvency II and the solvency position is calculated by applying the Solvency II standard formula as defined in the regulation. The calculation of the solvency position considers a volatility adjustment applied in the Danish, Finnish and Norwegian subsidiary, transitional measures for technical provisions applied in the Norwegian subsidiary and transitional measures for equity risk applied in all Nordic subsidiaries. In addition, the calculation takes into account that the occupational pension business within the Swedish subsidiary is subject to the Solvency I capital requirement.

NLP's RAF and capital policy sets a solvency ratio limit, solvency ratio target and a solvency ratio target range that NLP aims to operate within. The solvency position is reported to key stakeholders regularly.

9.3.2 Economic capital

NLP is included in the Nordea EC framework, described in section 8.3.

9.3.3 Financial buffers

For policyholders with products with embedded guarantees, financial buffers express the potential for receiving a bonus on top of the guarantees. For shareholders, 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 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.

10. List of abbreviations

ABCP	Asset-Backed Commercial Paper
ADF	Actual Default Frequency
AIRB	Advanced Internal Ratings Based approach
ALCO	Asset and Liability Committee
ALM	Asset and Liability Management
AR	Annual Report
ASF	Available Stable Funding
AT1	Additional Tier 1
AUM	Assets under management
AVA	Additional valuation adjustment
BA	Business Areas
BAC	Board Audit Committee
BCBS	Basel Committee on Banking Supervision
BI	Business Indicator
BOCC	Board Operations and Compliance Committee
BoD	Board of Directors
BRC	Board Remuneration Committee
BRRD	Bank Recovery and Resolution Directive
BRIC	Board Risk Committee
CCF	Credit Conversion Factor
CCO	Chief Credit Officer
CCoB	Capital Conservation Buffer
CCP	Central Counterparties
CCR	Counterparty Credit Risk
CCY	Currency
CCyB	Countercyclical Capital Buffer
CDO	Collateralised debt obligation
CEM	Current Exposure Method
CET1	Common Equity Tier 1
CEO	Chief Executive Officer
COO	Chief Operating Officer
CIRA	Compliance Independent Risk Assessment
CIU	Collective Investment Undertakings
CLN	Credit-Linked Notes
CLS	Continuous Linked Settlement
CO	Compliance Officer
COO	Chief Operating Officer
CRD	Capital Requirements Directive
CRM	Comprehensive Risk Measure
CRMA	Change Risk Management and Approval process
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CRU	Customer Responsible Unit
CVA	Credit Value Adjustment
EAD	Exposure At Default
EBA	European Banking Authority
EC	Economic Capital
ECAI	External Credit Assessment Institutions
EL	Expected loss
EP	Economic Profit
ESA	European Financial Supervisory Authority
ESG	Environment Social Governance
EU	European Union
EV	Economic Value
FICC	Fixed Income, Currencies and Commodities
FIRB	Foundation Internal Ratings Based approach
FRTB	Fundamental Review of the Trading Book
FSA	Financial Supervisory Authority
FSB	Financial Stability Board
FX	Foreign exchange
G-SIB	Global Systemically Important Bank
G-SII	Global Systemically Important Institution
GC	Group Compliance
GCO	Group Compliance Officer
GCRC	Group Credit Risk and Control
GCRM	Group Credit Risk Management
GCRR	Group Credit Risk Report
GDP	Gross Domestic Product
GEM	Group Executive Management
GIA	Group Internal Audit
GICS	Global Industries Classification Standard
GMCCR	Group Market and Counterparty Credit Risk
GOR	Group Operational Risk
GF	Group Functions
GFF	Group Financial Forecast
GRMC	Group Risk Management & Control
GWWR	General Wrong-Way Risk
ICAAP	Internal Capital Adequacy Assessment Process
ICR	Internal capital requirement
IFRS	International Financial Reporting Standard
ILAAP	Internal Liquidity Adequacy Assessment Process
IMM	Internal Model Method
IRB	Internal Ratings Based approach
IRM	Incremental Risk Measure
KRI	Key Risk Indicator
LCR	Liquidity Coverage Ratio
LGD	Loss given default
LoD	Line of Defense
LTC	Loan-to-collateral
LTV	Loan-to-value

MDA	Minimum Distributable Amount
NBSF	Net balance of stable funding
NII	Net Interest Income
NLP	Nordea Life & Pensions
NSFR	Net Stable Funding Ratio
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
P2G	Pillar 2 II Guidance
P2R	Pillar 2 II Requirement
QRA	Quality and Risk Analysis
QCCP	Qualitied Central Counterparty
RAF	Risk Appetite Framework
ROCAR	Risk on Capital at Risk
RAS	Risk Appetite Framework
RCSA	Risk and Control Self-Assessment
REA	Risk Exposure Amount
RiMO	Risk Models
RIRB	Retail Internal Ratings Based approach
RSF	Required Stable Funding
S&P	Standard & Poor's
SA	Standardised approach
SCRA	Specific Credit Risk Adjustment
SFSA	Swedish FSA
SFT	Securities Financing Transactions
SII	Systemically Important Institutions
SIIR	Structural Interest Income Risk
SNDO	Swedish National Debt Office
SMA	Standardised Measurement approach
SME	Small and Medium-sized Enterprises
SPE	Special Purpose Entity
SRB	Systemic Risk Buffer
SREP	Supervisory Review and Evaluation Process
SWWR	Specific Wrong-Way risk
sVaR	Stressed Value-at-Risk
T2	Tier 2
TALM	Group Treasury & ALM
TMTP	Transitional Method for Technical Provisions
TLAC	Total Loss Absorbing Capacity
TPRM	Third Party Risk Management
TTC	Through-the-cycle
VA	Volatility Adjustment
VaR	Value-at-Risk
VCF	Value Creation Framework

11. Risk terminology and measures

Advanced IRB (AIRB) approach
Nordea uses the AIRB approach to estimate and validate Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factor (CCF) parameters for exposures to corporate customers in the Nordic countries and in the International units. This includes exposures towards rated SMEs and specialised lending.

Compliance risk
The risk of failure to comply with statutes, laws, regulations, business principles, rules of conduct, good business practices and related internal rules governing Nordea's activities subject to authorisation in any jurisdiction where Nordea operates, which could result in material financial or reputational loss to the Group, regulatory remarks or sanctions.

Comprehensive Risk Measure (CRM)
The CRM captures the total risk related to positions in credit correlation products, covering structured credit trading operations. 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.

Concentration risk
Concentration risk represents the credit risk related to the degree of diversification in the credit portfolio, i.e. the risk inherent in doing business with large customers or not being equally exposed across industries and regions.

Correlation risk
The risk arising from a disparity between the estimated and actual correlation between two assets, currencies, derivatives, instruments or markets.

Counterparty credit risk
The risk that the counterparty in a contract will default.

Credit risk
The risk for potential loss due to failure of a borrower(s) to meet their obligations to clear a debt in accordance with agreed terms and conditions. Credit risk also includes counterparty credit risk, transfer risk and settlement risk.

Current Exposure Method (CEM)
CEM is used for calculating the regulatory exposure, which is essentially the sum of current net exposure 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 contracts' underlying asset and time to maturity.

Default risk
The risk that a counterparty is unable to make the required payments on their debt obligations.

Expected exposure
Expected exposure is calculated for Internal Model Method (IMM) approved contracts by simulating a large set of future scenarios for the underlying price factors and then revaluating the contracts 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.

Foreign exchange (FX) risk
The risk that a long or short position in a foreign currency might have to be closed out at a loss due to an adverse movement in exchange rates.

General Wrong Way Risk (GWWR)
The risk that the credit quality of the counterparty may, for non-specific reasons, be held to be correlated with a macroeconomic factor which also affects the value of derivatives transactions.

Incremental Risk Measure (IRM)
IRM measures the risk of losses due to credit migration or defaults of issuers of tradable debt in bond and credit derivative positions held in the trading book. This measure captures credit risk for two separate types of issuers, namely corporates, including Nordea's own debt exposure, and sovereigns.

Insurance risk
The risk that an insured event will occur, requiring the insurer to pay a claim.

Interest rate risk
The risk that an investment's value will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve, or in any other interest rate relationship.

Internal Model Method (IMM)
A set of credit risk measurement techniques used to calculate required regulatory capital. Nordea has approval from the Financial Supervisory Authorities (FSAs) in Sweden and Finland to use the Internal Model Method (IMM) to calculate the regulatory counterparty credit risk exposures in accordance with the credit risk framework in the Capital Requirements Regulation (CRR). The method is used for standard FX and interest rate products which constitute the predominant share of the exposure.

Internal Ratings Based approach (IRB)
A set of credit risk measurement techniques used to calculate required regulatory capital.

Key Risk Indicators
A set of indicators capturing main risks in Nordea

Legal risk
The risk arising from the uncertainty of legal proceedings, such as bankruptcy, and potential legal proceedings.

Liquidity risk
Liquidity risk is the risk that Nordea is unable to service its cash flow obligations when they fall due; or unable to meet its cash flow obligations without incurring significant additional funding costs.

Management Value at Risk (Management VaR)
Nordea utilises an internal VaR measurement, the Management VaR. It includes risk factors which are scheduled for use in the Regulatory VaR upon Financial Supervisory Authority (FSA) approval. In all other ways, the model is identical to VaR.

Market risk
Market risk is defined as the risk of losses related to Nordea's financial exposures resulting from changes in market rates and related assumptions that affect market value (i.e. changes to interest rates, credit spreads, FX rates, equity prices, commodity prices and option volatilities).

Model risk
The risk of loss resulting from using models that are insufficient to accurately support decisions.

Operational risk
Operational risk is defined in Nordea as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk. The risk of loss includes direct or indirect financial loss, and impacts from regulatory sanctions, legal exposure, reputational damage and critical business process disruption.

Pension risk
The risk that Nordea-sponsored defined benefit pension plans become underfunded.

Point-in-Time (PIT) methodology
Used for model calibration. A PIT rating system uses all currently available obligor-specific and aggregate information to assign obligors to risk grades. In a PIT rating system, an obligor's rating is expected to change as its economic prospects change.

Probability of Default (PD)
The likelihood that a loan will not be repaid and will fall into default.

Rating model
A rating model employs a set of specified and distinct rating criteria to produce a rating. These are called input factors and are, together with the criteria for assigning a customer to a specific rating model, the fundamental building blocks of a rating model. Typical input factors are financial factors, customer factors and qualitative factors.

Real estate risk
The risk of financial loss occurring as the result of owing a real estate investment.

Recovery rate risk
The risk that following a default, contracts of the defaulting entity cannot be honoured in full, thereby leading to financial loss to Nordea.

Reputational risk
The risk of damage to trust in Nordea from our customers, employees, authorities, investors, partners and general public with the potential for adverse economic impact.

Retail IRB (RIRB) approach
A set of credit risk measurement techniques used to calculate required regulatory capital. Nordea uses the Retail IRB (RIRB) approach to estimate and validate PD, LGD and CCF parameters for exposures to retail customers for Nordea's Nordic customers and in Nordea's mortgage companies, as well as in Nordea Finance Finland

Risk appetite
The risk appetite within Nordea is defined as the aggregate level and types of risk Nordea is willing to assume within its risk capacity, and in line with its business model, to achieve its strategic objectives.

Risk capacity
Nordea's risk capacity is defined as the maximum level of risk Nordea is deemed able to assume given its capital, its risk management and control capabilities, and its regulatory constraints. Risk capacity is set in line with Nordea's capital position, including an appropriate shock absorbing capacity.

Risk Exposure Amount (REA)
Nordea's assets or off-balance sheet exposures, weighted according to risk. REA is used to determine the minimum amount of required regulatory capital.

Risk grade
Risk grade is calculated based on the customer's behaviour on all accounts/products including potential joint commitments. The corresponding Risk Grade is assigned across all of the customer's facilities in Nordea.

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

Specific Wrong Way Risk (SWWR)
The risk arising due to the future exposure to a specific counterparty being positively correlated with the counterparty's PD due to the nature of the contracts with the counterparty.

Stressed Value at Risk (Stressed VaR)
Stressed VaR is calculated using a similar methodology as used for the calculation of the ordinary Value at Risk (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. In addition, stressed VaR is calculated as the average of the worst returns of the empirical distribution of market value changes.

Structural Foreign Exchange (FX) risk
Structural FX risk arises from the mismatch in currency composition between assets and capital. The mismatch creates volatility in capital ratios from the revaluation of foreign currency assets and capital to EUR.

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 50 basis points.

SIIR reflects mismatches in balance sheet and off-balance sheet items due to differences in the interest rate repricing periods, volumes or reference rates of assets, liabilities and derivatives.

Survival horizon
The Survival Horizon is a short-term measure describing the excess of liquid assets compared to net funding requirement on a 30-day horizon.

Tail risk
Risks with low probability that have the potential to result in severe impact.

Third Party Risk
The risk of adverse impact from a dependent resource to a primary supplier or service provider.

Through-The-Cycle (TTC)
For a TTC rating system, 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.

Transfer risk
The risk that a local currency cannot be converted into the currency that a debt is denominated in.

Value at Risk (VaR)
VaR is used to quantify market risk and describes the probability of losing more than a given amount of assets, based on a current portfolio.