

# Risk and capital management 2016



Pillar 3 – disclosure of financial information

[www.snn.no](http://www.snn.no)

**SpareBank** 1  
NORD-NORGE

# CONTENTS

<b>1 INTRODUCTION</b>	<b>3</b>	5.5 Standard method	39
<b>2 THE SPAREBANK 1 NORD-NORGE GROUP</b>	<b>4</b>	5.6 Capital requirement for credit risk	39
<b>3 CAPITAL ADEQUACY</b>	<b>7</b>	5.7 Counterparty risk for derivatives	40
3.1 Regulatory capital	8	<b>6 MARKET RISK</b>	<b>42</b>
3.2 Tier 1 leverage ratio	10	6.1 Management and control of market risk	42
3.3 Buffer requirements	10	6.2 Exposure	42
<b>4 MANAGEMENT AND CONTROL OF RISK</b>	<b>11</b>	<b>7 OPERATIONAL RISK</b>	<b>43</b>
4.1 The Group's control and management model	11	7.1 Management and control of operational risk	43
4.2 Framework and process for risk and capital management	12	7.2 Capital requirement for operational risk	44
4.3 Responsibilities in the Group	13	<b>8 LIQUIDITY RISK</b>	<b>45</b>
4.4 Risk policy and culture	14	8.1 Management and control of liquidity risk	45
4.5 Measurement of risk	16	8.2 Exposure	45
4.6 Reporting of risk	17	<b>9 OTHER RISK TYPES</b>	<b>47</b>
<b>5 CREDIT RISK</b>	<b>25</b>	9.1 Ownership risk	47
5.1 Management and control of credit risk	25	9.2 Business risk	47
5.2 Credit exposures	28	9.3 Reputation risk	47
5.3 Default and write-downs	31	9.4 Strategic risk	48
5.4 The IRB method	32	<b>ABBREVIATIONS AND DEFINITIONS</b>	<b>49</b>

# 1 INTRODUCTION

This report describes risk and capital management in SpareBank 1 Nord-Norge in relation to the requirements on disclosure of financial information laid down in Part IX of the Norwegian Capital Requirements Regulations. The report describes the key risk areas and explains how the risks are measured, monitored and managed in the Group.

Financial groups are subject to a comprehensive set of rules which define the framework within which Norwegian banks can operate. One of the key terms within risk and capital management is capital adequacy, along with the capital adequacy regulations. Capital adequacy is a measure of financial strength, and the capital adequacy regulations govern different aspects of risk and capital management in the financial sector.

The current capital adequacy rules, Basel III, are made up of three 'pillars'. Pillar 1 defines how the capital requirement is calculated, and the criteria for meeting the requirements. Pillar 2 describes the Group's responsibility for assessing other types of risk than those for which capital requirements are calculated under Pillar 1, and the capital need for Pillar 1 over and above the minimum requirements. Pillar 3 covers the requirements for disclosing financial information pursuant to Part IX of the Capital Requirements Regulations.

In 2015 the Basel Committee published a revised framework for Pillar 3 with the aim of increasing the standardisation of Pillar 3 reports. In December 2016 the European Banking Authority (EBA) published supplementary provisions and guidelines implementing the revised framework. Among other things, the guidelines contain standardised qualitative and quantitative forms, with different frequencies of disclosure. High-level qualitative information on risk and capital management has to be published annually. Details of capital requirements, risk exposures and other quantitative information on internal models have to be published more often.

The new guidelines enter into force from 31 December 2017 onwards. SpareBank 1 Nord-Norge has based this report on the guidelines mentioned above, and has used the qualitative forms that are to be published each year. Where it makes sense to do so, the document has been split by topic, as defined in the different forms.

## 2 THE SPAREBANK 1 NORD-NORGE GROUP

### THE REGION'S LOCAL BANK

SpareBank 1 Nord-Norge is a leading provider of financial services within the retail and corporate banking markets in Northern Norway.

The Bank's corporate vision is For Northern Norway!

This means that SpareBank 1 Nord-Norge wants to be known as:

- The region's local bank
- A Group that creates value in, and invests it back into, Northern Norway
- Close and competent - with decisions taken on a local level
- Financially sound, generous and people-oriented - Rich in tradition, yet modern
- A driving force behind the development of Northern Norway – we care about you.

### BUSINESS CONCEPT

SpareBank 1 Nord-Norge provides comprehensive, modern financial solutions to customers based in the northern Norwegian market.

SpareBank 1 Nord-Norge wants to be a bank that renews itself for the benefit of the people and businesses in Northern Norway: a bank that will be aggressive and thought of as a clear alternative to national and international competitors.

SpareBank 1 Nord-Norge is an attractive workplace with a corporate culture characterised by dynamic training, a will to win, and a willingness to work together towards a common goal. The Bank's operations are based on strict requirements concerning integrity and business ethics laid down in the SNN Code.

SpareBank 1 Nord-Norge is an independent financial services group within the SpareBank 1 Alliance. SpareBank 1 Nord-Norge has two shareholder groups: 46.4% is owned via the Oslo Stock Exchange, while 53.6% is owned by the community in Northern Norway.

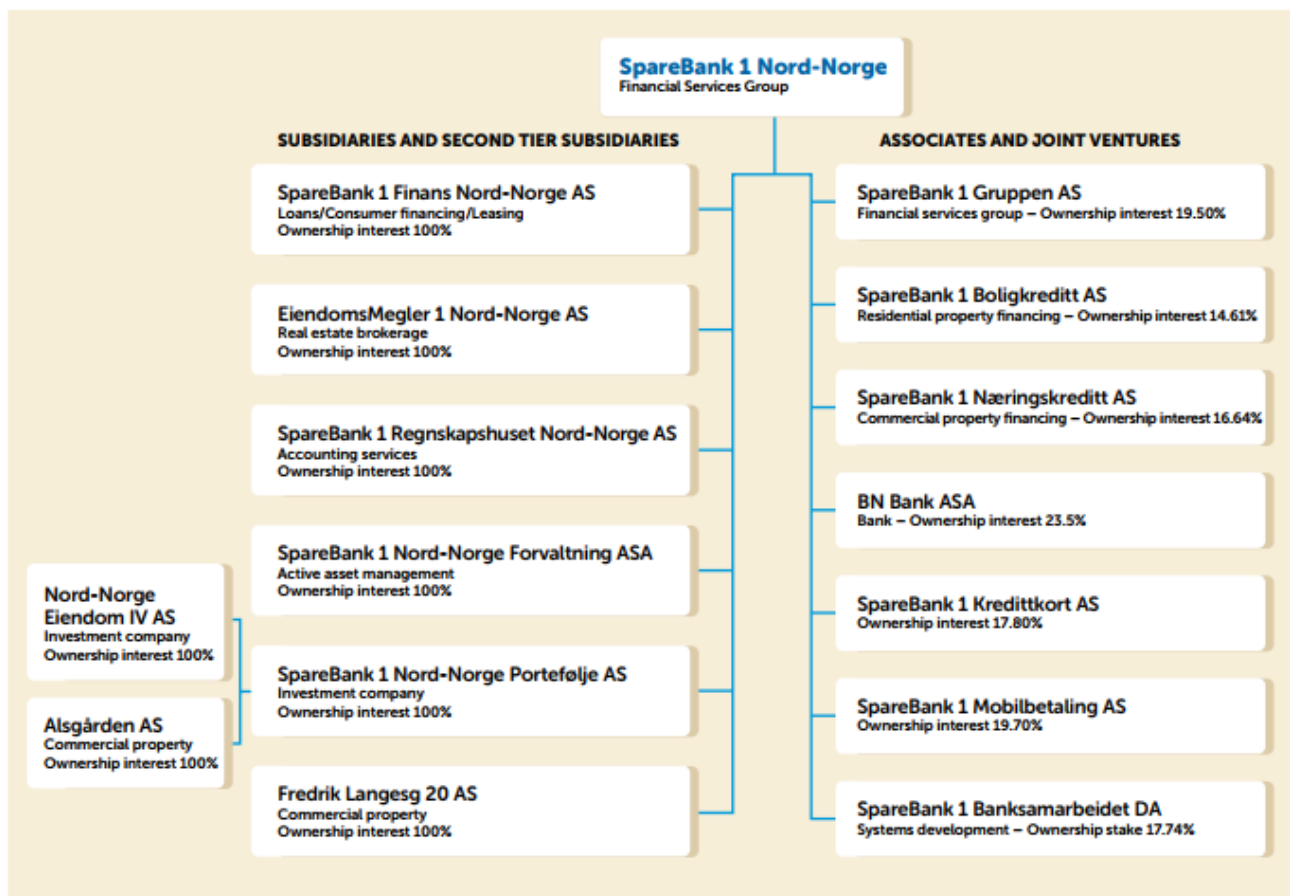
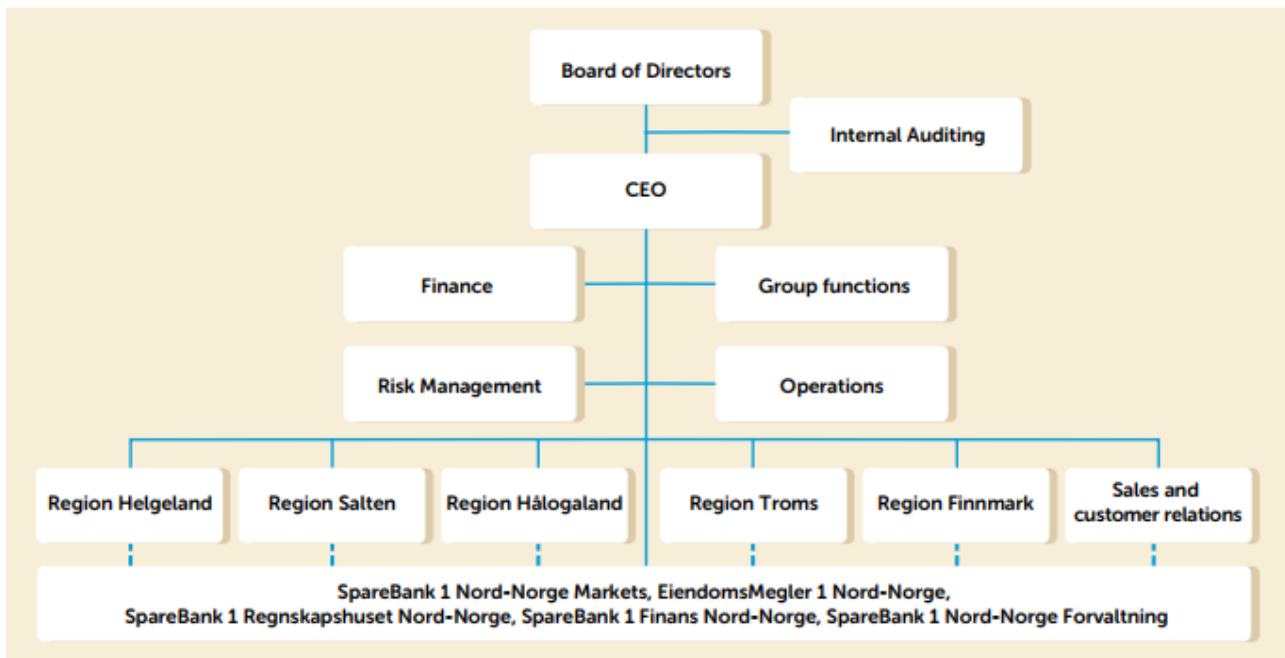
This ownership model underpins the company's North-Norwegian profile and strong position in the region, including through the allocation of dividends to the North Norwegian community.

### STRATEGIC GOALS

SpareBank 1 Nord-Norge's strategic goals:

- Number one in Northern Norway!
- The most satisfied customers
- The most attractive place to work with the most capable and committed employees
- Indisputably strong, with top international class banking operations
- Quality in everything we do

The Group's strategic goals and strong social commitment, along with its ethical guidelines, are crucial to and govern its risk management, policies and culture.



## THE SPAREBANK 1 ALLIANCE

The Sparebank 1 Alliance is a banking and product partnership, in which the SpareBank 1 banks in Norway cooperate through the jointly-owned companies SpareBank 1 Gruppen and SpareBank 1 Banksamarbeidet DA. SpareBank 1 Nord-Norge is an independent financial services group within the SpareBank 1 Alliance. The purpose of the SpareBank 1 Alliance is to procure and provide competitive financial products and services, and to achieve economies of scale in the form of lower costs and/or higher quality. This allows the Alliance to offer retail and corporate customers expertise, local roots and easier day-to-day banking. The Alliance should also help to ensure the creation of value by the banks for the benefit of their region and the banks' owners.

For the ownership and corporate structure of the Sparebank 1 Alliance, refer to the section of the Annual Report on 'The SpareBank 1 Alliance and SpareBank 1 Gruppen'.

## HIGHLIGHTS AND IMPORTANT EVENTS IN 2016

The Northern Norwegian economy remains in good shape, and the Group's earnings for 2016 are very good. The Group has implemented several strategic measures in the last few years, including significantly building up equity and financial strength, cultivating the core business and improving the Group's profitability.

### NORTH WEST 1 ALLIANCE BANK SOLD

In January, SpareBank 1 Nord-Norge sold all of its shares in North West 1 Alliance Bank in Russia. The Group entered the Russian banking market in 2008. The intention was to support companies from Northern Norway with operations in our neighbouring country. Under new management, and as a part of a new strategy, SpareBank 1 Nord-Norge decided in 2013 to scale down these activities. Following the sale of North-West 1 Alliance Bank, SpareBank 1 Nord-Norge has ceased its banking operations in Russia.

### CLOSING THE SMALLEST BRANCHES

In March, SpareBank 1 Nord-Norge announced that 21 of the smallest branches would close. Most of them had been staffed with one full-time equivalent or less, and had limited opening hours in recent years. No staff lost their jobs as a result of the closures.

### NEW REGULATORY REQUIREMENTS

A number of new rules were proposed and/or introduced in the financial markets area in 2016, and a considerable amount of regulatory work is still being done in this area, both nationally and internationally. For a more detailed description, refer to the section of the Annual Report on 'Risk management, internal control and capital management'.

### 3 CAPITAL ADEQUACY

The Norwegian capital adequacy regulations are aligned with the EU's CRD IV/CRR (Capital Requirements Directive/Capital Requirements Regulation), and require financial institutions and securities firms to have a buffer of regulatory (Tier 1 and 2) capital to cover unexpected losses. The purpose of the capital adequacy regulations is to help to underpin financial stability by maintaining the financial strength of the institutions. This is achieved through:

- A risk-sensitive capital requirement
- Better risk management and control
- Closer supervision
- More information to the market

The capital requirement is a requirement for capital adequacy and is expressed as the fraction below.

$$\frac{\text{TIER 1 CAPITAL + TIER 2 CAPITAL}}{\text{RISK WEIGHTED ASSETS}} \\ (\text{credit risk} + \text{market risk} + \text{operational risk})$$

The denominator in this fraction, the basis for calculation, is a risk-weighted total of the assets in the balance-sheet and off-balance-sheet items. The risk weighting should reflect the calculated risk associated with every exposure.

The capital adequacy regulations are made up of three pillars which support each other and are intended to improve risk management in the institutions and provide for a better match between risk and capital.

#### PILLAR 1 – MINIMUM REQUIREMENTS FOR REGULATORY CAPITAL

Pillar 1 defines the minimum requirement for regulatory capital and requirements for technical calculation of the capital requirement. The rules describe what is regulatory capital and the composition of this, along with deduction rules. It also lays down requirements for the scope and quality of Tier 1 capital, with a requirement that common equity Tier 1 capital should make up at least 4.5% and core Tier 1 capital at

least 6% if the basis for calculation. Core Tier 1 capital may include up to 1.5% hybrid capital. The minimum requirement for capital adequacy is 8% of the basis for calculation, of which up to 2% may be supplementary (Tier 2) capital.

#### PILLAR 2 – EVALUATION OF OVERALL CAPITAL REQUIREMENTS AND SUPERVISORY REVIEW

Pillar 2 lays down various requirements for prudent corporate governance and the supervisory authority's assessment of a given institution's overall risk and capital needs. The Pillar 2 requirements are meant to pick up capital needs associated with risk factors that only partly covered, if at all, by Pillar 1.

Under Pillar 2, financial institutions must have a process for evaluating their overall risk and associated capital needs, and a strategy for maintaining an adequate level of capital (ICAAP). The risk assessment process includes an assessment of the risk profile and capital needs in parent companies, important subsidiaries and stakes in associated companies. The review is conducted annually and the risk is quantified by calculating the risk-adjusted capital. The banks use both quantitative models and qualitative assessments to determine their capital requirement. Stress tests and sensitivity analyses of key indicators also provide important pointers to final assessments.

The financial institutions' internal assessment of their capital needs and strategies forms the basis for the Financial Supervisory Authority of Norway's review, and should ensure compliance with the capital requirements imposed by the authorities. Norwegian banks have therefore worked actively together over time to ensure transparent processes in this area. As part of this increased transparency, the Financial Supervisory Authority of Norway published the Pillar 2 specifications for the individual bank in the autumn of 2016. For SpareBank 1 Nord-Norge, it was decided that the Pillar 2 requirement should be 1.5% of risk-weighted assets.



## PILLAR 3 – DISCLOSURE OF INFORMATION

Pillar 3 lays down requirements for the disclosure of financial information, and is intended to contribute to increased market discipline. Disclosure should enable market operators to assess companies' risk profile, capitalisation and management and control of risk. Widespread use of undertakings' own systems to calculate their capital requirements and to manage and control risk makes it harder to compare the banks' risk profiles. Forthcoming requirements for standardised Pillar 3 reporting are intended to improve comparability and coherence in the data being disclosed.

### 3.1 REGULATORY CAPITAL

The capital adequacy regulations define different ways of calculating the minimum requirement for regulatory capital, as outlined in the figure below.

As the figure above shows, the basis for calculating credit risk can be determined in two ways, the standard method or internal rating-based (IRB) methods. The Bank uses the advanced IRB method to calculate the capital requirement for credit risk. The use of internal rating methods means that the statutory minimum requirement for capital adequacy is based on the Group's internal risk assessments. The capital requirement will broadly correspond to the perceived risk in the underlying portfolios, so it is more risk-sensitive than when the standard method is used. Institutions that use internal rating methods are subject to a transitional regime. The transitional regime requires the basis for calculation to be no lower than 80 per cent of the basis for calculation under the previous capital adequacy framework, the Basel I rules. Financial institutions are also subject to specific Norwegian rules for regulatory capital needs calculations for mortgage

loans. Refer to section 5.4 on credit models for a more detailed description of these regulations.

Credit risk also includes capital requirements for counterparty exposures from derivatives. The Norwegian Capital Requirements Regulations define four different methods of calculating the capital requirement: the market value method, the original commitment method, the standardised method and the IMM method. The Bank uses the market value method to calculate the capital requirement for counterparty risk.

The capital requirement for market risk can be calculated by the standard method or using internal VaR (value at risk) models. The Bank uses the standard method to calculate capital requirements for market risk

For operational risk, the capital requirement can be calculated by the basic method, the standardised method or the AMA (advanced measurement approach). The Bank uses the standardised method, which requires control and management systems for operational risk which are an integral part of the Bank's risk management.

SpareBank 1 Nord-Norge's goal is to maintain unquestionable financial strength and satisfy the statutory minimum equity requirements for capital adequacy. The Group's goal for the core Tier 1 capital ratio is currently 14.5 per cent. The Group had a core Tier 1 capital ratio of 15.0 per cent as of 31 December 2016.

Credit risk	Market risk	Operational risk
Standard approach	Standard approach	Basic indicator approach
Foundation-IRB*	Internal model approach*	Standardised approaches*
Advanced IRB*		AMA*

\* Needs to be approved by the Financial Supervisory Authority



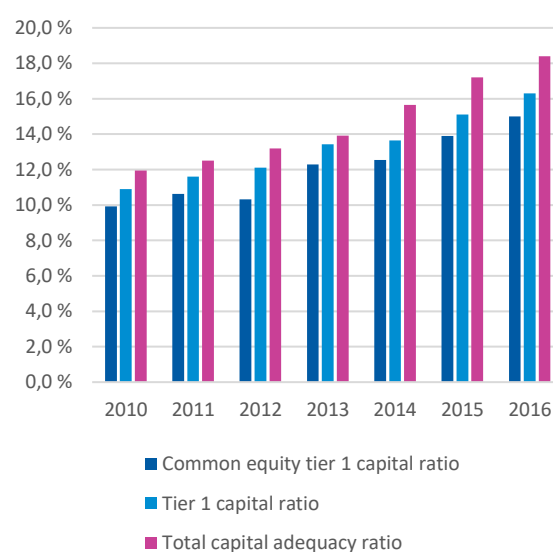
Table 1 - Regulatory capital, SpareBank 1 Nord-Norge Group

Amounts in NOK millions	2016	2015
<b>Regulatory capital</b>		
Common equity Tier 1 capital	9,155	8,367
Core Tier 1 capital	9,951	9,110
Supplementary (Tier 2) capital	1,278	1,248
<b>Regulatory capital</b>	<b>11,229</b>	<b>10,358</b>
<b>Risk-weighted basis for calculation</b>		
Credit risk	48,370	51,601
Market risk	219	375
Operational risk	3,706	3,536
Market risk	219	375
Poor counterparty creditworthiness (CVA risk)	588	751
Addition for Basel I floor	8,237	4,064
<b>Risk-weighted basis for calculation</b>	<b>61,120</b>	<b>60,327</b>
<b>Total minimum regulatory capital requirements</b>	<b>4,890</b>	<b>4,826</b>
<b>Capital adequacy</b>		
Core tier 1 capital ratio	15.0%	13.9%
Common equity Tier 1 capital ratio	16.3%	15.1%
Tier 2 capital ratio	2.1%	2.1%
<b>Capital adequacy</b>	<b>18.4%</b>	<b>17.2%</b>

For detailed information on the composition of regulatory capital and the risk-weighted basis for calculation for SpareBank 1 Nord-Norge, its subsidiaries and associates, refer to the appendix to this document.

In recent years the Group has significantly increased its owners' equity and common equity Tier 1 capital to satisfy new regulatory requirements. Equity increased from NOK 5.6 billion at the end of 2010 to NOK 11.0 billion at the end of 2016. The common equity Tier 1 capital ratio increased from 9.9 to 15.0 per cent in the same period.

Figure 1- Change in capital adequacy ratio



3.2 TIER 1 LEVERAGE RATIO

The Tier 1 leverage ratio is an additional capital target. The capital amount is core Tier 1 capital including hybrid capital. The exposure target is made up of assets and off-balance-sheet items, calculated without risk-weighting. For off-balance-sheet items, the same conversion factors are used as in the standard method for calculating capital adequacy, but with a minimum conversion factor of ten per cent.

CAPITAL MEASURE

EXPOSURE MEASURE

=

LEVERAGE RATIO

On 20 December 2016, the Ministry of Finance set new requirements for the leverage ratio effective from 30 June 2017. The Norwegian minimum requirement for the leverage ratio is three per cent, in addition to a buffer requirement of two per cent. Systemically important banks must have an unweighted core Tier 1 capital buffer amounting to at least three per cent. The total requirement for the Group will be five per cent. SpareBank 1 Nord-Norge’s leverage ratio as of 31 December 2016 was 7.03 per cent, which meets the requirement by a good margin.

3.3 BUFFER REQUIREMENTS

The capital adequacy regulations lay down requirements for capital buffers over and above the minimum requirements under Pillar 1. The purpose of the capital buffers is to mitigate the effect of economic and financial shocks. The capital buffer comprises two components, a capital conservation buffer where the

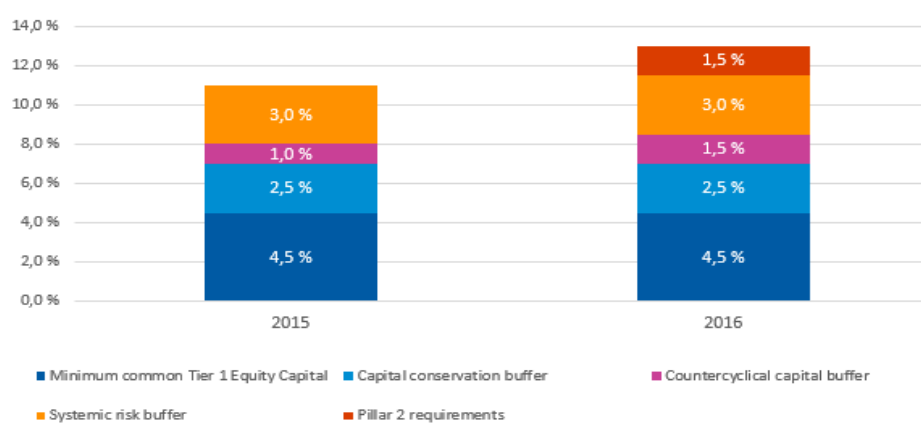
level is constant over time and a countercyclical buffer where the target level depends on the economic situation.

The capital conservation buffer is intended to cover losses and prevent the capital from falling below the minimum requirement in an economic slump, and should equal 2.5 per cent of the basis for calculation. The countercyclical capital buffer is designed to safeguard the banks when the risk in the financial system increases, typically at times of high credit growth which creates imbalances. The requirement for the countercyclical capital buffer may be between 0 and 2.5 per cent, depending on the state of the economy. In 2016 the requirement was 1.5 per cent of risk-weighted assets. On 15 December 2016, the Ministry of Finance decided that this should be increased by 0.5 percentage points to 2.0 per cent of risk-weighted assets from 31 December 2017.

In addition to these buffers, there are capital requirements for systemic risk buffers. This buffer is meant to safeguard the banks against structural or systemic risk, and the requirement is set at 3 per cent. Systemically important institutions may also be required to maintain an additional SIFI buffer of up to 2 per cent. SpareBank 1 Nord-Norge is not defined as system-critical by the Norwegian Ministry of Finance.

All of these buffer requirements should be covered by common equity Tier 1 capital. The total buffer requirement for SpareBank 1 Nord-Norge is seven per cent.

Figure 2- Pillar 1 and Pillar 2 requirements for common equity Tier 1 capital



## 4 MANAGEMENT AND CONTROL OF RISK

### 4.1 THE GROUP'S CONTROL AND MANAGEMENT MODEL

Risk management, internal control and capital management are key areas with respect to financial activities, and the control and management of risk is a strategic tool for increasing value creation in SpareBank 1 Nord-Norge.

The Group's internal control and management model addresses the organisational requirements for the independence of risk reporting, in which responsibilities and roles in day-to-day risk management are particularly emphasised.

SpareBank 1 Nord-Norge has invested a great deal of resources in developing effective risk management processes for the identification, measurement and management of risk under its own direction and through the SpareBank 1 Alliance over many years.

SpareBank 1 Nord-Norge's risk and capital management should support the Group's strategic

development and target attainment, while ensuring financial stability and proper asset management. This is to be achieved through:

- A good risk culture characterised by a high awareness of risk and capital management
- A good understanding of the risks that drive earnings
- Pricing products, as far as possible, in line with the underlying risk
- Striving to achieve the optimal allocation of capital within the adopted business strategy
- Taking advantage of synergy and diversification effects
- Preventing individual events causing serious damage to the Group's financial position

All managers are responsible for maintaining a full overview of the risk situation in their own business area and/or area of expertise at any given time. In order to satisfy the Group's primary goals, the Group has chosen to divide the risk management process into five.

The structure and relationships between the parties involved in the risk management system are shown in the figure below.



## 4.2 FRAMEWORK AND PROCESS FOR RISK AND CAPITAL MANAGEMENT

The renewal and revision of overarching and central governing documents is subject to annual discussion and review by the Board. This is to ensure broad comprehension of the relationship between a good framework for management and control and the active use of limits/targets for the management of risk in relation to the requirements in the capital adequacy regulations.

SpareBank 1 Nord-Norge's framework for identifying and managing risk is illustrated in the diagram below:

SpareBank 1 Nord-Norge revises the Group's business strategy on an ongoing basis. This entails a review of changes in the regulatory framework, including the competitive situation, requirements from public authorities, changes in customer behaviour and requirements for competence and organisation.

In order to ensure an effective and adequate process for risk and capital management, the framework is based on elements that reflect the manner in which the Board and the executive management team run the Group:

- Strategic goals
- Organisation and corporate culture
- Identification of risk
- Risk analysis
- Risk strategies
- Capital management (including return and capital adequacy)
- Reporting
- Follow-up
- Contingency plans
- Compliance

In the risk and capital management process, corporate culture provides the foundation for the other elements. The corporate culture includes management philosophy, management style and the integrity, core values and ethical attitudes of the people in the organisation. It is difficult to compensate for an inadequate corporate culture using other control and management measures. SpareBank 1 Nord-Norge has therefore established clear core values and a code of conduct, and made the entire organisation aware of them.

The Board's duties are set out in a special annual plan that is revised every year. This ensures that the Board has sufficient time for, and focus on, their key assigned duties.



## 4.3 RESPONSIBILITIES IN THE GROUP

The Board of Directors of SpareBank 1 Nord-Norge is responsible for approving a prudent risk profile, return targets and an overall framework for risk and capital management, including the IRB system and risk models in general. The Board is also responsible for approving risk limits, authority levels and the internal capital adequacy assessment process (ICAAP), with the associated assessments of reasonable financial strength and liquidity in relation to the Group's risk profile and regulatory requirements.

The chief executive officer is responsible for overall risk management. This means that the CEO is responsible for ensuring that effective risk management systems are implemented in the Group and that its risk exposure is monitored. The CEO is also responsible for delegating authority and reporting to the Board.

The heads of business and support areas and employees are responsible for day-to-day risk management within their areas of responsibility. They must at all times ensure that the risk management and risk exposure comply with the limits and general management principles determined by the Board or chief executive.

The Risk Management department is independent of the business units and reports directly to the chief executive. The senior group general manager for risk management can also report directly to the Board should extraordinary situations so require. The department is responsible for refining the framework for risk and capital management, including risk models and risk management systems. The department is also responsible for following up and reporting risk exposure and limit utilisation.

The Compliance department is independent of the business units. The department is responsible for ensuring that the rules in effect at any given time are implemented, monitored and complied with. This includes acts, regulations and statutory standards, circulars and guidelines from national and international supervisory authorities, licences, industry standards, internal ethical rules and internal standards and procedures.

The Credit department is responsible for the preparation and maintenance of targets, strategies, guidelines and routines, operative management and follow-up of the Group's credit operations and credit risk management. The department performs an independent role in relation to the business areas and local banks.

Internal Audit verifies that the risk management process is targeted, effective, and functioning as expected. Internal Audit reports to the Board of Directors. Internal Audit's reports and recommendations for improvements have to be followed up by the organisation.

## COMMITTEES AND WORKING GROUPS

The Board's risk committee is tasked with monitoring the Group's risk exposure and risk and capital management framework. The risk committee is authorised to examine all activities and circumstances related to the Group's overall risk, and can obtain information from any employee. All of the Group's employees and elected representatives have to provide the information and assistance requested by the risk committee.

The Board's audit committee is a preparatory and advisory working committee tasked with carrying out more in-depth assessments of selected areas. The audit committee exists to check that the Group has an independent and effective external auditor and satisfactory financial reporting in line with acts and regulations.

The risk and audit committees can initiate any examinations that they consider necessary to perform their tasks, including the use of external advice and assistance. The responsibilities of the Board and the individual members are not reduced by the activities of the risk committee.

The Board's remuneration committee prepares matters that will be reviewed by the Board concerning remuneration arrangements, assesses the remuneration of the chief executive and suggests any changes to this. In SpareBank 1 Nord-Norge, the committee consists of the Chairman of the Board and two other members, and is independent of any executive personnel. The Group is adapting its practices

to the provisions stipulated in the new regulations relating to remuneration in the financial sector, and the remuneration committee's mandate satisfies these provisions.

The management forum for risk and capital management handles the overall monitoring of the Group's risk profile, funding, liquidity, financial strength and compliance with relevant laws and regulations. The committee also discusses draft risk strategies, capital allocation (capital strategy) and validation reports and recommends new risk models. The management forum for risk and capital management should be broad-based, with executives from business units and from risk and capital management.

The credit committees are responsible for issuing independent recommendations to authorised decision-makers. In these recommendations, the credit committees assess loan and credit applications in relation to the current credit strategy, credit policy, appropriation rules, and credit processing routines. The credit committees focus especially on identifying risk associated with the individual application and make an independent assessment of credit risk.

The compliance committee reports to the Group's Compliance department. The committee is made up of persons with various professional backgrounds and different areas of responsibility within the Bank. The main purpose of the committee is to assist the Group's Compliance department with complementary skills and capacity in order to meet the regulatory requirements applicable to our business at any given time.

## 4.4 RISK POLICY AND CULTURE

The Group's strategic goals and strong social commitment, along with its ethical guidelines, govern its risk management, policies and compliance.

### STRUCTURE OF THE GROUP'S GOVERNING DOCUMENTS

All strategies, policies and guidelines are written to support the overall vision and strategic goals, and also to comply with the Group's ethical rules. The Group's governing documents are listed below. The blue boxes

are documents to be approved by the Board. Other documents may be approved by the CEO.

The risk strategy describes and defines the risk capacity and risk appetite, along with key indicators and the monitoring of these. The risk strategy is based on the Group's ICAAP (capital evaluation), and must be viewed in conjunction with the recovery plan and capital strategy.

The purpose of the ethical rules is to enable people to act in line with our values and to clarify our ethical standards for business practice and personal conduct.

Strategic principles for risk and capital management provide guidelines on the Group's overall attitudes and approach to risk and capital management, and ensure that the Group has an effective and appropriate process for this. These principles should also ensure that the internal framework complies with acts, regulations and best practice for good risk and capital management.

The capital strategy determines the Group's capital targets, and helps to ensure that the Bank and the Group can maintain reasonable financial strength in the short and the long term. The document also sets out the Group's ownership and dividend policy.

The recovery plan is a key tool which identifies ways of restoring the Group's financial strength and viability in situations where the Group is under heavy financial pressure, extends the current processes for balance-sheet and liquidity management under stress, and ensures that the business model and risk appetite include a 'Plan B'. This helps to safeguard owners' assets, protects the Group's creditors and maintains financial stability.

The financing and liquidity strategy proposes business strategies for the Group's liquidity management and for the business areas of deposits and lending. The document also specifies roles and responsibilities within this area.

The strategy for market risk guides the business strategies for the Group's capital market activities. The document also specifies roles and responsibilities within this area.



The credit strategy sets out general principles for granting credit and how the credit risk should be managed and priced. Based on overarching commercial and risk-based objectives, this document defines general goals for the credit area. Together with market plans, procedures and guidelines, it is designed to support the target risk profile and the Group's requirements for risk-adjusted returns.

The appropriation rules lay down principles and criteria for delegating decision-making authority from the Board and define the decision-making structure and associated approval limits.

Credit policies operationalise the Bank's credit strategy as determined by the Board. The credit policy sets out general provisions on what and who should be financed by the Group, and specific provisions for selected products and industries.

The policy for portfolio management provides guidance for the Group's management of the credit portfolio.

The strategy for ownership risk defines how the Group's ownership policy should be managed.

The strategy for operational risk and compliance sets out the Group's attitudes and overarching principles for handling operational and compliance risk. The strategy is also intended to clarify the division of roles/responsibilities in the Group when it comes to managing operational and compliance risk.

The policy for operational risk is designed to support and implement the guidance on operational risk given in the strategy for operational risk and compliance and other high-level governing documents. The policy for operational risk is designed to clarify the Group's attitudes and central principles for handling operational risk.

The policy for compliance risk is designed to support and implement the guidance on compliance risk given in the strategy for operational risk and compliance and other high-level governing documents. The policy for compliance risk is designed to clarify the Group's attitudes and central principles for handling compliance risk.

The policy for money-laundering and terrorist financing is designed to clarify the Group's attitudes and central principles for handling money-laundering and terrorist financing.

The purpose of the security policy is to reduce vulnerability and strengthen cooperation within the SpareBank 1 Alliance, safeguard life and health, values, information and assets effectively and provide for targeted collaboration across the security area in the SpareBank 1 Alliance and for effective application of the management model.

The outsourcing policy should help to ensure that the Group implements its business strategies by providing scope for action and specifying general conditions for outsourcing services to third parties.

The Alliance ICT strategy gives general guidance for managing ICT activities for all banks and product companies in the SpareBank 1 Alliance. The strategy is determined by the Board of the Alliance and describes the main goals for the coming period. The IT strategy should help to ensure that the business goals of the SpareBank 1 Alliance are achieved, and it should ensure that the IT resources of the Alliance are used as efficiently as possible to deliver the services desired by customers and employees. The IT strategy should provide for coherence and consistency between business strategies across the Alliance and the current IT strategy.

## CORPORATE CULTURE

The corporate culture is the foundation of the Group's risk and capital management and is made up of the management philosophy, management style and the people in the organisation with their individual qualities such as integrity, values and ethical attitudes. It is difficult to compensate for an adequate organisational culture by out of control and management measures, and SpareBank 1 Nord-Norge has, therefore, established clear values and ethical guidelines (the SNN Code) which is communicated and made known throughout the entire organisation. The SNN Code focuses on attitudes and ethics and how we do business with customers and other associates at SpareBank 1 Nord-Norge. The SNN Code is an important element in the management of reputation risk.



## ROLE OF THE CRO IN THE GROUP

The CRO sits on the Group Board along with the Group's credit manager and regional managers.

The CRO attends quarterly operational monitoring meetings with the regional managers. The operational monitoring covers the status, market plans and measures directed at attaining strategic targets.

The CRO also attends Board meetings and represents the views of the Risk Management department.

## RISK MANAGEMENT DEPARTMENT

The Risk Management department works closely with other functional units and directly with line management. Some formal arenas have been established where risk functions and business groups meet to discuss risk-related problems. See section 4.3 on committees and working groups for a more detailed account of these. Along with the formal arenas, the Group relies heavily on coordination between specialised departments and the business to arrive at best practice for the relevant problems.

## 4.5 MEASUREMENT OF RISK

Several of the management information systems are key to the retrieval, analysis, documentation, reporting and storage of information related to important parameters in the Group's IRB system and commercial follow-up and management, as well as the follow-up of improvement measures. The most important systems in this context are the strategic scorecard, the portfolio management system, the early warning system and the quality and risk management system.

### STRATEGIC SCORECARD

Measures key indicators that are closely related to the IRB system. Applies, for example, to the risk-adjusted return, share of high-risk exposure and defaults.

### PORTFOLIO MANAGEMENT SYSTEM (PORTO)

The Group's central system for reading and reporting key risk parameters:

- Probability of default (PD)

- Loss given default (LGD)
- Exposure at default (EAD)
- Expected loss (EL)
- Unexpected loss (UL)
- Risk-adjusted return
- Doubtful commitments

The portfolio management system also provides a summary of the actual migration and master data for validation and stress testing.

### EARLY WARNING

The Group's early warning system allows it to constantly monitor key risk drivers: these are important indicators that improve its monitoring of customers and the development of potential default situations. The information from the early warning system is important for detecting significant trends at the earliest possible time.

### QUALITY AND RISK MANAGEMENT SYSTEM

The Group has implemented a 'Quality and risk management' tool, which is designed to handle improvement measures, losses and events, customer complaints, controls and risk analyses.

The system has been designed to document and follow up the work of management and control. All risk analyses, controls, reports and events are documented in the system, and reports are drawn up on the basis of this documentation, including:

- The annual management report
- The Financial Supervisory Authority of Norway's modules for management and control
- Risk analyses (strategic risk analysis, process analyses etc.)
- Internal Audit reports
- Communication with the Financial Supervisory Authority of Norway
- The Group's own controls and inspections

All identified areas for improvement, both as a result of feedback from Internal Audit and the Financial Supervisory Authority of Norway, and from the company's own controls and analyses, are recorded

and followed up in the system. Allocation of responsibility and automatic follow-up help to make the improvement work more effective, and are a major element of the Group's quality and improvement work.

## 4.6 REPORTING OF RISK

### INTERNAL CONTROL AND MANAGEMENT CONFIRMATION

The Group's internal control is based on the COSO framework (Committee of Sponsoring Organizations of the Treadway Commission).

COSO is a framework with five levels:

1. Control environment
2. Risk management: assessment of internal and external factors that affect goal attainment
3. Control activities: guidelines and procedures that are intended to ensure that risks are reduced and managed efficiently
4. Information and communication: processes that ensure that relevant information is identified and communicated on time
5. Monitoring: processes for ensuring that internal control is appropriately defined and performed, and that it is effective and adaptable



The five levels are meant to help the Group achieve its strategic goals through good risk management and administration. The COSO framework has been established in line with the Group's general principles for risk and capital management, which emphasise continuous improvement, efficient operation, reliable financial reporting and compliance with laws and regulations.

Directors, bank executives, specialist managers and department managers have to report upwards in the organisation on how risk management has been carried out in their areas of responsibility in relation to the approved framework and risk exposure. This is intended to provide the chief executive and the Board with a basis for determining whether risk management is being carried out properly. The confirmation from management (internal control reporting) is produced once a year. This work is coordinated by the Risk Management department.

The purpose of the annual confirmation from managers is primarily:

- to analyse the Group's strengths and weaknesses within internal control and risk management, and ensure that the necessary improvements can be made
- to lay the foundations for active engagement in and understanding of internal control and risk management among managers at all levels in the Group

The reporting should be used actively in a management development process that increases the understanding of the importance of good risk management and quality.

The COBIT framework (Control Objectives for Information and Related Technology) is used in the area of IT as a basis for internal control and risk management. COBIT is a framework intended to ensure comprehensive management and control within three key areas:

- Internal and regulatory requirements and checks
- Technical issues and challenges
- IT risk

Business goals and strategic goals must be linked to IT goals within these areas. Good management is ensured through ongoing calculations and following up goals and performance, and by making process owners accountable within business areas and the area of IT. The framework unifies recognised IT standards and best practice with other general and strategic goals.

## QUARTERLY RISK REPORT

The Risk Management department reports to the administration and the Board every quarter. The risk report contains details of the status and development of the risk profile, both overall and broken down by key risk groups.

The risk report is based on the control framework, particularly the risk strategy and the strategies for each specific risk type. Status and development with regard to target attainment, limit utilisation and any breaches are reported under each risk category.

The report also contains a summary of key indicators defined in the Group's recovery and resolution plan (RRP). The key indicators are the levels or key figures judged to be critical in terms of risk management. Continuous monitoring and reporting of these figures is important to be able to identify a crisis as quickly as possible and take the necessary actions depending on the nature and extent of the crisis and based on an assessment of current contingency measures.

## COMPLIANCE REPORT

The compliance committee reports to management and the Board every six months. The report summarises the work of the compliance committee on changes to the law and new regulations, and the implementation of these in the organisation. Risk factors associated with the implementation of, and compliance with, such changes or new regulations, and a summary of the risk situation in the area are key parts of the report.

## ICAAP

SpareBank 1 Nord-Norge is subject to statutory rules that set minimum requirements for capital adequacy and financial strength. The CEBS (Committee of European Banking Supervisors) has issued guidelines

for supervisory authorities when they have to assess the institutions' processes for the management of risk and capital needs, in the form of an Internal Capital Adequacy Assessment Process (ICAAP).

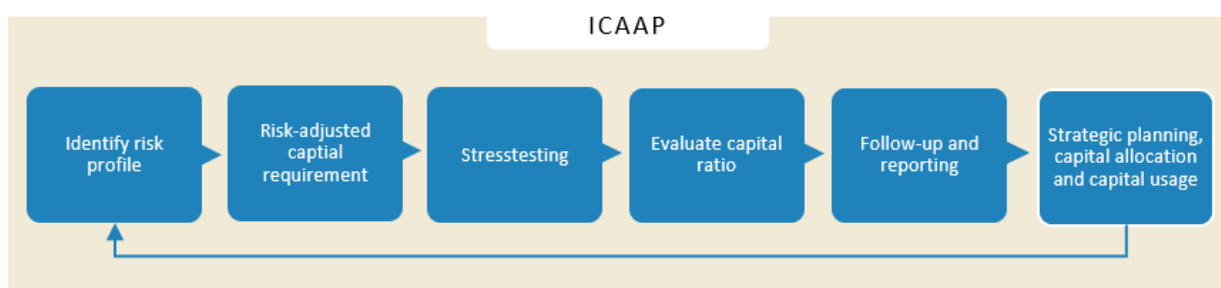
The Board is responsible for initiating the ICAAP process and capital planning, as well as approving the structure and methods chosen. The Board is also responsible for setting targets for the Group's capital level that are adapted to the risk profile and commercial framework conditions. This process is an integral part of the Group's overall risk management. The process should be risk-driven and cover the elements outlined in the figure below.

The risk and capital assessment process takes the Group's strategic goals as its starting point. Forecasts of the expected financial development, as well as future scenarios with an economic downturn and capital stress that lasts for a minimum of 5 years, are then drawn up based on the strategic goals and business plan.

SpareBank 1 Nord-Norge has established processes to assess the capital need in light of the risk profile and the quality of the established internal control and risk management systems. The process and its results are documented in writing in an annual ICAAP report. The Group's CRO is responsible for the capital assessment process.

## PURPOSE

The management of risk and capital employment is a key instrument that SpareBank 1 Nord-Norge uses to achieve the Bank's objectives as they are defined in the bank's business strategy. The Group's profitability and opportunities to achieve its objectives in relation to its equity certificate holders, employees and society in general are dependent on its ability to identify, measure, manage and price the risks that arise in



connection with offering financial products and services. The risk management process should ensure financial stability and safe and secure asset management through:

- A strong organisational structure characterised by high risk management awareness and high quality
- A good understanding of the risks that drive earnings
- Efficient procurement and use of capital in relation to the Group's strategic goals and adopted business strategy
- Satisfactory capital adequacy
- A competitive return
- Ensuring that the Group manages at least to maintain its current international ratings
- Preventing unexpected incidents from causing serious damage to the Group's financial position
- Exploitation of synergy and diversification effects
- Exploitation of growth opportunities in the Group's defined market area

## RISK TYPES

All significant risks are subject to continuous assessment throughout the year. The most important risks are quantified through the expected losses and need for economic capital, and this is an important foundation for the Bank's capital management process. The capital assessment process includes main and sub-risk groups as illustrated below. The assessment of the management and control related to the various business and risk areas is also key to the assessment of the capital needs.

It is a fundamental goal that the risk-adjusted capital should, as far as possible and within the adopted business strategy, be allocated to the areas that provide the highest risk-adjusted return.

## FORECASTS AND STRESS TESTS

In the last few decades, financial stability analysis has played an increasingly important role in many central banks placing new requirements on financial institutions. This must be viewed in the context of the financial markets having become deeper and financial crises having occurred more frequently. One important element in the analysis of financial stability is investigating how vulnerable the financial system is with respect to macroeconomic disturbances. This can be done using forecasts and stress tests.

The main purpose of the forecast model is to assess the development of the Group's results, risk and financial strength in various scenarios when economic growth is weak and produce the associated estimates for capital requirements. The challenge is to identify relevant future scenarios in which risk increases, and to construct a good relationship between the macroeconomic developments in the scenarios and the microeconomic developments for all the key variables that affect the results, balance sheet and risk levels.

The scenarios in the Group's ICAAP should be relevant in the sense that they cover the situations that are regarded as capable of disturbing the macroeconomic stability of the Norwegian economy and thus increase the risk in the group. The forecasting model satisfies the requirements of the capital adequacy rules. These are the requirements that are stipulated for IRB banks through the Norwegian Capital Requirements Regulations (Pillar 1) and guidelines on the assessment of risk levels and calculation of capital requirements in institutions (Pillar 2).

## External requirements for stress tests and scenarios

Section 16-1 of the Capital Requirements Regulations sets out requirements for identifying matters that could adversely affect credit risk, financial strength and portfolios, and requirements for these issues to be stress-tested at least once a year.

In other words, stress testing is a condition for IRB approval. The stress tests must show the impact on capital adequacy and the ability to satisfy the minimum capital requirement. The regulations say nothing about the severity of the scenario one should analyse, but state that the impact of an economic downturn on credit risk must be discussed.

The Committee of European Banking Supervisors (CEBS)<sup>1</sup> published revised guidelines on stress testing in a circular dated 26 August 2010. The Financial Supervisory Authority of Norway emphasises that the guidelines on stress testing form part of the guidelines on the Pillar 2 process and supplement circular 21/2006 'Pillar 2 of the revised capital adequacy framework – guidelines for assessing risk profile and calculating capital needs at institutions'.

There is a requirement that the effects of a serious slump must be analysed in connection with the ICAAP. From the Financial Supervisory Authority of Norway's circular 21/2006<sup>2</sup>:

- Stress testing constitutes a key part of ICAAP and capital planning.
- The institution must consider how it can survive an economic downturn with negative results, in which raising new equity could be problematic.
- An extraordinary but probable scenario shall include:
  - The recession must last for at least 3 years, with at least one year of negative results
  - It should show the impact on earnings and financial strength
  - It should show the impact on complying with the minimum requirement
  - It should show how the capital requirements will be satisfied through the recession, including management measures
  - Forecast of the financial/liquidity situation

Another important reference is the 'Technical aspects of stress testing under the supervisory review process – CP12' from the Committee of European Banking Supervisors (CEBS), which also provides a number of guidelines on what Pillar 2 stress tests should include. From chapter IV.3.b. 'Stress testing for IRB institutions' and the definition of 'scenario stress test' and 'sensitivity stress test' in section 16:

- Scenario stress test – shows the impact on results/financial strength of movements in a number of risk drivers (simulation); resulting from



<sup>1</sup> New guidelines on stress testing called 'CEBS Guidelines on Stress Testing (GL32)' applicable from 31 December 2010

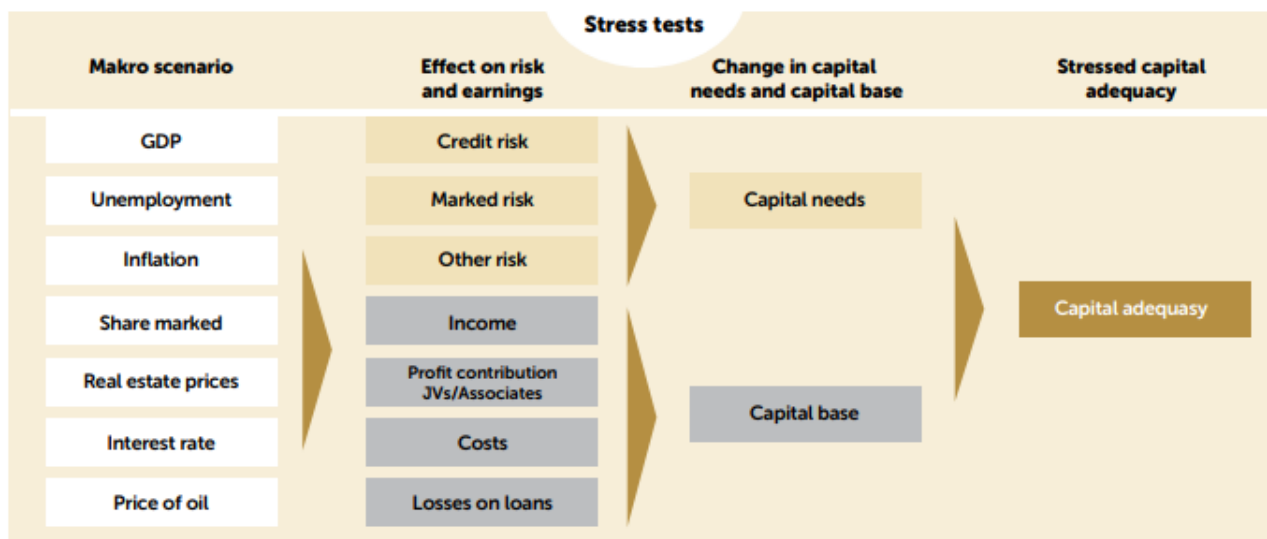
<sup>2</sup> This section is based on the presentation by Jon Hellevik of the Financial Supervisory Authority of Norway at Norges Bank on 18 September 2007.

a well-defined stress event. Expected to be used by larger institutions.

- Sensitivity stress test – shows the impact on the result/financial strength of movement in a specific risk driver; where the stress event is unknown. May be enough for smaller banks.

#### Relationship between scenarios and stress tests

The Group's model for stress tests and scenarios is illustrated in the figure below.



One significant challenge is to use macro assumptions and convert them to business variables when assessing:

- Credit score models – assessment of migration and changes in default probability, expected and unexpected losses
- Financial strength and profitability – forecasts for normal development and various economic recessions
- Liquidity (funding) – the Group's challenges and vulnerability associated with changes in funding levels and situations associated with any general financial crises or special situations for SpareBank 1 Nord-Norge
- Financial performance of associated companies
- Impact of market and competition situations in Northern Norway and reputation risk

#### Setting the scenarios

For the Bank it is important that the scenario and stress test for stressed economic conditions is based on serious, but possible, disturbances in the economy so

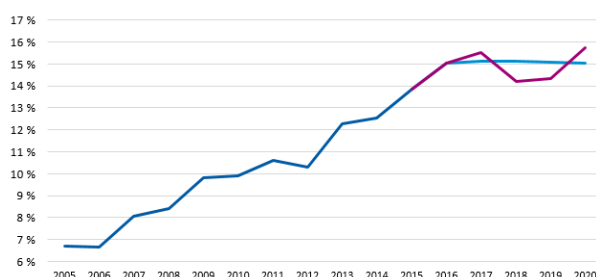
that it provides answers to how much could be lost, but not necessarily how much is likely to be lost. This means that the scenarios do not need to express changes regarded as likely because it is assumed that all events occur at the same time (correlation = 1).

It is important to the authorities that the banks carry out scenarios and stress tests to show the robustness of the financial sector. The results from joint national stress tests and the banks' stress tests are also important input to discussions about future capital levels and capital targets.

The results from the scenarios and stress tests are processed as an important part of the annual ICAAP. In the assessments the Bank attaches importance to presenting the results from the normal scenario (expected development) and the stress scenario (strong negative impact on the economy), and sensitivity analyses against the trend in the baseline scenario.

The effects on the Group's common equity Tier 1 capital ratio of the various forecasts/stress tests are shown in the figure below.

*Figure 3 - Development of core Tier 1 capital ratio*



The calculation of ICAAP was conducted in 2016 with data as at 30 September 2016. The year-end core Tier 1 capital ratio was forecast at 15.06 per cent.

#### Relationship to other documents

The ICAAP is closely related to the following documents, which also contain important assessments and documentation:

- The capital strategy, containing assessments of the Group's capital level and future capital targets
- The risk strategy, which provides a high-level overview of the Group's risk appetite and capacity in the main risk areas
- The recovery plan, which describes trigger levels and measures to enable a normalisation of banking operations in the event of a serious crisis. The plan also contains a description and documentation of scenarios used in the inverse stress test.

## RECOVERY PLAN

The EU Crisis Management Directive (Bank Recovery and Resolution Directive – BRRD) includes requirements for banks to draw up recovery plans to handle financially stressed situations. These plans should be maintained and updated at least once a year, and they should be dealt with by the Board.

Under the Crisis Management Directive, national authorities are required to lay down requirements for the content of recovery plans, the date of the first plan and the frequency of updating for institutions that may produce one under the 'simplified obligations'.

There are as yet no Norwegian rules implementing the requirements in the Crisis Management Directive, and the Banking Law Commission is examining how this Directive should be implemented in Norway. A technical standard defines minimum criteria for supervisory monitoring of recovery plans and should ensure a common approach to regulatory supervision.

## PURPOSE AND REQUIRED CONTENT

One important purpose of the Directive is to limit the costs to taxpayers of a crisis in an undertaking, and to prevent a crisis in a systemically important undertaking from threatening financial stability. The Directive emphasises that shareholders and creditors must bear their share of the costs when an undertaking is in crisis. Deposits that are covered by the deposit guarantee schemes must normally be shielded from losses. Some types of liability are exempt from 'bail in' (being written down or converted to equity)

The EBA has published a technical standard with detailed minimum requirements for recovery plans. This standard provides a common framework for the design, content and testing of financial institutions' plans for recovery from serious crises:

- Summary
- Information on the management structure for the plan
- Strategic analysis
- Communications plan
- Analysis of improvement measures for recovery

The standard states that the recovery plan should be built up and structured according to these five main elements.

## MAIN POINTS IN THE RECOVERY PLAN

The recovery plan for SpareBank 1 Nord-Norge is a comprehensive document whose main focus is on strategic analysis, contingency measures and scenarios.

### Indicators and trigger levels

The Bank has made use of the standard setup from the EBA (requirements for types of indicator), uses the following levels for monitoring and handling of trigger levels:



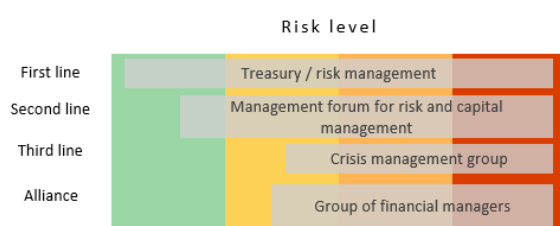
Figure 4 Indicators and trigger levels

Zone	Actions
Going concern	<ul style="list-style-type: none"> <li>Business as usual</li> </ul>
Early warning	<ul style="list-style-type: none"> <li>'Early warning'</li> <li>The situation is reported and discussed within normal management mechanisms and governance structures</li> <li>Contingency measures from the 'business as usual' list</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>The recovery team (crisis/contingency team) is set up</li> <li>Gain an overview of the situation; produce a base for information and decision-making</li> <li>Relevant and appropriate plans and actions from the recovery plan are implemented</li> </ul>
Resolution	<ul style="list-style-type: none"> <li>Assumed resolution phase: the authorities are notified and the crisis management authority is assumed to take over control of the situation</li> </ul>

#### Process in the Bank for implementing recovery measures

The CFO in consultation with the Risk Management department is responsible for:

- Identifying a potential crisis
- Categorising the risk level
- Situation reporting to the CEO, CFO, CRO and/or the management forum for risk and capital management



The management forum for risk and capital management is responsible for situation reporting to the crisis management group in relation to the crisis and continuity plan.

Relevant measures should be decided on according to the risk level. The chief executive officer is responsible for deciding on an implementing measures.

#### Indicators in the recovery plan

The following indicators have been chosen and will be followed up by the Risk Management department. The results will be reported to the administration on a regular basis and included in the quarterly risk report to the Board.

- Core tier 1 capital ratio
- Total capital adequacy
- Leverage ratio
- LCR
- Liquidity indicator 1
- Funding cost
- RoE
- Significant operational losses
- Growth in number of non-performing loans
- Loan loss provision ratio
- Rating
- Variation in share price
- Variation in GNP
- CDS States

The indicators are viewed against the trigger levels in each reporting cycle and reported to senior management and the Board in the quarterly risk report.

Because every crisis is unique, the indicators will not automatically activate contingency measures, so they should not be seen as threshold values that will trigger

a set of pre-defined reactions. They should be regarded as a time from which the contingency measures should be looked at, re-evaluated and reviewed in terms of what a possible implementation might involve. Indicators are therefore a natural part of the escalation process moving towards a possible recovery plan.

### Scenarios

The recovery plans are not meant to identify factors that could trigger a fresh financial crisis, but to evaluate the institution's ability to react to a wide range of shock events. The stress scenarios are adapted to the size and complexity of the institution. The scenarios cover both events that occur suddenly and crises that develop more slowly and gradually. The scenarios give an assessment of the impact of the event on the Bank's capital, liquidity, risk profile, profitability, operating situation and reputation.

SpareBank 1 Nord-Norge uses the following scenarios:

- |    |                                      |                        |
|----|--------------------------------------|------------------------|
| 1: | Concentration risk<br>(large losses) | - sudden, market-wide  |
| 2: | Systemic crisis                      | - gradual, combination |
| 3: | Financial crisis                     | - sudden, market-wide  |

### Contingency measures

The contingency measures are in three parts:

- Plan for risk reduction measures
- Plan for capital injection and liquidity
- Communication plan

The measures have differing degrees of seriousness and attractiveness depending on the scenario type. They are implemented at different times from 'going concern' to recovery, depending on the type of crisis.

The strategic analysis concludes with the plan being adopted for the parent bank in the SpareBank 1 Nord-Norge Group. All essential support functions are located in the parent bank. It should be noted nevertheless that SpareBank 1 Gruppen and SpareBank 1 Boligkreditt AS are critical undertakings for the Group, but that it is inappropriate to plan for these companies in the plan for SpareBank 1 Nord-Norge as they are

jointly owned companies within the SpareBank 1 Alliance. The recovery plan for SpareBank 1 Nord-Norge is supplemented with separate analyses drawn up jointly with other allied banks in SpareBank 1 Gruppen and Bolig-/ Næringskreditt.

The overall intention of the process leading up to the Bank's recovery plan is to take appropriate decisions and implement measures to prevent the Bank being seriously hit in the event of a financial crisis. The planning supplements the already existing crisis and continuity planning in the Bank and at the alliance level. The Risk Management department bears the main responsibility for drawing up the recovery plan in SpareBank 1 Nord-Norge, and the Group CEO together with the Board is responsible for approving it.

The plan should be kept up to date at all times in terms of operational and strategic conditions, and the Risk Management department reviews the plan every year.

## 5 CREDIT RISK

Credit risk is defined as the risk of loss due to customers being unable or unwilling to fulfil their obligations. In a loan situation, the credit risk is that the borrower will not comply with the loan agreement.

Credit risk also includes concentration risk and residual risk. Concentration risk is the risk that arises from a high cumulative exposure to a single counterparty or issuer of security. The concentration risk may also be linked to counterparties with operations within the same industry or geographical area. Residual risk is the risk that securities taken into account when determining capital requirements for credit risk might prove less effective than expected. Counterparty risk, which arises from derivative trading, for example, is also dealt with under credit risk.

A guiding principle for the risk profile is that the Group should maintain a moderate credit risk profile, where no single incident is able to seriously damage the Group's financial position. Credit risk in SpareBank 1 Nord-Norge is mainly related to ordinary lending portfolios in the retail and corporate markets in the parent bank, and to holdings and commercial activities in subsidiaries and associates.

### 5.1 MANAGEMENT AND CONTROL OF CREDIT RISK

Management of credit risk covers the management of processes designed to ensure that the Bank achieves its goals for risk-adjusted returns by keeping risk exposure within approved limits. SpareBank 1 Nord-Norge aims to be among the leading players in Norway in managing credit risk.

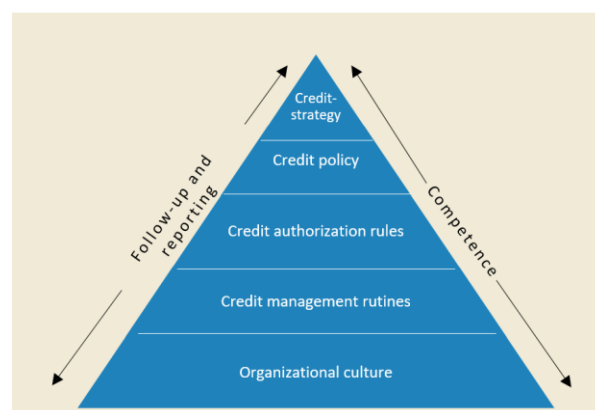
The management of credit risk in the Group should be in line with the requirements and recommendations in:

- The Norwegian Capital Requirements Regulations
- The Financial Supervisory Authority of Norway's methodology for risk-based supervision
- The Financial Supervisory Authority of Norway's regulations on risk management and internal control
- The framework for management and control (COSO and COBIT)

Credit risk is managed by providing for:

- An appropriate environment for controlling credit risk
- An appropriate credit process
- An appropriate process for credit administration, measurement and monitoring of risk
- An appropriate check on the processes for managing credit risk

The Board of SpareBank 1 Nord-Norge has laid down overall credit strategy guidelines and limits for the management and control of credit risk. Credit risk is managed through the Group's overall credit strategy, appropriation rules, credit policy, portfolio management policy and credit management routines.



#### Credit strategy

The Group's credit strategy lays down general principles for granting and monitoring credit. The desired risk profile is defined through overall credit strategy limits related to portfolios, sub-portfolios and individual customers. This framework sets limits for the number of bad and doubtful commitments, risk-adjusted capital, the size of individual customers and exposure to specific industries. This forms the basis for reporting and follow-up of ongoing risk exposure.

The document is approved by the Board and reviewed when necessary, at least once a year. Any departures from the credit strategy limits are decided on at Board level. The status of the credit strategy limits is reported to the CEO each month, and to the Board every quarter, by the Risk Management department.

### Appropriation rules

The appropriation rules define principles and criteria for delegating decision-making authority from the Board and define the decision-making structure. Within certain limits, the Board delegates operational responsibility for decisions in loan and credit cases to the chief executive. The chief executive can delegate authority to others within the scope of his own authority. The levels of authority are differentiated by volume and risk. The appropriation rules are determined by the Board and reviewed at least once a year.

### Credit policy

The credit policy operationalises the Bank's credit strategy, describes the division of roles and responsibilities, and lays down more detailed criteria for credit-related activities. The policy described what is acceptable within given areas of credit assessment. The intention is to ensure that the Bank behaves consistently, in line with external conditions and internally defined risk levels. The document is approved by the CEO and presented to the Board. The document is revised when necessary, at least once a year.

### Policy for portfolio management

The policy for portfolio management lays down the principles for portfolio management. The document defines responsibilities and the division of tasks and roles in reporting, monitoring and managing the credit portfolio, including the preparation and implementation of measures to manage risk at an acceptable level. The document is approved by the Board of Directors.

### Credit handling procedures

The credit handling procedures regulate various circumstances related to the ongoing granting of credit and follow-up of commitments. The rules for granting credit, procedures for following up on commitments in default, assessment of impairment needs, extended quarterly review of major commitments, extended annual follow-up of commitments with major customer and individuals are examples of procedures designed to maintain the operation of the Bank in line with the adopted strategies. The documents are drawn up and

regularly revised by the Credit and Production departments in consultation with the business units, and are approved by the CEO.

The ongoing monitoring and follow-up of commitments and credit portfolios are central to the Group's management of credit risk. As mentioned in section 4.5, the Group's early warning and portfolio management systems are key tools in portfolio management. The portfolio management system contains information on individual customers and portfolios, and provides efficient follow-up of the risk profile. Individual commitments, and hence the entire portfolio, are scored monthly based on objective data. Early identification of future high-risk commitments is especially important. The identification and follow-up of bad and doubtful commitments are discussed in more detail in section 5.3.

## RESPONSIBILITIES AND ROLES IN THE MANAGEMENT OF CREDIT RISK

The Board of Sparebank 1 Nord-Norge has defined responsibilities and roles in the management of credit risk through the Group's credit strategy.

The Board sets out the Group's long-term framework for the risk profile and overall limits for credit-related activities. The Board approves the credit strategy, the appropriation rules and the policy for portfolio management. The Board also ensures that the credit strategy is implemented and that the provisions and limits in the governing documents are complied with.

The CEO is responsible for implementing frameworks and guidelines for credit risk adopted by the Board, and ensures that systems are developed for monitoring, reporting and following up on credit risk at the commitment and portfolio level.

The business units are responsible for running credit-related activities within the limits laid down in the governing documents, and provide for monitoring and follow-up of risk in their own portfolios. The business units are responsible for implementing measures to limit the Bank's risk when required.

The Credit department is responsible for drawing up draft governing documents and amending them in

collaboration with the risk management department. The department should contribute to good credit processes in the business units, and assumes responsibility for defaulting and doubtful customers. The department establishes and implements measures in the event of deviation from the credit strategy limits. The department is also responsible for the qualitative assessment of the IRB system.

The Risk Management department conducts independent checks on the risk management processes. This involves monitoring and helping the Group to establish a framework for managing credit risk which satisfies regulatory requirements and the need for robust internal management principles and limits. The department is also meant to check that the Group's risk limits are in line with its defined risk appetite, and report to the Board on any deviations from the credit strategy limits. The department assesses whether the Group's proposed quarterly loss position is in line with the relevant acts and regulations and the Group's internal guidelines.

Internal Audit conducts independent reviews of the lending business and reports the results and any deviations directly to the business units, the Risk Management department, the Compliance department, senior management or the Board.

## REPORTING OF CREDIT RISK

The status and development of the credit portfolio and credit strategy goals and limits are reported to senior management and the Board. Periodic reporting to the Board is the responsibility of the CEO, and is meant to ensure that the approved principles for portfolio management are followed up in a proper manner, to provide an accurate basis for decisions and trigger appropriate action.

The Credit department produces reports giving a periodic summary of various activities and measures. An extended annual review of major customers, and the renewal of credit, result in separate annual reports. Separate quarterly reports are also produced on:

- Monitoring of high-risk customers
- Watch lists
- Monitoring of covenants

- Extended review of major commitments
- Loss report

The quarterly risk report drawn up by the Risk Management department contains details of the attributes and development of the credit portfolio. Exposure broken down across different dimensions, growth, migration within the portfolio, development of concentration risk and changes in the various parameters of the A-IRB models are all areas covered in the report. There is also an analysis of status and development within the credit strategy limits.

As mentioned in section 4.6, the Risk Management department runs the Internal Capital Adequacy Assessment Process (ICAAP) for the Group. This process also assesses risk tolerance, risk management and capital needs specific to the credit risk area. The results of the process are reported to the Board of Directors

There is regular validation of the credit models. The validation process results in an annual validation report which is adopted by the Board. For a detailed description of the Group's validation process, refer to section 5.4 on the IRB method.

Alongside these fixed reports, the Risk Management department is responsible for reporting on demand or in case of specific events within the credit area.

## SECURITIES AND OTHER RISK-REDUCING MEASURES

The Group uses securities to reduce its credit risk. The commonest forms of security in the retail market are real estate such as homes and leisure properties. Securities in objects other than real estate are limited in the retail market. In the corporate market, commercial properties, ships and other vessels are usual securities. Securities in bank deposits, plant and equipment, inventories, receivables and licences are also common.

The valuation of the security objects follows the principle that the negotiable value should be assessed conservatively and should be based as far as possible on objective valuation criteria. The source used to establish the negotiable value may be the book value, an internal assessment based on defined criteria, a

valuation by an external broker, a standard rate or a sale price. The negotiable value is the Bank's assessment of the market value of the object, assuming a voluntary sale on the measurement date. The realisable value is the negotiable value reduced to a value designed to reflect the value of the object if realised in a severe economic downturn. The reduction factors used to reduce the negotiable value to the realisable value represent an estimate of possible impairment of an object, and are dependent on the object type and designation. The impairment allows for a severe economic downturn and the fact that the market is aware that the sale is a result of default/bankruptcy. The Group has guidelines for the frequency of updating the negotiable value for the various security objects.

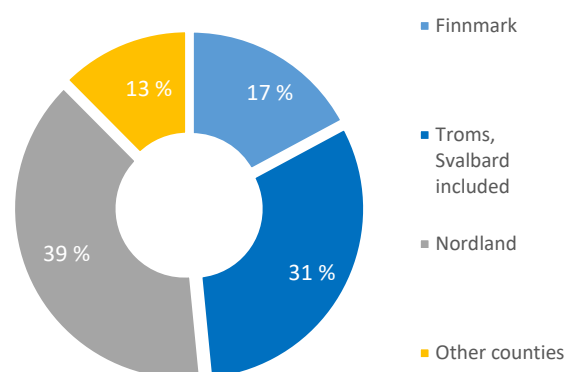
As well as security in objects, the Bank may sometimes have provisions on negative pledges in its agreement with the customer. A negative pledge restricts the customer's ability to pledge its assets to other lenders.

Guarantees in the form of ordinary sureties, simple sureties or other forms of surety are also used to reduce credit risk. A guarantee is an agreement between the lender and the guarantor to the effect the guarantor accepts liability for all or part of a loan along with the borrower. Guarantors may be companies, individuals or banks or, in rare cases, public-sector bodies. The negotiable value of the guarantee is determined from the ability of the guarantor to meet the liability, and their creditworthiness. Where the guarantor is a company, the negotiable value is affected by their creditworthiness and their financial situation based on accounting information.

## 5.2 CREDIT EXPOSURES

The Group's primary geographical market is tied to its vision 'For Northern Norway!', and is made up of the counties of Finnmark, Troms and Nordland. The figure below shows the Group's lending, excluding intermediary loans, broken down by county.

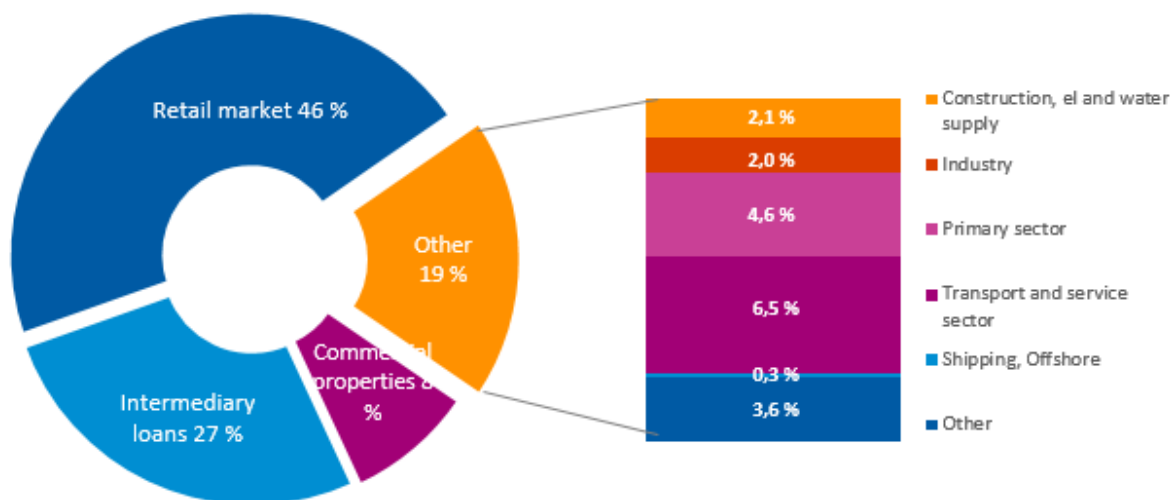
*Figure 5 Gross lending broken down by geographical area*



As of 31 December 2017, the Group has the greatest exposure in Nordland, at NOK 27.6 billion. This accounts for 39 per cent of the Group's total lending exposure. Exposure in Troms and Svalbard makes up 31 per cent, or NOK 22 billion.

The composition of the lending portfolio as at 31 December 2016 is presented in the figure below.

Figure 6 - Segment breakdown of the lending portfolio, including intermediary loans. The bar chart shows the exposure in different industries; the percentages are relative to the whole lending portfolio.



The Group has a high proportion of customers in the retail market and a well-defined commercial portfolio. The occupancy rate in commercial property in the Group's market area is satisfactory, and not major problems have been found in lending within this segment. Refer to the appendix to this document for a detailed presentation of the industry-level lending data.

The figures below show the trend in the volume of gross lending in the Group. The figures include loans set up in SpareBank 1 Nord-Norge and later transferred to SpareBank 1 Boligkreditt. The Group's gross lending to customers amounted to NOK 96 billion as of 31 December 2016, with 72 per cent in the retail market and 28 in the corporate market and the public sector. Compared with 31 December 2015, this is an increase of 8.9 per cent. Retail banking loans grew by 9.0 per cent, corporate- and public sector borrowings by 8.6 per cent.

Figure 7 - Growth in ending in the retail market and in the corporate and public-sector market.

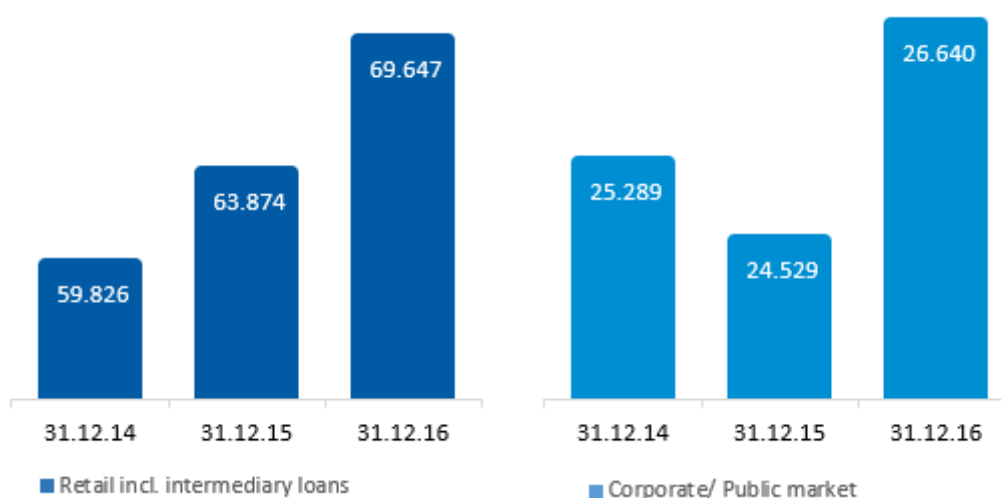
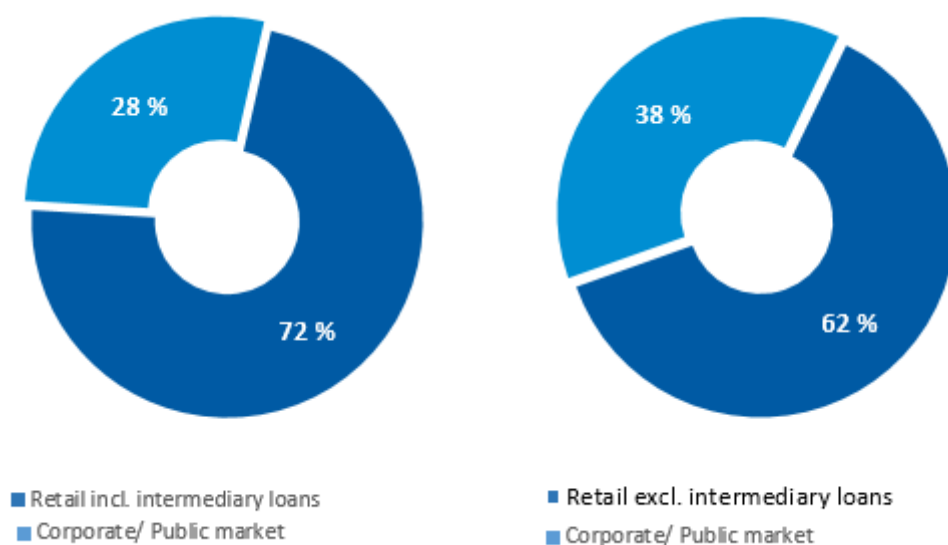




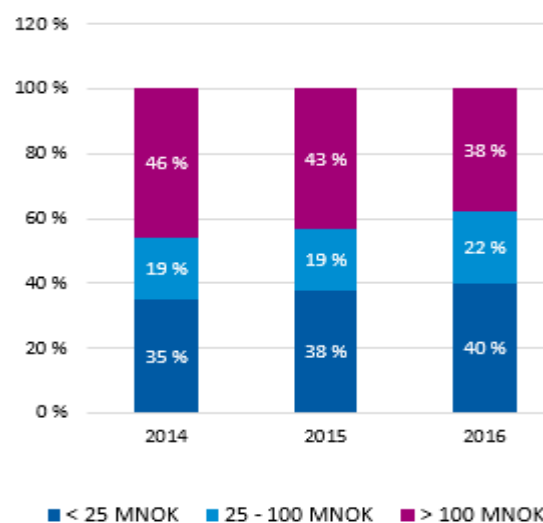
Figure 8 - Proportion of lending volume by segment, with and without intermediary loans.



The growth within the corporate market is a result of the Group's investment in small and medium-sized enterprises (SMEs), as can be seen from the composition of credit exposures by economic sector (parent bank) in relation to commitment size.

In the course of the year, the risk breakdown of the lending portfolio has improved, and the volume of bad and doubtful commitments has decreased; see Annual Report, note 11. Overall, the Group's credit risk is considered to be low in the retail market and moderate in the corporate market.

Figure 9 - Trend in credit exposures broken down by size of commitment.



## 5.3 DEFAULT AND WRITE-DOWNS

The Group has its own procedures for identifying and following up high-risk customers through watch lists and early warning systems. These procedures are designed to help detect and handle risk, provide a system to take early action vis-à-vis the customer, and to minimise any loss to the Group.

### DEFAULT

A commitment is deemed to be in default if one of the following criteria applies:

- A claim has been due for more than 90 days and the amount is over NOK 1,000, or
- The Bank considers it unlikely that the customer will meet their payment obligations as a result of:
  - The debtor suffering significant financial problems
  - Non-payment or other significant breach of contract
  - The customer has been granted new terms (special concessions) due to financial problems
  - Debt negotiations or insolvency are likely (over 50% probability)
  - It is considered that the customer will not meet its payment obligations for other reasons

SpareBank 1 Nord-Norge has special procedures for monitoring commitments in default in the retail and corporate markets. The procedures describe what should be done in various phases of the default work, and who is responsible.

### RESTRUCTURED COMMITMENTS

A commitment is considered to be restructured where a process causes a change to the original credit agreement in favour of the customer, and/or with better conditions than other customers with a similar risk profile would have enjoyed, and the change would not have been allowed if the customer was not in financial difficulties.

Typical signs are significant relaxation of terms in the form of easier interest rates and/or deductions, conversion of debt to other financial instruments, and remission of debt.

## WRITE-DOWNS

A loan or group of loans is impaired if there is objective evidence of a loss event that reduces the estimated future cash flows from the loan. Where there is objective evidence of impairment, losses on lending are calculated as the difference between the book value and the present value of estimated future cash flows, discounted by the effective interest rate. The effective interest rate used for discounting is not adjusted due to changes in the credit risk and terms of the loan. Impairment write-downs are posted to the income statement as losses. Interest income is recognised using the effective interest rate method.

Loans that have not been subject to individual impairment assessments are assessed together in groups. Loans that have been assessed individually, with no objective evidence of impairment, are also assessed in groups. The groups are defined as loans with equal risk and value attributes.

Value changes in impaired commitments (individual write-downs) are divided into the following types:

- Individual write-downs to cover losses on loans and guarantees as at 1 January
- Write-off of loans and guarantees previously written down individually for the period
- Reversal of write-downs from prior years
- Increase in write-downs on commitments previously written down individually
- Write-downs on commitments not previously written down individually
- Individual write-downs to cover losses on loans and guarantees as at 31 December

When it is highly probable that losses are final, they are classified as realised losses. Realised losses that are covered by previous individual loan loss provisions are posted against provisions. Realised losses without cover by way of loan loss provisions and over or under coverage in relation to previous loan loss provisions are recognised through profit or loss.

Value changes, or losses, are divided into the following types:

- Change in individual write-downs for the period

- Change in Group write-downs / change in long-term monitoring for the period
- Write-offs for the period, for which individual write-downs were made earlier
- Write-offs for the period, for which individual write-downs were not made earlier
- Recoveries on loans, guarantees, etc. previously written down
- Other losses

Loans to private individuals are assessed when more than 55 days have elapsed since a default or when there are indications of loss events, or these actually exist.

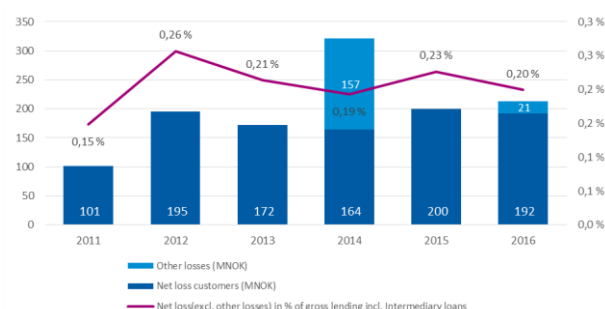
The Bank assesses its entire portfolio of business customers annually. Large commitments, or commitments with a special risk profile, are examined more frequently, with quarterly or monthly reviews. For particularly risky commitments, an action plan will be drawn up and followed up regularly. The assessment is mandatory and is performed on commitments with the following characteristics:

- Large commitment
- High risk
- Negative migration in the risk class
- Commitments subject to special follow-up (watch list, forbearance)

A review of the commitments provides a basis for assessing whether the customer should be classed as doubtful. If the commitment is judged to be doubtful, an individual loss assessment is carried out. The number of commitments defined as being in default but not written-down is limited. Where this does occur, the present value of cash flows from future receipts or the redemption of securities is assumed to cover all of the book value of the commitment.

In recent years, recognised losses have been stable at around 0.20 per cent of gross lending.

Figure 10 - Net loss development



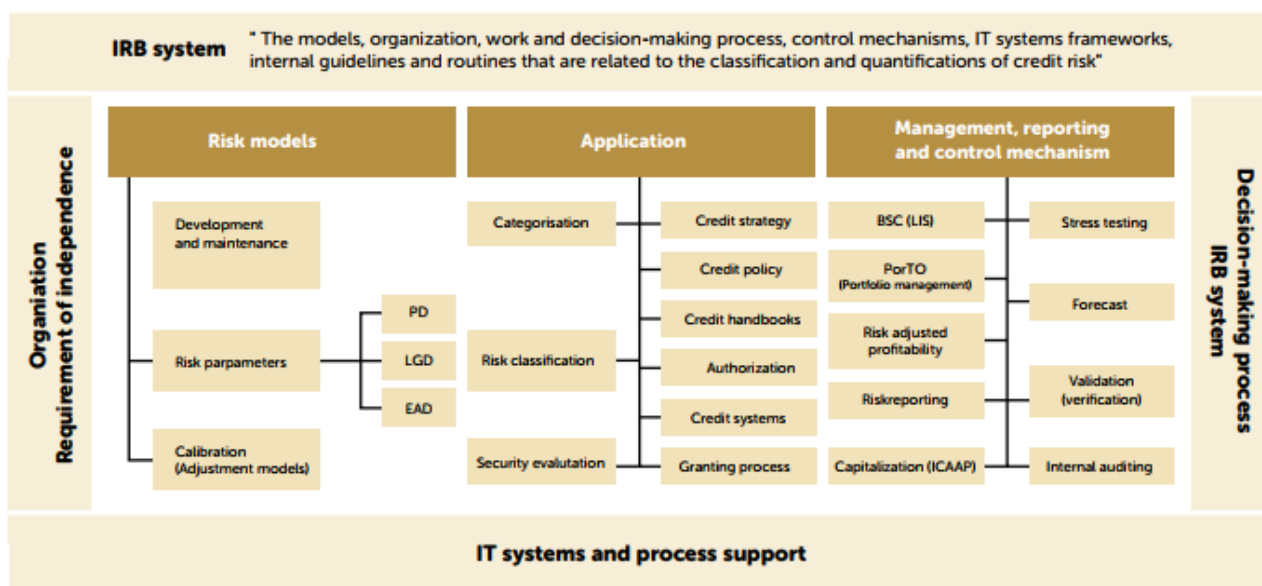
During 2016 the Group increased its collective provision by NOK 126 million, and this increase accounts for a significant part of the recognised losses. The increase in collective provisions relates to the manufacturing, oil-related industry, and fishing and hunting segments. The increase within the manufacturing and oil-related industry segments is based on underlying risk, while the increase within fishing and hunting is based on greater exposure.

For more detailed information on provisions and losses, refer to tables 16 and 17 in the appendix to this document.

## 5.4 THE IRB METHOD

The IRB system encompasses the models, organisation, work and decision-making processes, control mechanisms, IT systems, frameworks, and internal guidelines and routines that are used to classify and quantify credit risk. The objective of the IRB system is to ensure satisfactory fulfilment of the capital adequacy requirements stipulated for the banks. The IRB system affects several key areas in the Bank, as illustrated by the schematic diagram below.

Use of the IRB system presupposes high quality, involvement, compliance and transparency throughout the entire value chain. This includes robust quantitative methods for the measurement of risk, the quality of the processes that produce data for the quantitative methods, and requirements that the organisation integrate and use this data in risk management at all the relevant levels.



## MODEL DEVELOPMENT, CONTROL AND CHANGES

In January 2007, SpareBank 1 Nord-Norge was authorised to use internal models to calculate the capital requirement for credit risk (the IRB method). In February 2015, the Bank was also authorised to use the advanced IRB method for the corporate portfolio. The models have been developed in the SpareBank 1 Alliance, using the Alliance's shared centre of expertise for credit models (KFK) to lead model development and design.

SpareBank 1 Nord-Norge, by way of the Board, has a separate responsibility for ensuring that the IRB system is used and complied with in line with the applicable rules and conditions of the IRB authorisation. To ensure that the models are sufficiently precise and that they are used as intended, the risk management system is constantly checked and validated by the Group's own Risk Management department, while the operational credit monitoring is performed by the Credit department. Any model changes are approved by the Group Board and implemented by the Risk Management department. The Group's validation process is described in more detail later in this section.

Internal Audit, at the request of the Board, reviews the IRB system and its use on a regular basis, and at least once a year. The audit also includes an assessment of

the Bank's use of the IRB system and compliance with the Norwegian Capital Requirements Regulations. It evaluates the conditions of use in the Capital Requirements Regulations which specify that the Bank has to use all elements of the IRB system in monitoring, risk control and capital allocation, and the approval and follow-up of individual commitments. It also evaluates the relevant requirements for stress-testing and validation. The aim is to provide the Board and senior management with an independent and impartial assessment of the IRB system. Internal Audit also makes recommendations for improvements to the IRB system.

## CREDIT MODELS

SpareBank 1 Nord-Norge uses in-house models to estimate the probability of default (PD), exposure at default (EAD), loss given default (LGD), expected loss (EL) and unexpected loss (UL). The credit models are used for risk classification, portfolio management and calculating capital needs. The risk classification system calculates credit risk in the lending portfolio at

individual account level, and the system is based on the following main components:

Probability of default	Customers are classified in risk classes according to the likelihood of the customers defaulting on their commitments during a 12-month period
Exposure at default	This is the estimate of what the exposure will be if a customer defaults
Loss given default	This is an assessment of how much the Group could potentially lose if the customer defaults on his/her/its commitments.
Expected loss	Describes the amount that the Group must statistically expect to lose during a 12-month period
Risk category	Customers are classified in risk categories according to the probability of default
Risk-adjusted capital	The amount of capital the Group may set as buffer for future unexpected losses
Risk pricing	The Group is committed to price risk correctly and has a price model that calculates the price based on the risk involved

## PD – PROBABILITY OF DEFAULT

Probability of default (PD) is the likelihood of a customer defaulting on its commitments during a 12-month period. A commitment is deemed to be in default if one of the default criteria listed in section 5.3 applies: The commitments are classified into risk classes according to their probability of default. A commitment is deemed to be in default if one of the following criteria applies:

The probability of default is calculated based on historical data series for key financial indicators, as well as non-financial variables such as behaviour and age. The commitments are classified into risk classes according to their estimated probability of default. Risk classes A-I for healthy customers, and risk classes J/K

for customers with bad or doubtful commitments. The PD level for the various risk classes is presented in the table below.

The PD models for SpareBank 1 are calibrated against long-term outcomes, an overall level of default designed to reflect default over a hypothetical cycle of normal and crisis years.

The regulatory PD model is calibrated against a slightly higher long-term default rate than the Bank's own assessment of the long-term outcome. The Financial Supervisory Authority of Norway has also laid down guidelines for the lowest levels of regulatory PD, where mortgage customers have the lowest PD, at 0.20%. This means that no customers in risk class A appear in regulatory reports.

Risk class	Lower limit	Upper limit	Rating scale S&P	Rating scale, Moody's
A	< 0.00%	0.10%]	AAA - A-	Aaa – A3
B	< 0.10%	0.25%]	BBB+ - BBB	Baa1 – Baa2
C	< 0.25%	0.50%]	BBB-	Baa3
D	< 0.50%	0.75%]	BB+	Ba1
E	< 0.75%	1.25%]	BB	Ba2
F	< 1.25%	2.50%]	BB-	Ba3
G	< 2.5%	5.00%]	B+	B1
H	< 5.00%	10.00%]	B	B2
I	< 10.0%	99.99%	B- - CCC/C	B3 – Caa3/C
J	100% - default exceeding 90 days			
K	100% - commitment with loss provision			

## EAD – EXPOSURE AT DEFAULT

Exposure at default (EAD) is defined as the exposure the bank has to a customer in the event of future default. The credit conversion factor, KF, is defined as the percentage of the unused limit which would be drawn on and outstanding at the date of default. For the retail market, a conversion factor of 100 per cent is used for drawing rights. This means that it is assumed that existing unused credit will have been fully drawn down on default. For credit limits in the corporate segment, different conversion factors are used depending on the risk class. The Norwegian Capital Requirements Regulations specify a conversion factor of 50 per cent for all guarantees, except for loan guarantees, which are set at 100 per cent. The KF estimates are also required to anticipate the actual conversion factor in an economic slump.

## LOSS GIVEN DEFAULT (LGD)

Loss given default (LGD) is the expected loss that could occur if the customer defaults on its obligations. Among other things, the LGD model takes account of the realisable value of the securities lodged by the customer. The potential loss calculated by the model is an estimate of the potential loss in an economic slump.

LGD calculations for housing loans are regulated via the LGD floor and the Financial Supervisory Authority of

Norway's benchmark model. The Norwegian Capital Requirements Regulations require the EAD-weighted average LGD for the mortgage portfolio to be at least 20 per cent. The Financial Supervisory Authority of Norway has also developed its own benchmark model for LGD. Circular 8/2014 requires the bank's LGD models to be calibrated such that average LGD for the bank's portfolio is no lower than the level specified in the Authority's benchmark model.

## EL – EXPECTED LOSS.

Expected loss (EL) is the amount that the bank may statistically expect to lose on the lending portfolio during a 12-month period. Expected loss is calculated by multiplying PD, EAD and LGD.

## UNEXPECTED LOSS - UL (RISK-ADJUSTED CAPITAL)

Risk-adjusted capital, also called unexpected loss, is a measure of losses over and above the expected loss. The parameter describes how much capital the company believes it really needs to cover the actual risk the company has assumed. Risk-adjusted capital is calculated with a confidence level of 99.9 per cent.

## VALIDATION

The Group has established a process for continuous enhancement and back-testing of the IRB system. The purpose of the validation process is to ensure that:

- The IRB system is adapted to the portfolios on which it is used
- The prerequisites on which the IRB system is based are reasonable
- The IRB system measures what it is meant to measure
- The IRB system is well-integrated throughout the organisation and represents a key part of the group's risk management and decision-making process
- SpareBank 1 Nord-Norge complies with the Capital Requirements Regulations

The validation process comprises two main components, quantitative and qualitative validation. Quantitative validation covers all validation activities linked to the calculation of statistical parameters for the credit models based on empirical data. This includes benchmarking, back-testing and evaluation of discriminatory power, and is meant to ensure that the estimates used maintain an adequate level and quality. Qualitative validation is used to monitor and quality-

## QUALITATIVE VALIDATION

The qualitative validation checks a number of areas in order to quality-assure the integration and use of the IRB system. Areas for qualitative validation:

- Framework, procedures and documentation
- Organisation and corporate culture
- Competence
- Data, models and classification
- Reporting/management confirmation
- Validation and stress testing
- Monitoring of areas for improvement

There is a review of each area and of what the bank does in day-to-day use, and how the work is documented and followed up. There is an assessment of whether qualitative requirements have been met, and of possible areas for improvement to be addressed in the future.

assure the use of the IRB system in the organisation. Among other things, qualitative validation sets out to examine whether the models are being used in accordance with the conditions of use, whether the guidelines produced are adequate, and whether compliance with them is satisfactory.

The validation process is coordinated by the Group's Risk Management department. The results of the validation process are summarised each year in a report to the Board and form the basis for the Board's assessment of the IRB system.

The banks in the SpareBank 1 Alliance use 'data pools', whereby the data used for validation comprises data from both the Alliance and the local bank level. This base data is used as input to the Bank's quantitative validation of the IRB models. The quantitative validation is carried out by validation staff in the Risk Management department. The qualitative validation is carried out in parallel by the Credit department. The validator produces a quantitative and qualitative validation report which is presented to the management forum for risk and capital management. This forum, in collaboration with the validators, recommends possible changes in light of the validation results. Recommended changes from the forum are discussed, and possibly adopted, by the Board.

The latest validation report shows that the IRB system is well integrated into the organisation and that there is satisfactory competence and understanding of the risk classification system in the Group. The IRB system is used in accordance with the conditions laid down in the Norwegian Capital Requirements Regulations.

## QUANTITATIVE VALIDATION

The quantitative validation assesses the models for PD, EAD, LGD and EL against the Norwegian Capital Requirements Regulations. For each model there is an assessment of the base data, the discriminatory power of the models, the accuracy of the models and the stability of the estimates.

There is a review of the base data for the different models, to assess whether the data on which the validation is based are of sufficient quality. The basis should be representative of SpareBank 1 Nord-Norge's portfolio. The requirement for satisfactory quality



means that the base data must be of a quality to enable estimated values to be compared with actual outcomes.

Validation of the discriminatory power of the models involves back-testing the ability of the models to distinguish between strong and weak customers over time and across different segments. The ranking ability of the PD model is tested by analysing whether the actual default rate among customers with low probability of default is lower than the default level among those with a higher PD. For the LGD model, analyses are run of the ability of the model to distinguish between customers with high and low loss levels. The ability of the EAD model to rank customers with the highest and lowest conversion factors is also tested. The model for the retail market uses a conversion factor of 1, so does not rank individual customers. The ranking ability is therefore tested only for the EAD model for the corporate market.

Validation of the accuracy of the models includes examining whether they are calibrated at the right level. This means assessing whether the estimates from the models match actual outcomes, within different categories and across the board. The models should help to increase knowledge of the absolute level of credit risk, which is important if they are to be used to manage and monitor risk.

The validation report for 2015 shows that the quality for 2015 of the base data for the different models meets the requirements. Any uncertainties in the base data are allowed for by sufficient safety margins. The ranking ability of the models is generally considered satisfactory.

The PD models for both the retail and the corporate market have very good discriminatory power. The models estimate with good margins, in line with the requirements. The PD models are calibrated against the long-term outcome. Regulatory calibration of these models for both customer segments is slightly higher than the Group's own estimates of long-term outcome.

For the LGD model for the corporate market, the ranking ability is hard to assess because there are few, if any, instances in the best LGD classes. For the LGD model for the corporate market, the number of KF

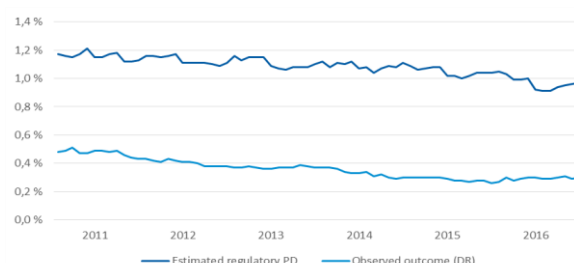
classes will be assessed further in the next validation. In assessing the level in the LGD model and the EAD model, the requirement to estimate for an economic slump is especially important. The EAD models for framework loans are judged to meet this requirement. The LGD models are generally considered to give robust results. Adjustments to the models were implemented in 2017 as a result of findings from the validation process.

Validation for 2016 is planned for the first half of 2017. However, general observations of estimates and outcomes for the PD model and the LGD model are in place, and are presented in the next section.

## PD MODELS

The figures below show estimated weighted regulatory PD and observed default rate (DR). For the retail market, the level of estimated PD is partly governed by the requirements from the Financial Supervisory Authority of Norway laid down via its benchmark model.

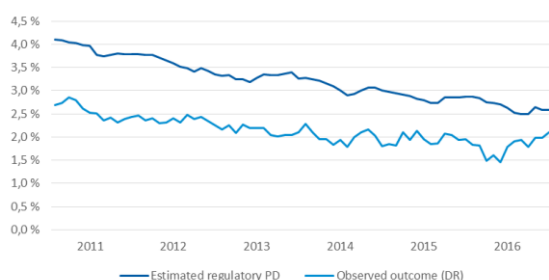
*Figure 11 - Estimated and observed default, retail market mortgage customers*



*Figure 12 - Estimated and observed default, retail market other customers*



Figure 13 - Estimated and observed default, corporate market



There are very good margins between estimated values and actual outcomes for the whole period. The chart for the corporate market shows estimates and actual outcomes for normally scored customers only. These are customers who have submitted accounts. In addition to this scorecard, a fixed PD level is used for new companies and customers who do not submit accounts. For customers rated on the scorecard for new customers, the PD level is set at 5.0 per cent. The average default rate over the last seven years is 3.7 per cent for these customers. The scorecard for customers who do not submit accounts has a fixed PD of 4.0 per cent. The average default rate over the last seven years is 1.6 per cent for these customers. The portfolios scored with a fixed PD make up a small part of the total portfolio.

## EAD MODELS

The figures below show the average for the observed/estimated conversion factor (KF) used to calculate EAD. For framework loans there are often very few observations. This is because there are few cases of default, and because commitments included in the measurement of observed KF can only include those with an unchanged credit limit at the onset of default. This condition thus excludes commitments where the limits have been reduced before the onset of default, a normal measure in portfolio management.

Figure 14 - Ratio between observed and estimated EAD for the retail and corporate markets



## LGD MODELS

The figures below show estimated and actual LGD for the corporate market and the retail market mortgage portfolio. The estimates are based on customers in default and are normally higher than for the portfolio as a whole.

The chart for the retail market model shows the LGD estimates before adjustment to the requirements from the Financial Supervisory Authority of Norway. These requirements raise LGD relative to their benchmark model and relative to the requirement for a minimum LGD of 20% for home mortgages. The chart for the corporate market shows the estimates both before and after the safety margin defined for capital adequacy purposes.

Figure 15 - Estimated and observed LGD, retail market mortgage customers

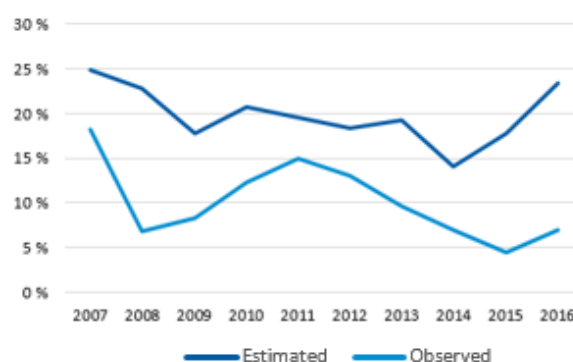
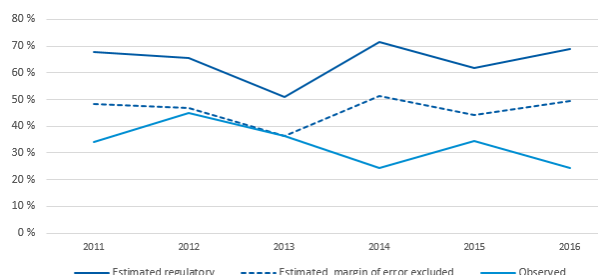


Figure 16 - Estimated and observed LGD, corporate market



The actual loss is often much lower than the estimates for both models. As we know, the A-IRB requirement for the LGD models is that they should allow for an economic slump, so there should be a margin between estimated and actual losses in the period. For the retail market, the margins for the LGD estimates used for capital adequacy are greater than show in the chart, mainly because of the requirement for average LGD to be at least 20% for home mortgages.

## 5.5 STANDARD METHOD

SpareBank 1 Nord-Norge uses the standard method to calculate the capital requirements for credit risk in individual sub-portfolios. The parent bank mainly uses the IRB method, but the standard method is used for commitments with states and central banks, institutions and housing cooperatives. SpareBank 1 Næringskreditt AS, SpareBank 1 Finans Nord-Norge AS and SpareBank 1 Nord-Norge Forvaltning AS use the standard method for the whole portfolio. The risk-weighted basis for calculation for the Group's credit risk where the standard method is used was NOK 14.6 billion at 31 December 2016. For a detailed presentation of risk-weighted assets and capital requirements for credit risk using the standard method, refer to the appendix to this document.

## EXTERNAL RATING AGENCIES

The Group uses ratings from S&P, Moody's and Fitch, and bases its models on the weakest of the three. This method has been used for several years. The ratings are used to arrive at the basis for calculation for bonds in accordance with Circular 9/2014 – Ratings, to determine risk weights for commitments when calculating capital adequacy and to calculate spread risk under Pillar 2.

## 5.6 CAPITAL REQUIREMENT FOR CREDIT RISK

At the end of 2016, the Group's total risk-weighted assets for credit risk stood at NOK 48.4 billion. This represents a capital requirement of NOK 3.9 billion. At the end of 2015, the total risk-weighted assets for credit risk stood at NOK 51.7 billion.

In the calculation of capital adequacy, the same rules do not apply to consolidation of associates and joint ventures as for the financial statements. In terms of capital adequacy, the Bank is subject to the rules on significant and insignificant shares in financial institutions. Under 'Group capital adequacy', credit exposures in companies with shares over 20 per cent should be consolidated proportionally, and fully consolidated for shares over 50 per cent. This means that BN bank is consolidated proportionally. The Bank has significant holdings below 20 per cent in SpareBank 1 Næringskreditt and SpareBank 1 Boligkreditt. For these companies, the Bank has applied for and been granted proportional consolidation. In accounting terms, the holdings in these companies mean that they are not fully consolidated, and credit exposures in these companies are not included in gross lending.

The table below shows the risk-weighted assets for credit risk according to the IRB method and the standard method. The Bank has found that the present categorisation of companies means that it has a percentage of specialised companies which is significantly higher than other comparable banks. Whether or not a company is categorised as specialised under the current rules has no bearing on the capital requirement. The Bank's current categorisation of companies as specialised enterprises is based solely on the company's industry code, without any explicit view as to whether the conditions in Section 9-1 third paragraph of the Norwegian Capital Requirements Regulations are satisfied. If one of more of the conditions are not satisfied, the commitment should not be categorised as a specialised company. The Bank has therefore started work to bring the categorisation in line with market practice and the provisions of the Regulation.

Table 2 - Risk-weighted basis for calculation for credit risk 31.12.16

Amounts in NOK millions	Commitment category	Commitment	EAD	Basis for calculation	Risk weight
Companies	SMEs	6,462	5,898	4,006	67.9%
	Specialised companies	18,304	17,894	10,971	61.3%
	Others	1,397	1,367	1,536	112.3%
<b>Total businesses</b>		<b>26,164</b>	<b>25,159</b>	<b>16,513</b>	<b>65.6%</b>
Mass market	Property commitments – SMEs	1,880	1,875	525	28.0%
	Property commitments – non-SMEs	74,671	74,668	15,676	21.0%
	Other SMEs	186	183	54	29.7%
	Other non-SMEs	2,014	2,012	889	44.2%
<b>Total mass market</b>		<b>78,750</b>	<b>78,738</b>	<b>17,145</b>	<b>21.8%</b>
<b>Total IRB</b>		<b>104,914</b>	<b>103,897</b>	<b>33,658</b>	<b>32.4%</b>
<b>Standard method</b>		<b>44,085</b>	<b>44,007</b>	<b>14,565</b>	<b>33.1%</b>

## 5.7 COUNTERPARTY RISK FOR DERIVATIVES

The Group handles counterparty risk associated with the banking and trading book (market risk) through its capital markets strategy and lines of credit granted (customers). Counterparty risk is defined as the risk of the Bank's counterparties being unable to meet their contractual obligations at the specified time.

As of 31 December 2016, the Bank had not yet started clearing derivative trades (EMIR), although the infrastructure for this is almost complete. For counterparties with ISDA/CSA, SEB is used as an agent for lodging security.

Counterparty risk is monitored and controlled by looking at the gross outstanding position with each counterparty. The market value method is used to measure derivative exposure; see Section 21 of the Norwegian Capital Requirements Regulations and the

standard method for CVA. CVA is calculated at portfolio level.

The Group's counterparty risk is managed and monitored primarily through the daily follow-up of risk exposures against the limits stipulated by the Board and lines of credit granted. The check takes place in the front-office (SNN Markets and the Group Treasury function) and is double-checked by the back-office. The Risk Management department is responsible for the ongoing, independent monitoring of market risk.

Security for derivative exposure is covered by the CSA (Credit Support Annex), which is an addition to the standardised contracts between the Group and the counterparty banks (the ISDA Master Agreement). The Group monitors collateral as part of its daily procedures. The actual administration of net liabilities to all CSA counterparties is handled by SEB through agreements on collateral management.

Figure 3 - Financial derivatives

Amounts in NOK thousands	Nominal value	Credit equivalent	Weighted amount	Capital requirement
Interest-bearing and currency instruments in the trading portfolio	12,288,020	156,014	31,203	2,496
Interest-bearing and currency instruments, hedging	41,986,380	1,581,941	535,061	42,805
Commodities	480,014	71,526	22,985	1,839
<b>TOTAL</b>	<b>54,754,414</b>	<b>1,809,481</b>	<b>589,249</b>	<b>47,140</b>

## 6 MARKET RISK

Market risk is defined as the risk of losses due to changes in observable market variables such as interest rates, foreign exchange rates and securities markets.

Market risk arises primarily in connection with the Bank's investments in bonds, certificates and shares, and as a consequence of activities carried out to support ordinary banking operations, such as funding and interest rate and currency trading. There is also market risk in the banking activities. This basically involves interest-rate risk on lending and deposits where differing interest rate lock-in periods on assets and liabilities are a source of interest-rate risk. The Bank has a small trading book which is used to procure bonds for customers.

Market risk is primarily monitored through the daily follow-up of risk exposure based on the limits stipulated by the Board of Directors and an ongoing analysis of outstanding positions. The exposure limits are reviewed and renewed at least once a year.

### 6.1 MANAGEMENT AND CONTROL OF MARKET RISK

SpareBank 1 Nord-Norge reviews the Bank's capital market activities every year.

A specific capital markets strategy is presented to the Board concerning the Bank's capital market activities based on this review. The strategy covers status within the area with regard to the Bank's own capital market activities - Treasury and SNN Markets, where all customer activities within the capital markets area are gathered. Proposed exposure limits are also considered.

The managing director lays down the framework and delegates authority through the delegation table.

The limits are determined based on stress tests and analysing market movements, as well as risk capacity and appetite.

The Group's market risk is managed and monitored primarily through the daily follow-up of risk exposures

against the limits stipulated by the Board and ongoing analysis of outstanding positions. The Risk Management and Compliance department is responsible for the ongoing, independent monitoring of market risk. It reports to the Board of the Bank at least monthly.

### 6.2 EXPOSURE

For a presentation of the Group's market risk exposure, refer to Notes 15, 16, 17 and 30 in the Annual Report.

Market risk is a significant risk area within the Group's Pillar 2 requirement of 1.5%.

## 7 OPERATIONAL RISK

Operational risk is defined in Sparebank 1 Nord-Norge as the risk of losses due to weak or inadequate internal processes or systems, human error or external incidents. Operational risk encompasses legal risk, but not strategic or reputation risk.

In managing operational risk, the Group first tries to prevent and limit the negative impact of adverse events, partly by maintaining sufficient internal control. The work of managing operational risk should also support the Group's strategic goals, particularly that of 'Quality in everything we do'.

### 7.1 MANAGEMENT AND CONTROL OF OPERATIONAL RISK

The management of operational risk is an important part of the Group's comprehensive risk management. The Bank's ability to work systematically with management and control, including the systematic follow-up of weaknesses/improvement areas is the foundation its management of operational risk.

The Risk Management department is responsible for the ongoing, independent monitoring of the operational risk. The department reports on status and developments in this area as part of its quarterly risk report to management and the Board. Each year, the Board also receives an independent assessment from

Internal Audit and the auditor responsible for the Group's risk management, confirming whether the internal control is working in an appropriate and satisfactory manner.

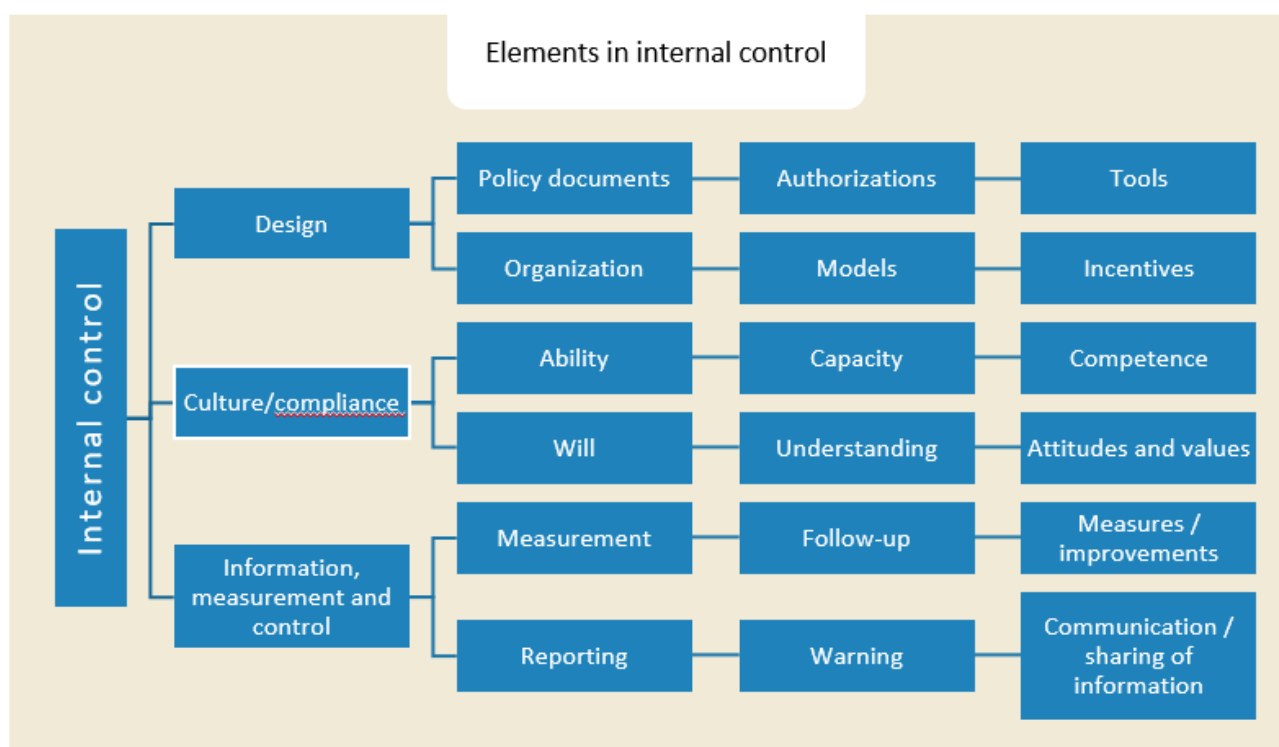
Two annual analyses in particular help to assure quality in risk management:

- The management confirmation, which is part of the internal control confirmation
- Evaluation of management and control

The management confirmation in SpareBank 1 Nord-Norge is an analysis in which all managers of specialised and business units assess the internal control within their areas of responsibility. The various elements of internal control, including compliance, are evaluated.

After the managers' self-assessment of their respective areas, the elements of internal control are reviewed by the senior group general managers and the directors of the subsidiaries. The review focuses on the main features, areas for improvement and differences between departments/units. This enhances learning across units/departments and creates an end-to-end understanding of the work on internal control. Ideas and areas for improvement from the analysis are entered in the Group's improvement database. This takes the form of projects and/or measures designed to provide for sufficient internal control over time, and also to support good risk management and strategic goal attainment.





In addition to the management confirmation, there is an annual self-assessment of management and control for each of the key risk types based on the Financial Supervisory Authority of Norway's modules for risk-based supervision. This review is an important part of the Group's annual ICAAP, and here too, identified areas for improvement are entered in the Group's improvement database.

The Group should be focused and equipped to detect and understand risk and also to learn from adverse events. Operational losses and events should be recorded in the Group's incident database. Where areas for improvement can be identified from events recorded in the incident database, such as systematic errors or events that require preventive measures to maintain adequate quality or control, these areas for improvement should be entered into the Group's improvement database. This will ensure that lessons from events are taken on board while internal control is maintained at a satisfactory level.

In the Group's work on event handling and contingency planning, the right skills and capacity are two of the most important priorities. The threat situation in recent

years has seen both customers and the banks themselves increasingly subject to attacks (hacking, phishing, ransomware etc.). This places great demands on the capacity of the security functions in the banks, particularly as criminals often strike during holidays and weekends when capacity can generally be expected to be lower. SpareBank 1 Nord-Norge, together with the SpareBank 1 Alliance, is equipped with the right skills and the right capacity to be able to handle any events that might occur. Good, up-to-date systems, good procedures, a clear division of responsibilities and good capacity to handle attacks over time should give the Group sufficient control over this type of ICT risk.

## 7.2 CAPITAL REQUIREMENT FOR OPERATIONAL RISK

The capital requirement for operational risk is calculated using the standardised approach, and by the basic method for subsidiaries and associated companies. At the end of 2016, the Group's total capital requirement for operational risk was NOK 297 million. Refer to the appendix to this document for detailed information.

## 8 LIQUIDITY RISK

Liquidity risk is defined as the risk of the Group being unable to fund increases in assets and being unable to meet its obligations as its overall funding requirements increase without a dramatic increase in costs. Liquidity risk is generally conditional, in the sense that it will only become visible when other events raise concerns about the Group's ability to settle its accounts.

### 8.1 MANAGEMENT AND CONTROL OF LIQUIDITY RISK

The management of the Group's financial structure is based on an overall funding strategy that is reviewed and approved by the Board at least annually. The liquidity strategy reflects the desire for low to moderate funding risk.

The organisation of the Bank's liquidity management is governed by a clear authorisation and reporting structure, in accordance with the Regulations on Prudent Liquidity Management.

Liquidity risk is managed and measured with the aid of several measurement methods, as no single method can quantify this type of risk. The methods include limits for maximum refinancing needs within different maturities, balance-sheet indicators, survival targets in a normal situation assuming closed capital markets and the short term liquidity target of LCR. Internal stress-testing of the Group's viability is also carried out under various scenarios, including a serious banking and market-specific crisis. The results of the stress tests are included in the information used to produce the Group's liquidity strategy and contingency plan.

The funding risk is reduced by diversifying funding across several markets, funding sources, instruments and maturities. Too much maturity concentration increases the vulnerability of refinancing. An attempt is made to limit this risk through defined limits.

The Group's Treasury department is responsible for ensuring that the Group stays within the liquidity limits set by the Board at all times. Compliance with the limits is monitored by the Risk Management and Compliance

Department. The status of the limits adopted by the Board is reported to the Board every month.

### MANAGEMENT FORUM FOR RISK AND CAPITAL MANAGEMENT

The forum is an advisory body in the market and liquidity area in the Bank.

The management forum for risk and capital management reviews liquidity risk, limit utilisation, balance sheet composition and funding structure once a month. Maturity diversification is reported once a month to the Board and the balance-sheet committee via a graphical presentation of the maturity structure. The frequency of meetings depends on the situation in the market.

### RECOVERY PLAN

The Group has prepared a recovery plan for the management of liquidity and financial strength during periods of unrest in the financial markets, in accordance with the Crisis Management Directive. The plan is approved by the Board of Directors and reviewed by the Financial Supervisory Authority of Norway. The plan should be revised as and when necessary and at least once a year.

The purpose of the plan is to describe the management's strategy for handling crises and the Group's contingency capacity. More detailed information on the recovery plan can be found in section 4.6 on risk reporting.

### 8.2 EXPOSURE

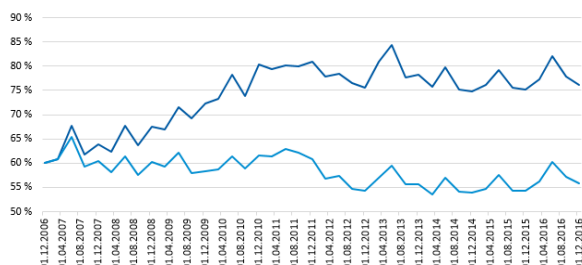
Deposits from customers represent the Bank's main source of funding. At the end of the fourth quarter of 2016, the deposit coverage ratio, excluding intermediary loans, was 76.1 per cent.

SpareBank 1 Nord-Norge has good deposit coverage by Norwegian standards. The Bank has had a target of a minimum of 50 per cent deposit coverage for the Group and 70 per cent after transferring the lending portfolio to Boligkreditt.

Loan capital in SpareBank 1 Nord-Norge is concentrated around issues of senior bonds in NOK. The picture is slightly different if we include the Group's share of SpareBank 1 Boligkreditt's OMF financing in other

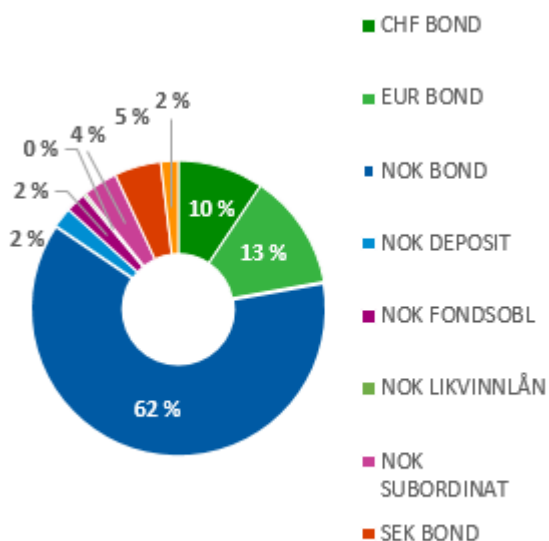
currencies. Overall, diversification is considered satisfactory, particularly in combination with the Group's maturity profile.

Figure 17 - Development of deposit coverage



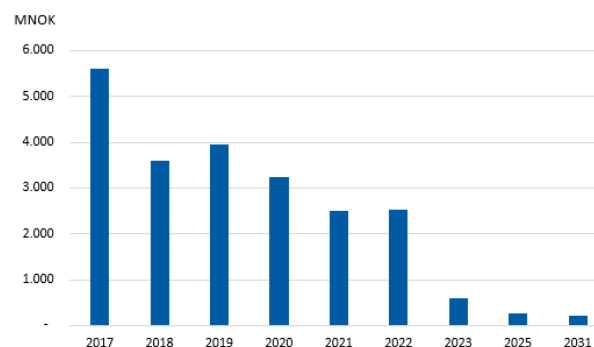
The Group's deposit coverage has been very stable in the last few years. Board targets have been set for the composition of deposits, and these are closely monitored to maintain the right level of risk.

Figure 18 - Loan capital



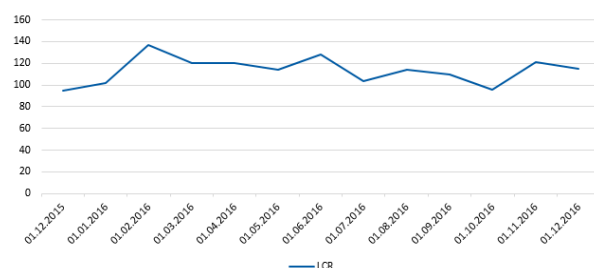
The bank's funding maturity in 2017 is NOK 5,604 million (of which NOK 453 million is in EUR and NOK 284 million in SEK). The weighted average term to maturity of the financing is 2.87 years. SpareBank 1 Boligkreditt AS represents an important source of funding for the Group. The share of total mortgage lending transferred to the mortgage company was 36.4 per cent as of 31/12/2016. The figure below shows the bank's overall maturity profile as at 31/12/2016.

Figure 19 - Funding maturity



The figure below shows the historical development in LCR. The Group has adapted well to new minimum requirements in LCR and actively uses the indicator in its day-to-day liquidity management, including the daily liquidity forecast.

Figure 20 - LCR development



The liquidity reserve is affected by the adjustment to LCR, which has resulted in recent years in liquidity reserves with better credit quality than before. The liquidity reserve as at 31/12/2015 was NOK 9.9 billion.

## 9 OTHER RISK TYPES

### 9.1 OWNERSHIP RISK

The Group's ownership risk depends on its shares in subsidiaries and associates, and the factors that affect their results and capitalisation. The risk therefore depends on the activities of the individual companies and their underlying risk.

The Bank's exposure in associated companies is significant, and is important to the Bank's operation, development and results. The companies and the cooperation within the alliance give the Bank access to up-to-date products and systems, while the costs are held at an acceptable level through sharing with the alliance banks.

Ownership risk is calculated for SpareBank 1 Gruppen and SpareBank 1 Kredittkort. These are companies in which the Group has a significant stake as defined in the Capital Requirements Regulations, but where it does not apply proportional consolidation. In the companies that are consolidated for capital adequacy purposes, the underlying risk is included in the various risk categories in proportion to ownership. Other smaller holdings/companies are handled as equity risk; see Note 31 to the Annual Report for 2015 for an overview of shareholdings.

The book value of stakes in associated companies is just under 5 per cent of the total assets in the Group. The stakes have a major impact on the Group's financial strength and results. Volatility in results from most associated companies is associated with credit risk; for SpareBank 1 Gruppen, it is also associated with market risk through the structure and exposures of the life company (SpareBank 1 Livsforsikring AS). SpareBank 1 Nord-Norge is represented on the boards of the associates, and plays an active role in safeguarding the Group's interests.

SpareBank 1 Nord-Norge has a strong focus on management and control in companies in which the Bank has full or partial ownership.

In companies that are partially owned, either through direct ownership by SpareBank 1 Nord-Norge or

indirectly through ownership of 19.5% of SpareBank 1 Gruppen, SpareBank 1 Nord-Norge is represented on the boards of all the major companies.

A good supply of information is provided through active board participation, which safeguards SpareBank 1 Nord-Norge's ownership interests. In cases that are of importance to SpareBank 1 Nord-Norge's other operations, the individual board chairman/member will submit the matter for a plenary discussion by the Group management team, which meets every week.

### 9.2 BUSINESS RISK

The Group's business risk is the risk of falls in earnings, significant changes in capital needs due to new regulatory requirements, and/or declining confidence or damage to its reputation in the market due to serious events. The risk can manifest itself as a weakening of the results that may be attributed to competitive conditions that result in lower volumes and pressure on prices, competitors introducing new products, government regulations or negative media coverage. Negative results effects arise if the Group is unable to adapt its costs to such changes.

Strategic planning is the most important tool for reducing business risk and involves both preventive measures and plans for how incidents should be managed. The Group's limits and guidelines, corporate culture and the SNN Code of Conduct play an important role in the commercial management of its operations.

The Group's business model and management and control are judged to be robust in the face of changes in the market and regulation by the authorities.

### 9.3 REPUTATION RISK

Reputation risk is defined as the risk of inadequate earnings and funding due to declining confidence and reputation in the market, which includes customers, counterparties, equity certificate holders and authorities.

Reputation risk is inherent in everything SpareBank 1 Nord-Norge is involved in. This is one of the reasons why the Group's strategic goal of 'Quality in everything we do' is crucial. The Group's limits and guidelines for good corporate governance and its guidelines, the SNN

Code of Conduct, play an important role in the commercial management of its operations. In addition to complying with the laws and regulations that are applicable to the Group's areas of activity at any given time, the ethical guidelines focus on attitudes and ethics, and how SpareBank 1 Nord-Norge does business with customers and others.

The Group's corporate social responsibility strategy facilitates the strategic use of communication and strengthens external and internal relationships. Corporate social responsibility should be a means of strengthening our reputation among all relevant stakeholder groups.

Reputation risk is not specifically measured or reported as it is hard to quantify. In order to handle reputation risk, we use indicators for customer satisfaction and feedback from customers in operational follow-up.

## 9.4 STRATEGIC RISK

Strategic risk is the risk of losses due to failed strategic initiatives. This includes the risk of inadequate earnings or generation of capital attributable to changes in framework conditions, poor business decisions, poor implementation of decisions or failure to adapt to changes in the commercial framework conditions.

SpareBank 1 Nord-Norge regularly assesses the Group's strategy by reviewing changes in framework conditions, including the competitive situation, the public authorities' requirements, changes in customer behaviour, and requirements for competence and organisation. A focus on the core business has been a central part of our strategic management, together with the annual strategic analysis which gathers input and risk assessments from the whole organisation.

## ABBREVIATIONS AND DEFINITIONS

<b>Regulatory capital</b>	Regulatory capital is the capital that can be used to cover the capital requirements. Regulatory capital may be made up of core Tier 1 capital and supplementary (Tier 2) capital. Detailed information on what qualifies as regulatory capital, common equity tier 1 capital, tier 1 capital and other capital in calculating capital adequacy is given in the Regulations on measurement of own funds.
<b>Core Tier 1 capital</b>	Core capital is common equity Tier 1 capital plus hybrid Tier 1 securities. Hybrid tier 1 securities are debt instruments that can be converted to equity in specific cases. Issued hybrid tier 1 securities may make up 15 per cent of core capital, while excess amounts can be included in supplementary capital.
<b>Common equity Tier 1 capital</b>	Common equity Tier 1 capital is mainly deposits and retained earnings.
<b>Supplementary (Tier 2) capital</b>	Supplementary capital comprises subordinated loan capital and the portion of hybrid Tier 1 securities that do not count towards core capital.
<b>CRO</b>	Chief Risk Officer. In SpareBank 1 Nord-Norge the CRO is the senior group general manager responsible for the risk area.
<b>EAD</b>	Exposure at default. EAD is the expected commitment in the event of default. The expected amount depends on the limit/credit/funding granted, the balance and the type of commitment.
<b>EL</b>	Expected loss. Depending on PD and LGD, the expected loss is the amount of the loss expected on the commitment.
<b>IRB</b>	Internal rating-based approach. In this context, IRB is an authorisation granted to the Group by the Financial Supervisory Authority of Norway for the Group's own estimates/models to be used to calculate the capital requirement. IRB comes in two categories: F-IRB and A-IRB, where F (foundation) means the basic method and A stands for advanced method. Under A-IRB, the Group uses its own estimates/models for PD, LGD, EL and EAD. For the foundation method (F-IRB), our own model was not used for LGD – LGD was defined by statute.
<b>LGD</b>	Loss given default. The central element of the LGD model is the relationship between commitments and the realisable value of securities. The model also has elements to ensure that LGD is also calculated for well-secured commitments.
<b>LR</b>	Tier 1 leverage ratio.
<b>PD</b>	Probability of default. PD is the estimated likelihood of a customer defaulting on its commitment.
<b>RoE</b>	Return on equity.
<b>RWA</b>	Risk-weighted assets
<b>UL</b>	Unexpected loss. Economic/regulatory capital.