

Pillar 3
SpareBank 1 SMN
2021



Table of contents

- 1. CAPITAL ADEQUACY FRAMEWORK**
- 2. RISK MANAGEMENT AND CAPITAL MANAGEMENT AT SPAREBANK 1 SMN**
- 3. REGULATORY CAPITAL ADEQUACY (PILLAR 1)**
 - 3.1 CREDIT RISK
 - 3.1.1 *Management of credit risk*
 - 3.1.2 *Measurement of credit risk*
 - 3.1.3 *The risk classification system*
 - 3.1.4 *Collaterals and other risk mitigating measures*
 - 3.1.5 *Validation*
 - 3.2 MARKET RISK
 - 3.3 LIQUIDITY RISK
 - 3.4 OPERATIONAL RISK
- 4. ECONOMIC CAPITAL (PILLAR 2)**
 - 4.1 SUMMARY
 - 4.2 CREDIT RISK
 - 4.3 MARKET RISK
 - 4.4 OPERATIONAL RISK
 - 4.5 LIQUIDITY RISK
 - 4.6 OWNER RISK
 - 4.7 BUSINESS RISK
 - 4.8 STRATEGIC RISK
- 5. COMPARISON OF REGULATORY AND ECONOMIC CAPITAL NEED**

1. CAPITAL ADEQUACY FRAMEWORK

In order to ensure that financial institutions are solid and robust to fluctuations and shocks in the economy, financial institutions are subject to regulation, inter alia through requirements on capital adequacy.

The capital adequacy framework is based on three pillars:

Pillar 1: Quantitative minimum requirements on own funds and a description of methods used for calculating risk weighted volume and eligible capital.

Pillar 2: Requirements on risk management and internal control, including requirements on internal processes for assessing risk exposure and capital need (Internal Capital Adequacy Assessment Process (ICAAP)). The object of ICAAP is to carry through a structured and documented process for assessment of the Group’s risk profile in order to ensure that the Group has sufficient capital to cover the risk associated with the business. Entities are also required to have in place a strategy for maintaining a sufficient level of capital.

Under Pillar 2 supervisory authorities can set requirements for Tier 2 capital if they consider that other capital requirements fail to adequately capture the underlying risk in an institution. Finanstilsynet published in autumn 2016 circular 12/2016 “Finanstilsynet’s methodologies for assessing risk and capital needs”. The circular with appendices sets out the methods employed by Finanstilsynet to quantify Pillar 2 requirements for various risk types.

Pillar 3: Pillar 3 is a requirement set by the authorities to publish information on capital and risk factors. This document describes risk and capital management at SpareBank 1 SMN and aims to cover requirements for the disclosure of financial information.

Pillar 1

The minimum capital requirement is 8 per cent of risk weighted assets. The minimum capital requirement can be met by up to 2% Tier 2 capital and up to 1.5% hybrid capital. SMN aims to meet the minimum requirements through maximum use of hybrid capital and Tier 2 capital.

Capital adequacy is measured as shown in the figure below.

$$\frac{\text{CET1 capital + other Tier 1 capital + Tier 2 capital}}{\text{Credit risk + Market risk + Operational risk + Basel I floor}} \geq 8\%$$

Figure 1 – Calculation of capital requirements

The figure below shows the various methods banks can use to arrive at risk weighted assets.

Credit risk	Market risk	Operational risk
Standardised approach	Standardised approach	Basic indicator approach
IRB foundation approach*)	IRB approach	Standardised approach
IRB advanced approach*)		Advanced measurement approach (AMA)*)

*) Requires Finanstilsynet’s approval

Figure 2 – Methods for calculating risk weighted assets

Banks with approval to use an Internal Rating Based Approach for credit risk base their statutory minimum capital requirement for credit risk on their own internal risk assessments. This makes for a more risk sensitive statutory minimum requirement which to a greater extent reflects the risk in the underlying portfolios.

In the case of the IRB Advanced Approach the risk parameters ‘probability of default’ (PD), ‘credit conversion factor’ (CF) that are used to establish exposure at default (EAD) and ‘loss given default’ (LGD) are calculated using the Bank’s own models. These parameters are used to calculate the capital requirement.

Implementing the capital adequacy framework at SpareBank 1 SMN

SpareBank 1 SMN has received permission from Finanstilsynet to apply an internal rating based (IRB) approach to credit risk as from 2007. SMN received permission to apply an AIRB approach to its corporate portfolio in February 2015.

The subsidiary SpareBank 1 SMN Finans AS has implemented PD-based credit models for portfolio monitoring and in 2011 also implemented PD models for use in the credit granting process. The company is building experience with the models and will consider a subsequent transition to the IRB approach, and the portfolio is therefore reported under the standardised approach until further notice. The company's main business is leasing and secured car loans.

The figure below shows the main approaches used by SpareBank 1 SMN to calculate capital requirements for credit, market and operational risk respectively.

RISK TYPE	AREA	APPROACH
Credit risk	Sovereigns	Standardised approach
	Institutions	Standardised approach
	Housing cooperatives, clubs and associations	Standardised approach
	Companies – parent bank	Advanced IRB approach
	Retail market – parent bank	Retail IRB approach
	SpareBank 1 SMN Finans	Standardised approach
	SpareBank 1 Invest	Standardised approach
	Spire Finans	Standardised approach
	SpareBank 1 Markets	Standardised approach
	Retail market – SpareBank 1 Boligkreditt	Retail IRB approach
	Companies – SpareBank 1 Næringskreditt AS	Standardised approach
	Companies – BN Bank	Advanced IRB approach
	Retail market – BN Bank	Retail IRB approach
	Market risk	Equity risk – parent bank
Debt risk – parent bank		Standardised approach
Foreign exchange risk – parent bank		Standardised approach
Subsidiaries and other part-owned companies		Standardised approach
Operational risk	Parent bank	Standardised approach
	Subsidiaries and associates	Standardised approach

Figure 3 – Approaches employed by the SMN Group to calculate capital requirements

SpareBank 1 SMN has ownership interests in the following companies as at 31.12.2021:

- SpareBank 1 Boligkreditt AS 20.9%
- SpareBank 1 Næringskreditt AS 12.8%
- BN Bank ASA 35%
- SpareBank 1 Kreditt AS 19.2%

SpareBank 1 SMN's share of the capital requirement of these companies is consolidated into SpareBank 1 SMN's capital adequacy reporting based on the Group's ownership interest. SpareBank 1 SMN also owns 19.5% of SpareBank 1 Gruppen. That part of the investment in these companies

which exceeds 10% of the CET1 capital is deductible from SpareBank 1 SMN's CET1 capital. That part of the investment which is included in the CET1 capital carries a risk weight of 250%.

Combined buffer requirements

In addition to the minimum own funds requirement of 8%, Norwegian banks are subject to combined buffer requirements to be met by CET1 capital. The buffer requirements are composed as follows:

- Requirement of a capital conservation buffer (2.5%)
- Requirement of a systemic risk buffer (4.5%)
- Requirement of a countercyclical buffer (0-2.5%)
- Requirement of a buffer for systemically important institutions (1-2%)

The requirement of a capital conservation buffer of 2.5% of the Bank's risk weighted assets applies through all economic scenarios and is designed to ensure that the banks build up capital in good times in order to prevent capital falling below the minimum requirement in downturns.

Systemic risk buffer (4.5 per cent): Systemic risk can be defined as the risk of financial instability causing disruption to financial services on a scale that may have substantial negative impacts on production and employment. The systemic risk buffer is designed to dampen the negative effects of financial instability. The systemic risk buffer was raised from 3% to 4.5% as of 31 December 2020.

The countercyclical buffer aims to dampen the effects of cyclical variations by requiring institutions to build up extra buffer capital in periods of particularly strong credit growth. The assumption here is that this buffer will not be used for the purpose of fine-tuning macroeconomic management by Norges Bank, the central bank. The level is set by the Ministry of Finance based on advice from Norges Bank, and the size of the buffer depends on the cyclical situation in effect.

The purpose of the countercyclical capital buffer is to render institutions more solid and robust to loan losses in a future slump and to dampen the risk that banks will contribute to intensifying an economic downturn by reducing their lending. 12 months' notice is given of any increase in the countercyclical buffer. A reduction of the countercyclical buffer can be implemented immediately. The countercyclical buffer was lowered to 1.0% with effect from 13 March 2020 in light of the uncertainty surrounding coronavirus. In June 2021 it was decided to raise the countercyclical capital buffer requirement by 0.5 percentage point to 1.5% with effect from 30 June 2022. In December 2021 it was decided to raise this requirement by a further 0.5 percentage point to 2.0% with effect from 31 December 2022.

The buffer requirement for systemically important institutions (SIFIs) is 2%. The buffer is designed to reduce the likelihood of difficulties where the wind-down of an institution might involve financial instability and substantial disruptions to the real economy. Institutions defined as systemically important are in all essentials institutions with total assets representing at least 10% of Mainland Norway's GDP or a share of the lending market of at least 5%. SMN is not defined as systemically important as at the end of 2021.

Pillar 2 – Assessment of overall capital need and supervisory review

Pillar 2 imposes requirements on the Bank's process for assessing its total capital in relation to risk profile and a strategy for maintaining its capital level, the Internal Capital Adequacy Assessment Process (ICAAP). The ICAAP covers risk types not covered by Pillar 1, and must be forward looking. Pillar 2 also defines Finanstilsynet's supervisory process.

The supervisory authorities are required to review and evaluate the banks' internal assessment of capital need and strategies. The supervisory authorities are also required to monitor and oversee compliance with the capital requirements imposed by them. The supervisory process follows the requirements on the Supervisory Review and Evaluation Process (SREP) and may result in an

individual Pillar 2 add-on. Finanstilsynet has published descriptions of the models and methods it uses in its determination of Pillar 2 add-ons¹. Finanstilsynet defines capital requirements related to the transitional rules as an independent requirement, which cannot be used to cover other risk types under Pillar 2.

For SpareBank 1 SMN the current Pillar 2 requirement is 1.9%.

Should the Bank breach the combined buffer requirements, a capital plan must be presented to Finanstilsynet within five working days. The Bank can continue in business, but a breach will involve restrictions on the application of the profit for the year.

SpareBank 1 SMN aims for CET1 ratio of 16.9% as of 31.12.21, implying a countercyclical buffer of 2.5% over time. The Bank targets a management buffer of 1% in relation to overall Pillar 1 requirements as a Pillar 2 add-on. The Bank considers this buffer to be sufficient to capture fluctuations in profit and growth that may impact on CET1 capital and risk weighted assets.

At the end of 2021 the CET1 ratio stands at 18.0% and total capital adequacy at 21.6% compared with 18.3 and 22.3% respectively at the end of 2020.

Leverage ratio

In addition to the tighter requirements on own funds and combined buffer requirements, the Basel Committee proposed in 2011 the introduction of a leverage ratio as a supplementary capital measure to capital adequacy based on risk weighted assets. The proposal was for a minimum requirement of 3 per cent. The European Commission followed this up by introducing in CRD IV a requirement for calculation of the leverage ratio and an ambition to introduce minimum requirements on the level of the leverage ratio as from 2018. The Ministry of Finance has set a minimum leverage ratio requirement of 3.0 per cent as from 30 June 2017. All banks are in addition required to maintain a leverage ratio buffer of at least 2.0%. Systemically important banks are required to maintain a further leverage ratio buffer of at least 1.0 per cent.

The minimum leverage ratio requirement for SpareBank 1 SMN is 5%. At the end of 2021 SpareBank 1 SMN's leverage ratio is 6.9%.

Quantitative liquidity requirements

Introduction of liquidity requirements (LCR)

The requirements on financial institutions in terms of maintaining a liquidity buffer sufficient to survive periods of great stress are increasingly stringent. The LCR (Liquidity Coverage Ratio) largely resembles traditional liquidity indicators but imposes strict requirements as to what qualifies as liquid assets. The main eligible items are cash, government securities and highly liquid assets (in this case defined as covered bonds and well-rated industrial bonds). These assets are intended cover a net negative cash flow in a stressed period of 30 days. 'Stress' includes both on-balance sheet and off-balance sheet items.

Introduction of requirements on long-term funding (NSFR)

In the wake of the financial crisis there has been a growing focus on the maturity of the Bank's funding. The introduction of this key ratio aims to ensure that the Bank's asset side of the balance sheet is funded on a sufficiently long-term and stable basis, in this case defined as funding with maturities above one year.

Pillar 3 – Disclosure requirements

The reporting requirement under Pillar 3 is set out in the capital requirements regulations part IX, chapters 45 and 46. This pillar is designed to complement the minimum capital requirements under

¹ http://www.finanstilsynet.no/no/Artikkelarkiv/Rundskriv/2016/2_kvartal/Finanstilsynets-praksis-for-vurdering-av-risiko-og-kapitalbehov/

Pillar 1 and the supervisory review process under Pillar 2. Pillar 3 is designed to promote market discipline through requirements on the disclosure of information that enables the market, including analysts and investors, to assess the institution's risk management, risk measurement and capital adequacy.

SpareBank 1 SMN publishes supplementary analyses and data on a quarterly basis in "Supplementary Information".

2. RISK AND CAPITAL MANAGEMENT AT SPAREBANK 1 SMN

The risk and capital management regime supports the Group's strategic development and target attainment. Risk management also aims to ensure financial stability and prudent asset management.

This will be achieved through:

- A strong organisation culture characterised by a high awareness of risk and capital management
- A sound understanding of the risks that drive earnings and risk costs, thereby creating an improved basis for decision-making
- Striving for an optimal use of capital within the adopted business strategy
- Avoiding unexpected negative events which could be detrimental to the Group's operations and reputation in the market.

SpareBank 1 SMN aims to maintain a moderate risk profile and to employ risk monitoring of such high quality that no single event will seriously impair the Bank's financial position. The framework for determining the Group's risk profile aims to provide a coherent and balanced overview of the risk to which the business is exposed and consists of statements that define the Group's risk appetite in key risk areas. Risk appetite is defined as desired risk exposure/profile based on an earnings and loss perspective. The Bank's risk profile is quantified through targets for rating, concentration, risk-adjusted return, probability of default, loss ratios, expected loss, necessary economic capital, regulatory capital adequacy and anticipated regulatory liquidity requirements.

The principles underlying SpareBank 1 SMN's risk management are laid down in the Bank's risk management policy. The Bank gives much emphasis to identifying, measuring, managing and following up central risks to ensure that the Group evolves in line with its adopted risk profile and strategies.

The Group's risk is quantified i.a. by calculating expected loss and the risk-adjusted capital (economic capital) needed to meet unexpected losses. Expected loss is the amount which statistically can be expected to be lost in a 12-month period. Risk-adjusted capital is the volume of capital the Group considers it needs to meet the actual risk incurred by the Group. The Board of Directors has resolved that the risk-adjusted capital should cover 99.9% of all possible unexpected losses.

Statistical methods are employed to compute expected loss and risk-adjusted capital, but calculation none the less requires expert assessment in some cases. In the case of risk types where no recognised methods of calculating capital need are available, the Bank defines risk management limits to ensure that the likelihood of an event occurring is extremely low.

Return on risk-adjusted capital is one of the key strategic profit measures in the internal management of SpareBank 1 SMN. It entails allocating capital to the business lines based on the estimated risk attending the business concerned, and continuous monitoring of return on capital. Calculation of risk-adjusted capital enables comparison of risk across risk groups and business lines. To this end the Bank has implemented EVA (Economic Value Added) calculations to keep track of the business lines' risk adjusted profitability. Risk is also monitored by measuring positions relative to quantitative risk limits and key portfolio risk limits.

The Group's overall risk exposure and risk trend are monitored through periodic risk reports to the Administration and the Board of Directors. Overall risk monitoring and reporting are carried out by

Risk Management which is independent of the Group’s business lines.

RESPONSIBILITY FOR RISK MANAGEMENT AND CONTROL

Risk management and control are part of SpareBank 1 SMN’s corporate governance as described in the chapter on Corporate Governance in the annual report. The Group’s control and management model aims for independence in risk reporting, with due emphasis given to responsibilities and roles in the day-to-day risk management. SpareBank 1 SMN has for several years devoted substantial resources to developing effective risk management processes to identify, measure and manage risk.

In the risk and capital management process, organisation culture is the very foundation on which the other elements build. SpareBank 1 SMN’s organisation culture comprises management philosophy, managerial style and the people making up the organisation with their individual qualities such as integrity, values and ethical mindset. A deficient organisation culture cannot be compensated for by imposing other control and governance measures.

The Group attaches importance to a control and management structure that promotes targeted and independent management and control.

Board of Directors

Establishes the Group’s risk profile and ensures that the Group’s own funds are adequate in relation to the risk in the Group and requirements set by the authorities

CEO, business units and supporting units	Risk Management and Compliance	Internal Audit function
First line of defence	Second line of defence	Third line of defence
Day-to-day risk management	Overall risk reporting and follow-up	Independent confirmation
→ Instructions, limits and authorisations	→ Formal reporting	

Figure 4 – Roles and responsibilities in the risk management process

The risk management process at SpareBank 1 SMN is split into the following functions:

- an executive function (including both line (customer responsibility) and Group staff (management/support/control))
- an independent monitoring function (risk management and compliance)
- an independent confirmation function (internal audit function)

This control and management model is designed to ensure independence in decision-making and reporting, and responsibilities and roles in the day-to-day risk management are assigned particular importance. An important principle is that the risk management process is an integral part of the day-to-day business. The risk management and compliance function removes none of the profit centres’ responsibility for sound risk management.

An important basis for effective risk management is a strong risk culture that is characterised by a high awareness of risk and risk management throughout the Group. It requires each and every staff member to have a sound understanding of his/her activity and actions, and of the associated risks. The

responsibility for risk management is shared between the Board of Directors, the Group Management Team and line management.

The Bank's risk management process is grounded in overall risk management strategies adopted by the Board of Directors and in an assessment of the capital situation that defines risk appetite and capacity for risk exposure.

Further, risk management strategies are adopted for various risk types, as well as strategies for the respective business lines that translate risk appetite and ambitions into concrete targets.

Importance is attached to ensuring that the business and risk management strategies are well matched. Current developments in relation to business goal attainment are reported to the Board of Directors monthly via the Group CEO's scorecard, financial reporting and status reports from the business units. This forms the basis for Board of Directors' assessment of the respective units' target attainment.

The Board of Directors receives a quarterly risk and compliance report which enables it to make sure that the activities are being carried out within the risk profile adopted by the Board of Directors.

Further, the internal audit function confirms that the activities are compliant with the framework for internal control that has been established, and that this framework is appropriate. The Internal Audit function meets with the Board of Directors' audit committee ahead of the Board of Directors' consideration to review findings and observations.

Governance systems

The Bank has developed an application portfolio of governance systems which has been distributed to all managers in the Bank.

Several of the management information systems are key to the reading, analysis, documentation, reporting and storage of information related to central parameters in the Group's IRB system, and to following up of improvement measures. The most important systems in this context are:

LIS systems, developed for each division, which include key indicators that are closely linked to the IRB system – such as risk-adjusted return, high-risk share, credit quality and default

The portfolio management system (PorTo), which is the Group's system for reading and reporting key risk parameters related to lending activity, including:

- Probability of default (PD)
- Loss given default (LGD)
- Exposure at default (EAD)
- Expected loss (EL)
- Unexpected loss (UL)
- Risk adjusted return on risk adjusted capital (RARORAC)
- Potential problem exposures

The portfolio management system also provides an overview over actual migration and data for validation and stress testing. The system is flexible, and it is a simple matter for the individual user to export data to a spreadsheet in order to conduct sensitivity analyses and what-if analyses of the portfolio concerned.

PorTo is also used as a starting point for budgeting and setting credit-strategy targets for the coming period.

The **Board of Directors** of SpareBank 1 SMN is responsible for overseeing that the Group's own funds are adequate to the strategic objectives, adopted risk profile and requirements set by the authorities. The Board of Directors establishes the overarching objectives related to risk profile and return. The Board of Directors also establishes overall limits, authorisations and guidelines for risk and capital management within the Group, as well as ethical guidelines intended to contribute to a high

ethical standard. The Board of Directors shall moreover ensure that the management sees to an appropriate and efficient risk management process in accordance with laws, regulations, articles of association and principles described in this document, and establish preparedness and continuity plans to ensure that operations can continue and that losses are curbed in the event of significant unforeseen events.

The work of the Board of Directors is enshrined in an annual plan which is updated on an annual basis. This ensures that the Board of Directors has sufficient time for, and focus on, central tasks.

The Board of Directors has separate committees for risk management, audit and remuneration. The Risk Committee is a preparatory body for the Board of Directors in matters related to the Group's risk management and internal control, while the Audit Committee prepares matters concerning financial information and the associated internal control. The committees comprise the same four members drawn from the Board of Directors. The Remuneration Committee similarly assists the Board of Directors in its work on the Group CEO's terms and conditions of employment, and as regards the main principles and strategy for compensation to the highest echelon of management in the Group. The Remuneration Committee consists of three members of the Board of Directors.

The **Group CEO** is responsible for risk management. The Group CEO is accordingly responsible for seeing to the implementation of effective risk management systems in the Group, and for the monitoring of risk exposures. The Group CEO is also responsible for delegating authorisations, and for reporting to the Board of Directors.

The **business lines** are responsible for the day-to-day risk management within their respective areas of responsibility, and they must at all times see to it that risk management and risk exposure are in compliance with the limits and overarching management principles established by the Board or the Group CEO.

Risk Management is organised independently of the business units and reports directly to the Group CEO. This division is responsible for the Group's risk models and for the further development of effective risk management systems. It is also responsible for independent risk assessment, risk reporting and for overall monitoring of risk.

The **Compliance function** is organised independently of the business units. This function identifies, assesses and makes recommendations, and monitors and reports within the regulatory framework governing SpareBank 1 SMN.

Credit committees. The Group has a Central Group Credit Committee and a Credit Committee For SMB Clients. The credit committees are responsible for delivering an independent recommendation to the authorisation holder concerned. The recommendation:

- assesses loan and credit applications, including renewals, in accordance with the existing credit strategy, credit policy, lending regulations and credit processing procedures
- gives particular emphasis to identifying risk related to the individual application and to providing an independent credit risk assessment
- assures that the consequences for the Group of the various risks have been duly clarified

Credit Support Unit. This unit takes over dealings with customers who are clearly unable, or are highly likely to become unable, to service their debts unless action is taken beyond ordinary follow-up.

Credit Watch Committee. This committee's main focus is on exposures at risk. The committee deals with exposures defined on a centralised watch list, mainly exposures in excess of NOK 50m.

Validation Committee. This committee reviews at least once yearly the validation of the Bank's IRB models. The committee also considers proposals for implementation of new and further developed versions of the Bank's IRB models. The committee submits recommendations to the Bank's Board of Directors, which adopts the final decision.

The **Balance Sheet Committee** is responsible for dealing with matters related to capital structure and liquidity risk, market risk, internal pricing of capital and compliance with limits established by the Board.

The **Internal Audit** is a tool at the disposal of the Board of Directors and the administration which oversees that the risk management process is targeted, effective and functions as intended. The Group’s internal audit is carried out by an external provider, thereby assuring the required independence, competence and capacity. The Internal Audit function reports to the Board of Directors. The Internal Audit function’s reports and any recommendations for improvements in the Group’s risk management are reviewed on a continuous basis.

The Internal Audit function reviews, regularly and at least annually, the IRB system, including the models underlying the calculation of risk parameters and the application of and compliance with the capital requirements regulations. KPMG conducts the Group’s internal audit.

Annual review and Board consideration

Monthly reporting to the Board	Overarching risk management policy	Alignment	ICAAP	
Group CEO’s scorecard				Quarterly risk report to the Board
Accounts	Retail market strategy		Strategy, credit risk	
Divisional reports	Corporate market strategy	Alignment	Strategy, market risk	Four-monthly internal audit reports to the Board
Status Group	Markets strategy		Strategy, liquidity risk	
	Creating value		Protecting value	

Figure 5 – Overview of business strategies and risk strategies in context

CAPITAL MANAGEMENT

SpareBank 1 SMN applies a focused capital management process designed to assure to the greatest possible extent:

- Effective capital procurement and capital application in relation to the Group’s strategic objectives and adopted business strategy
- Competitive returns
- Satisfactory capital adequacy in relation to the chosen risk profile
- Competitive terms and good long-term access to capital market funding
- The Group’s ability to maintain at minimum its present international ratings
- Utilisation of growth potentials in the Group’s defined market area
- That no individual events can seriously impair the Group’s financial position

A long-term objective of the adopted business strategy is to ensure that the risk-adjusted capital is as far as possible allocated to those areas that yield the highest risk-adjusted return.

Legislation imposes on SpareBank 1 SMN rules setting minimum requirements on capital adequacy and financial strength. The Committee of European Banking Supervisors (CEBS) has laid down guidelines for supervisory authorities’ reviews of institutions’ internal capital adequacy assessment process (ICAAP).

As an integral part of its risk management policy, SpareBank 1 SMN has established a capital allocation process (ICAAP) to ensure that the Bank at all times has sufficient own funds in relation to its chosen risk profile. The process also aims to ensure efficient and effective procurement and

application of capital. The Bank has drawn up a recovery plan for handling the capital and liquidity situation should the Group encounter severe pressure on its CET1 capital adequacy, and in periods of turbulent financial markets. Measurements of KRIs (Key Risk Indicators) are made on a continuous basis in order to capture signals indicating that the Bank is moving towards defined trigger levels. Potential measures are identified and quantified.

The capital management process shall:

- be risk-driven and include all significant types of risk within the Group
- be an integral part of the business strategy, management process and decision-making structure
- be forward-looking and include stress testing
- be based on recognised and appropriate risk measurement methods and procedures
- be regularly reviewed, at least annually, by the Board of Directors

Stress tests

Key to the assessment of the Group’s long-term capital need are a stress-testing process and models. The intention is to identify factors which may adversely affect the risk picture and capital adequacy. Stress testing covers all significant aspects of the risk picture and includes an assessment of their significance for the Group’s financial position.

The stress tests represent factors which could arise from time to time, and which SpareBank 1 SMN should make allowance for in the interest of its long-term operation. The assessment and determination of necessary capital forms part of an overall risk assessment, together with an assessment of future growth plans and strategies.

The Group’s stress test and scenario model is illustrated in the following figure:

	Forecast (baseline scenario)	Quantitative effects <u>Financial targets</u> - Financial strength - Profitability - Efficiency	
Assumptions Macro Micro	Forecast (mild downturn)	<u>Risk (incl. Pillar II)</u> - Credit Risk - Market Risk - Liquidity - Owner risk - Business risk	Assessment of measures - Strategies - Limits - Capital plan
	Forecast (severe downturn)	Qualitative assessments - Business development and challenges	

Figure 6 – stress testing structure

A major challenge is to define and translate the macro assumptions into business effects by assessing:

- the credit score models – assessment of migration and changes in probability of default, expected and unexpected loss
- financial strength and profitability – forecasts for normal development and various economic setbacks
- liquidity (funding) – challenges facing the Group and vulnerability to changes in funding level and to a general financial crisis, or unusual situations for the Bank
- the impact on the market and the competitive situation

Description of scenarios

In order to define the macro scenarios we use a simple macro model that sets a minimum requirement for consistency between the macro variables. The model shares many features with Norges Bank’s

macro models but is considerably simpler in order to be operative in Excel. The model contains the following assumptions:

- The production gap is modelled as a function of historical production gap, real interest rate and a residual. Inflation is modelled as a function of historical inflation, production gap and a residual.
- The nominal money market rate is modelled as a function of the divergence between inflation and the inflation target, the production gap and a residual (Taylor rate)
- Unemployment is modelled as a function of historical unemployment and the level of and change in the production gap.
- GDP growth is modelled as a function of the production gap and an assumption for potential growth.
- Operating income, operating expenses and operating profit are modelled as a function of GDP growth, inflation and level of production gap and a residual. The level of the production gap determines the trend in the margin, i.e. the ratio between the growth rates for operating income and operating expenses.
- Finance costs are a simple function of nominal money market rate and a residual which for example takes account of changes in risk premiums.

This model is implemented in all macro scenarios when assessing effects on the balance sheet, profit/loss and risk, and is used in particular to estimate effects on credit risk. Other variables are determined to a larger degree by management judgement.

For the Bank it is important that the scenario and stress test for a severe economic setback should envisage severe – but possible – disturbances in the economy, thereby indicating how much *could* be lost, not necessarily how much probably *would* be lost. Hence, they need not express changes we consider to be probable, since our assumptions make clear that all events take place simultaneously (correlation = 1).

As mentioned, effects of major crises are more a basis for illustrating the effect of possible tremors in the economy and their impact on the Bank’s profitability and financial position. This provides a basis for management’s discussions about measures that may need to be taken in the event of a major banking crisis.

For the authorities it is important that banks conduct scenarios and stress tests in order to reveal the robustness of the financial sector.

SpareBank 1 SMN regularly makes economic projections with a three-year perspective via long-range forecasts.

Reporting and follow-up

An important element of effective risk management is monitoring of current risk exposure. All managers are responsible for day-to-day risk management within their area of responsibility, and they are required at all times to see to it that risk exposure is within the limits decided by the Board of Directors or Group CEO.

The Group’s overall risk exposures and risk trend are monitored through periodic risk reports to the administration and Board of Directors. Overarching risk monitoring and reporting are done by the risk management function which is independent of the business units in the Group.

Significant reporting to the management team and Board of Directors:

Analysis/report	Recipient/decision-maker		Frequency			Comments
	Board of directors	Group CEO	Yearly	Quarterly	Monthly	
Risk management policy - overarching	x		x			Assessment and adjustment of the Bank’s risk tolerance in various risk areas – credit, market, liquidity and operational risk

Risk strategy – credit, market and liquidity risk	x		x			Assessment and adjustment of detailed targets and limits for credit, market and liquidity risk
ICAAP	x		x			Assures that the Group has a process for assessing its total own funds in relation to risk profile. ICAAP also helps to determine a prudent target capital ratio and assure a prudent liquidity strategy.
Recovery plan	x		x			The recovery plan is a tool for identifying opportunities to restore financial strength and stability under severe financial stress. Minimum yearly updating
Risk report	x			x		Quarterly reporting of status and expected development of the Group’s risk profile. Also confirms compliance with and fulfilment of strategic targets and limits laid down in the Group’s risk strategy. Reporting of status at the trigger level in the recovery plan
Key figures report, risk		x			x	Status and trend in relation to targets and limits for credit, market and liquidity risk.
Validation report	x			x		Annual overview of quantitative and qualitative validation
Economic/financial report	x		x	x	x	
Assessment of need for impairment write-down		x		x		Minimum quarterly review of large and potential-problem exposures and portfolios to assess any need for impairment write-down – individual and collective.

Figure 7 – Significant reporting to the management team and Board of Directors:

Risk areas

SpareBank 1 SMN identifies and manages risk within the following overarching risk areas:

- **Strategic risk:** Risk of earnings shortfall or failure to generate capital due to changes in framework conditions, poor business decisions, poor implementation of decisions or failure to adjust to changes in business conditions or regulatory framework.
- **Credit risk:** Risk of loss arising from the customer’s inability or unwillingness to honour their obligations.
- **Concentration risk:** Risk of loss arising from concentration to a single counterparty, sector or geographical area.
- **Climate risk:** Risk of economic losses and financial instability arising from physical climate changes and society’s response to them.

- **Market risk:** Risk of loss due to changes in observable market variables such as interest rates, exchange rates and securities markets.
- **Operational risk:** Risk of loss due to unsatisfactory or failing internal processes or systems, human error or external events. Operational risk includes legal risk, but not strategic risk or reputational risk.
- **Liquidity risk:** Risk that the Group will be unable to refinance its debt or unable to fund increases in assets.
- **Owner risk:** Risk of loss at subsidiaries, SpareBank 1 Gruppen AS or SpareBank 1 Boligkreditt AS refers to the risk incurred by the individual company in its operations, as well as the risk of having to supply fresh capital to one or more of these companies.
- **Business risk:** Risk of shortfall in earnings and capital supply due to lack of diversification of the business base or lack of sufficient and permanent profitability, for example due to an excessively high cost-income ratio.
- **Reputational risk:** Risk of shortfall in earnings and capital supply due to failing confidence and standing in the market, i.e. among customers, counterparties, equity certificate holders and the authorities.
- **Compliance risk:** Risk of the Group incurring public sanctions or fines, financial loss or reputational impairment as a result of non-compliance with laws and/or regulations, standards or internal policies.

Risk appetite framework	
Risk type	Dimension
Profitability	Return on equity
Capitalisation	CET1 capital adequacy Rating Leverage ratio
Credit risk	Concentration risk, 20 largest Largest single exposure Maximal loss risk, single customer
Liquidity risk	Deposit-to-loan ratio Ability to survive without access to fresh funding LCR Transfer capacity to residential mortgage company
Market risk	Maximal risk as a share of CET1 capital
Owner risk	Application of capital Return on equity
Operational risk	Operational losses and events
Reputational risk	The Bank shall not involve itself in business activities that may harm the Bank's reputation
Compliance	Financial loss and sanctions

Figure 8 – Risk appetite framework

3. REGULATORY CAPITAL ADEQUACY (PILLAR I)

Consolidation. The table below shows the difference in the consolidation basis between consolidation pursuant to the accounting rules and consolidation for capital adequacy purposes.

Table 1 – Consolidation approaches to capital adequacy assessment

Entity name	Accounting treatment (IFRS Group)	Capital treatment (CRR Group)	Sector of investee
SpareBank 1 SMN	Full consolidation	Full consolidation	Credit institutions
Mavi XV AS	Full consolidation	Full consolidation	Financial corporations other than credit institutions
Sparebank 1 SMN Spire Finans AS	Full consolidation	Full consolidation	Credit institutions
SpareBank 1 Bygget Steinkjer AS	Full consolidation	Full consolidation	Non-financial corporations
EiendomsMegler 1 Midt-Norge AS	Full consolidation	Full consolidation	Non-financial corporations
SpareBank 1 Regnskapshuset SMN AS	Full consolidation	Full consolidation	Non-financial corporations
SpareBank 1 Finans Midt-Norge AS	Full consolidation	Full consolidation	Credit institutions
SpareBank 1 Bilplan AS	Full consolidation	Full consolidation	Non-financial corporations
SpareBank 1 SMN Kvartalet AS	Full consolidation	Full consolidation	Non-financial corporations
SpareBank 1 SMN Invest AS	Full consolidation	Full consolidation	Financial corporations other than credit institutions
SpareBank 1 Markets AS	Full consolidation	Full consolidation	Financial corporations other than credit institutions
St. Olavs Plass 1 SMN AS	Full consolidation	Full consolidation	Non-financial corporations
BN Bank	Equity method	Proportional consolidation	Credit institutions
SpareBank 1 Boligkreditt AS	Equity method	Proportional consolidation	Credit institutions
SpareBank 1 Kreditt AS	Equity method	Proportional consolidation	Credit institutions
Sparebank 1 Næringskreditt AS	Equity method	Proportional consolidation	Credit institutions
SpareBank 1 Forvaltning	Equity method	Proportional consolidation	Financial corporations other than credit institutions
SpareBank 1 Utvikling DA	Equity method	Neither consolidated nor deducted	Financial corporations other than credit institutions
SpareBank 1 Bank og Regnskap AS	Equity method	Neither consolidated nor deducted	Non-financial corporations
SpareBank 1 Gjeldsinformasjon AS	Equity method	Neither consolidated nor deducted	Non-financial corporations
SpareBank 1 Gruppen AS	Equity method	Deducted	Financial corporations other than credit institutions
Sparebank 1 Betaling AS	Equity method	Deducted	Financial corporations other than credit institutions

SpareBank 1 SMN considers it important for all units in the Group to be satisfactorily capitalised at all times. The Group's governing bodies have not set restrictions on the Board of Directors' opportunity to transfer capital between the parent bank and subsidiaries and between subsidiaries beyond those set by regulatory and other statutory provisions. Nor do the articles of association set such restrictions. For the same reason neither the Bank nor its subsidiaries enter into agreements restricting the Board of Directors' right to transfer capital as mentioned. This is true of funding agreements as well as agreements with suppliers and customers.

Against the above background there are equally no restrictions on the Board of Directors' opportunity to reallocate capital between the various business units in the parent bank. Transfer of capital between the companies is regulated by the ordinary framework legislation applying to these entities and to the financial services group.

As in the case of investments in the subsidiaries, the Group has a strategic interest in supporting the activities of BN Bank ASA, SpareBank 1 Næringskreditt AS, SpareBank 1 Boligkreditt AS, SpareBank 1 Kredittkort AS and SpareBank 1 Gruppen AS. The Group is concerned that no agreements should be entered into or resolutions or the like adopted that entail a restriction on the owner banks' opportunity to transfer capital to these companies if this should prove necessary for achieving satisfactory capital adequacy and/or financial strength.

The Group assumes that it would not be practical to transfer capital other than ordinary dividend payments from these companies to the owner banks and takes this as a basis for the Group's own risk profile. The owner banks' policy is to transfer the entire net profit and thereafter undertake the necessary recapitalisation.

Table 2
Difference between consolidation for accounting purposes and for capital adequacy purposes

	For accounting purposes	For capital adequacy purposes	Credit risk framework	Market risk framework	Counterparty risk framework	Excepted from calculation or deducted from own funds
ASSETS						
Cash and receivables from central banks	1 252	1 303	1 303			
Deposits with and loans to credit institutions	4 704	7 306	7 306			
Net loans to customers	145 890	207 466	207 466			
Fixed-income CDs and bonds	30 762	36 477	34 658	1 771		48
Derivatives	3 224	4 916			4 916	
Shares, units and other equity interests	2 654	2 977	1 114	1 863		
Investments in related companies	7 384	2 832	2 184			648
Investments in group companies	-	0				
Assets held for sale	59	59	59			
Intangible assets	853	874				874
Other assets	2 062	2 166	2 166			
Total assets	198 845	266 375	256 255	3 634	4 916	1 570
LIABILITIES						
Deposits from credit institutions	15 063	15 063				15 063
Deposits from and debt to customers	111 286	119 152				119 152
Debt created by issue of securities	40 332	97 322				97 322
Derivatives	3 909	4 513				4 513
Other liabilities	3 217	4 590				4 590
Assets held for sale	1	1				1
Subordinated loan capital	1 796	2 226				2 226
Total liabilities	175 603	242 866	0	0	0	242 866
EQUITY						
Equity certificates	2 597	2 597				2 597
Treasury Ecs	-9	-9				-9
Premium fund	895	895				895
Dividend equalisation fund	6 974	6 974				6 974
Allocated to dividends	970	970				970
Allocated to gifts	547	547				547
Ownerless capital	5 918	5 918				5 918
Unrealised gains reserve	171	171				171
Other equity capital	2 896	2 896				2 896
Hybrid capital	1 293	1 561				1 561
Non-controlling interests	989	989				989
Total liabilities and equity	23 241	23 509				23 509
Sum gjeld og egenkapital	198 845	266 375				266 375

Own funds

The table below shows the composition of tier 1 capital and own funds for the parent bank and the Group as at 31.12.2021

NOK million

Group

Parent

Total book equity	23.241	19.356
Hybrid capital included in equity	-1.293	-1.250
Deferred taxes, goodwill and other intangible assets	-961	-458
Provision for gifts	-1.517	-1.517
Non-controlling interests recognised in other equity	-989	-
Non-controlling interests eligible for inclusion in CET1 capital	568	-
Value adjustments due to requirements for prudent valuation	-56	-41
Positive value of adjusted expected loss under IRB Approach	-560	-495
Cash flow hedge reserve	3	-
Deduction CET1 capital for significant investments in financial institutions	-648	-202
Total CET1 capital	17.790	15.393
Hybrid capital	1.581	1.250
Hybrid capital covered by transitional provisions	-48	-48
Total core capital	19.322	16.595
Supplementary capital in excess of core capital		
Own funds	2.226	1.750
Deduction for significant investments in financial institutions	-214	-214
Total supplementary capital	2.011	1.536
Net own funds	21.333	18.130

Table 3 – composition of own funds

Regulatory capital requirements as at 31.12.2021

The companies making up the SpareBank 1 SMN Group are listed in Table 1. The table below shows the minimum regulatory requirement on own funds.

Minimum requirements on own funds	Group	Parent
Specialised lending	1248	1049

Corporate	1030	1016
Retail mortgage exposures	2384	1400
Other retail exposures	95	93
Equity capital positions, IRB	1	1000
Total credit risk, IRB	4758	4558
Sovereigns and central banks	4	3
Covered bonds	133	106
Institutions	299	398
Local and regional authorities, state-owned enterprises	29	1
Corporate	432	188
Retail	466	7
Exposures secured on real property	128	25
Equity positions	521	271
Other assets	142	92
Total credit risk, standardised approach	2154	1098
Debt risk	36	35
Equity risk	34	-
Currency risk and settlement risk	1	-
Operational risk	817	433
CVA risk	93	26
Minimum requirement on own funds	7893	6150
Risk weighted assets	98664	76873
Minimum requirement on CET1 capital, 4.5%	4440	3459
Buffer requirements		
Capital conservation buffer, 2.5%	2467	1922
Systemic risk buffer, 3.0%	4440	3459
Countercyclical buffer, 2.5 (2.0)%	987	769
Total buffer requirements on CET1 capital	7893	6150
Available CET1 capital after buffer requirements	5457	5784
Capital adequacy		
CET1 capital ratio	18,0 %	20,0 %
Tier 1 capital ratio	19,6 %	21,6 %
Total capital ratio	21,6 %	23,6 %
Leverage ratio		
On-balance-sheet items	269857	191697
Off-balance-sheet items	11341	10782
Other adjustments	-2110	-1042
Calculation basis for leverage ratio	279088	201437
Tier 1 capital	19322	16595
Leverage ratio	6,9 %	8,2 %

Table 4 – Regulatory capital adequacy as at 31.12.2021

The minimum requirement on own funds is NOK 7,893m,

At the end of 2021 the Group's CET1 capital ratio was 18.0% (18.3%), the tier 1 capital ratio was 19.6% (20%) and the total capital ratio was 21.6% (22.3%).

(NOK million)	Group	Parent
Dated subordinated debt		
2026 SpareBank 1 Finans Midt-Norge 16/26	43	-
2027 floating rate NOK (Call 2022)	150	150
2027 floating rate NOK (Call 2022)	600	600

2029 floating rate NOK (Call 2024)	250	250
2028 floating rate NOK (Call 2023)	500	500
2028 floating rate NOK (Call 2023)	250	205
Premium/discount/market value	-	-
Currency agio dated	-	-
Accrued interest	3	3
Total dated subordinated debt	1796	1753
Average rate NOK	1,9 %	1,9 %
Hybrid capital		
5/99 SpareBank 1 Finans Midt-Norge floating rate NOK (Call 2022)	43	-
5/99 floating rate NOK (Call 2023)	300	300
7/99 fixed rate 5.0% NOK (Call 2025)1)	200	200
5/99 floating rate NOK (Call 2023)	300	300
5/99 floating rate NOK (Call 2023)	200	200
5/99 floating rate NOK (Call 2024)	250	250
Total hybrid capital	1293	1250
Average rate NOK	3,8 %	3,8 %

- 1) Fixed rate funding converted to floating rate via interest rate swaps

Table 5 – subordinated loan capital and hybrid capital as at 31.12.2021

The following chapters give a closer account of SpareBank 1 SMN's framework for and management of credit, market and operational risk respectively.

3.1 Credit risk

Credit risk is the risk of loss resulting from the inability or unwillingness of customers or counterparties to honour their commitments to the Group. The Bank's organisation of and framework for management of credit risk is aligned with requirements of and recommendations of the Financial Institutions Act, the CRR/CRD IV Regulations, the Capital Requirements Regulations, Finanstilsynet's module for management and control of credit risk, and the Basel Committee's Sound Practices for the Management of Credit Risk.

Credit risk arising from the Group's lending activity is the Group's largest risk area. The Group incurs exposure to credit risk through lending and leasing products to retail and corporate customers and through the operations of the Bank's Capital Market and Finance Division.

Through its annual review of the Bank's credit strategy, the Board of Directors concretises the Bank's risk appetite by establishing objectives and limits for the Bank's credit portfolio.

The Bank's credit strategy and credit policy are derived from the Bank's main strategy, and contain guidelines for the risk profile, including maximum expected loss (EL) for Retail Banking and Corporate Banking respectively, maximum portfolio default probability (PD) and maximum economic and regulatory capital (UL) allocated to the credit business.

Concentration risk is managed by:

- restricting the size of loans and loss ratio on individual exposures
- limits on maximum exposure and application of economic capital within sectors
- limits on regulatory risk weighted assets for Retail Banking and Corporate Banking,
- requirements as to maximum exposure, credit quality and number of exposures above 10% of own funds

Compliance with credit strategy and limits adopted by the Board of Directors is monitored on a continual basis by Risk Management and reported quarterly to the Board of Directors.

3.1.1 Management of credit risk

Credit strategy

The Group's primary market area is Mid Norway consisting of the counties of Trøndelag and Møre og Romsdal. The Group also operates in parts of the county of Sogn og Fjordane.

The Group aims to maintain a moderate risk profile in the segments in which it operates. Credit strategy limits curb exposure to individual sectors and clients and set a ceiling for loss risk per client. The credit strategy also sets limits for growth and use of capital within the various market areas.

The credit strategy and limits are established by the Board of Directors on an annual basis.

Credit policy

The credit policy rules describe limits for, and what is acceptable within, given areas in the credit assessment. In addition to the credit policy rules, a document has been drawn up describing guidelines for lending to corporate clients. These guidelines indicate normative/recommended levels and limits in various areas, in contrast to the credit policy rules where specific authorisations are required in order to diverge from them. The credit policy rules are revised at least once per year and are approved by the CEO, who duly informs the Board of Directors.

Authorisations

The Board of Directors is responsible for the Group's granting of loans and credit, but delegates – subject to certain limits – credit authorisations to the CEO, who within his own authorisations can delegate the credit authorisations to others. The delegated credit authorisations are linked to an exposure's probability of default and collateral value and apply to grouped clients at parent bank level. The authorisations are personal. This means that the credit committees do not have decision-taking authority but make a recommendation to the authorisation holder. For some levels of position the authorisation limit will be reduced by 50% if a recommendation from a credit committee is not available. In general the authorisations are substantial if an exposure's probability of default and loss ratio indicate low risk, whereas authorisations are progressively tightened with increasing risk. The lending regulations are reviewed on an annual basis, and changes are approved by the CEO who duly informs the Board of Directors. However this does not apply to changes in the CEO's credit authorisations or where the changes entail a significant change in risk, since these are approved by the Board of Directors.

Credit procedures

The credit manual regulates in detail all matters related to the Group's lending and exposure monitoring. The credit process provides a closer description of the customer and the purpose of the loan application, and assessments of matters related to:

- Owners and management
- Funding structure
- Observance of credit strategy and credit policy
- Earnings – will the customer have sufficient earnings ahead to service ongoing commitments, interest and instalment payments?
- Absorption – if earnings fail, for how long and by what means can the client meet ongoing commitments, interest payment and principal payments?
- Collateral items and overall risk assessment

3.1.2 Measurement of credit risk

Credit risk in the portfolio is monitored on an ongoing basis. This is done through monthly reclassifications of each individual customer in which the Bank's IRB-approved risk models are utilised. In addition, the Bank has established early warning systems for early identification of undesired risk build-up at portfolio or single customer level. The Bank monitors and reports breaches

of credit strategy and credit policy in matters dealt with by the Group Credit Committee, and the results are reported to each meeting of the Board of Directors.

Portfolio management

The Group performs a monthly reclassifications of all customers whereby updated information of significance for calculating credit risk is obtained and utilised in our credit models. The portfolio management system can thus each month present updated estimates for customers' probability of default, loss ratios and expected losses. Based on this, capital needs and risk-adjusted return are calculated. Both internal and regulatory calculations are included in this reclassification, and are made available to customer officers, managers and the risk management function. Credit risk information concerning individual customers can readily be aggregated at the desired level, for example division, segment, portfolio or bank level.

Early warning

The Group has established a number of processes and reports to enable early identification of changes in credit risk with consequences for default and loss ratio. Examples of the Group's early warning process:

- Reporting of brief non-performance (0-90 days)
- Reporting of utilisation of flexi-loan limits and of overdraft facilities
- Reporting of development in and breach of covenants
- Reporting of developments in exposures with forbearance
- Monitoring of announcements (bankruptcies, compulsory winding up orders, mergers, demergers etc)
- Monthly bankruptcy statistics, by industry and region
- Monthly follow-up of changes in capital use and analysis of causes

Credit process monitoring

The Group's systems for monitoring the credit granting process enable ongoing follow-up of the credit quality of, and risk-adjusted return on, new exposures. A credit granting record is downloaded on a monthly basis supplemented with relevant risk and earnings information. The system is well suited to comparisons of quality across the divisions and enables an early response if for example individual divisions show an undesired development in their ongoing credit practices.

3.1.3 The risk classification system

In 2007 SpareBank 1 SMN received permission to apply an IRB approach to calculate capital charges on its loans to retail customers and corporates (basic IRB approach). This covers loans by the parent bank. In addition, the part-owned companies Bolig Kreditt and BN Bank apply the IRB approach to compute their capital charges. As from 2015 SpareBank 1 SMN has permission to apply an advanced IRB approach to loans to corporates.

The group's risk classification system consists of the following models:

Table 6 – models – credit risk classification

Probability of default PD	The model calculates the probability of a client going into default over the course of the next 12 months
Exposure at default EAD	The model calculates the size of a customer exposure at a future default date
Loss given default LGD	The model calculates how much of the exposure to the customer will be lost to the Bank if the customer goes into default
Expected loss EL	The model calculates what statistically can be expected to be lost on a customer in the next 12 months based on PD, EAD and LGD
Unexpected loss UL	The model calculates what equity the Bank must hold to cover an expected loss on a customer, calculated as all possible losses within a 99.9% confidence level
Risk class	Customers are assigned to risk classes based on PD
Risk group	Customers are assigned to risk groups based on risk class
Collateral class	Customers are assigned to collateral classes based on collateral cover

PD

PD indicates the likelihood of a customer going into default in the next 12 months. The Bank's definition of default is based on the Capital Requirements Regulations section 10-1 according to which a default is present when one or more of the following criteria are met:

- 90 days overdrawn / arrears in excess of NOK 1,000 in the period
- Debt composition, voluntary or compulsory; opening of bankruptcy proceedings or notice of public composition with creditors
- Default due to assessment of unlikeliness to pay
- Internally registered bankruptcy, opening of bankruptcy proceedings or notice of bankruptcy
- Confirmation of loss or individually assessed write-down / provision for loss

The Bank employs the PD models when granting loans and for monthly reclassification of customers. The PD models are also used for the purposes of price determination, ongoing reporting and exposure monitoring. Based on calculated PD, each customer is assigned to a risk class and risk group according to the following scale:

Table 7 – Risk classes

PD	Risk class	Risk group	Moody's
< 0,1 %	A	Lowest risk	AAA – A3
0,10% - 0.25%	B	Lowest risk	Baa1 – Baa2
0,25% - 0.50%	C	Lowest risk	Baa3
0,50% - 0.75%	D	Low risk	Ba1
0,75% - 1.25%	E	Low risk	Ba2
1,25% - 2.50%	F	Medium risk	
2,50% - 5.0%	G	Medium risk	Ba2 – B1
5,0% - 10.0%	H	High risk	B1 – B2
10.0 % - 30.0 %	I	Highest risk	B3 – Caa3
Defaulted	J	Defaulted and written down	
Written down	K	Defaulted and written down	

The models provide something between entirely stable (TTC) and unbiased (PIT) estimates. This is because the model uses explanatory variables which in part rapidly capture changes in a customer's

financial situation (for example payment defaults registered against him) and other explanatory variables where changes are more sluggish (for example accounting or tax assessment information). As a result the observed default rate (DR) often diverges from the estimated default rate (PD). The observed default rate will typically fluctuate more widely than the estimates.

Table 8 – structure of PD models

<p>The PD models’ structure and calibration are presented in the table below.</p> <p>Portfolio</p>	<p>Explanatory variables</p>	<p>Method</p>	<p>Uncertainty</p>	<p>History and calibration</p>	<p>Regulatory requirements</p>
<p>Corporate</p>	<p>Accounts</p> <p>Payment history and other behavioural information</p> <p>Line of business</p> <p>Age</p>	<p>The Bank employs a scorecard model based on regression analysis, in which historical observations are used to predict the probability of default. The scorecards are divided into nine line-of-business variants to make allowance for the fact that the explanatory variables have differing significance for different lines of business. In addition, the calibration can be set at different levels for different lines of business to make allowance for differing historical default levels.</p>	<p>Uncertainty is taken into account through safety margins at the risk class level. Uncertainty is a theme considered in the Bank’s periodic validation of the model.</p>	<p>The data underlying estimation and validation are > 10 years. When calibrating level, a method identical to that prescribed by the authorities for residential mortgages is used, but with other parameter values. By that means the Bank takes account of actual historical default levels when predicting future defaults. The Bank employs up to 7 years’ historical data for level calibration purposes, in addition to including a presumed default rate in a severe downturn. The data underlying estimation and validation are > 10 years. When calibrating level, a method prescribed by the authorities is used that takes into account the actual default rate in the Bank over the last 7 years and a presumed default rate in a severe downturn.</p>	<p>No customers can be assigned a PD lower than 0.03%.</p>

Retail	Tax assessment information Liquidity and debt Payment history and other behavioural information Age	The Bank employs a scorecard model based on regression analysis, in which historical observations are used to predict the probability of default. The scorecard has two variants: Residential mortgages and Other retail. The explanatory variables are assigned different weights in the two variants. In addition, the calibration can be set at different levels for the two variants.	Uncertainty is taken into account through safety margins at the risk class level. In addition, the method prescribed by the authorities gives a substantial overestimation of the actual default rate. Uncertainty is a theme considered in the Bank's periodic validation of the model.		No residential mortgage borrowers can be assigned a PD lower than 0.2%.
---------------	--	---	--	--	---

EAD

The model calculates what portion of an unutilised credit line will have been drawn down at a future default date. The Bank utilises the EAD model when granting exposures and in the ongoing (monthly) reclassification of its customers.

Table 9 – Structure of EAD models

Portfolio	Explanatory variables	Method	Uncertainty	History and calibration	Regulatory requirements
Corporate	Product Score segment PD	The Bank utilises a model that assigns a conversion factor based on the explanatory variables. The model starts out from a supposition that existing customers will have a lower CF than new customers, public sector customers a lower CF than private companies, and that customers with a low PD will have a lower CF than customers with a high PD.	Uncertainty is taken into account through safety margins	When calibrating level, we have utilised historically observed CF levels, and considered the necessity of a cyclical add-on. In our model, customers are assigned a CF between 40% and 100%.	The level of the CF shall take into account economic contractions. The CF for guarantees is set by the authorities at 100% for loan guarantees and 50% for contractual and other guarantees.
Retail	Product (credit line)	All customers are assigned the same CF: 1		It is checked that historically observed values are below estimated values, and that any cyclical effects are sufficiently taken into account.	

LGD

The model estimates how much of the EAD the Bank must take as a loss should the customer go into default. The Bank utilises the LGD model when granting exposures and in the ongoing (monthly) reclassification of its customers. The LGD model consists of several sub-models.

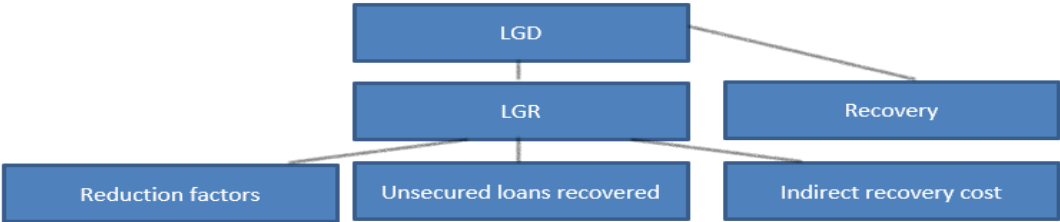


Figure 7 – Structure, LGD model

Table 10 – Description of the LGD model

Portfolio	Explanatory variables	Method	Uncertainty	History and calibration	Regulatory requirements
Corporate	Collaterals Customer type Equity ratio EAD	The Bank utilises a structural model which estimates LGD based on sub-models. Collaterals are the dominant explanatory variable.	Uncertainty is taken into account through safety margins both at sub-model and total-model level.	When calibrating collateral values (reduction factors), customer recovery, recovery of unsecured loans and indirect recovery costs, the Bank utilises its own observations back to 2007, in addition to expert assessments and national and international analyses and statistics. To assure conservative estimates, the Bank has implemented minimum values for LGD.	The Bank is required to include in its LGD estimates a safety margin set by the authorities.
Retail	Collaterals Product			It is checked that historically observed values are below estimated values, and that any cyclical effects are sufficiently taken in to account.	For residential mortgages a floor is set for LGD at portfolio level. This exceeds the Bank’s own LGD estimates.

Collaterals are the chief explanatory variable in the LGD model. Having good estimates of the values of collaterals is accordingly crucial to the quality of the LGD model’s estimates. Further, the LGD estimate is designed to take account of a future economic contraction, entailing that the current market value cannot be employed as collateral value.

- Good estimates of collateral value are assured through regular updating of market values. To this end various sources are employed, depending on the type of object furnished as security. Valuations are obtained in the case of commercial properties and ships. For residential properties, estimates from national providers of such information are largely utilised, while for

most other assets we utilise accounting data. As part of its IRB system the Bank has procedures with regard to how, and how often, the various types of objects are to be valued.

- To ensure that the collateral values accommodate a future economic contraction, the market value is reduced by a reduction factor. This factor is specific to the particular object type and is determined by reference to historical observations of price falls, the Bank's own realisations and expert assessments of potential future falls.

The collaterals' significance for estimated LGD is shown in the figure below. This takes a basis in a loan secured by residential property. Differing loan-to-value ratios (LTVs) give different LGDs. Whereas LTV utilises the current value of the mortgaged object, LGD utilises a reduced value of the mortgaged object to take account of a possible price fall in a future economic contraction. For residential properties the Bank utilises a reduction factor of 40%. The graph includes the effect of the LGD floor set by the authorities for residential mortgages.

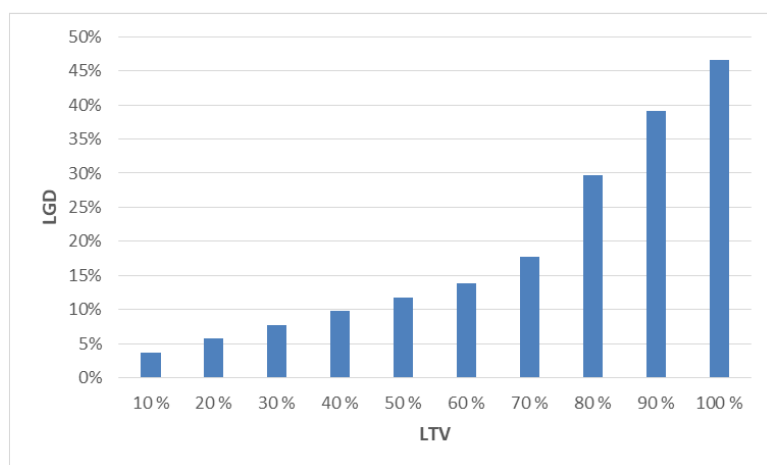


Figure 8 – Relationship between LTV and regulatory LGD

Besides collateral values, the LGD model utilises estimates of probability of customer recovery, of the portion of unsecured EAD that can be recovered and indirect costs of recovery to estimate the loss ratio.

- The probability of customer recovery is the probability that a customer who has gone into default will “return to health” without recourse to restructuring and / or debt forgiveness.
 - For corporate clients the estimate is based on customer type, equity ratio and size of EAD. Clients are assigned a probability of recovery between 0% and 30%.
 - For retail customers the estimate is determined by whether the loan is, or is not, a residential mortgage.
- The portion of unsecured EAD that can be recovered is an estimate of how much of the unsecured EAD can be recovered without realisation of collaterals. All corporate borrowers are assigned the same estimate. The same applies to retail borrowers.
- Indirect costs of recovery are costs that the Bank has incurred that cannot be attributed to specific exposures. All customers (corporate and retail) are assigned the same estimate.

Expected loss – EL

Expected loss is calculated by multiplying PD, EAD and LGD.

Unexpected loss – UL

Unexpected loss, or capital charges, denotes the equity capital needed by the Bank to back each exposure and to cover any loss that may arise within a confidence level of 99.9%. Expected loss that has already been calculated is deducted. This uncertainty regarding the possible loss level varies from one customer to the next, and depends inter alia on type of customer, loan term, collateral cover and stability of servicing ability. The method used by the Group to calculate capital charges is set out in the capital requirements regulations and is applied to both internal and regulatory calculations.

Risk pricing

All credits in SpareBank 1 SMN's portfolio are priced in relation to the exposure's risk in the sense that higher risk entails a higher price. The main elements included in this assessment are the customer's overall net interest income, other incomes, expected losses, estimated operating expenses, capital lock-in and the Bank's required rate of return. Expected loss, operating expenses and capital lock-in will all be affected by the assessed risk posed by the customer/exposure. The risk assessments are based in the same main components as in the Group's risk classification system as regards assessment of debt servicing ability and collateral cover. Whether the price can in the final instance be defended will however also be determined by the pricing applied by important competitors and by strategic considerations.

SpareBank 1 SMN has a pricing model that takes account of these elements and calculates return in relation to required rate of return / EVA (Economic Value Added). The Bank also monitors the profitability of each customer by compiling and analysing historical data on a monthly basis. The same elements as those described above are included in the profitability assessments.

3.1.4 Collaterals and other risk-mitigating measures

SpareBank 1 SMN makes use of collateral to reduce credit risk in each individual exposure. For corporates, use is made various types of covenants in credit agreements in cases where this is appropriate. Use of covenants gives the Bank assurance that the company concerned will hold prudent levels of, for example, liquidity and equity, or that the company will abide by applicable laws and regulations that govern its business.

For personal customers, collateral is mainly real property (residential). Corporate borrowings are secured against various types of collateral.

The Group determines the realisation value of furnished collaterals against the background of statistical data over time, and expert assessments in cases where statistical data are not sufficiently reliable. Realisation values are fixed so as to reflect, on a conservative assessment, the presumed realisation value in an economic contraction.

In the personal market the market value of real property is determined either by using the purchase sum shown in the contract, a broker's estimate or valuation estimates from Eiendomverdi (residential property only). Eiendomverdi is an information and analysis tool providing access to estimated market values of properties in Norway. In the personal market, collateral is rarely accepted in any other form than real property.

In the corporate market collateral values of commercial properties are calculated using the yield method, where the basis is the present value of expected net cash flows associated with the property. Yield reflects the return an investor would demand when investing in the property and is influenced inter alia by factors such as the property's location and type, duration of leases, tenants' financial position, regulatory risk and the expected long-term risk-free interest rate. The realisation value of the collaterals furnished is determined by reducing the market value by a factor that varies with the collateral object's characteristics.

The reduction factors for all types of collateral are determined with reference to value falls to be expected in a severe economic downturn.

3.1.5 Validation

It is important that validation of the credit models is done with a sufficient degree of independence. In this context independence means independence of the units that develop the credit models from those that validate the same models. This is to ensure that validation is objective and that there can be no suspicion of incentives to embellish the validation results.

RTS 2016/03 of July 2016 from the European Banking Authority (EBA) provides further clarification on the requirement of independence of the validation function. Two central roles are presented:

- The Credit Risk Control Unit (CRCU)
This unit has responsibility for developing credit models and monitoring their performance
- Validation function
This unit has responsibility for the validation of models and for their use.

Thus the validation function is responsible for validation of the credit models and for their use. At SpareBank 1 SMN this is taken care of by the Risk Management function, which is responsible for both qualitative and quantitative validation, as well as for the preparation of validation reports to the Validation Committee, the Management and is the Board of Directors. Data and analyses/assessments are obtained from units through the work done on validation. Where qualitative validation is concerned, assessments and checks carried out by the line units are obtained. In the case of quantitative validation, inputs from the Bank's own Credit Analysis Department, the Alliance's validation network and the Alliance's Competence Centre for Credit Models (CFC) are utilised.

- The Credit Analysis Department contributes its competence in sector-specific assessments, typically commercial property and offshore.
- The Alliance's validation network exchanges experience and proposals for improvement of the validation process. In addition, the validation network draws up joint orders for data and analyses from the CFC. Hence the CFC is an important contributor of data, analyses and inputs to the work of validation. Annex 1a and 1b contain the Bank's outline of the content and structure of the validation report. These were sent to the CFC as orders for data and analyses on which to base the year's validation report. The same orders were dispatched in previous years.
- In addition to contributing data and analyses, the CFC also makes recommendations for changes to models and estimates when they consider this necessary. The year's contributions are to be found in annex 2a and 2b (2b is an updated version of the LGD chapters in 2a)

Based on inputs from these units, and its own analyses and assessments, Risk Management performs the Bank's independent validation of credit models and their use.

Roles

Risk Management is organised independently of the business units and reports directly to the Group CEO. This division is responsible for the further development of the risk management framework, including risk models and risk management systems. It is also responsible for independent monitoring and reporting of risk exposure. The division works closely with the SpareBank 1-alliansens Competence Centre for Credit Models which is located at SpareBank 1 SR-bank. The competence centre is responsible for developing and quality assuring credit models in line with leading international practice.

The *Internal Audit* is an independent control body which oversees that the risk management process is targeted, effective and functions as intended. The Group's internal audit function is outsourced, thereby assuring the required independence, competence and capacity. The function reports to the Board of Directors. The function's reports and recommendations for improvements to the Group's risk management are reviewed by the Group on a continuous basis.

The Board of Directors has overarching responsibility for the management and organisation of the Group in keeping with laws, articles of association and regulations. The Board of Directors is

responsible for ensuring that the funds at the Group’s disposal are managed in a secure and appropriate manner. From this it follows that the Board of Directors also has an obligation to ensure that bookkeeping and asset management are subject to satisfactory control. Board members are required to exercise prudent judgement in discharging their responsibilities and tasks.

The Board of Directors is responsible for ensuring that the Group has own funds that are adequate in light of the adopted risk profile and requirements set by the authorities. The Group’s Board of Directors establishes the overarching objectives such as risk profile, return targets and how the capital is to be distributed on the various business lines. The Board of Directors also sets the overarching limits, authorisations and policies for the Group’s risk management. The Board of Directors has adopted ethical rules that promote awareness of and compliance with the ethical standard established for the Group.

The *Validation Committee / Risk Committee* prepare matters for the Board of Directors related to the financial institution’s overall risk and to overseeing that management and control arrangements are adequate to the risk level and scale of the business.

3.1.5.1 Validation

Validation of the Bank’s IRB models is important for ensuring that the models’ estimates are in line with the de facto risk to which the Bank is exposed. Validation therefore represents an important quality assurance of the Bank’s IRB system. The IRB system is checked both by means of quantitative and qualitative validation in keeping with sections 16-2 and 16-3 of the Capital Requirements Regulations.

Qualitative validation is a process that ensures that the models are geared to the Bank’s portfolios and that they constitute a central component of the Bank’s risk management and decision taking. The IRB system also comprises those models, working and decision processes, control mechanisms, IT systems, and internal policies and procedures that are linked to the classification and quantification of credit risk using IRB models.

Quantitative validation is described in the table below.

Table 11 – tests, quantitative validation

	Suitability and stability	Ranking ability	Level
PD	Validation examines whether the population to which the model is applied is identical to the model’s estimation basis. This is done both through statistical tests and qualitative assessments of the underlying data and changes in the customer base.	We test the models’ ability to distinguish between customers going into default and customers not going into default. To this end the Bank uses both simple migration matrices and statistical analyses.	Through the validation process we check that the estimated level is sufficiently high measured against actual observations of the default rate. To define what is a sufficiently high level, we utilise up to 7 years’ default history, and also make allowance for the presumed default rate in an economic contraction.
EAD (CF)	We make a qualitative assessment of whether the model is geared to the customer base. Observations that represent noise affecting what we want to measure are removed.	In contrast to probability of default (PD), the credit conversion factor (CF) does not have a binary outcome (default or non-default). Therefore, when assessing the ranking ability of the EAD model, we look at whether the model manages to distinguish between customers with a high CF and those with a low CF.	Through the validation process we check that the estimated level is sufficiently high measured against actual observations.

LGD	We make a qualitative assessment of whether the model is geared to the customer base. Observations that represent noise affecting what we want to measure are removed.	The assessment of the LGD model's ranking ability uses the same approach as the EAD model. We assess whether the LGD model manages to distinguish between default customers with a high loss ratio and those with a low loss ratio.	The assessment of whether the LGD model's estimates are sufficiently high must take into account the fact that estimated LGD has to be calibrated to an economic contraction. This makes the assessment of estimates under normal economic conditions challenging. Estimated values are measured against the Bank's historically observed values and assumed levels in an economic contraction.
------------	--	---	---

3.1.5.2 PD

Ranking ability is an important characteristic of a PD model. We measure the models' ranking ability by means of a method termed AUC. A model's calculated AUC enables us to classify the model's ranking ability according to the following scale.

Table 12 – assessment of ranking ability, PD

AUC	Ranking ability
0%-50%	None
50%-70%	Low
70%-80%	Acceptable (minimum requirement)
80%-90%	High
90%-100%	Very high

The PD model's ranking ability for, respectively, residential mortgages and corporates is shown below. The underlying data include loans sold to the captive mortgage companies BoligKreditt and Næringskreditt. The drop in AUC for the corporate model in 2017 is attributable to some clients in oil-related business which, owing to the oil price fall and substantially lower activity, moved from low estimated risk to write-down in a short space of time. Apart from these observations, our models have shown a high ranking ability.

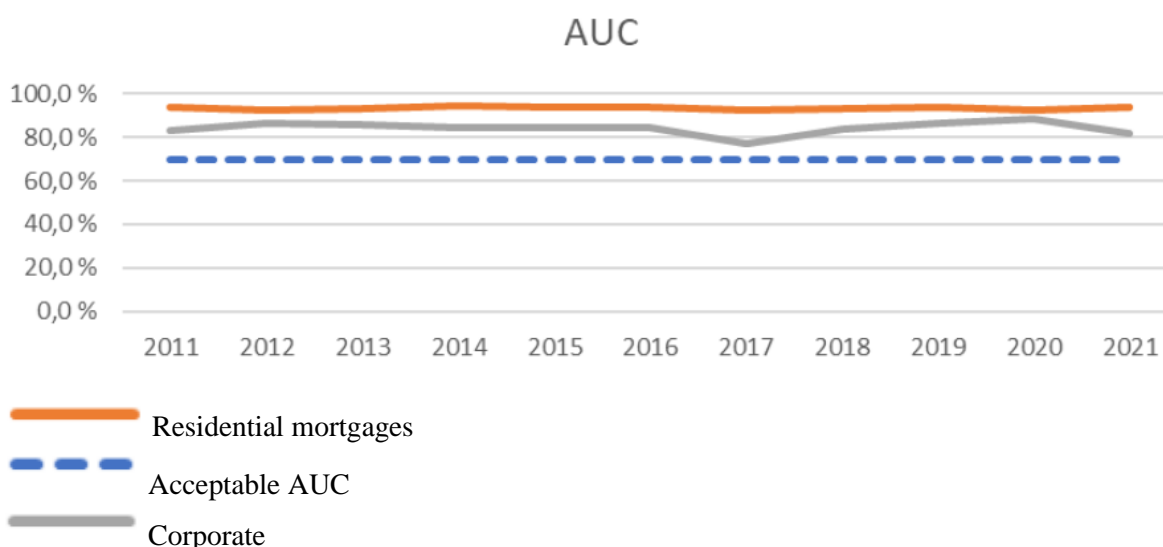


Figure 10 – historical ranking ability, PD

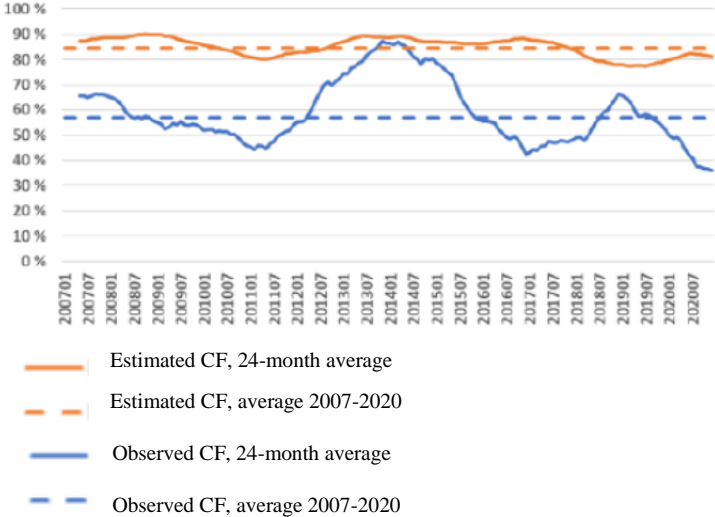
The table below shows the historical development of estimated (PD) and the observed default rate (DR) for, respectively, residential mortgages and corporates in the parent bank. The estimated default rate has exceeded the observed default rate for all years in the measurement period.

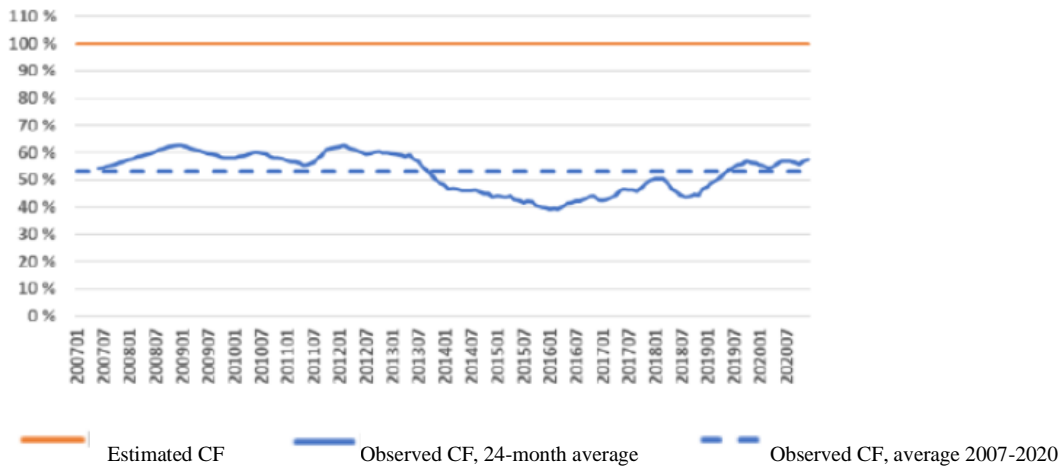
Residential mortgages			Other retail market			Corporates, normal scoring		
	Estimated	Actual		Estimated	Actual		Estimated	Actual
2010	1,10 %	0,44 %	2010	4,18 %	1,81 %	2010	3,62 %	2,63 %
2011	1,05 %	0,40 %	2011	3,93 %	1,48 %	2011	3,68 %	1,94 %
2012	1,01 %	0,39 %	2012	3,59 %	1,38 %	2012	3,36 %	1,60 %
2013	0,93 %	0,30 %	2013	3,39 %	1,51 %	2013	3,15 %	1,73 %
2014	0,96 %	0,30 %	2014	3,23 %	1,43 %	2014	3,05 %	2,02 %
2015	0,98 %	0,30 %	2015	2,95 %	1,18 %	2015	2,78 %	1,53 %
2016	0,93 %	0,23 %	2016	2,52 %	0,98 %	2016	2,63 %	1,19 %
2017	0,90 %	0,20 %	2017	2,31 %	0,63 %	2017	2,63 %	1,50 %
2018	0,86 %	0,25 %	2018	2,13 %	0,80 %	2018	2,65 %	1,38 %
2019	0,85 %	0,26 %	2019	1,99 %	0,73 %	2019	2,61 %	1,38 %
2020	0,91 %	0,37 %	2020	1,78 %	0,95 %	2020	2,65 %	1,71 %
Snitt	0,95 %	0,31 %	Snitt	2,91 %	1,17 %	Snitt	2,98 %	1,69 %

Figure 11 – development in regulatory PD and DR

3.1.5.3 EAD

Due to the small number of observations each month, observed CF fluctuates widely. We have therefore opted to look at a 24-month moving average of the observations and measure them against the estimates. For the residential mortgage portfolio we see a considerable overestimation. For corporates the observations show greater fluctuation and have at times exceeded the estimates. Thus far we have not considered it necessary to revise the estimates. The observations in the graphs refer to the parent bank.





Estimated CF
Figure 12 – development in estimated and observed CF

3.1.5.4 LGD

In the graphs below, observations to end-2020 refer to the parent bank since a validation report for 2021 is not yet available. Our validation shows that the estimates have substantial safety margins relative to observed values. In our assessment the assessments are also conservative if an economic contraction is considered.

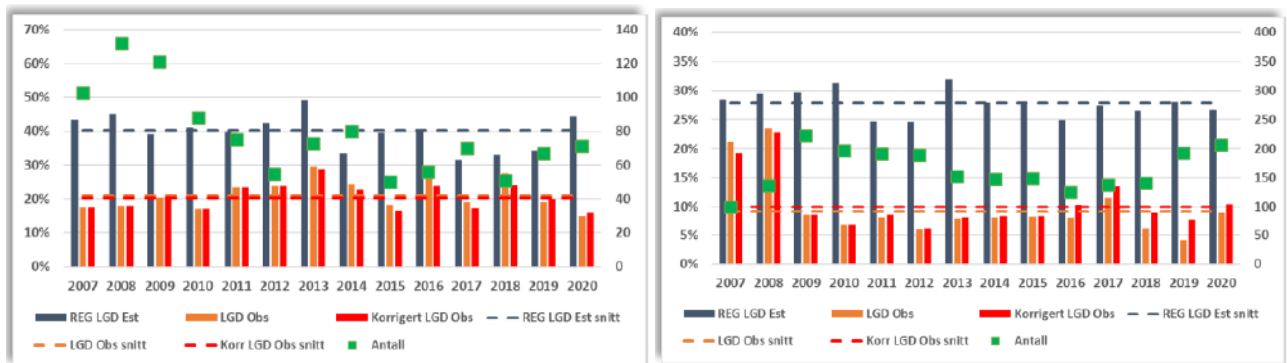


Figure 13 – development in estimated and observed LGD

3.1.5.5 EL

The graphs below show EL in per cent of EAD for the parent bank at the start of the year against observed recognised losses in per cent of EAD at year-end. Wide margins are evident between estimated and observed EL values.

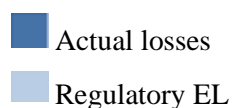
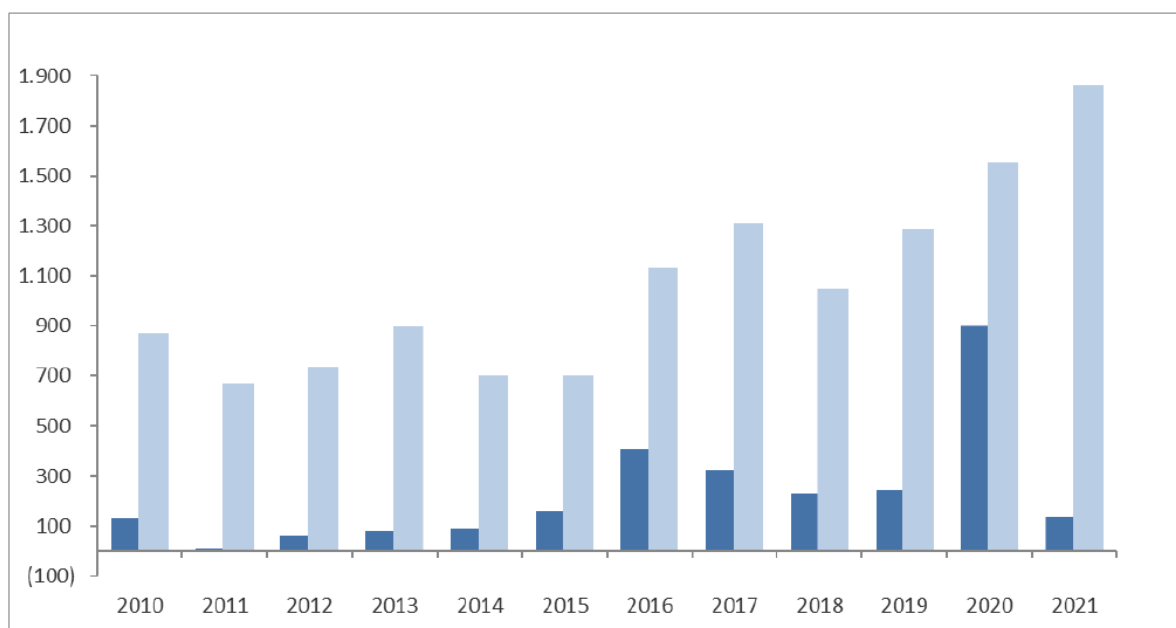


Figure 14 – comparison of regulatory EL and actual losses

Table 13 – Exposures by sector and industry

Gross loans by sector and industry	Gross loans	Exposures
Wage earners etc	86.244	94.614
Public administration	34	979
Agriculture and forestry	9.783	10.659
Fisheries and hunting	5.870	7.774
Sea farming industries	2.176	3.865
Manufacturing and mining	2.766	4.746
Construction, power and water supply	4.124	6.289
Retail trade, hotels and restaurants	2.966	4.541
Maritime sector and offshore	4.715	5.836
Property management	15.643	17.766
Business services	4.990	5.961
Transport and other services	6.667	8.076
Other sectors	1.325	2.308
Total gross exposure by sector and industry	147.301	173.415
Average	140.975	165.612

Table 14 – Exposures by geographical area

Gross loans by geographical area	Gross loans	Exposures
Trøndelag	95.160	110.316
Møre og Romsdal	29.509	37.067
Nordland	1.263	1.325
Oslo	6.524	7.961
Rest of Norway	14.594	16.469
Other countries	250	277
Total gross loans by geographical area	147.301	173.415
Average	140.975	165.612

Losses and write-downs

The Bank reclassifies its loan portfolio on a monthly basis. Customers showing objective evidence of loss due to payment default, impaired creditworthiness or other objective criteria are subject to individual assessment and calculation of loss. Should the Bank's calculations show that the present value of the discounted cash flow based on the effective interest rate at the time of estimation is below the book value of the loan, a write-down is performed for the calculated loss. A high degree of discretionary judgement is required to assess evidence of loss, and the estimation of amounts and timing of future cash flows with a view to determining a calculated loss is affected by this judgement. Changes in these factors could influence the size of the provision for loss. In cases where collateral values are tied to specific objects or industries that are in crisis, collaterals will have to be realised in illiquid markets, and in such cases assessment of collateral values may be encumbered with considerable uncertainty.

For loans in stage 1 and 2 a calculation is made of the expected credit loss using the Bank's loss model based on estimates of probability of default (PD) and loss given default (LGD), as well as exposure (EAD). The Bank uses the same PD model as in IRB but with unbiased calibration, i.e. without safety margins, as a basis for assessing increased credit risk.

Write-downs for exposures at stage 1 involve calculation of one year's expected loss, whereas for exposures at stage 2 expected loss over the lifetime is calculated.

The most important input factors in the Bank's loss model that contribute to significant changes in the loss estimate, and are subject to a high degree of discretionary judgement, are the following:

- Use of forward-looking information and projection of macroeconomic variables for multiple scenarios on a probability-weighted basis
- Establishing what constitutes a significant increase in credit risk for a loan.

Use of forward-looking information

Measurement of expected credit loss for each stage requires both information on events and current conditions as well as expected events and future economic conditions. Estimation and use of forward-looking information require a high degree of discretionary judgement. Each macroeconomic scenario that is utilised includes a projection for a five-year period. Our estimate of expected credit loss at stage 1 and 2 is a probability-weighted average of three scenarios: Base Case, Best Case and Worst Case. Our Base Case scenario is based on observed defaults and losses over the past three years, discretionarily adjusted to an unbiased estimate of the development which is somewhat above observed defaults and losses over the past three years.

The development in the Best Case and Worst Case scenario is drawn up using adjustment factors to project the development in economic conditions by means of assumptions as to how far the probability of default (PD) or loss given default (LGD) will increase or be reduced compared with the basis scenario over a five-year period. A basis is taken in observations over the last 15 years where the Worst Case reflects expected default and loss levels in a crisis situation with PD and LGD levels that are used in conservative stress scenarios for other purposes in the Bank's credit management.

The baseline scenario is drawn up using adjustment factors to project the development in economic conditions by means of assumptions as to how far the probability of default (PD) or loss given default (LGD) will increase or be reduced compared with the basis scenario over a five-year period. We anticipate increased losses related to debtors who are in a demanding position prior to the crisis – typically debtors at stage 2. We have accordingly opted to increase the paths for PD and LGD and to reduce expected repayments in the baseline scenario in particular from year 2 and beyond since this will affect expected loss in particular for debtors at stage 2. To take account of migration to stage 2, the PD and LGD estimates are also increased the first year. An additional assumption is no repayments the first year in the case of all portfolios in the worst case scenario.

Determination of a significant increase in credit risk:

The assessment of what constitutes a significant increase in credit risk requires a high degree of discretionary judgement. Movements between stage 1 and stage 2 are based on whether the instrument's credit risk on the balance sheet date has increased significantly relative to the date of first-time recognition. This assessment is done with a basis in the instrument's economic 12-month PD, and not expected losses.

The assessment is done for each individual instrument. Our assessment is performed at least quarterly, based on three factors:

The Bank uses both absolute and relative changes in PD as criteria for removal to stage 2. A change of more than 150% in PD is considered a significant change in credit risk. In addition, the final level of PD must be over 0.6 percentage points.

An additional qualitative assessment is made based on whether the exposure has a significantly increased credit risk if it is subject to special monitoring or has received forbearance.

In addition, customers with payments 30-90 days overdue will in all cases be moved to stage 2.

If any of the above factors indicate that a significant increase in credit risk has occurred, the instrument will be moved from stage 1 to stage 2.

Table 15 – Write-downs on loans and guarantees

Loan losses	RM	CM	Total
Period's change in loss provisions	-20	50	30
Additional losses upon confirmation and recognition	30	112	142
- Incomings on previously written down loans, guarantees etc.	(9)	(3)	(12)
Total losses on loans and guarantees	1	159	161

Total carried loss provision (NOKm)	Stage 1	Stage 2	Stage 3	Total
Retail market				
Balance sheet 1 January	42	107	58	207
Transferred to (from) Stage 1	22	-22	-	-
Transferred to (from) Stage 2	-2	3	-	-
Transferred to (from) Stage 3	(1)	(7)	8	-
Net new measurement of loss	(23)	26	(1)	2
New issued or purchased loans	22	20	1	43
Derecognised loans	-14	-37	-9	-60
Change due to revised assumptions	0	-2	-4	-5
Confirmed write-downs (confirmed losses)	-	-	-12	-12
Balance sheet 31 December	45	89	40	174
Corporate market				
Balance sheet 1 January	98	399	845	1.342
Transferred to (from) Stage 1	20	-20	-	-
Transferred to (from) Stage 2	-7	7	-	-
Transferred to (from) Stage 3	(2)	(27)	29	-
Net new measurement of loss	(29)	31	42	44
New issued or purchased loans	35	23	112	169
Derecognised loans	-21	-146	-2	9
Change due to revised assumptions	-2	12	-2	9
Confirmed write-downs (confirmed losses)	-	-	-128	-128
Balance sheet 31 December	94	278	896	1.268
Total loss provision recognised	138	367	936	1.442

Table 16 Information per risk class for exposures where an IRB approach is used

Exposure category	Risk class	Gross on-balance-sheet exposure amount	Gross off-balance-sheet exposure amount	EAD	Weighted average PD	Weighted average LGD	RWA	RWA after SMB discount	Average risk weight	Expected loss
SMB	A	-	-	-			-			-
SMB	B	625.487	108.345	733.832	0,22 %	19,5 %	162.364	146.582	20,0 %	312
SMB	C	2.630.833	1.009.940	3.640.773	0,37 %	29,3 %	1.288.738	1.209.894	33,2 %	3.580
SMB	D	2.026.024	914.748	2.940.772	0,64 %	24,4 %	1.015.758	949.836	32,3 %	4.035
SMB	E	1.969.184	721.881	2.691.066	0,98 %	34,1 %	1.545.463	1.465.662	54,5 %	8.352
SMB	F	3.307.941	535.216	3.843.157	1,68 %	28,3 %	2.156.512	2.016.251	52,5 %	17.682
SMB	G	2.369.819	561.022	2.930.841	3,63 %	32,6 %	2.403.017	2.240.532	76,4 %	33.904
SMB	H	587.993	121.162	709.155	7,15 %	36,2 %	768.196	663.512	93,6 %	17.692
SMB	I	652.780	345.495	998.275	14,39 %	36,0 %	1.413.309	1.334.478	133,7 %	47.019
SMB	J	978.677	59.920	1.038.596	100,00 %	41,4 %	143.008	143.008	13,8 %	418.625
SMB	K	1.124.332	28.341	1.152.673	100,00 %	47,0 %	1.599.816	1.559.816	135,3 %	538.012
SMB	Subtotal	16.273.070	4.406.071	20.679.141	9,30 %	27,50 %	12.456.181	11.729.571	56,7 %	1.089.213
Specialised entities	A	4.591	12.131	16.722	0,1 %	12,3 %	1.076	1.076	6,4 %	1
Specialised entities	B	401.720	38.851	440.570	0,2 %	18,3 %	86.591	74.534	16,9 %	178
Specialised entities	C	8.578.438	963.069	9.541.508	0,4 %	19,9 %	2.460.094	2.397.551	25,1 %	6.587
Specialised entities	D	4.669.436	464.589	5.134.025	0,6 %	21,2 %	1.782.432	1.734.565	33,8 %	6.528
Specialised entities	E	5.434.860	2.169.063	7.603.923	1,0 %	19,9 %	2.593.974	2.520.152	33,1 %	13.133
Specialised entities	F	4.614.989	1.011.842	5.626.831	1,8 %	23,2 %	2.793.247	2.691.197	47,8 %	23.138
Specialised entities	G	3.361.101	711.486	4.072.587	3,9 %	23,0 %	2.291.920	2.205.628	54,2 %	34.247
Specialised entities	H	680.324	384.952	1.065.276	6,9 %	29,8 %	894.252	823.943	77,3 %	20.238
Specialised entities	I	302.208	15.579	317.787	13,5 %	36,9 %	453.847	422.062	132,8 %	15.352
Specialised entities	J	244.815	323	245.138	100,0 %	55,9 %	7.038	7.038	2,9 %	137.007
Specialised entities	K	107.101	8.045	115.146	100,0 %	26,1 %	231.958	231.958	201,4 %	30.016
Specialised entities	Subtotal	28.399.584	5.779.929	34.179.513	2,63 %	22,90 %	13.596.431	13.109.705	38,4 %	286.427
Other entities	A	-	-	-			-	-	-	-
Other entities	B	-	-	-			-	-	-	-
Other entities	C	532.247	326.801	859.048	0,4 %	16,2 %	195.453	194.916	22,7 %	423
Other entities	D	9.441	362.283	371.724	0,6 %	15,1 %	48.799	48.799	13,1 %	205
Other entities	E	378.980	361.723	740.703	1,0 %	14,9 %	197.107	197.107	26,6 %	926
Other entities	F	375.821	185.213	561.033	1,7 %	33,1 %	392.502	392.502	70,0 %	2.936
Other entities	G	-	196	196	2,9 %	57,7 %	182	182	92,7 %	2
Other entities	H	79.513	30.616	110.129	5,5 %	33,9 %	119.718	119.460	108,5 %	1.979
Other entities	I	16.674	12.326	29.000	12,9 %	14,0 %	16.784	16.784	57,9 %	472
Other entities	J	-	-	-			-	-	-	-
Other entities	K	247.557	-	247.557	100,0 %	74,2 %	-	-	0,0 %	183.668
Other entities	Subtotal	1.640.233	1.279.157	2.919.390	14,90 %	19,50 %	970.545	969.749	33,2 %	190.610
Retail, SMB	A	-	-	-			-			-
Retail, SMB	B	2.565.955	456.901	2.561.514	0,2 %	17,3 %	191.960	167.449	6,5 %	909
Retail, SMB	C	1.821.519	94.385	1.820.097	0,4 %	21,9 %	258.924	223.622	12,3 %	1.439

Retail, SMB	D	1.077.681	33.941	1.076.421	0,6 %	25,5 %	257.919	219.707	20,4 %	1.685
Retail, SMB	E	827.644	14.784	827.239	1,0 %	24,8 %	258.797	219.607	26,5 %	1.977
Retail, SMB	F	586.551	21.072	585.919	1,7 %	28,1 %	286.977	244.085	41,7 %	2.773
Retail, SMB	G	216.835	5.854	215.817	3,6 %	25,1 %	153.657	132.766	61,5 %	1.978
Retail, SMB	H	233.077	3.466	232.986	7,2 %	23,2 %	209.907	177.127	76,0 %	3.702
Retail, SMB	I	476.751	5.797	476.663	20,6 %	26,9 %	683.038	559.938	117,5 %	25.847
Retail, SMB	J	32.830	153	32.770	100,0 %	24,2 %	9.737	9.737	29,7 %	7.936
Retail, SMB	K	11.157	66	11.157	100,0 %	3,0 %	38.882	38.882	348,5 %	335
Retail, SMB	Subtotal	7.850.001	636.420	7.840.583	2,6 %	22,0 %	2.349.797	1.992.920	25,4 %	48.581
Retail, secured on real property	A	-		-						-
Retail, secured on real property	B	22.450.996	2.305.899	24.756.106	0,21 %	16,4 %	1.772.134	1.772.134	7,2 %	8.418
Retail, secured on real property	C	25.491.695	243.650	25.735.059	0,36 %	20,2 %	3.431.987	3.431.987	13,3 %	19.070
Retail, secured on real property	D	14.526.573	28.990	14.555.533	0,61 %	21,8 %	3.019.917	3.019.917	20,7 %	19.469
Retail, secured on real property	E	9.579.310	8.102	9.587.412	0,93 %	24,1 %	2.910.117	2.910.117	30,4 %	21.440
Retail, secured on real property	F	2.646.706	5.188	2.651.894	1,64 %	22,8 %	1.091.877	1.091.877	41,2 %	9.794
Retail, secured on real property	G	1.000.453	10.183	1.010.570	3,56 %	21,6 %	625.860	625.860	61,9 %	7.693
Retail, secured on real property	H	714.300	3.584	717.885	7,05 %	23,4 %	691.336	691.336	96,3 %	11.907
Retail, secured on real property	I	918.576	3.868	922.443	23,86 %	22,1 %	1.164.772	1.164.772	126,3 %	49.090
Retail, secured on real property	J	221.434	2.850	224.284	100,00 %	22,4 %	137.803	137.803	61,4 %	50.259
Retail, secured on real property	K	74.971	-	74.971	100,00 %	22,0 %	204.495	204.495	272,8 %	16.478
Retail, secured on real property	Subtotal	77.625.013	2.612.315	80.236.157	1,21 %	20,00 %	15.050.298	15.050.298	20,0 %	213.617
Other retail	A	-	-	-			-			-
Other retail	B	415.729	81.290	497.019	0,21 %	50,6 %	110.051	110.051	22,1 %	518
Other retail	C	553.195	42.118	595.313	0,37 %	50,6 %	190.851	190.851	32,1 %	1.113
Other retail	D	463.481	15.773	479.254	0,61 %	50,8 %	206.978	206.978	43,2 %	1.495
Other retail	E	421.655	5.702	427.357	0,95 %	50,4 %	225.524	225.524	52,8 %	2.037
Other retail	F	175.989	4.243	180.232	1,66 %	50,9 %	118.128	118.128	65,5 %	1.527
Other retail	G	81.747	632	82.379	3,66 %	50,1 %	62.306	62.306	75,6 %	1.517
Other retail	H	43.350	458	43.808	6,76 %	49,5 %	35.340	35.340	80,7 %	1.475

Other retail	I	48.431	364	48.795	19,07 %	50,6 %	54.313	54.313	111,3 %	4.702
Other retail	J	23.873	221	24.093	100,00 %	50,8 %	112	112	0,5 %	12.211
Other retail	K	13.647	10	13.657	100,00 %	36,4 %	2.056	2.056	15,1 %	4.970
Other retail	Subtotal	2.241.096	150.810	2.391.906	2,51 %	50,27 %	1.005.659	1.005.659	42,04 %	31.566
Total (all portfolios)		134.028.996	14.864.701	148.246.690	3,46 %	22,3 %	45.428.909	43.857.902	29,6 %	1.860.014

Predicted PD and observed default rates (DR) are averages based on number of exposures and are not volume weighted. Predicted PD expresses the estimated probability of default for exposures not in default at the start of the measuring period.

An exposure to a retail customer where the realisation value of the dwelling is assessed to be below 30% of the customer's loan is categorised not as an exposure secured on real property but as "other retail market".

3.2 Market risk

Market risk is a generic term for the risk of loss and reduction of future earnings arising from changes in observable rates or prices on financial instruments – in particular changes in share prices, fixed income rates (including credit spreads) and exchange rates.

Market risk also includes the risk of loss due to changes in the market price of financial derivatives such as futures, options, and financial derivatives based on items other than securities – for example commodities.

Market risk arises primarily in connection with the Bank's investments in bonds, short-term money market paper and shares, and as a result of activities designed to underpin banking operations such as funding along with fixed income and currency trading. The Group is also exposed to market risk through own account trading at SpareBank 1 Markets.

Market risk is controlled through day-to-day monitoring of risk exposures against limits set by the Board of Directors and through ongoing analyses of outstanding positions. Risk management reports monthly to the Board of Directors on the position regarding compliance with the limits set by the board. Detailed limits apply to investments in shares, bonds and positions in the fixed income and currency markets as well as limits to spread risk. Daily monitoring of market risk at SpareBank 1 Markets is carried out by the company's own risk management department. Monthly meetings are held between risk management at the parent bank and the head of risk management at SpareBank 1 Markets.

The Group defines limits on exposure to equity instruments using stress tests based on Finanstilsynet's scenarios. The limits are reviewed at least once a year and are adopted yearly by the Bank's Board of Directors.

Finanstilsynet's models for market and credit risk are used to compute the Bank's market risk. These models stress test the Bank's market risk based on traditional risk measures with an addition for the risk factors risk diversification and market liquidity. The risk factors are reviewed on a quarterly basis.

Market risk is stress tested and reported monthly to the Board of Directors.

Equity risk is the risk of loss on positions due to changes in share prices. This risk is linked to positions in equity instruments, including derivatives with equity instruments as the underlying. Equity risk is regarded as moderate.

Interest rate risk is the risk of loss due to changes in interest rates in financial markets. Interest rate risk arises mainly on fixed interest loans and funding in fixed interest securities. The risk on all interest rate positions can be viewed in terms of the change in value of interest rate instruments resulting from a rate change of 1 basis point. The Group utilises analyses showing the effect of this change for various maturity bands, with separate limits applying to interest rate exposure within each maturity band in addition to a separate limit for aggregate interest rate risk.

Interest rate lock-ins on the Group's instruments are essentially short, and the Group's interest rate risk is low to moderate.

Exchange rate risk is the risk of loss arising from changes in exchange rates. The Group measures exchange rate risk with a basis in net positions in the various currencies. The limits on exchange rate risk are expressed as limits on the maximum aggregate currency position and on the maximum position in the individual currency. Exchange rate risk is regarded as low.

Spread risk is the risk of losses arising due to changes in market value/realistic value of bonds as a consequence of increased risk add-ons in the pricing of these bonds. Credit risk in the bond portfolio is managed with a basis in an evaluation of the respective issuers. In addition, the Bank has a separate limit for overall spread risk for all bonds. The Bank calculates spread risk based on Finanstilsynet's module for market and credit risk, where the overall loss potential is the sum of loss potentials calculated for each individual credit risk exposure. The loss potential for the individual credit exposure is calculated with a basis in rating and duration. Bond risk is considered moderate.

3.3 Liquidity risk

Liquidity risk is the risk that the Group will be unable to honour its obligations and/or finance increases in assets without incurring extra costs in the form of falling values of assets which must be realised, or in the form of extra costly funding.

Management

The Bank's Finance Division is responsible for the Group's funding and liquidity management. Compliance with limits is monitored by Risk Management which reports the position to the Board of Directors on a monthly basis. The Group manages its liquidity on an overall basis since the finance division is responsible for funding both the Bank and the subsidiaries.

Liquidity risk management is based in the Group's overall liquidity strategy which reflects the Group's moderate risk profile. As part of the strategy, preparedness plans have been drawn up to handle the liquidity situation in periods of market turbulence with Bank-specific and industry-related crisis outcomes and a combination of these. Liquidity management includes stress tests which simulate the liquidity effect of various market events. The results of such testing are part of the basis for the preparedness plans developed for the Group's liquidity management regime.

Risk measurement

The Bank's Board of Directors reviews the liquidity strategy annually and establishes a framework that promotes a long-term perspective and balance in liquidity procurement. The Bank's overall aim is to ensure its ability to survive for 12 months of ordinary operation without fresh external funding.

The Bank's most important source of finance is customer deposits. The Bank mitigates its liquidity risk by diversifying funding across a variety of markets, funding sources and instruments, and by use of long-term funding. Too high a concentration of maturities increases refinancing vulnerability. This risk is curbed through defined limits. The Bank is rated by Moody's and Fitch Ratings as an element in assuring access to funding at acceptable prices in the market. The Bank uses SpareBank 1 Boligkreditt as an important funding source for the Bank's residential financing. The Bank will continue to use this company ahead since it has a good rating, is a frequent issuer and has proven itself capable of bringing in new funding in demanding market situations where smaller institutions may face greater challenges.

SpareBank 1 SMN's liquidity position is satisfactory.

The Ministry of Finance established new quantitative requirements for banks' liquidity reserves on 25 November 2015. The LCR requirement means that institutions must at all times have in place a liquidity reserve of at least 100 per cent, in other words their holding of liquid assets shall at least match net liquidity outflow in a given stress period of 30 calendar days.

Portfolio information

Table 18 Minimum own funds requirement in respect of market risk, including position risk, counterparty risk, settlement risk, foreign exchange risk and commodity risk

	Consolidated	Parent bank
Position risk	70	35
Equity instruments	34	0
Debt instruments	36	35
Units in securities funds	0	0
Derivatives	0	0
Credit derivatives	0	0
Issues	0	0
Counterparty risk (in the trading portfolio)		
Settlement risk		
of which 5-15 days	0	0
of which 16-30 days	0	0
of which 31-45 days	0	0
of which > 45 days	0	0
Foreign exchange risk	1	0
Commodity risk		
Total	71	35

Equity capital positions outside the trading portfolio:

Table 19 – Information on investments by purpose

(NOK million)	2021
At fair value through profit/loss	729
Listed	162
Unlisted	567
Hybrid capital	107
Listed	95
Unlisted	12
Assets held for sale – of which shares	
Unlisted	59
Total shares and units	895

Table 20 – Overview of counterparty risk for derivatives

Total foreign-exchange and contract amount	Contract amount	Fair value	
		Assets	Liabilities
Total interest rate derivatives	289.649	2.129	-2.376
Total equity instruments	1.398	33	-409
Total commodity-related contracts	814	190	-190
Total foreign exchange derivatives	16.919	304	-235
Accrued interest		569	-699
Total	308.780	3.225	-3.909

3.4 Operational risk

Operational risk is the risk of loss as a result of unsatisfactory or failing internal processes, systems, human error or external events. Examples of the foregoing include errors on the part of employees, flaws in products, processes or systems, or losses inflicted on the Bank by external factors such as fraud, fire or natural damage.

Operational risk is a risk category that captures the bulk of costs associated with quality failings in the Bank's ongoing business.

SpareBank 1 SMN has established a policy specifically for the management of operational risk. The policy guides the Bank's overarching stance on the management of operational risk and is designed to ensure that such risk is managed in an effective and appropriate manner. Operational risk shall be low, and its management aims to ensure that the risk of undesired loss is reduced.

Identification, management and control of operational risk are an integral aspect of management responsibility at all levels in SpareBank 1 SMN. Managers' most important aids in this respect are professional insight and managerial expertise along with action plans, control procedures and good monitoring systems. A systematic focus on risk assessment also promotes knowledge and awareness of improvements needed in the particular entity. Any flaws found are reported to appropriate levels of the organisation.

SpareBank 1 SMN attaches importance to authorisation structures, good descriptions of procedures and clear definition of responsibilities in supply contracts between the respective divisions as elements of a framework for handling operational risk.

The Board of Directors is kept abreast of the operational risk position through quarterly risk reports, and the annual internal control reporting. In addition the Board of Directors receives each year from the Internal Audit function an independent assessment of the Group's risk and of whether the internal control system functions in an appropriate and satisfactory manner.

A registration and follow-up system is used in the effort to ensure continuous improvement across all SpareBank 1 SMN's activities. This system promotes a better structure and follow-up of risk, events and areas needing improvement. Together with the reporting carried out, this system constitutes an important experience base with respect to operational risk. All operational events which could potentially entail loss, or where losses have arisen, are recorded in the base. Improvement measures are considered and set in train where appropriate.

The Group has a broad-based insurance programme designed to capture significant portions of losses incurred as a result of major events and disasters. Liability and crime insurances have been taken out, along with property and contents insurances, with a view to such events. Several types of personal insurance have also been taken out. These highly cost-effective policies are primarily intended to cover major loss events.

Undesired events recorded in 2021 show that the highest proportion of loss events is in the category *Customer, products and enterprise practices*. The proportion of book losses is highest in the category 'external crime' and refers to card use.

The figure below shows the distribution of actual operational losses at SpareBank 1 SMN broken down on various intervals in the period 2014 to 2021. The figure shows that the bulk of operational loss events are small, and that about 71 per cent of loss events involve amounts below NOK 10,000.

Distribution of operational losses 2014 - 2021

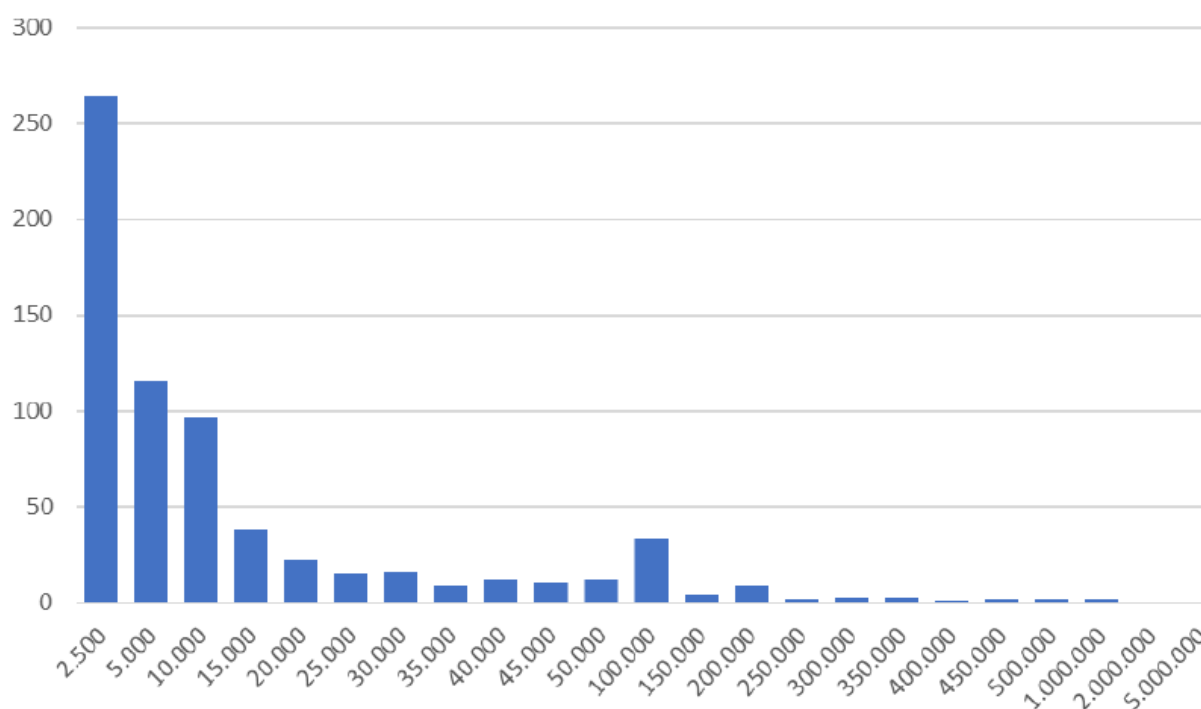


Figure 15 – Distribution of operational loss events in the period 2014 - 2021

Method

The parent bank uses the standardised approach when calculating capital need for operational risk, whereas the basic indicator approach is applied to subsidiaries.

Compliance risk

Compliance risk is the risk of failure to comply with the rules regulating the business. Non-compliance may result in SpareBank 1 SMN's incurrence of public sanctions, financial loss or loss of reputation.

The Compliance function is organised independently of the business lines. This function identifies, assesses and makes recommendations, and also monitors and reports under regulatory frameworks applying to SpareBank 1 SMN. The function is headed by the legal services director who reports to the Group CEO and the Board of Directors.

Management and measurement of compliance risk

SpareBank 1 SMN's compliance policy is adopted by the Board of Directors and describes main principles governing responsibilities and organisation. Low compliance risk is aimed for across the Group.

The Group shall comply with applicable rules for the business that is carried on. A risk-based approach to the exercise of the Compliance function is aligned with overall strategy, the range of products and services, and the scope of the activity. The Group's Compliance function has overarching responsibility for following up compliance risk through preventative and controlling measures. The annual plan shows planned activities. The responsible manager reports to the Group CEO and the Board of Directors on a quarterly basis.

The Group's managers are operatively responsible for ensuring that all activities within their units are carried on in accordance with applicable rules and are required to document this on an ongoing basis. Managers shall see to it that employees have the necessary knowledge and competence to carry out their tasks within the bounds of applicable rules. All staff are responsible for everyday compliance.

All business lines and support functions, along with subsidiaries, are required to promote compliance when operationalising the compliance policy adopted by the Board of Directors and when addressing identified compliance risks. Compliance with anti-money laundering measures is monitored by a position specifically established to operationalise AML. The individual responsible for compliance reports on compliance risk and any breaches of laws or regulations under which SpareBank 1 SMN operates.

4. ECONOMIC CAPITAL (PILLAR 2)

4.1 Summary

Economic capital refers to the amount of capital the Group considers it needs to cover the actual risk the Group has incurred. Since it is impossible to guard against all losses, the Group has determined that its economic capital should cover 99.9% of possible unexpected losses over a one-year horizon. For owner risk in SpareBank 1 Gruppen, however, a confidence level of 99.5% is applied which is in keeping with the requirement under the Solvency II framework.

While statistical methods are employed to calculate economic capital, calculation none the less requires qualitative assessments in some instances.

The following table shows the distribution of economic capital on the respective risk groups with a basis in risk exposure as at 31.12.21. At year-end economic capital is calculated for credit, market, operational, owner and business risk (including strategic risk).

The calculations are done based on internal risk assessments, and accordingly do not build on the Pillar-1-plus approach applied by Finanstilsynet in its SREP.

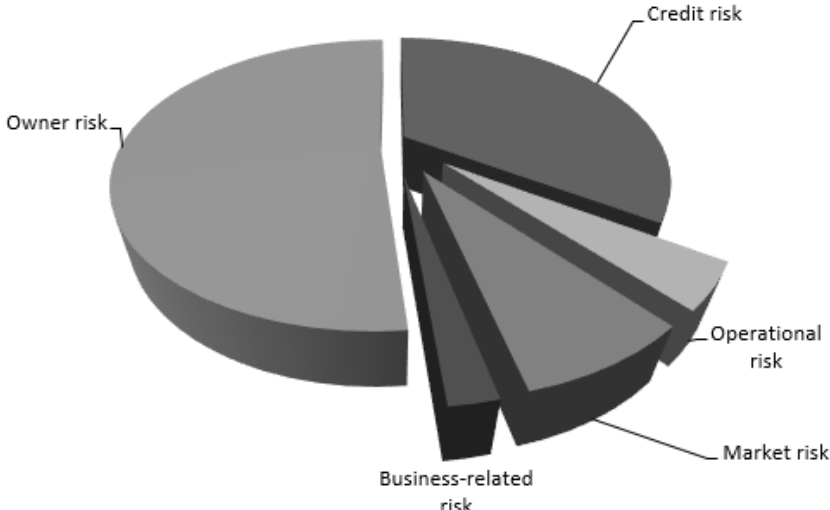


Figure 16 – application of economic capital by risk area

A significant portion of capital employed at SMN is devoted to owner risk. The following figure shows owner risk distributed on the respective risk groups. Credit risk accounts for the bulk of risk exposure. SMN is indirectly exposed to credit risk via BN Bank ASA, SpareBank 1 Gruppen, SpareBank 1 Boligkreditt, SpareBank 1 Næringskreditt and SpareBank 1 Kreditt.

Market risk is a further significant risk type which is chiefly incurred through exposures via the subsidiaries SMN Invest and SpareBank 1 SMN Markets, and via SpareBank 1 Gruppen.

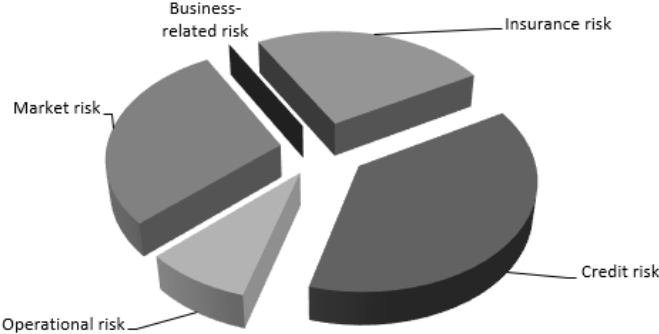


Figure 17 – owner risk by risk type

The following figure shows economic capital as at 31.12.21. In addition a comparison has been made of the need for economic capital against actual equity capital adjusted for goodwill and hybrid capital as at 31.12.21.

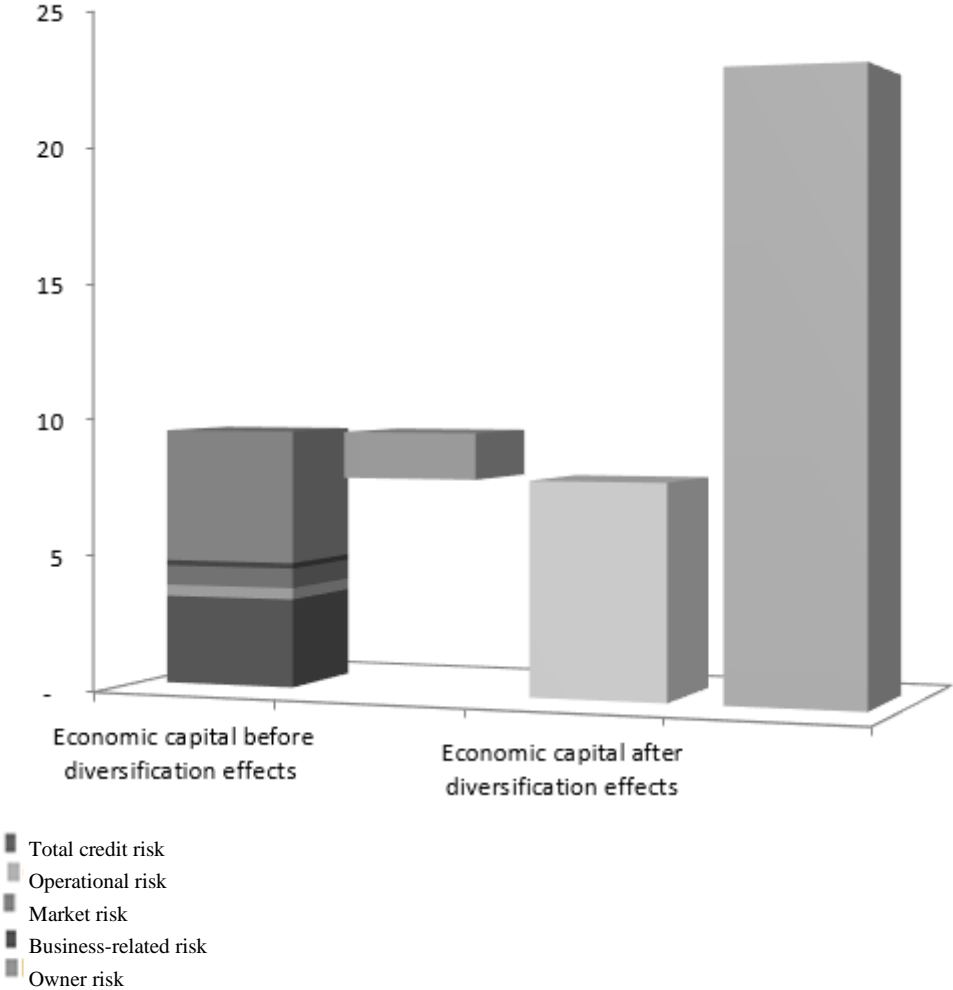


Figure 18 – need for economic capital relative to available equity capital

The total need for economic capital as at 31.12.21 is calculated at NOK 9.5bn before diversification effects. When account is taken of diversification effects between risk groups, the need for economic capital is calculated at NOK 7.8bn. The diversification effect shows the risk-mitigating effect the Group achieves by operating in several risk areas which cannot be expected to inflict unexpected losses simultaneously. A significant portion of the diversification effects is related to activities in the insurance business.

Available loss-absorbing capital including hybrid capital totalled NOK 22.5bn at year-end.

In the following chapters SpareBank 1 SMN gives a closer account of (a) the risk management framework for the various types of risk not covered by the Pillar 1 minimum requirements on own funds and (b) the calculation of economic capital for credit, market and operational risk where this calculation deviates from the regulatory calculations.

4.2 Credit risk

Management and control

Management and control of credit risk are further described in chapter 3.1.

Model description and application

The Group uses in all essentials the same models and approaches when calculating economic capital as when calculating minimum requirements on own funds. The main differences are described in chapter 5.

Economic capital

Economic capital for credit risk forms part of the Group's process for assessing economic capital under Pillar 2.

4.3 Market risk

Management and control

Management and control of credit risk are further described in chapter 3.2.

Model description and application

The Group reports regulatory capital (Pillar 1) using the standardised approach for market risk. Economic capital is calculated for interest rate, exchange rate and securities risk incurred by SpareBank 1 SMN. The calculation is based on stress tests which incorporate a scenario of major market disruption. Measurement of economic capital is an important tool with a view to internal budget setting and capital allocation.

Measurements of economic capital deviate not only in model terms, but also in portfolio terms, from the regulatory calculations. This is partly because the internal measurements of economic capital include interest rate risk outside the trading portfolio, which is not subject to the standardised approach's minimum capital requirements.

The table below illustrates the profit/loss effect of stress testing conducted at full utilisation of limits. Risk activities related to trading in currencies, fixed income and securities are conducted within the limits, authorisations and credit lines to counterparties in effect at all times. SpareBank 1 SMN incurs moderate interest rate risk, and actively assumes interest rate risk in its trading activities on only a very limited scale. The aim is to generate revenues to the greatest possible degree in the form of customer margins. This is with a view to assuring the greatest possible stability and safety in earnings.

Table 21 – Limits on market risk

Main limit	Market stress	Estimated profit effect (NOKm)
Currency exposure	27% change	41
Interest rate exposure	200 bpv parallel shift	176
Spread risk	Finanstilsynet's module	335
Equity risk limit	45-72% value fall	423

Economic capital

Economic capital for market risk forms part of the Group's process for assessing economic capital under Pillar 2.

4.4 Operational risk

Management and control

Management and control of operational risk receives closer attention in chapter 3.4.

Economic capital

Capital for operational risk forms part of the Group's process for assessing economic capital under Pillar 2. The capital need is calculated using the standardised approach for the parent bank and the basic indicator approach for subsidiaries. Moreover, the Group considers the need to set aside additional capital for operational risk to take account of any shortfall in the quality of management and control at SMN.

4.5 Liquidity risk

Management and control

Management and control of liquidity risk are further described in chapter 3.3

Diversification and maturities

The figures below illustrate the diversification of the Group's funding sources and markets as of 31.12.2021.

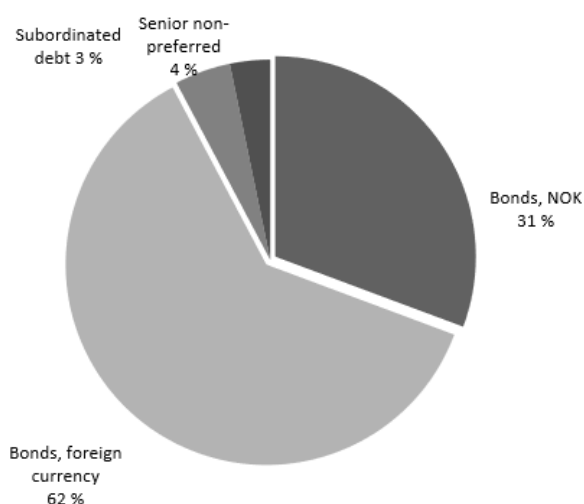


Figure 19 – Composition of money market funding

Funding via the Euro Medium Term Note (EMTN) program accounts for 55% of total funding. This category comprises both open offers and private placings.

At end-2021 the Group's LCR (liquidity coverage ratio) was 140% and the NSFR (net stable funding ratio) was 122%.

The figure below illustrates the funding portfolio's maturity structure as from end-2021.

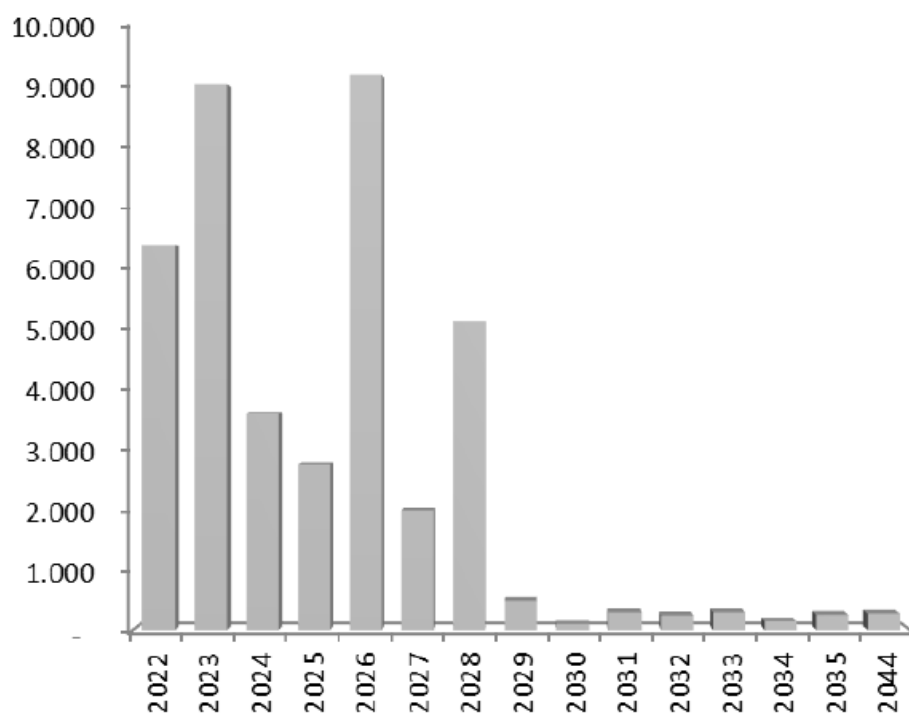


Figure 20 – maturity profile, market funding (figures in NOKbn)

Economic capital

The Bank does not hold economic capital for liquidity risk.

4.6 Owner risk

Definition

Owner risk is the risk that SpareBank 1 SMN will incur negative results on its holdings in strategically owned companies and/or will need to supply fresh equity to those companies. The companies concerned are defined in this context as companies in which SpareBank 1 SMN has a significant owner interest and influence. SpareBank 1 SMN incurs owner risk essentially through its stake in SpareBank 1 Gruppen, BN Bank ASA, SpareBank 1 Næringskreditt AS, SpareBank 1 Boligkreditt AS and SpareBank 1 Kredittkort.

Management and control

The SpareBank 1 banks operate a collaborative alliance and develop product companies through a jointly owned holding company – SpareBank 1 Gruppen AS. SpareBank 1 Gruppen AS is owned by SpareBank 1 SMN, SpareBank 1 Nord-Norge, SpareBank 1 SR-Bank, Sparebanken Hedmark, Samarbeidende Sparebanker AS, and the Norwegian Confederation of Trade Unions and affiliated unions. SpareBank 1 SMN has a 19.5% stake in SpareBank 1 Gruppen.

SpareBank 1 Gruppen also has administrative responsibility for collaborative processes within SpareBank 1-alliansen in which technology, brand-building, competence, shared processes / exploitation of best practice and procurement are at centre stage. SpareBank 1-alliansen is also

engaged in development work through three competence centres for training (in Tromsø), cash management (in Trondheim) and credit models (in Stavanger).

Meetings of the Board of Directors of SpareBank 1 Gruppen are attended by the CEOs of the owner banks SpareBank 1 SMN, SpareBank 1 Nord-Norge, SpareBank 1 SR-Bank, Sparebanken Hedmark and Samarbeidende Sparebanker AS in their ownership capacity. The owner banks' CEOs are also members of the alliance's governing body.

SpareBank 1 Boligkreditt AS and SpareBank 1 Næringskreditt AS are mortgage companies operating under licence granted by Finanstilsynet, their mission being to provide their parent banks with access to funding via the covered bond market. The mortgage companies are owned by the savings banks making up SpareBank 1-alliansen. SpareBank 1 Boligkreditt AS was founded on 18 August 2005 and SpareBank 1 Næringskreditt AS on 30 April 2009. Each savings bank's stake in the companies is based on its proportion of all loans transferred by the respective parent bank. At the end of 2021 SpareBank 1 SMN's stake in SpareBank 1 Boligkreditt AS was 20.9%. Its stake in SpareBank 1 Næringskreditt AS was 12.8%, and SpareBank 1 SMN is represented on the board of directors, the supervisory board and the general meeting respectively.

Method for calculating economic capital

SpareBank 1 SMN calculates economic capital for owner risk in SpareBank 1 Gruppen with a basis in SpareBank 1 Gruppen's own capital assessment process and assessments of economic capital.

Calculation of economic capital for owner risk for other affiliates is based on those companies' internal capital assessment process. Figure 17 shows the composition of owner risk at the end of 2021.

Economic capital

Calculation of economic capital for owner risk forms part of the Group's process for assessing economic capital under Pillar 2.

4.7 Business risk

Definition

Business risk is the risk of unexpected income and cost fluctuations arising from factors other than credit risk, market risk and operational risk. This risk can arise in a variety of business or product segments and be caused by cyclical fluctuations and changing customer behaviour.

Management and control

Business risk is managed through strategic analyses of external market situations and possible changes in framework conditions. The Group is concerned to develop a well-diversified income base so that any failure in individual product groups or customer segments will not have significant consequences.

SpareBank 1 SMN is well placed to meet new challenges. The Group has for many years demonstrated a considerable ability and will to adapt. The Group has over time developed cost-effective operations combined with continuous competence enhancement and business expansion in terms of product range and geographical reach. SpareBank 1 SMN has for several years systematically prioritised value chain thinking in its development of products and services.

Method for calculating economic capital

Calculation of economic capital centres on the volatility of that portion of SpareBank 1 SMN's revenues and expenses to which capital is not allocated through other risk categories. Volatility is calculated taking into account elements such as possible changes in customer behaviour prompted by a severe economic setback, changes in the competitive situation, or product innovation.

Economic capital

Economic capital for business risk forms part of the Group’s process for assessing economic capital under Pillar 2.

4.8 Strategic risk

Definition

Strategic risk is the risk of impairment of earnings and capital generation due to changes in framework conditions, poor business decisions, poor implementation of decisions or failure to adapt to changes in the business operating climate.

Management and control

SpareBank 1 SMN runs each year a strategy process involving the board of directors, management team and the divisions. A key aspect of the strategy process is to evaluate the Group’s strengths, weaknesses, threats faced and potentials. The process culminates with a strategic vision for the next three years with an associated business plan.

The Group Management Team performs a monthly and quarterly evaluation of the Group’s performance and strategic direction. A periodic review of strategic direction and the strategic risk picture is also conducted by the Board of Directors.

Changes in the risk picture due to regulatory changes in framework conditions are monitored on an ongoing basis.

Method for calculating economic capital

SpareBank 1 SMN calculates economic capital based on a risk analysis of the Group’s strategic risk picture with associated scenario analyses.

Economic capital

Economic capital for strategic risk forms part of the Group’s process for assessing economic capital under Pillar 2.

5. COMPARISON OF REGULATORY AND ECONOMIC CAPITAL NEED

The following graph compares minimum requirements on own funds (Pillar 1) and the need for economic capital (Pillar 2). The main reason for differences between the two pillars is also explained.

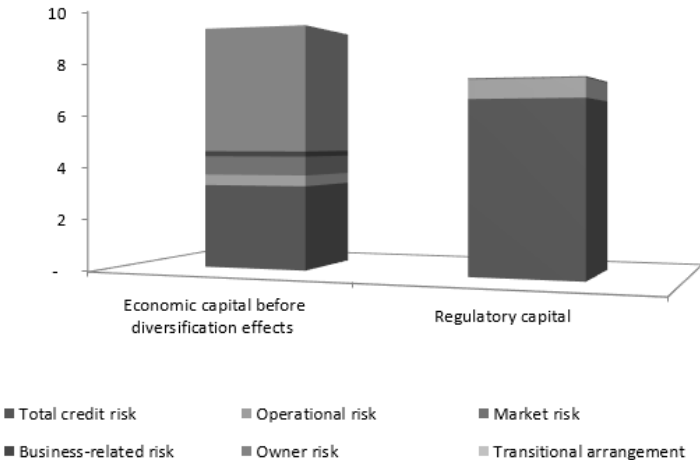


Figure 21 – comparison of economic versus regulatory capital need

The main differences between economic capital (Pillar 2) before diversification effects of NOK 9.5bn and minimum requirements on own funds (Pillar 1) of NOK 7.4bn are due mainly to:

- *Credit risk:*
 - *PD:* In the calculation of economic and regulatory capital need, the PD for the individual counterparty is employed. Due to special requirements on safety margins, the level of the regulatory PD is higher than the economic PD.
 - *Loss given default (LGD):* For IRB exposures to the retail market a 20% LGD floor is defined, causing average LGD to be higher for regulatory purposes than indicated by the Bank's internal models.

The Group fixes the realisable value of furnished collaterals in light of experience gained over time and such that, based on a conservative assessment, these reflect the assumed realisable value in an economic setback. SpareBank 1 SMN's internal estimates for Loss Given Default are significantly lower than the floor values set by the authorities for the residential mortgage portfolio.
 - *Concentration risk:* The IRB framework premises that the loan portfolios are so well diversified that no individual exposure in isolation will affect risk in the portfolio. While this premise is credible in relation to exposures to the retail segment, the corporate market portfolio has concentrations both in terms of major single exposures and in terms of sectoral composition. The Bank's calculation of the need for economic capital accordingly takes account of concentration risk associated with size and line of business.
- *Owner risk:* Economic capital (Pillar 2) calculated for owner risk in subsidiaries and affiliates is calculated at NOK 4.9bn before diversification effects. The capital requirements for BN Bank, SpareBank 1 Boligkreditt, SpareBank 1 Næringskreditt and SpareBank Kredittkort. are consolidated on a proportional basis. The owner interests in SpareBank 1 Gruppen are deducted at 100% from the Group's CET1 capital for that portion which exceeds 10% of the Group's CET1 capital. That portion of the holding which is not deducted from the CET1 capital is assigned a risk weight of 250%.
- *Business risk (including strategic risk):* Economic capital is calculated (Pillar 2) for business risk (incl. strategic risk), whereas business risk is not a risk category where calculation of the minimum own funds requirement is concerned.
- *Diversification effects:* Diversification effects arise because different asset classes / risk types are not perfectly correlated. As a result the overall capital need is lower than the sum of capital needs for each individual risk category. The Bank takes account of these effects in its assessment of necessary economic capital. The diversification effects are based on observed correlations which are then adjusted to take account of the risk of stronger correlation in an economic downturn.