

## Note 6 - Risk factors

### Risk Management

SpareBank 1 SMN aims to maintain a moderate risk profile and to apply risk monitoring of such high quality that no single event will seriously impair the Group's financial position. The Group's risk profile is quantified through targets for rating, concentration, risk-adjusted return, loss ratios, expected loss, necessary economic capital, regulatory capital adequacy, and expected liquidity related regulatory requirements.

The principles underlying SpareBank 1 SMN's Risk Management are laid down in the risk management policy. The Group gives much emphasis to identifying, measuring, managing and monitoring central risks in such a way that the Group progresses in line with its adopted risk profile and strategies.

Risk management within the Group is intended to support the Group's strategic development and target attainment. The risk management regime is also designed to ensure financial stability and prudent asset management. This will be achieved through:

- A strong organisation culture featuring high risk-management awareness
- A sound understanding of the risks that drive earnings and risk costs, thereby creating a better 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

The Group's risk is quantified by calculating expected loss and the need for 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 has decided that the risk-adjusted capital should cover 99.9 per cent of all possible unexpected losses. Statistical methods are employed to compute expected loss and risk-adjusted capital, but the calculation requires expert assessments in some cases. In the case of risk types where no recognised methods of calculating capital needs are available, the Group defines risk management limits to ensure that the likelihood of an event occurring is extremely low. For further details see the Group's Pillar III reporting which is available on the Parent Bank's website.

The Group's overall risk exposure and risk trend are followed up 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 areas.

### 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 Group is exposed to credit risk through all customer and counterparty receivables. The main exposure is through ordinary lending and leasing activities, but the Group's credit risk also has a bearing on the liquidity reserve portfolio through counterparty risk arising from interest rate and foreign exchange derivatives.

Credit risk associated with the Group's lending activity is the largest area of risk facing the Group.

Through its annual review of the Parent Bank's credit strategy, the Board of Directors concretises the Group's risk appetite by establishing objectives and limits for the Parent Bank's credit portfolio. The Parent Bank's credit strategy and credit policy are derived from the Parent Bank's main strategy, and contain guidelines for the risk profile, including maximum expected loss (EL) for the retail market and corporate market divisions respectively, maximum portfolio default probability (PD) and maximum regulatory capital (UL) allocated to the credit business.

Concentration risk is managed by distribution between Retail Banking and Corporate Banking, limits on the size of loan and loss ratio on single exposures, limits on maximum exposure to sectors, and limits on regulatory risk weighted assets for Retail Banking and Corporate Banking.

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.

The Parent Bank has approval to use internal models in its risk management and capital calculation (IRB), and in February 2015 was given permission to apply the advanced IRB approach.

The Parent Bank's risk classification system is designed to enable the Parent Bank's loan portfolio to be managed in conformity with the Parent Bank's credit strategy and to secure the risk-adjusted return. The Board of Directors delegates lending authorisation to the Group

CEO. The Group CEO can further delegate authorisations to levels below executive director level. Lending authorisations are graded by size of commitment and risk profile.

The Parent Bank has a division dedicated to credit support which assists in or 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.

The Group uses credit models for risk classification, risk pricing and portfolio management. The risk classification system builds on the following main components:

### **1. Probability of Default (PD)**

The Group's credit models are based on statistical computations of probability of default. The calculations are based on scoring models that take into account financial position and behavioural data. The models are partly point-in-time oriented, and reflect the probability of default in the course of the next 12 months under current economic conditions. The Bank has also developed a cashflow based PD-model used for exposures in rental of commercial property. The Bank has engaged in a dialogue with Finanstilsynet to be able to use this model in the calculation of capital requirements (IRB).

Customers are assigned to one of nine risk classes based on PD, in addition to two risk classes for exposures in default and/or subject to individual impairment write down.

The models are validated on an ongoing basis and at least once per year both with respect to their ability to rank customers and to estimate PD levels. The validation results confirm that the models' accuracy meets internal criteria and international recommendations.

### **2. Exposure at Default (EAD)**

EAD is an estimation of the size of an exposure in the event of, and at the time of, a counterparty's default. For drawing rights, a conversion factor (CF) is used to estimate how much of the present unutilised credit ceiling will have been utilised at a future default date. For guarantees, CF is used to estimate what portion of issued guarantees will be brought to bear upon default. CF is validated monthly for drawing rights in the retail market and corporate market. The Group's EAD model takes account of differences both between products and customer types.

### **3. Loss Given Default (LGD)**

The Group estimates the loss ratio for each loan based on expected recovery rate, realisable value of the underlying collateral, recovery rate on unsecured debt, as well as direct costs of recovery. Values are determined using standard models, and actual realised values are validated to test the models' reliability.

Estimated loss ratio shall take into account possible economic downturn. With limited downturn data, the Bank has entered significant margins in its calculations to ensure conservative estimates when calculating capital requirements.

The three above-mentioned parameters (PD, EAD and LGD) underlie the Group's portfolio classification and statistical calculation of expected loss (EL) and need for economic capital/risk-adjusted capital (UL).

### **Counterparty risk**

Counterparty risk in derivatives trading is managed through ISDA and CSA contracts set up with financial institutions that are the Group's most used counterparties. ISDA contracts regulate settlements between financial counterparties. The CSA contracts limit maximum exposure through market evaluation of the portfolio and margin calls when the change in portfolio value exceeds the maximum agreed limit or threshold amount. The Group will continue to enter CSA contracts with financial counterparties to manage counterparty risk. See note 14 Financial Instruments and offsetting for further description of these contracts.

Counterparty risk for customers is hedged through use of cash depots or other collateral which, at all times, have to exceed the market value of the customer's portfolio. Specific procedures have been established for calling for further collateral or to close positions if market values exceed 80 per cent of the collateral.

SpareBank 1 Markets clears ordinary share trades executed at Oslo Børs through CCP settlements. The company is a direct clearing member of SIX X-Clear, and the counterparty risk is against SIX X-Clear.

### **Market risk**

Market risk is a generic term for the risk of loss and reduction of future incomes as a result of changes in observable rates or prices of financial instruments. Market risk arises at SpareBank 1 SMN mainly in connection with the Group's investments in bonds, CDs and shares, including funding. SpareBank 1 SMN has outsourced customer trading in fixed income and foreign currency instruments to SpareBank 1 Markets. This customer activity, and SpareBank 1 Markets' use of the Parent Bank's balance sheet, also affect the Group's market risk.

Market risk is managed through limits for investments in shares, bonds and positions in the fixed income and currency markets. The Group's strategy for market risk lays the basis for management reporting, control and follow-up of compliance with limits and guidelines.

The Group defines limits on exposure to equity instruments with a basis in stress tests employed in Finanstilsynet's (Financial Supervisory Authority of Norway) models. Limits are reviewed at least once a year and adopted yearly by the Group's Board of Directors. Compliance with the limits is monitored by Risk Management and exposures relative to the adopted limits are reported monthly.

Interest rate risk is the risk of loss due to changes in interest rates in financial markets. 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 (0.01 percentage 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 and across all maturity bands as a whole. Interest rate lock-ins on the Group's instruments are essentially short, and the Group's interest rate risk is low to moderate.

Spread risk is the risk of loss as a result of changes in market value/fair value of bonds due to general changes in credit spreads. The bond portfolio is managed based on an evaluation of the individual issuers. In addition, the Group has a separate limit for overall spread risk for all bonds. The Group calculates spread risk based on Finanstilsynet's module for market and credit risk. The loss potential for the individual credit exposure is calculated with a basis in rating and duration.

Exchange rate risk is the risk of loss resulting from exchange rate movements. The Group measures exchange rate risk on the basis of net positions in the various currencies. Limits on exchange rate risk are expressed in limits for the maximum aggregate foreign exchange position in individual currencies.

Equity risk is the risk of loss on positions as a result of changes in share prices. This risk is linked to positions in equity instruments as the underlying. Shares in subsidiaries and shares forming part of a consolidated or strategic assessment are not included.

#### **Liquidity risk**

Liquidity risk is the risk that the Group will be unable to refinance its debt or unable to finance increases in its assets.

The Group's most important source of finance is customer deposits. At end-2017 the Group's ratio of deposits to loans was 51 per cent, including loans sold to SpareBank 1 Boligkreditt and SpareBank 1 Næringskreditt, compared with 49 per cent at end-2016 (Group).

The Group reduces its liquidity risk by diversifying funding across a variety of markets, funding sources, maturities and instruments, and by employing long-term funding. Excessive concentration of maturities heightens vulnerability with regard to refinancing. The Group seeks to mitigate such risk by applying defined limits.

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

Governance is based in the Group's overall liquidity strategy which is reviewed and adopted by the board at least once each year. The liquidity strategy reflects the Group's moderate risk profile. As a part of the strategy, emergency plans have been drawn up both for the Group and the SpareBank 1 Alliance to handle the liquidity situation in periods of turbulent capital markets. These take into account periods of both bank-specific and system-related crisis scenarios as well as a combination of the two. An aim of the Group is to survive for 12 months of ordinary operation without fresh external funding. This assumes that the Parent Bank can continue to sell eligible loans to SpareBank 1 Boligkreditt, and that there will at all times be sufficient capacity in the stock of loans to cover a house price fall of up to 30 per cent and thus to maintain funding through the mortgage credit company. It also intends to succeed in surviving for 30 days under the most extreme crisis scenario. In such a scenario only the Parent Bank's holding of highly liquid assets may be utilised.

Access to capital has been satisfactory throughout 2017.

The Group's liquidity situation as of 31 December 2017 is considered satisfactory.

#### **Operational risk**

Operational risk can be defined as the risk of loss resulting from:

- People: Breaches of routines/guidelines, inadequate competence, unclear policy, strategy or routines, internal irregularities
- Systems: Failure of IT- and other systems
- External causes: Criminality, natural disaster, other external causes

Operational risk is a risk category that captures the great majority of costs associated with quality lapses in the Group's current activity.

Management of operational risk has acquired increased importance in the financial industry in recent years. Contributory factors are internationalisation, strong technological development and steadily growing demands from customers, public authorities and other interest groups. Many substantial loss events in the international financial industry have originated in failures in this risk area.

Identification, management and control of operational risk are an integral part of managerial responsibility at all levels of SpareBank 1 SMN. Managers' most important aids in this work are professional insight and leadership skills along with action plans, control routines and good follow-up systems. A systematic programme of risk assessments also contributes to increased knowledge and awareness of current needs for improvement in one's own unit. Any weaknesses and improvements are reported to higher levels in 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 in a framework for handling operational risk.

Management consider the Bank's IT –systems to be central for the operation, accounting and reporting of transactions in addition to providing the support for important estimates and calculations. The IT- systems are mainly standardised, and the management and operation has been outsourced to a service provider.

The Parent Bank has put to use a registration and monitoring tool (Risk Information System) for better structure and follow up of risk, events and areas for improvement in the Group.

Operational losses are reported to the Board of Directors. The Board of Directors receives each year from the internal audit and the statutory auditor an independent assessment of the Group's risk and of whether the internal control functions in an appropriate and adequate manner. The Board's assessment of the operational risk is moderate, including the risk related to the accounting and reporting process.

For further information see the Bank's Pilar III-report available at <https://www.sparebank1.no/en/smn/about-us/investor/financial-info/capital-adequacy.html> and notes:

Note 13: Maximum credit risk exposure

Note 14: Financial instruments and offsetting

Note 16: Market risk related to interest rate risk

Note 17: Market risk related to currency exposure