Pillar 3
2018

SpareBank 1 ØSTLANDET

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1 Introduction

Pillar 3 is a regulatory requirement for the publication of information about capital and risk conditions. This document provides a description of SpareBank 1 Østlandet's risk and capital management and shall satisfy the requirements for the public disclosure of financial information as stipulated in part IX of the Capital Requirements Directive.

Work is taking place internationally to standardise the disclosure by using standardised tables, as well as clarifying requirements for qualitative descriptions. The Basel Committee and the European Banking Authority (hereinafter referred to as the EBA) updated their Pillar 3 frameworks in March 2017 and December 2016 respectively. Until the new regulations have been implemented in the EU, SpareBank 1 Østlandet has supplemented the requirements of the Capital Requirements Directive with the guidelines from the EBA of December 2016 in the publication; the standardised tables follow as an attachment to the Pillar 3 document. The publication is also applied adapted to circular 5/2018 of December 2018 on the disclosure of financial information.

This document is updated annually. If, however, there are significant changes that have an impact on the assessment of the Group's financial standing, then this document will be updated with new information. Standardised forms in attachments are updated at the recommended frequency for each form. Periodic information on capital adequacy and the minimum eligible capital requirements is available in the Group's quarterly reports. All figures are stated in NOK million unless otherwise stated.

Beyond the information available in this document with attachments, we refer to About us/Investor on SpareBank 1 Østlandet's website *https://www.sparebank1.no/nb/ostlandet.*

1.1 Capital adequacy regulations

The capital adequacy regulations are based on a standard for calculating capital adequacy where the purpose is to reinforce the stability of the financial system through the following instruments:

- Risk sensitive capital requirements.
- Regulatory requirements for risk management and control.
- Supervisory follow-up.
- Information to the market

The regulations are intended to ensure there is agreement between how the authorities stipulate capital adequacy requirements for financial institutions and the approaches the financial institutions use to calculate and evaluate their capital requirements. The capital adequacy rules and regulations are based on the following three pillars:

- Pillar 1: Minimum eligible capital requirements.
- Pillar 2: Evaluation of the overall capital requirements and supervisory follow-up.
- Pillar 3: Public disclosure of information.

1.1.1 Pillar 1 – Minimum eligible capital requirements

Pillar 1 concerns the minimum eligible capital requirements for credit risk, operational risk and market risk, for which the minimum capital adequacy requirement has been set at 8 per cent. In addition to this comes a total buffer requirement of 7.5 per cent as at 31 December 2018

SpareBank 1 Østlandet has not currently been defined as a national systemically important bank. The Financial Supervisory Authority of Norway has proposed a regulatory change regarding the identification of systemically important financial institutions. If the regulatory change is passed, SpareBank 1 Østlandet will be identified as systemically important. The Financial Supervisory Authority of Norway is not explicit in its proposal regarding implementation date.

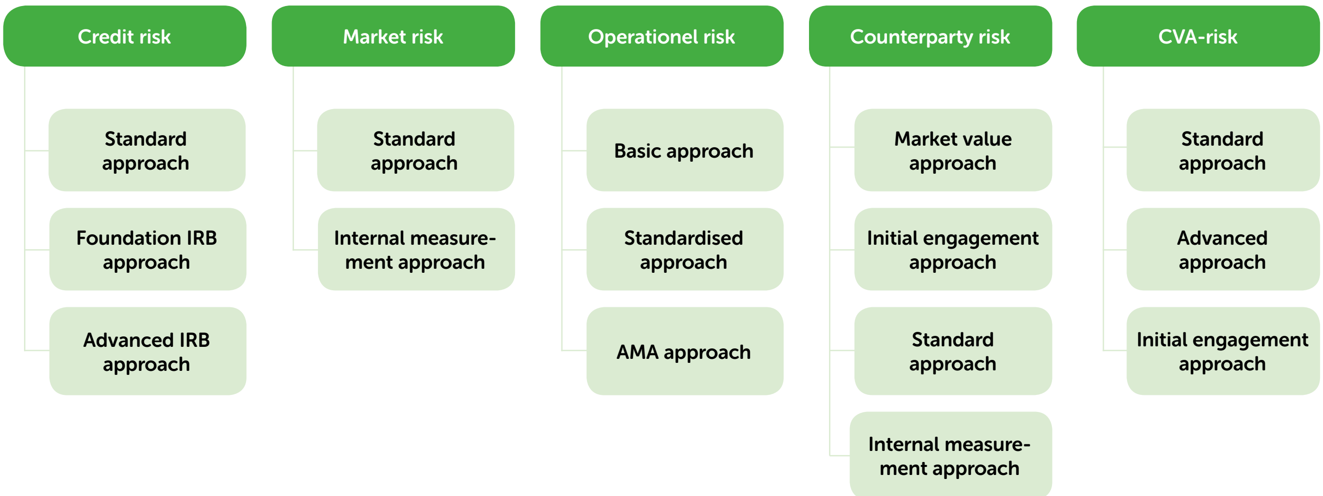
Capital adequacy is defined as the relationship between the bank's total eligible capital and its risk-weighted assets.

Figure 1.1: Capital adequacy ratio

$$\frac{\text{Common equity tier 1 capital + additional tier 1 capital + supplementary capital}}{\text{Credit risk + market risk + operational risk}} >= \text{minimum requirement + buffer requirement}$$

The capital adequacy regulations contain various approaches for calculating capital requirements. The various approaches appear in the figure below.

Figure 1.2: Approaches for calculating capital requirements



For institutions that have permission to use an internal measurement approach (hereinafter called IRB approaches, where IRB is an abbreviation of Internal Rating Based Approach), the statutory minimum capital requirement for credit risk will be based on the institution's risk models. The use of IRB approaches will make the minimum capital requirement more risk sensitive and means that capital requirements, to a greater degree than when using the standard approach based on standardised input, will vary more with the risk inherent in the underlying portfolios. However, the regulations for the IRB banks include a preliminary provision that the total capital requirement may not be less than 80 per cent of a capital requirement calculated according to the Basel I rules. As a result of this Basel I floor, the regulatory capital requirement will therefore not always be determined by the risk sensitivity of the IRB models.

1.1.2 Pillar 2 – Evaluation of the overall capital requirements and individual supervisory follow-up

Pillar 2 sets requirements for the institution's capital assessment process (hereinafter referred to as the ICAAP process, where ICAAP is an abbreviation of Internal Capital Adequacy Assessment Process). The purpose of the process is to implement a structured and documented assessment process for the Group's risk profile in order to ensure that the Group has adequate capital to cover the risk associated with its operations. In addition, institutions must have a strategy for maintaining an adequate level of capital.

In autumn 2016, the Financial Supervisory Authority of Norway published circular 12/2016 "The Financial Supervisory Authority of Norway's practices for assessing risk and capital requirements". The Group has adapted its ICAAP process to comply with the circular.

Based on the above-mentioned circular, the Group calculates its Pillar 2 supplement in a process involving the parent bank, subsidiaries and the stakes in associated companies/joint ventures. The process is based on an assessment of exposure and quality in management and control, where the capital requirements are mainly based on the approach described in the aforementioned circular.

The Financial Supervisory Authority of Norway is required to monitor and evaluate the Group's risk exposure and risk management, internal assessments of capital requirements and associated strategies, as well as the Group's ability to ensure compliance with the authorities' capital requirements. The Financial Supervisory Authority of Norway has the authority to implement suitable supervisory measures if the Financial Supervisory Authority of Norway is not satisfied with the results of this process.

1.1.3 Pillar 3 – Public disclosure of information

The purpose of Pillar 3 is to help increase market discipline and to make it easier to compare institutions. The institutions shall publish information that gives the market participants the opportunity to assess the institutions' risk profile, capitalisation and control of risk. The information shall be provided in an understandable way that makes it possible to compare different institutions. The information shall mainly be published at least annually with the financial statements, but the institutions shall assess whether parts of the information are to be made public more frequently.

1.2 The Group's capital adequacy targets

The Group's overarching strategic targets are set on the basis that they should underpin a moderate to low risk profile, where the Group shall be among Norway's financially strongest and most profitable regional financial groups.

The Group's financial strength is expressed through its regulatory capital adequacy. The following conditions shall be taken into account when setting the level of capital:
- The authorities' capital adequacy requirements.
- The need for freedom of action.
- The level of ambition in the strategic targets.
- The commercial framework conditions.
- The desired risk profile.

The Group has the following capital targets:
- Common equity tier 1 ratio of 16.0 per cent.
- Capital adequacy ratio of 17.8 per cent.
- Leverage ratio of 6.0 per cent.

1.3 Adapting to the Capital Adequacy Regulation

As at 31 December 2018, the parent bank, SpareBank 1 Østlandet, uses the advanced IRB approach for calculating minimum requirements for eligible capital for credit risk in the credit portfolio. The figure below provides an overview of the approaches the Group uses for calculating capital requirements.

Figure 1.3: Approaches for calculating capital requirements in the Group

Area	SpareBank 1 Østlandet (parent bank)	SpareBank 1 Finans Østlandet
Credit risk		
- Governments	Standard approach	Standard approach
- Institutions	Standard approach	Standard approach
- Corporates	Advanced IRB approach	Standard approach
- Retail	Advanced IRB approach	Standard approach
- Equity positions	Standard approach	N/A
Market risk	N/A	N/A
Operational risk	Standardised approach	Standardised approach
Counterparty risk	Market value approach	N/A
CVA risk	Standard approach	N/A

2 Regulatory capital

At the end of 2018, the Group is subject to a common equity tier 1 capital requirement of 12 per cent under Pillar 1. In addition, the capital requirement under Pillar 2, has been set at 1.8 per cent. The purpose of the Pillar 2 requirement is to cover capital requirements associated with risks that are not, or are only partially, covered by the capital requirements in Pillar 1. The Group is subject to a minimum eligible capital requirement under Pillar 1 of 15.5 per cent as at 31 December 2018.

2.1 Regulatory capital adequacy – Pillar 1

The following table shows the Group's capital adequacy calculation under Pillar 1 as at 31 December 2018.

Table 2.1: Calculation of capital adequacy

Parent bank			Group	
Basel III	**Basel III**		**Basel III**	**Basel III**
31.12.2017	**31.12.2018**		**31.12.2018**	**31.12.2017**
6 078	6 762	Paid-up equity	6 670	6 111
5 928	6 738	Earned equity capital	7 588	6 758
400	400	Hybrid capital	400	400
		Minority interests	104	62
12 406	**13 900**	**Total equity carried**	**14 762**	**13 331**
		Common equity tier 1 capital		
-629	-705	Results for the accounting year not included	-705	-629
-400	-400	Hybrid capital	-400	-400
		Minority interests that is not eligible as CET1 capital	-58	-21
93	20	Cumulative gains and losses due to changes in own credit risk on fair valued liabilities	20	93
		Cash flow hedge reserve	6	8
-103	-72	Goodwill and other intangible assets	-395	-380
-189	-238	Positive value of expected losses under the IRB approach	-311	-231
		CET 1 instruments of financial sector entities where the institution does have a significant investement	-326	-154
-28	-27	Value adjustments due to the requirements for prudent valuation (AVA)	-27	-35
11 150	**12 479**	**Common equity tier 1 capital**	**12 566**	**11 583**
		Additional Tier 1 capital		
400	400	Hybrid capital	400	400
		Instruments issued by consolidated entities that are given recognition in AT1 Capital	245	216
400	**400**	**Tier 1 capital**	**645**	**616**
		Supplementary capital in excess of Tier 1 capital		
1 700	1 100	Subordinated loan capital	1 100	1 700
		Instruments issued by consolidated entities that are given recognition in T2 Capital	361	368
		T2 instruments of financial sector where the institution does not have a significant investement		
-130		T2 instruments of financial sector where the institution does have a significant investement		-130
1 570	**1 100**	**Total supplementary capital**	**1 461**	**1 939**
13 120	**13 979**	**Total eligible capital**	**14 672**	**14 138**
5 154	4 781	Corporates - SME	4 781	5 154
9 776	11 034	Corporates - Specialised Lending	11 034	9 776
633	1 411	Corporates - Other	1 411	633
1 020	1 223	SME exposure	1 424	1 203
14 507	16 886	Retail mortgage exposure	24 235	21 840
1 701	1 234	Other retail exposure	1 259	1 723

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32 792	**36 569**	**Credit exposures calculated using IRB-approach**	**44 145**	**40 330**
10 869	12 106	Credit exposures calculated using the standardised approach	16 405	14 936
207	383	Counterparty credit risk	1 732	1 267
		Market risk		
3 343	3 433	Operational risk	5 222	4 503
2 577	1 849	Basel I floor adjustment	7 495	7 884
49 787	**54 340**	**Risk-weighted assets**	**74 999**	68 920
3 983	**4 347**	**Capital requirements (8%)**	**6 000**	5 514
846	**978**	**Pillar 2 (1.8%, 1.7% as at 31.12.2017)**	**1 350**	**1 172**
		Buffer requirements		
1 245	1 359	Capital conservation buffer (2.5%)	1 875	1 723
996	1 087	Countercyclical capital buffer (2%)	1 500	1 378
1 494	1 630	Systemic risk buffer (3%)	2 250	2 068
3 734	**4 076**	**Total buffer requirements for Common Equity (7.5 %)**	**5 625**	5 169
4 329	**4 980**	**Available Common Equity (13.8 %, 13.7 % as at 31.12.2017)**	**2 217**	**2 141**
		Capital ratios		
22,4 %	**23,0 %**	CET 1 capital ratio	**16,8 %**	**16,8 %**
23,6 %	**23,8 %**	CET 1 capital ratio (excluding Basel 1-floor)	**18,6 %**	**19,0 %**
23,2 %	**23,7 %**	Tier 1 capital ratio	**17,6 %**	**17,7 %**
26,4 %	**25,7 %**	Capital adequacy ratio	**19,6 %**	**20,5 %**
10,6 %	**10,2 %**	Leverage ratio	**7,5 %**	**7,1 %**

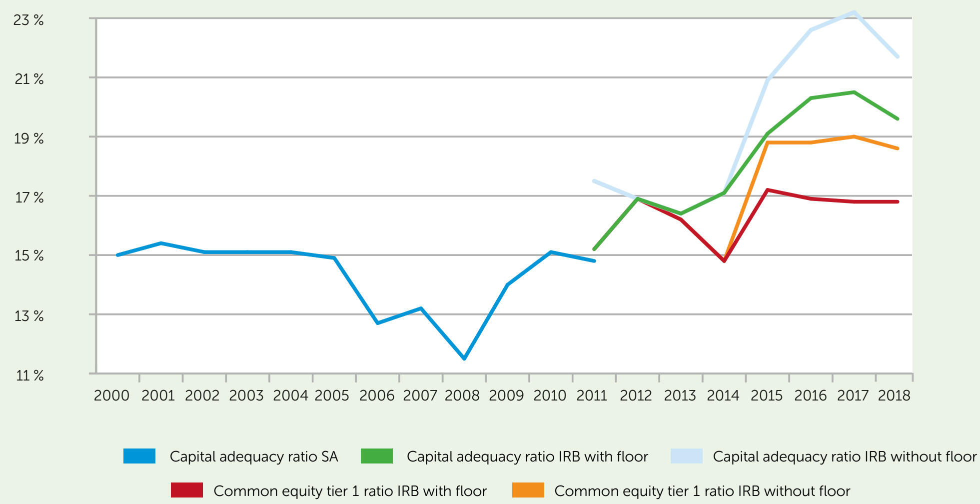
The following table shows the Group's minimum eligible capital requirement (8 per cent) as at 31 December 2018.

Table 2.2: Minimum eligible capital requirements

IRB exposures	**SpareBank 1 Østlandet (parent bank)**	**SpareBank 1 Finans Østlandet AS**	**SpareBank 1 Boligkreditt AS**	**SpareBank 1 Næringskreditt AS**	**SpareBank 1 Kredittkort AS**	**SpareBank 1 Østlandet (Group)**
Corporates - SME	382					382
Corporates - Specialised lending	883					883
Corporates - Other	113					113
Retail - Secured by real estate SME	98		80			114
Retail - Secured by real estate non-SME	1 351		2 910			1 939
Retail - Other SME	10					10
Retail - Other non-SME	89		9			91
Equity IRB						
Minimum requirement IRB	**2 926**		**3 000**			**3 532**
Standard approach exposures						
Central governments or central banks						
Regional governments or local authorities	13	3				16
Public sector entities						
Multilateral development banks						
International organisations:						
Institutions	142		72	6	8	49
Corporates	45	99		285		174
Retail	10	392			294	462
Secured by mortgages on immovable property	10			519		79
Exposures in default		6				6
High risk exposures	1					1
Covered bonds	73		121	10		101
Receivables from institutions and corporates with short-term rating	1					1
Units in securities funds	5					5
Equity positions	605					275
Other items	63	11	7		39	143
Minimum requirement SA	**968**	**511**	**201**	**820**	**341**	**1 312**
Operational risk	275	29	62	17	74	418
Counterparty risk including CVA	31		470	47		139
Additions for Basel I floor	148		2 378			600
Total funds requirement	**4 347**	**541**	**6 111**	**884**	**414**	**6 000**

The figure below shows the development of the Group's capital adequacy.

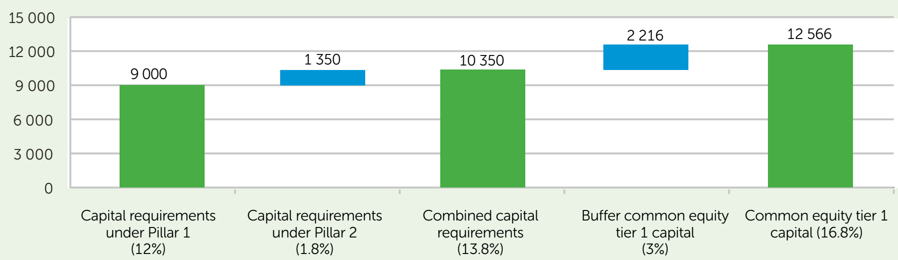
Figure 2.1: Development of capital adequacy



2.2 Regulatory common equity tier 1 capital ratio – Pillar 1 and Pillar 2

The figure below provides a graphic representation of the Group's capital situation with a focus on common equity tier 1 capital as at 31 December 2018.

Figure 2.2: Common equity tier 1 capital



2.3 Leverage ratio

The leverage ratio is calculated as the Group's tier 1 capital as a percentage of the Group's exposure measure. The exposure measure is defined as the sum of the capitalised assets plus the off-balance drawing rights, guarantees and unutilised credit. As at 31 December 2018 the Group is subject to a minimum requirement for leverage ratio of 5 per cent. The table below shows the leverage ratio as at 31 December 2018.

Table 2.3: Leverage ratio

On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	169 094
(Asset amounts deducted in determining Tier 1 capital)	-1 033
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	**168 061**
Leverage ratio common disclosure	
Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	5 923
Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	1 379
(-) Deductions of receivables assets for cash variation margin provided in derivatives transactions	-5 038
(-) Exempted CCP leg of client-cleared trade exposures	
Total derivative exposures	**2 264**
SFT exposures	
Gross SFT assets (with no recognition of netting), after adjusting for reverse repurchase transactions	
(-) Netted amounts of cash payables and cash receivables of gross SFT assets	
Counterparty credit risk exposure for SFT assets	
Total securities financing transaction exposures	
Other off-balance sheet exposures	
Off-balance sheet exposures at gross notional amount	18 883
- Adjustments for conversion to credit equivalent amounts	-13 344
Other off-balance sheet exposures	**5 539**
Capital and total exposure measure	
Tier 1 capital	13 211
Leverage ratio total exposure measure	175 864
Leverage ratio	**7,5 %**

3 Regulatory framework implementation

3.1 Consolidation for capital adequacy purposes

Consolidation of capital adequacy follows the rules in chapter 18 of the Financial Enterprises Act on "Activities in financial groups, consolidation etc.". The most significant differences from ordinary consolidation according to IFRS are due to the proportional consolidation of financial enterprises where participant interest is above 20 per cent.

3.1.1 Cooperative group

The Group forms part of a cooperative group according to chapter 17 part III of the Financial Enterprises Act "Cooperation outside the Group structure". Jointly owned financial enterprises such as SpareBank 1 Boligkreditt AS, SpareBank 1 Næringskreditt AS and SpareBank 1 Kredittkort AS are therefore proportionally consolidated for capital adequacy purposes. The inclusion of these companies' balance sheets represents the greater part of the difference between the balance in relation to the accounts and to capital adequacy. The table below provides an overview of companies in the Group and the treatment according to IFRS consolidation and capital adequacy consolidation.

Table 3.1: Basis for consolidation

Name	Method of accounting consolidation	Method of regulatory consolidation	Description of the entity
SpareBank 1 Østlandet	Full consolidation	Full consolidation	Parent bank
SpareBank 1 Finans Østlandet AS	Full consolidation	Full consolidation	Finance company
EiendomsMegler 1 Hedmark Eiendom AS	Full consolidation	Full consolidation	Real estate broker
SpareBank 1 Østlandet VIT AS	Full consolidation	Full consolidation	Accounting and consulting
EiendomsMegler 1 Oslo Akershus AS	Full consolidation	Full consolidation	Real estate broker
Youngstorget 5 AS	Full consolidation	Full consolidation	Rental of real estate
Vato AS	Full consolidation	Full consolidation	Rental of real estate
SpareBank 1 Boligkreditt AS	Equity method	Proportional consolidation	Covered bond companies
SpareBank 1 Næringskreditt AS	Equity method	Proportional consolidation	Covered bond companies
SpareBank 1 Kredittkort AS	Equity method	Proportional consolidation	Finance company
Betr AS	Equity method	Equity method	Software development
SMB Lab AS	Equity method	Equity method	Consulting
SpareBank 1 Gruppen AS	Equity method	Equity method	Financial holding company
SpareBank 1 Betaling AS	Equity method	Equity method	Financial holding company
SpareBank 1 Banksamarbeidet DA	Equity method	Equity method	Service provider in SpareBank 1 Alliance

The Group attaches importance to maintaining adequate capitalisation for all the companies within the Group at all times. The Group's governing bodies have not imposed any restrictions on the Board's ability to transfer capital between the parent bank and the subsidiaries beyond what follows from law. In addition, there are no provisions in the Articles of Association that impose any such restrictions.

3.2 Relevant framework for calculating risk-weighted balance

The bank uses the framework for credit risk in the Capital Requirements Directive parts II and III for the greater part of the balance. Financial derivatives and secured financing transactions, such as resale agreements, are treated by the counterparty risk framework defined further in parts IV, V and VI in the same directive. In determining the amount of commitment, the bank uses the market value approach according to chapter 21 of the aforementioned directive. Assets that are deducted from eligible capital in the calculation of capital adequacy according to the Calculation Regulations are also deducted in the calculation of risk-weighted balance. This includes, among other things, deductions for investments in financial sectors.

The bank does not have a trading portfolio according to capital requirements rules and does not therefore use the framework for market risk. The Group had no positions which were processed by the framework for securities positioning at the end of the period.

The following table provides differences between exposures according to accounting consolidation and capital adequacy consolidation.

Table 3.2: Differences between financial and regulatory consolidation and comparison of accounting and regulatory risk categories.

	Carrying values as reported in published financial statements	**Carrying values under scope of regulatory consolidation**	*Subject to the credit risk-framework*	*Subject to the CCR framework*	*Not subject to capital require-ments or subject to deduction from capital*
Cash and deposits with central banks	1 878	1 878	1 878		
Loans and receivables from credit institutions	81	1 099	-739	1 838	
Loans to and receivables from customers	99 547	143 597	143 597		
Certificates, bonds and fixed-income funds	14 446	19 992	19 992		
Financial derivatives	819	5 898		5 898	
Shares, units and other equity interests	594	594	594		34
Investments in associated companies and joint ventures	4 124	1 366	1 366		292
Investments in subsidiaries					
Property, plant and equipment	543	545	545		
Goodwill and other intangible assets	400	455	455		395
Deferred tax assets		2	2		
Other assets	1 041	1 051	1 051		312
Total assets	**123 472**	**176 477**	**168 741**	**7 736**	**1 033**
Deposits from and liabilities to financial institutions	2 636	3 415			
Deposits from and liabilities to customers	71 497	71 468			
Liabilities arising from issuance of securities	31 984	79 288			
Financial derivatives	354	586			
Current tax liabilities	248	253			
Deferred tax liabilities	202	213			
Other debt and liabilities on the balance sheet	687	4 790			
Subordinated loan capital	1 102	1 466			
Of which subordinated loans eligible as T2 capital	*1 100*	*1 461*			
Total liabilities	**108 710**	**161 480**			
Equity certificates	5 766	5 766			
Share premium reserve	830	830			
Dividend equalisation fund	2 112	2 112			
Dividends	*477*	*477*			
Primary capital	3 690	3 690			
Other paid-in equity	166	166			
Endowment Fund	15	15			
Fund for unrealised gains	253	253			
Customer dividends	222	222			
Hybrid capital	400	400			
Of which hybrid capital eligible as T1 capital	400	400			
Interest on hybrid capital	-48	-48			
Other equity	776	1 010			
Non-controlling ownership interests	102	102			
Of which interests eligible as common equity T1 capital	**46**	46			
Total equity capital	**14 762**	**14 997**			
Total equity capital and liabilities	**123 472**	**176 477**			

Table 3.3: Discrepancies between regulatory exposure and financial exposure.

	Total	Subject to the credit risk framework	Subject to the CCR framework
Assets carrying value amount under the scope of regulatory consolidation	176 477	168 741	7 736
Liabilities carrying value amount for offsetting under the regulatory scope of consolidation			
Total net amount under the regulatory scope of consolidation			
Off-balance-sheet amounts	18 883	18 883	
Differences in valuations	1 404		1 404
Differences due to different netting rules	-6 876		-6 876
Differences due to consideration of provisions			
Differences due to prudential filters	-1 033	-1 033	
Others	354	523	
Exposure amounts considered for regulatory purposes	**189 208**	**187 113**	**2 264**

3.3 Encumbered assets

Encumberence of assets as security occurs mainly through four types of transactions:

- Deposit of securities in Norges Bank for borrowing.
- Offsetting and cash collateral in conjunction with derivatives contracts.
- Repurchase agreements.
- Pledging as security of loans in conjunction with the issue of bonds with pre-emptive rights (hereinafter called OMF).

The majority of the bank's encumberance of assets occurs via SpareBank 1 Boligkreditt AS and SpareBank 1 Næringskreditt AS which issue OMF. The bonds are issued with security in a volume of assets with residential property as collateral and loans with commercial properties as collateral respectively These companies are consolidated proportionally in conjunction with capital adequacy calculation, and are consolidated in accordance with the equity method for financial reporting purposes.

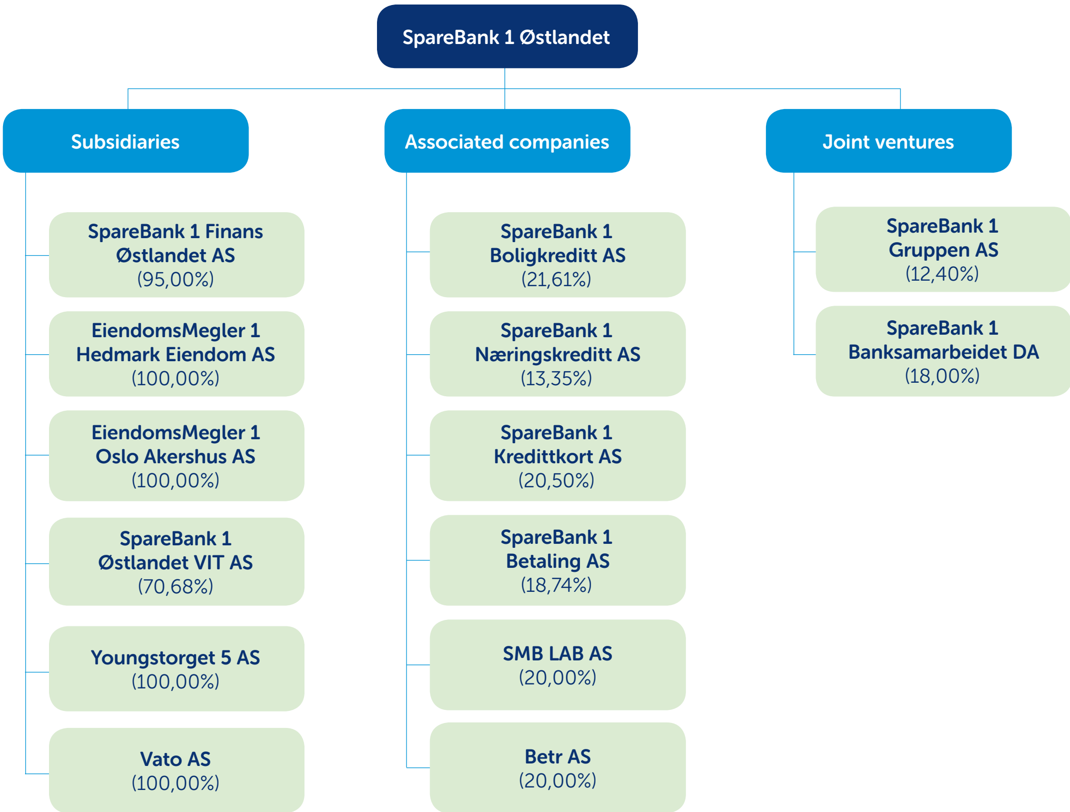
Encumbered assets, including collateral received in relation to total assets and collateral received, amounts to 26 per cent for the regulatory group. The equivalent key ratio for the parent bank is 1 per cent. For more information on OMF issues, see the covered bond companies' financial reports.

4 The Group

4.1 Group structure

The companies included in the SpareBank 1 Østlandet Group are shown in the figure below.

Figure 4.1: Group structure



SpareBank 1 Østlandet is the parent bank of the Group and is the leading supplier of financial services to individuals, businesses and the public sector in Hedmark, as well as a contender within the same service spectrum in Oslo and Akershus. The bank has also established offices in Gjøvik and Lillehammer in Oppland.

SpareBank 1 Finans Østlandet AS sells leasing products and secured financing, with all of Eastern Norway as its primary market area. The parent bank, SpareBank 1 Ringerike-Hadeland, through its ownership position, and capital goods suppliers are, in addition to the Internet, the company's most important distribution channels.

EiendomsMegler 1 Hedmark Eiendom AS is Hedmark's leading real estate broker and is represented in the most central locations in the county, as well as at Gjøvik in Oppland.

EiendomsMegler 1 Oslo Akershus AS is the Group's real estate broker in Oslo and Akershus.

SpareBank 1 Østlandet VIT AS is a holding company that owns 100 per cent of the shares in SpareBank 1 Regnskapshuset Østlandet and TheVIT AS. SpareBank 1 Regnskapshuset Østlandet AS is part of the SpareBank 1 Regnskapshuset alliance's endeavour to become one of Norway's leading actors in the accounting industry. TheVIT AS provides services in finance, accounting/payroll, analysis, HR and business development.

Youngstorget 5 AS eowns the parent bank's office building at Youngstorget in Oslo.

Vato AS owns some of the Group's office buildings in Hedmark.

SpareBank 1 Boligkreditt AS is the Alliance banks' covered bond company for the retail segment.

SpareBank 1 Næringskreditt AS is the Alliance banks' covered bond company for the corporate segment.

SpareBank 1 Kredittkort AS is the Alliance banks' joint credit card company.

SpareBank 1 Betaling AS is the Alliance banks' joint company for mobile phone payment solutions, which is part owner of Vipps AS.

SMB LAB AS develops and provides financial services to small and medium-sized businesses and is owned by the banks of the SpareBank 1 Alliance.

Betr AS develops IT solutions within governance, risk management and compliance and is owned by most banks in the SpareBank 1 Alliance, as well as SpareBank 1 Gruppen AS.

SpareBank 1 Gruppen AS og SpareBank 1 Banksamarbeidet DA

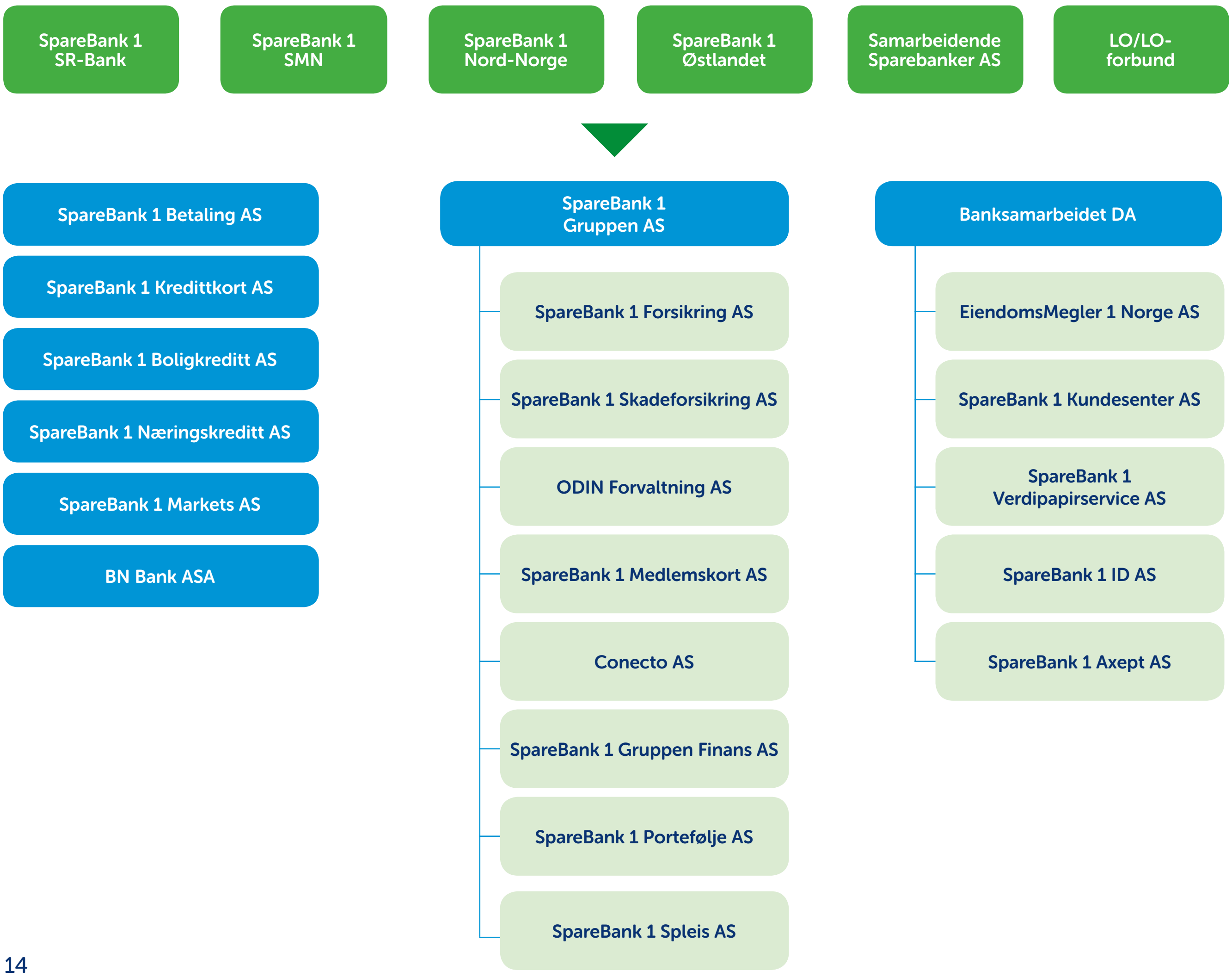
The purpose of the SpareBank 1 Alliance is to acquire and provide competitive financial products and services, taking advantage of economies of scale in the form of lower costs and/or higher quality. The Alliance contributes accordingly to private individuals and corporate customers experiencing local roots, competence and an easier way of having their various requirements met. In addition, the Alliance shall contribute to ensuring the creation of value by the bank for the benefit of the bank's market area.

The SpareBank 1 banks run the Alliance, as well as developing and managing products via SpareBank 1 Utvikling DA and SpareBank 1 Gruppen AS. While SpareBank 1 Gruppen AS is a product provider primarily within insurance, SpareBank 1 Banksamarbeidet DA is responsible for the cooperation processes in the SpareBank 1 Alliance, where technology, brand names, competence, joint processes/best practices, and purchasing are all key factors .

The SpareBank 1 banks work together extensively on development.

[1] SpareBank 1 Skadeforsikring AS and DNB Forsikring AS will merge with effect from 1 January 2019. The merged company will be called Fremtind Forsikring AS. As part of the transaction, the plan is to split off the individual personal risk products from SpareBank 1 Forsikring AS (the life insurance company) and DNB Livsforsikring AS, and the employer-funded personal risk cover from SpareBank 1 Forsikring AS, into the merged company.

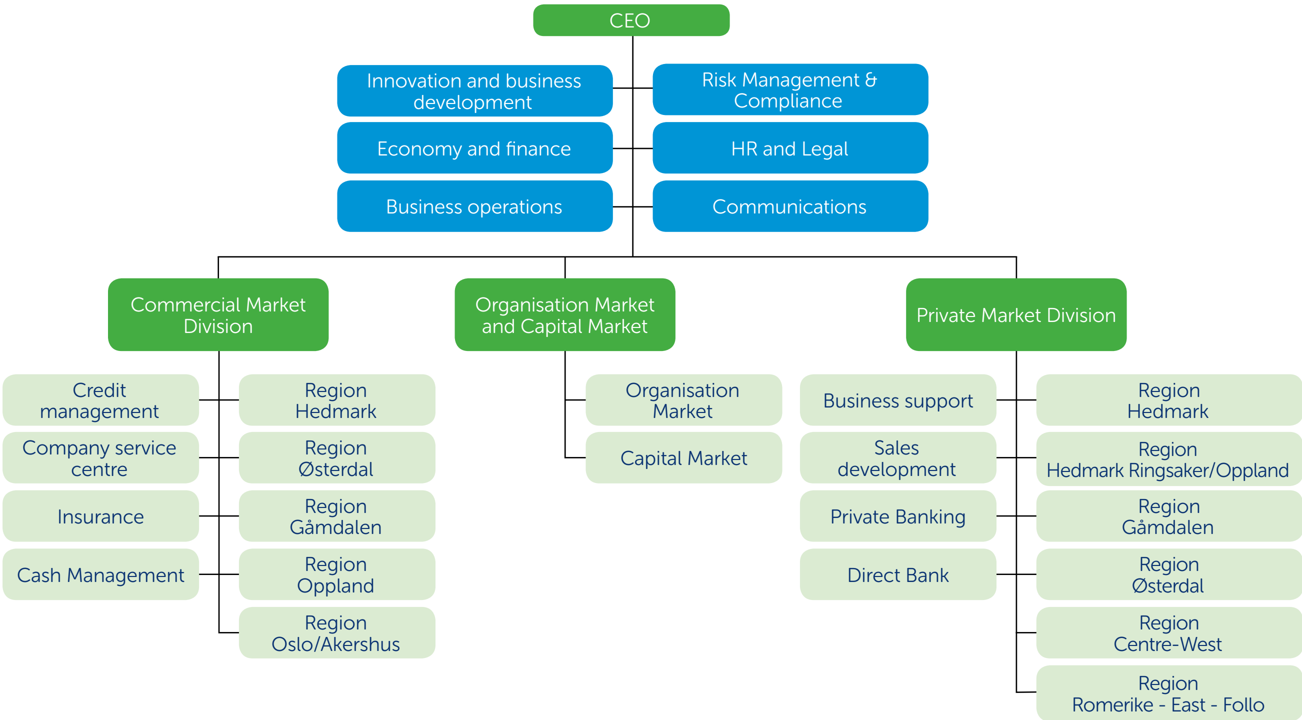
Figure 4.2: The SpareBank 1 Alliance



4.2 Organisational chart

The parent bank SpareBank 1 Østlandet is organised as shown in the figure below as at 31 December 2018.

Figure 4.3: Organisational chart



4.3 Risk and capital management

4.3.1 Objective

The Group's risk and capital management shall support the Group's strategic development and goal fulfilment, and contribute to the maintenance of the desired risk profile. Risk and capital management shall also help to ensure financial stability and satisfactory asset management. This shall be achieved by:

- A clear corporate culture characterised by a high awareness of risk and capital management.
- A good understanding of the risks driving earnings.
- Striving for good use of capital.
- Avoiding unexpected negative events seriously harming the Group's financial status.

The Group aims for a moderate to low risk profile. The framework for determining the Group's risk profile shall provide a holistic and balanced overview of the risk that the business is exposed to, and consists of statements that define the Group's risk appetite within significant risk areas. Risk appetite is defined as the desired risk exposure/profile from an earnings and loss perspective.

Based on the statements defining the Group's risk appetite, the risk profile is quantified through the determination of measurement indicators for the Group's risk appetite and risk capacity. Risk capacity is defined as maximum risk exposure before the Group conflicts with regulatory requirements or is forced to take undesired measures, including undesired changes in strategy or business model.

Targeted risk profile shall be reflected in other parts of the risk management framework, including, for example, the determination of authorisations and frameworks for operational management.

4.3.2 Management and supervision structure

Management and supervision comprise all the processes and control measures that have been introduced and implemented by the bank's management to ensure efficient operations and the implementation of the Group's strategies.

In the process for risk management, corporate culture is the foundation that the other elements build on. Corporate culture encompasses management philosophy, management style, governing principles and the people in the organisation with their individual characteristics, such as integrity, core values and ethical attitudes. A good corporate culture is important because, without it, it can be difficult to compensate with other control and management measures.

It is established clearly defined core values and a code of conduct, which have been clearly communicated and presented throughout the organisation. These guidelines provide information about the expectations of individual employees in terms of integrity, ethical behaviour and competence.

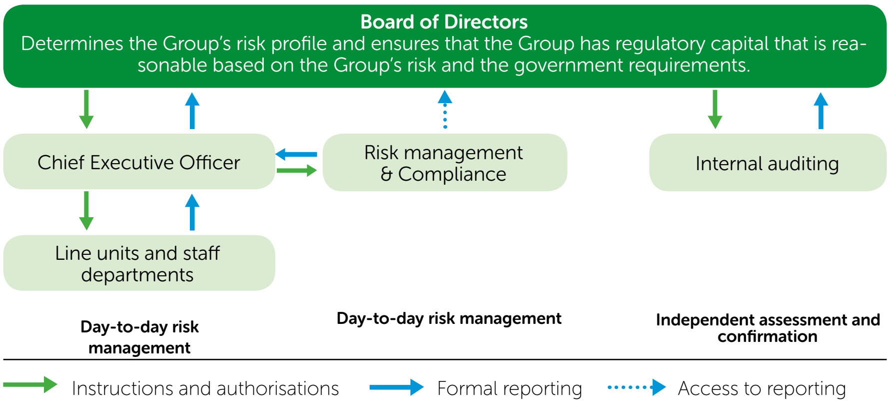
The recruitment of new employees considers professional and personal suitability in relation to the position to be a prerequisite.

All the Group's business areas and staff functions are represented in Group management. For all key areas of the Group there shall be clearly established responsibilities.

4.3.3 Key roles and areas of responsibility

The Group attaches importance to having a supervisory and management structure that promotes targeted and independent management and control. Responsibility for risk management has therefore been divided between different roles in accordance with the figure below.

Figure 4.4: Responsibilities and roles in the risk management process.



The Board is responsible for ensuring that the Group has adequate eligible capital based on the strategic objectives, adopted risk profile and regulatory requirements. The Board stipulates the overall objectives with respect to the risk profile and return. The Board also stipulates the overall limits, authorisations and guidelines for risk and capital management in the Group, as well as the ethical guidelines that shall contribute to a high ethical standard. Furthermore, the Board shall ensure that management provides an appropriate and effective risk management process in accordance with the laws, regulations, statutes and principles outlined in this document, as well as determining contingency and continuity plans to ensure that operations can continue and losses are limited in the event of significant unforeseen incidents.

The Board's tasks are set out in an annual plan, which is revised annually. This ensures that the Board of Directors has adequate time to focus on its key duties.

The Board has its own committees for risk management, audits and remuneration. The Risk Committee is a preparatory body for the Board in cases involving the Group's risk management and internal control, while the Audit Committee prepares cases that involve financial information and internal control associated with this. The committees consist of the same three members of the Board, although the committees do not have the same chair. The Remuneration Committee has an advisory responsibility to the Board regarding the determination and follow-up of remuneration policy applicable to all employees, and shall correspondingly assist the Board with matters concerning the CEO's terms of employment, as well as matters concerning the general principles and strategy for the remuneration of the senior executive personnel in the Group. The Remuneration Committee consists of three board members.

The CEO is responsible for overall risk management. This means that the CEO is responsible for the implementation of efficient risk management systems in the Group and the monitoring of the risk exposure. The CEO is also responsible for delegating authority and reporting to the Board of Directors.

The business divisions and staff units are responsible for risk management within their areas of responsibility. This means that the managers should make sure that proper risk management is established and executed, and that it is performed in accordance with the management documents, authorisations, routines and instructions.

The Risk Management and Compliance Department is organised independently of the line and staff units and reports directly to the CEO. The department is also able to report directly to the Board. The department is responsible for independent monitoring and reporting of the risk situation and for ensuring that the Group complies with the applicable laws and regulations. The department is divided into sections for risk management and compliance. The risk management department is responsible for development of the risk management framework, including risk models and risk management systems, while the compliance department is responsible for development of the compliance and conduct risk framework. The manager of compliance may report directly to the Board and the Chief Executive Officer, even though the department is co-organised with risk management.

In the subsidiaries, a person shall be appointed to cooperate with the risk management and compliance department, and to handle responsibility in the respective subsidiary.

The internal audit is the Board's instrument for ensuring that risk management is targeted, effective, and functioning as assumed.

4.3.4 Decision-making structures

The following committees have been established in the risk management area to assist the CEO with decision-making data and follow-up:

- Risk and balance management committee
- Credit committee

The risk and balance management is an advisory body to the CEO and is broadly formulated with key managers from the risk management and compliance department, the finance department and the business areas. Internal audits can act as observer when processing the annual report for validation. The risk and balance management committee is chaired by the CEO.

The risk and balance management committee shall assess the consequence of various scenarios' effects on profitability, solvency, financing and liquidity, as the basis for strategic discussions on the growth targets for deposits and loans, dividend strategies etc. The risk and balance management committee shall also:

- Follow up the Group's risk profile and capital adequacy situation and propose corrective action if necessary.
- Manage and recommend changes to risk based governing documents.
- Manage and recommend changes in the ownership and capital management framework, capital targets and capital plan.
- Manage circumstances of significance to the Group's balance management.
- Validate the risk management systems.
- Consider and recommend new risk models.

The credit committee is an advisory body to the CEO for credit decisions under managing Director's authority and shall:

- Consider loan applications in accordance with current governing documents, appropriation rules and credit management routines.
- Identify risk in each application, including an independent assessment of credit risk.

The credit committee is made up of the CEO, the Group director for the corporate market, the credit manager for the corporate market and assistant bank manager credit management for the corporate market. Regional bank manager and case officers participate in the handling of their cases.

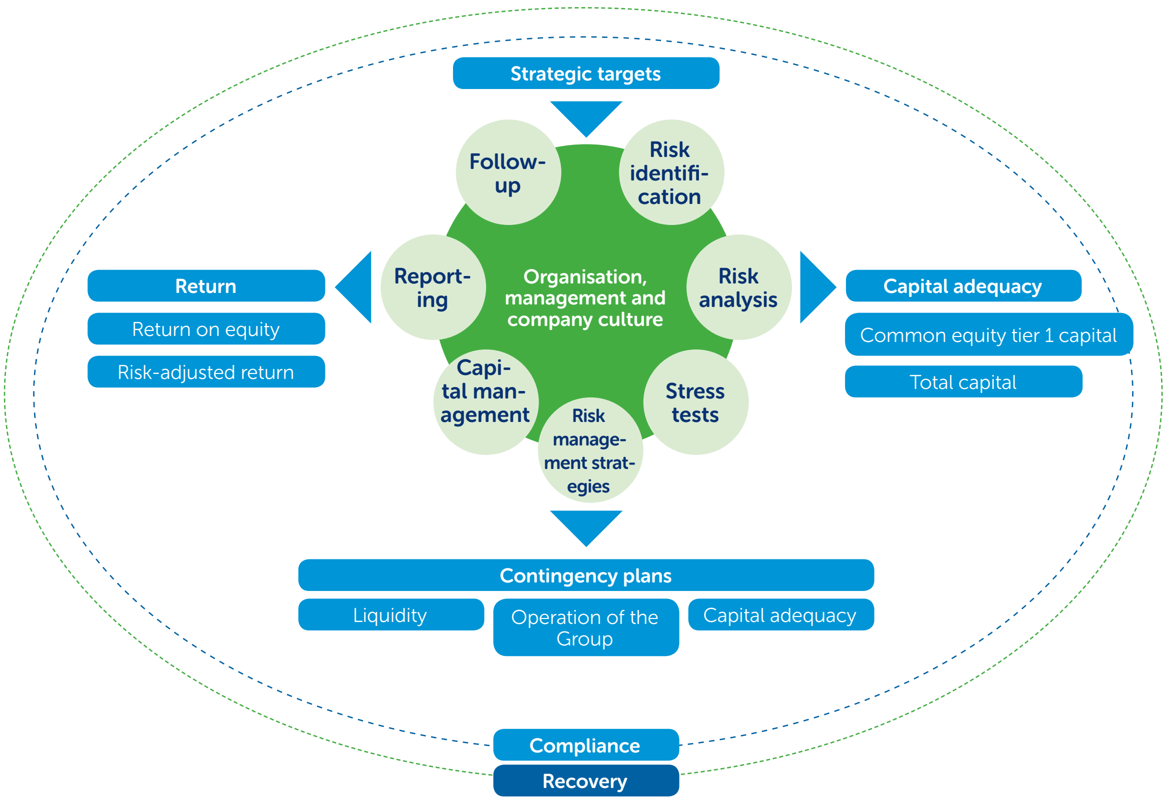
4.3.5 Framework for risk and capital management

In order to ensure an effective and appropriate process for risk and capital management, the framework is based on the following elements, which reflect the way in which Group is managed by its Board of Directors and the bank's senior management:

- Strategic targets.
- Organisation and corporate culture.
- Risk review.
- Risk analysis.
- Stress tests.
- Risk strategies.
- Capital management, including targets for returns and solvency.
- Reporting.
- Follow-up.
- Contingency plans.
- Compliance.
- Recovery plans.

The correlation between the individual elements can be summed up as in the figure below.

Figure 4.5: Framework for risk and capital management



4.3.5.1 Strategic objective and desired risk profile
Risk and capital management shall be based on the Group's strategic objectives expressed in the Group's business strategy and the desired risk profile, as it is determined in the Group's overall risk strategy and policy for risk and capital management.

4.3.5.2 Risk identification
In order to realise the strategic objective and desired risk profile, the Board and management shall be familiar with the risk pattern. The risk identification process shall be forward looking and an integral part of the strategy process. The process shall cover all the significant risks the Group faces and shall be conducted at least once per year or more often when special conditions so indicate.

4.3.5.3 Risk analysis
The risk analysis shall form the basis for how the Group understands and controls the risks. Among other things, this means that:
- Significant risks shall to the maximum extent possible be quantified, where methods and models of quantification are based on proven methods for measuring risk.
- A review and documentation shall be undertaken of the control measures established and whether these measures are properly safeguarded.
- For significant risks a risk profile shall be prepared that shall be quantified to the greatest extent possible.

4.3.5.4 Stress tests
Stress tests are essential tools for showing how negative events affect profit, the balance sheet, capital adequacy and liquidity. Stress tests shall be included as an important element in the Group's projection of financial development, including also projections related to a serious but not unlikely financial setback. Stress tests shall be carried out at least annually and used in the capital assessment process and maintenance of the Group's recovery plan.

4.3.5.5 Risk strategies
There is a superordinate risk strategy and risk strategies associated with all major risk areas, as well as a corresponding superordinate policy for risk and capital management and policies relating to all significant areas of risk.

The superordinate risk strategy is the Board's tool for defining and managing the Group's risk profile. With a fixed risk profile, measurement indicators are defined for the individual risk, with limit values for the Group's risk appetite and capability. The superordinate risk strategy shall be based on overall objectives of the business strategy, but also provide guidance for this. The document is issued by the Board and revised as required, and at least once a year.

The policy for risk and capital management is the Group's framework for management and control. This policy provides guidelines for the Group's overall attitudes and principles for risk management and should ensure that the Group establishes and maintains an effective and appropriate risk management process. In addition, the document should ensure that the framework satisfies the external requirements and expectations for good risk management. The document is issued by the Board and revised as required, and at least once a year.

The underlying risk strategies and policies are the Board's instruments for determining the desired risk profile in different areas of risk and ensuring that the risks are managed in line with this profile. The various risk strategies shall reflect overall targets and strategies given by the superordinate risk strategy and the Group's business strategy, and shall be in relation to the Group's risk capacity and appetite.

The underlying risk strategies and policies are determined by the Board and are revised as needed, as a minimum annually.

The Group's code of conduct functions as a guide by defining the ethical requirements that are set internally and how the Group shall relate to other stakeholders.

The Group's strategy for corporate social responsibility and sustainability strategy describes the Group's opportunities and challenges in relation to corporate social responsibility sustainability and how this issue is managed.

4.3.5.6 Capital management
The Group's capital management shall contribute to:
- Effective capital funding and application in relation to strategic targets and adopted business strategy.
- A satisfactory return on equity.
- A satisfactory common equity tier 1 capital ratio in relation to the desired risk profile the requirements set by the authorities.
- Competitive terms and good long-term access to funding in capital markets.
- Utilisation of growth opportunities in defined market areas at any given time.

On the basis of the strategic objective and the results of the capital assessment process, a capital plan shall be prepared annually. As a minimum, two different projections of the Group's financial development for the next three years shall be used. These projections shall take into account expected developments in the period, as well as a situation with a serious but not unlikely economic downturn.

On the basis of the projections, the Board and management shall carry out an overall assessment of whether the capital level is sufficient and adapted to the Group's risk profile and strategic objective.

The Group's objectives for common equity tier 1 capital ratio and total capital adequacy ratio shall ensure sufficient capital to comply with the capital requirements imposed by the authorities and safeguard the Group's creditors.

4.3.5.7 Reporting
The purpose of risk reporting is to ensure that all levels of the organisation have access to adequate and reliable risk

reporting. This shall ensure an overview of current risk exposure and any weaknesses in the risk management process. The reporting shall form the basis for the further follow up and monitoring of risk exposure and the risk management process within the Group.

4.3.5.8 Follow up and monitoring

The ongoing risk exposure shall be monitored. All managers are responsible for the day-to-day risk management in their own areas of responsibility and thus the use of capital in their own areas of responsibility and they shall ensure that the risk exposure is within the defined limits.

The overall risk exposure and risk development are followed up through periodic risk reports to the Board and management. Overall risk monitoring and reporting are undertaken by the risk management department. The purpose of the follow-up is to assess the effectiveness of the risk management process over time and ensure that necessary actions or changes are carried out.

The Group has established indicators with limit values for follow-up and monitoring. In this way, timely assessments of the need for escalation are ensured from negative development in one or more indicators.

4.3.5.9 Compliance

There shall be processes that ensure compliance with the applicable laws and regulations, so that the Group is not subject to sanctions or other financial loss resulting from breach of these. This shall be achieved by:

- Clearly defined core values and code of conduct, which have been clearly communicated and understood throughout the organisation.
- Guidelines and routines to detect, communicate and implement amendments to laws and regulations.
- Guidelines and routines to follow up and report compliance with laws and regulations

4.3.5.10 Contingency plans

The Group's core business entails the acceptance of risk. Over time this may inflict large unexpected losses on the banks, in spite of good risk management systems and processes. Such a situation may entail serious pressure on capital adequacy, funding and operations. The Group must, therefore, have contingency plans for the aforementioned areas.

4.3.5.11 Recovery plan

In addition to ordinary contingency plans, it is established a separate recovery plan that specifies concrete, practical measures for managing financial crisis situations. The recovery plan shall not predict financial crises; rather it shall identify and assess the Group's opportunities to restore financial strength and viability in situations where the Group is under hard financial pressure.

4.4 Remuneration schemes

SpareBank 1 Østlandet's remuneration for executive personnel complies with the rules and guidelines laid down in the "Regulation on Remuneration Arrangements in Financial Institutions, Investment Firms and Management Companies".

Executive personnel and others covered by the regulation's definition receive remuneration in the form of a fixed salary. They are members of the bank's ordinary defined contribution pension scheme. Those who were members of the defined benefit pension scheme at the time the members were moved to a defined contribution pension scheme receive compensation for the transition from a defined benefit pension to a defined contribution pension in line with the same rules that apply to other employees.

No schemes involving variable pay elements or other special administrative schemes have been established for this group of employees.

In 2018, one-off supplements were paid to 44 employees of SpareBank 1 Østlandet. The supplements amount to between NOK 20,000 and 50,000. The average size of the one-off supplements granted was NOK 25,681.

None of the employees who received a one-off supplement belonged to the category of "executive personnel", etc. as this is defined in relation to the remuneration regulations. After the renewed assessments subsequently made with respect to the scope provision of the remuneration regulation, the bank managers in the Retail Market Division are now considered to fall within the category of "senior employees". In 6 of the 44 cases, the supplements were granted to bank managers in the Retail Market Division.

No one-off supplement was paid to employees of SpareBank 1 Østlandet Finans AS in 2018.

The parent bank has no form of bonus scheme or any obligations concerning considering bonuses for the chief executive or chairman of the Board. There are no incentive schemes or obligations concerning share value based remuneration for the benefit of employees or elected officers.

Following the bank's private placement in the autumn of 2018, it has been decided to make an internal issue to the Group's employees. The staff issue will be made in January 2019. All employees will be invited to purchase equity certificates with a face value of up to NOK 125,000 at a discount of 20 per cent and a lock-in period of 2 years. The tax advantage of a purchase with a face value of NOK 125,000 has been calculated at NOK 4,965.

The pay conditions are assessed via annual processes at the end of the year and any changes normally come into effect on 1 January the following year. The assessments are based on the bank's remuneration system and described processes.

The chief executive's assessments and proposals on limits and conditions for changes for the members of the bank's executive management team are presented to the Remuneration Committee to get any input and comments they may have before the chief executive makes a decision.

The Remuneration Committee is similarly briefed on the thinking concerning the pay conditions of the managing directors of the bank's subsidiaries and thereby has an opportunity to present any comments before decisions are made by the subsidiaries' boards. The chief executive's terms are set by the Board based on the recommendations of the Remuneration Committee.

The chief executive has an agreement on possible early retirement from the age of 62. If the Board decides to exercise the option of early retirement, the company will pay an annual early retirement pension that amounts to 70 per cent of the applicable fixed salary on the retirement date. Should the chief executive wish to retire between the ages of 62 to 67, the company will pay an annual early retirement pension that amounts to 60 per cent of the applicable fixed salary on the retirement date. Early retirement pensions that are being paid, including previous adjustment supplements, are adjusted upwards on 1 May each year by the percentage increase in the National Insurance Scheme's basic amount (G). From age 67 to 77, a service pension equivalent to 5.47 times the National Insurance Scheme's basic amount (G) has been agreed in addition to the company's ordinary defined contribution scheme, in which the ceiling for pensionable income is 12 G.

4.5 Key risk groups

The Group is exposed to a variety of risks where the main risk groups are:

- **Credit risk** is the risk of losses resulting from a customer's or other counterparty's inability or unwillingness to fulfil its obligations.
- **Concentration risk** is the risk of loss resulting from accumulation of exposures to customer, industry and/or geographical areas. The term is also used to describe consentration risk among risk groups.
- **Market risk** is the risk of losses due to changes in observable market prices, such as interest rates, share prices or currency rates.
- **Operational risk** is the risk of losses due to weak or inadequate internal processes or systems, human error or external incidents.
- **Liquidity risk** is the risk of being unable to fulfil obligations or finance assets, including desired growth, without significant extra costs.
- **Ownership risk** is risk that the Group will suffer negative results from stakes in strategically owned companies and/or the need to inject fresh capital into these companies.
- **Business risk** is the risk associated with unexpected income and cost fluctuations due to factors other than credit risk, market risk, and operational risk.
- **Reputation risk** is the risk of a failure in earnings and access to capital due to failing confidence in the market, i.e. customers, counterparties, stock market and authorities.
- **Strategic risk** is the risk of losses resulting from unsuccessful strategic investments.
- **Compliance risk** is the risk that the Group will incur public sanctions/penalties, financial losses or a damaged reputation as a result of a failure to comply with laws, regulations or guidelines from the authorities.
- **Conduct risk** is the risk of loss of licence, other public sanctions or criminal sanctions, loss of reputation or financial loss as a consequence of the bank's business methods or the employees' conduct materially jeopardising customers' interests or the integrity of the market.
- **Risk of unjustifiable debt build-up** is the risk that the Group's financial strength will be disproportionately reduced due to a high proportion of external funding and excessive debt build-up.

5 Credit risk

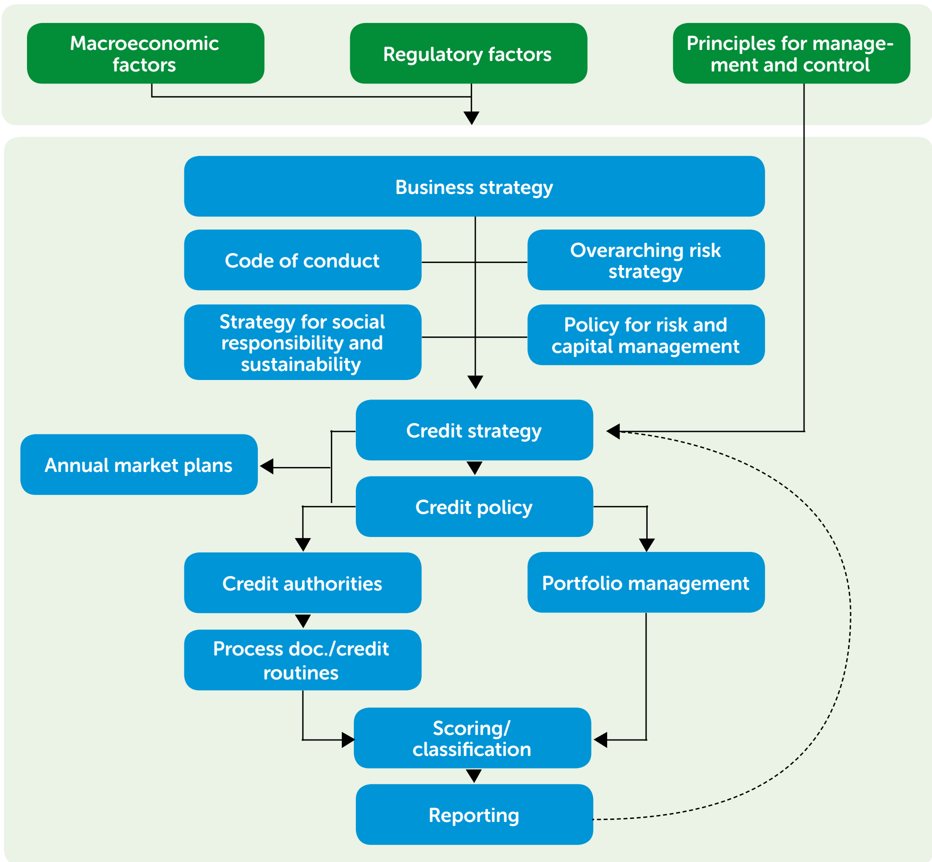
Credit risk is the risk of losses resulting from a customer's or other counterparty's inability or unwillingness to fulfil its obligations. The bank is subject to credit risks mainly through loans to personal and corporate market customers, but also through other assets that the bank holds capital for. In the latter group are guarantees, unused withdrawal rights, interest-bearing securities, equity positions and Interbank investments. Credit risk also includes concentrations arising from large exposures to individual customers, single industries, geographical areas and growth.

5.1 Management and control

Credit risk in the Group shall be managed in accordance with the requirements and recommendations in the:
- Financial Enterprises Act.
- CRR-/CRD IV Regulation.
- Capital Requirements Directive.
- The Financial Supervisory Authority of Norway's methodology for risk-based supervision.
- Key recommendations from the EBA.

The Group shall have a quality in credit handling and the portfolio that contributes to a low credit loss over time. The following figure shows strategies and procedures that are the basis of the Group's management and control of credit risks in portfolios.

Figure 5.1: Framework for managing credit risk



5.1.1 Credit strategy

The credit strategy specifies the overall principles for granting credit. The desired credit profile is defined through stipulation of the target figures related to portfolios, subportfolios and individual customers. The credit strategy forms the basis for reporting and monitoring the ongoing risk exposure. The document is issued by the Board and revised as required, and at least once a year.

5.1.2 Credit policy

The credit policy describes the distribution of responsibilities and roles and determines more detailed criteria for the credit operations. The policy describes what is acceptable within the given credit assessment areas. The purpose is to ensure that the bank acts in a uniform manner and in accordance with the external regulatory framework, including laws and regulations, and risk level stipulated internally. The document is issued by the Board and revised as required, and at least once a year. Separate policy documents exist for the private market and the corporate market.

5.1.1 Annual market and activity plans

The annual market and activity plans describe what activities are to be carried out for the individual year. These plans should help ensure that the market, earnings and risk related goals in accordance with the bank's strategy plan and risk strategies are achieved.

5.1.2 Rules and regulations for granting credit/credit authorities

The Board delegates credit authority to the CEO and determines the bank's rules and regulations for granting credit. The credit authorities are personal and should reflect the competence of the individual. Credit authorities are differentiated by volume and risk. The rules and regulations for granting credit are revised as required and at least once a year.

5.1.3 Process documentation/credit routines

The documentation regulates various matters related to the ongoing granting of credit and follow-up of commitments, including routines for following up defaulted commitments, assessment of the need for impairment etc. The documentation is prepared by the credit managers in consultation with the business divisions. The documents are revised on an ongoing basis.

5.1.4 Risk pricing

The Group strives to achieve the right pricing of credit risk and has established price models and customer profitability models based on the risk classification system.

5.1.5 Validation

The purpose of the validation process is to verify the credit risk models and the Group's IRB system to ensure that both the quality of the models and the compliance with and application of the IRB system are good over time. The process and preparation of the necessary reports are carried out by the Risk Management Department. Validation reports are reviewed by the Risk and Balance Sheet Management Committee before the CEO makes decisions relating to matters addressed in the report. The Board is kept informed about the validation work and the decisions that are made.

5.1.6 Stress testing

Regular stress tests of the credit portfolio are performed in which developments in credit portfolios are stressed as a result of large, but not improbable, negative changes in framework conditions. The purpose of the result of such analyses is to indicate the extent to which the portfolio or parts of the portfolio can withstand an abnormal and powerful weakening of the assumptions, and thus how this affects the bank's risk pattern and solvency.

5.1.7 Follow-up of credit risk/risk reporting

Risk exposure within the credit area is followed up using a portfolio management system. Importance is attached to following up the portfolio risk distribution and its development based on movements between risk classes, probability of default, risk-weighted assets, concentration risk and risk-adjusted return.

The corporate market and retail market divisions follow up on the credit risk in the portfolio on a monthly basis. The credit risk is followed up based on current strategic frameworks and objectives, as well as whether development in the portfolios is in the desired direction. The Risk Management Department follows up the risk in the credit portfolio and reports quarterly to the Board and the bank's management team. Based on the superordinate risk strategy, frameworks are established for when measures should be assessed and implemented, and frameworks for risk appetite and capacity are also defined.

5.2 Credit risk models and risk classification

SpareBank 1 Østlandet and SpareBank 1 Finans Østlandet use common models for calculating credit risk at the portfolio level and in the granting process together with the other banks and financing companies in the SpareBank 1 Alliance. The models are primarily based on statistical calculations and are divided into scorecards for different segments. The parent bank uses the model both in internal reporting and in capital adequacy calculations. The models are based primarily on the components in the figure below.

In addition, a cash flow model is used for calculating PD when granting credit and follow-up for corporate market commitments in the rental of commercial property sector. The model is also used to calculate value estimates of the objects to be financed. The bank applied to the Financial Supervisory Authority of Norway in 2018 to be able to use the PD estimates of the regulatory model under IRB. Upon approval, this model will replace the current PD model for BM for corporate commitments within commercial real estate rental.

Figure 5.2: Risk classification system

Probability of default	The customers are classified into default classes based on the probability of default over a 12-month period, calibrated on the basis of a long-term outcome.
Exposure at default	Exposure at default is a calculated size that indicates the exposure to customer default.
Loss given default	The loss given default is an estimate of how much the Group could potentially lose if the customer defaults on his obligations.
Expected losses	Expected losses describes the loss the Group can statistically expect on its credit portfolio during a 12-month period.
Risk class	A risk class is assigned to the customers based on the commitment's probability of default.
Risk-adjusted capital	The risk-adjusted return describes how much capital must be set aside as a buffer for future unexpected losses.
Risk pricing	SpareBank 1 Østlandet seeks to price risk correctly and it has models for pricing that are based on the risk of the individual commitment.

5.2.1 The IRB system

The capital adequacy regulations allow banks to apply to the authorities to use their own models to calculate the capital requirement for credit risk. The method entails that the capital requirement is calculated at the commitment level based on the probability that the customer defaults and the expected loss given default.

SpareBank 1 Østlandet has permission to use the advanced IRB approach for calculating the capital requirements for credit risk for the exposure categories corporate and retail. The former Sparebanken Hedmark and Bank 1 Oslo Akershus received permission to use the basic IRB approach in February 2012 and May 2008 respectively, and permission to use the IRB advanced approach for corporates in February 2015.

The permission means that the parent bank uses its own models to estimate the risk parameters included in the bank's risk-weighted assets according to the IRB approach. For the corporate portfolio, the bank mainly utilises the IRB-advanced approach. The IRB approach is used for the retail portfolio. No distinction is made between the different IRB approaches for this portfolio. The bank has exceptions to the IRB approach for certain commitments. The exceptions apply to states/municipalities and institutions, where permanent exceptions are given, as well as housing cooperatives and associations/clubs, where the Group uses the standard approach.

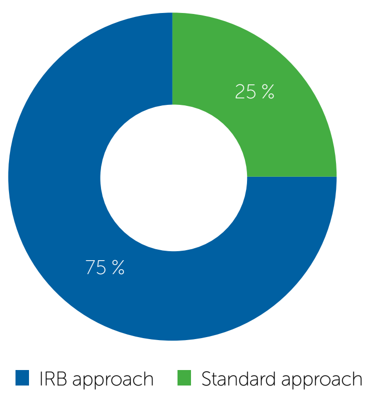
For the reporting of capital adequacy, the portfolios of the part-owned institutuions are consolidated proportionately based on the approved method of the part-owned institution.

The table below describes the Group's methods for calculating the minimum eligible capital requirement for the various exposure categories and portfolios, while the figure below shows the distribution of the portfolio between the IRB and Standard approach.

Table 5.1: Approved method for calculating the minimum eligible capital requirement

Company	Portfolio	Regulatory approach
SpareBank 1 Østlandet - parent bank	States/municipalities	Standard approach
SpareBank 1 Østlandet - parent bank	Institutions	Standard approach
SpareBank 1 Østlandet - parent bank	Cooperatives, clubs and associations	Standard approach
SpareBank 1 Østlandet - parent bank	Corporates	IRB Advanced
SpareBank 1 Østlandet - parent bank	Retail	IRB
SpareBank 1 Finans Østlandet AS	Leasing and sale security	Standard approach
SpareBank 1 Kredittkort AS	Credit card	Standard approach
SpareBank 1 Boligkreditt AS	Retail	IRB
SpareBank 1 Næringskreditt AS	Corporates	Standard approach

Figure 5.3: The Group's credit portfolio, distributed by the IRB approach and standard approach



[2] The distribution is made on the basis of net exposure on and outside the balance sheet as at 31 December 2018

5.2.2 Application of the IRB system

Use of the IRB method sets stringent requirements for estimation of the risk parameters, competence and use in the business.

The bank has long experience of using the IRB approach and has professionalised risk management in accordance with the IRB requirements. The IRB system is well integrated in all stages, and is used in granting and following up individual commitments, pricing, capital allocation, and in the preparation of strategies, strategic risk frameworks and reporting.

The models used under IRB are subject to annual validation to ensure sufficiently robust estimates. The composition and level of the models are adjusted as required according to established routines, as well as to ensure that the models' cyclical properties are safeguarded.

The Financial Supervisory Authority of Norway conducts annual supervision of the bank's application of the IRB system.

5.2.3 Models used in regulatory IRB reporting

The table below shows which models the bank uses in regulatory IRB reporting as at the end of 2018.

Table 5.2: Models used in regulatory IRB reporting

Engagement category	Customer segment	PD model	Scorecard	EAD model	LGD model
Retail – security in homes and property (SME and non-SME)	All private retail customers	PD model retail market	Residential property	EAD retail market	LGD retail market
	All self-employed who are registered in the bank with personal ID number				
Other retail customers (SME and non-SME)	All retail market customers		Scorecard other	EAD retail market	LGD retail market
	All self-employed who are registered in the bank with personal ID number				
Corporates	All corporates except the following segments	PD model for BM	Subdivision in industry groups and scorecard	EAD retail market	LGD retail market
	-Institutions and states	Standard approach			
	- Housing cooperatives				
	- Associations, clubs and organisations				

5.2.3.1 The PD model

PD is an expression of how probable it is that a customer will default within the next 12 months. The bank's definition of default is based on the Capital Requirements Directive section 10-1 where default exists when one or more of the following criteria occur:

- Overdrafts or arrears over 90 days, where arrears/overdrafts have exceeded NOK 1,000.
- Debt settlement, compulsory enforcement, opening of debt negotiations or public scheme of arrangement notification.
- Bankruptcy, opening of bankruptcy or notice of bankruptcy.
- Confirmed loss or individual impairment/loan loss impairment.

Based on the PD estimate, each customer is assigned a risk class according to the scale in the table to the right.

Table 5.3: Risk classes

PD	Risk class
0,00 – 0,01 %	A
0,10 – 0,25 %	B
0,25 – 0,05 %	C
0,50 – 0,75 %	D
0,75 – 1,25 %	E
1,25 – 2,50 %	F
2,50 – 5,00 %	G
5,00 – 10,00 %	H
10,00 % –	I
Defaulted	J
Impaired	K

The following table shows how the PD model is built up.

Table 5.4: Build-up of the PD model

Commitment category	Explanation variables	Method	History and calibration	Regulatory requirements
Corporates	Accounting Payment history and other behavioural information Industry Age	The bank uses a scorecard model based on regression analysis, where historical observations are used to predict probability of default. Score cards are divided into nine industry variants to take into account that explanation variables have different significance for different industries. In addition, the calibration level can be set differently for different industries to take into account different historical default levels.	Data basis for estimation and validation: > 10 years When calibrating a level, a method is used that is similar to that determined by the authorities for mortgages, but with other parameter values. In this way, the bank takes into account the actual historical default level when predicting future defaults. The bank uses up to 7 years of history when calibrating the level, as well as including the assumed default rate in a severe economic downturn. The model has a ceiling for PD for healthy customers, set at 30%.	No customers can be assigned a PD lower than 0.03%.
Retail	Assessment Information Liquidity and liabilities Payment history and other behavioural information age	The bank uses a scorecard model based on regression analysis, where historical observations are used to predict probability of default. Score cards have two versions: mortgages and other loans, of which the former portfolio is the dominant. The explanation variables are weighted differently in the two variants. In addition, the calibration level can be set differently for different industries to take into account different historical default levels.	Data basis for estimation and validation: > 10 years When calibrating a level, a method determined by the authorities is used that takes into account the actual default rate at the bank and an assumed default rate in a severe economic downturn. The model has a ceiling for PD for healthy customers, set at 40%.	No mortgage customers can be assigned a PD lower than 0.2%.

5.2.3.2 The EAD model

The EAD model estimates the customer's exposure to default. EAD is the exposure on the balance sheet with the addition of exposure outside the balance sheet multiplied by a conversion factor. For credits, the conversion factor specifies how much of the available credit frame is assumed to be withdrawn by default. For guarantees, the conversion factor specifies the proportion of the guarantee that is assumed to be paid out on default. The bank uses the EAD model when granting credit and in monthly reclassifications of the customers. The EAD model is also used in pricing, ongoing reporting and follow-up of commitments. The following table shows how the EAD model is built up.

Table 5.5: Build-up of the EAD model

Commitment category	Method and explanation variables	History and calibration	Regulatory requirements
Corporates	Model that assigns conversion factor by account type (guarantee or ledger), score type, and probability of default.	Data basis for estimation and validation: > 10 years	The level of the conversion factor should be set so as to provide an estimate of withdrawals in an economic downturn The guarantee conversion factor has a parameter determined by the authorities of 100% for loan guarantees and 50% for contract and other guarantees.
Retail	Model that assigns conversion factor by account type (guarantee or ledger)	Data basis for estimation and validation: > 10 years	The level of the conversion factor should be set so as to provide an estimate of withdrawals in an economic downturn The guarantee conversion factor has a parameter determined by the authorities of 100% for loan guarantees and 50% for contract and other guarantees.

5.2.3.3 The LGD model

LGD indicates the proportion of the bank's exposure to a customer that is expected to be lost if the customer defaults. The bank uses the LGD model when granting credit and in monthly reclassifications of the customers. The LGD model is also used in pricing, ongoing reporting and follow-up of commitments.

Security is the dominant explanation variable in the LGD model. Therefore, having good estimates of the value of security is crucial to the quality of the LGD model's estimates. Together with the SpareBank 1 Alliance, the bank has routines for the valuation of collateral to ensure a prudent core value. The routines are subject to annual audit and maintenance.

The LGD estimate shall take into account a future severe recession, which means that the value of the security is adjusted down by a reduction factor in calculating LGD. The bank's reduction factors are approved by the Financial Supervisory Authority of Norway and validated annually based on internal loss data.

As well as security, estimates of recovery probability, recovery of unsecured commitments and collection costs are used to estimate LGD.

Table 5.6: Build-up of the LGD model

Commitment category	Explanation variables	Method	History and calibration	Regulatory requirements
Corporates	Security Customer type Equity proportion EAD	The bank uses a structural/definition model that estimates LGD based on sub-models. Security is the dominant explanation variable.	Data basis for estimation and validation: > 10 years LGD is calibrated through parameter values in the model	The bank is required to include a safety margin imposed by the authorities in its LGD estimates.
Retail	Security Product	The bank uses a structural/definition model that estimates LGD based on sub-models. Security is the dominant explanation variable.	Data basis for estimation and validation: > 10 years LGD is calibrated through parameter values in the model	For mortgages, estimates are adjusted against the Financial Supervisory Authority of Norway's reference model. For mortgages, there is a floor of 20% for LGD at portfolio level.

5.2.4 Validation

Modelled estimates will always be burdened with some uncertainty. Validation of the bank's IRB models is important to ensure that the models' estimates are in line with the actual risk the bank is exposed to. Through robust buffers an attempt is made to compensate for uncertainty in model estimates. The size of this buffer depends on how cyclically sensitive different parameters are. For example, the LGD estimates for the real estate portfolio should be significantly higher than the observed loss in a normal to expanding high economic cycle. Uncertainty in the models is also taken into account through various safety margins, which make the estimates conservative.

Validation therefore represents an important quality assurance of the bank's IRB system. The IRB system is tested through both quantitative and qualitative validation in accordance with the Capital Requirements Directive sections 16-2 and 16-3.

In the following descriptions regarding validation, data up to and including 2017 are disclosed. Data for 2018 are not yet reviewed by the board.

Quantitative validation is a process that ensures that the bank's estimates for PD, KF, EAD, and LGD have adequate quality. The quantitative validation process includes an assessment of:

- The data basis that is included in the validation.
- Stability in the model's estimates over time.
- The model's ability to rank customers.
- The model's ability to estimate correct levels.

Qualitative validation is a process that ensures that the models are tailored to the bank's portfolios and that they represent a central ingredient of the bank's risk management and decision-making. The IRB system also includes the models, work and decision-making processes, control mechanisms, IT systems and internal guidelines and routines associated with the classification and quantification of credit risks when using the IRB models.

The following table lists the various assessments in the quantitative validation. The above parameters are included in the calculation of expected losses (hereinafter abbreviated to EL), and the bank validates this estimate by looking at the expected loss against actual losses in the period.

Table 5.7: Assessments in the validation

	Suitability and stability	Ranking ability	Level
PD	The validation examines whether the population that the model is applied to is similar to the model's estimation basis. This is safeguarded through statistical tests and qualitative assessments of the data basis.	Tests the model`s ability to rank customers with regards to risk. For this, the bank uses both migration matrices and statistical analyses such as AUC	Verifies that the estimated level is robust, measured against actual observations of the default rate. To define what is sufficiently high, a long-term outcome is calculated, based on up to seven years of default history and an assumed default rate in an economic downturn.
EAD (KF)	An assessment is made of whether the model is adapted to the customer base.	Tests the model's ability to distinguish between customers with high KF and those with low KF.	By means of validation we check whether the estimated level is robust, measured against actual observations of default.
LGD	An assessment is made of whether the model can be applied to the customer base.	Tests the LGD-model`s ability to distinguish between default customers with a high level of loss and those with a low level of loss, measured against actual observations.	Estimated values are measured against the bank's historically observed values. Assessment of whether the LGD model estimates are sufficiently high. Must take into account that the estimated LGD must be calibrated against a recession.

5.2.4.1 Roles in the validation

It is important that the validation of the credit models is done with a sufficient degree of independence. Independence is achieved through the following central roles:

- The unit responsible for developing the credit model.
- The unit responsible for validating the models and their application.
- Internal auditing.

The SpareBank 1 Alliance's competence centre for credit models (hereinafter called CFK) is developing new models and further developing existing models on behalf of, and in cooperation with, the banks in the Alliance. Additionally, the KFK contributes with professional input to the quantitative validation.

SpareBank 1 Østlandet, in the area of risk management, is responsible for the qualitative and quantitative validation of the bank. The bank annually prepares a validation report that includes all models, portfolios, and sub-parameters. Here, each model is considered within the areas of suitability, ranking ability and level. Analysis is done on sub-portfolios, such as industries. The report, which also deals with qualitative validation, is handled by the bank's risk and balance sheet management committee before it is presented to the Board of Directors.

Also, development in estimates and observations is continuously monitored so as to monitor the models' performance. Analyses are performed to give an early warning if a model tends towards a weaker performance, whether this is due to the model no longer being suited to the portfolio in question, or the ranking ability diminishing or the estimates varying too much from the actual observations.

Internal audits conducts annually audits to ensure that the IRB system is used and complies with the applicable regulations and the terms of the IRB approval. The purpose of the audit is to give the Board and management an independent and neutral assessment of the validation of the IRB system and whether the system is firmly integrated into the bank and forms a central ingredient of the bank's risk management and decision-making process.

5.2.4.2 Estimated and observed PD level

The figures below show the rolling, actually observed average default rate (hereinafter abbreviated to DR) each month against the estimated PD at the start of the validation period. Categorisation in the private and corporate markets is done in this context on the basis of the scoring model and not the regulatory categorisation.

The model estimates are a combination of stable and expected estimates. This is because the model uses explanation variables that quickly capture changes in a customer's financial situation, such as payment notes, and other explanation variables that change periodically, such as accounting or assessment information. This results in the actually observed DR often differing from the estimated PD. In addition, the calibration of the estimates plays a part in that the calibration methodology is an element for adjustment against defaults in a serious recession.

Figure 5.4: Estimated regulatory PD against actually observed DR for retail market customers with a mortgage.

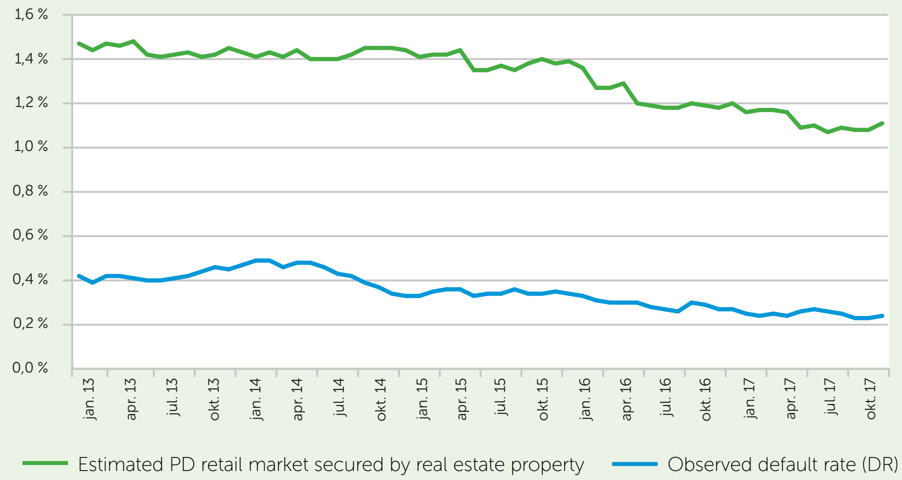


Figure 5.5: Estimated regulatory PD against actually observed DR for other retail market customers

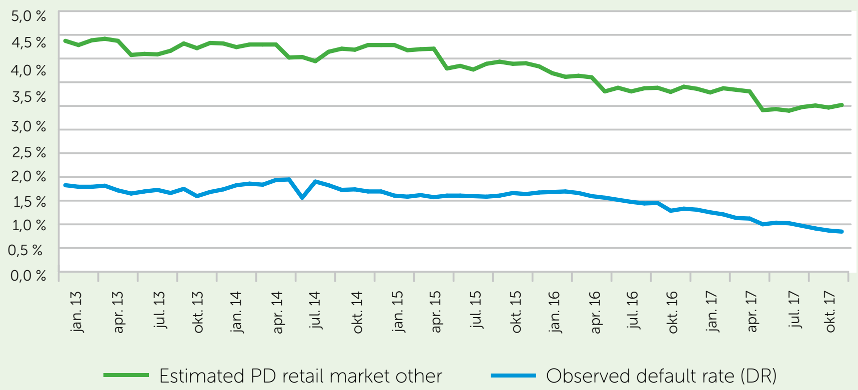
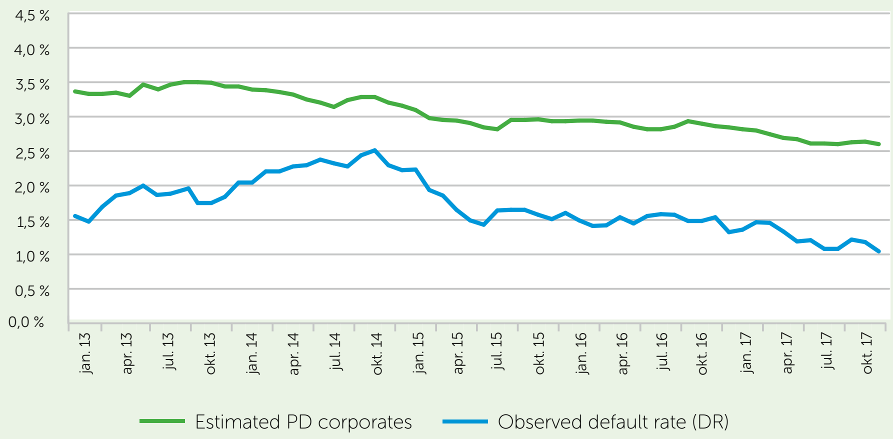


Figure 5.6: Estimated regulatory PD against actually observed DR for corporate market customers



5.2.4.3 Estimated and observed EAD level

Unused credit for retail market customers with mortgages has a KF of 1, which means that there is full credit utilisation at default. For corporate market customers, a KF ranging between 60 and 90 per cent is used, depending on the customer's PD. KF for guaranteed is set by the authorities at 100 per cent for loan guarantees and 50 per cent for contract and other guarantees.

Figure 5.7: Estimated and actually observed KF for retail market customers with ledger

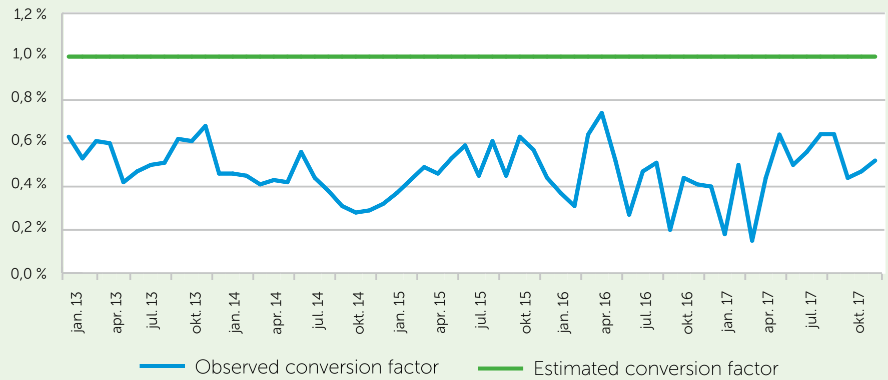
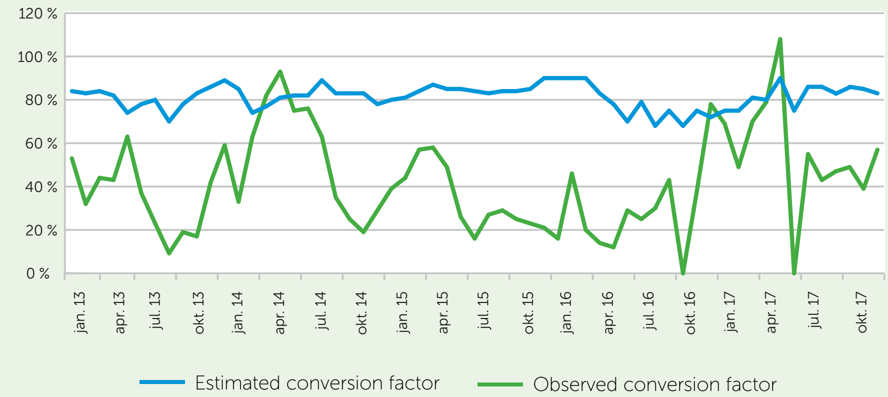


Figure 5.8: Estimated and actually observed KF for corporate market customers with credit facilities



5.2.4.4 Estimated and observed LGD level

The validation is based on the LGD level of defaulted commitments and looks at this level against actually observed losses adjusted for commitments that have become healthy during the period.

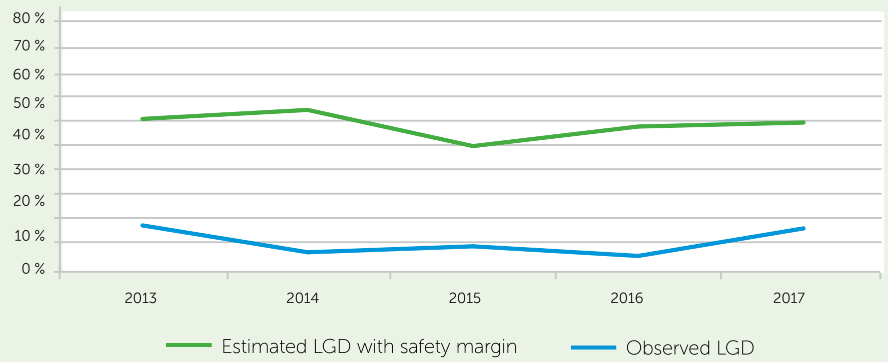
The corporate portfolio utilises the LGD model for corporate market customers. The table below shows that seven classes are used for classifying commitments in accordance with LGD. Class 1 applies to customers with LGD of 10 per cent or lower. These are customers with excellent security coverage after the security values are adjusted down by the current reduction factors. Increasing LGD class corresponds to decreasing security coverage.

Table 5.8: LGD classes

LGD Class	LGD value ranges
1	0-10
2	<10-20
3	<20-30
4	<30-40
5	<40-50
6	<50-60
7	> 60

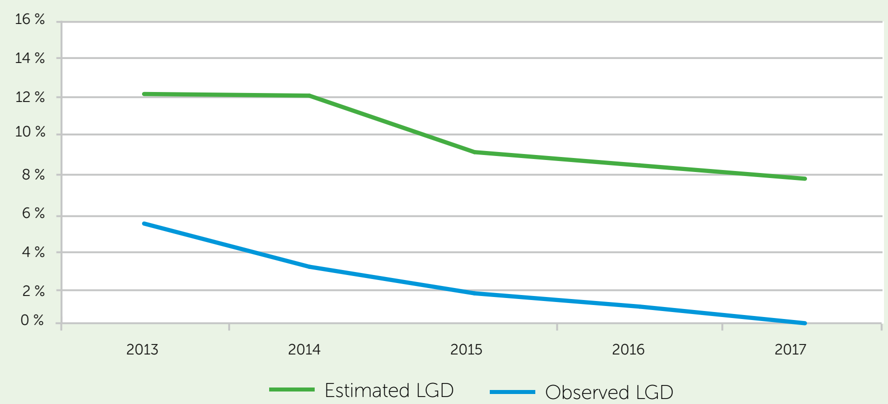
For the corporate portfolio, as indicated in the figure below, EAD-weighted estimated and actually observed LGD levels are noted, where safety margins are included in the LGD estimates.

Figure 5.9: Estimated LGD against actually observed LGD for the corporate portfolio



For the retail market portfolio, the estimated and actually observed LGD levels are EAD-weighted in the same way. The figure below shows the actually observed and estimated LGD levels for commitments with mortgages, before adjustment to the Financial Supervisory Authority of Norway's reference model.

Figure 5.10: Estimated LGD against actually observed LGD for the retail market portfolio secured by real estate



The figures show that the estimated LGD levels are consistently higher than actually observed LGD throughout the period. The margin between actually observed LGD and estimated LGD is considered robust in terms of taking a severe recession into account.

5.2.4.5 Estimated and observed EL level

The figures below show the EL as a percentage of EAD at the beginning of the year against observed posted losses as a percentage of EAD at the end of the year. There are large margins between estimated and observed values for EL. This comes from conservative estimates in underlying models. The Group has had low loan losses in recent years – largely due to limited exposure to industries that have been severely hit by the oil downturn, good credit handling and robust follow-up routines for doubtful exposures and defaulted.

Figure 5.11: Estimated regulatory EL against actually observed EL for the corpotate portfolio

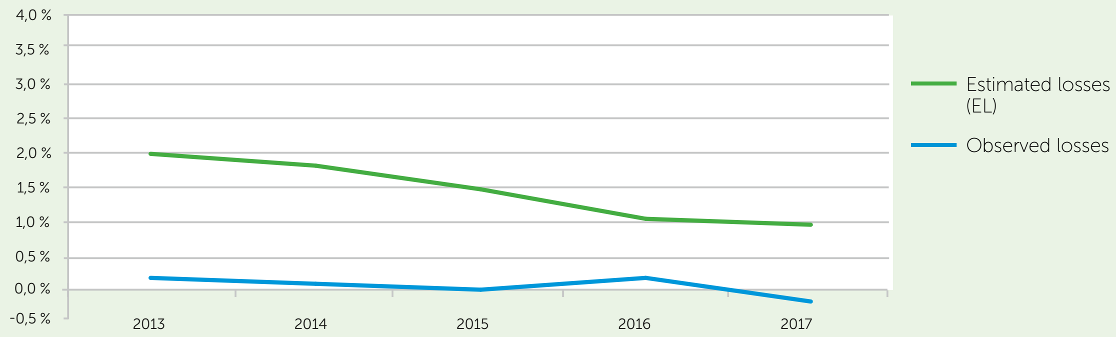
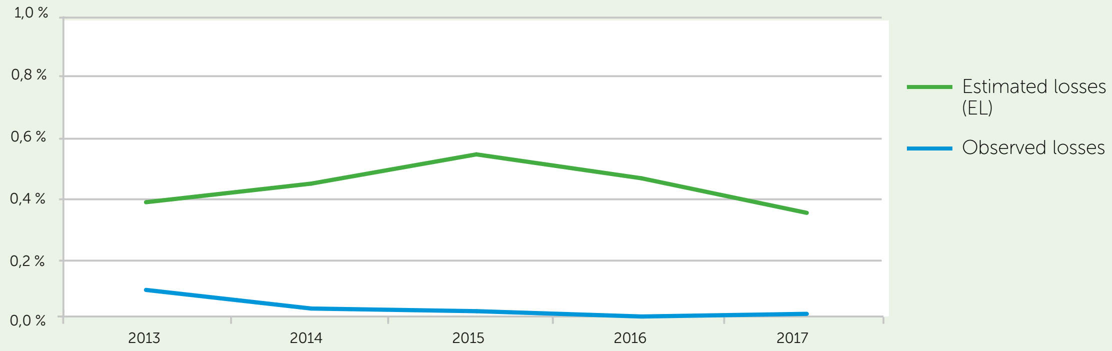


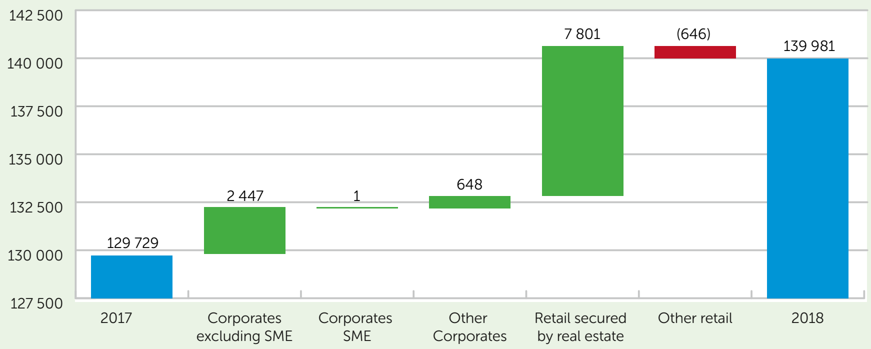
Figure 5.12: Estimated regulatory EL against actually observed EL for the retail market portfolio



5.3 The IRB portfolio

The table below illustrates the growth in the IRB portfolio in 2018.

Figure 5.13: Assessment of lending growth for the IRB portfolio[3]

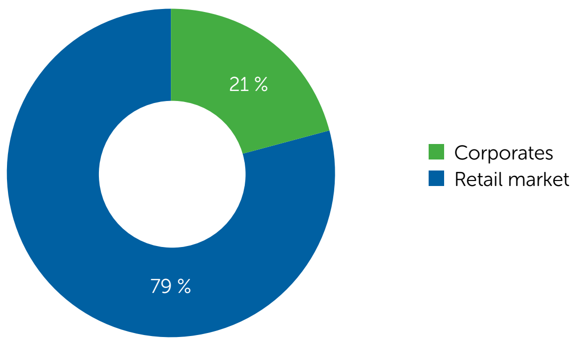


[3] The distribution is made on the basis of net exposure on and outside the balance sheet as at 31 December 2018.

For capital adequacy of the Group's consolidated credit portfolio, the IRB approach is used on 75 per cent of the total portfolio with related models previously described. This distribution is the same as the previous year.

The Group's IRB portfolio consists of 79.5 per cent retail market customers and 20.5 per cent corporate customers measured in net exposure on and outside the balance sheet. SpareBank 1 Boligkreditt AS consolidates proportionally and represents 38.1 per cent of the IRB portfolio retail market. The figure below shows the distribution of the IRB portfolio on the retail market and corporates respectively.

Figure 5.14: The Group's IRB portfolio



The following figures show the breakdown within the retail market portfolio and the corporates portfolio.

Figure 5.15: Breakdown of retail market portfolio

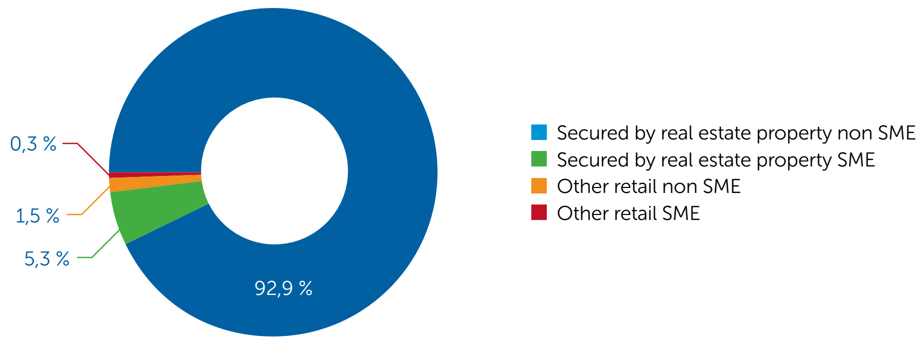
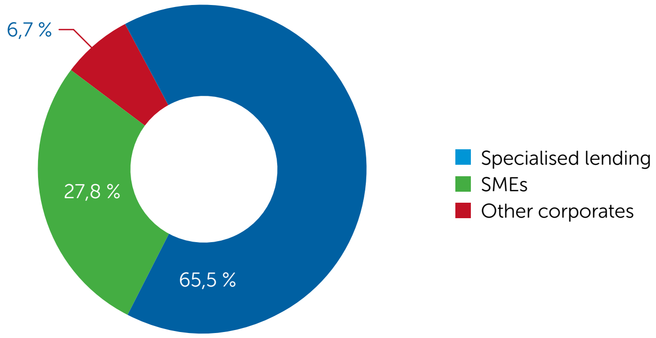


Figure 5.16: Breakdown of corporate portfolio



The retail market portfolio is mainly exposed to mortgage loans. There is also a proportion categorised under property commitments against small and medium-sized enterprises (SMEs). The corporate portfolio has the largest proportion classified as specialised corporates. This categorisation is mainly made up of customers in commercial property rental, which is the largest single industry the Group is exposed to on the corporate side; see Figure 5.21.

5.3.1 Mortgage portfolio

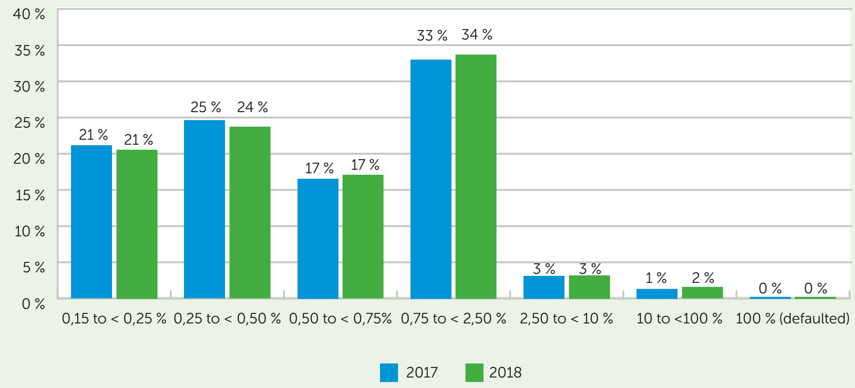
The Group's mortgage portfolio accounts for 98.2 per cent of the Group's IRB portfolio for the retail market.

Below, the IRB portfolio in mortgages is distributed in risk groups according to various ranges of PD:

- Low: PD 0.00 – 0.75 %.
- Medium: PD 0.75 – 5.00 %.
- High: PD over 5.00 %.
- Defaulted and impaired: Defaults and commitments with loss impairments.

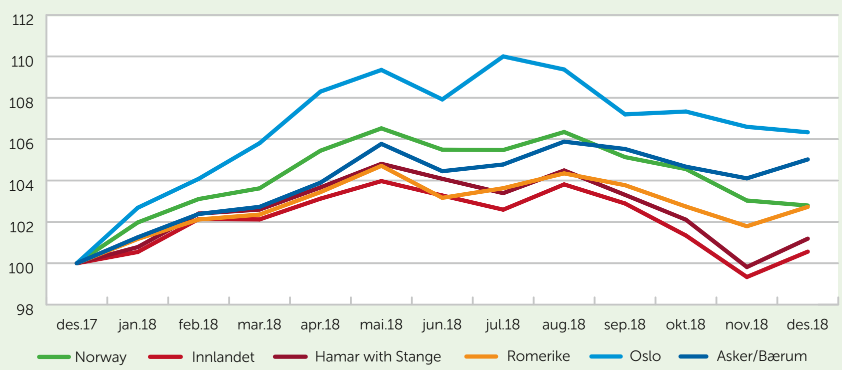
The figure below shows that the mortgage portfolio is mainly in the lower risk groups.

Figure 5.17: The mortgage portfolio distributed by PD ranges



Low interest rates and a large demand surplus in the market have driven housing prices in the Eastern Norway area in recent years. Prices increased particularly sharply in the Oslo area, but the Inland Region has also experienced pressure on house prices in recent years. In 2017, Oslo in particular experienced a correction in prices, while the price level of the Inland Region has been flat to a greater extent. Throughout 2018, house prices have been subject to a moderately positive development. We still see the biggest growth in the central Oslo/Akershus area, while the inland region is more flat on an annual basis. Figure 5.18 shows indexed development in 2018 in the bank's market areas[4].

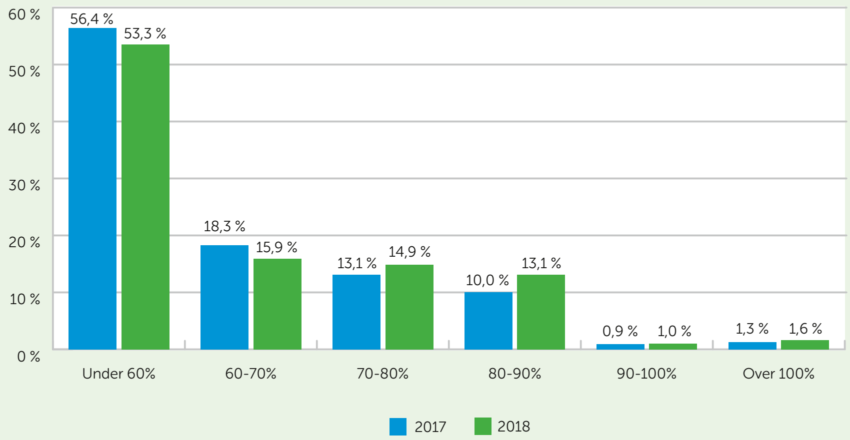
Figure 5.18: Indexed housing price development in the bank's market areas



[4] Source: Price statistics from Eiendom Norge, FINN and Eiendomsverdi AS.

The loan-to-value ratio (hereinafter called LTV) of the mortgage loan portfolio at the end of the year shows a weighted average of 58.3 per cent, compared with 56.9 per cent in December 2017.

Figure 5.19: Loan to value by LTV group



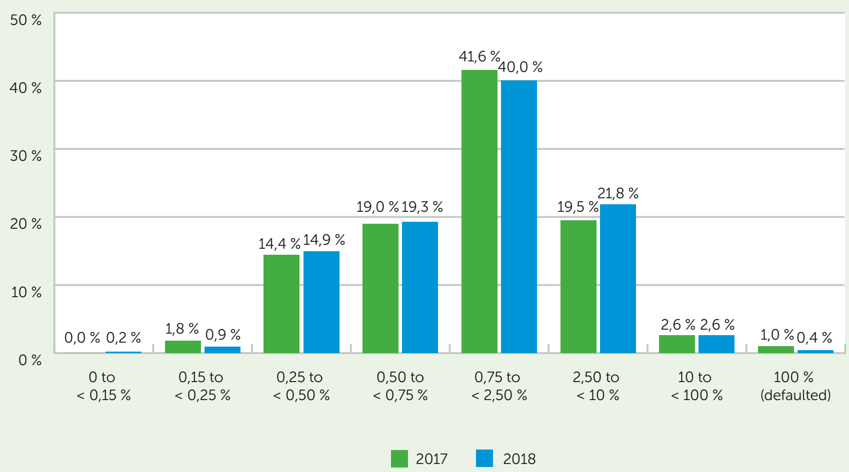
Loan to value is calculated from balance sheet exposure per account, taking into consideration the preceding debt and other loans with security in the same object, and the entire exposure is placed in the LTV group which the exposure falls within. Then each LTV group's proportion of the overall exposure of the portfolio is calculated. For cooperative housing, shared debt is also taken into account.

The largest share of the Group's mortgage loan portfolio is in the group with less than 60 per cent LTV, see Figure 5.19.

5.3.2 The corporate portfolio

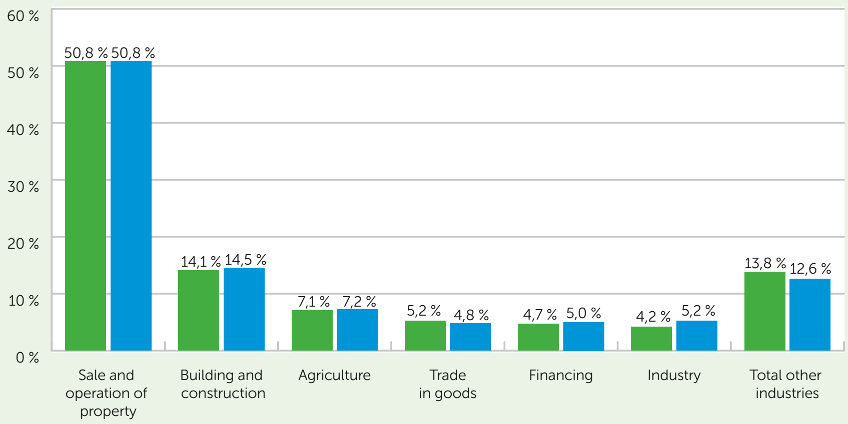
The figure below shows the corporate portfolio distributed in the same PD ranges as for mortgages. The portfolio has a low to medium risk profile.

Figure 5.20: The corporate portfolio distributed in regulatory PD ranges



The largest single industry in the corporate portfolio is "sale and operation of property" and exposure to this industry counts for 51 per cent of the corporate portfolio's overall net exposure.

Figure 5.21: The corporate portfolio distributed by industries



5.3.3 Commercial property

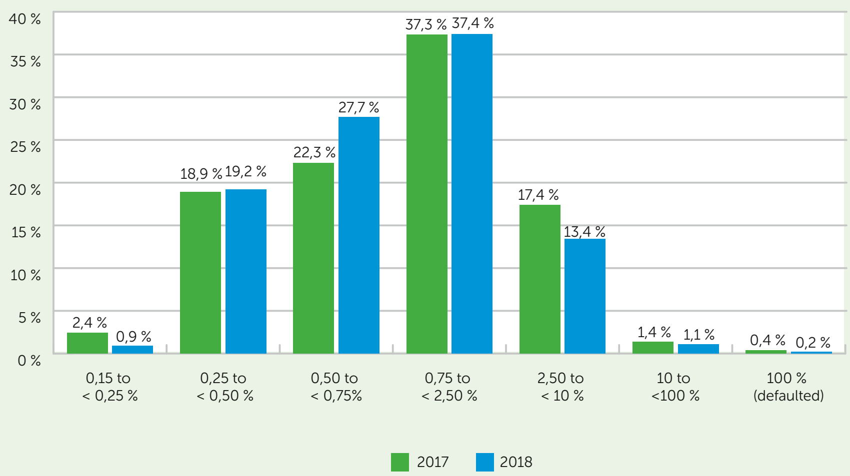
The bank has a good experience with commercial property in Eastern Norway and has had the largest proportion of its exposure in this industry. For granting and internal risk management, the bank uses a cash flow model with associated routines to rank customers. The model has its own built-in yield matrices, which are viewed together with the properties' net cash flow to put value estimates on the objects to be financed.

When granting and following up, the buildings' cash flow is reviewed, the tenants are scored and the nature of the property is considered to provide a comprehensive basis for assessing risk and profitability. In this way, the bank has a good overview of, and a good assessment basis for, the risk drivers that underlie the customer's ability to service debt. At the same time, the bank has a good overview of indirect risks to which the bank is exposed.

A moderate increase in rental prices in Oslo continues to be observed, while office vacancy rates show a declining trend. This development continues to give a positive development to the price level in Oslo. Regionally in Norway we are observing more diverse development and some greater differences.

The bank annually assesses its own yield matrices which form the basis for valuing commercial property, and the estimates are validated against actual transactions. The estimates are generally conservative in relation to the validation.

Figure 5.22: The commercial property portfolio distributed in regulatory PD ranges



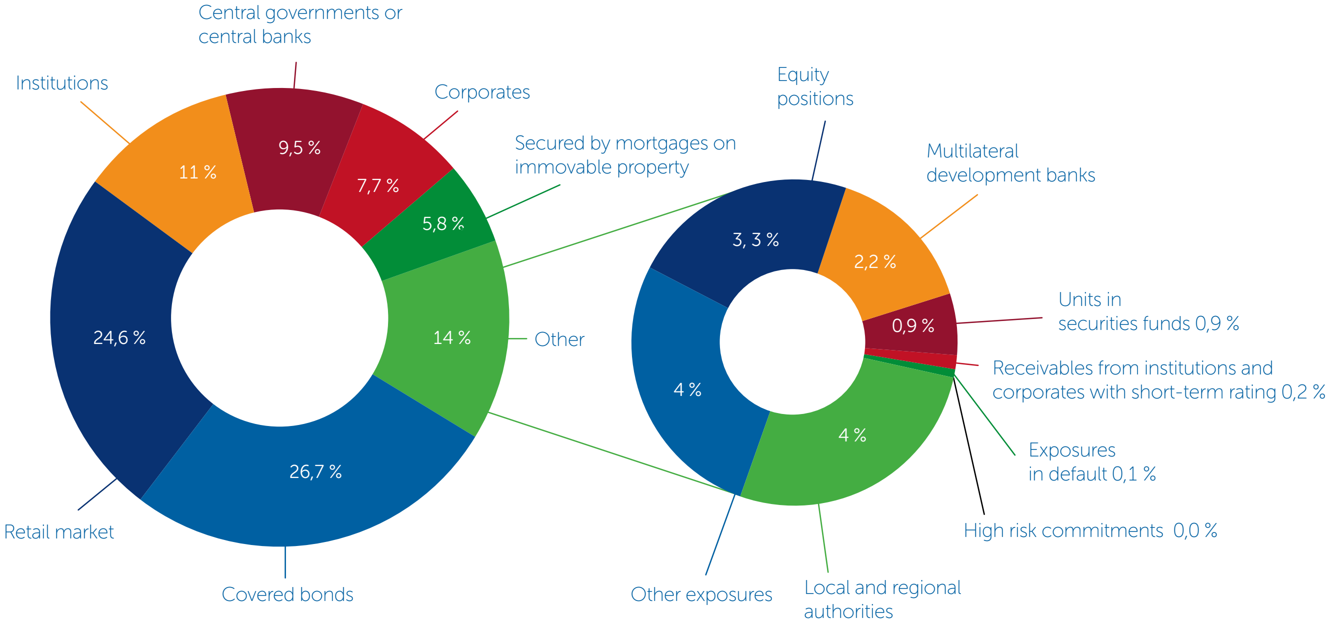
5.4 Standardised approach portfolio information

The credit portfolios that are not covered by the IRB approach are reported according to the standardised approach. Of the Group's consolidated credit portfolio, the standardised portfolio represents 25 per cent. The distribution is made on the basis of net exposure amount on and outside the balance sheet as at 31 December 2018.

The standard approach portfolio consists of the parent bank's own lending, where the bank has been given permanent or temporary exemption from the use of the IRB approach, while the credit portfolios in the partly-owned companies that use the standard approach are proportional consolidated .

Interest-bearing securities, equity positions and Interbank investments are also covered by the standard approach.

Figure 5.23: The Group's standard approach portfolio



5.5 Collateral

Collateral are used to reduce risk in the credit portfolios. The most common form of collateral is property, but inventory and guarantees by individuals, companies, state/municipality, guarantee institutions or banks are also used.

Table 5.9: Most commonly used collateral types

Security type	Retail market	Corporate market
Property	x	x
Undeveloped land	x	x
Securities	x	x
Guarantees	x	x
Plant and machinery		x
Motor vehicles/fixed assets		x
Inventory		x
Accounts receivable		x
Deposits	x	x

5.5.1 Valuation of collateral

In essence, all banks in the SpareBank 1 Alliance uses homonymous standards for collateral valuation. The guidelines cover assessment criterias, updating frequency of values and use of reduction factors.

The market value of residential property is determined by the use of purchase price according to contract, estate agent valuation or value estimates from Eiendomsverdi. For commercial property, in most cases the Group uses the present value of expected net cash flow associated with the property as a basis. The value basis is calculated by taking into account ongoing lease contracts, costs and yield. The latter takes into account location, alternative use potential, duration of lease contract, standards, solvency, regulation and risk-free interest rate.

The estimated market value for residential property is updated at least every other year. The value of commercial property is updated more frequently.

Where the bank will check the portfolio against real estate value one month before expiry. For special cases where the value does not exist or cannot be used, manual update routines are in place.

For the corporate portfolio, the bank performs an assessment of the value base of collateral at least annually, either through annual commitment reviews or automatic updates

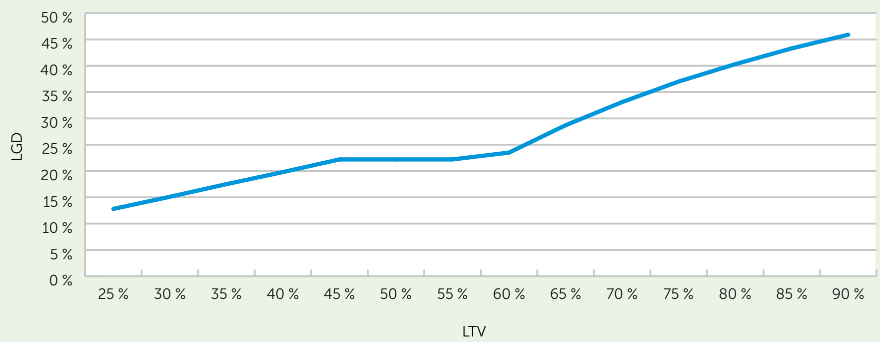
5.5.2 The impact of the collateral on capital adequacy according to IRB

Collateral is the most important explanatory factor in the bank's LGD model, where the estimates are used when calculating the Group's risk-weighted assets. Before the LGD estimates can be calculated, the value of the collateral is reduced by a reduction factor, which varies with the type of security object, in order to find the realisation value of the security. The realisation value that emerges is the estimate of the value of collateral in a severe recession. The downward adjustments are validated annually.

Regulatory calculation of LGD for mortgage loans is based on own estimates against the Financial Supervisory Authority of Norway's reference model, where LTV is an important explanatory factor. A regulatory minimum floor of 20 per cent is also taken into accoutnt for the consolidated portfolio.

For corporate with collateral in commercial property, the relationship between regulatory LGD and LTV can be illustrated as shown in the figure below.

Figure 5.24: Regulatory LGD and LTV



5.6 Impairment and default

5.6.1 Impairment losses on loans

Losses on lending are calculated based on the expected credit loss according to the general model of impairment of financial assets in IFRS 9. The measurement of impairments for expected losses depends on whether or not the credit risk has increased significantly since initial capitalisation. Credit deterioration is measured by the development of financial PD.

An estimate of losses will be made each quarter based on data which contains a history of account and customer data for the entire credit portfolio. The loss estimates are calculated based on the 12-month and lifelong probability of default, loss on default and exposure on default respectively.

In line with IFRS 9, the loans are grouped into three stages.

Stage 1

This is the starting point for all lending covered by the general loss model. A loss cost equal to 12 months' expected losses will be calculated for all assets that do not have a significantly higher credit risk than they did upon initial recognition.

Stage 2

Stage 2 includes lending that has seen a significant rise in credit risk since initial recognition, but that does not have objective evidence of a loss event. A loss cost equivalent to the expected losses over the lifetime will be calculated for these assets. This group includes accounts with a significant degree of credit deterioration, but which on the balance sheet data belong to customers that are classified as healthy.

Stage 3

Stage 3 includes lending that has seen a significant rise in credit risk since being granted and where there is objective evidence of a loss event on the balance sheet date. For these assets the loss provision must cover expected losses over the lifetime. These are assets that, under the rules prior to 1 January 2018, would be defined as defaulted/doubtful or individually impaired.

5.6.2 Individual impairment

Individual impairment for losses on individual commitments is made when there is objective evidence of default that triggers a loss of value for the Group. The Group's definition of default is therefore central to the process

The Group's definition of default is based on the Capital Requirements Directive section 10-1, where default is considered to exist when one or more of the following criteria occur:

- Overdrafts or arrears over 90 days, where arrears/overdrafts have exceeded NOK 1,000.
- Debt settlement, compulsory enforcement, opening of debt negotiations or public scheme of arrangement notification.
- Bankruptcy, opening of bankruptcy or notice of bankruptcy.
- Confirmed loss or individual impairment/loan loss impairment.

Individual write-downs represent the difference between the commitment's book value and the present value of the discounted cash flow based on the effective interest rate at the time of the initial calculation of the individual write-down. A write-down entails that a commitment is given the highest risk class.

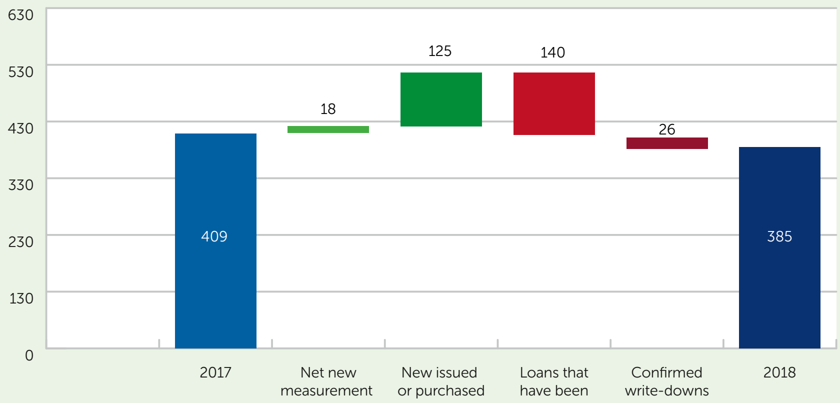
Importance is attached to specific project orientation and caution in the estimation of value as grounds for the realisation of collateral security. The cash flow is updated at least once a year based on materiality assessments.

Individual impairments reduce the book value of the commitments on the balance sheet, and changes in the assessed value during the period are recognised in the income statement as losses on loans and guarantees.

5.6.3 Development in defaulted and impaired loans

The figure below shows the development in the Group's loss impairments according to IFRS. Loss impairments according to IFRS 9 were implemented as of 1 January 2018. Therefore, the opening balance as of 1 January 2018 will deviate from the closing balance as of 31 December 2017.

Figure 5.25: Development in the Group's loss impairments according to IFRS



The following table shows the Group's loss costs in the last year.

Table 5.10: Recognised changes in value/losses for the period

Net recognised losses	**2018**
Changes in impairment losses	27
Amortisation loss	-0,3
Confirmed loss on lending and guarantees with early write-downs	-25
Confirmed loss on lending and guarantees without early write-downs	-49
Input of previousperiod's confirmed losses	12
Loss costs for the period	**-35**

The table below shows provisions in relation to net defaulted and doubtful commitments.

Table 5.11: Defaulted and impaired commitments

Defaulted (over 90 days) and doubtful commitments	**2018**	**2017**	**2016**
Defaulted commitments (over 90 days)	314	287	233
Individual impairments of defaulted commitments	50	42	54
Net defaulted commitments	264	244	179
Loan loss provision ratio	**16 %**	**15 %**	**23 %**
Other doubtful commitments	134	254	272
Individual impairments in other doubtful	43	104	101
Net other doubtful	91	151	171
Loan loss provision ratio	32 %	41 %	37 %
Total loan loss provision ratio	**21 %**	**27 %**	**31 %**

The extent of the commitments that have defaulted, but have not been individually impaired, is shown in the table above with a total loan loss impairment ratio of 16 per cent. The remaining defaulted commitments have been assessed, but as at 31 December 2018 there is no objective evidence that they will lead to a loss in value.

Commitments may also be considered as doubtful without the commitment being in default. Other doubtful commitments are marked with a loss event in which objective conditions indicate a probability of loss of value. For these commitments, the loan loss impairment ratio is 32 per cent.

6 Counterparty risk

6.1 Management and control

The management of the Group's counterparty risk is regulated in the bank's risk-based governing documents. In accordance with the market risk policy, the Group's trading in derivatives shall be within the general limits for interest rate, currency, equity and counterparty risk.

The Group enters into derivative trades on the basis of customer demand and to hedge positions arising from such activity. Derivatives are also used to hedge currency and interest rate risks arising in connection with borrowing and lending.

Derivatives are traded with several different counterparties, which also do other types of business. Credit risks arising in connection with trading in derivatives is included in the measurement of credit risk in a capital adequacy context. In order to minimise the counterparty risk against single counterparties, there are netting agreements and bilateral security agreements.

The *European Market Infrastructure* Regulation, abbreviated to EMIR, entered into force in Norway on 1 July 2017. EMIR regulates the clearing obligation and obligation to implement risk-reducing measures in cases where clearing is not applicable. EMIR also sets out requirements for bilateral counterparty agreements that include risk-reducing measures, including with regard to pledging assets as security. This means that the bank cannot conduct derivative transactions with bank counterparties where ISDA and CSA agreements have not been established. ISDA is an abbreviation of the International Swaps and Derivatives Association, which is an association of international financial Institutions, and an ISDA agreement enables offsetting. CSA is an abbreviation for Credit Support Annex and such an agreement allows collateral received to be seen in context. The collateral pledged for these transactions consists exclusively of cash deposits.

6.2 Portfolio information

Table 6.1 below provides an overview of the bank's derivative agreements by type of derivative, type of hedging, the contracts' nominal value, credit equivalent taking into account potential future exposure, risk-weighted assets and requirements for common equity tier 1 capital both before and after offsetting as at 31 December 2018. The Group has no trading portfolio.

Table 6.1: Derivative contracts

Type of derivative	Nominal value	Credit equivalent (EAD)	Risk-weighted assets	Common Equity Tier 1 capital requirements
Currency Instruments (financial hedging)				
Interest rate instruments (financial hedging)	10 385	947	379	45
Interest rate instruments (fair value hedging)	2 948	56	45	5
Credit derivatives				
Gross value before set-off	**40 932**	**1 523**	**619**	**74**
Agreements on set-offs	36 526	1 088	408	49
Net value after set-offs	**4 406**	**435**	**210**	**25**

** Requirement for pure common equity tier 1 capital according to Pillar I (12.0%) is calculated in full by the standard approach.*

The Group has NOK 25.2 million in common equity tier 1 capital for the bank's counterparty risk as at 31 December 2018. In addition, an additional NOK 20.8 million in common equity tier 1 capital is held for the Group's CVA risk. This part of the capital requirement calculation includes bank counterparties, private individuals and municipalities. Businesses are, for all practical purposes, exempted from CVA capital requirements.

The derivatives are recognised at fair value through profit and loss. Contracts with unrealised gains are recognised as assets, while contracts with unrealised losses are recognised as debts for all derivatives. Hedges relating to the bank's borrowing activities are generally defined as "fair value hedging" according to IFRS 9. Other hedges are defined as financial hedging and are used, in part, for securing interest rate swaps with small amounts which are not naturally hedged on a one-to-one ratio. These derivatives are hedged in bulk, which means securing multiple hedge objects with one hedge instrument and this will therefore not qualify for documented hedge accounting. The Group does not use cash flow hedging.

7 Market risk

Market risk is the risk of loss due to changes in observable market variables such as interest rates, foreign exchange rates and shares/equity certificates. The risk associated with falls in value in the real estate market is also included in market risk. So is the risk of changes in the market value of bonds, certificates and funds due to general changes in credit spreads.

The Group has no trading portfolio and is thus does not calculate capital requirement for market risk under Pillar 1. Under Pilar 2, the Group calculates capital requirements for market risk for interest rate risk, equity risk, currency risk, property risk and spread risk.

Shares, units and other equity interests are classified in compliance with IFRS 9 at fair value through profit or loss. Realised gains and losses, dividends, and impairments are recognised in the income statement as income from other financial investments.

Also see the notes in the Group's annual financial statements for 2018 for a more detailed description of how financial instruments are accounted for.

7.1 Management and control

The management of the Group's market risk is based on risk-based governing documents for the market risk area. The governing documents are adopted by the Board and apply for the strategy period, although they are revised as required and at least once a year. The Group's governance and control of the market risk is considered to be satisfactory to meet the Group's risk profile and strategy.

To ensure satisfactory division of work between the departments and the people who take positions on the Group's behalf and the departments and persons responsible for settlement, control and reporting, the Group has defined different roles and responsibilities.

The Board's adopted market risk strategy and policy for market risk provide the CEO with guidelines, frameworks and authorisation for the management of market risk. The CEO further delegates this according to area of responsibility.

The finance department is responsible for ongoing control of frameworks. The department for risk management is responsible for monthly follow-up and reporting of positions in relation to internal limits. In the case of a framework breach, the risk management department will immediately report upwards in the organisation. The risk management department submits independent reports to the management group every month and to the Board every quarter.

7.1.1 Interest rate risk

The purpose of the Group's management of interest rate risk is to ensure that the Group has a known interest rate risk exposure and that this concurs with the Group's risk profile and current limits for the area. Management of the interest rate risk should take all the elements of the interest rate risk into account.

The Group measures interest rate risk as the total net income effect on the Group's balance sheet and off balance sheet items on shifts in the interest rate. Frameworks have been set for the amount of effect on profit allowed for a 1 percentage point parallel shift and a 1 percentage point distortion of the interest rate curve. Frameworks and associated calculations take into account administrative interest rate risk. That is to say, the effect of the time it takes in practice from when an interest rate change occurs in the market until the Group has adjusted the terms for deposits and loans with adjustable interest rates.

Interest rate curve risk is the risk that the interest rate curve shifts differently within the various times to maturity when the interest rates change. The interest rate risk is also limited through frameworks for the maximum weighted time to maturity and duration in the securities portfolio.

To minimise the Group's interest rate risk, interest rate swap agreements are used. Hedging transactions are conducted with reputable Norwegian and foreign banks in order to reduce own risk. Derivative business is linked to ordinary banking and is carried out to reduce risks related to the bank's borrowing in financial markets, and to reveal and reduce risks related to customer activities.

7.1.2 Currency risk

Currency risk arises when differences exist between the Group's assets and liabilities in the individual currency. The currency risk is measured based on the combined net currency position and the net position in the various currencies.

The aim of the Group's currency activities is to safeguard customers' need for foreign exchange trading, foreign currency funding and international money-transfer services, and to secure the currency positions that occur within the financing/liquidity and management of securities.

Activities related to currency turnover shall at all times occur within the adopted guidelines, frameworks and authorisations. The Group's frameworks define quantitative targets for maximum currency exposure, measured in NOK. There are frameworks for net positions in each currency, as well as total absolute sum of net positions per currency. The currency risk is quantified and monitored continuously.

7.1.3 Property risk

Property risks are market risks associated with exposure in property. This includes ownership positions and shares in commercial property, property companies, property funds as well as direct ownership of properties, including our own bank buildings and property for our own or employee use. The Group's investments consist mainly of its own bank buildings. The bank also owns a total of eight holiday properties. Beyond this, the bank has a strategic interest in Oslo Kongressenter Folkets Hus BA, which is recognised in the accounts as shares. In the Pillar 2 assessment, however, this is included as property risk and calculations show that overall there is major added value in the bank's properties beyond what appears in the bank's accounting.

7.1.4 Equity risk

Equity risks arise in that the Group owns shares, equity certificates or other equity instruments that derive the value determined by market developments.

According to the market risk policy, the bank has its own framework for investments in strategic and financial share positions. Strategic share positions mean "investments to contribute to growth and development in the Group's market area" and "strategic stakes in relation to the banking business". Financial share positions are short-term or long-term investments with the goal of providing the best possible returns.

In measuring exposure to the market risk frameworks, the market value of investments is used. Shares in subsidiaries as well as investments in affiliated companies (AC) or joint ventures (JV) are kept outside as they are essentially consolidated in full or proportionately in the capital adequacy calculations. Non-consolidated AC/JV are included in the assessment of ownership risk according to Pillar 2.

7.1.5 Spread risk

Spread risk is risk of loss on a change in the mark-up against the reference rate on the Group's investments. Mark up against the reference index consists of both credit risk and liquidity risk and is part of the Group's total market risk assessment.

7.2 Portfolio information

As previously mentioned, as at 31 December 2018 the Group has no trading portfolio and thus does not calculate market risk under Pillar 1. Capital requirements for the bank's interest rate portfolio, properties and equity positions are included instead as credit risks in a regulatory context. Credit risks associated with the bank's interest rate portfolio appear in the table below.

Table 7.1: Credit risk in the interest rate portfolio

Bonds and certificates	Book value	Risk-weighted assets	Capital requirement 8,0 %
States and central banks			0
Local and regional authorities	1 679	159	13
Multilateral development banks	1 051	0	0
Institutions	1 350	24	2
Corporates	424	48	4
OMF	8 658	866	69
Total	**13 624**	**1 097**	**88**

The market value excluding the amount of interest on the Group's investment in bonds and certificates as at 31 December 2018 is shown in the following table. Investments included in the capital adequacy consolitation are kept outside this summary.

Table 7.2: Bonds and certificates

Rating	Market value
AAA	10 334
AA	1 785
A	97
BBB	21
BB	0
B or lower	2
Non rated Norwegian municipalities	789
Other non-rated papers*	552
Total bonds and certificates	**13 580**

* Consist of Norwegian state, Swedish city, and one covered bond.

The Group's positions in equity positions can be divided into three categories. A summary of book value and fair value, gains and losses as at 31 December 2018 is shown in the following table.

Table 7.3: Overview of book value, fair value, gains and losses

Investment type	Book value	Fair value	Realised gains or losses as at 31 December 2018	Unrealised gains or losses as at 31 December 2018	Amount deducted in common equity tier 1 capital
Financial investments at fair value through profit or loss	32	32	0	-1	0
Strategic investments at fair value through profit or loss	515	515	0	17	34
Associated companies and joint ventures	4 124				292
Total	**4 671**		**0**	**15**	**326**

The Group has, as at 31 December 2018, investments in substantial equity positions in financial corporates which, according to applicable rules, will be deducted from the Group's common equity tier 1 capital by NOK 325.9 million as at 31 December 2018.

The Group's equity positions consist mainly of investments in affiliated companies and joint ventures, as well as other strategic investments. The Group's investments in SpareBank 1 Boligkreditt AS, SpareBank 1 Kredittkort AS and SpareBank 1 Næringskreditt AS are consolidated proportionately in the capital adequacy calculations. A detailed overview of the bank's investments by purpose as at 31 December 2018 is presented in the following table.

Table 7.4: Investments (equity positions outside the trading portfolio) distributed by purpose

Objective	Investments	Book value
Financial investments at fair value through profit or loss	NorgesInvestor Proto AS	21
	Norgesinvestor IV AS	8
	Other financial investments	4
Total		**32**
Strategic investments at fair value through profit or loss	Totens Sparebank	183
	VISA Inc. A shares	84
	Eksportfinans ASA	71
	Oslo Kongressenter Folket Hus AS	54
	VN Norge AS	39
	SpareBank 1 Markets AS	39
	Visa Inc. Preference shares	26
	Other strategic investments	19
Total		**515**
Associated companies and joint ventures	SpareBank 1 Boligkreditt AS	2 248
	SpareBank 1 Gruppen AS	1 204
	SpareBank 1 Næringskreditt AS	277
	SpareBank 1 Kredittkort AS	232
	SpareBank 1 Betaling AS	123
	SpareBank 1 Banksamarbeidet DA	19
	SMB LAB AS	17
	Betr AS	3
Total		**4 124**
Sum total		**4 671**

The following table provides an overview of the book value by type of share investment as at 31 December 2018. Affiliated companies and joint ventures are in this overview defined as other. The remaining share portfolio is primarily unlisted, except for two papers traded on the stock exchange.

Table 7.5: Overview of the type and value of listed shares, unlisted shares in diversified portfolios and other commitments

Type	Book value
Unlisted	279
Traded on stock exchange	268
Others	4 124
Total	**4 671**

The interest rate risk for all interest rate positions can be expressed by looking at the change in the value of interest rate instruments in the event of a parallel 1 per cent change in interest rates. The table below shows the effect of the aforementioned interest rate change on assets and liabilities, maturities and currencies as of 31 December 2018. These calculations take into account administrative interest rate risk. Where the interest rate risk is positive, this means that the result will be improved at an increased rate.

Table 7.6: Interest rate risk

Interest rate risk, 1 percentage point change	2018
Certificates and bonds	-75
Fixed-rate loans to customers	-152
Fixed-rate deposits to customers	15
Bank and credit lending	3
Bond borrowing	707
Other	2
Derivatives	-486
Administrative interest rate risk	-7
Total interest rate risk, effect on profit after tax	**7**

Fortsettelse tabell 7.6: Renterisiko

Yield curve risk, 1 percentage change	2018
0-1 months	1
1-3 months	11
3-6 months	2
6-12 months	9
1-3 years	-9
3-5 years	-18
5-10 years	11
Over 10 years	0
Total interest rate risk, effect on profit after tax	**7**

Currency, 1 percentage point change	2018
NOK	4
EUR	3
Other	0
Total interest rate risk, effect on profit after tax	**7**

The table below provides an overview of the Group's net currency exposure as at 31 December 2018. The currency risk is quantified and monitored continuously. The Group was exposed to limited currency risk both during the year and at year end.

Table 7.7: Currency exposure

Currency	Net exposure
GBP	-1
USD	-3
HKD	7
JPY	3
PLN	1
SEK	-3
EUR	-6
CHF	1
Other	3
Total	**1**

8 Liquidity risk

Liquidity risk is the risk of being unable to fulfil obligations when they fall due or finance assets, including undesired growth, without significant extra costs.

8.1 Management and control

The management of the Group's funding risk is based on risk-based steering documents for the area of liquidity. The governing documents are adopted by the Board and apply for the strategy period, although they are revised as required and at least once a year. In connection with the steering documents, a separate contingency plan has been established for managing the funding situation during periods of turbulence in the financial markets, and the funding situation is also a key theme in the Group's recovery plan. The Group's governance and control of liquidity risk is considered to be satisfactory to meet the Group's risk profile and strategy.

8.1.1 Strategic objective and management processes

The Group aims to ensure that the liquidity risk will be low and the objective is secured through:

- Sufficient liquid reserves.
- Diversification and a long-term approach to financing.
- Identification and control of the on and off balance sheet exposures.

Frameworks that support the strategic objective, including limits for survival for various time horizons, the size and quality of the liquidity reserve and the financing's duration and diversification, are determined in the policy for liquidity risk.

8.1.1.1 Sufficient liquid reserves

Investments in interest-bearing securities are made for the purpose of controlling the liquidity risk. The Group shall have sufficient liquid reserves to support the survival targets. Different assets have different levels of liquidity. The composition and the size of the reserves shall be such as to satisfy all of the Group's survival targets. Holding a liquidity reserve has a cost and total liquidity costs shall be the lowest possible.

8.1.1.2 Diversification and a long-term approach to financing

Deposits from customers represent the most important source of funding. Deposits are considered to be stable funding, so the Group shall always have a sufficiently high percentage of balance financing via deposits. Deposits with low liquidity risk shall be prioritised. At the same time, deposits should be obtained from a sufficient number of different types of depositors. Given sufficient diversification, the deposits shall be priced so that the Group's profitability is maintained.

The foreign capital market has in recent years taken over a larger proportion of the Group's financing. The desired level of refinancing risk shall be achieved through diversification in different geographical markets, types of investor groups, maturities and currencies. There is the opportunity to enter into derivative agreements relating to loan transactions. Borrowing cost shall be minimised, given the guidelines given for diversification and long-term financing.

OMF through SpareBank 1 Boligkreditt AS og SpareBank 1 Næringskreditt AS shall be actively used to secure the Group's stable and long-term financing, contribute to the diversification of financing and reduce financing costs. In order to ensure the greatest possible flexibility in financing opportunities, the Group shall actively work to maintain the facilitation pace of loans that can be transferred to the companies.

The Group's balance of loans in residential and commercial credit companies shall be limited so as to take into account the Group's own creditworthiness and general risk considerations. In general, the Group shall follow a conservative policy and not be negatively differentiated compared with other banks' use of the residential and commercial credit companies as a funding source.

8.1.1.3 Identification and risk measurement

Different parts of the balance give the Group varying levels of liquidity risk. To better understand different assets' actual liquidity risks, there shall be continuous work to increase knowledge of the assets' inherent risks.

Deposits give the Group liquidity risk. Different types of deposits have different risks of being withdrawn. Similarly, unused credits cause the Group risk because the customer may choose to take advantage of free credit. The Group does not have full control over this liquidity risk. The Group therefore makes stress scenarios that shall seek to describe the various liquidity risks.

Borrowing shall be refinanced and desired growth shall be financed. Through regularly updated liquidity forecasts, the liquidity risks that occur through borrowing activity are measured.

By combining known liquidity flows with different scenarios, the Group's total liquidity risk is measured.

8.1.2 Organisation, roles and responsibility

To ensure satisfactory division of work between the departments and the people who take positions on the Group's behalf and the departments and persons responsible for settlement, control and reporting, the Group has established an organisation in which executive and controlling functions are independent of each other.

8.1.2.1 Control of liquidity risk

The Board's adopted liquidity strategy and policy for liquidity risk provide the CEO with guidelines, frameworks and authorisation for the management of liquidity risk. The CEO further delegates this according to area of responsibility. The Group director of finance has the overall responsibility for the liquidity management within the Group. The operational responsibility for the liquidity management is delegated to the chief financial officer, who is responsible for:

- Monitoring of the ongoing development in the Group's liquidity situation.
- Management of the liquidity reserve.
- The Group's borrowing of foreign capital.
- Correct determination of the internal price.

8.1.2.2 Identification and measurement of liquidity risk

The financial department and risk management department have a shared responsibility for identifying and measuring liquidity risks.

- The finance department is responsible for identifying and measuring the liquidity risk for foreign capital funding, including the use of OMF and the portion of liquid reserves invested in the market.
- The risk management department is responsible for identifying and measuring the liquidity risk of deposits and unused credits.

8.1.2.3 Reporting of liquidity risk

To ensure independent control, the risk management department is responsible for the following reporting:

- Ongoing limit control and reporting of positions according to the framework determined in the liquidity risk policy and any guidelines from the Financial Supervisory Authority of Norway.
- Independent reporting to the Board and management.
- Regulatory reporting within the liquidity area.

8.1.2.4 Ongoing follow up

Operations are responsible for settlement and control at transaction level. The business divisions are responsible for ensuring that liquidity events that are essential for liquidity management are reported to the finance department as soon as they become known.

Before basic new instruments are used, those should be approved by the Group director for finance. A risk analysis shall also be drawn up with related risk measures.

Systems for management and control shall be evaluated regularly by the Group's internal auditor.

8.2 Portfolio information

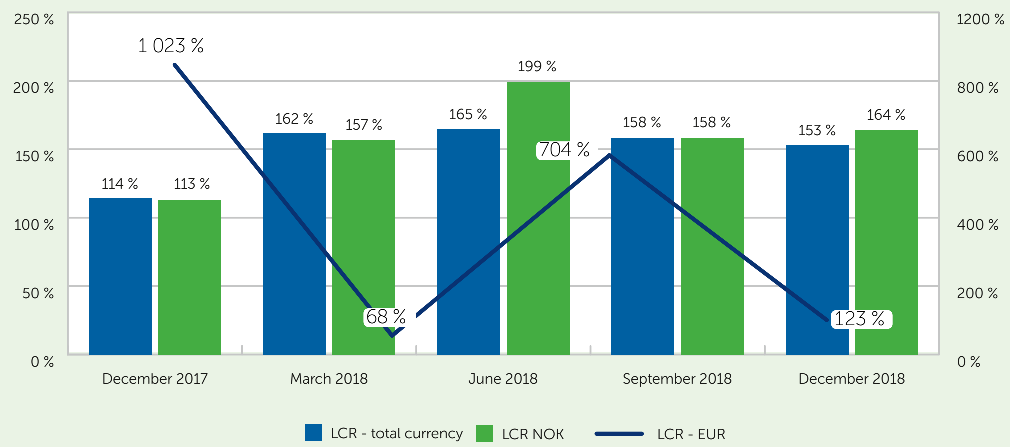
8.2.1 Survival

For the purpose of supporting the objective of low liquidity risk, different survival goals are established at different time horizons.

8.2.1.1 Survival according to liquidity coverage ratio

Liquidity Coverage Ratio (hereinafter LCR) defines a stress scenario that lasts for 30 days. The development in the last quarters of the Group's consolidated LCR for all currencies, EUR and NOK is shown in the figure below, where the scale for LCR in EUR is on the right axis. Supplementary information about diversification of financing and the liquidity portfolio's composition can be found in the sections below.

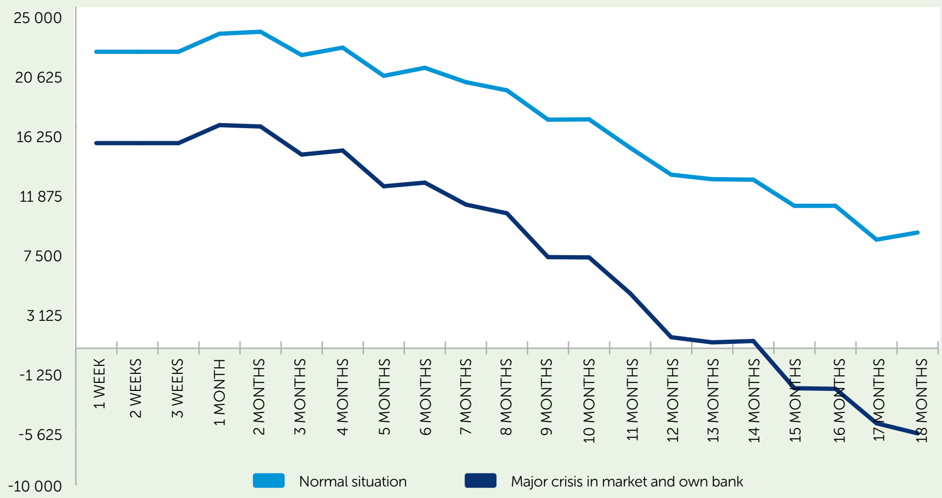
Figure 8.1: LCR



8.2.1.2 Survival in a normal situation and in a self-defined stress with a great crisis in the market and our own bank

As at 31 December 2018, the Group could continue its operations for more than 18 months in a normal situation. In a scenario defined as a major crisis in the market and at our own bank, the Group as at 31 December 2018 had enough liquidity to continue operations for over 14 months.

Figure 8.2: Results from stress tests



8.2.2 Liquidity reserve

The liquidity reserve shall at all times be large enough to satisfy government requirements and internal survival targets. As at 31 December 2018, the liquidity reserve was NOK 23.7 billion, given the Group's internal limitation on transferring loans to SpareBank 1 Boligkreditt AS.

The liquidity reserve shall consist of liquid assets of good quality. The liquidity reserve at the start of the year contained cash, access to loans from Norges Bank, bonds, loans prepared for sale to residential and commercial credit companies and funds and listed shares. The following figures indicate the composition and quality of the liquidity reserve.

Figure 8.3: The composition of the liquidity portfolio

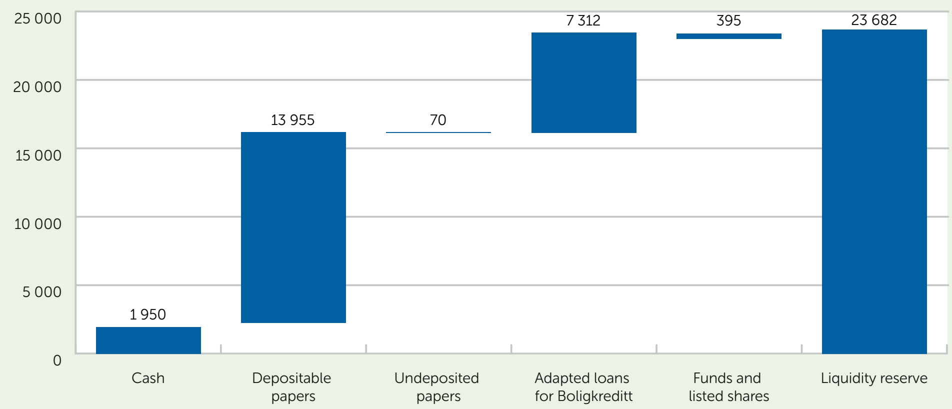
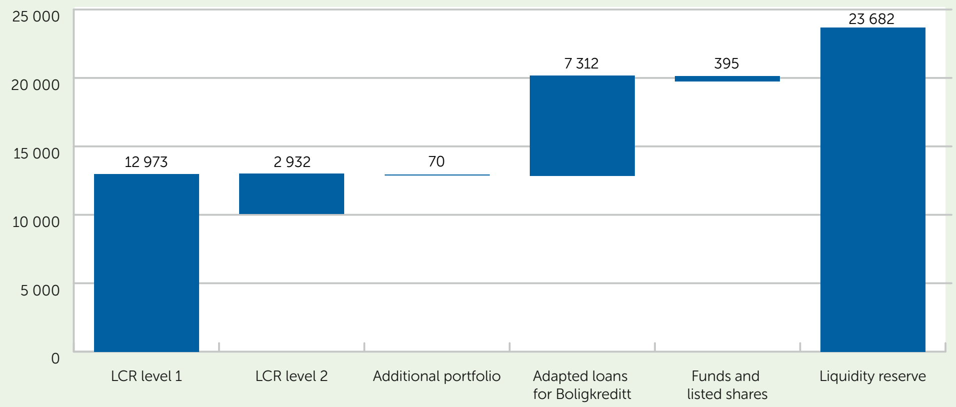


Figure 8.4: The quality of the liquidity portfolio



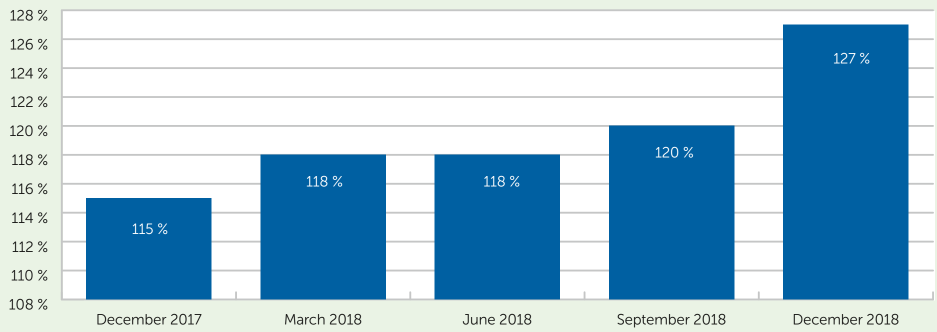
8.2.3 Diversification and long-term approach to financing

Liquidity risk is reduced by the diversification of financing over different markets, financing sources, instruments, terms and currencies. Total financing, consisting of equity, customer deposits, loans transferred to residential and commercial credit companies and market financing, was NOK 162.1 billion as at 31 December 2018. The market financing alone on the same date was NOK 34.6 billion.

8.2.3.1 Long-term financing

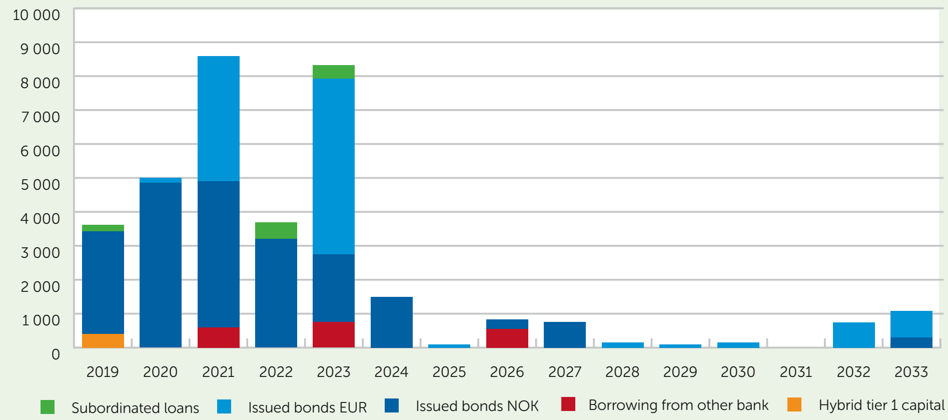
Net Stable funding Ratio (hereinafter called NSFR) describes the degree to which the Group is long-term funded. The development in the last quarters of the Group's consolidated NSFR for total currency is shown in the figure below.

Figure 8.5: NSFR



Of the Group's total funding volume of NOK 34.6 billion, NOK 3.6 billion will be refinanced in 2019. The average term for the Group's market financing was 3.8 years as at 31 December 2018. The figure below shows the maturity structure for the Group's market financing.

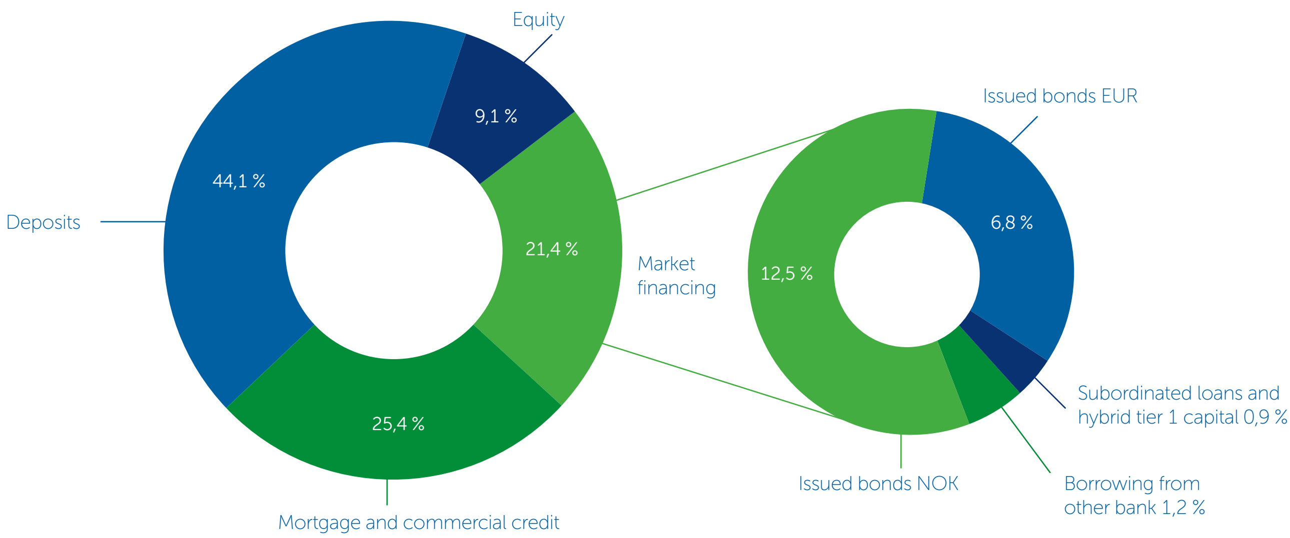
Figure 8.6: Maturity structure



8.2.3.2 Diversified financing

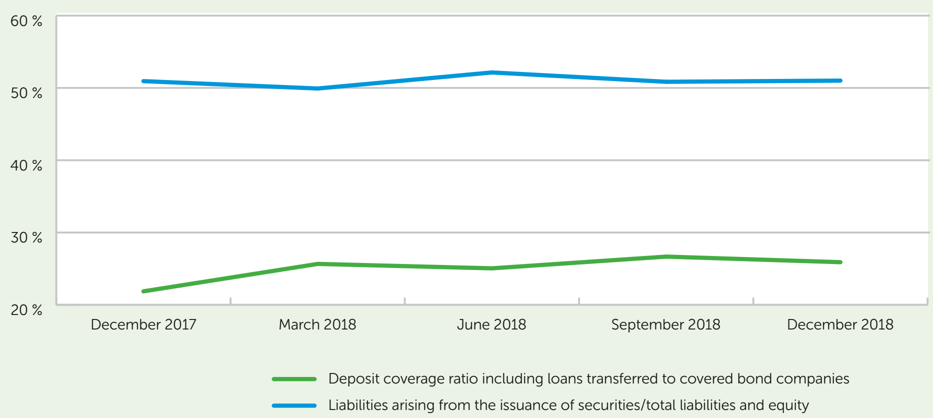
The figure below shows the Group's sources of financing as at 31 December 2018.

Figure 8.7: The Group's sources of funding



To ensure other diversification of financing than different maturities and funding sources, the Group has established frameworks for reliance on market funding, use of OMF as a funding source and diversification of deposits.

Figure 8.8: Deposit coverage ratio and reliance on market funding



At the end of the year, the Group's funding in EUR represented 31.8 per cent of total market funding and 10.1 per cent of total liabilities on its own balance sheet.

9 Operational risk

Operational risk is the risk of losses due to weak or inadequate internal processes or systems, human error or external incidents. Operational risk also includes legal risk, which is a risk that often arises due to problems with documentation and the interpretation of contracts, as well as varying legal practices where the Group operates.

9.1 Management and control

Management and control of the bank's operational risk is based on the strategy and policy for operational risk adopted by the Board. The policy establishes the Board's risk profile for operational risk. The overall objective is for the Group to have effective management and monitoring of operational risks, so that no incidents should be able to substantially damage the Group's solvency and performance.

By defining quantified limits for exposure for different types of operational risk, it is possible for the Group to have a more systematic approach to the governance and follow-up of the risk picture on a more continuous basis. The practical management of operational risk in the Group is based on the main activities described below.

9.1.1 Manager confirmation

All managers of business and support functions are responsible for day-to-day risk management, and for ensuring good internal control exists within their area of responsibility. All managers must report on status and development in annual manager confirmations, as well as assess the risk culture as an element in analyses and reports for their areas. The manager confirmations are intended to provide the CEO and Board with information about whether risk management is being properly addressed, including whether routines, guidelines and Acts/Regulations are being followed. Manager confirmations are an important part of the Group's systematic quality work. The work on manager confirmation is coordinated by the risk management department.

9.1.2 Losses and incidents

The Group has systems and routines for registering undesired incidents. Such registration enables the organisation to learn from the incidents and take the necessary measures to reduce the likelihood that similar incidents occur at a later date.

Undesired incidents means incidents arising from:

- Human failure (human error, routine and policy violations)
- Weaknesses in routines or systems
- Crime (internal and external)
- Operating events (power failure, Evry outage, etc.)

and where the consequences entail or could result in:

- Economic loss
- Breach of legal requirements
- Injuries/negative consequences for employees
- Reputation loss

Operational losses and incidents must be registered in the incident database and followed by in accordance with the routine for registering and following up adverse incidents.

9.1.3 Customer complaints

The parent bank has a centralised complaint scheme that seeks to safeguard the parent bank, the parent bank's customers and other contractual partners. The scheme satisfies the Financial Supervisory Authority of Norway's guidelines for complaint management. The purpose of this scheme is to ensure that all complaints are given satisfactory treatment in line with the bank's principles of complaint processing and contribute to adequate consumer protection in line with the Financial Supervisory Authority of Norway's guidelines. The system shall also ensure that the bank gains a better overview of the operational risk, and can thus can analyse the complaints to determine whether they are due to systematic errors. The extent of complaint cases and serious complaint cases are reported quarterly to the Board. In addition, complaints are reported annually to the Financial Supervisory Authority of Norway.

9.1.4 Continuous improvement

The risk management department are registering and follows up material suggestions for improvement based on reports from the internal audit and measures based on recommendations from the Financial Supervisory Authority of Norway or other independent control bodies. All managers with responsibility for active measures registers updates on relevant activities on a regular frequency in the improvements database.

9.1.5 Risk analyses

The risk management department facilitates risk analyses based on a defined annual plan. The annual plan are reviewed at least annually and will be based on an assessment of inherent risk. The risk management department is also responsible for enabling the front-line to carry out its own risk analyses, and providing assistance with methodology and tools.

9.1.6 The Financial Supervisory Authority of Norway's risk modules

Gap analyses are performed in relation to the Financial Supervisory Authority of Norway's modules for self-assessment of management and control, as well as the Cobit framework for evaluating ICT operations. The gap analyses provide useful information about management and control in line with external regulations and expectations.

9.1.7 New and revised products, solutions and processes

When establishing or revising products, solutions and processes, effective and solid quality assurance must be carried out before implementation. This shall be done to avoid the unintentional or unwanted introduction of operational risk. Risk analysis shall be part of quality assurance, and shall include assessment of operational risk factors. A policy has been established for new, or revised, products, processes or solutions that lay down guidelines for how the assessments should be carried out.

9.2 Minimum eligible capital requirements

The Group uses the basic approach to calculate the eligible capital required to cover operational risk.

Table 9.1: Minimum eligible capital requirement for operational risk

	Consolidated	SpareBank 1 Østlandet	SpareBank 1 Finans Østlandet AS
Risk-weighted assets	5 222	3 433	368
Capital requirement 8%	**418**	**275**	**29**

10 Compliance risk

Compliance risk is the risk that the bank will incur public sanctions, penalties, other criminal sanctions, loss of reputation or financial losses as a consequence of failure to comply with acts, regulations, official guidelines and mandatory public orders.

10.1 Management and control

Management and control of the bank's compliance risk is based on the Board of Directors' adopted strategy and policy for compliance risk. The documents lay down the Board of Directors' risk tolerance for compliance risk. The Group has a low tolerance for compliance risk, and there is zero tolerance of deliberate infringement of regulations. No compliance incidents may significantly impair the Group's solvency, performance or reputation. The Group's business operations must be organised so as to eliminate fines and sanctions. This overall risk tolerance is concretised and operationalised through quantifiable parameters in different sub-areas.

The policy also regulates responsibilities, including guidelines for all employees' responsibility for regulatory compliance. The Group's management is responsible for implementation and compliance with laws and regulations, while each individual employee is responsible for day-to-day, ongoing compliance.

The bank has its own compliance function, which is organised independently of the operative business management. The bank's compliance function is responsible for assessing whether the bank's guidelines, routines and systems contribute to ensuring compliance with relevant regulations, as well as controlling regulatory compliance. The compliance function shall also monitor regulatory development and make impact assessments of known and notified regulatory changes. The bank's compliance function works according to a risk-based annual plan. If regulatory development or other circumstances so dictate, the annual plan will be adjusted on an ongoing basis.

The policy sets requirements for internal follow-up and reporting, including requirements for processes to ensure and follow up on regulatory compliance. Incidents and violations in the compliance area will be registered in the same manner as operational risk is registered and followed up via the Group's incident database.

10.2 Regulatory changes and compliance risk

The extent of regulatory changes was significant again in 2018. Extensive regulatory changes with significance for the bank's framework conditions are also expected in the coming years. In addition, some elements of the new regulations, such as regulations in the anti-money laundering and data protection areas, give the authorities access to apply more stringent sanctions. Overall, this contributes to increasing the potential compliance risk. The bank has a considerable focus on regulatory developments and compliance risk. In 2018, the bank had strong focus on the areas of anti money laundering and financing of terrorism, data protection (GDPR) and changes in securities trading regulations (MiFID II).

11 Conduct risk

Conduct risk is the risk of public sanctions, criminal sanctions, loss of reputation or financial loss as a consequence of the bank's business methods or the employees' conduct materially jeopardising customers' interests or the integrity of the market.

11.1 Management and control

Over time, the regulation of the financial industry has evolved to increasingly include regulations to protect customers and consumers. The bank's conduct risk is therefore closely associated with the bank's compliance. During 2018, the Board of Directors adopted a separate conduct risk policy, in order to emphasise the importance of this topic for the bank. The policy lays down the Board of Directors' risk tolerance in this area. The Group has a low tolerance for conduct risk. This entails that no single business practice incidents may be able to materially damage the Group's solvency, performance or reputation. The overall risk tolerance in the area is concretised and operationalised through quantifiable parameters for risk tolerance in various sub-areas, such as employee attitudes and competence, consumer protection, innovation, counselling and sustainability.

The policy also regulates responsibility, follow-up and reporting requirements, and the main principles for ensuring good business practice. All employees are required to contribute to ensuring that customers' needs and entitlements are adequately handled, including by providing professional and honest customer services to ensure that the bank's customers can make clear and well-informed choices.

Key instruments to ensure good business practice include, among other things, ethical guidelines, internal information and training initiatives, implementation of risk analyses, a well-functioning procedure to handle customer complaints – including root cause analyses and improvement measures – and an appropriate whistleblowing channel. On the establishment of or changes to products and services, the necessary quality assurance must be carried out prior to launch. Reward and remuneration schemes must be designed to ensure that the required conduct for good business practice is safeguarded and promoted.

12 Ownership risk

Ownership risk is the risk that the Group will incur negative earnings from ownership interests in strategically owned companies, or that the Group must inject new equity in strategically owned companies, whether it is due to strong growth or to ensure continued operations as a result of large losses.

12.1 Exposure

As at 31 December 2018, SpareBank 1 Østlandet is exposed to ownership risk through the following ownership positions:
- SpareBank 1 Gruppen AS, stake 12.4 per cent.
- SpareBank 1 Boligkreditt AS, stake 21.6 per cent.
- SpareBank 1 Næringskreditt AS, stake 13.3 per cent.
- SpareBank 1 Kredittkort AS, stake 20.5 per cent.
- SpareBank 1 Betaling AS, stake 18.7 per cent.

In addition, some smaller stakes are handled, such as affiliated companies and joint ventures with smaller amounts.

12.2 Management and control

The SpareBank 1 banks conduct their alliance work through the jointly owned holding company SpareBank 1 Gruppen AS. SpareBank 1 Gruppen AS is owned by SpareBank 1 Østlandet, SpareBank 1 SR-Bank, SpareBank 1 Nord-Norge, SpareBank 1 SMN, Samarbeidende Sparebanker AS, as well as the Norwegian Confederation of Trade Unions (LO) and trade unions associated with LO. SpareBank 1 Boligkreditt, SpareBank 1 Næringskreditt, SpareBank 1 Kredittkort and SpareBank 1 Betaling are owned by all the banks in the SpareBank 1 Alliance.

The CEOs from the owning banks, SpareBank 1 Østlandet, SpareBank 1 SR-Bank, SpareBank 1 Nord-Norge, SpareBank 1 SMN and the chair of Samarbeidende Sparebanker AS, as well as the Norwegian Confederation of Trade Unions (LO), as owners of the company, sit on the Board of SpareBank 1 Gruppen AS. The finance director of SpareBank 1 Østlandet joins the Board meetings of SpareBank 1 Boligkreditt AS and SpareBank 1 Næringskreditt AS. SpareBank 1 Østlandet is similarly represented on the Boards of SpareBank 1 Kredittkort AS and SpareBank 1 Betaling AS.