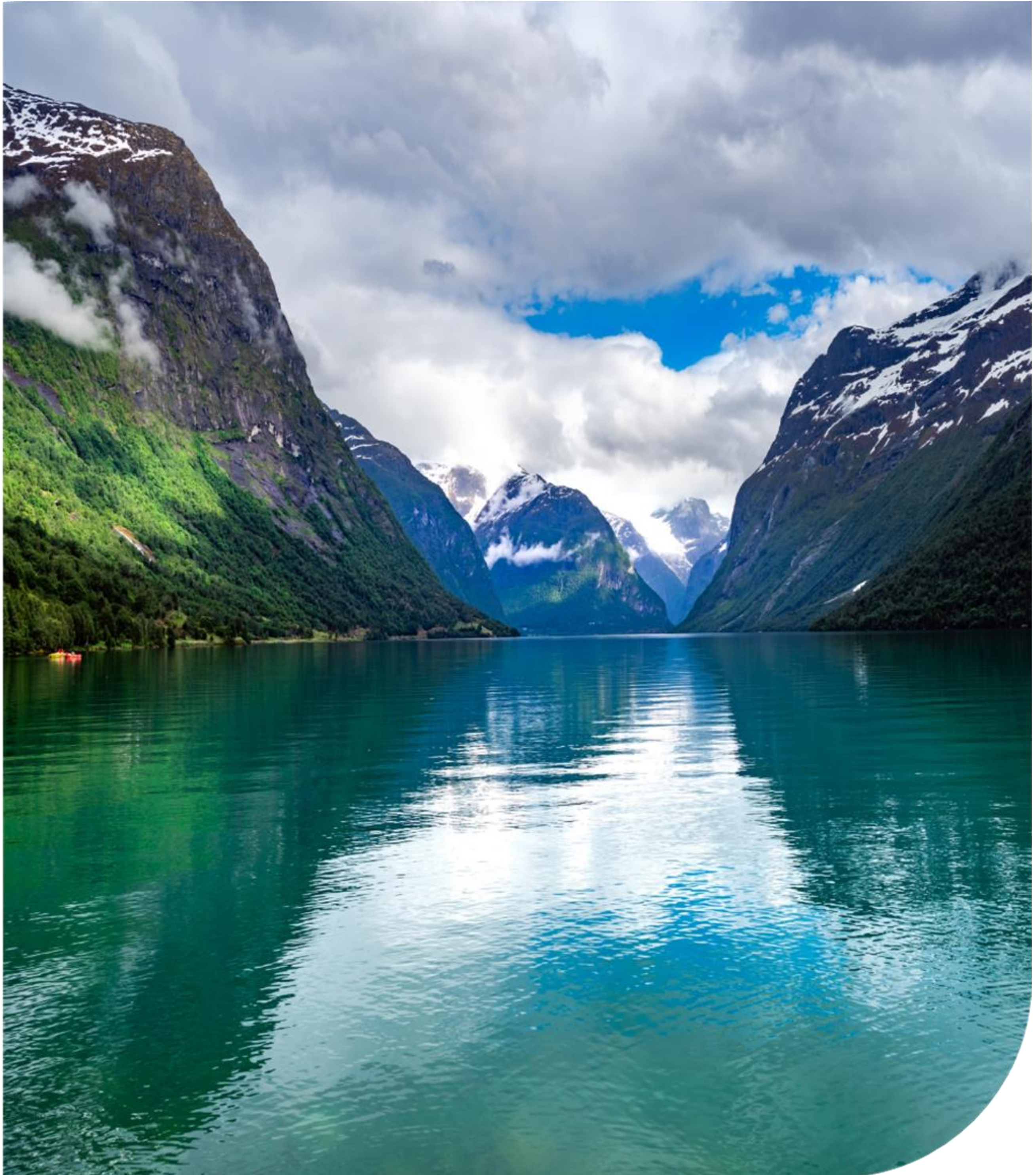
eika.

Pillar 3 - risk and capital 2020

Eika Boligkreditt AS



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1 INTRODUCTION

The main purpose of Eika Boligkreditt (**EBK**) is to ensure access for the local banks in the Eika Alliance (the owner banks) to long-term and competitive funding by issuing covered bonds. An important part of the company's business concept is to increase the competitiveness of the owner banks by improving their access to external funding in the Norwegian and international financial markets with regard to the length of loans, their terms and the depth of access. The object of the company's business is to reduce risk for the owner banks. At 31 December 2020, the owner banks had secured a total of NOK 89.1 billion in financing through EBK and had thereby reduced their need to obtain market financing on their own account by a corresponding amount.

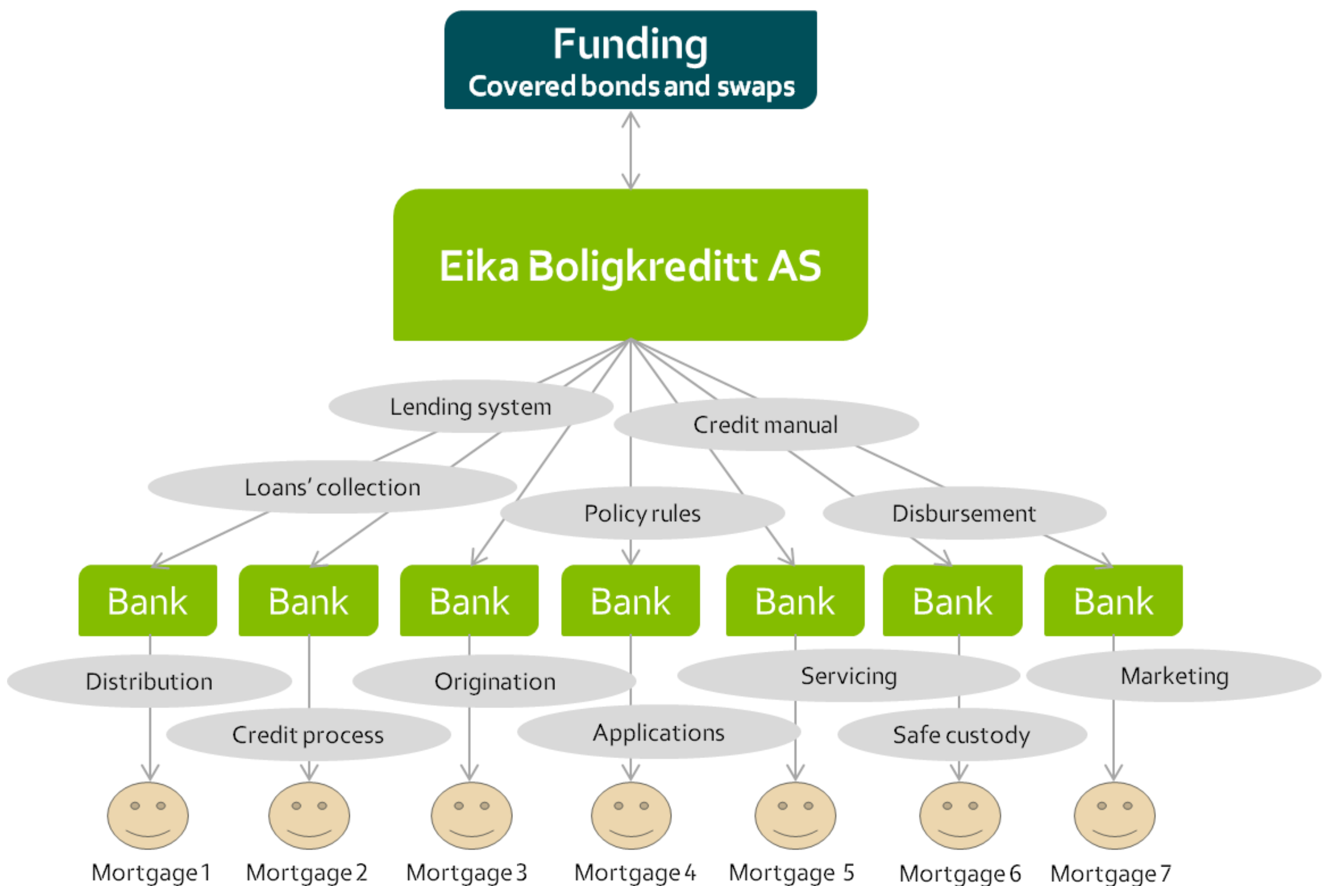
EBK is licensed as a credit institution and entitled to raise loans in the market through the issuance of covered bonds. Norwegian regulations for covered bonds were adopted in 2007, and this type of bond has become an important source of financing for the lending activities of banks and credit institutions. Concentrating funding activities relating to covered bonds in EBK has secured the owner banks a player in the bond market which possess the necessary qualifications to achieve competitive terms for borrowing both in Norway and internationally.

2 COMPANY STRUCTURE AND OPERATIONS

Mechanisms for providing the company with support from the owner banks have been established. These comprise the obligations resting on the owner banks to provide the company with liquidity and capital as and when required. The owner banks exercise a dynamic ownership of EBK. This will ensure an annual adjustment of the shareholding of the individual bank and OBOS so that it corresponds to the owner bank's share of the residential mortgage portfolio in EBK.

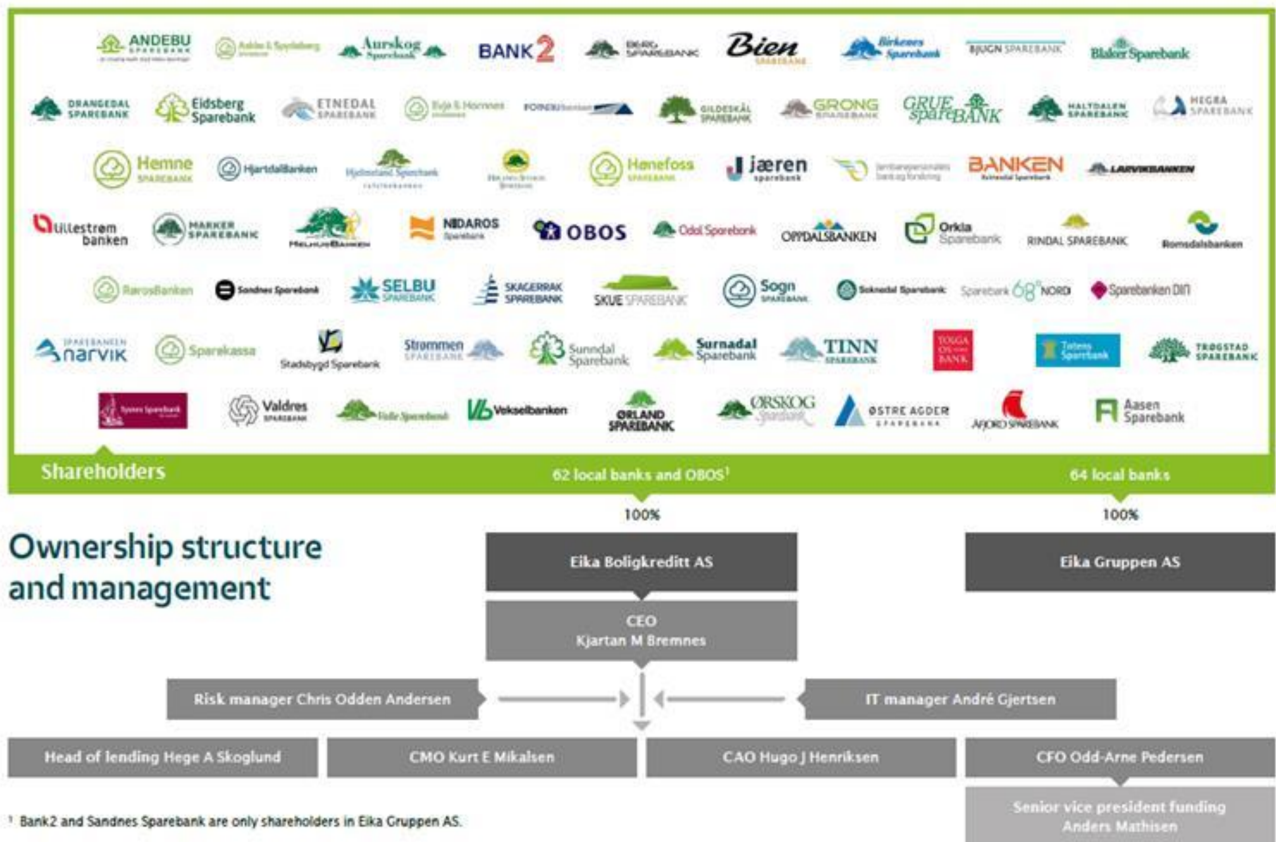
For EBK to be active as an issuer in both Norwegian and international financial markets, its covered bonds must have an international rating. An international rating from Moody's Investors Service (**Moody's**) gives EBK the opportunity to diversify its financing and to obtain funding at the best terms available in the market. The owner banks are prevented from issuing covered bonds directly but, through EBK, they can nevertheless access very favourable financing and maintain their competitiveness in relation to large Norwegian and international banks.

Figure 1 The company's area of operation



The owner banks are EBK's local representatives as distributors. They make all the arrangements related to providing residential mortgages. That includes processing mortgage applications, establishing the loan, amending existing mortgages and borrowing, and so forth. As a result, a residential mortgage transferred to EBK will be wholly perceived by the mortgagee as one taken out with the owner bank, because it will always be the mortgagee's point of contact for the mortgage. EBK is responsible in the mortgage process for operating the IT system, credit policy and disbursals.

Figure 2 Ownership structure in the Eika Alliance



EBK is organised in five departments:

- lending
- funding and investment
- marketing
- accounting and back office
- risk management and compliance.

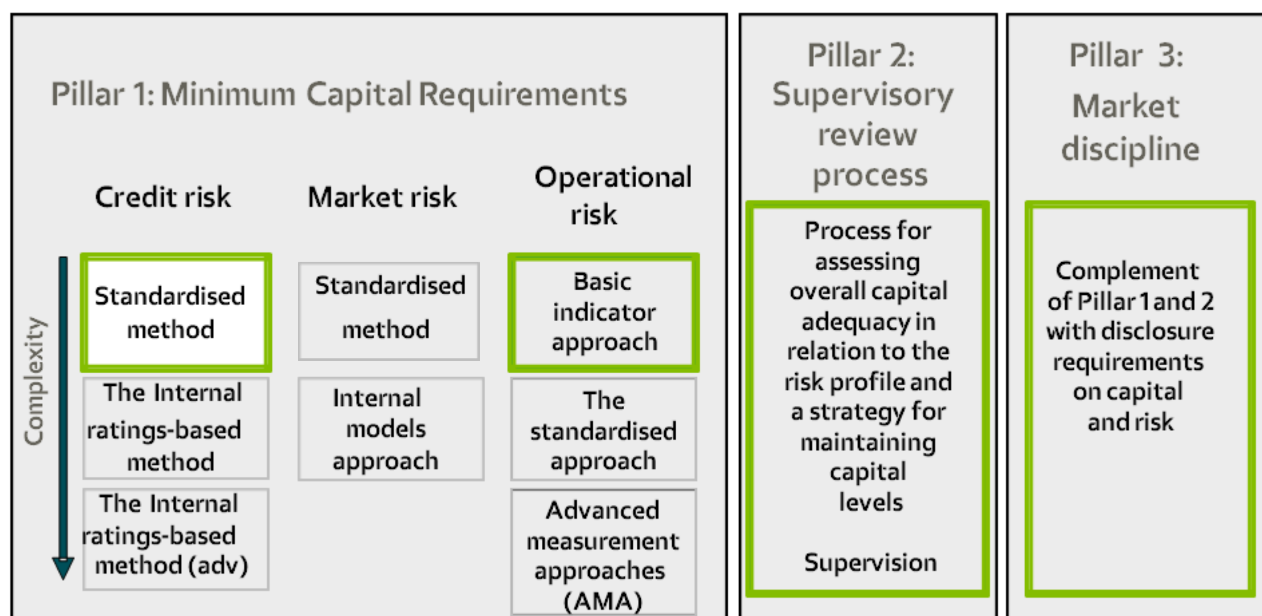
Company staffing at 31 December 2020 was the equivalent of 19 work-years. In addition, services are provided by Eika Gruppen in such areas as human resources, payroll, legal affairs, accounting and marketing. EBK's IT platform is also supplied by Eika Gruppen.

3 CAPITAL ADEQUACY STANDARDS

Regulations for capital adequacy build on standards for calculating capital adequacy established by the Bank for International Settlements (BIS). The purpose of the capital requirement regulations (CRR) is to strengthen the stability of the financial system through

- more risk-sensitive capital requirements
- better risk management and control
- closer supervision
- more information to the market.

Figure 3 Basel II pillars



When calculating capital requirements, the company utilises the standardised method for credit risk and the basic indicator method with regard to operational risk. This means that the calculation of capital requirements for these risks accords with the categories and risk weighting rules in the CRR.

PILLAR 1

Pillar 1 addresses minimum capital adequacy requirements related to credit, market and operational risk. It also covers capital adequacy related to the creditworthiness of counterparties to derivatives – ie, the risk of credit valuation adjustment (CVA risk).

PILLAR 2

Pillar 2 addresses a process for assessing EBK's total capital requirements in relation to its risk profile, including the capital requirement for risks not covered by Pillar 1. This capital requirement is assessed on the basis of two main elements – intrinsic risks based on the risk level viewed in a 12-month perspective, and the capital requirement viewed in a forward-looking perspective as the basis for the company's capital targets. The Financial Supervisory Authority of Norway (FSA) issued a decision on EBK's Pillar 2 requirement on 4 September 2017.[1] An extract from and summary of the content in this decision is presented below.

> *Eika Boligkreditt must have assets over and above the minimum and buffer requirements corresponding to at least 0.5 per cent of the calculation basis (Pillar 2 requirement) for risks which the enterprise is exposed to and which are not, or only partly, covered by Pillar 1. The Pillar 2 requirement must be covered by core tier 1 capital.*

The Pillar 2 requirement is enterprise-specific and will vary between banks and credit institutions in accordance with the risk in each enterprise.

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[1] The FCA's decision can be found here (in Norwegian only): https://www.finanstilsynet.no/offentliggjoring-av-finanstilsynets-vedtak-om-pilar-2-krav-for-enkeltbanker/vedtak-om-kapitalbehov-i-eika-boligkreditt-as/

PILLAR 3

Pillar 3 is intended to supplement the minimum requirements in Pillar 1 and the regulatory follow-up specified in Pillar 2. It will help to enhance market discipline through requirements for the publication of information which make it possible for the market, including analysts and investors, to assess the enterprise's risk profile and capitalisation as well as its management and control. The publication requirements are particularly important when players can make greater use of their own systems and methods for calculating their capital requirement.

The capital requirement and targets are assessed on the basis of the international Basel II and Basel III regulations on capital adequacy as specified in the Act on Financial Institutions and the CRR. Pursuant to section 13, sub-section 6 of the Act on Financial Institutions, a financial institution must at all times have a primary capital (tier 2 capital) which is acceptable in relation to the risk and scope of the institution's business. This must be assessed for both the immediate future and the long term. Capital adequacy must accordingly be higher than the minimum requirement of eight per cent in total and applicable buffer requirements, as specified in detail in chapter 14 of the Act on Financial Institutions. The FSA will evaluate both EBK's capital target and the documentation of the assessments on which the board's conclusions are based.

RECOVERY PLAN WITH CAPITAL MEASURES

The company has established contingency and recovery measures for capital adequacy in its recovery plan, which is intended to help ensure that good processes are in place for capital management. EBK's owner banks are all subject to capital requirements and all have good solvency. The owner banks are committed by agreements to participate in issues to strengthen the company's capital. Each owner bank's capitalisation commitment is restricted primarily to its pro rata share of capital issues, which is calculated on the basis of each owner bank's share of the company's bank financing.

4 OVERALL RISK AND CAPITAL MANAGEMENT

RISK MANAGEMENT IN EBK

Responsibility for conducting the company's overall management and control is organised as follows.

Figure 4 Governance and control

EBK has established a framework for management and control through risk policies determined by the board of directors, with quarterly reporting of status and developments. Overall professional responsibility for risk management in the company lies with the chief executive. The company's attention will be focused on maintaining sufficient resources to pursue risk management and compliance, and will assess available expertise and capacity on a continuous basis.

Quarterly risk and compliance reporting is conducted to provide an overview of exposure in relation to established parameters in the company, allowing the executive management and the board to verify that risk exposure falls within the defined willingness to accept risk. This reporting quantifies and assesses all main risks relevant to the company, including strategic, credit, counterparty, market, liquidity and refinancing, and operational risk.

A good internal control regime depends on entrenchment in the whole organisation, from the individual employees to the executive management and the board. PricewaterhouseCoopers is the company's internal auditor.

ICAAP

The business is required pursuant to section 13, sub-section 6 of the Act on Financial Institutions to conduct an internal capital adequacy assessment process (ICAAP). This process involves assessing capital requirements in relation to the company's goals, policies, current and anticipated risk exposures, and applicable risk parameters and regulatory provisions. The FSA's modules for risk-based supervision, together with methods and stress tests which follow from the FSA's circular 12/2016 with appendices, provide the assumptions to the extent that they are suitable. Furthermore, the ICAAP is intended to help provide a shared understanding of the risk picture in the company and provide opportunities for evaluating risk in relation to the quality of management and control. That provides a basis for determining the capital targets. The company's internal liquidity adequacy assessment process (ILAAP), which covers liquidity and financing risk, is conducted as part of ICAAP and reported on in the same document.

Estimated budgets and forecasts for three years ahead are prepared by the management. On the basis of budgets and forecasts of anticipated developments in the company, the risk management and compliance department calculates capital needs for the coming three years.

The department analyses capital requirements in a forward-looking perspective by conducting stress tests with what would be a reasonable but serious crisis scenario with an economic setback, and analyses uncertainty related to expected financial developments affecting the capital requirement in the short term. These scenarios are intended to reflect a worst-case condition for EBK.

The preliminary ICAAP report is important for the board's assessment that the Company has adequate level of capital and liquidity, pursuant to section 3, sub-section 4 of the Act on Private Limited Liability Companies and possible opportunities to pay dividend, requirements for additional capital and so forth. The board process involves reviewing and discussing important assumptions in the ICAAP analysis, including

- significant assumptions in the budget and the three-year forecast
- an assessment of whether the stress tests are sufficiently conservative to cover a worst-case scenario

- an assessment of the capital adequacy – in other words, how much capital the company ought to have, including how large a buffer the board finds prudent/desirable.

Contributions from the initial ICAAP process, with assessments from the final board meeting for the year, and the final annual financial statements, form the basis for updating the ICAAP calculations. A report is prepared to summarise the company's ICAAP and ILAAP work. The final ICAAP is approved by the board and submitted to the FSA on request and every third year at a minimum.

5 RISK APPETITE AND CAPITAL POLICY

Risk appetite determines the level of risk the board is willing to accept, and represents an acceptable balance for the board between growth, risk and return.

The board assesses the business and sees to it that the company has a primary capital which is proportionate to the risk in the business being conducted. The level of the board's risk appetite is determined in relation to the size of the possible loss of primary capital for the company in the stress scenario. The company operates with low, moderate and high levels of risk. Its clear starting point is to be a low-risk company.

Table 1 The company's risk appetite

Risk type	Risk appetite
Strategic risk	Low
Credit risk on lending	Low
Couterparty risk	Low
Market risk	Moderate
Financing and liquidity risk	Moderate
Operational risk	Low

Requirements for good management and control are set in all risk areas, and management is required to see to it that risk management helps to keep overall risk in line with the company's risk appetite. Given the company's overall risk profile, it expects capital requirements to be low over and above the minimum level required.

CAPITAL AND BUFFER REQUIREMENTS

The company has updated its capital targets to ensure that they are adequate to meet the regulatory minimum requirements, the enterprise-specific Pillar 2 requirement and applicable buffer requirements for capital. An assessment conducted on the basis of the company's ICAAP result has found that the company's Pillar 2 requirement is adequate to meet the capital requirement for risks not covered by Pillar 1. The company has resolved to meet capital targets in line with the table below.

Table 2 Capital targets* for Eika Boligkreditt in the ICAAP period

Capital targets	31 Dec. 2020	31 Dec. 2022	31 Dec. 2023
Core tier 1 capital ratio	12.0%	13.5%	14.0%
Tier 1 capital ratio	13.5%	15.0%	15.5%
Tier 2 capital ratio	15.5%	17.0%	17.5%

**Including EBK's Pillar 2 capital requirement and management buffer.*

Should the need for capital change, the shareholder agreement with the owner banks provides considerable predictability over the provision of capital from the owner banks. The company's capital targets are to be adjusted from 31 December 2022, since the systemic risk buffer is being

increased from three to 4.5 per cent. Account has also been taken of a potential increase in the countercyclical capital buffer from one to 1.5 per cent from 31 December 2023.

Combined buffer requirements which exceed the company's minimum requirements must be met with core tier 1 capital, and comprise system-risk, capital-conservation and countercyclical buffers. A common denominator for the buffer requirements is the restrictions imposed on opportunities to make dividend and bonus payments in circumstances where the company fails to satisfy the requirements.

Table 3 Capital buffer requirements at 31 December 2020 (amounts in NOK thousand)

Buffertypes		Core tier 1 requirements
Capital conservation buffer	2.5%	930 549
Systemical risk buffer	3.0%	1 116 659
Countercyclical buffer	1.0%	372 220
Combined buffer requriements		**2 419 427**

The company had a combined buffer requirement of about NOK 2.4 billion at 31 December 2020, which is covered by core tier 1 capital.

6 CAPITAL

The company applies the standardised method for calculating capital requirements for credit and market risk, and the basic indicator method for calculating operational risk. In addition, capital requirements are calculated for risk related to weakened creditworthiness at counterparties to derivatives (CVA risk) in pillar 1. The standardised method for credit risk is used in calculating capital requirements for investments in liquid securities (hereafter termed market risk).

Pursuant to the CRR, the following weighting rules are significant for credit risk in the company:

Credit risk: commitments	Risk weighting	Assessment of capital in relation to risk
Residential mortgages secured on the property with an LTV of at least 80 per cent, including mortgages held by residential cooperatives	35%	Credit risk
Mortgage loan approvals and partly disbursed loans with an LTV of at least 75 per cent. Conversion factors of 20 and 50 per cent	35%	Credit risk
Bank deposits without fixed terms	20%	Counterparty risk
Derivatives, depending on rating	20%/50%	Counterparty risk
Repurchase agreements	20%	Counterparty risk
Local and regional government, including local authorities and county councils	20%	Market risk
Covered bonds	10%	Market risk
Government securities, multilateral development banks, foreign regional authorities and international organisations	0%	Market risk

Capitalised assets and other credit risk are basically weighted at 100 per cent unless special rules have been specified.

Calculating the capital requirement for operational risk using the basic indicator method means that the capital requirement is determined in relation to the company's net interest income and other revenues. Assessment of the operational risk is based on incidents experienced, events in the rest of the banking industry, and intrinsic risks.

Calculating the capital requirement for counterparty risk, including the risk of a reduction in the counterparty's creditworthiness (CVA risk) is calculated in accordance with the standardised method for CVA risk pursuant to the CRR. Calculated on the basis of the counterparty's creditworthiness, this supplementary requirement is known as the credit valuation adjustment (CVA).

On the basis of an overall integrated risk profile, including exposure and the company's management control systems, the most significant risk types for the company are calculated and assessed in the following table.

Table 4 Capital adequacy status at 31 Dec 2020 (amounts in NOK thousand)

Capital status	31 Dec. 2020
Share capital	1 225 497
Share premium	3 384 886
Other paid-in equity	477 728
Other equity	1 018
Total equity capital	**5 089 128**
Fund for unrealised gains	41 500
Intangible assets	(3 270)
Prudent valuation	(28 500)
Total core tier 1 capital	**5 098 859**
Hybrid capital	574 232
Total tier 1 capital	**5 673 091**
Subordinated loan capital	724 343
Total tier 2 capital	**6 397 434**
Risk-weighted assets and capital adequacy ratio	
Credit risk	34 712 468
CVA risk	2 182 527
Operational risk	326 965
Total risk-weighted assets	**37 221 959**
Capital requirement corresponding to 8% of risk-weighted assets	2 977 757
Surplus equity and subordinated capital	3 419 678
Core tier 1 capital ratio	**13.7 %**
Tier 1 capital ratio	**15.2 %**
Tier 2 capital ratio	**17.2 %**

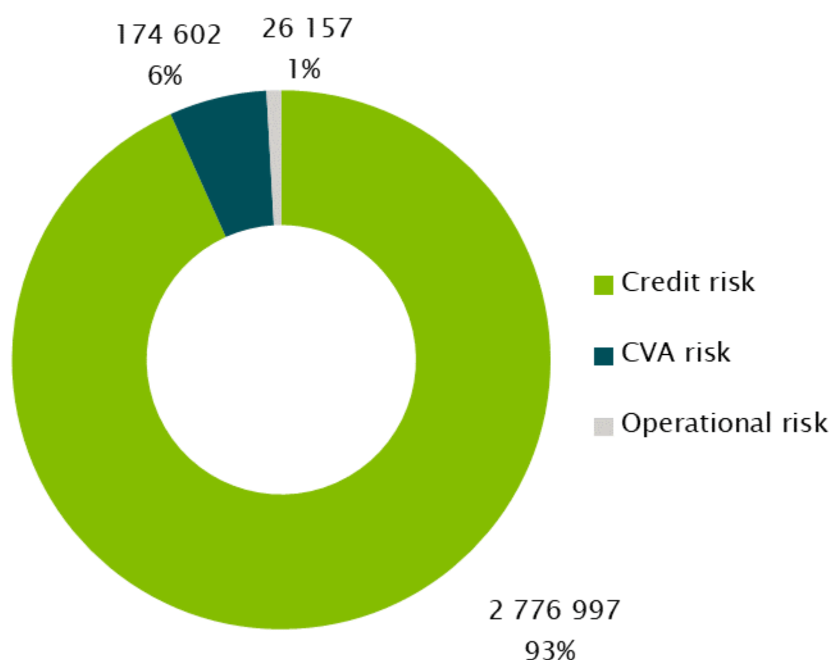
The company's capital adequacy status at 31 December 2020 comprised a core tier 1 capital adequacy of 13.7 per cent, a tier 1 capital ratio of 15.2 per cent and a tier 2 capital ratio of 17.2 per cent.

SUMMARY OF MINIMUM CAPITAL REQUIREMENT

Table 5 Capital adequacy by risk type (amounts in NOK thousand)

Capital status	31 Dec. 2020
Core tier 1 capital ratio	13.7%
Tier 1 capital ratio	15.2%
Capital ratio	17.2%
Credit risk	2 776 997
CVA risk	174 602
Operational risk	26 157
Sum Pillar 1	**2 977 757**

Figure 5 Capital requirements on Pillar 1 (amounts in NOK thousands)



LEVERAGE RATIO

The Ministry of Finance has set the requirement for the leverage ratio which applies to credit institutions, and thereby to EBK, at three per cent from 30 June 2017 (the CRR/CRD IV regulations). The leverage ratio must be calculated using the following formula and expressed in per cent:

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}}$$

The capital measure comprises tier 1 capital in accordance with article 429 of the CRR. The leverage ratio requirement supplements the capital adequacy requirement calculated on the risk-weighted balance sheet and is intended to act as a safeguard against setting the calculation basis too low when calculating capital adequacy.

When calculating the leverage ratio, today's reporting standard does not permit collateral from derivative counterparties to be taken into account when calculating derivative exposure. In addition,

the amount must be calculated using the current exposure method. That has unfortunate effects for EBK, and means that the indicator fails to provide a good picture of the actual risk associated with an irresponsible increase in debt. It is actually the case that the calculation method punishes financial institutions with agreements on receiving collateral for the increased market value of derivatives. EBK has therefore also carried out calculations of the leverage ratio which show net derivative exposure calculated in accordance with the standardised method pursuant to the CRR.

Table 6 Leverage ratio at 31 December 2020

Leverage ratio	31 Dec. 2020
Balance-sheet items (excluding derivatives)	110 257 330
Change in value of financial instruments at fair value	(31 769)
Derivative exposure (current exposure method)	13 357 214
Derivative exposure (standardised method)	4 594 631
Loan commitments to customers	123 423
Total on- and off-balance sheet exposures (c.e. method)	123 706 197
Total on- and off-balance sheet exposures (std. method)	114 943 614
Tier 1 capital	5 673 091
Leverage ratio - tier 1 (current exposure method)	**4.59 %**
Leverage ratio - tier 1 (standardised method)	4.94 %

EBK has estimated its future leverage ratio on the basis of the FSA's calculation method, and fulfils the specified requirement of three per cent with a good margin.

7 STRATEGIC AND BUSINESS RISK

Definition: *Strategic and business risk are defined as the risk of weakened profitability owing to changes in competitive terms, operating parameters and external factors, and also includes political and regulatory risk. This includes the risk of a lack of correlation between revenue and expenses over time. It is considered appropriate to assess business risk in relation to strategic risk. Strategic and business risk also cover rating, reputational, owner, and reward and incentive risk.*

RISK APPETITE AND EXPOSURE

Strategic and business risk in the company must be low and is not included in the calculation of the Pillar 1 capital requirement. EBK has established a good business strategy and comprehensive risk policies for managing strategic risk. Goals have been set in the business strategy, and other policies have overarching parameters related to risk appetite. The company's business concept is to improve the competitiveness of the banks and reduce their risk by issuing covered bonds in the Norwegian and international financial markets. Through professional cultivation of the financial markets, good international ratings and high-quality collateral, EBK will thereby secure long-term and competitive funding for the owner banks. Achieving this strategy is based on the following priority areas:

- optimal use of covered-bond financing
- good international ratings
- profitability and cost-effectiveness
- prudent risk
- quality at every level.

EBK's reputational risk relates most significantly to the company as a source of funding. It has rated covered bonds, and a reduction in rating would be damaging. The Moody's rating agency assesses

the owner banks as a single category as well as the quality of the company's cover pool. The assessment of the owner banks is particularly vulnerable, since this depends on how far the Norwegian government would be willing to rescue them in a crisis. Should a downturn occur, fewer investors would invest in the company's covered bonds and would require a compensation in the credit spread if they opt to invest.

The company is exposed to reputational risk related to Eika as a brand. Adverse developments in one of the Eika companies or the banks could give rise to detrimental rumours and consequences which EBK must deal with. In addition, the company is exposed to the effects of political changes. A significant proportion of market-based issues by Norwegian bond issuers are conducted in currencies other than the Norwegian krone. Possible political developments in Norway have an impact on the international reputation of Norwegian issuers. That also relates to the willingness of the Norwegian authorities to support Norwegian banks in crises. Decisions taken by the Norwegian government have historically had a direct effect on the financing opportunities for Norwegian issuers and on credit spreads. Nevertheless, the risk associated with these considerations is greatest internationally and for state-owned issuers, and such political/reputational risk is particularly high in periods when the company needs to refinance maturing bonds with an order of magnitude which cannot be accommodated by the Norwegian market.

MANAGEMENT AND CONTROL

Good policy processes are important for ensuring management and control of business and strategic risk. EBK has an annual cycle in which revision of business and risk policies plays a fixed role. Part of the management and control of business risk includes changes to the company's guarantee agreements with the shareholders.

Focusing attention on good risk management, compliance, business ethics, whistleblowing, managing conflicts of interests, and other policies, strategies and routines will help the company to handle processes in a positive way.

CAPITAL REQUIREMENTS

An assessment of capital requirements for strategic and business risk is included in the assessment of Pillar 2 risk not covered by Pillar 1. No internal capital requirement related to strategic and commercial risk has been allocated.

8 CREDIT RISK

Definition: Credit risk is the risk of loss posed by customers or counterparties failing to meet their payment obligations. Credit risk affects all claims on customers/counterparties, lending, credits, guarantees, open trades, residential mortgage approvals to customers, and the counterparty risk arising through derivatives and foreign-exchange contracts. Credit risk depends in part on the size of the claim, the time to maturity, the probability of default and possibly the value of collateral. Credit losses can also be incurred as a result of operational errors.

RISK APPETITE AND EXPOSURE

The credit risk related to lending must be low. In its credit policy and lending activity, EBK will take account of the applicable regulations which govern credit institutions issuing covered bonds at any given time. See section 11, sub-section 5 of the Act on Financial Institutions. The company's policy

for credit risk on lending is intended to minimise the risk of defaults and to keep credit risk below the level in comparable companies. This will ensure that the company's bonds are a preferred choice for investors.

The company's credit risk is strictly limited through credit guarantees from the distributor banks and the supplementary agreement for mortgages with a loan-to-value (LTV) ratio greater than 60 per cent, as well as the company's credit risk policy and credit manual. Maximum limits have been set for the proportion of fixed-interest mortgages in EBK, whereby the maximum allowable share of such mortgages for an individual bank is 17.5 per cent of the mortgages established/transferred to EBK. The limit for the overall mortgage portfolio is 15 per cent. In this context, a fixed-interest mortgage means one with a fixed rate of interest where the fixed-interest term has more than two years left to run. EBK's credit risk is primarily related to balance sheet items, but it is also exposed to off-balance sheet credit risk. EBK uses the standardised method to calculate capital requirements for credit risk. Credit risk accounted for 93 per cent of the company's capital requirement under Pillar 1 at 31 December 2020. This chapter deals with credit risk related to residential mortgages. Other credit risk is handled under counterparty and market risk.

The company reports pursuant to the International Financial Reporting Standards (**IFRS**), and measures mortgages at fair value. The market value of floating-rate mortgages is measured as equal to amortised cost. The fair value of fixed rate loans is correspondingly measured as equal to amortised cost adjusted for the difference between the loans' fixed rate of interest and the applicable fixed interest rate offered at the balance sheet day. The fair value of mortgages with a fixed interest rate is determined pursuant to the regulations on credit agreements. The fair value of each individual fixed-interest mortgage is determined on the basis of the discount or premium which the customer will receive or have to pay in the event of early redemption. This value is therefore contingent on interest-rate developments, and value fluctuations will affect the financial results. The company also provides mortgages for residential cooperatives.

GENERAL CONSIDERATIONS RELATED TO CREDIT RISK IN EBK

EBK has never experienced defaults with instalments overdue by more than 90 days on its lending, or losses related to its mortgage business[2]. The guarantee structure between EBK and its distributors reduces the company's credit risk, and it therefore also expects no bad debts in the future. Consequently, the company has never taken an impairment charge on mortgages.

[2] Pursuant to article 178 (1) of the CRR, a loan is to be regarded as being in default on the part of a specific borrower if one of the borrower's significant credit commitments to the institution fell due more than 90 days earlier.

Table 7 Credit risk: specification of risk-weighted volume and capital requirement (amounts in NOK thousand)

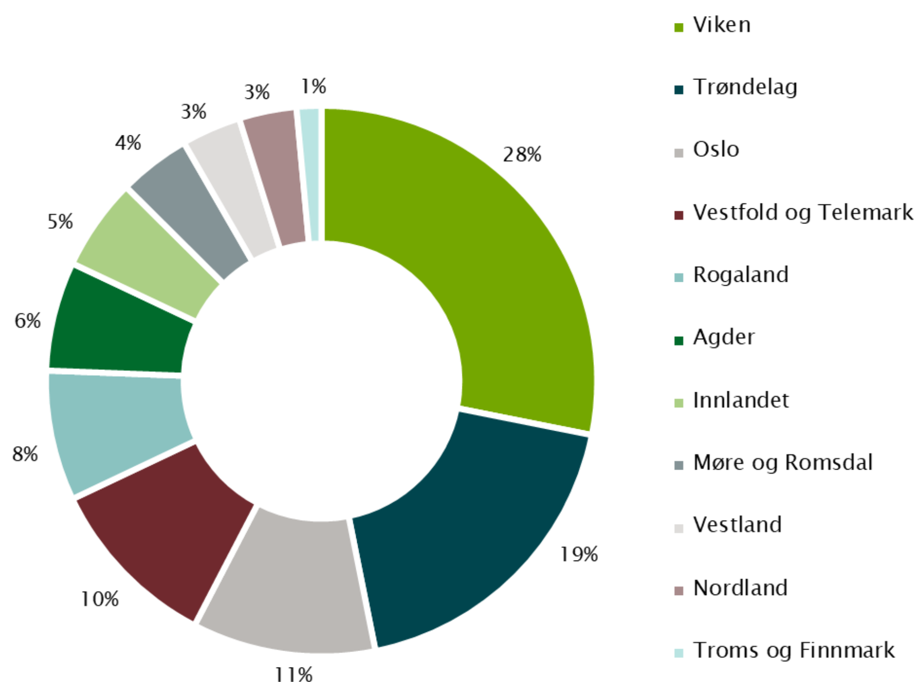
Credit risk	Article of the	CCF	Balance sheet	Off-balance sheet items	Risk Weight	Calculation basis	Capital requirement
Government bonds	114		3 128 823		0%	-	-
Public sector entities	116 (4)		970 233		0%	-	-
International local/regional government	115		2 973 241		0%	-	-
Local and regional government (Norwegian)	115		4 142 525		20%	828 505	66 280
Multilateral development banks	117		757 064		0%	-	-
International organisations	118		419 344		0%	-	-
Banks and institutions (deposits in other bank	120		973 157	0	20%	194 631	15 571
Credit guarantees from the shareholders	120			1 171 639	20%	234 328	18 746
OTC derivatives AA-rating (standardised metho	120			2 109 523	20%	421 905	33 752
OTC derivatives A-rating (standardised method	120			2 485 108	50%	1 242 554	99 404
Claims on corporates (unrated)	122		59 091		100%	59 091	4 727
Claims or contingent claims secured on real pr	125		89 344 634	(1 171 639)	35%	30 860 548	2 468 844
Loan commitments to customers	125	0.5		27 816	35%	4 868	389
Loan commitments to customers (duration 30	125	0.2		547 574	35%	38 330	3 066
Covered bonds	129		7 444 785		10%	744 478	59 558
Other assets	134		18 569		100%	18 569	1 486
Other assets (deferred tax asset)	48 (4)		25 864		250%	64 660	5 173
Total credit risk			**110 257 330**	**5 170 021**		**34 712 468**	**2 776 997**

**Pursuant to articles 276-282 of the CRR.*

Table 8 Credit risk by commitment category (amounts in NOK thousand)

Claims	Capital requirement
Claims on regional and local government	66 280
Claims on institutions	167 473
Claims on corporates	4 727
Claims or contingent claims secured on real property	2 472 300
Covered bonds	59 558
Other items	6 658
Total capital requirement credit risk	**2 776 997**

Figure 6 Residential mortgages by Norwegian region as % of total mortgage volume at 31 Dec 2020



Having the owner banks as the distributor channel means that customers are well spread geographically. The company's customers are primarily private individuals, each of whom accounts for a relatively small proportion of the company's total portfolio.

Table 9 Loans and investments by commitment type and residual time to maturity (amounts in NOK thousand)

Expected maturities	31 Dec. 2020	0-1 months	1-3 months	3-6 months	6-12 months	1-3 years	3-5 years	5-10 years	Over 10 years
Lending:									
Residential	83 911 588	589	1 459	4 557	14 665	232 567	598 847	3 357 341	79 701 563
Residential cooperatives	5 198 781	-	-	-	523	16 017	12 908	246 591	4 922 741
Investments:									
Government bonds	3 128 823	314 184	1 665 219	1 149 420	-	-	-	-	-
Covered bonds	7 444 785	-	-	-	951 344	6 071 058	422 383	-	-
Local or regional autority (Norwegian)	4 142 525	790 655	2 004 568	760 679	236 531	350 091	-	-	-
Government guaranteed etc.	1 176 408	-	419 344	-	65 776	691 288	-	-	-
Public sector entities	970 233	253 066	-	262 483	-	454 684	-	-	-
Local or regional autority (foreign)	2 973 241	261 710	419 344	524 711	-	1 767 476	-	-	-
Bank deposits	971 759	971 759							
Total	**109 918 142**	**2 591 964**	**4 509 934**	**2 701 849**	**1 268 838**	**9 583 181**	**1 034 138**	**3 603 932**	**84 624 304**

Table 9 shows that EBK has a good spread of maturities on its mortgages and other lending, which helps to reduce the company's credit risk.

EBK has a diversified mortgage portfolio in terms of geographical distribution and individual customers.

CREDIT RISK – THE STANDARDISED METHOD

As an issuer of covered bonds, EBK must ensure that all loans and advances in its cover pool comply with credit quality step 1 or 2. When assessing ratings, credit rating agencies specified by Commission implementing regulation (EU) 2016/1799[3] and pursuant to FSA circular 18/2016[4] are used to determine the credit quality step. Where a counterparty has been rated by two or more of these agencies, the credit quality step will be determined by the second best rating pursuant to article 138 (f) of the CRR. If the counterparty is rated by only a single accredited agency, that rating will be used.

- States and central banks: long-term ratings by an accredited agency are used to assign the credit quality step.
- Multilateral development banks and international organisations: only counterparties awarded a zero per cent risk weighting pursuant to articles 117 and 118 of the CRR.
- Local and regional government: long-term rating is used for local authorities and county councils. Unrated local authorities are treated as AA-rated counterparties
- Institutions: long-term rating of institutions rated by approved rating agencies will be utilised to determine the credit quality step for financial institutions.
- Enterprises: long-term ratings from an accredited agency are used to assign the credit quality step, with a 100 per cent risk weighting applied to relevant claims if no approved rating exists.

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1479307277253&uri=CELEX:32016R1799

[4] https://www.finanstilsynet.no/contentassets/631324a179404e31a6dcc72c73da848f/rundskriv_18_2016.pdf

GUARANTEES

Pursuant to the covered bond regulations, all residential mortgages transferred to EBK must have an LTV ratio of a maximum of 75 per cent at origination. A further requirement is that collateral must be secured in completed residential properties or holiday homes. EBK's collateral requirements satisfy the provision in the CRR calling for 35 per cent risk weighting of mortgages and advances with collateral in residential properties. Documentation of value must be an approved appraiser's valuation, an estate agent's valuation, a purchase contract or a valuation by Eiendomsverdi AS, which must not be more than six months old when the mortgage is approved.

Upon transfer to Eika Boligkreditt, the owner banks assume mandatory guarantees for the mortgages they have transferred. The main features of these guarantees are as follows.

1. *Case guarantee,* covering the entire amount of the mortgage over the period from the owner bank's request for payment until the mortgage's collateral has been perfected (legally registered) and the custody department of the owner bank has checked the documentation.

2. *Loss guarantee*, where the bank undertakes to cover 80 per cent of a loss recognised on a mortgage. The loss guarantee is limited to one per cent of the bank's mortgage portfolio in EBK, with a minimum of NOK 5 million, or the whole portfolio if it is smaller than NOK 5 million. The remainder not covered by the loss guarantee may be offset by EBK against its commission payments to all the owner banks, calculated pro rata on the basis of each bank's share of the mortgage portfolio at the point when the loss is recognised. The offsetting right applies for a period of 12 months.

Residential mortgages with an LTV ratio greater than 60 per cent of the original valuation are covered by a supplementary agreement. This gives the owner banks a deadline of 31 days for transferring mortgages which exceed an LTV ratio of 75 per cent or for documenting the updated collateral value of the relevant mortgaged residence if a not insignificant depreciation in value has occurred. To the extent that the relevant mortgage remains part of the cover pool after the deadline, the owner bank undertakes to provide EBK with a credit limit corresponding to the total of those parts of the mortgage which exceed a 75 per cent LTV ratio.

An overview was established at 31 December 2020 of the outstanding residential mortgage portfolio compared with the valuation of the mortgage collateral at origination. This shows that the company has mortgages within the following collateral bands.

Table 10 Distribution of loan-to-value (LTV) at origination (amounts in NOK thousand)

Loan to value (LTV)	Origination values			
	Residential	Residential cooperatives	Total	Share of total
0 <= 40	12 657 685	4 070 338	16 728 023	19%
40 < x <= 50	13 672 815	416 714	14 089 529	16%
50 < x <= 60	45 332 311	640 351	45 972 662	52%
60 < x <= 75	12 320 154	-	12 320 154	14%
Total	**83 982 965**	**5 127 403**	**89 110 369**	**100 %**
Average LTV	**52.7 %**	**24.0 %**	**51.0 %**	

The collateral for EBK's lending is regarded as very good and the risk is considered to be small given the guarantee structure, including the supplementary agreement for those mortgages given with an LTV ratio exceeding 60 per cent.

CONTINUOUS VALUATION OF COLLATERAL

The portfolio is indexed on a quarterly basis against market values estimated by Eiendomsverdi AS, whose weighting model calculates a market value based on objects sold over time in the immediate vicinity, adjusted for price developments. It also takes account of the valuations registered by EBK on the mortgaged property at origination. Were residential property prices to fall, the company would have a good margin before possible repossessions might lead to loss. The table below presents indexed market values for EBK's mortgage portfolio.

Table 11 Distribution of indexed loan-to-value (LTV) (amounts in NOK thousand)

Loan to value (LTV)	Indexed values			
	Residential	Residential cooperatives	Total	Share of total
0 <= 40	20 292 771	4 243 262	24 536 033	28%
40 < x <= 50	18 874 436	356 098	19 230 534	22%
50 < x <= 60	29 319 649	283 852	29 603 502	33%
60 < x <= 75	14 838 606	149 673	14 988 279	17%
x > 75	657 502	94 518	752 020	1%
Total	**83 982 965**	**5 127 403**	**89 110 369**	**100 %**
Average LTV	**49.0 %**	**21.4 %**	**47.4 %**	

The indexed LTV at 31 December 2020 was 47.4 per cent, compared with an original LTV of 51 per cent. Indexing of residential cooperatives shows an indexed LTV of 21.4 per cent, compared with an original LTV of 24 per cent. This indicates that house prices have risen across the board since the mortgages were granted (combined with payment of instalments).

Some mortgages are indexed with a higher LTV than at origination, which might indicate a fall in house prices for objects related to these mortgages.

RISK OF DEFAULT IN THE COVER POOL

EBK's covered bonds are rated by Moody's. Moody's Collateral Score informs investors about the agency's modelling of the risk of loss related to the credit quality of the cover pool in an Aaa scenario. The higher the credit quality, the lower the collateral score. This score determines the level of loss which Moody's estimates will affect investors in the company's covered bonds in the event of default on these, based on the credit quality of the cover pool. The collateral score presents Moody's analysis of the amount of risk-free assets which must be added to the cover pool in order to offset the negative effect of the stress test scenario as defined by the rating agency. For further information, see Moody's methodology for the definition of the collateral score and the way it is calculated. EBK's collateral score was estimated by Moody's to be 2.1 per cent at 30 September

2020,[5] which is a very low figure compared with other global issuers of covered bonds also rated by the agency.

STRESS TESTS FOR RESIDENTIAL PROPERTY PRICES

EBK conducts stress tests for falls in residential property prices in order to identify the company's mortgage credit risk. The CRR require residential mortgages to have an LTV of at least 80 per cent (60 per cent for holiday homes) before the mortgage can be assigned a risk weight of 35 per cent. If this is not the case, the company's capital requirement will be increased for that part of the mortgage portfolio which must be weighted at 75 per cent[6] rather than 35 per cent when calculating capital requirements. Calculations are carried out when residential property prices fall by 15, 25 and 35 per cent respectively. Before the worst-case scenario with a price fall of 35 per cent could occur, for example, EBK would already have taken a number of steps to improve the quality of its cover pool, including initiating contingency and recovery measures for strengthening overcollateralisation. If certain mortgages in the cover pool acquire an LTV greater than 75 per cent (60 per cent for holiday homes), this part of the mortgage can no longer be included when determining the overall value of the cover pool. That will be significant for the company's compliance with the requirement that covered bond liabilities must be covered by cover assets pursuant to section 11, sub-section 7 of the regulations for financial institutions, and for its obligations related to overcollateralisation.

The company has a solid buffer for the mortgages with an LTV ratio up to 60 per cent at origination (50 per cent for holiday homes) in addition to the supplementary agreement for mortgages with an LTV ratio greater than 60 per cent, and is accordingly well equipped in relation to the risk of a possible fall in residential property prices which breaches the 75 per cent limit pursuant to the covered bond regulations. Reactions to such a fall would generally be swift with the aid of the guarantee structure, the supplementary agreement on residential mortgages with an LTV ratio greater than 60 per cent and the need to comply with legislation on covered bonds. No increased Pillar 2 requirement has accordingly been incorporated for a worst-case scenario with house prices falling by 35 per cent, since the risk associated with a general fall in residential property prices is adequately covered by the company's guarantee structure, by the supplementary agreement on residential mortgages with an LTV ratio greater than 60 per cent and by maintaining requirements for overcollateralisation of the cover pool.

RESPONSIBLE LENDING AND CLIMATE RISK

EBK is exposed to environmental, social and corporate governance (ESG) risk – hereafter climate risk – in its residential mortgage portfolio. In assessing climate risk in the portfolio, a distinction is made between the risk related to the transition to a low-emission society and the risk posed by physical changes to the climate. In relation to credit risk, climate-change events such as floods, landslides, increased precipitation, inundations and extreme weather in general could cause damage to properties which could in turn cause the value of the mortgage collateral in the cover pool to fall. Expectations by and requirements from the government or the market related to the residential property's energy consumption or climate footprint could also reduce its value.

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[5] EBK reports an overview of the content of the cover pool to Moody's on a quarterly basis. Against that background, EBK's borrowing programme is analysed by comparison with other borrowing programmes in Europe and the results are published quarterly in Moody's performance overview.

[6] The mortgages are assumed to satisfy the requirements for the retail exposures class and can accordingly be weighted at 75 per cent pursuant to the CRR.

The company will therefore begin work in 2021 to map the climate risk for the mortgage collateral in its cover pool. Data on this in Norway are acquired and stored by the Norwegian Water Resources and Energy Directorate (NVE). Once the company has mapped the environmental risk for the mortgage collateral in the cover pool, the next step will be to analyse the climate risk and seek to incorporate this in the company's risk management, and to set parameters for the level of climate risk the company can accept. It will then be possible to given attention to both transition and physical risk should the mortgage collateral in the cover pool be exposed to climate change.

Furthermore, it is likely to be possible in the longer term to focus attention on the financial consequences of risks related to sustainability and climate change, and to assess how far climate risk affects the valuation of assets and liabilities in the company's balance sheet.

MANAGEMENT AND CONTROL

EBK's distribution channel runs through the owner banks. These banks are locally entrenched with a high proportion of loyal customers and good knowledge of their markets. Customer selection through the owner banks is regarded as helping to ensure that the company's customers are generally good and loyal.

The company has established policies for credit risk on mortgages, counterparty risk and capital management, which form the basis for management and control of credit and counterparty risk. The status of compliance with the company's credit policy is assessed continuously, and the position in relation to the approved level of risk acceptance is reported quarterly to the board in the risk and compliance report. Compliance with the credit handbook, including safe custody department checks, is monitored on a continuous basis. Overall management and control of risk is described in more detail in chapter 4 above.

CAPITAL REQUIREMENTS

EBK applies the standardised method to calculate the capital requirement for credit risk. This was calculated to be NOK 2 777 million at 31 December 2020 The capital requirement calculated in accordance with Pillar 1 is considered to meet the potential risk of loss related to credit risk in the portfolio.

9 COUNTERPARTY RISK

Definition: *Counterparty risk is the risk of loss because counterparties are unable to meet their payment commitments and accordingly represent a credit risk. It relates to all claims with counterparties, including guarantees, unsettled transactions and undrawn credits, and to the counterparty risk which arises from exposure to derivatives. Counterparty risk depends in part on the size of the claim, time to maturity, probability of default and value of possible collateral.*

RISK APPETITE AND EXPOSURE

The company has established a policy for counterparty risk to ensure that overall requirements for management and control of such risk are met. This policy is intended to meet the company's need for control over large exposures, including the total exposure with a single counterparty. It will ensure that counterparty risk is manageable at all times by establishing parameters for such risk, ensuring the establishment of an international swaps and derivatives association (ISDA) with

associated credit support annex (CSA) for counterparties to derivatives, and providing a clear division of responsibility and authority.

EBK has established the following risk parameters for counterparty risk:

- maximum limit for total exposure (regulations on large exposures)
- internal maximum limit for total exposure
- entering into derivative contracts and defining maximum exposure to a counterparty.

The company is exposed to counterparty risk through lending, investment of surplus liquidity and derivatives. Attention in this chapter is focused on counterparty risk related to derivatives, bank deposits and repurchase agreements (repo), since this does not belong naturally with the assessment of other risk factors. Counterparty risk is treated as part of credit risk when it relates to lending, and as part of market risk when it relates to investment of surplus liquidity.

- **Counterparty risk related to bank deposits and repo agreements in credit institutions**

EBK uses bank deposits and repurchase agreements when investing surplus liquidity, and is accordingly exposed to counterparty risk in relation to the various banks concerned. Classic repo is regulated under the global master repurchase agreement (GMRA) which, like the ISDA, is an internationally recognised template for regulating bilateral agreements. The company has so far entered into GMRAs with five banks – Nordea, DNB, Danske Bank, Banco Santander and BNP Paribas. In addition, it has entered into a global master securities lending agreement (GMSLA) with SEB in order to be able to enter into swap agreements for securities. Repos and bank deposits must be confined to banks with a low credit risk, and the underlying security must fall within the requirements for inclusion in the cover pool (minimum credit quality step 2, rating A-/A3 for residual times to maturity of up to 100 days). Parameters for counterparty risk per bank are defined in the company's policy for capital management and in its investment mandate.

- **Counterparty risk related to derivatives**

Activities in EBK are subject to strict regulations for risk exposure, and the company is obligated to refrain from accepting greater interest-rate and foreign-exchange risk than is prudent at any given time.[7] This means that the company uses both interest-rate and foreign-exchange derivatives when borrowing in foreign currencies and/or fixed interest rates in order to keep risk at a minimum. The same applies to hedging interest-rate risk relative to lending at fixed interest rates.

Derivative contracts can only be entered into with counterparties which have a low credit risk, and must fall within the requirements for inclusion in the cover pool (minimum credit quality step 2, rating A-/A3).[8] EBK will only enter into derivative contracts within the framework established by the ISDA. ISDA master agreements with CSA are based on a standardised template utilised by most of the Norwegian covered-bond issuers who enter into derivative contracts. Counterparty risk related to derivatives is reduced through the existing set of agreements, which involves unilateral obligations for EBK's counterparties to provide collateral at specified thresholds, depending on rating and the agreed threshold for receipt of collateral. Where new derivative agreements entered

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[7] FOR-2016-12-09-1502. Sections 11-1 and 11-3 of the regulations for financial institutions.

[8] Should the derivatives be downgraded below credit quality step 2, they can still be included in the cover pool providing the counterparty provides satisfactory collateral.

into after March 2017 are concerned, the threshold for provision of collateral is zero. In other words, the counterparty provides collateral from the first krone if the fair value is positive in EBK's favour.

Pillar 1 specifies capital requirements related to counterparty risk through the standardised method for credit risk in the CRR. The company calculates counterparty risk in derivatives using the standardised method.[9] Account is taken of financial collateral in the form of cash and securities[10] when calculating capital requirements related to the counterparty risk in derivatives. At 31 December 2020, the company had the following counterparty exposure in derivatives by rating category.

Table 12 Counterparty risk in derivatives pursuant to the standardised method (amounts in NOK thousand)

Counterparty rating	EAD*	Risk classification	Risk weight	Risk weighted assets
AA	2 109 523	1	20 %	421 905
A	2 485 108	2	50 %	1 242 554
	4 594 631			**1 664 459**

**Exposure at default, the company's exposure to derivatives, is calculated as the maximum of the derivatives' potential future exposure and market value less received collateral in cash or securities.*

- **CVA risk**

The capital requirements directive (CRD) IV introduced a requirement intended to cover the risk related to changes in the fair value of bilateral derivative contracts which are not traded on a stock exchange.[11] This additional requirement is calculated on the basis of the counterparty's creditworthiness and is called the credit valuation adjustment (CVA).[12] The calculation basis amounted to NOK 2.2 billion at 31 December 2020.

Table 13 Total calculation basis for counterparty risk related to derivatives, bank deposits and repo at 31 Dec 2020 (amounts in NOK thousand)

Risk weighted assets		Amount
Bank deposits		194 631
Derivatives		1 664 459
Repurchase agreements (repo)		-
Credit valuation adjustment (CVA)		2 182 527
Total		**4 041 617**
Pillar 1 capital requirement	**8 %**	**323 329**

MANAGEMENT AND CONTROL

EBK has established a policy and associated parameters for counterparty risk which forms the basis for management and control of this risk in EBK. The status of compliance with the company's policy for counterparty risk is assessed continuously, and the position in relation to the approved level of risk acceptance is reported quarterly to the board in the risk and compliance report.

[9] Articles 276-282, CRR.
[10] Articles 205-236, CRR.
[11] Bilateral derivative contracts are also called over-the-counter or OTC derivatives.
[12] Article 384, CRR.

CAPITAL REQUIREMENTS

The capital requirement calculated in accordance with Pillar 1 is considered to cover the potential risk of loss related to counterparty risk in the portfolio.

10 MARKET RISK

Definition: *Market risk is the risk of loss on the market value of portfolios of financial instruments as a consequence of fluctuations in interest rates, credit spreads and exchange rates. It comprises interest-rate, credit-spread, currency and equities risk.*

Interest-rate risk in the balance sheet (net interest income) arises from differences between interest terms for borrowing and/or lending, and from borrowing by the company in different markets than those it lends to, so that the borrowing interest rate may change without the company being able to adjust the lending rate equally quickly.

Market risk in EBK will normally take the form of interest-rate risk in the bank portfolio (net interest income) which arises because of differences between fixed interest rates on assets and liabilities, in addition to the credit-spread risk which the company accepts when investing in securities (the securities portfolio). The company aims to maintain a low to moderate market risk. The company has borrowings in foreign currencies, but all significant currency risk related to borrowing is hedged through derivatives. The securities portfolio must not accept unsecured currency risk, or equity and property risk.

RISK APPETITE AND EXPOSURE

The total risk parameter for interest-rate and credit-spread risk in the balance sheet is five per cent of the company's core tier 1 capital. Overall interest-rate risk in the total balance sheet may not exceed 0.75 per cent of the company's core tier 1 capital. The individual investment must not have an interest rate fixed for longer than one year, and the maximum limit for the average duration of the whole liquidity portfolio is 0.3 years. The residual time to maturity for the individual security must be less than 3.5 years, and the average residual time to maturity must be less than two years. Interest-rate risk is stress-tested, in line with the FSA's methodology,[13] by looking at a parallel shift of two percentage points in the interest-rate curve. Credit-spread risk is stress-tested on the basis of the FSA's method for spread risk[14], which builds on the methodology in Solvency II for insurance undertakings.

Assessment of interest-rate risk in the bank portfolio (net interest income)

Interest-rate risk in the bank portfolio will be limited by ensuring that lending on floating interest-rate terms is financed by borrowing or derivatives at floating interest rates, and that lending at fixed interest rates is hedged with derivatives at floating rates. The company will make active use of derivatives to reduce interest-rate risk. Interest-rate risk related to net interest income must be low.

[13] It follows from article 98 (5) of the CRD IV directive and the EBA's guidelines on interest-rate risk in the bank portfolio that interest-rate risk must be assessed on the basis of a stress factor level of a two-percentage-point parallel shift in the interest-rate curve.

[14] FSA circular of 12/2016 – appendix 3.

The bulk of the residential mortgages in EBK's portfolio have a floating interest-rate. Pursuant to the Financial Contracts Act, interest rates on such mortgages can be adjusted at six weeks notice in line with the development of the company's borrowing costs. EBK is not subject to such notice in relation to the interest rates it charges to the owner banks. Interest-rate changes can therefore be implemented more quickly, which ensures efficient adjustment to changes in EBK's funding costs.

EBK permits the addition of fixed-rate mortgages to the cover pool, and this is regulated by separate agreements with the banks. EBK establishes the interest rate for fixed-interest mortgages, while the owner banks specify customer terms and interest rates based on borrowing costs and risk assessment for the advance. Fixed-rate mortgages are hedged with derivatives which convert them to floating interest rates. The company will use derivatives actively to reduce interest-rate risk.

EBK uses hedge accounting pursuant to the IFRS on borrowing at fixed interest rates, and an interest swap must be assessed as very effective when entered into. The company measures interest-rate risk on the balance sheet at least quarterly, based on the duration of the various claims and commitments. Duration means the number of years until the next interest-rate adjustment.

Table 14 Interest-rate sensitivity in the balance sheet (amounts in NOK thousand)

Interest rate sensitivity	Duration	Amount	Effect negative shift	Effect positive shift
Funding	0.12	97 559 050	(242 038)	242 038
Lending with floating rate*	(0.12)	81 399 381	195 359	(97 679)
Lending with fixed rate	(3.90)	7 869 282	613 891	(613 891)
Derivatives lending	3.58	7 820 422	(559 796)	559 796
Government bonds	(0.22)	3 128 823	13 762	(13 762)
Government guaranteed etc.	(0.17)	1 176 408	3 994	(3 994)
Covered bonds	(0.16)	7 444 785	23 631	(23 631)
Local and regional autority (Norwegian)	(0.19)	4 142 525	15 952	(15 952)
Bank deposits	(0.01)	971 115	135	(135)
Public sector entities	(0.25)	970 233	4 812	(4 812)
Local and regional autority (foreign)	(0.12)	2 973 241	7 004	(7 004)
Interest rate risk by shift in yield curve of 2 percentage points			**76 705**	**20 975**

**The duration of lending with floating interest rates is estimated be 0.06 with an increase in money market rates and 0.12 with a decrease. This asymmetry arises because of the ability to wait with cutting interest rates on the mortgage portfolio in the event of a decrease.*

Fixed interest rates on the company's borrowing have longer periods than on its lending. This means that, in circumstances where the interest rate for funding costs increases by two percentage points, the company will in reality benefit from the change if this is priced out to the banks before the borrowing costs have increased, and as long as the asset side of the balance sheet has a shorter fixed-interest period than the liability side. Other factors may nevertheless exist which prompt the company to reduce its lending margin and net interest income, but these will be independent of the interest-rate risk.

Assessment of credit-spread risk in the securities portfolio

The company's business purpose is to obtain favourable funding by issuing covered bonds. This means that its surplus liquidity must satisfy legal and regulatory requirements concerning what may be included in the cover pool. The objective of the company's investment of surplus liquidity is to have liquidity available at all times to secure the financing of growth and maturation, and to secure the highest possible return within specified risk parameters. Surplus liquidity is held in bank deposits or fixed-income securities in Norwegian kroner. In addition, the company has received liquidity in NOK and EUR which reflects the receipt of cash collateral from counterparties to

derivatives. Collateral received is held in bank deposits or low-risk securities in the currency of receipt to ensure that no currency risk arises for the company on its cash collateral.

EBK's securities portfolio totalled NOK 19.8 billion at 31 December 2020 and constituted about 16 per cent of the company's total assets. The company has invested in government bills, public enterprises (with central government guarantees), public-sector loans and so forth as well as in foreign local authorities which satisfy the requirement for zero risk weighting pursuant to the CRR. The company has calculated capital requirements for the securities portfolio on the basis of the standardised method for credit risk (Pillar 1) pursuant to the CRR.

Table 15 Calculation basis and capital requirement for market risk at 31 December 2020 (amounts in NOK thousand)

The securities portfolio	EUR	NOK	Total NOK	Risk weight	Risk weighted	Capital requirement
Government bonds	2 516 183	612 641	3 128 823	0%	-	-
Public sector entities	613 693	356 540	970 233	0%	-	-
Government guaranteed etc.	1 110 632	65 776	1 176 408	0%	-	-
Local and regional authority (foreign)	2 090 360	882 881	2 973 241	0%	-	-
Covered bonds	-	7 444 785	7 444 785	10%	744 478	59 558
Local and regional authority (Norwegian)	-	4 142 525	4 142 525	20%	828 505	66 280
Total	**6 330 868**	**13 505 146**	**19 836 015**		**1 572 983**	**125 839**

MANAGEMENT AND CONTROL

The company has established a policy for asset liability management which forms the basis for total interest-rate risk in its balance sheet. In the event of an increase in financing costs or money market interest rates, a decision to adjust the interest-rates charged to the owner banks will be made by the CEO in consultation with the rest of the company's executive management and based on forecasts of anticipated interest-rate developments and planned new funding. Such forecasts are made by the finance and accounting department. Interest-rate risk is measured quarterly as the change in value arising from a two-percentage-point adjustment to the level of interest rates, and the company has defined maximum exposure related to this. The exposure is reported quarterly in the risk and compliance report submitted to the board.

The basis for management and control of market risk in the portfolio of securities is provided by policies for asset liability and for investment management with an associated investment mandate. The company's risk management and compliance function continuously assesses exposure in relation to approved risk acceptance and parameters in quarterly risk and compliance reports for the board. The board-approved parameter as a percentage of core tier 1 capital is meant to cover the interest-rate risk in the bank portfolio of a two-percentage-point parallel change in the interest-rate curve and increased credit-spread outcomes in the company's portfolio of securities. Market risk in the securities portfolio is managed on a daily basis by the funding department in line with its mandate and the company's risk policies.

CAPITAL REQUIREMENTS

The capital requirement for credit risk in the securities portfolio is taken into account in the standardised method for credit risk, and totalled NOK 125.8 million at 31 December 2020, including risk-weighting of the various investments in securities. Assessments of capital requirements for market risk, including interest-rate risk in the bank portfolio and credit-spread risk in the securities portfolio, are included in the evaluation of Pillar 2. EBK's enterprise-specific

Pillar 2 requirement of 0.5 per cent is considered to be adequate for meeting future Pillar 2 capital requirements related to market risk.

No provision has been made for any supplementary potential for loss related to a lack of risk spreading in the securities portfolio or for market liquidity.

11 FINANCING AND LIQUIDITY RISK

Definition: *The risk that the company will be unable to meet its commitments as and when they fall due without incurring substantial costs in the form of expensive refinancing or the need for premature realisation of assets. In the worst case, liquidity risk is the risk that the company will be unable to refinance itself sufficiently in order to meet commitments as and when they call due.*

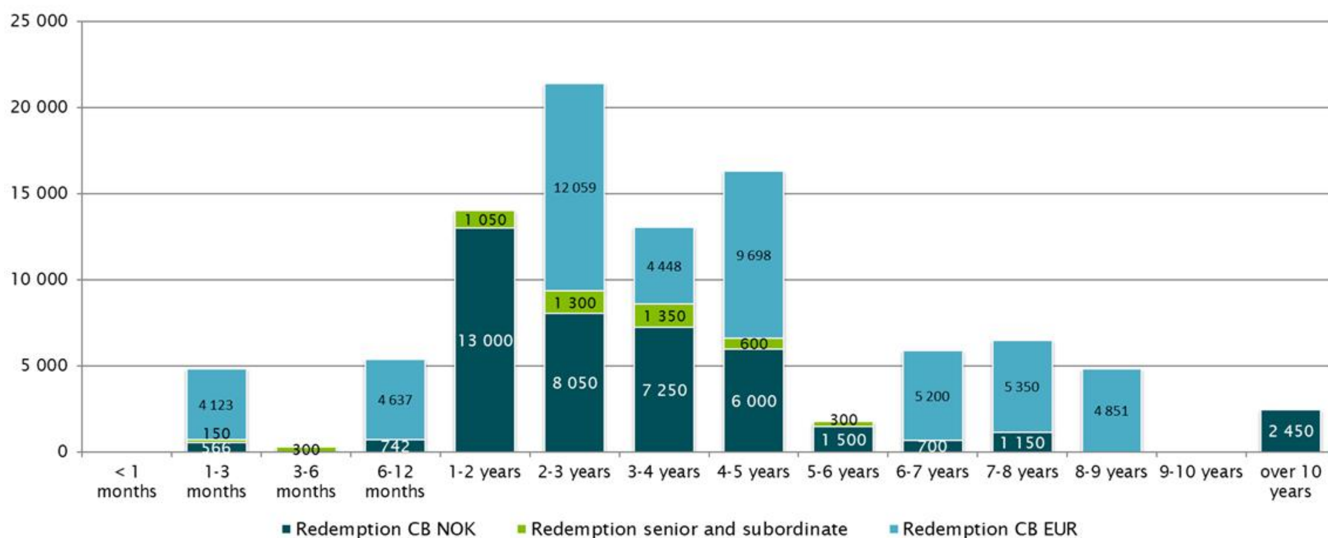
RISK APPETITE AND EXPOSURE

The company's liquidity and refinancing risk must lie within a moderate risk level. EBK has a dedicated strategy for financing and liquidity risk, including defined risk parameters as well as contingency and recovery measures should a shortage of liquidity arise. EBK finances lending primarily through the issue of covered bonds. Through its opportunity to make such issues, the company achieves lower borrowing costs than its owner banks. The company will also raise ordinary senior unsecured bonds in order to cover overcollateralisation requirements, and tier 1 perpetual bonds and subordinated loans to cover requirements for other tier 1 and subordinated loan capital. EBK has established an international borrowing programme for issuing covered bonds. This Euro Medium Term Covered Note (EMTCN) programme was signed and approved by the UK Listing Authority for the first time on 10 August 2007. Bonds are issued under the EMTCN programme to both Norwegian and international investors. The programme is revised at least once a year and listed on Euronext in Dublin.

The company has established overarching goals and specified parameters for liquidity management to keep financing and liquidity risk satisfactorily low, and to comply with section 11, sub-section 12 of the Act on Financial Institutions, chapter 11 of the regulations for financial institutions issuing covered bonds, and the CRR/CRD IV regulations.

EBK had a good liquidity position at 31 December 2020, with total liquid assets of about NOK 13.9 billion exclusive of collateral received. The company issued bonds and certificates amounting to NOK 17.8 billion in bonds during 2020, comprising NOK 16.5 million in covered bonds and NOK 1.3 billion in tier 1 perpetual bonds. About 41 per cent of the issues during 2020 were in Norwegian kroner and 59 per cent in euros. Despite great uncertainty over the coronavirus position and volatile credit spreads during the year, the company had good access to financing in both NOK and EUR markets during 2020. The company has complied with all risk exposure parameters for funding and liquidity management.

Figure 7 Redemption profile of the company's debt financing at 31 December 2020 (amounts in NOK million)



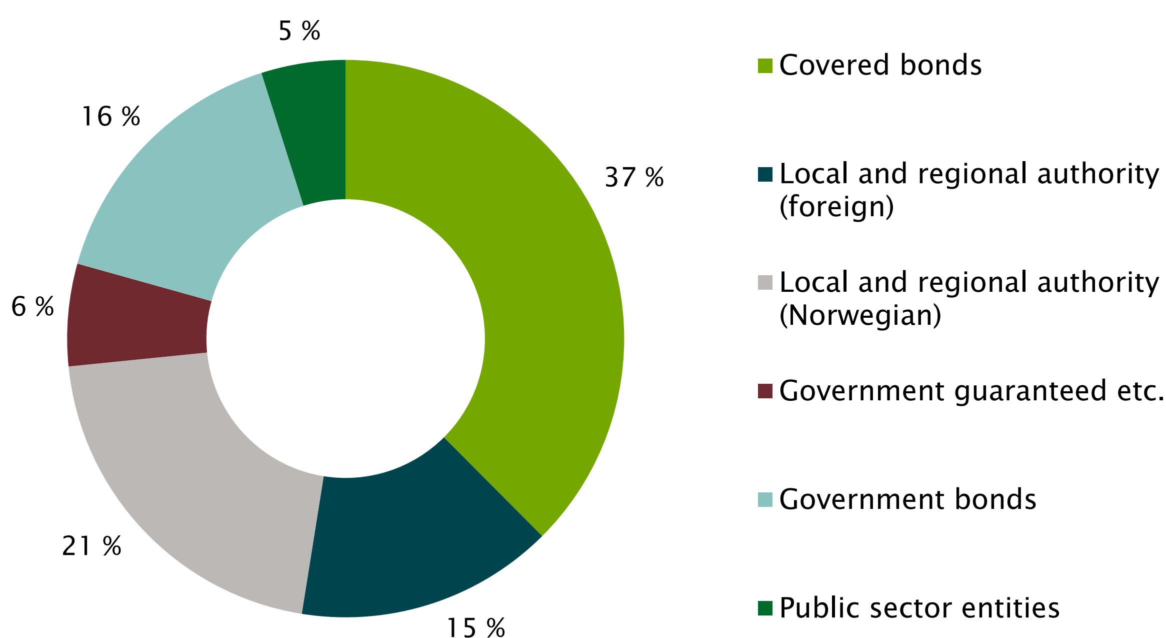
Investor interest in subscribing to the company's covered bonds was high in 2020, and the company also achieved good terms for its borrowing during the year. In addition to contingency facilities, the company has a 12-month soft bullet structure on its covered bonds, which confers the right to postpone maturity by up to one year residual time.

The financing position in 2020 was characterised by volatile credit spreads, but availability of funds was good for the year as a whole. Credit spreads initially widened sharply when the coronavirus began to spread, but this reversed as the government's support packages took effect. Access to financing is currently good, and credit spreads are at very low levels from a historical perspective.

EBK launched a green bond framework on 4 February 2021. Its purpose is to finance the most energy-efficient mortgage collateral in the cover pool through the issuance of green bonds. The company has identified NOK 16.4 billion in residential mortgages related to just over 8 000 mortgages which meet the collateral requirements for the issuance of green bonds. EBK aims to issue its first green bond in 2021.

The company's borrowing department constantly monitors the financial markets, and is focusing its attention on the remaining funding requirement for 2021. Pursuant to its strategies and recovery plan, the company can adopt a number of possible measures were it to prove impossible to implement the planned financing as specified in the funding plan. The company considers itself to be well equipped to deal with a future crisis.

Figure 8 Composition of the liquidity buffer



EBK is subject to the quantitative requirements for the liquidity coverage ratio (LCR). These rules derive from the CRR/CRD IV regulations. The company must satisfy the LCR applicable at any given time.[15] The company will monitor the development of the LCR closely, and uses forecasts in order to be prepared for the need to adapt liquid assess which can be included in the indicator at short notice. At 31 December 2020, the company's total LCR indicator was 102 per cent, its EUR indicator was 100 per cent and its NOK indicator was 121 per cent.

Article 413 of the CRR requires companies to have stable and long-term financing, but the final definition and level requirements have yet to be clarified. Requirements for the net stable funding ratio (NSFR) are included in CRR2, where the proposed minimum requirement for the NSFR is 100 per cent. Weighting in the NSFR for mortgages in a cover pool is to be reduced to 85 per cent (originally 100 per cent). This is planned to come into effect for the EU in mid-2021, but the timing could differ for Norway with regard to its incorporation in the European Economic Area (EEA) agreement. Until the final definition of the NSFR has been formally adopted, the FSA's calculation of the NSFR will be based on the Basel committee's final recommendations of October 2014. The company has reported the NSFR to the FSA on a quarterly basis since 30 September 2014. Its NSFR indicator was 100 per cent at 31 December 2020.

MANAGEMENT AND CONTROL

EBK has established a risk policy for financing risk, including defined risk appetite, risk parameters, and contingency and recovery measures in the event of insufficient liquidity. These are incorporated in the company's recovery plan, which forms the basis for liquidity management.

Financing and liquidity risk is managed through parameters for financing structure, requirements for diversification of instruments, markets and residual times to maturity, and the establishment of

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[15] FOR-2014-08-22-1097 CRR/CRD IV regulation.

contingency facilities. An agreement has also been entered into between the shareholders and EBK to ensure that the company can access liquidity in a crisis. The agreement commits the owner banks, under given circumstances, to purchase the company's covered bonds limited to the maturity of the company's covered bonds issued under the EMTCN programme and the associated swap agreements over the coming 12 months. EBK's own liquidity is deducted when calculating the liquidity obligation. The owner banks can deposit these covered bonds as collateral with the Central Bank of Norway in exchange for a haircut. EBK is not permitted to make such deposits in the Central Bank of Norway.

The company has a separate funding department headed by the CFO, who is responsible for operational liquidity management and reports to the CEO. The funding department utilises liquidity forecasts, which are updated at least monthly and more frequently as and when required. The future liquidity holding, refinancing indicators and the average time to maturity of funding are then simulated. Each board meeting receives detailed information on the financing and liquidity position in the company.

EBK's risk and compliance function measures exposure linked to financing and liquidity risk in relation to approved parameters on a continuous basis, and reports quarterly on the actual exposure in the risk and compliance report to the board. The same reporting contains stress tests which simulate the effect of possible liquidity crises, including market-specific, company-specific and combined market/company crises. These reports provide a basis for the executive management and the board to assess the exposure status in relation to established parameters and targets.

CAPITAL REQUIREMENTS

Financing and liquidity risk are not included in the capital assessment pursuant to Pillar 1. The assessment of capital requirements for financing and liquidity risk is included in the assessment under ICAAP/ILAAP in the company, where the company's capital targets are considered to be adequate for handling future capital and liquidity needs over and above the minimum regulatory requirements.

12 OPERATIONAL RISK

Definition: *Operational risk is the risk of loss as a result of inadequate or deficient internal processes or systems, human error, or external events. Operational risk also comprises compliance, legal, default, data protection, money-laundering and terrorism funding risk.*

RISK APPETITE AND EXPOSURE

EBK has a simple and transparent organisation, and has therefore adopted the basic indicator method for calculating the capital requirement for operational risk. With this approach, the calculation basis for the minimum primary capital requirement is 15 per cent of average income over the past three years multiplied by 12.5. See the CRR.

Table 16 Calculation basis and capital requirement for operational risk (amounts in NOK thousand)

Operational risk	2018	2019	2020
Net income	212 824	128 896	181 424
Average income			174 381
Basis of calculation			326 965
Capital requirement			**26 157**

The company will have a low-risk profile for operational risk. Operational risk which could expose EBK to loss consists virtually entirely of a failure to establish adequate collateral, deficient internal control or failure of IT systems.

MANAGEMENT AND CONTROL

EBK has established a policy for operational risk which forms the basis for its management and control. A number of guidelines and routines have been implemented for all significant processes in the company. These are intended to help identify that operational risk is being handled in a way which ensures an acceptable level of residual risk. The company will have an updated business continuity plan at all times, which ensures that it can maintain its operations, while functions will have adequate back-up. Relevant contingency plans have also been drawn up to deal with crises.

The company monitors operational risk through reporting and registering of operational events, pursuing compliance activities, internal auditing and so forth. The company's risk and compliance department prepares a quarterly risk and compliance report which presents the status of and trend for operational risk based on the above-mentioned conditions. This reporting provides the executive management and the board with the basis for assessing the status of exposure in relation to established parameters and targets.

CAPITAL REQUIREMENTS

EBK applies the basic indicator method to calculate the capital requirement for operational risk as prescribed in Pillar 1. The capital requirement was calculated to be NOK 26.2 million at 31 December 2020 and is considered to make sufficient allowance for loss in the worst case.