

2018

Pillar 3 of the Basel regulations

**Capital adequacy and
risk management**

SBAB!

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Glossary

CHAPTER 4 RISK MANAGEMENT AND RISK ORGANISATION

Asset and Liability Committee (ALCO)

The committee that handles matters relating to risk and capital planning, which are then addressed by Executive Management and the Board.

Directive 2013/36/EU – CRD IV of the European Parliament and of the Council on authority to conduct operations in credit institutions and on the supervision of credit institutions and securities companies
Common European regulations on risk management and capital adequacy.

Regulation (EU) No. 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (CRR)

Common European regulations on risk management and capital adequacy.

Minimum requirement for own funds and eligible liabilities – (MREL)

The Swedish National Debt Office (SNDO) has finalized the model for calculation of the Minimum Requirement for Own Funds and Eligible Liabilities (MREL), which determines how much own funds and eligible liabilities each bank must have, what proportion should be debt and what type of liabilities may be used to meet the requirement. Banks that are not systemically important will always meet the SNDO's minimum requirement provided that they comply with existing capital requirements. In a crisis, these banks will be declared bankrupt or placed in liquidation rather than resolution.

MREL – coefficient

Own funds and eligible liabilities as a percentage of total liabilities and own funds.

Internal capital adequacy assessment process (ICAAP)

Process according to Article 73 of CRD IV for continuously calculating and maintaining capital in an amount, type and distribution that is sufficient to cover the risks to which the bank is or will become exposed.

CHAPTER 5 CAPITAL ADEQUACY

Perpetual subordinated loans

Perpetual subordinated loans have a maturity that is essentially unlimited, but they can be repurchased with the permission of Finansinspektionen (the Swedish FSA).

Internal ratings-based approach (IRB approach)

The IRB approach is used to calculate the regulatory capital requirement for credit risk. The foundation IRB (FIRB) approach entails that the institution is only to estimate the PD parameter. In the advanced IRB (AIRB) approach, the institution is to estimate, in addition to PD, one or several of the parameters CCF, LGD and M (maturity).

Own funds

Own funds consist primarily of equity and subordinated loans and act as a buffer against unexpected losses.

Capital requirements under Pillar 1

Refers to the minimum amount of capital that the company is to have in accordance with the CRR and CRD IV, the Special Supervision of Credit Institutions and Investment Firms Act (2014:968), the Capital Buffers Act (2014:966) and the Swedish FSA's regulations regarding prudential requirements and capital buffers (FFFS 2014:12).

These provisions also include transitional rules deriving from Basel 1, which applied until 31 December 2017.

Risk-weight floor, Residential mortgages, Pillar 1

The addition of a risk exposure amount (REA) calculated based on Swedish residential mortgage exposures, which entail a risk weight for these exposures of at least 25%. The supplement only applies for credit institutions that apply the IRB approach. The requirement of a risk-weight floor for Swedish residential mortgages has been moved from Pillar 2 to Pillar 1 and entered force on 31 December 2018.

Credit valuation adjustment risk (CVA risk)

CVA risk is the risk that the counterparty in a financial transaction defaults and is unable to meet future payments under contracted OTC derivative agreements. Transactions with a central counterparty (CCP) should be excluded from the capital requirement for CVA risk.

Common Equity Tier 1 (CET1) capital

Tier 1 capital less additional Tier 1 capital. Consists primarily of equity.

Minimum capital requirement

The lowest amount that the company is permitted to have as own funds.

Tier 1 capital

Tier 1 capital mainly comprises equity and additional Tier 1 capital.

Additional Tier 1 capital

Additional Tier 1 capital generally comprises perpetual subordinated loans that meet the requirements in Article 52 of the CRR. According to the transitional regulations, older additional Tier 1 capital may also be included in Tier 1 capital.

Risk exposure amount (REA) under Basel 3

The Basel 3 regulations permit the use of the IRB approach, within the Pillar 1 framework, to establish REAs for balance-sheet and off-balance sheet exposures based on SBAB's own models for credit risk, market risk and operational risk. The risk weightings of other exposures are determined on a standardised basis, in appropriate cases based on the counterparty's rating.

Tier 2 instruments

Subordinated loans that meet the requirements in Article 63 of the CRR may be included in own funds. According to the transitional regulations, older Tier 2 instruments may also be included in own funds. If the remaining maturity is less than five years, a deduction will be made based on the remaining number of days.

Total capital ratio

Own funds divided by the risk exposure amount.

CHAPTER 6 INTERNALLY ASSESSED CAPITAL REQUIREMENT

Economic capital

Economic capital is based on models in which SBAB assesses quantifiable risks. This constitutes an important component in, for example, pricing, financial control and in assessment of the requisite scope of risk capital.

Exposure at default (EAD)

Exposure at the time of default. Calculating the EAD for off-balance-sheet items entails multiplying the unutilised amount by a credit conversion factor (CCF).

Capital requirements under Pillar 2

The assessment is based on economic capital which, in combination with capital based on stress tests and capital for further risk, comprises the company's own assessment of the appropriate scope of risk capital. Under Pillar 2, the capital requirement may not be less than the capital metric under Pillar 1 for each risk type.

Value at Risk (VaR)

A statistical metric of the maximum expected loss at a given level of security and over a defined time period.

CHAPTER 7 CREDIT RISK IN LENDING OPERATIONS

Expected loss (EL)

The calculated EL must be covered by earnings from operating activities, while unexpected losses must be covered by the company's equity. EL is arrived at by calculating the risk associated with each individual loan using a statistical model based on a longer time horizon. EL is measured through the formula $EL = PD * LGD * EAD$.

Off-balance-sheet items

A commitment, pledged collateral or similar item that is not recognised in the balance sheet because it is unlikely that it will be necessary to realise or utilise it, or because, due to its extent, it cannot be calculated with sufficient reliability. Contingent liabilities may also comprise possible commitments, meaning it is uncertain whether or not the commitment exists.

Credit conversion factor (CCF)

The percentage of an off-balance sheet item that is expected to be utilised at the time of a possible future default.

Loan-to-value (LTV)

The loan-to-value ratio expresses the extent of a loan in relation to the value of pledged collateral.

Loss given default (LGD)

Loss amount in the event of default.

Probability of default (PD)

Probability of default of a customer or counterparty within one year.

CHAPTER 10 FUNDING

Credit Support Annexe (CSA)

Supplement to the ISDA Master Agreement that regulates the provision of collateral in connection with a derivative transaction.

Euro Medium Term Covered Note Programme (EMTCN)

International funding programme for issuing covered bonds.

Euro Medium Term Note Programme (EMTN)

International funding programme for medium and long-term unsecured funding.

Global Master Repurchase Agreement (GMRA)

International standardised agreement for repurchases.

CHAPTER 11 CREDIT RISK IN TREASURY OPERATIONS

International Swap and Derivatives Association (ISDA) Master Agreement

Framework agreement that regulates the rights and obligations between the parties to a derivative transaction, primarily the netting of debt in the event of insolvency.

Repo transaction

A repo transaction comprises a reverse purchase agreement whereby one party undertakes to sell a security to a counterparty in exchange for cash. In parallel, a futures contract is entered into to repurchase the security at a specific price at a specified future date.

CHAPTER 13 LIQUIDITY RISK

Liquidity coverage ratio (LCR)

The LCR is a liquidity risk metric that measures the relationship between liquid assets and a 30-day net cash outflow in a stressed scenario.

Net stable funding ratio (NSFR)

A liquidity risk metric of a structural nature that demonstrates the stability of the Group's funding in relation to its assets

Survival horizon

Measurement of the number of days over which liquidity needs can be met in a stressed scenario without access to new liquidity.

1 Introduction

In this annual report, SBAB discloses information on capital adequacy, risk management and liquidity based on Regulation (EU) No. 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (CRR) and the Swedish FSA's regulations regarding prudential requirements and capital buffers (FFFS 2014:12). This report pertains to the consolidated situation and the conditions prevailing on 31 December 2018. For periodic information, please refer to the quarterly reports "Capital, liquidity and leverage disclosures" at www.sbab.se.

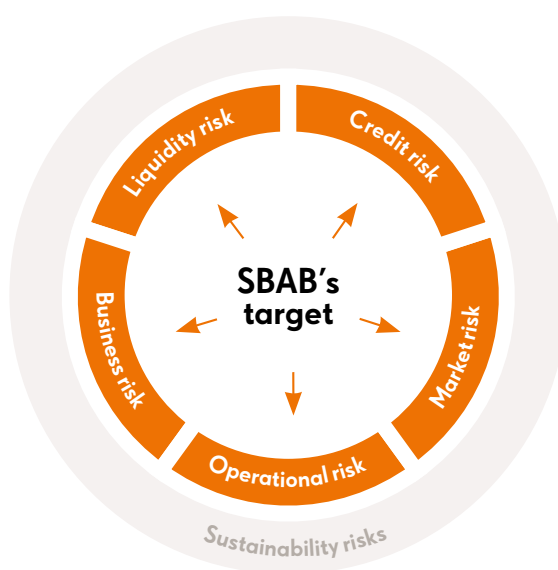
SBAB Bank AB (publ) is owned by the Swedish state. Its operations, which consist principally of deposit operations and residential mortgage lending to consumers, tenant-owners' associations and property companies in Sweden, are characterised by a low level of risk. SBAB is well capitalised.

The CET1 capital ratio declined to 12.5% as a result of the Swedish FSA's decision to amend the method for applying the risk-weight floor for Swedish residential mortgages from 31 December 2018. The credit loss ratio remained low. The continued strength of its capital position and good risk management means that SBAB meets the supervisory rules adopted by the EU.

Total credit risk at SBAB rose slightly over the year and pertained mainly to derivative transactions. Liquidity risk was relatively unchanged and remained low. Market risk declined in 2018 due to the entire liquidity portfolio being transferred from the trading book to the banking book in accordance with IFRS 9. Accordingly, the market risk in Pillar 1 only comprises currency risk.

New common regulations on supervisory requirements for credit institutions have been adopted by the EU. The regulations aim to increase the stability of the international banking sector and encompass, inter alia, capital adequacy and large exposures, requirements regarding liquidity coverage and leverage, as well as an opportunity for the authorities to introduce capital buffers that can be used to mitigate systemic risk and economic fluctuations. The regulations encompass capital requirements and requirements regarding quality of capital. The rate of change in the regulatory frameworks has remained high. In December 2018, the EBA published new guidelines pertaining to disclosure requirements for non-performing and forborne exposures that apply from December 2019. At the end of 2018, the Basel Committee also presented proposals for expanded Pillar 3 disclosure requirements adapted to the completion of the Basel 3 package.

This report shows the significant operational risks for SBAB broken down by risk type as per the table on the next page.









SBAB's risk appetite

Read more on page **08**

For information about sustainability risks, refer to SBAB's 2018 Annual Report

TABLE 1. SIGNIFICANT RISKS

Risk type	Risk appetite	
	Classification	Level
 <p>Credit risk in lending operations</p> <p>The risk that the counterparty does not fulfil its payment obligations towards SBAB. Credit risk arises in conjunction with loans and loan commitments, as well as in connection with value changes in pledged collateral entailing that these no longer cover the Group’s receivables. The credit risk also includes concentration risk, which refers to the increase in credit risk that arises in large exposures to individual counterparties, regions or industries.</p> <p>Read more in chapter 9</p>	Wanted risk	Medium
 <p>Credit risk in treasury operations</p> <p>Defined as the total of investment risk and counterparty risk. Counterparty risk is defined as credit risk in financial derivatives that arises when the value of the instrument changes resulting from variations, for example, in interest rates or currency exchange rates, which means SBAB recognises a receivable against the counterparty. In addition, counterparty risk entails that SBAB’s financial counterparties cannot meet their commitments under the contracted repos. Investment risk is defined as credit risk in financial investments and entails the risk that a debtor does not fulfil its payment obligations, meaning either completes payments late or not at all. Investment risk arises through investments in the liquidity portfolio and the investment of surplus liquidity.</p> <p>Read more in chapter 11</p>	Necessary risk	Low
 <p>Market risk</p> <p>The risk of loss or reduced future income due to market fluctuations. Market risk includes interest-rate risk, currency risk, basis risk and spread risk. Currency risk refers to the risk that changes in the exchange rate for SEK against other currencies result in losses or lower future income. Interest-rate risk is defined as the risk that variations in interest rates result in losses or lower future income as assets and liabilities have different fixed-interest periods and interest terms. Spread risk refers to an exposure to changing conditions between interest costs for different issuers. Basis risk refers to the risk associated with deposits and lending that are locked to different interest bases.</p> <p>Read more in chapter 12</p>	Necessary risk	Low
 <p>Operational risk</p> <p>The risk of losses due to inappropriate or unsuccessful processes, human error, faulty systems or external events, including legal risks. The forms of operational risk applicable to SBAB are shown in the categorisation of types of events. Examples of types of events that could be applicable are internal and external fraud, work conditions and environment, damage to tangible assets, disruptions to the business operations and systems, transaction management and process control. Legal risk includes the risk that agreements or other legal transactions cannot be completed in accordance with specific terms and conditions or that judicial proceedings are started that could have a negative impact on SBAB’s operations. Operational risk includes compliance risk. Regulatory compliance is essential in maintaining confidence in SBAB’s operations. Even rules that are not legally binding, but that reflect a market practice or ethical guidelines, affect SBAB’s approach to employees and customers.</p> <p>Read more in chapter 14</p>	Necessary risk	Low
 <p>Business risk</p> <p>The risk of declining earnings due to harsher competition, inappropriate strategies or erroneous decisions. SBAB differentiates its business risk between strategic risk and the risk of weaker earnings. Strategic risk is defined as the risk of a loss arising due to unfavourable business decisions, erroneous implementation of strategic decisions or a lack of sensitivity to changes in the industry, the political environment or legal circumstances. The risk of weaker earnings encompasses the risk of, for example, reduced margins, which in turn may arise due to more expensive financing or more intense competition.</p> <p>Read more in chapter 15</p>	Necessary risk	Low
 <p>Liquidity risk</p> <p>The risk that the company will not be able to meet its payment obligations on the date of maturity without the related cost increasing significantly. Short-term liquidity risk measures the risk of being impacted in the short term by a lack of liquidity, while structural liquidity risk is a measure of the mismatch between assets and liabilities in terms of maturities, which risks leading to a lack of liquidity in the longer term.</p> <p>Read more in chapter 13</p>	Necessary risk	Low

Risk profile

Risk management

SBAB's customer base is primarily consumers, tenant-owners' associations and landlords who finance residences secured through SBAB, the majority of which are concentrated to major metropolitan areas.

Credit risk is central to SBAB's business model and it is considered to be the dominant risk in operations. Credit granting in SBAB is characterised by responsible credit granting taking into account the customer's long-term repayment capacity and resilience as well as collateral. Credit rules and credit management is continuously analysed, processed and improved. Corporate clients are processed individually while retail customers are analysed using a structured process in conjunction with the credit approval process. Concentration risk and large exposures are carefully monitored.

SBAB's counterparty risks and investment risks are low and are not considered dominant risks.

Counterparty-risk exposure is primarily covered through collateral agreements in which the counterparty provides collateral in an effort to reduce exposure. Investment risk is mitigated as SBAB only invests in interest-bearing bonds with high credit ratings.

SBAB's market risk is low and is not considered a dominant risk.

Interest-rate risk is to be mitigated through direct funding or the use of derivatives. Currency risks are mitigated as funding in international currency is hedged through currency swaps or invested in matching currencies.

Operational risk is a natural part of all business. SBAB aims to optimise the relationship between costs for operational risk and operating activities. SBAB considers operational risk to be a prerequisite for implementing the business concept efficiently and competitively, taking into account operations, strategy, risk appetite and the macro environment.

Within SBAB, risk management consists of uniform valuation and reporting of operational risk. The analysis of risk levels in all operations is conducted on a regular basis and reported to the Board, the CEO and the Executive Management. Self-evaluation of processes that are considered significant is performed at least once per year. Within the framework of changes with potential effects on the bank's risk level, risks are identified in an early stage of the change process. Prior to implementation, the change process is quality assured by representatives from the second line of defence. Unexpected events that can negatively affect the bank are to be reported as incidents and managed according to pre-determined instructions.

SBAB's business risk is low and is not considered a dominant risk.

Risks related to strategy and earnings are evaluated on an ongoing basis over the year within the first line's strategy work. Strategically important decisions are managed within the framework for managing material changes. Furthermore, the Board receives an annual evaluation of the material risks that clearly addresses strategic business risk and the bank's overall earnings. Business risk is also included in the calculation of the Pillar 2 capital requirement as part of SBAB's stress tests, and where the effects of a scenario corresponding to a normal economic downturn are evaluated.

SBAB has a low liquidity risk and diversified funding. Securities that are part of the liquidity reserve have high credit ratings and are eligible as collateral with either the Riksbank or the European Central Bank, to guarantee liquidity.

SBAB's liquidity strategy includes proactive and continuous liquidity planning, active debt management and an adequate liquidity reserve. The funding strategy takes into consideration the expected maturity on the asset side. On this basis, SBAB limits its structural liquidity risk by maintaining diversified funding with sufficiently long maturities. SBAB has several liquidity metrics, for which limits apply, most of which are monitored and reported on a daily basis.

2 The Board's statement on risk management and a brief risk declaration

The Board of Directors of SBAB Bank AB (publ) supports the risk management described in this document and considers that it meets the requirements that may be placed on it in relation to SBAB's risk profile and adopted short and long-term strategic, capital and financial plans.

TABLE 2. RISK APPETITE AND RISK PROFILE

Risk type	RISK APPETITE		RISK PROFILE	
	Classification	Level	Limit utilisation	Proportion of economic capital, %
Credit risk in lending operations	Wanted risk	Medium	Medium	77
Credit risk in treasury operations	Necessary risk	Low	Low	4
Market risk	Necessary risk	Low	Medium	13
Operational risk	Necessary risk	Low	Low	6
Business risk	Necessary risk	Low	Low	–
Liquidity risk	Necessary risk	Low	Low	–

SBAB classifies risks as wanted and necessary:

- Wanted risks comprise those directly related to the business concept.
- Necessary risks are those arising from activities that are regarded as a direct prerequisite for being able to implement the business concept efficiently and competitively, whereby a certain level of risk is accepted.

Credit risk is central to SBAB's business model and is considered to be the dominant risk in SBAB's operations. Credit risk directly related to SBAB's business operations qualifies as a wanted risk, while credit risk related to liquidity investments or in the form of counterparty risk is classified as necessary risk that is acceptable, but where the level of risk should be limited.

Market risk and its components are primarily considered a necessary risk. Market risk should be kept at a low level and not be a predominant risk.

Operational risk is defined as a necessary risk, which means that both expected and unexpected losses must be optimised based on the expected positive effects to be achieved in the form of anticipated revenues, cost savings or reductions in other risk.

Business risk is defined as a necessary risk. Changes in the form of new products or new markets may only constitute a small part of SBAB's activities and must be implemented at such a pace that SBAB does not substantially jeopardise its earnings level and with great probability avoids pressure on its own funds. The quantifiable portion of business risk is included in the evaluation of the capital situation in a normal economic downturn.

Liquidity risk is defined as a necessary risk and must be maintained at such a level that SBAB can manage a period of acute liquidity crisis without depending on the capital market. Liquidity risk is not managed by capital provisions but by maintaining a liquidity reserve.

3 The consolidated situation

The consolidated situation includes SBAB Bank AB (publ), AB Sveriges Säkerställda Obligationer (publ) (Swedish Covered Bond Corporation – SCBC). SCBC issues covered bonds in the Swedish and international capital markets.

TABLE 3. OUTLINE OF THE DIFFERENCES IN THE SOPE OF CONSOLIDATION (EBA LI3 TABLE)

ENTITIES INCLUDED IN THE CONSOLIDATED SITUATION

Name of entity	Organisation Number	Share	Method of accounting consolidation	Method of regulatory consolidation	Description
SBAB Bank AB (publ)	556253-7513	Parent Company	–	–	Institution
AB Sveriges Säkerställda Obligationer (publ) (Swedish Covered Bond Corporation – SCBC)	556645-9755	100%	Full consolidation	Full consolidation	Institution

ENTITIES NOT INCLUDED IN THE CONSOLIDATED SITUATION

Name of entity	Organisation Number	Share	Method of accounting consolidation	Method of regulatory consolidation	Description
Booli Search Technologies AB	556733-0567	100%	Full consolidation	Not consolidated	IT company

SBAB's principal activity is to provide mortgage loans for residential properties and tenant-owners' rights located in Sweden against collateral in the form of mortgage deeds and shares in tenant-owners' associations and, to a limited extent, to finance commercial properties and provide unsecured loans. The Parent Company also offers savings accounts.

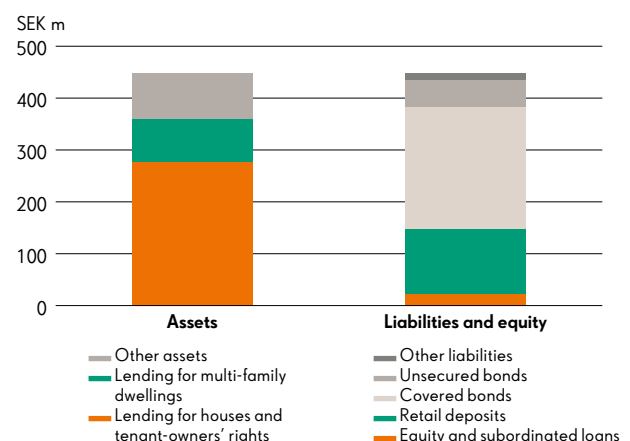
Information about the Board of Directors, the recruitment policy, the diversity policy and the risk committee is included in the Corporate Governance Report in SBAB's Annual Report. For information about related parties, please refer to Note G:2 of SBAB's Annual Report.

The Swedish Covered Bond Corporation (hereinafter referred to as SCBC) does not conduct any proprietary new lending operations. Instead, it acquires loans from the Parent Company on a regular basis. The purpose of securing credits is for them to be able to be included, in full or in part, in the cover pool that comprises collateral for holders of covered bonds issued by SCBC in Swedish and international capital markets.

SBAB's sales activities are conducted through two channels: Retail and Corporate Clients & Tenant-Owners' Associations. Retail focuses on lending to consumers and deposits from consumers and companies. Corporate Clients & Tenant-Owners' Associations is active in the property market through lending to property companies, property funds and tenant-owners' associations. SBAB's funding is managed by Treasury, within the Accounting & Treasury department.

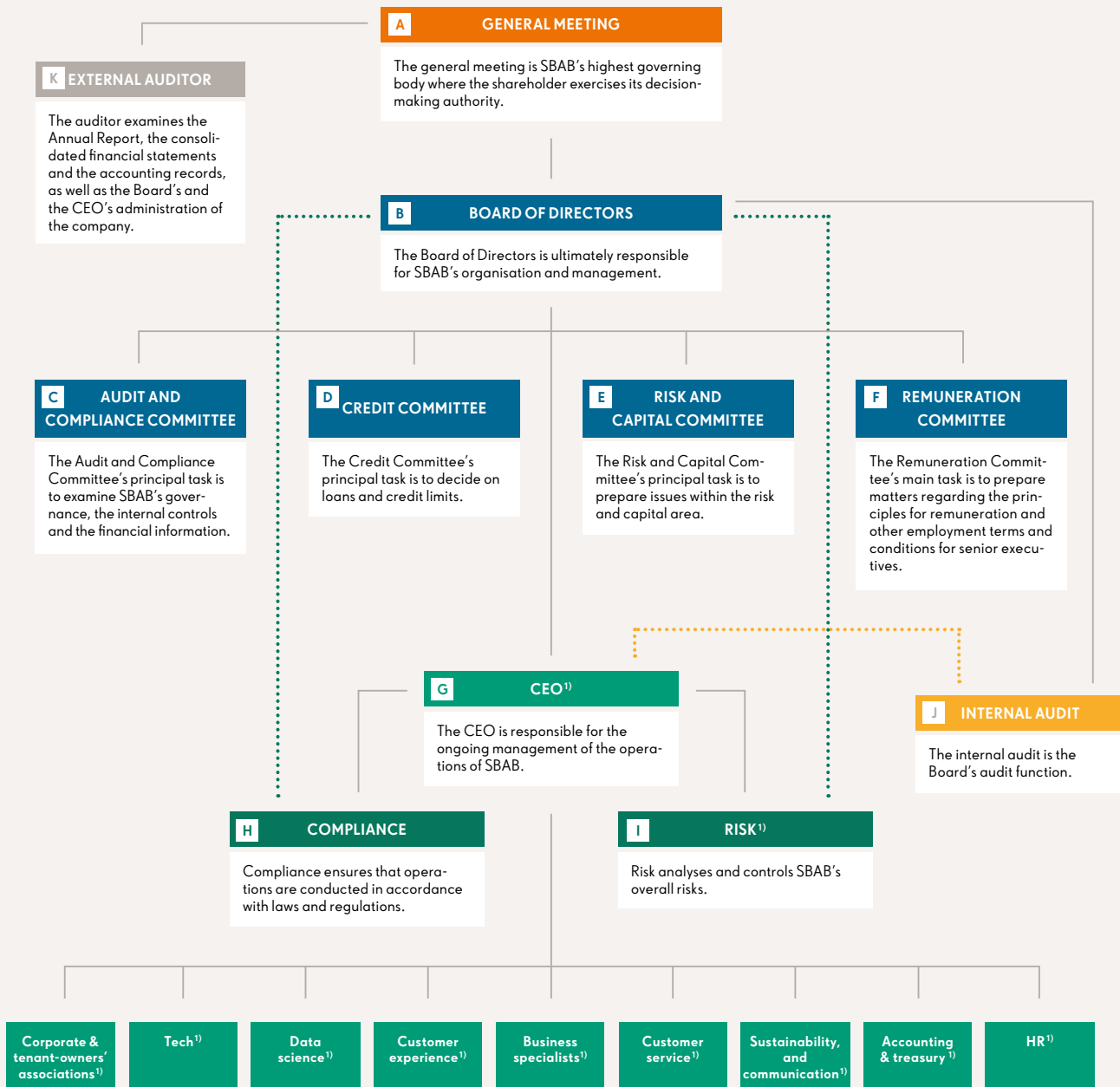
On 30 November 2018, SBAB acquired the remaining shares outstanding in Booli Search Technologies AB (Booli), and now owns 100% (68). Booli develops products and services focusing on the housing market and is not included in the consolidated situation. The consolidated situation encompasses SBAB Bank AB (publ) and its wholly owned subsidiary SCBC.

FIGURE 1. CONDENSED BALANCE SHEET



The consolidated situation

FIGURE 2. ORGANISATION



¹⁾ Included in Executive Management.

Organisational changes in 2018

In 2018, SBAB decided to implement a number of organisational changes to be able to more rapidly meet new customer requirements, and to be able to adapt operations to the accelerating pace of market change. The changes included the closure of two units in the Executive Management (Retail Market and Partnerships & Business Development) as well as the creation of three new units in the form of Data Science, Customer Experi-

ence and Customer Service. Following certain changes in responsibility, Operations was renamed Business Specialists. Credit & Risk was renamed Risk after certain reallocations of responsibility. Sustainability and Strategic Communication was renamed Sustainability and Communication after the reallocation of full responsibility for communication and the brand to this unit. The organisational changes entered force on 1 May 2018.

4 Risk management and risk organisation

SBAB's risk taking is low and is kept at a level commensurate with financial targets for return, scope of own funds and target rating. The lending operations mainly generate credit risk, while the most significant risks in the funding operations consist of interest-rate risk and liquidity risk.

4.1 General rules for risk management

Risk management involves ensuring that SBAB is resilient in all types of situations and that the company has capital that guarantees that even unexpected risks can be managed.

- Risk management must support operations, maintain a high level of quality to ensure control of all risks, safeguard SBAB's survival, keep in line with rating targets and limit volatility in SBAB's financial position.
- The ability to assess, manage and price risks while simultaneously maintaining sufficient liquidity and capital to meet unforeseen events is of fundamental significance for long-term profitability and stability. The aim of the strategy adopted for the operations is to consider the risks that arise in the operations and the capital needed to cover these risks. This entails that an ongoing discussion should be maintained regarding the risks that arise in the operations and the capital required to counter those risks.
- SBAB is to have an independent risk control function to identify, measure, govern, report and maintain control of the risks that SBAB is or may become exposed to. The independent risk control function must have the requisite competence and mandate. There must be an effective risk management system and satisfactory internal control.
- SBAB must have knowledge and awareness of any risks to which the bank may be exposed. SBAB is to be able to estimate the size of the risks to which the bank is and may become exposed.
- All SBAB employees are responsible for managing the company's risks as part of their regular work. SBAB is to continuously inform and train its employees on the company's risk management framework. A sound risk culture is to be realised through a value-based work approach.

4.2 Risk strategy

SBAB's operations are to be conducted such that risks are adapted to SBAB's risk-bearing capacity. Risk-bearing capacity primarily refers to the capacity to manage expected and unexpected losses by means of own funds or ongoing earnings capacity and, secondly, the capacity to minimise unwanted risks by means of appropriate functions, strategies, processes, procedures, internal rules, limits and controls. Certain risks cannot be quantified and compared with the risk-bearing capacity. In such cases, the cost of mitigating the risk should be weighed up

against the desired level of risk and the change in the level of risk achieved through a particular measure.

SBAB should only deliberately expose itself to risks directly attributable or necessary to SBAB's business operations. Such risks primarily encompass credit risk, liquidity risk, market risk, business risk and operational risk.

In addition to limiting the exposure to different types of risk, the risks to SBAB from using different types of financial instruments must also be limited. In its treasury operations, SBAB should mainly use derivatives for hedging purposes. Since the risk profile of a derivative transaction may differ from that of the hedged exposure, an analysis must always be performed to ensure that the total risk is understood. This is especially important in the use of new financial instruments that must be approved in SBAB's process for new financial instruments prior to the transaction.

SBAB applies a documented process for the approval of new or significantly altered products, services, markets, processes and IT systems as well as major operational and organisational changes.

SBAB's risk strategy involves managing and evaluating risks that the operations are or may be exposed to, through:

- Clear and documented internal procedures and control systems.
- An appropriate and transparent organisational structure with clearly defined and documented powers.
- Current and documented decision-making procedures that clearly state the reporting structure.
- Risk evaluation methods and system support that are adapted to the operations' requirements, complexity and size.
- Sufficient resources and skills to achieve the desirable quality in both business and control activities.
- Regular incident reporting by the operations according to a documented process.
- Documented and communicated contingency and continuity plans.
- Clear instructions on internal capital adequacy assessments, credit risk, operational risk, liquidity risk and market risk, which are updated annually and adopted by the CEO or, if required, by the Board of Directors.
- All significant risks for SBAB are limited by the Board and are commensurate with the pre-determined risk appetite.

4.3 Risk appetite

The level of risk taking within SBAB is low. This is achieved by ensuring that the total risk level is kept compatible with short and long-term strategic plans, capital plans, financial plans and recovery plans.

An important part of SBAB's business model entails risks being relatively low and predictable, making it possible to maintain a large volume of business in relation to own funds. This does not mean that each individual credit exposure has low risk, but rather that the total lending portfolio consists largely of low-risk exposures and that their internal risk effect is such that SBAB's total risk is limited. The basis for SBAB's appetite for various types of risk is that each risk should fit within a well-defined segment of SBAB's risk-bearing capacity. The total risk exposure may not exceed the total risk-bearing capacity. The scope of the risk that is accepted must be clearly linked to how important the relevant risk is to SBAB's business model and the positive effects expected to be achieved in the form of anticipated income, cost savings or reduction of other risks.

As a rule, each business decision changes SBAB's exposure to various risk types. Accordingly, SBAB's risk control models are designed to reflect the determined risk appetite and such that each business decision is based on a healthy balance between the estimated impact on earnings and changes in risk exposure.

Based on the chosen strategy, ongoing earnings and the size of own funds, the Board of the Parent Company establishes the risk that SBAB is prepared to take and makes decisions regarding risk appetite targets. These targets are based on three main categories: solvency, liquidity risk and compliance. The solvency category encompasses the risks for which SBAB must retain capital, while liquidity risk encompasses the risks impacting SBAB's prerequisites for successful financing and liquidity management. Compliance, the third main category, encompasses the regulations and ethical standards SBAB must comply with to pursue its operations. Each category is broken down into subgroups with established limits for which outcomes are followed up on and reported monthly to the CEO and Board.

SBAB's targets for the three risk appetite categories:

- In the first category, solvency, work is conducted to ensure that SBAB maintains sufficient capital to conduct an operation in accordance with the adopted strategy, and that credit risk, market risk, operational risk, concentration risk and income-volatility risk are kept within the levels approved by the Board, and that minimum levels are maintained with regard to capital ratios.
- In the second category, liquidity risk, work is conducted to monitor that liquidity meets the determined minimum levels so that SBAB is able to cope with periods of strained market liquidity. It also includes ensuring that the SCBC's cover pool has a sufficient level of collateral to maintain a AAA rating in a stressed scenario.
- Regulatory compliance is essential in maintaining confidence in SBAB's operations. Even rules that are not legally binding, but that reflect a market practice or ethical guidelines, affect SBAB's approach to employees and customers. The risk appetite metric for the third category, compliance, is not quantifiable in the same way as the other categories — solvency and liquidity — but is summarised in a more preventive qualitative target.

SBAB is tasked with continuously, and at least annually, reassessing the balance between risks and risk-bearing capacity or the costs to minimise risk. The reassessment includes limits and calibration levels, and should be performed prior to the start of business planning, the internal capital and liquidity adequacy assessment processes (ICLAAP) and capital planning. The processes for business planning, ICLAAP and capital planning should then include a clear and documented link to risk appetite.

4.4 Limits for capital ratios and targets for capital

Each year, the Board considers capital requirements in relation to the risks to which SBAB is exposed. This is performed through a decision on limits for capital ratios.

Based on the chosen business strategy, rating targets and capital planning, the Board decided to adopt the following capital targets effective from 31 December 2018:

- The CET1 capital ratio should under normal conditions be at least 0.6 percentage points higher than the CET1 capital requirement communicated by the Swedish FSA.
- The total capital ratio should under normal conditions be at least 0.6 percentage points higher than the capital requirement communicated by the Swedish FSA.
- Under normal conditions, the leverage ratio should be at least 0.2 percentage points above the capital requirement communicated by the Swedish FSA, or 3%, whichever is higher.
- The MREL coefficient must be at least 5.1% and the debt share amount to at least 29.9% of REA in accordance with the decision of the Swedish National Debt Office (SNDO) for 2019.

At any given time, the capital requirement as communicated by the Swedish Financial Supervisory authority and which applies to CET1 capital, own funds requirements, the leverage ratio and the MREL must be met. Outcomes for the capital ratios are reported to the CEO and Board on a monthly basis. More detailed reporting of the current capital position in relation to established targets is performed quarterly. The CRO is responsible for this reporting.

TABLE 4. DECIDED TARGETS FOR RETURNS AND CAPITAL RATIOS

	TARGETS		OUTCOME		DIFFERENCE	
	2018	2017	2018	2017	2018	2017
Return on equity (owner's return requirement) ¹⁾ , %	10.0	10.0	12.1	12.5	2.1	2.5
CET1 capital ratio, %	10.6	27.3	12.5	32.2	1.9	4.9
Total capital ratio, %	14.7	37.7	18.1	47.6	3.4	9.9

¹⁾ Net profit for the year divided by average equity.

4.5 The three lines of defence

To define the division of responsibilities between the business operations, risk control and compliance, as well as internal audit, SBAB applies the division of roles and responsibilities resulting from the three lines of defence principle:

- The first line of defence refers to the day-to-day management of risks performed by the business operations that incur and own the risks.
- The second line of defence refers to the risk control (comprising the units for financial risk, capital, operational risk, and credit risk analysis and policies) and compliance functions. The risk control units are to ensure that risk awareness and acceptance are sufficient to be able to manage risks on a daily basis. They also have a supportive role and work to ensure that the business operations have the procedures, systems and tools required to maintain the daily management of risks, thereby ensuring that the business operations comply with applicable laws and regulations in risk control's sphere of responsibility. Compliance is to verify that the business operations adhere to laws and regulations and support the business operations within its area of responsibility.
- The third line of defence refers to the internal audit, which reviews and regularly assesses whether the company's organisation, governance processes, IT systems, models and procedures are appropriate and effective, and whether the company's internal controls are appropriate and effective. The internal audit is also tasked with reviewing and regularly assessing the company's risk management based on its adopted risk strategy and risk appetite.

4.6 Risk organisation

SBAB's Board bears the overarching responsibility for the company's total risk exposure and determines the risk policy, capital policy and risk appetite. It is the Board's responsibility to ensure that operations can be conducted with sound internal control so that SBAB's ability to meet its obligations is not compromised. When the Board determines the business strategy, it takes into account the risks that SBAB is and may be exposed to as well as the capital required to cover SBAB's risks.

The Board or its committees are to approve all significant methods, models and processes used in risk management. (For more information regarding the Board's committees, see the Corporate Governance Report in SBAB's Annual Report.) The Board and CEO should have a sound overall comprehension of these and a detailed understanding of the content of the risk reports submitted to them. The CRO is responsible for the Board and CEO receiving ongoing

FIGURE 3. THE THREE LINES OF DEFENCE



training in risk-related issues and for ensuring that new members are trained within two months of commencing their appointments.

The CEO is responsible for ongoing administration in accordance with the strategies, guidelines and governance documents adopted by the Board. The CEO is to ensure that the methods, models and processes forming part of the internal measurement and control of identified risks function as intended and are approved by the Board. In ALCO (Asset & Liability Committee), issues concerning capital management, liquidity preparedness,, overall strategy regarding market risk and limit issues are discussed. Above that issues related to finance strategy, balance sheet plan and internal price are discussed in front of CEO. The CEO also ensures, on an ongoing basis, that reporting to the Board by each unit, including the Risk Control function, is conducted in accordance with the relevant instructions. The CRO is responsible for the independent Risk Control function, which comprises identification, quantification, analysis, follow-up and reporting of all risks. The CRO is directly subordinate to the CEO and reports directly to the CEO and Board of Directors of SBAB.

Among other matters, the CRO is responsible for:

- At an overarching level, developing risk-taking strategies and ensuring that SBAB's risk-taking strategies are implemented in accordance with the Board's intentions, and that policies, instructions and processes facilitate relevant follow-up;
- Identifying, measuring, analysing and reporting risk exposure to the Board of Directors and CEO;
- Providing the Board of Directors and the CEO with a tangible and comprehensive overview of all risks in the institution;
- Designing proposals for the risk strategy and participating in all material risk management decisions;

- Having sufficient authority to influence strategic risk management decisions and being able to contact the Board of Directors directly; and
- Designing, implementing, ensuring reliability and following up SBAB’s risk classification system and its economic capital model.

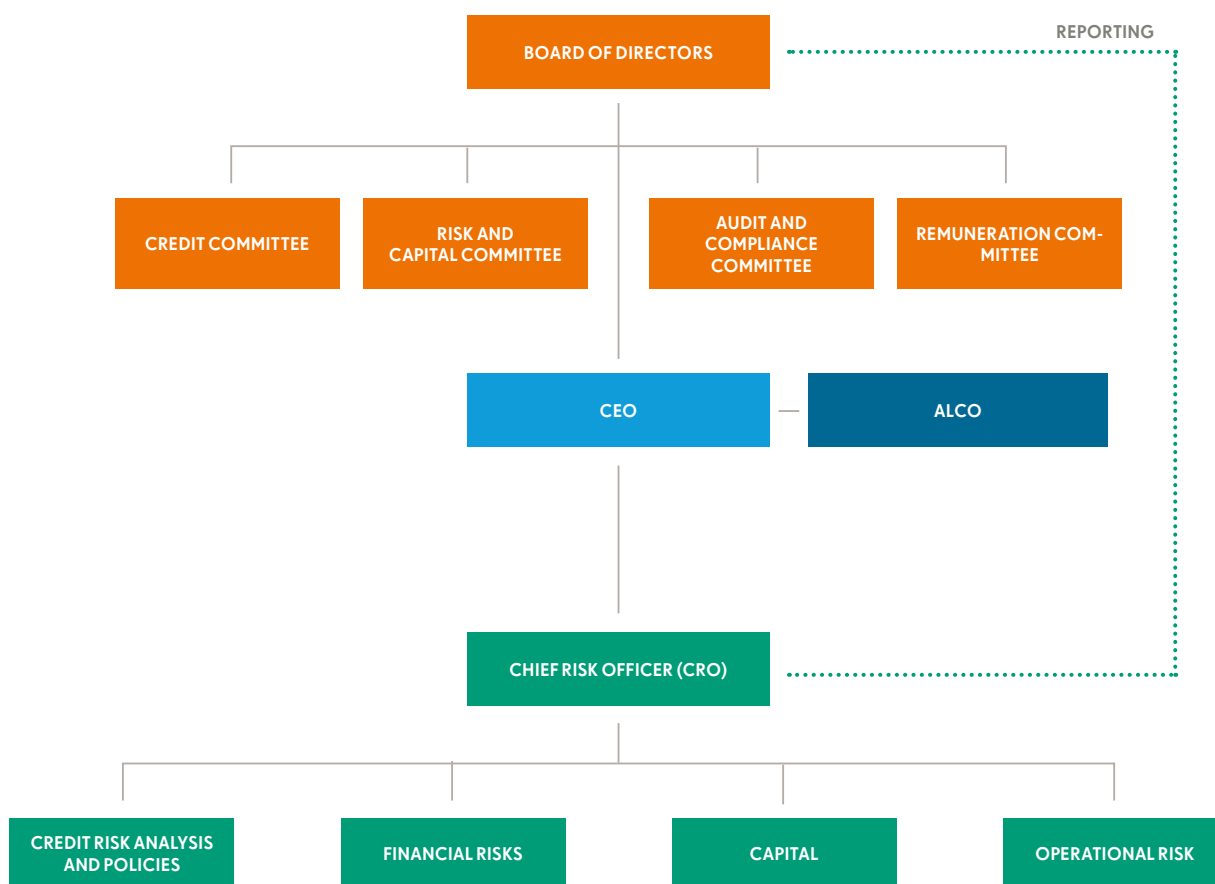
A monthly report on the overall risk situation and capital adequacy ratios is presented by risk control to the Board, the CEO and Executive Management. The Board and the CEO are also provided with a more in-depth description of risks on a quarterly basis. In addition, a daily report on current risk levels in relation to granted limits is presented to the CEO, CFO and CRO. SBAB’s Board and

Executive Management are thereby provided with a relevant overview of the Group’s risk exposure on a continuous basis.

Those who own the risks, i.e. the business operations, must, without delay, inform risk control of occurrences of significant events that could entail a heightened risk.

Clear ownership of risk and compliance applies in the first line of defence at SBAB. This is secured through an organisation comprised of risk and compliance coordinators in the first line of defence, who support the respective business managers with a focus on risk management, process mapping, internal controls, incident management and regulatory compliance.

FIGURE 4. RISK REPORTING



5 Capital adequacy

The rules for capital adequacy are stated in the CRR and CRD IV. In part, the rules serve to make institutions more resilient to new crises and, in part, to raise confidence in the institutions' ability to manage new crises. The institutions must prove to rating agencies and the investors who purchase the institutions' securities, as well as new and existing customers, that they have an adequate capital situation.

5.1 Capital requirements

The size of SBAB's capital requirement depends on laws and regulations, the company's internal assessment based on approved strategies, the assessments of investors and rating agencies, and the evaluations made by the owner, the Board and Executive Management.

Capital in accordance with Pillar 1, refers to the minimum amount of capital that the company is to have in accordance with the CRR and CRD IV, the EU's technical standards and delegated acts, the Special Supervision of Credit Institutions and Investment Firms Act (2014:968), the Capital Buffers Act (2014:966) and the Swedish FSA's regulations regarding prudential requirements and capital buffers (FFFS 2014:12). The total capital ratio including the additional amount under Pillar 2 amounted to 14.1% at 31 December 2018, and the CET1 capital requirement was 10.0%. The total capital ratio amounted to SEK 18.1% at 31 December 2018, and the CET1 capital ratio was 12.5%.

5.2 Capital requirements and buffers

The rules in the CRR and CRD IV entail, among other things, requirements in the Pillar 1 for a minimum level of own funds and controls on capital requirements. According to the requirements, the bank must have a CET1 capital ratio of at least 4.5%, a Tier 1 capital ratio of at least 6% and a total capital ratio at least equal to 8% of the total risk exposure amount for credit risk, market risk and operational risk.

5.2.1 Buffers

In addition to a total capital ratio of 8%, the bank must maintain CET1 capital to meet the combined buffer requirement, which in Sweden is the sum of a capital conservation buffer of 2.5% of the risk exposure amount, a countercyclical buffer of up to 2.5% and buffers for systemic risk of up to 5%.

The Swedish FSA has decided that, in addition to a capital conservation buffer of 2.5%, a countercyclical buffer of 2.0% will apply for Swedish exposures. In 2018, the Swedish FSA took a decision to raise the countercyclical buffer for Swedish exposures to 2.5% effective from 19 September 2019. The Swedish FSA has also decided to recognise countercyclical buffer values of up to 2.5% set by a competent authority in another EEA country, which means that Norwegian exposures are subject to a countercyclical buffer of 2.0%. From 31 December 2019, the countercyclical buffer value for Norwegian exposures is being raised to 2.5% following a decision by the Norwegian Ministry of Finance. United Kingdom exposures are subject to a countercyclical buffer of 1%. Furthermore, banks considered systemically important are subject to an additional capital requirement of 5% to be covered by CET1 capital. The banks in Sweden that are currently considered systemically important are: Handelsbanken, SEB, Swedbank and Nordea Hypotek. The buffer values are presented in Table 12, Risk exposure amounts and capital requirements.

5.2.2 Risk-weight floor for Swedish mortgages

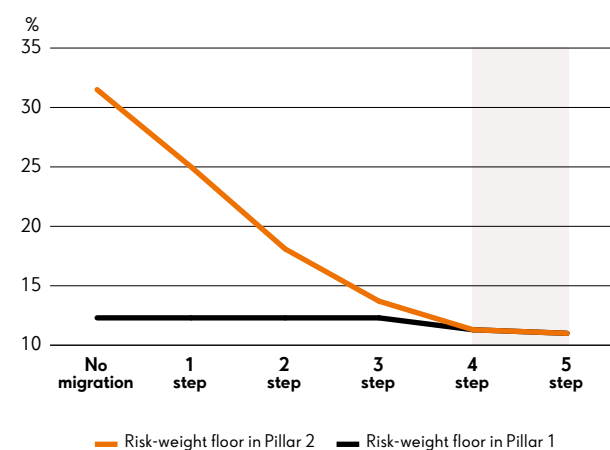
On 22 August 2018, the Board of Directors of the Swedish FSA decided to change the method for applying risk-weight floors for Swedish residential mortgages. The requirement that previously applied in Pillar 2 has, from 31 December 2018, been replaced with a corresponding requirement in Pillar 1 through activation of Article 458 of the CRR. The change applies for a period of two years, or alternatively, until the macroprudential risk ceases to exist. Under Article 458, the measure can be extended for one year at a time. The measure applies to credit institutions with Swedish mortgage exposures and to institutions with permission to apply an IRB approach for these exposures. SBAB and SCBC are subject to this measure.

5.2.2.1 Impact on SBAB

In nominal terms, SBAB's total capital requirement is not significantly affected by the amendment. The minimum requirement rises, as does the buffer requirement. At the same time, the Pillar 2 capital requirement decreases by a corresponding amount since the existing Pillar 2 requirement of 25% for residential mortgages is removed. However, this does entail an increase in the risk exposure amount of around SEK 71 billion. The consequence is that the capital ratios and the capital requirement expressed as a percentage of the risk exposure amount decreases, while the difference in absolute terms is negligible. SBAB's capacity to meet the total capital requirement is unaffected.

Figure 5 illustrates the CET1 capital ratio in the case of a downgrade in the PD risk class for the entire mortgage portfolio given a risk-weight floor in Pillar 2 and Pillar 1, respectively. The risk sensitivity of the capital ratio is maintained with the floor in Pillar 2. Accordingly, deterioration of PD risk class contributes naturally to declines in capital ratios. With a risk-weight floor in Pillar 1, an insensitive and essentially static capital ratio is obtained, which requires the entire mortgage portfolio to decline by at least four migration stages to obtain a response from the capital ratio. The effect will be standardized, this means that SBAB's capital ratios will at an early stage be phased in to the effects from the completion of Basel III (also known as "Basel IV"). Therefore, it is very important to emphasize that SBAB's actual risk or requirements in real terms are not affected by the change. Capital ratios are affected by a fall in levels but, after the change, will no longer represent the actual risks in the portfolio and would mostly stay at more static levels.

FIGURE 5. RISK-WEIGHT FLOOR



5.2.3 Regulatory changes

The rate of change in the regulatory frameworks has remained high. Known, forthcoming regulatory changes are presented below:

- The EBA published new guidelines pertaining to disclosure requirements for non-performing and forborne exposures that apply from 31 December 2019.
- Over the year, the Basel Committee presented additional proposals for changes aimed at increasing transparency and making institutions more resilient to disruptions in the market, for example, new guidelines for the application of the disclosure requirements under Chapter 8 of the CRR.
- The Swedish FSA has introduced new regulations and general guidelines for managing credit risks, which enter into force on 1 March 2019. The regulations include rules regarding how companies should identify, measure, govern, report internally and exercise control over credit risks. They also include rules for how the companies should conduct credit assessments. The aim of the regulations is to improve credit risk management at credit institutions and securities companies. The impact on SBAB's operations is assessed as manageable and, in autumn 2018, work was carried to secure compliance with the regulations.
- The new lease standard (IFRS 16) was implemented on 1 January 2019, and entails the recognition of a lease as an asset (right-of-use) and a liability in the lessee's balance sheet. In 2018, SBAB completed analysis of all contracts, which has resulted in rental contracts for premises becoming subject to SBAB's application of IFRS 16. These contracts were classified as operating leases under IAS 17. On transition on 1 January 2019, SBAB will recognise, in its consolidated situation, a tangible asset with respect to lease contracts identified pursuant to IFRS 16 of SEK 88 million according to the simplified approach. A risk weight of 100% is applied for the tangible asset pursuant to Article 134, item 7 of the CRR. The effect on profit or loss is deemed limited and will therefore not materially affect SBAB's own funds.
- The EBA has initiated an extensive effort aimed at harmonising the banks' internal ratings-based (IRB) systems used to cover capital requirements for credit risk. Harmonisation comprises two parts. The first part is the new regulatory requirements that clarify the definition of default and the thresholds for materiality pursuant to Article 178(1) of the CRR. The second part concerns the parameter estimates of PD and LGD, and their respective calibration against long-term default frequencies and credit losses after taking into account economic downturn periods. Through clarification of the regulatory requirements in these areas, the EBA hopes to achieve a consensus among the banks, whereby the same underlying credit risks are covered to an equal extent. The new regulatory requirements apply from 1 January 2021 and will affect all of SBAB's IRB models. At the start of 2020, SBAB is expected to apply for a new permission from the Swedish FSA for the adapted IRB system.
- The European Commission has submitted proposals for amendment of the CRR, which aim to reduce the share of non-performing loans. The proposal entails a minimum level for how much an institution should set aside to cover any future losses on non-performing loans. This is conducted by making a deduction from the institution's CET1 capital. The impact on SBAB's own funds is expected to be marginal.

TABLE 5. GEOGRAPHIC DISTRIBUTION OF EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL BUFFER

Countercyclical buffer by country, SEK million	GENERAL CREDIT EXPOSURES		TRADING BOOK EXPOSURES		SECURITISATION EXPOSURES		CAPITAL REQUIREMENTS					
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total	Own funds requirements weights	Countercyclical capital buffer rate
Sweden	35,123	373,687	-	-	-	-	2,479	-	-	2,479	80.24	2.00
Norway	2,089	-	-	-	-	-	17	-	-	17	0.54	2.00
Other	41,728	-	-	-	-	-	594	-	-	594	19.22	-
Total	78,940	373,687	-	-	-	-	3,090	-	-	3,090	100.00	-

TABLE 6. AMOUNT OF INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER

SEK million	
Total risk exposure amount	114,141
Institution-specific countercyclical capital buffer rate, %	1.99
Institution-specific countercyclical buffer requirement	2,266

5.3 Own funds

SBAB's own funds comprise equity as well as additional Tier 1 capital and Tier 2 capital consisting of subordinated loans. SBAB's own funds amounted to SEK 20,713 million at 31 December 2018. Over the year, CET1 capital was affected by the fact that net profit/loss for the period was added and the estimated dividend deducted, in accordance with SBAB's dividend policy. The surplus has been verified by the company's auditors, in accordance with Article 26, item 2, of the CRR.

According to Article 35 of the CRR, the institution shall, except in the case of the items referred to in Article 33, not make adjustments to remove from own funds unrealised gains or losses on assets or liabilities recognised at fair value. According to this Article, SEK 609 million have been added to CET1 capital.

According to Article 33, item 1, of the CRR, the part of the fair-value reserves related to gains or losses on cash-flow hedges of financial instruments that are not valued at fair value, including

projected cash flows, is not to be included in own funds. The CET1 capital has been adjusted for cash-flow hedges amounting to SEK 488 million.

Changes in fair value that depend on the institution's own credit standing and that are related to derivatives had a negative impact of SEK 65 million on CET1 capital, in accordance with Article 33, item 1b.

With reference to Articles 34 and 105 of the CRR, SEK 59 million has been deducted from CET1 capital due to the requirements for prudent valuation.

A deduction of SEK 126 million for intangible assets and a deduction of SEK 50 million for net provisions were made in accordance with Article 36 of the CRR. An addition for an IRB surplus, under Article 62, item d of the CRR, had an impact of SEK 3 million on own funds in December 2018.

No risk exposures have been deducted from own funds.

Disclosure of own funds

Disclosures in accordance with Article 4 of Commission Implementing Regulation (EU) No 1423/2013, Annex V.

TABLE 7. OWN FUNDS

Consolidated situation, SEK million	31 Dec 2018	31 Dec 2017
CET1 capital instruments: Instruments and reserves		
Capital instruments and the related share premium accounts	1,958	1,958
Retained earnings	11,443	10,452
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	609	189
Additional Tier 1 instruments	1,500	1,500
Independently verified net profit for the year net of any foreseeable charge or dividend	1,041	1,026
CET1 capital before regulatory adjustments	16,551	15,125
CET1 capital: Regulatory adjustments		
Additional value adjustments (negative amount)	-59	-62
Intangible assets (net of related tax liability) (negative amount)	-126	-83
Fair value reserves related to gains or losses on cash-flow hedges	-488	9
Negative amounts resulting from the calculation of expected loss amounts	-50	-29
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-65	-17
Additional Tier 1 instruments in equity	-1,500	-1,500
Total regulatory adjustments to CET1 capital	-2,288	-1,682
CET1 capital	14,263	13,443
Additional Tier 1 capital: Instruments		
Capital instruments and the related share premium accounts	3,000	3,000
<i>of which: classified as equity under applicable accounting standards</i>	1,500	1,500
<i>of which, classified as liabilities under applicable accounting standards</i>	1,500	1,500
Amount of qualifying items referred to in Article 484(4) and the related share premium accounts subject to phase out from Additional Tier 1 capital	-	-
Additional Tier 1 capital before regulatory adjustments	3,000	3,000
Additional Tier 1 capital: Regulatory adjustments		
Total regulatory adjustments to Additional Tier 1 capital	-	-
Additional Tier 1 capital	3,000	3,000
Tier 1 capital (Tier 1 capital=CET1 + Additional Tier 1 capital)	17,263	16,443
Tier 2 capital: Instruments and provisions		
Capital instruments and the related share premium accounts	3,447	3,447
Credit risk adjustments	3	-
Tier 2 capital before regulatory adjustments	3,450	3,447
Tier 2 capital: Regulatory adjustments		
Total regulatory adjustments to Tier 2 capital	-	-
Tier 2 capital	3,450	3,447
Total capital (Total capital=Tier 1 capital + Tier 2 capital)	20,713	19,890
Total risk exposure amount	114,141	41,797
Capital ratio and buffers		
CET1 capital (as a percentage of total risk-weighted exposure amount), %	12.5	32.2
Tier 1 capital (as a percentage of total risk-weighted exposure amount), %	15.1	39.3
Total capital (as a percentage of total risk-weighted exposure amount), %	18.1	47.6
Institution-specific buffer requirements (CET1 capital requirement in accordance with Article 92(1)(a) plus the capital conservation buffer and countercyclical capital buffer requirements, plus the systemic risk buffer, plus the systemically important institution buffers (G-SII buffer and O-SII buffer) expressed as a percentage of the risk-weighted exposure amount, %	9.0	9.0
<i>of which, CET1 capital, minimum requirement, %</i>	4.5	4.5
<i>of which, capital conservation buffer requirement, %</i>	2.5	2.5
<i>of which, countercyclical buffer requirement, %</i>	2.0	2.0
<i>of which, systemic risk buffer requirement, %</i>	-	-
<i>of which, G-SII buffer and O-SII buffer, %</i>	-	-
CET1 capital available to meet buffers (as a share of risk-weighted exposure amounts, %)	8.0	27.7
Capital instruments subject to phase-out arrangements (only applicable between 1 January 2014 and 1 January 2022)		
Current cap on AT1 instruments subject to phase-out arrangements	-	-
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-
Current cap on T2 instruments subject to phase-out arrangements	-	-

There are no ongoing or foreseen material obstacles or other legal barriers to a rapid transfer of funds from own funds other than what is stipulated in the terms and conditions governing subordinated loans (see Note L:7 in SBAB's Annual Report for 2018) or what generally applies under the Companies Act (2005:551).

The starting capital required for the Parent Company in accordance with the Act on Banking and Financing Activities (2004:297) totalled SEK 45.9 million. The corresponding capital requirement for SCBC amounted to SEK 47.0 million.

TABLE 8. CAPITAL ADEQUACY¹⁾

SEK million	CONSOLIDATED SITUATION		PARENT COMPANY		SCBC	
	2018	2017	2018	2017	2018	2017
CET1 capital	14,263	13,443	6,398	7,127	15,250	16,710
Tier 1 capital	17,263	16,443	9,398	10,127	15,250	16,710
Total capital	20,713	19,890	12,845	13,574	15,253	16,710
Risk exposure amount	114,141	41,797	36,404	31,776	89,188	21,422
CET1 capital ratio, %	12.5	32.2	17.6	22.4	17.1	78.0
Excess ²⁾ of CET1 capital	9,127	11,563	4,760	5,697	11,237	15,746
Tier 1 capital ratio, %	15.1	39.3	25.8	31.9	17.1	78.0
Excess ²⁾ of Tier 1 capital	10,415	13,936	7,214	8,221	9,899	15,424
Total capital ratio, %	18.2	47.6	35.3	42.7	17.1	78.0
Excess ²⁾ of total capital	11,582	16,547	9,933	11,032	8,118	14,996

¹⁾ The risk exposure amount, the excess and capital ratios have been impacted by the risk-weight floor for residential mortgages.

²⁾ Excess capital has been calculated based on minimum capital requirements (without buffer requirements).

TABLE 9. RESULTS BEFORE SHIFT OF RISK-WEIGHT FLOOR FOR SWEDISH MORTGAGE LOANS¹⁾

	2018
Risk exposure amount, SEK million	43,422
CET1 capital ratio, %	32.8
Tier 1 capital ratio, %	39.8
Total capital ratio, %	47.7

¹⁾ The table illustrates what the capital situation would have been if the risk-weight floor had not been moved. This information is solely for comparative purposes.

5.3.1 Subordinated loans

The subordinated loans are subordinate to the Parent Company's other liabilities, and the subordinated loans included in Tier 1 capital are subordinate to other subordinated loans. For a specification of own funds and the terms and conditions for subordinated loans in accordance with Commission Implementing Regulation (EU) No 1423/2013, please refer to the information under "Capital adequacy & risk management" at www.sbab.se. The complete terms and conditions of the subordinated loans are also specified at www.sbab.se.

TABLE 10. SUBORDINATED LOANS, SEK million

ISIN	Currency	Nominal amount	Nominal amount outstanding	First possible redemption date	Interest rate after first possible redemption date, %			Maturity date	Included in own funds as Additional Tier 1 capital	Included in own funds as Tier 2 capital
					Interest rate, %	Interest rate after first possible redemption date, %	Interest rate after first possible redemption date, %			
XS1202975386	SEK	400	400	16 Mar 2020	3.8245%	3m STIBOR +3.25%	Perpetual	400	-	
XS1202987985	SEK	1,100	1,100	16 Mar 2020	3m STIBOR +3.25%	3m STIBOR +3.25%	Perpetual	1,100	-	
XS1245415812	SEK	1,000	1,000	11 Jun 2020	3m STIBOR +1.30%	3m STIBOR +1.30%	11 Jun 2025	-	1,000	
XS1317715842	SEK	600	600	10 Nov 2020	2.25%	3m STIBOR +1.90%	10 Nov 2025	-	597	
XS1317716147	SEK	1,850	1,850	10 Nov 2020	3m STIBOR +1.90%	3m STIBOR +1.90%	10 Nov 2025	-	1,850	
XS1412406503	SEK	775	775	21 Jun 2021	5.052%	3m STIBOR +4.75%	Perpetual	775	-	
XS1412408897	SEK	725	725	21 Jun 2021	3m STIBOR +4.75%	3m STIBOR +4.75%	Perpetual	725	-	
Total		6,450	6,450					3,000	3,447	

5.4 Regulatory capital requirement

When calculating capital requirements, each exposure is allocated to an exposure class, either using the standardised or the IRB approach. Table 12 shows the individual risk exposure amounts distributed by exposure class.

The capital requirement for credit risk rose slightly over the year due to derivative transactions. The capital requirement for credit risk, excluding counterparty risk, declined over the year due to positive migrations of PDs measuring the probability of default. This is also in line with the historically low default frequencies that were observed over the year. The capital requirement for market risk declined due to the entire liquidity portfolio being transferred from the trading book to the banking book. This has resulted in SBAB no longer having interest-rate risk in Pillar 1 and only having currency risk.

TABLE 11. OVERVIEW OF RWAS (EBA OV1 TABLE)

SEK million	RWAs		Minimum capital requirement	
	2018	2017	2018	2017
Credit risk (excluding CCR)	31,423	31,644	2,513	2,532
of which the standardised approach	7,199	6,917	575	554
of which the foundation IRB (FIRB) approach	12,128	12,258	970	981
of which, the advanced IRB (AIRB) approach	12,096	12,469	968	997
CCR	6,661	4,850	533	388
of which the standardised approach	3,776	2,592	302	207
of which credit valuation adjustment (CVA) risk	2,885	2,258	231	181
Market risk	999	1,159	80	93
of which the standardised approach	999	1,159	80	93
Operational risk	4,339	4,144	347	331
of which the standardised approach	4,339	4,144	347	331
Adjustment for the Basel 1 floor	-	-	-	12,096
Additional stricter prudential requirements under Article 458 of the CRR	70,719	-	5,658	-
Total	114,141	41,797	9,131	15,439

TABLE 12. RISK EXPOSURE AMOUNTS AND CAPITAL REQUIREMENTS

SEK million	Risk exposure amount 31 Dec 2018	Capital requirement 31 Dec 2018	Risk exposure amount 31 Dec 2017	Capital requirement 31 Dec 2017
Credit risk recognised in accordance with IRB approach				
Exposures to corporates	12,128	970	12,258	981
Retail exposures	12,096	968	12,469	997
- of which, exposures to SMEs	829	67	1,160	93
- of which, retail exposures secured by immovable property	11,267	901	11,309	904
Total exposures recognised with the IRB approach	24,224	1,938	24,727	1,978
Credit risk recognised with the standardised approach				
Exposures to governments and central banks	0	0	0	0
Exposures to regional governments or local authorities or agencies	0	0	0	0
Exposures to multilateral development banks	0	0	0	0
Exposures to institutions ¹⁾	3,777		2,593	207
- of which, derivatives according to CRR, Appendix 2	3,776	302	2,583	206
- of which, repos	-	-	9	1
- of which, other	1	0	1	0
Retail exposures	2,236	179	2,193	175
Exposures in default	10	1	11	1
Exposures in the form of covered bonds	3,593	287	3,282	263
Exposures to institutions and corporates with a short-term credit rating	16	1	21	2
Equity exposures	1,116	89	1,078	86
Other items	227	18	331	27
Total exposures recognised with standardised approach	10,975	877	9,509	761
Market risk	999	80	1,159	93
- of which, position risk	-	-	413	33
- of which, currency risk	999	80	746	60
Operational risk	4,339	347	4,144	331
Credit valuation adjustment risk	2,885	231	2,258	181
Additional stricter prudential requirements under Article 458 of the CRR	70,719	5,658	-	-
Total risk exposure amount and minimum capital requirements	114,141	9,131	41,797	3,344
Capital requirements for capital conservation buffer		2,854		1,045
Capital requirements for countercyclical buffer		2,266		829
Total capital requirements		14,251		5,218

¹⁾ The risk-weighted amount for counterparty risk according to the CRR, Article 92(3)(f), amounts to SEK 3,776 million (2,592).

TABLE 13. STANDARDISED APPROACH (EBA CR5 TABLE)

Exposure class, SEK million	0%	10%	20%	50%	75%	100%	150%	1,250%	Deducted ²⁾	Total	Of which,
											unrated
Central governments or central banks	25,266	-	-	-	-	-	-	-	-	25,266	-
Regional governments or local authorities	12,081	-	-	-	-	-	-	-	-	12,081	-
Multilateral development banks	2,443	-	-	-	-	-	-	-	-	2,443	-
Institutions ¹⁾	-	-	2,747	6,455	-	-	-	-	-	9,202	-
Retail	-	-	-	-	2,982	-	-	-	-	2,982	2,982
Exposures in default	-	-	-	-	-	7	2	-	-	9	9
Covered bonds	-	35,929	-	-	-	-	-	-	-	35,929	-
Institutions and corporates with a short-term credit rating	-	-	80	-	-	-	-	-	-	80	-
Equity	-	-	-	-	-	-	-	89	-	89	-
Other items	154	-	-	-	-	227	-	-	-	381	381
Total	39,944	35,929	2,827	6,455	2,982	234	2	89	-	88,462	3,371

¹⁾ The calculation includes counterparty risk.

²⁾ The exposure class, "other items" includes those items deducted from own funds. Capital adequacy for these is calculated with a risk weight of 0%.

Capital adequacy

TABLE 14. DIFFERENCES BETWEEN ACCOUNTING AND REGULATORY SCOPES OF CONSOLIDATION AND MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY RISK CATEGORIES (EBA TABLE LI1)¹⁾

Balance sheet, SEK million	Carrying values					
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to CCR framework	Subject to the market risk framework ²⁾	Not subject to capital requirements or subject to deduction from capital base ³⁾
Assets						
Cash and balances at central banks	0	0	0	-	-	-
Treasury bills, etc. ⁴⁾	20,904	20,904	23,419	-	-	-
Lending to credit institutions ⁴⁾	2,847	2,847	80	252	-	-
Lending to the public	364,215	364,215	364,215	-	-	-
Value changes of interest-rate-risk hedged items in macro hedges	99	99	99	-	-	-
Bonds and other interest-bearing securities	50,945	50,945	50,945	-	-	-
Derivatives	8,313	8,313	-	8,313	-	-
Share in subsidiaries	0	89	89	-	-	-
Intangible assets	234	154	154	-	-	-
Property, plant and equipment	16	14	14	-	-	-
Other assets	73	68	68	-	-	-
Prepaid expenses and accrued income	709	707	707	-	-	-
Total assets	448,355	448,355	439,790	8,565	-	-
Liabilities						
Liabilities to credit institutions	6,606	6,606	-	6,606	-	-
Deposits from the public	124,926	124,926	-	-	-	-
Debt securities issued	290,795	290,795	-	-	-	-
Derivatives	1,339	1,339	-	1,339	-	-
Other liabilities	384	384	-	-	-	-
Accrued expenses and deferred income	1,790	1,786	-	-	-	-
Deferred tax liabilities	194	195	-	-	-	-
Provisions	138	138	-	-	-	-
Subordinated debt	4,946	4,946	-	-	-	-
Total liabilities	431,118	431,115	-	7,945	-	-

¹⁾ The table does not include operational risk or CVA risk.

²⁾ Following the implementation of IFRS 9, SBAB no longer has any interest-rate risk and only has currency risk. The table does not specify carrying values for currency risk.

³⁾ The exposure class, "other items" includes those items deducted from own funds. Capital adequacy for these is calculated with a risk weight of 0%.

⁴⁾ Deposits amounting to SEK 2.5 billion are recognised in the balance sheet under the item Lending to credit institutions and are classified for capital adequacy purposes under Chargeable treasury bills, etc.

TABLE 15. MAIN SOURCES OF DIFFERENCES BETWEEN REGULATORY EXPOSURE AMOUNTS AND CARRYING VALUES IN FINANCIAL STATEMENTS (EBA TABLE LI2)

SEK million	Items subject to				
	Total	Credit risk framework ¹⁾	CCR framework ¹⁾	Securitisation framework	Market risk framework ¹⁾
Assets carrying value amount under the scope of regulatory consolidation	448,355	439,790	8,565	-	-
Liabilities carrying value amount under the regulatory scope of consolidation	7,945	-	7,945	-	-
Total net amount under the regulatory scope of consolidation	440,410	439,790	620	-	-
Off-balance-sheet amounts	37,535	37,535	-	-	-
Differences due to different netting rules, other than those already included in Liabilities carrying value amount under the regulatory scope of consolidation	8,580	-	8,580	-	-
Differences due to prudential filters	131	131	-	-	-
Differences in valuations	-	-	-	-	-
Exposure amounts considered for regulatory purposes	486,656	477,456	9,200	-	-

¹⁾ The framework for counterparty risk and market risk encompasses REAs from derivatives and repos under Pillar 1. Since the implementation of IFRS 9, REAs for bonds are only encompassed by the framework for credit risk under Pillar 1, due to the transfer of all of the bond holdings in the trading book to the banking book.

5.5 Credit risk mitigation techniques

Credit risk mitigation used for IRB exposures consists of government and municipal guarantees. These are recognised using the standardised approach for credit risk.

TABLE 16. STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION (CRM) EFFECTS (EBA CR4 TABLE)

aryExposure classes, SEK million	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA Density (%)
Central governments or central banks	25,221	–	25,266	–	–	–
Regional governments or local authorities	11,295	–	12,081	–	–	–
Multilateral development banks	2,443	–	2,443	–	–	–
Institutions ¹⁾	2	–	2	–	0	0
Retail	2,784	990	2,784	198	2,236	75
Exposures in default	9	–	9	–	10	110
Covered bonds	35,929	–	35,930	–	3,593	10
Institutions and corporates with a short-term credit rating	80	–	80	–	16	20
Equity	89	–	89	–	1,116	1,250
Other items	381	–	381	–	227	60
Total	78,233	990	79,065	198	7,198	9

¹⁾ The institution exposure class excludes counterparty risk.

TABLE 17. EXPOSURE AMOUNTS BEFORE AND AFTER CREDIT RISK MITIGATION BY CREDIT QUALITY STEP

Credit quality step, SEK million	Exposure amount before credit risk mitigation measures	Exposure amount after credit risk mitigation measures
1	78,545	78,545
2	6,438	6,438
3	17	17
4	–	–
5	–	–
6	–	–
Total	85,000	85,000

TABLE 18. CREDIT RISK MITIGATION TECHNIQUES - OVERVIEW (EBA CR3 TABLE)

SEK million	Exposures unsecured – carrying amount	Exposures secured – carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total – loans	12,353	352,012	351,257	755	–
Total – debt securities	74,887	–	–	–	–
Total exposures	87,240	352,012	351,257	755	–
Of which defaulted	10	229	229	–	–

5.6 Securitised assets

The SBAB Group has no securitised loans of its own and has not contributed to any other institution's securitisation.

SBAB has no overdue exposures in respect of securitisations and no re-securitisations, and no securitised rolling exposures.

5.7 Rating

SBAB uses ratings from all three approved rating agencies: Moody's, Standard & Poor, and Fitch.

When external ratings are used, the two lowest ratings from Moody's, Fitch or Standard & Poor's are selected in accordance with Article 138 of the CRR. External ratings are used for exposures to governments and central banks, regional governments or local authorities and agencies, multilateral development banks, institutions or corporates with a short-term credit rating, and exposures in the form of covered bonds. The association of the external rating provided by credit rating agencies with the credit quality steps prescribed in the CRR complies with the standard association published by the EBA (refer to Table 26, Relationship between internal and external rating).

6 Internally assessed capital requirement

The internal capital adequacy assessment aims to ensure that SBAB has adequate capital under normal circumstances and in the event of financial problems. The Board of Directors and Executive Management are responsible for the internal capital adequacy assessment. Within the framework of the internal capital and liquidity adequacy assessment processes (ICLAAP), SBAB applies an economic capital model for its internally assessed capital requirement. At present, liquidity risk does not give rise to any actual capital requirement for SBAB. The ICLAAP is designed to ensure an equal balance between risks, capital and liquidity. Refer to Chapter 13 for more information on liquidity risk.

6.1 Internal capital adequacy assessment in line with Pillar 2 of the Basel regulations

Pillar 2 of the Basel 3 regulations imposes the requirement that the banks' management and assessment of risks must be satisfactory to ensure that the banks can fulfil their obligations. To meet this requirement, the banks must have methods that enable them to continuously evaluate and uphold capital in an amount, type and distribution sufficient to cover the risks to which they are or could become exposed. This is called the internal capital and liquidity adequacy assessment process (ICLAAP).

The operations conducted by SBAB affect the size of the risk taken by the company, which in turn impacts the size and nature of the capital required to manage unforeseen losses. The size of the capital in turn affects the price of individual transactions for customers. The better SBAB can manage and assess the risk, the more accurately the scope of the capital utilised in the individual transaction can be assessed, thereby enabling the risk-adjusted return for the transaction to be calculated.

SBAB's internally assessed capital requirement comprises the minimum capital requirement under Pillar 1, the capital requirement under Pillar 2 and buffer requirements. The Pillar 2 capital requirement assesses the additional capital required, over and above Pillar 1, for the risks where a capital requirement has been identified in Pillar 2. This assessment is based on SBAB's economic capital model. If the economic capital for each risk class exceeds the capital requirement in Pillar 1, an additional amount applies under Pillar 2. The capital requirement under Pillar 2 also assesses risk classes not covered by Pillar 1. Moreover, a number of buffer requirements also apply. In addition to the buffer requirement under Pillar 1, SBAB calculates a capital planning buffer to cover any downgrade of the capital adequacy in the event of severe but plausible financial stress.

When determining the size of the capital requirement, assessments of investors and rating agencies regarding the company's capital requirements compared with the capital held by the company are also taken into account. The views of rating agen-

cies are reflected in SBAB's rating, which directly impacts the company's funding cost.

The quality and utilisation of risk information are essential to SBAB's long-term competitiveness in the market. The purpose of the internal capital adequacy assessment process (ICAAP) is to ensure that the company identifies, measures, secures and manages the risks to which SBAB is exposed and that SBAB has own funds that are compatible with the selected risk appetite. The process is revised annually to capture changes in the operating environment that continuously affect the company's performance.

6.2 Process for internal calculation of capital requirements

As part of SBAB's process for establishing internally calculated capital requirements, the risks generated in the operations are identified initially. Risk Control is responsible for the quantification of all risks. Various models are used depending on the risk to be measured. The economic capital model is used to calculate capital requirements for quantifiable risks.

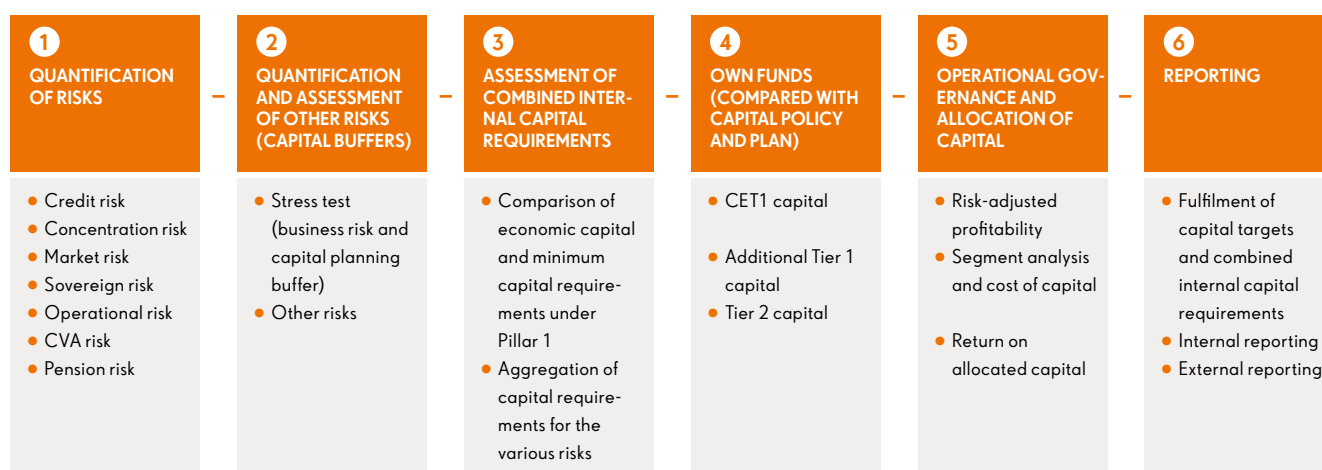
SBAB uses stress tests to assess the impact on the capital requirement during a normal economic downturn and during severe but plausible financial stress.

In addition to economic capital, capital buffers are reserved for capital requirements caused by stress tests and for pension risk, which are all included in the internal capital requirement. The combined results are followed up and analysed, for both short and long-term effects, in terms of capital planning and forecasts. The compiled results of the internal capital adequacy assessment are reported to the Board and CEO. Finally, the Board and CEO adopt the process and the results of the company's internal capital adequacy assessment.

6.3 Internal capital adequacy assessment components

SBAB's internal assessment of the capital requirement takes into consideration the minimum requirements under Pillar 1, the Pillar 2 core requirement, the risk-weight floor for Swedish residential mortgages, buffer requirements, stress tests and the capital plan-

FIGURE 6. INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS



ning buffer. It is used to control and monitor profitability in the company's operations and for strategic considerations.

The capital requirements for credit risk, including concentration risk and sovereign risk, market risk, operational risk and CVA risk are quantified in SBAB's economic capital model. Economic capital for credit risk and market risk is defined as the amount of capital needed to ensure solvency over a one-year period, given a predetermined confidence interval. The confidence interval is chosen to reflect the company's target rating. In SBAB's case, the confidence level is 99.97%, which corresponds to the long-term AA- target rating (according to Standard & Poor's ratings scale). In addition to the capital requirement that is quantified with SBAB's economic capital model, an additional capital requirement arises from the risk-weight floor for Swedish residential mortgages, pension risk, and any additions in the form of business risk and the capital planning buffer. Refer to Table 19 for the internally calculated capital requirements per risk type.

6.3.1 Credit risk

Credit risk in lending operations is the dominant risk in SBAB's operations. Credit risk in lending operations is defined as the risk of loss due to the customer's or the counterparty's inability to make interest and loan repayments or otherwise fulfil the loan agreement. Lending is conducted to consumers, tenant-owners' associations and companies. Aside from through lending and loan commitments, credit risk also arises in treasury operations through derivative counterparties and through investment risk for investments in the liquidity portfolio.

6.3.1.1 Credit risk in lending operations

In the economic capital model, credit risk is calculated using the Basel framework's formulas for capital requirements for credit risk. However, these have been modified by adding further safety margins to the required correlation assumptions applied. Moreover, the capital requirement is calculated to a confidence level of 99.97%, rather than to 99.9% as applied in the original formula. However, in the economic capital calculation, which is the

base for SBAB's risk-adjusted follow-up, the prescribed LGD floors of 10% and 15%, respectively, are not applied. This is because economic capital, in contrast to the IRB approach applied in the regulatory framework, should be sensitive to the LTV ratio for all exposures.

The formula applied by the Basel framework for calculating capital requirements under Pillar 1 does not take into account any concentration effects in the loan portfolio. In this model, the capital requirement for a single exposure is independent of the loan's portfolio and is based solely on PD, LGD and EAD for the specific exposure. Therefore a supplement for concentration risk must be made to quantify SBAB's compiled credit risk, including concentration risk.

6.3.1.2 Risk-weight floor for Swedish mortgages

In August 2018, the Swedish FSA decided to apply the existing risk-weight floor for mortgages applied in Pillar 2 as a requirement within the framework of Article 458 of the CRR. The amendment entered force from 31 December 2018 and applies for two years. The change means the capital requirement is set as a requirement in Pillar 1. The credit institutions encompassed by the measure are those authorised to use the IRB approach and which have exposures to Swedish residential mortgages. The branches of foreign credit institutions in Sweden that are exposed to Swedish residential mortgages and which apply the IRB approach for these may also be affected.

6.3.1.3 Credit risk in treasury operations

Credit risk arises in treasury operations, in part, in the form of counterparty risks for the derivative contracts entered into by SBAB to manage its financial risks and, in part, in the form of investment risk as a result of investments in the liquidity portfolio and the investment of surplus liquidity. Calculation of the exposure value for counterparty risk is based on the mark-to-market approach and the majority of the exposure is covered through collateral agreements.

The assessment of credit risk in treasury operations is based on the same principles as for lending operations. The material difference to lending operations is that the PD is set based on the counterparty's external rating and the LGD is set based on the type of instrument (derivative, covered bond, etc.).

6.3.1.4 Sovereign risk

SBAB has central government exposures in its treasury operations and lending operations, which are allocated a risk weight of 0% under Pillar 1. SBAB uses sovereign risk as a risk class in its economic capital model and quantifies the internally assessed capital requirement from sovereign risk. Sovereign risk is calculated on foreign exposures with the risk-weight formula for institutions using an LGD of 45%, and where the PD is set based on the counterparty's external rating.

6.3.1.5 Credit-related concentration risk

Concentration risk arises when exposures are concentrated to certain counterparties, regions or industries. SBAB is considered to be exposed to credit risk related concentration risk in its lending and treasury operations. The entire capital requirement for concentration risk is included in the economic capital for credit risk.

SBAB calculates the concentration risk divided into single-name concentration, industry concentration and sector concentration (geographic concentration). SBAB's method for single-name concentration is based on a method developed by Gordy & Lutkebohmert (2007) while industry and sector concentration is based on a method based on the Herfindahl index.

Upon calculation at 31 December 2018, the internally calculated capital requirement for concentration risk was SEK 968 million (898), of which SEK 898 million (842) pertained to credit risk in lending operations and SEK 70 million (57) to credit risk in funding operations.

6.3.2 Credit valuation adjustment risk (CVA)

CVA is defined as the risk of a downgrade in the credit quality of SBAB's OTC derivative counterparties. Calculation of the exposure amount for counterparty risk is based on the mark-to-market approach. SBAB quantifies CVA each month in accordance with the standardised approach in the CRR.

SBAB does not identify any additional amount under Pillar 2 for CVA.

6.3.3 Operational risk

Operational risk means the risk of losses due to inappropriate or unsuccessful internal processes, human error, faulty systems or external events. The definition also includes legal risk.

SBAB applies the standardised approach for capital adequacy for operational risk under Pillar 1. This approach calculates the capital requirement based on 12, 15 and 18%, respectively of the business area's average operating income over the past three years.

SBAB does not identify any additional amount under Pillar 2 for operational risk.

6.3.4 Market risk

Market risk means the risk of a negative earnings impact due to market fluctuations and, in SBAB's operations, mainly comprises interest-rate risk, credit-spread risk, currency risk and basis risk. Market risk is quantified using SBAB's Value at Risk models (VaR) and is managed by limiting exposure within limits set by the Board and by centralising the management of these risks to the Treasury department.

6.3.4.1 Interest-rate risk

Interest-rate risk pertains to the risk of variations in general interest rate levels leading to a negative earnings impact due to future income and expenses having different fixed-interest periods or interest terms. The general principle governing SBAB's exposure to interest-rate risk is to limit it through direct borrowing and the use of derivatives. As far as possible, fixed-interest liabilities are matched with fixed-interest assets, but since SBAB's residential mortgage customers generally choose floating interest (three-month fixed-interest period) while a large portion of the liability is fixed to longer maturities, a large portion of the debt must be swapped down to a three-month fixed-interest period. As a general principle, the interest-rate risk associated with mortgage lending and the liquidity portfolio, including the debt allocated to the respective portfolios, should be matched. SBAB's equity is invested using a guide value determined by SBAB's Board and therefore includes a strategic long-term interest-rate risk.

6.3.4.2 Credit-spread risk

Credit-spread risk is defined as the value changes in SBAB's bond holdings, since the credit rating of the issuers can change.

6.3.4.3 Currency risk

Currency risk refers to the risk that changes in the exchange rate for SEK against other currencies result in losses or negatively impact earnings. As a general rule, SBAB swaps its borrowing in foreign currencies into SEK or matches it against assets in the liquidity portfolio in the same currency.

6.3.4.4 Basis risk

Basis risk mainly arises when borrowing in foreign currency is swapped to SEK using mismatched maturities.

6.3.5 Pension risk

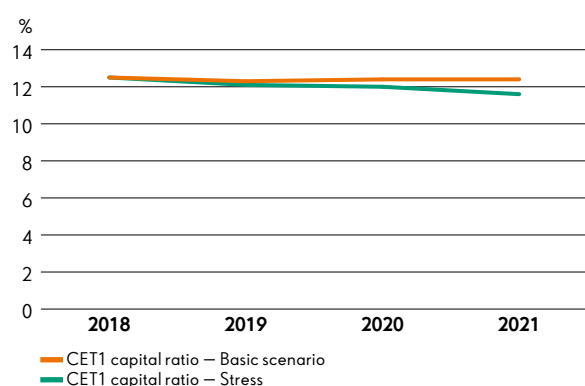
Pension risk arises from the obligation under SBAB's defined-benefit pension plans to provide agreed compensation to existing and former employees of the company. Even though SBAB makes ongoing payments to secure this obligation, a risk exists in the form of a negative outcome in terms of the return on the capital provision. The present value of the pension obligation could also increase depending on actuarial assumptions in terms of mortality and as a result of a lower discount rate. From 1 February 2013, no new employees have joined the defined-benefit pension plans. SBAB quantifies pension risks in accordance with the Swedish FSA's methods for assessing individual types of risk within Pillar 2.

6.3.6 Capital planning buffer

6.3.6.1 Quantification and assessment of the capital planning buffer

To evaluate the effect of SBAB's stress test, a calculation is made of the change in SBAB's capital adequacy ratios resulting from increased capital requirements and reduced own funds resulting from greater loan losses. In the stress scenario characterised by a severe recession, both the capital requirement and expected losses would increase significantly, albeit from very low levels. At the same time, net interest income would deteriorate relative to the basic scenario as a result of increased funding expenses. As a result of the simulation of a difficult but not unlikely scenario, SBAB's CET1 capital ratio would weaken according to the below.

FIGURE 7. CET1 CAPITAL RATIO IN A STRESSED SCENARIO



To counteract the weakening of SBAB's CET1 capital ratio, a provision of SEK 2,780 million would be required as a buffer without taking into account the risk-weight floor, which is the additional CET1 capital required to maintain an unchanged CET1 capital ratio relative to the basic scenario. However, most of SBAB's credit exposures are covered by the risk-weight floor for Swedish residential mortgages and, consequently, the capital requirements will not increase due to a reasonable increase in risk in the lending portfolio. Taking into account the risk-weight floor for Swedish residential mortgages and thereby excluding the increase in the capital requirements for Swedish mortgages, a provision of SEK 800 million was made as a buffer. This was then compared with the capital conservation buffer and any surplus added to the capital requirement. SBAB's stress tests are described in more detail in section 6.5.

6.3.6.2 Income volatility

Due to the structure of the accounting regulations, whereby different parts of the balance sheet are measured differently, valuation effects arise that affect operating profit and thereby own funds without constituting a real market risk.

Basis swaps not included in a hedging relation are measured at fair value while the loans to which the basis swaps are linked are not fully measured at market value should no hedge accounting relationship exist. This means that the basis risk on basis swaps that are not subject to hedge accounting lack counter-items in profit and loss.

This has the effect that operating profit, and thereby own funds, varies in a manner that does not match the actual risk to which the portfolio is exposed. To simulate how much this can conceivably affect own funds, a VaR model has been used. The model is based on a holding period of one year and a confidence level of 99.97%. A substantial gradual decrease from current levels is expected in SBAB's income volatility, when outstanding basis swaps not included in the hedge accounting approach maturity. Moreover, income volatility is limited for risk mitigation and capital adequacy provided by the capital planning buffer, which is why it is not reported separately in the internally assessed capital requirement.

6.3.6.3 Business risk

Business risk means the risk of declining earnings due to harsher competition, inappropriate strategies or erroneous decisions. Weaker earnings arising, for example, from reduced margins as a result of increased funding costs or tougher competition, can to some extent be met by reducing the SBAB's costs. However, since the cost base largely comprises fixed expenses that cannot be reduced over a one-year horizon. Business risk can be described as the loss arising when earnings decline to such an extent that they no longer cover the fixed expenses in a stressed economic scenario. Similar to the definition in the Swedish FSA's consultation memorandum "Capital requirements for Swedish banks" from September 2014, SBAB defines a normal economic recession as a scenario that occurs around every seven years. The capital requirement for business risk is quantified by evaluating the effects of a stressed scenario that corresponds to a normal economic recession. SBAB's stress tests are described in more detail in section 6.5.

6.4 Compilation of internal capital adequacy assessment

According to the Swedish FSA's supervisory practices, it is expected that SBAB will cover a certain part of its capital requirement for risks in Pillar 2 with CET1 capital. These are as a general rule to be covered according to the same capital distribution as the Pillar 1 capital requirement, including static buffer requirements (capital conservation buffer, systemic risk buffer and O-SII buffers). For SBAB, this means that 67% of the capital requirement for risks in Pillar 2 should be covered with CET1 capital. SBAB's internally calculated capital requirements without and with consideration for the risk-weight floor for Swedish residential mortgages are stated in Table 19. The internally assessed capital requirement corresponds to a CET1 capital ratio of 10.0% and a total capital ratio of 14.1%. According to the targets set out in SBAB's capital policy, these levels should, under normal conditions, be exceeded by at least 0.6% of the risk exposure amount. Accordingly, the CET1 capital ratio should amount to at least 10.6% and the total capital ratio to at least 14.7% as per 31 December 2018.

TABLE 19. INTERNALLY ASSESSED CAPITAL REQUIREMENT

SEK million	Pillar 1	EXCL. RISK-WEIGHT FLOOR		INCL. RISK-WEIGHT FLOOR	
		Internally assessed capital requirement	Internally assessed capital requirement	Internally assessed capital requirement	Internally assessed capital requirement
	Credit & CVA risk	3,046	3,046	3,046	3,046
Pillar 1	Market risk	80	80	80	80
	Operational risk	347	347	347	347
	Risk-weight floor ¹⁾	5,658	-	5,658	5,658
	Credit risk ²⁾	-	1,164	0	0
	Market risk	-	781	781	781
	Operational risk	-	0	0	0
Pillar 2	Risk-weight floor	-	-	-	-
	Concentration risk	-	968	968	968
	Sovereign risk	-	52	52	52
	Pension risk	-	0	0	0
Buffers	Capital conservation buffer	2,854	2,854	2,854	2,854
	Capital planning buffer ³⁾	-	-	-	-
	Countercyclical buffer	2,266	2,266	2,266	2,266
Total		14,251	11,558	16,052	16,052

¹⁾ Pillar 1 risk-weight floor under Article 458 of the CRR

²⁾ In the internal capital requirement without taking the risk-weight floor into account, additional credit risks in Pillar 2 consist of SBAB's estimated capital requirement in economic capital. Since the additional capital requirement for the risk-weight floor exceeds the additional capital requirement according to economic capital, only the risk-weight floor is included in the internal capital requirement with consideration for the risk-weight floor.

³⁾ The higher of the stress test buffer and the capital planning buffer is included in the internally assessed capital requirement. After taking into account the risk-weight floor, the stress test buffer is calculated without consideration for risk migration in the residential mortgage portfolios and, accordingly, the required buffer is smaller.

According to its supervision and evaluation process based on data from 31 December 2016, the Swedish FSA assessed SBAB's

CET1 capital requirement at SEK 9,174 million and the total capital requirement at SEK 13,338 million.

FIGURE 8. SCHEMATIC PROCESS FOR CALCULATING ECONOMIC CAPITAL



6.5 Stress tests

Capital planning is founded on a basic scenario that reflects the most probable operational development based on internal forecasts. Complementing this, stress tests and scenario analyses are performed, whereby the development of the loan portfolio and capital requirements during severe but plausible financial stress is evaluated. When performing the tests, events and economic conditions that could give rise to an unfavourable impact on the institution's loan-portfolio exposures and that are not reflected in the anticipated scenario are also taken into account.

6.5.1 Stress test methods

SBAB uses a number of statistical models to forecast credit risk. The common factor for the models is that they are built around one or more explanatory variables that are specifically adapted to the kind of exposure and risk dimension (PD or LGD) for which the model is intended to be used. A change in one or more of these explanatory variables results in a change in the forecast credit risk. This in turn affects the risk class to which an exposure is allocated. In the stress tests, this relationship is utilised by simulating changes in the underlying model variables. The starting point for this simulation is an assumed macroeconomic scenario.

In the stress test, a scenario that expresses an unfavourable economic trend will result in a migration towards inferior risk classes, which in turn entails higher economic capital, higher risk exposure amounts and larger anticipated losses. A scenario that reflects an economic recovery will consequently result in the opposite effect. A simplified illustration of the process is provided in Figure 8. The stress test is conducted for the portfolio at that particular date. This portfolio is then subjected to stress over a three-year time horizon, taking the planned volume development within different portfolio segments into account. The macroeconomic scenario that forms the basis of the stress test is also assumed to have a direct effect in SBAB's risk models. This means that the model variables are expected to change without any time shift.

TABLE 20. PARAMETERS SUBJECTED TO STRESS IN THE CURRENT AND NEXT THREE YEARS

Demand	Prices	Interest rates
GDP growth (real)	Consumer prices	Residential mortgages, 3 month
Disposable household income (nominal)	House prices	STIBOR, 3 month
Employment	Prices of tenant-owners' rights	Government bond rate, 10-year
Unemployment	Residential property prices	STIBOR Treasury bill
		Housing bonds – Government bonds, 5-year
		Government bonds Sweden – Germany, 10-year

The components included in SBAB's model for stress tests comprise:

- Determination of a macroeconomic scenario for the stress test
- Translation of the macroeconomic scenario to model variables
- Assumptions regarding new sales and loan redemption
- Calculation of expected losses and capital requirements
- Calculation of profit and own funds.

In addition to credit losses and capital requirements related to credit risk, the stress tests also simulate the effect of a deterioration in SBAB's credit rating and the effect of a decline in property prices on SBAB's scope for funding by means of covered bonds. These are expected to lead to increased funding costs, resulting in weaker net interest income and lower earnings, and consequently also to reduced own funds. Finally, realised losses related to operational risks are also brought out by applying a fraud scenario independent of the macro scenarios, thus leading to further deterioration in earnings and decreased own funds.

6.5.2 Macroeconomic scenario

The stress tests can be used in a number of conceivable approaches and methods. In general, these involve an assumption regarding a future scenario, either hypothetical or based on a historical outcome. The stress tests presented in SBAB's current ICLAAP are based on a hypothetical scenario whereby the development of the parameters is based on a subjective interpretation of economic theory and empirical analysis. The scenario describes a sharp economic decline.

For a number of variables in the models, there is a natural connection between the value the variable is expected to take on and the development of one or more of the macroeconomic parameters. In these cases, the variable value could consequently be recalculated directly based on the change in the underlying macro-parameters.

In general, all model variables are expected to be affected to some extent, except the variables that are not deemed to be correlated to economic conditions.

Since a macroeconomic scenario cannot be directly translated to the effect that it has on certain PD variables, historical correlations are used instead. Examples of such model variables are the number of reminders and claims. For these variables, the effect has instead been estimated based on the historical correlation to the residential mortgage rate.

LGD is subjected to stress according to the same methodology as PD. Since SBAB's LGD models are built around the loan-to-value ratio, changes in the market values of properties have a direct impact on LGD.

Finally, the macro scenario is combined with a simulated deterioration in SBAB's credit rating by two rating levels.

Scenario

In this scenario, a range of external shocks, in combination with internal imbalances and political problems lead to a recession and problems in the Swedish banking system. Typically, this kind of scenario occurs approximately every 25 years.

- Major stock exchange crashes and declining growth in the USA and China, combined with an escalating trade war and renewed uncertainty surrounding cooperation on the euro, lead to the prices of oil and other commodities falling sharply and the international financial markets steering investments toward safe assets.
- Global demand declines and Swedish households rapidly tighten their belts while foreign confidence in the central government's financing and the banks' financial strength is eroded due to a weak government, an uncertain parliamentary situation and imbalances in the housing and residential mortgage market. The Swedish krona weakens, helping maintain inflation close to 0%.
- The GDP decline will be about the same as during the 2008 financial crisis, although the process is less volatile and more protracted. Employment and household income levels also fall. The economy does not stabilise until 2021.
- The central government's finances deteriorate rapidly and the parliamentary situation helps erode the credibility of economic policy, causing a sharp rise in interest rates and risk premiums. The banking system is under pressure. The Riksbank tries unsuccessfully to stimulate the economy due to risk premiums. Altogether, housing prices will fall by around 30% before stabilising at the start of 2022, which is after the forecast period.

7 Leverage ratio

The CRR introduced a non-risk-sensitive metric to avoid excessive indebtedness. This metric is calculated as Tier 1 capital in relation to total assets and off-balance sheet exposures restated with the application of credit conversion factors (CCF).

The leverage ratio is a measure of solvency. Compared with the capital adequacy requirement, assets are not risk-weighted but rather the same amount of capital is required, regardless of what risk is associated with the assets. According to the European Commission's delegated regulation ((EU) 2015/62), the leverage ratio is calculated as Tier 1 capital divided by the total exposure amount, where off-balance sheet exposures are assigned CCFs. The leverage ratio amounted to 3.77% as of December 2018.

Description of measures taken to manage the risk of inadequate leverage

The leverage ratio is included in SBAB's forward-looking capital planning to enable proactive management of the risk of the leverage ratio becoming too low. The target for the metric is set in SBAB's capital policy, and therefore its outcome and development is followed up and reported monthly to the CEO and Board. In a situation with excessive debt and an inadequate leverage ratio that needs to be addressed, the requisite measures can include a lower dividend, additional capital from the owner or alternatively an issue of additional Tier 1 capital. Moreover, balance-sheet measures may need to be applied to reduce SBAB's exposure.

Description of factors influencing leverage in the period to which the published leverage pertains

The year-on-year change in the leverage metric was due to:

- Tier 1 capital increased due to accrued earnings, which had a positive impact on the metric of 0.19%
- The effect of the exposure metric attributable to derivatives increased slightly, which had a negative impact on leverage of 0.03%
- The effect of the exposure metric attributable to off-balance-sheet items decreased slightly, which had a positive impact on leverage of 0.01%
- An increase mainly in mortgage exposures entailed a negative impact of 0.26%.

TABLE 21. LEVERAGE RATIO

SEK million	2018	2017
Tier 1 capital	17,263	16,443
Exposure metric	457,697	425,674
Leverage ratio, %	3.77	3.86

TABLE 22. SUMMARY RECONCILIATION OF ACCOUNTING ASSETS AND LEVERAGE RATIO EXPOSURES (LR SUM)

SEK million	APPLICABLE AMOUNT
	2018
Total assets as per published financial statements	448,355
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	1
Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013	-
Adjustments for derivative financial instruments	886
Adjustment for securities financing transactions (SFTs)	-
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	8,819
(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	-
(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	-
Other adjustments	-364
Leverage ratio total exposure measure	457,697

TABLE 23. SPLIT-UP OF ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES AND SFTS) (LR SPL)

SEK million	CRR LEVERAGE RATIO EXPOSURES
	2018
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	439,803
Trading book exposures	-
Banking book exposures, of which:	439,803
Covered bonds	35,929
Exposures treated as sovereigns	39,790
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	-
Institutions	2
Secured by mortgages of immovable properties	360,509
Retail exposures	2,784
Corporates	-
Exposures in default	238
Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	550

Leverage ratio

TABLE 24. LEVERAGE RATIO COMMON DISCLOSURE (LRCOM)

	CRR LEVERAGE RATIO EXPOSURES
SEK million	2018
On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	439,803
(Asset amounts deducted in determining Tier 1 capital)	-125
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)(sum of rows 1 and 2)	439,678
Derivative Exposures	
Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	2,688
Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	6,819
Exposure determined under Original Exposure Method	-
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-307
(Exempted CCP leg of client-cleared trade exposures)	-
Adjusted effective notional amount of written credit derivatives	-
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-
Total derivative exposures (sum of lines 4 to 10)	9,200
SFT Exposures	-
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	-
(Netted amounts of cash payables and cash receivables of gross SFT assets)	-
Counterparty credit risk exposure for SFT assets	-
Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-
Agent transaction exposures	
(Exempted CCP leg of client-cleared SFT exposure)	-
Total securities financing transaction exposures (sum of lines 12 to 15a)	-
Other off-balance sheet exposures	-
Off-balance sheet exposures at gross notional amount	37,535
(Adjustments for conversion to credit equivalent amounts)	-28,715
Other off-balance sheet exposures (sum of lines 17 to 18)	8,820
Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)	
(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
(Exposures exempted in accordance with Article 429(14) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
Capital and total exposures	
Tier 1 capital	17,263
Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	457,697
Leverage ratio	
Leverage ratio	3.77%
Choice on transitional arrangements and amount of derecognised fiduciary items	
Choice on transitional arrangements for the definition of the capital measure	Fully Phased in
Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No. 575/2013	

8 Risk in remuneration systems

SBAB is to have a remuneration system that is both compatible with and promotes effective risk management and does not encourage undue risk-taking. Remuneration should promote SBAB's long-term interests. Further information on remuneration systems is available in Note IC:5 of SBAB's annual report and on the website www.sbab.se.

The General Meeting decides on the overall guidelines for remuneration and other employment terms for senior executives (members of SBAB's Executive Management). The Board of Directors decides on:

- Remuneration policy, risk analysis regarding remuneration systems and other policy documents for remuneration issues
- Remuneration and other employment benefits for Executive Management and the heads of the control functions (the CRO and the heads of Internal Audit and Compliance)
- Follow-up on the application of SBAB's control documents regarding remuneration issues.

The Board has appointed a Remuneration Committee. Information on the members of the Remuneration Committee and the number of meetings can be found in the Corporate Governance Report in SBAB's Annual Report at www.sbab.se.

The Remuneration Committee is tasked with preparing remuneration issues for decision by the Board and for conducting an independent assessment of policy documents pertaining to remuneration issues and remuneration systems. The Board is to ensure that the appropriate control functions participate in the independent assessments.

The Board decides the mission description for the Remuneration Committee. The meetings of the Remuneration Committee are reported back to the Board through the minutes prepared of the Remuneration Committee's meetings. The Board annually evaluates and follows up how SBAB has complied with the principles for the remuneration of senior executives that have been adopted by the Annual General Meeting and the remuneration structures and remuneration levels, including bonuses.

At present, SBAB has no variable remuneration to senior management or members of staff whose actions have a material impact on the institution's risk profile.

9 Credit risk in lending operations

SBAB conducts customer-centric credit operations based on professionalism, simplicity and quality, which create the conditions for favourable profitability and long-term customer relations. This means that the credit operations are denoted by high credit quality, efficient decision-making processes, and respect for and understanding of the customer's situation. This also entails straightforward conduct, language and procedures, balanced risk-taking in the portfolio and each loans' internal risk effect is such that the total risk is limited.

9.1 Credit risk management

SBAB is to have documented risk management of credit risk with a clear division of responsibilities. Credit risk management must support the business operations, ensure SBAB's survival and be in line with SBAB's rating targets. SBAB's credit operations are characterised by low risk taking. Business-related risks are viewed in relation to arisen earnings. Credit risk is considered in all business decisions and constitutes a component in the pricing of products and services.

SBAB's Board and Executive Management are to be actively involved in the design of the institution's risk management system and the follow-up of credit risks. The Board of Directors or its committees approve all significant methods, models and processes related to credit risk.

The reporting structure is designed so that the Board of the Parent Company and the Executive Management receive reports on all material risks. Procedures must be in place for managing and acting, based on the information provided in the reports.

9.2 Credit risk in the lending portfolio

Credit risk is the single largest risk in SBAB and accounts for 81% of the risk exposure amount according to Pillar 1, excluding the risk-weight floor for Swedish household exposures with collateral in immovable property. Credit risk is defined as the risk of loss due to the customer's inability to make interest and loan repayments or otherwise fulfil the loan agreement. Aside from through lending and loan commitments, credit risk also arises in connection with changes in the value of pledged collateral, resulting in this no longer covering the Group's receivables.

In the credit-granting process, the credit risk of a new credit is first checked by the business area and then, in some cases, by the credit department. Credit risk is then checked by risk control, which is also responsible for analysing credit risk. Each business operation deals with the practical management of credit risk.

Credit risk in lending operations is restricted by limits determined for the customer or customer group. The credit risk is also managed through a credit-granting process, whereby the ability of potential borrowers to make their interest payments and capital repayments is analysed. For example, new retail loans

are granted only to borrowers who are expected to be able to pay interest and make capital repayments when interest rates comfortably exceed the rate prevailing today. Furthermore, risk classification is used in the analysis of the credit risk for new and existing customers in the loan portfolios.

Large exposures, meaning those amounting to 10% or more of own funds, are managed based on the credit instructions and external regulations. All exposures exceeding 2% of own funds are identified and analysed for the purpose of deciding whether they fall within the framework of large exposures in relation to a group of customers with internal ties.

The granting of credit requires the provision of adequate collateral, which can be provided in the form of real property or a share in a tenant-owners' association. Adequate collateral usually means mortgage deeds in a property or a tenant-owners' association of not more than 75–85% of the market value. The 85% ratio applies provided that collateral can be obtained with first lien and that the customer has a risk class of R1–R4 for retail customers and C1–C3, and manually adjusted from C3 to C4, for corporate customers (for the relation between risk class and rating, refer to Table 26). In other cases, an LTV ratio of 75% generally applies for corporate exposures. SBAB also grants small unsecured loans to borrowers in the retail segment, which comprise 5% of the REA under Pillar 1, excluding the risk-weight floor. Furthermore, SBAB applies a debt ratio ceiling of 550% (gross income in relation to the loan) for new retail loans.

When lending to consumers, market values for collateral in the form of properties or rights of use are generally determined by the administrator, based on approved calculation models. If the market value cannot be determined using approved calculation models, it is determined by the person in charge of valuations or an approved external appraiser.

When lending to tenant-owners' associations and companies, the market values for collateral in the form of properties or rights of use are generally determined by internal property valuers. External valuations can form the basis of decisions upon approval by the person in charge of valuations. If an external valuation is carried out by an approved external appraiser, the valuation does not require approval by internal property valuers.

SBAB verifies the property value on a regular basis. For residential properties and tenant-owners' rights, the property value is verified at least every third year. For other properties, the value is verified at least annually. If there are major changes in economic factors that affect the property market, the value is verified more often. An extra property valuation was conducted in spring 2018 to take into consideration the falling prices noted on the property market at the end of 2017.

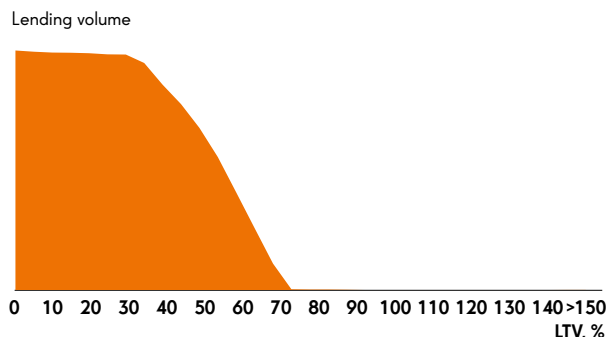
In addition to collateral in real property or tenant-owners' rights, it is possible to grant credit against, inter alia, collateral in the form of a government guarantee, municipal guarantee, securities, bank guarantees and deposits in a Swedish bank.

To a limited extent, equities corresponding to up to 85% of the market value of the underlying properties can be approved as collateral in conjunction with a property purchase through a company transaction. SBAB does not hold any collateral that has been taken over in foreclosure to protect claims.

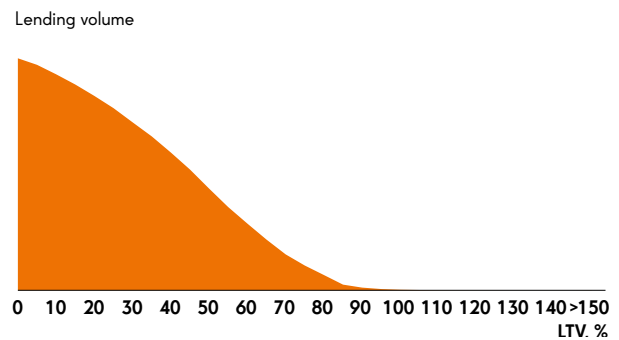
Lending to the public accounts for 81% of SBAB's total assets. Figures 9 and 10 describe loan-to-value (LTV) for loans for which collateral consists of collateral in real property or tenant-owners' rights. Figure 9 shows corporate exposures and Figure 10 shows retail exposures¹). The areas in the figures correspond to the lending volume and cover 96% of total retail lending. Since 83% of lending is secured with collateral in real property or tenant-owners' rights to within 50% LTV and 98% within 75% LTV, the credit quality is assessed as very favourable (see the table under figures 9 and 10).

FIGURES 9 AND 10. "LOAN TO VALUE" (LTV) FOR CORPORATE AND RETAIL EXPOSURES

CORPORATE EXPOSURES



RETAIL EXPOSURES



Segment, %	Below 50%	Below 75%	Below 85%	Below 100%	Exposure-weighted average LTV
Corporate exposures	82.5	99.9	100.0	100.0	60.0
Retail exposures	82.5	97.7	99.5	99.9	58.0
Total	82.5	97.9	99.5	99.9	58.5

9.3 Risk classification system

SBAB applies the IRB approach for retail loans and lending to tenant-owners' associations and the foundation IRB approach (FIRB approach) for corporate loans. These commitments comprise 99% of total lending to the public. For other types of exposures, including unsecured loans, the standardised approach is used for quantifying credit risk.

The IRB approach has been used since 2007 for assessing credit risk where a mortgage deed for real immovable property or a tenant-owners' right is used as collateral. In 2013, permission was received to include tenant-owners' associations with a turnover of less than EUR 50 million in the retail exposure class, for which SBAB holds an IRB permit. In 2015, SBAB also received permission to use the IRB approach for excess exposures that are not fully covered by mortgage deeds, property financing using collateral other than directly pledged mortgage deeds and building credits. Previously, the standardised approach was used for these exposures.

In credit risk models, an assessment is made of the probability of default¹⁾ (PD), the loss given default (LGD) and the proportion of loan commitments expected to be converted to the balance sheet (CF). On the basis of these parameters and the size of the

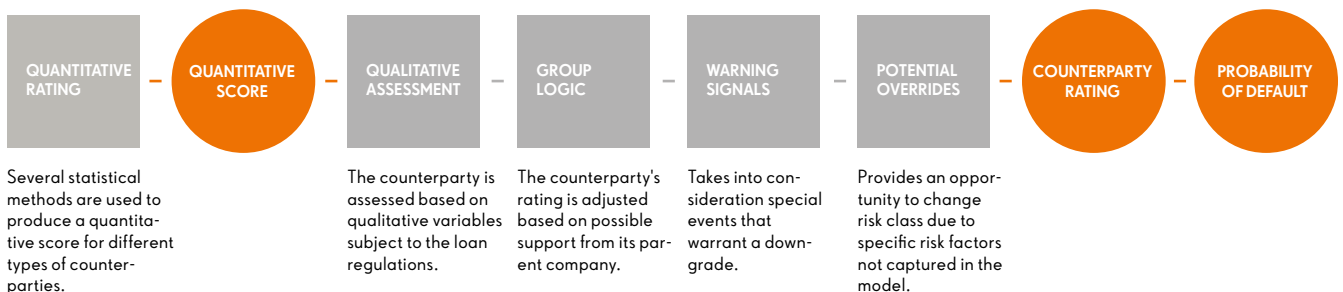
exposure, the expected and unexpected loss can be estimated. The exposure is ranked by PD to one of eight risk classes for corporate and retail exposures, of which the eighth class comprises customers in default. Trends for customers in high-risk classes are monitored diligently and, when necessary, exposure is managed actively by credit monitoring personnel as part of the insolvency process.

The IRB models are used in SBAB's lending operations for tasks such as credit granting, pricing, portfolio analysis and performance monitoring per business area. The models produced are validated annually by risk control and, whenever required, they are recalibrated. The validations carried out for 2018 did not result in any changes to models. A major challenge in the validation process has been that the number of defaults and confirmed credit losses has been very low.

For those customer segments within corporate exposures for which current financial statements are available, the quantitative assessment is supplemented with a systematic qualitative assessment in accordance with SBAB's loan regulations, based on a number of predetermined questions (see Figure 11). For other customer segments involving corporate lending, credit analysts add their assessment of risk class and an explanatory statement to the supporting material for risk class assessment.

¹⁾ An exposure is regarded as in default if the receivable is more than 60 days past due (for receivables exceeding SEK 1,000) or if an assessment has been made that the customer will probably not be able to pay agreed interest amounts or cover repayments of the principal.

FIGURE 11. INTERNAL RATING PROCESS FOR CORPORATES



9.4 Risk classification method

In conjunction with capital adequacy and risk classification, exposures are categorised in exposure classes. Retail loans and loans to tenant-owners' associations with a turnover of less than EUR 50 million and 100% collateral in residential property are reported in the retail exposure class. The IRB approach is applied for retail exposures with some form of collateral. Other exposures secured by collateral are reported under corporate exposures. The foundation IRB approach is used for corporate exposures. Table 25 shows the distinction between retail exposures and corporate exposures. The standardised approach is applied for unsecured retail exposures. Guarantees from the National Board of Housing, Building and Planning (BKN) or municipalities in the form of KFAs are allocated to central government and municipal exposures and are recognised using the standardised approach. Table 12 shows the distribution of risk exposure amounts and capital requirements by exposure class.

For risk classification according to IRB, SBAB uses several ranking models for PD depending on the type of counterparty. Both internal and external data sources are used to provide decision data for the models. Internal data consists of customer informa-

tion, loan information, default outcomes and internal payment records. Data obtained externally includes income data, financial accounts, external payment records, property data and macro-economic data. SBAB's PD models are based on decision data from the end of the 1990s and to the present day. In preparing long-term PD estimates, data from the housing crisis of the 1990s and onwards is also used. For retail exposures comprising both retail loans and credits to tenant-owners' associations, SBAB uses an LGD estimation model that is largely based on the LTV ratio. A rise in the LTV entails an increase in the likelihood of a loss and in the scope of the financial loss. SBAB primarily uses internal loss data for LGDs, but has used external loss data from the 1990s housing crisis to calibrate models for downturn periods with the aim of ensuring sufficiently conservative estimates.

SBAB uses its own CCF estimates for loan commitments to consumers in the retail exposure class. The CCF measures the probability of the loan commitment resulting in a disbursement and an actual loan. The model is mainly based on how far the loan commitment has progressed in the credit granting process and how much time has passed since the case was created.

TABELL 25. LOAN PORTFOLIOS AND EXPOSURE CLASSES FOR WHICH THE IRB APPROACH IS APPLIED

Portfolio	Property	Exposure class	Method	PD model
Corporates	Private properties			
	Tenant-owner associations (turnover greater than or equal to EUR 50 million)	Corporate exposures	Foundation IRB approach	"Corporate"
	Commercial properties			
Retail	Houses and holiday homes			
	Tenant-owners' rights	Retail exposures	Advanced IRB approach	"Retail"
	Tenant-owner associations (turnover less than EUR 50 million)			

9.5 The link between external and internal ratings

SBAB's risk classes are not directly comparable to the ratings used by external credit rating agencies.

The credit rating agencies' ratings do not correspond to a direct classification of the counterparties' probability of default in the same way that the bank's risk classification does. The credit rating agencies also consider, to a varying degree, the severity of the losses that may be caused by default, while SBAB captures this in the LGD dimension. The time horizon on which the credit

rating is based is not always the same for credit rating agencies as for SBAB. Accordingly, it is difficult to translate internal risk classes to external ratings unequivocally and consistently. However, by analysing the historic proportion of default in SBAB's risk classes compared with the proportion of default in Standard & Poor's rating classes, it is possible to obtain a reasonably correct comparative table. Table 26 presents the external rating classes that best correspond to the historic proportion of default in each of SBAB's risk classes.

TABELL 26. RELATIONSHIP BETWEEN INTERNAL AND EXTERNAL RATING

Risk class	Standard & Poor's rating	Risk class	Standard & Poor's rating
C1	AAA-A	R1	AAA-AA
C2	A	R2	AA-A
C3	A-BBB	R3	A
C4	BBB-BB	R4	A-BBB
C5	BB	R5	BBB-BB
C6	BB-B	R6	BB
C7	B-C	R7	BB-C

9.6 Exposure amounts and capital requirements

Table 27 shows all credit risk exposures both in and outside the lending portfolio. Without taking credit risk protection into account, the total amount for all credit risk exposures was SEK 487 billion.

Credit risk protection used for IRB exposures consists of government and municipal guarantees. Credit risk protection is only used to an extremely limited extent for exposures reported in accordance with the standardised approach.

SBAB has also obtained guarantees of SEK 116 million from business partners to cover any possible credit losses. In addition, the Parent Company SBAB and SCBC have jointly taken up credit insurance with Genworth Financial Mortgage Insurance Limited (Genworth) (sold to AmTrust Financial Services, Inc in 2016). The credit insurance covers the part of the exposure that exceeds

85% of the value of collateral pledged. The insured amount totalled SEK 45 million at 31 December 2018. The insurance policy was cancelled effective 1 January 2009 and cannot be utilised for new loans arising after that date. Neither the guarantees from business partners nor the credit insurance from Genworth were taken into account when calculating capital adequacy.

Corporate exposures comprised only 11% of total exposures in the lending portfolio for which the IRB approach is used, but due to the higher average risk weighting for credit risk, the exposures account for 50% of the total capital requirement according to Pillar 1.

The average risk weighting for exposures recognised in accordance with the IRB approach was 6.5%, while the weighting for exposures recognised with the standardised approach was 12.4%. Exposure-weighted average PD estimates per coun-

TABLE 27. EXPOSURE AMOUNTS BY EXPOSURE CLASS FOR CREDIT RISK EXPOSURES

SEK million	Original exposure before credit risk protection	Value adjustments	Net exposure after value adjustments and reserves	Collateral that reduces capital requirements in the form of guarantees and financial securities	Inflows	Off-balance-sheet exposures before CCF	Exposure after CCF ¹⁾	Off-balance-sheet exposures after CCF
Credit risk in lending portfolio recognised under the IRB approach								
Corporate exposures	44,096	-	44,096	-100	-	5,024	42,430	3,457
Retail exposures	354,124	-	354,124	-731	-	31,521	331,258	9,387
<i>of which, houses and holiday homes</i>	153,020	-	153,020	-39	-	13,088	143,573	3,679
<i>of which, tenant-owners' rights</i>	154,523	-	154,523	-	-	18,214	141,829	5,521
<i>of which, tenant-owners' associations</i>	46,580	-	46,580	-692	-	219	45,856	187
Total credit risk under the IRB approach	398,220	-	398,220	-831	-	36,545	373,688	12,844
Credit risk in the lending portfolio recognised under the standardised approach								
Exposures to governments and central banks	25,221	0	25,221	-	45	-	25,266	-
Exposures to regional governments or local authorities or agencies	11,295	0	11,295	-	786	-	12,081	-
Exposures to multilateral development banks	2,443	0	2,443	-	-	-	2,443	-
Exposures to institutions	9,202	-	9,202	-	-	-	9,202	-
Exposures to corporates	-	-	-	-	-	-	-	-
Retail exposures	3,782	-8	3,774	-	-	990	2,982	198
Exposures in default	13	-4	9	-	-	-	9	-
Exposures in the form of covered bonds	35,930	-1	35,929	-	-	-	35,929	-
Exposures to institutions and corporates with a short-term credit rating	80	-	80	-	-	-	80	-
Equity exposures	89	-	89	-	-	-	89	-
Other items	381	-	381	-	-	-	381	-
Total credit risk under the standardised approach	88,436	-13	88,423	-	831	990	88,462	198
Total	486,656	-13	88,423	-831	831	37,535	462,150	13,042

¹⁾ In exposures after inflows and outflows, adjustments have been made of amounts to be recognised and covered by capital in an exposure class other than the original one.

²⁾ Off-balance sheet exposures have been excluded.

terparty for IRB exposures amounted to 0.17% for corporate exposures and 0.37% for retail exposures. Exposure-weighted average LGD estimates for corporate exposures was 38.0% and exposure-weighted LGD for retail exposures was 10.0%. For clarification, the exposure-weighted amount for LGD is controlled by the limitation rule, which entails a lowest average LGD of 10% for retail exposures covered by collateral in residential properties in accordance with Article 164 item 4 of the CRR.

The following tables in this section correspond with COREP reporting with regard to exposure amounts. This meets the European Banking Authority's (EBA's) disclosure requirements.

The tables illustrating lending operations differ from the information presented in SBAB's 2018 Annual Report as total exposure amounts, including accrued interest, are reported instead of the principal. Furthermore, transaction costs relating to commissions

to business partners are excluded. Moreover, Booli Search Technologies AB has been excluded since this company is not included in the consolidated situation.

Exposure amounts covered by credit risk protection in the form of properties	Average exposure amounts for lending portfolio exposures ²⁾	Risk exposure amounts before SME discount	Risk exposure amounts after SME discount	Capital requirement	Average risk weight, %	Specific credit risk adjustment	Expected loss	Exposure-weighted average PD, %	Exposure-weighted average LGD, %
42,430	39,648	12,880	12,128	970	28.6	7	28	0.17	38.04
331,258	309,204	12,348	12,096	968	3.7	104	131	0.37	10.00
143,573	133,632	4,978	4,978	398	3.5	42	55	0.38	10.0
141,829	129,689	6,289	6,289	503	4.4	52	67	0.42	10.9
45,856	45,882	1,081	829	66	1.8	10	9	0.18	7.3
373,688	348,852	25,228	24,224	1,938	6.5	111	159		
-	49	0	0	0	0.0	0	-	-	-
-	870	0	0	0	0.0	0	-	-	-
-	-	0	0	0	0.0	0	-	-	-
-	-	3,777	3,777	302	41.0	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	2,735	2,236	2,236	179	75.0	8	-	-	-
-	14	10	10	1	117.1	4	-	-	-
-	-	3,593	3,593	287	10.0	1	-	-	-
-	-	16	16	1	20.0	-	-	-	-
-	-	1,116	1,116	89	1,250	-	-	-	-
-	-	227	227	18	76.9	-	-	-	-
-	3,668	10,975	10,975	877	12.4	13	-	-	-
373,688	352,520	36,203	35,199	2,815	7.6	124	-	-	-

TABLE 28. CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE
(EBA CR6 TABLE)

SEK million	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF, %	EAD post CRM and post CCF	Average PD, %	Number of obligors	Average LGD, %	Average maturity	RWAs	RWA density, %	Expected loss	Value adjustments and provisions	
Exposure class														
Corporates (foundation approach)	Of which, Corporate SME	0.00 to <0.15	7,354	-	-	7,340	0.09	72	35.8	2.5	1,196	16	2	-
		0.15 to <0.25	6,746	-	-	6,745	0.21	109	35.9	2.5	1,681	25	5	-
		0.25 to <0.50	1,710	-	-	1,710	0.45	69	35.3	2.5	624	37	3	-
		0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
		0.75 to <2.50	252	-	-	251	1.16	14	35.1	2.5	146	58	1	-
		2.50 to <10.00	20	-	-	16	3.23	12	36.8	2.5	10	66	0	-
		10.00 to <100.00	11	-	-	11	27.04	3	35.2	2.5	14	127	1	-
		100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
	Portfolio subtotal	16,093	-	-	16,073	0.22	279	35.8	2.5	3,671	23	12	1	
	Of which, Corporate Other	0.00 to <0.15	18,549	2,599	63.0	20,143	0.09	126	38.0	2.5	5,074	25	7	-
		0.15 to <0.25	3,315	1,125	75.0	4,122	0.21	27	44.1	2.5	1,928	47	4	-
		0.25 to <0.50	1,066	1,300	75.0	2,041	0.45	8	44.5	2.5	1,415	69	4	-
		0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
		0.75 to <2.50	50	-	-	50	1.16	1	35.0	2.5	40	80	0	-
		2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
		10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
		100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
Portfolio subtotal	22,980	5,024	69.0	26,356	0.14	162	39.4	2.5	8,457	32	15	6		
Retail (advanced approach)	Of which, Retail SME	0.00 to <0.15	33,131	141	88.0	32,906	0.09	1,135	7.1	-	420	1	2	-
		0.15 to <0.25	11,253	75	82.0	11,122	0.21	519	7.4	-	277	2	2	-
		0.25 to <0.50	1,635	3	-	1,524	0.45	110	9.1	-	81	5	1	-
		0.50 till <0.75	-	-	-	-	-	-	-	-	-	-	-	-
		0.75 to <2.50	255	-	-	255	1.16	17	9.0	-	25	10	0	-
		2.50 to <10.00	68	-	-	30	3.20	11	8.3	-	5	17	0	-
		10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
		100.00 (Default)	19	-	-	19	100.00	3	21.9	-	21	109	4	-
	Portfolio subtotal	46,361	219	86.0	45,856	0.18	1,795	7.3	-	829	2	9	11	
	Of which, Retail Other	0.00 to <0.15	187,472	15,641	27.0	191,593	0.04	124,258	10.1	-	2,440	1	8	-
		0.15 to <0.25	44,613	10,805	32.0	48,040	0.16	31,102	10.9	-	1,892	4	9	-
		0.25 to <0.50	28,357	4,413	29.0	29,640	0.42	18,106	11.2	-	2,425	8	14	-
		0.50 till <0.75	-	-	-	-	-	-	-	-	-	-	-	-
		0.75 to <2.50	11,868	367	75.0	12,142	1.55	7,095	11.6	-	2,480	20	22	-
		2.50 to <10.00	2,307	51	79.0	2,346	4.17	1,456	11.4	-	850	36	11	-
		10.00 to <100.00	1,387	25	67.0	1,404	24.67	973	11.1	-	958	68	38	-
		100.00 (Default)	237	-	-	237	100.00	186	11.7	-	221	93	20	-
Portfolio subtotal	276,241	31,302	29.0	285,402	0.40	183,176	10.4	-	11,267	4	123	93		
Total (all portfolios)		361,675	36,545	35.0	373,687	0.35	185,412	13.2	-	24,224	6	159	111	

TABLE 29. RWA FLOW STATEMENTS OF CREDIT RISK EXPOSURES UNDER IRB
(EBA CR8 TABLE)

SEK million	RWA amounts	Capital requirements
RWA at the end of the previous reporting period	24,727	1,978
Asset size	1,814	145
Asset quality	-2,296	-184
Model updates	-	-
Methodology and policy	-	-
Acquisitions and disposals	-	-
Foreign exchange movements	-	-
Other	-21	-1
RWA at the end of the reporting period	24,224	1,938

9.7 Exposure amounts by geographical region

SBAB's credit exposure is concentrated in Sweden. There is some exposure to other countries in Western Europe, Canada and the US due to the funding of the Swedish lending operations.

SBAB's lending portfolio is mainly secured by housing in the Stockholm area (58%). Only 1% of the underlying collateral derives from economically weak regions. Sweden is divided as follows:

- Greater Stockholm: Stockholm's labour market region according to Statistics Sweden (SCB) (2004);
- Greater Gothenburg: Gothenburg's labour market region according to SCB (2004);
- The Öresund region: Labour market regions in Malmö and Helsingborg according to SCB (2004);
- University and growth regions: Municipalities with universities and municipalities with especially buoyant growth according to analyses by SBAB;
- Weak regions¹⁾: Municipalities with very weak or negative growth according to analyses by SBAB; and
- Other regions¹⁾: Municipalities that are not allocated to any other category.

¹⁾ The analysis is based in part on statistics from SCB, such as short and long-term population growth, the proportion of the population older than 64 years, average income and the vacancy rate in public utility housing, and in part on the local knowledge of SBAB's analysts.

TABLE 30. TOTAL AND AVERAGE NET AMOUNT OF EXPOSURES
(EBA CRB-B TABLE)

SEK million	Net value of exposures at the end of the period ²⁾	Average net exposures over the period ³⁾
Exposures to corporates	44,089	44,925
of which, Specialised lending	-	-
of which, SMEs	16,092	16,527
Retail exposures	354,019	352,987
Exposures to households secured against immovable property	354,019	352,987
of which, SMEs	46,570	46,794
of which, non-SMEs	307,449	306,193
of which, non-SMEs	-	-
Total exposure with IRB approach	398,108	397,912
Exposures to governments and central banks	25,221	31,744
Exposures to regional governments or local authorities or agencies	11,295	10,734
Exposures to public sector entities	-	-
Exposures to multilateral development banks	2,443	2,491
Exposures to international organisations	-	-
Exposures to institutions ¹⁾	9,202	8,982
Exposures to corporates	-	-
of which, SMEs	-	-
Retail exposures	3,774	3,828
of which, SMEs	-	-
Exposures to households secured against immovable property	-	-
of which, SMEs	-	-
Exposures in default	9	9
Exposures associated with particularly high risk	-	-
Exposures in the form of covered bonds	35,929	37,115
Exposures to institutions and corporates with a short-term credit rating	80	432
Exposures in the form of collective investment undertakings	-	-
Equity exposures	89	87
Other items	381	471
Total exposure with standardised approach	88,423	95,893
Total	486,531	493,805

¹⁾ The institution exposure class includes counterparty risk.

²⁾ Average net exposures after provisions pertain to both the IRB and the standardised approach.

³⁾ Average net exposures over the period are based on observed amounts over four quarters.

TABLE 31. GEOGRAPHICAL BREAKDOWN OF EXPOSURES¹⁾ (EBA CRB-C TABLE)

SEK million	Sweden	Denmark	Finland	France	Germany	Norway	United Kingdom	USA	Canada	Switzerland	Other countries	Total
Exposures to corporates	44,089	-	-	-	-	-	-	-	-	-	-	44,089
Retail exposures	354,019	-	-	-	-	-	-	-	-	-	-	354,019
Total exposure with IRB approach	398,108	-	-	-	-	-	-	-	-	-	-	398,108
Exposures to governments and central banks	22,107	-	946	-	1,836	-	-	-	110	222	-	25,221
Exposures to regional governments or local authorities or agencies	9,798	1,497	-	-	-	-	-	-	-	-	-	11,295
Exposures to multilateral development banks	-	-	-	-	-	-	-	-	-	-	2,443	2,443
Exposures to institutions	2,659	2,320	1,862	39	11	9	2,137	165	0	-	-	9,202
Exposures to corporates	-	-	-	-	-	-	-	-	-	-	-	-
Retail exposures	3,774	-	-	-	-	-	-	-	-	-	-	3,774
Exposures to households secured against immovable property	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in default	9	-	-	-	-	-	-	-	-	-	-	9
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in the form of covered bonds	31,582	995	625	-	-	2,089	-	-	638	-	-	35,929
Exposures to institutions and corporates with a short-term credit rating	80	-	-	-	-	-	-	-	-	-	-	80
Exposures in the form of collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-
Equity exposures	89	-	-	-	-	-	-	-	-	-	-	89
Other items	381	-	-	-	-	-	-	-	-	-	-	381
Total exposure with standardised approach	70,479	4,812	3,433	39	1,847	2,098	2,137	165	748	222	2,443	88,423
Total	468,587	4,812	3,433	39	1,847	2,098	2,137	165	748	222	2,443	486,531

¹⁾ The table does not include off-balance-sheet exposures.

TABLE 32. NET EXPOSURE AMOUNT BY GEOGRAPHICAL AREA FOR CREDIT RISK EXPOSURES IN LENDING OPERATIONS¹⁾

SEK million	Greater Stockholm	Greater Gothenburg	Öresund region	University and growth regions	Other regions	Weak regions	Total
Exposures to corporates	20,373	4,142	8,325	8,025	2,414	810	44,089
Retail exposures	211,186	31,947	36,677	30,549	40,873	2,787	354,019
Total exposure with IRB approach	231,559	36,089	45,002	38,574	43,287	3,597	398,108
Exposures to governments and central banks	-	-	-	-	-	-	-
Exposures to regional governments or local authorities or agencies	-	-	-	1	1	-	2
Exposures to multilateral development banks	-	-	-	-	-	-	-
Exposures to institutions	-	-	-	-	-	-	-
Exposures to corporates	-	-	-	-	-	-	-
Retail exposures	842	112	53	66	2,698	3	3,774
Exposures to households secured against immovable property	-	-	-	-	-	-	-
Exposures in default	2	-	-	-	7	-	9
Exposures associated with particularly high risk	-	-	-	-	-	-	-
Exposures in the form of covered bonds	-	-	-	-	-	-	-
Exposures to institutions and corporates with a short-term credit rating	-	-	-	-	-	-	-
Exposures in the form of collective investment undertakings	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-
Other exposures	-	-	-	-	-	-	-
Total exposure with standardised approach	844	112	53	67	2,706	3	3,785
Total	232,403	36,201	45,055	38,641	45,993	3,600	401,893

¹⁾ The table does not include off-balance-sheet exposures.

9.8 Net exposure amounts by next stipulated date of expiry

Table 33 presents net exposures in the balance sheet, that is, off-balance-sheet items are excluded. A large proportion (69%) of credit risk exposures have less than one year remaining until maturity¹⁾. The proportion with a remaining term of between one

and five years accounts for 98% of the outstanding exposures. Exposures under other items where the duration cannot be calculated have been placed in the "no stated maturity" column to provide a better overview.

TABLE 33. MATURITY OF EXPOSURES (EBA CRB-E TABLE)

SEK million	On demand	<=1 year	>1 year <=5 years	> 5 years	No stated maturity	Total
Exposures to corporates	-	7,543	30,752	776	0	39,071
Retail exposures	-	273,223	46,411	2,832	33	322,499
Total exposure with IRB approach	-	280,766	77,163	3,608	33	361,570
Exposures to governments and central banks	-	19,343	5,418	460	-	25,221
Exposures to regional governments or local authorities or agencies	-	621	9,461	1,213	-	11,295
Exposures to public sector entities	-	-	-	-	-	-
Exposures to multilateral development banks	-	534	1,517	392	-	2,443
Exposures to international organisations	-	-	-	-	-	-
Exposures to institutions	-	7	6,921	2,274	-	9,202
Exposures to corporates	-	-	-	-	-	-
Retail exposures	2,192	591	-	-	-	2,783
Exposures to households secured against immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	9	9
Exposures associated with particularly high risk	-	-	-	-	-	-
Exposures in the form of covered bonds	-	6,724	28,528	677	-	35,929
Exposures to institutions and corporates with a short-term credit rating	-	80	-	-	-	80
Exposures in the form of collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	89	89
Other items	-	-	-	-	381	381
Total exposure with standardised approach	2,192	27,900	51,845	5,016	479	87,432
Total	2,192	308,666	129,008	8,624	512	449,002

¹⁾ For credit risk exposures in the lending portfolio, the next stipulated date of expiry has been used. The stipulated date of expiry is defined as the day for establishing the conditions that are to apply for loans during the forthcoming contractual period. The terms must be supported by the stipulations of the original loan agreement.

9.9 Net exposure amounts by sector and type of property

Tables 34 and 35 contain net amounts for on- and off-balance-sheet items. Table 34 provides information about credit risk exposures as a whole, unlike Table 35 which shows credit risk exposures in lending operations.

In the distribution of the lending portfolio by type of property, lending for houses, holiday homes, tenant-owners' rights and tenant-owners' associations accounts for 82% of the total lending portfolio.

TABLE 34. CONCENTRATION OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES (EBA CRB-D TABLE)

SEK million	Construction	Real estate activities	Other services	Financial services*	Total
Exposures to corporates	12,121	31,968	-	-	44,089
of which, Specialised lending	-	-	-	-	-
of which, SMEs	-	16,092	-	-	16,092
Retail exposures	-	354,019	-	-	354,019
Exposures to households secured against immovable property	-	354,019	-	-	354,019
of which, SMEs	-	46,580	-	-	46,580
of which, non-SMEs	-	307,449	-	-	307,449
Total exposure with IRB approach	12,121	385,987	-	-	398,108
Exposures to governments and central banks	-	-	-	25,221	25,221
Exposures to regional governments or local authorities or agencies	-	11,295	-	-	11,295
Exposures to public sector entities	-	-	-	-	-
Exposures to multilateral development banks	-	-	-	2,443	2,443
Exposures to international organisations	-	-	-	-	-
Exposures to institutions	-	-	-	9,202	9,202
Exposures to corporates	-	-	-	-	-
of which, SMEs	-	-	-	-	-
Retail exposures	-	-	3,774	-	3,774
of which, SMEs	-	-	-	-	-
Exposures to households secured against immovable property	-	-	-	-	-
of which, SMEs	-	-	-	-	-
Exposures in default	-	-	9	-	9
Exposures associated with particularly high risk	-	-	-	-	-
Exposures in the form of covered bonds	-	-	-	35,929	35,929
Exposures to institutions and corporates with a short-term credit rating	-	-	-	80	80
Exposures in the form of collective investment undertakings	-	-	-	-	-
Equity exposures	-	-	89	-	89
Other items	-	-	381	-	381
Total exposure with standardised approach	-	11,295	4,253	72,875	88,423
Total	12,121	397,282	4,253	72,875	486,531

TABLE 35. NET EXPOSURE AMOUNTS BY TYPE OF PROPERTY FOR CREDIT RISK EXPOSURES IN LENDING OPERATIONS

SEK million	Houses and holiday homes	Tenant-owners' rights	Tenant-owners' associations	Private multi-family dwellings	Municipal multi-family dwellings	Commercial properties	Unsecured	Off-balance-sheet items	Total
Exposures to corporates	16	-	5,565	30,171	148	3,171	-	5,018	44,089
Retail exposures	139,890	136,258	46,351	-	-	-	-	31,520	354,019
Total exposure with IRB approach	139,906	136,258	51,916	30,171	148	3,171	0	36,538	398,108
Exposures to governments and central banks	-	-	-	-	-	-	-	-	-
Exposures to regional governments or local authorities or agencies	-	-	-	-	2	-	-	-	2
Exposures to public sector entities	-	-	-	-	-	-	-	-	-
Exposures to multilateral development banks	-	-	-	-	-	-	-	-	-
Exposures to international organisations	-	-	-	-	-	-	-	-	-
Exposures to institutions	-	-	-	-	-	-	-	-	-
Exposures to corporates	-	-	-	-	-	-	-	-	-
Retail exposures	256	339	-	-	-	-	2,189	990	3,774
Exposures to households secured against immovable property	-	-	-	-	-	-	-	-	-
Exposures in default	1	1	-	-	-	-	7	-	9
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-
Exposures in the form of covered bonds	-	-	-	-	-	-	-	-	-
Exposures to institutions and corporates with a short-term credit rating	-	-	-	-	-	-	-	-	-
Exposures in the form of collective investment undertakings	-	-	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-	-	-
Other exposures	-	-	-	-	-	-	-	-	-
Total exposure with standardised approach	257	340	-	-	2	-	2,196	990	3,785
Total	140,163	136,598	51,916	30,171	150	3,171	2,196	37,528	401,893

9.10 Past due exposures and exposures subject to impairment requirements

An exposure is regarded as in default if the receivable is more than 60 days past due (for receivables exceeding SEK 1,000) or if an assessment has been made that the customer will probably not be able to pay agreed interest amounts or cover repayments of the principal. Exposures subject to impairment requirements refer to doubtful exposures whereby individual provisions have been posted for commitments, meaning that in SBAB's assessment, future payments are exposed to risk and the collateral does not cover the amount of the claim. The size of the individual provisions is assessed by comparing the agreed payment flow with the expected future payment capacity in combination with a valuation of the underlying collateral.

For all other commitments a collective provision is made based on the ECL model that estimates the ECL and is therefore intended to cover losses for events that have occurred but that

have not yet had effect on the individual level. The models rank the loan receivables and divide them according to their relative credit risk following initial recognition into three stages: Credit impaired loan receivables are allocated to stage 3. SBAB applies the internal default definition to determine whether a receivable has suffered credit deterioration. Loan receivables with a significant increase in credit risk but which have yet to be credit impaired are allocated stage 2. Other loan receivables are allocated to stage 1.

Individual and collective provisions are carried out pursuant to the current accounting standard IFRS 9. At 31 December 2018, the total provisions, with deductions for guarantees, amounted to 46% of the exposure amount for past due exposures. All provisions have been assessed to constitute specific credit risk adjustments based on Article 1, item 5, of the EBA's regulatory technical standards on specific and general risk regarding Article 110, item 4 of the CRR.

TABLE 36. CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENTS (EBA CR1-A TABLE)

SEK million	Gross carrying amount of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges for the period	Net values (or net exposures)
	Exposures in default	Non-defaulted exposures					
Exposures to corporates	-	44,096	7	-	-	-11	44,089
- of which, Specialised lending	-	-	-	-	-	-	-
of which, SMEs	-	16,093	1	-	-	-18	16,092
Retail exposures	257	353,866	104	-	26	-53	354,019
Exposures to households secured against immovable property	257	353,866	104	-	26	-53	354,019
of which, SMEs	19	46,560	10	-	23	0	46,569
of which, non-SMEs	237	307,306	94	-	3	-53	307,449
Total exposure with IRB approach	257	397,962	111	-	26	-64	398,108
Exposures to governments and central banks	-	25,221	-	-	-	0	25,221
Exposures to regional governments or local authorities or agencies	-	11,295	-	-	-	0	11,295
Exposures to public sector entities	-	-	-	-	-	-	0
Exposures to multilateral development banks	-	2,443	-	-	-	0	2,443
Exposures to international organisations	-	-	-	-	-	-	0
Exposures to institutions	-	9,202	-	-	-	-	9,202
Exposures to corporates	-	-	-	-	-	-	0
of which, SMEs	-	-	-	-	-	-	0
Retail exposures	13	3,782	8	-	-	-1	3,787
of which, SMEs	-	-	-	-	-	-	0
Exposures in default	13	-	4	-	-	0	9
Exposures in the form of covered bonds	-	35,930	1	-	-	0	35,929
Exposures to institutions and corporates with a short-term credit rating	-	80	-	-	-	-	80
Equity exposures	-	89	-	-	-	-	89
Other items	-	381	-	-	-	-	381
Deduction for retail exposures in default, recognised on rows 24 and 28*	-13	-	-	-	-	-	-13
Total exposure with standardised approach	13	88,423	13	-	-	-1	88,423
Total	270	486,385	124	-	26	-65	486,531
- Of which, loans	270	364,212	117	-	-	-72	364,365
- Of which, debt securities	-	60,398	-	-	-	-	60,398
- Of which, off-balance-sheet exposures	-	37,535	7	-	-	7	37,528

TABLE 37. CREDIT QUALITY OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES (EBA CR1-B TABLE)

SEK million	Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
	Defaulted exposures	Non-defaulted exposures					
Construction	-	12,127	6	-	-	0	12,121
Real estate activities	257	397,219	105	-	26	-64	397,371
Other services	13	4,163	12	-	-	-2	4,164
Financial services*	-	72,876	1	-	-	1	72,875
Total	270	486,385	124	-	26	-65	486,531

*Credit institutions

TABLE 38. CREDIT QUALITY OF EXPOSURES BY GEOGRAPHY (EBA CR1-C TABLE)

SEK million	Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
	Defaulted exposures	Non-defaulted exposures					
Sweden	270	468,441	124	-	26	-65	468,587
Denmark	-	4,811	-	-	-	0	4,811
Finland	-	3,434	-	-	-	-	3,434
Norway	-	2,098	0	-	-	0	2,098
Canada	-	748	0	-	-	0	748
USA	-	165	-	-	-	-	165
France	-	39	-	-	-	-	39
Germany	-	1,847	0	-	-	0	1,847
United Kingdom	-	2,137	-	-	-	-	2,137
Switzerland	-	0	-	-	-	-	0
Austria	-	222	-	-	-	-	222
Netherlands	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-
Other countries*	-	2,443	-	-	-	0	2,443
Total	270	486,385	124	-	26	-65	486,531

*Pertains to investments in securities issued by the European Investment Bank (EIB) and the Nordic Investment Bank (NIB)

TABLE 39. AGEING OF PAST-DUE EXPOSURES (EBA CR1-D TABLE)

SEK million	Gross carrying values					
	← 30 days	> 30 days ← 60 days	> 60 days ← 90 days	> 90 days ← 180 days	> 180 days ← 1 year	1 year
Loans	18,819	62	20	25	39	21
Debt securities	-	-	-	-	-	-
Total	18,819	62	20	25	39	21

TABLE 40. NON-PERFORMING AND FORBORNE EXPOSURES (EBA CR1-E TABLE)

SEK million	Gross carrying values of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
		Of which, performing but past due > 30 days and ≤ 60 days*		Of which, non-performing*				On performing exposures*		On non-performing exposures*		On non-performing exposures	Of which, forborne exposures
		Of which, performing forborne*	Of which, defaulted	Of which, loans with individual provisions	Of which, forborne	Of which, forborne	Of which, forborne	Of which, forborne					
Debt securities	23,175	-	-	-	-	-	-	-	-	-	-	-	-
Loans and advances	367,193	28	43	269	267	267	12	-99	0	-32	-1	229	54
Off-balance-sheet exposures	37,535	-	-	-	-	-	-	-7	-	-	-	-	-

* Pertains to definitions pursuant to Appendix V to the Commission Implementing Regulation (EU) No 680/2014

TABLE 41. NET EXPOSURE AMOUNTS FOR DEFAULTED AND NON-DEFAULTED EXPOSURES BY PROPERTY TYPE

SEK million	Total exposure amount in the lending portfolio	Of which, exposures in default	Of which non-defaulted exposures	Specific credit risk adjustment	Total exposure amount in the lending portfolio after deduction for provisions
Houses and holiday homes	140,205	133	140,072	41	140,164
Tenant-owners' rights	136,649	106	136,543	51	136,598
Tenant-owners' associations	51,926	19	51,907	11	51,915
Private multi-family dwellings	30,173	-	30,173	2	30,171
Municipal multi-family dwellings	150	-	150	0	150
Commercial properties	3,171	-	3,171	1	3,170
Unsecured	2,208	12	2,196	12	2,196
Other	37,535	-	37,535	6	37,529
Total	402,017	270	401,747	124	401,893

TABLE 42 NET EXPOSURE AMOUNTS FOR DEFAULTED AND NON-DEFAULTED EXPOSURES BY REGION

SEK million	Total exposure amount in the lending portfolio	Of which, exposures in default	Of which non-defaulted exposures	Specific credit risk adjustment ¹⁾	Total exposure amount in the lending portfolio after deduction for provisions
Greater Stockholm	232,465	124	232,341	62	232,403
Greater Gothenburg	36,210	12	36,198	9	36,201
Öresund region	45,071	40	45,031	17	45,054
University and growth regions	38,648	25	38,623	7	38,641
Weak regions	3,612	25	3,587	11	3,601
Other regions	46,011	44	45,967	18	45,993
Total	402,017	270	401,747	124	401,893

9.11 Reconciliation of change in specific credit risk adjustments for loans with provisions

SBAB only has specific credit risk adjustments and no general credit risk adjustments.

TABLE 43. CHANGES IN THE STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS (EBA CR2-A TABLE)

SEK million	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
Opening balance (Closing 31 Dec 2017)	190	-
Increases due to amounts set aside for estimated loan losses during the period	77	-
Decreases due to amounts reversed for estimated loan losses during the period	-132	-
Decreases due to amounts taken against accumulated credit risk adjustments	-11	-
Transfers between credit risk adjustments	-	-
Impact of exchange rate differences	-	-
Business combinations, including acquisitions and disposals of subsidiaries	-	-
Other adjustments	-	-
Closing balance	124	-
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	3	-
Specific credit risk adjustments directly recorded to the statement of profit or loss	-11	-

TABLE 44. CHANGES IN STOCK OF DEFAULTED AND IMPAIRED LOANS AND DEBT SECURITIES (EBA CR2-B TABLE)

SEK million	Gross carrying value for defaulted exposures
Opening balance	451
Loans and debt securities that have defaulted or impaired since the last reporting period	145
Returned to non-defaulted status	-240
Amounts written off	-7
Other changes	-79
Closing balance	270

9.12 Exposures per risk class in the PD dimension

The credit quality of the lending portfolio is favourable. A total of 99.9% of corporate exposures and 94.7% of retail exposures in the balance sheet derive from the best risk classes: up to C4 (corporate exposures) and up to R4 (retail exposures).

FIGURE 12. IRB CORPORATES – EXPOSURE BY RISK CLASS

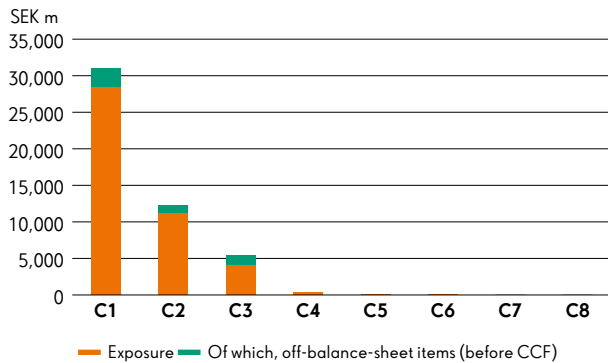


FIGURE 13. IRB RETAIL – EXPOSURE BY RISK CLASS

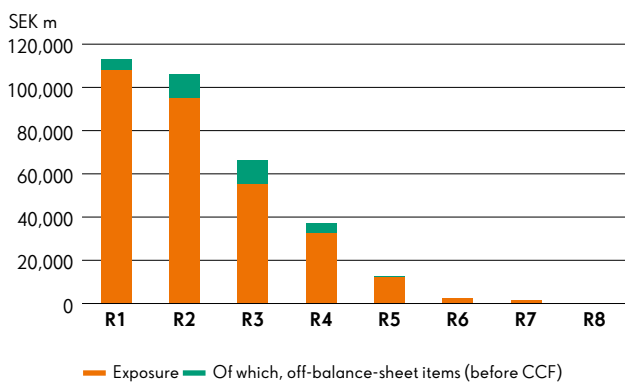


FIGURE 14. IRB RETAIL – TENANT-OWNERS' RIGHTS – EXPOSURE BY RISK CLASS

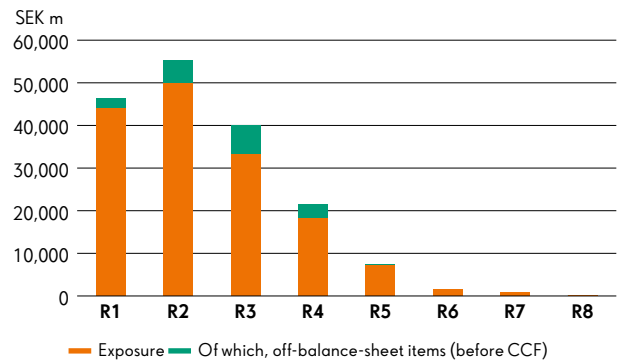


FIGURE 15. IRB RETAIL – HOUSE/HOLIDAY HOME – EXPOSURE BY RISK CLASS

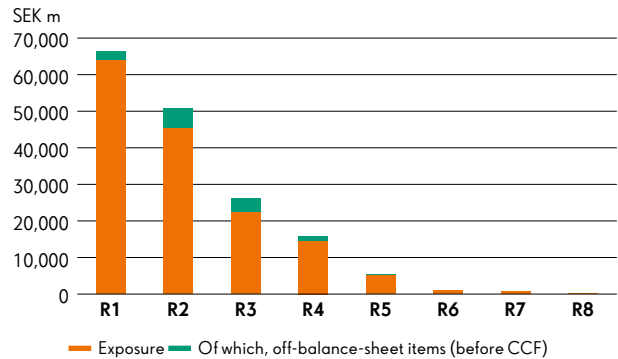
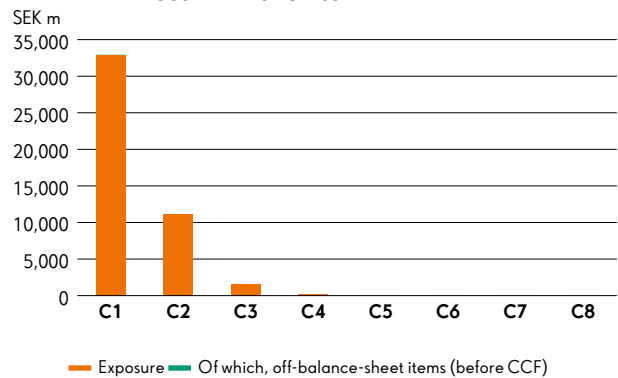


FIGURE 16. IRB RETAIL – TENANT-OWNERS' ASSOCIATION – EXPOSURE BY RISK CLASS



9.13 Realised outcome in the PD and LGD dimensions

Table 45 shows the exposure-weighted PD and LGD estimates as of 31 December 2017 and the actual outcome for 2018. The estimated PD for the retail exposures is somewhat above the actual outcome, which indicates that the models overestimate the risk of default. No default events occurred in 2018 and, accordingly it is difficult to draw any conclusions from the results in terms of the estimated PD for corporate exposures.

The estimated LGD for retail exposures is somewhat above the actual outcome. This was due to the estimated LGD being controlled by the above limitation rule, which entails a lowest average LGD of 10%.

Table 46 shows a further allocation of the PD estimates and outcomes.

TABLE 46. REALISED OUTCOME IN THE PD AND LGD DIMENSIONS

Exposure class	PD estimates, %	Realised outcome ¹⁾ , %	LGD estimate, %	Realised outcome ²⁾ , %
Exposures to corporates	0.3	0.0	-	0.0
Retail exposures	0.5	0.2	10,0 ³⁾	0.5 ³⁾

¹⁾ An exposure is regarded as in default if the receivable is more than 60 days past due or if an assessment has been made that the customer will probably not be able to pay agreed interest amounts or cover repayments of the principal.

²⁾ Realised outcome has been calculated on loans in default where the default was concluded during the year.

³⁾ The results are exposure-weighted.

TABLE 45. IRB APPROACH – BACKTESTING OF PD PER EXPOSURE CLASS (EBA CR9 TABLE)

Exposure class	PD range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	No. of obligors end of previous year	No. of obligors end of this year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate	
Corporates	Corporates – Other	0–100%	-	0.24%	0.17%	181	159	-	-	0.00%
	Corporates – SMEs	0–100%	-	0.20%	0.74%	278	275	-	-	0.23%
Retail	Retail – SMEs	0–100%	-	0.16%	0.28%	1,942	1,768	1	-	0.03%
	Retail – Other	0–100%	-	0.39%	0.42%	172,115	179,781	334	-	0.27%

9.14 Comparison of expected loss and outcome

During the comparison period, it can be seen that the expected loss (EL) decreased for both corporate and retail exposures. In both cases, the decrease was attributable to improved credit quality in the portfolio in terms of PD.

The good credit quality is also visible in the relatively small confirmed credit losses that arose during the year. In 2018, confirmed credit losses for exposures recognised under IRB amounted to 4% of EL.

TABLE 47. COMPARISON OF EXPECTED LOSS BETWEEN OUTCOME AND MODEL, AND PROVISION FOR LOANS REPORTED ACCORDING TO IRB APPROACH¹⁾

Exposure class, SEK million	EL, IRB/F-IRB 31 Dec 2017	EL, IRB/F-IRB 31 Dec 2016	EL, IRB/A-IRB 31 Dec 2017	EL, IRB/A-IRB 31 Dec 2016	Realised outcome 2018	Realised outcome 2017	Total provisions, including guarantees 31 Dec 2018	Total provisions, including guarantees 31 Dec 2017
Exposures to corporates	42	44	-	-	-	-	2	19
Retail exposures	-	-	156	157	3	8	103	157
<i>of which, houses and holiday homes</i>	-	-	60	65	2	5	42	54
<i>of which, tenant-owners' rights</i>	-	-	72	68	1	3	51	93
<i>of which, tenant-owners' associations</i>	-	-	24	24	-	-	9	10
Total	42	44	156	157	3	8	105	176

¹⁾ Expected loss (EL) has been calculated for the loan receivables that existed at the end of 2016 and 2017, respectively.

In table 18, the expected loss is compared with the actual outcome for confirmed loan losses during the outcome years of 2017 and 2018, respectively.

10 Funding

SBAB's operations are primarily funded through the capital and money markets. Since 2007, funding is also increasingly raised through retail deposits. Funding is conducted, in part, through the Parent Company SBAB Bank AB (publ) and, in part, through SCBC where funding is carried out through the issuing of covered bonds. Swedish and international programmes are utilised for funding and are predominantly conducted through public issues which are complemented by private placements. Funding is mainly targeted at major institutional investors. International funding is primarily aimed at European investors, but SBAB also attracts investors in the US, Japan and other parts of Asia.

10.1 Medium and long-term funding

10.1.1 Senior unsecured funding

SBAB has a programme for medium and long-term funding, the Euro Medium Term Note Programme (EMTN programme), which is used both for Swedish and international funding. The EMTN programme has a limit of EUR 13 billion. The terms of the EMTN programme follow market practice for similar programmes and entitle investors to early redemption of the bonds if, for example, SBAB fails to pay the interest or capital on time, breaks other terms of the programme (with consideration given to certain healing periods) or if SBAB is placed into receivership or liquidation. Under the EMTN programme, SBAB can choose between various types of interest-rate structures, including floating and fixed rates, and issue bonds in several currencies and denominations. Moreover, the EMTN programme allows SBAB to issue both unsubordinated debt (senior preferred and senior non preferred) as well as dated subordinated notes, which may qualify as Tier 2 capital on approval by the Swedish FSA.

Based on the EMTN programme, SBAB has also established a standalone prospectus under which perpetual subordinated debt intended to qualify as Additional Tier 1 capital has been issued.

10.1.2 Secured funding

The subsidiary SCBC has three funding programmes for issuing covered bonds: a Swedish covered bond programme with no fixed limit, an international Euro Medium Term Covered Note Programme (EMTCN programme) with a limit of EUR 16 billion and a dormant Australian Covered Bond Issuance Programme with a limit of AUD 4 billion. The terms of these programmes for issuing covered bonds follow market practice for similar programmes and entail, for example, that investors have limited right to early redemption of the bonds. The terms also stipulate that SCBC can choose between various types of interest-rate structures, including floating and fixed rates, and issue bonds through these three programmes in several currencies and denominations. The EMTCN programme also allows SCBC to issue bonds with a soft-bullet structure, which entitles the issuer, in certain cases, to extend the maturity of the bond according to the issuer's terms.

10.2 Short-term funding

SBAB manages its short-term funding primarily through two commercial paper programmes:

- A Swedish commercial paper programme with a limit of SEK 25 billion; and
- A European commercial paper programme with a limit of EUR 3 billion.

The terms of these programmes follow market practice for similar programmes and include limited opportunities for an investor to demand early redemption.

SBAB can issue commercial paper in the international market in a variety of currencies through the European programmes, while the Swedish programme is mainly used for SEK. Commercial papers are mainly "discount paper," meaning that it does not have floating or fixed coupon rates, but is issued in an amount that is more/less than the nominal amount that will be repaid when it falls due.

10.3 Encumbered and unencumbered assets

As a part of SBAB's operations, residential mortgages are transferred to the subsidiary SCBC. These residential mortgages can include credits pledged against mortgages in real estate intended for residential purposes, against tenant-owners' rights or credits that otherwise qualify for inclusion in the cover pool for covered bonds. SBAB's receivables relating to the residential mortgages transferred to SCBC are repaid (wholly or in part) to SBAB at the same time as covered bonds are issued by SCBC. SBAB's receivables relating to these transfers and other receivables (unless they have arisen as a result of a derivative contract connected to the cover pool) are subordinated receivables without priority, in the event SCBC were to enter receivership or be liquidated.

Derivative contracts may be used to ensure a good balance regarding currencies, interest rates and fixed-interest periods in the cover pool. By entering into interest-rate swap contracts with SBAB or external counterparties regarding the assets registered in the cover pool, SCBC is able to convert interest payments received by SCBC in SEK for certain assets that are registered in the cover pool into variable payments linked to 3-month STIBOR.

In the same manner, SCBC may enter into currency swaps to hedge currency risks arising from funding in foreign currencies or potential assets in foreign currencies that are registered in the cover pool.

The companies in the SBAB Group are also able to enter into derivative transactions that do not need to be recorded in the cover pool. Derivative contracts may be entered into between the companies in the SBAB Group or with external counterparties. For all counterparties documentation exists in the form of ISDA Master Agreements. In most cases, an agreement is supplemented by a credit support annex (CSA). The Parent Company and SCBC may also enter into repo transactions with certain counterparties. These transactions are governed through Global Master Repurchase Agreements (GMRA). In all instances, the collateral transferred between counterparties under CSAs and GMRA is in the form of cash.

The cover pool assets consist mainly of loans to the public in the form of loans against mortgages of immovable property intended

for residential use or against pledged tenant-owners' rights. The cover pool may also include substitute collateral, and it is consequently possible to include derivatives or securities in the cover pool. The volume pertaining to encumbered assets in the last five-year period is described in Figure 17, Encumbered assets.

According to the Covered Bonds (Issuance) Act (2003:1223), the value of the assets in the cover pool must always exceed the value of the bonds issued with the encumbered assets as collateral (referred to as overcollateralisation, "OC"). The unutilised scope in the last four-year period is described in Figure 18, Unutilised scope. At 31 December 2018, SCBC had set 2.0% as a minimum requirement for the OC level, which is the level required by the matching rules set out in Chapter 3, sections 8 and 9 of the Covered Bonds (Issuance) Act (2003:1223). At 31 December 2018, this level was equal to a volume of SEK 4.6 billion.

At 31 December 2018, SCBC had assets (reserves) corresponding to SEK 21.7 billion that can constitute covered assets.

FIGURE 17. ASSETS ENCUMBERED

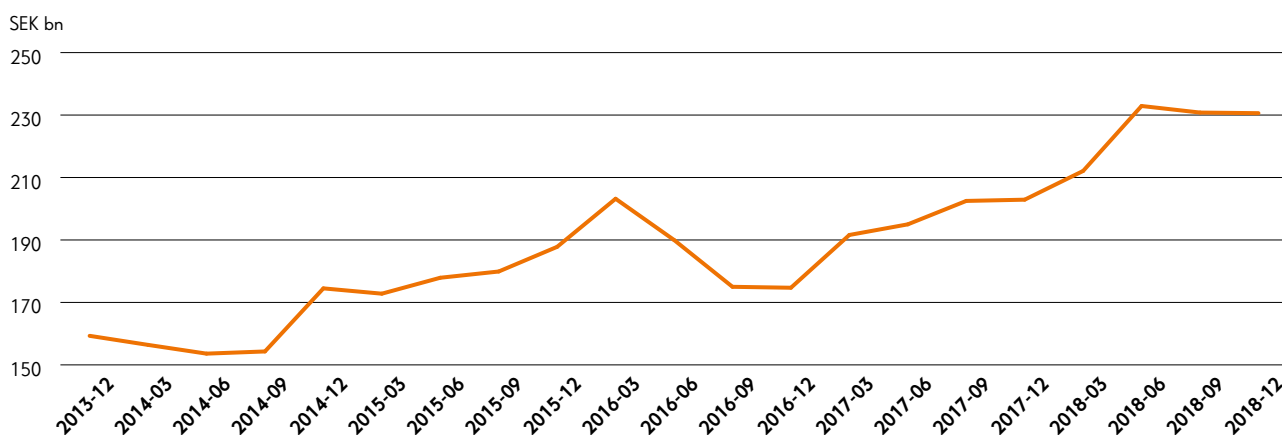
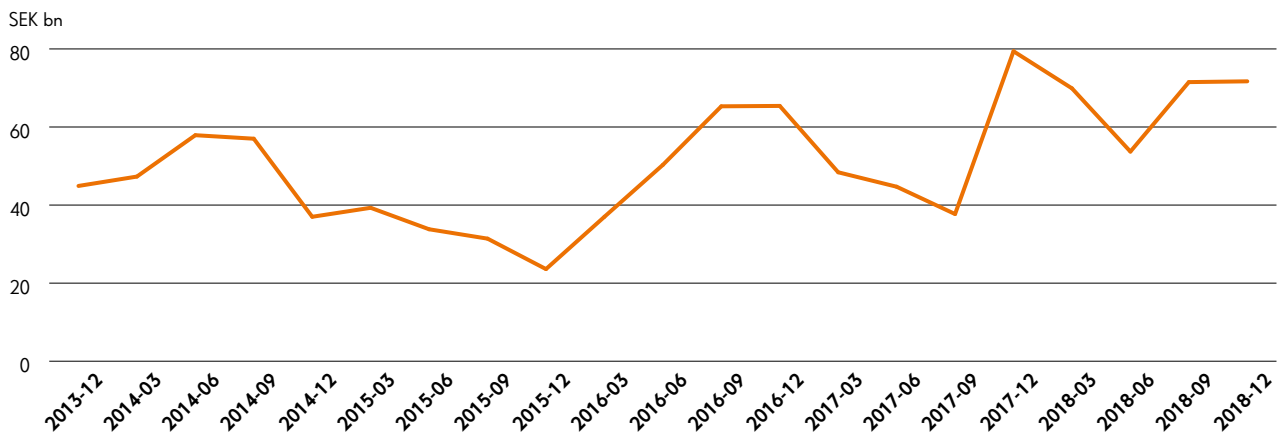


FIGURE 18. UNUTILISED SCOPE



Of the assets included in Table 48, Assets encumbered disclosures below, under the heading Unencumbered assets, carrying amount with the amount recognised in the item Other assets, SBAB has reported any items that are not available for mortgaging or other collateral arrangements in the regular operations.

Such assets include deferred tax assets, property, plant and equipment, intangible assets and certain other assets that are not mortgaged, pledged as collateral or used as security in the regular operations.

TABLE 48. ASSETS ENCUMBERED DISCLOSURES

Assets, SEK million	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		<i>of which notionally eligible EHQLA and HQLA</i>		<i>of which notionally eligible EHQLA and HQLA</i>		<i>of which EHQLA and HQLA</i>		<i>of which EHQLA and HQLA</i>
Assets of the reporting institution	233,824	-			214,531	71,238		
Equity instruments	-	-			-	-		
Debt securities	-	-	-	-	71,849	71,238	72,392	71,780
<i>of which: covered bonds</i>	-	-	-	-	35,660	35,048	35,953	35,340
<i>of which: asset-backed securities</i>	-	-	-	-	-	-	-	-
<i>of which: issued by general governments</i>	-	-	-	-	22,505	22,505	22,701	22,701
<i>of which: issued by financial corporations</i>	-	-	-	-	13,684	13,684	13,739	13,739
<i>of which: issued by non-financial corporations</i>	-	-	-	-	-	-	-	-
Other assets	233,824	-			142,682	-		

TABLE 49. COLLATERAL RECEIVED

SEK million	Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
		<i>of which notionally eligible EHQLA and HQLA</i>		<i>of which notionally eligible EHQLA and HQLA</i>
Collateral received by the reporting institution	1,352	-	0	-
Equity instruments	-	-	-	-
Debt securities	0	-	0	-
Other collateral received	1,352	-	-	-
Own debt securities issued other than own covered bonds or ABSs	-	-	-	-

TABLE 50. ENCUMBERED ASSETS/COLLATERAL RECEIVED AND RESULTING LIABILITIES

SEK million	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	233,824	233,824

10.4 Funding strategy

The size of the funding portfolio is a function of the volume of the loans outstanding, and on the composition of the assets after taking into consideration such factors as liquidity risk and the company's risk appetite. Funding is also continuously adjusted to meet new liquidity rules and the requirements imposed by rating agencies and investors. The funding should be diversified.

The portfolio must have an effective distribution between secured and unsecured funding and strive for an even distribution of debt maturity dates, i.e. avoiding periods with large concentrations of maturities. The funding portfolio should also include funding in several currencies with a balanced and diversified investor base. As a consequence of the company's lending being conducted exclusively in SEK, the majority of the funding is allocated to SEK. The second largest currency for funding is EUR and the Group has been a regular issuer in the EUR market for many years. Funding should be conducted using several lead banks and through public offers and private placements. Interest-rate risk and currency risk associated with funding are managed using derivatives, primarily interest-rate and currency swaps.

SBAB's lending is funded mainly by retail deposits and through the financial capital markets in the form of commercial paper and bonds. Long-term funding is mainly conducted via covered bonds.

Short-term funding under SBAB's commercial paper programme must be adjusted to market conditions and needs, but always constitute a limited share of the total funding portfolio. SBAB's loan assets should be used effectively by acting as collateral for secured funding. The funding mix between SCBC and the Parent Company must be well balanced, taking into account the companies' risk appetite, rating and total long-term funding cost.

SBAB and SCBC must maintain an active market presence, with favourable and frequent relations with investors in each investor segment.

10.5 Deposit strategy

SBAB has an expressed ambition of gradually increasing the amount of deposits and their share of balance sheet liabilities. Retail deposits are to amount to a significant proportion of total liabilities. To ensure that funding is diversified and to limit dependence on capital markets, deposits are to constitute at least 28% of lending (deposit-to-loan ratio). At 31 December 2018, this ratio was 34%. SBAB aims to raise the deposit-to-loan ratio (DTLR) further moving forward. Figure 20 illustrates the trends for deposits, lending and the deposit-to-loan ratio since 2008.

FIGURE 19. FUNDING SOURCES AND DISTRIBUTION BY CURRENCY FOR DEPOSITS AND FUNDING

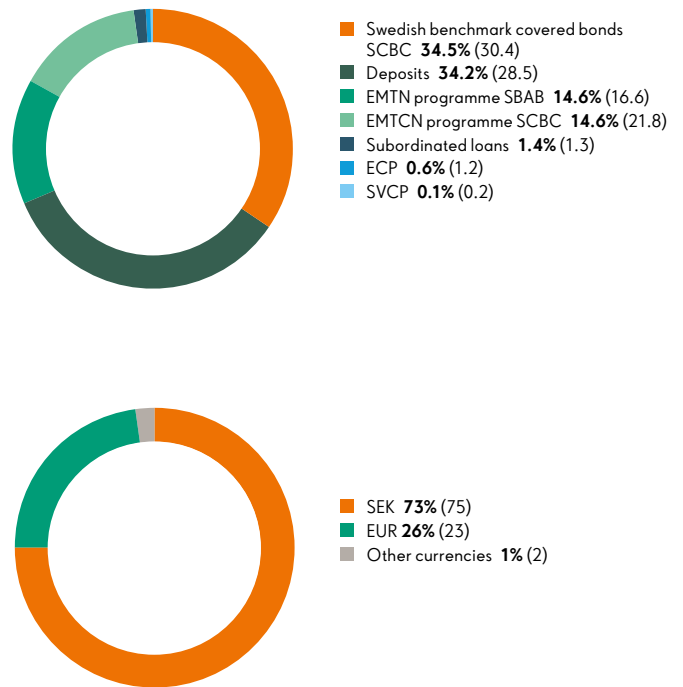
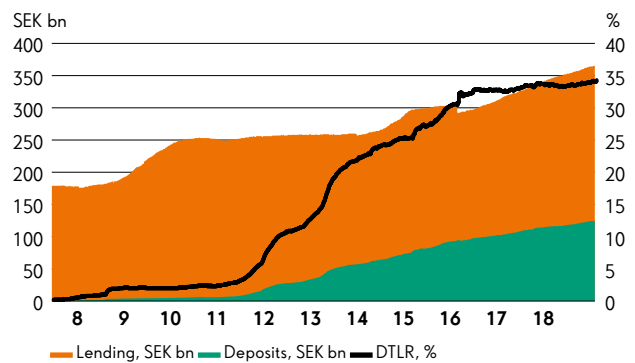


FIGURE 20. DEPOSITS AND LENDING TRENDS



11 Credit risk in treasury operations

Credit risk arises in treasury operations, in part, in the form of counterparty risks for the derivative and repo contracts entered into by SBAB to manage its financial risks and, in part, in the form of investment risk as a result of investments in the liquidity portfolio and the investment of surplus liquidity.

In accordance with the credit instruction adopted by the Board, credit risk limits are established by SBAB's Credit Committee for all counterparties in the treasury operations. The utilised limit is calculated as the market value of financial derivatives, repos and investments. For derivative and repo contracts, the effect of collateral pledged or received under CSAs and GMRA's is included in the total net exposure. Moreover, for derivatives, an add-on amount is also calculated for future risk-related changes. The credit risk limit may be established for a period of no longer than one year, following which a new assessment must be conducted. The decisions of the Credit Committee are reported to the Board at the following Board meeting.

11.1 Counterparty risk

Counterparty risk is the risk that SBAB's financial counterparties cannot meet their commitments pursuant to the completed derivatives and repo contracts, and such risk consists primarily of exposures to well-reputed and established banks. Table 51 provides a breakdown of CCR exposures by risk weight at 31 December 2018. This exposure is predominantly covered by collateral agreements, where the counterparty posts collateral to reduce net exposure.

TABLE 51. STANDARDISED APPROACH – CCR EXPOSURES BY REGULATORY PORTFOLIO AND RISK (EBA TABLE CCR3)

SEK million Exposure class	0%	10%	20%	50%	Total
Institution	-	-	2,745	6,455	9,200
Total	-	-	2,745	6,455	9,200

To limit the potential counterparty credit risk associated with derivative transactions involving non-standardised derivatives that are not cleared through a central counterparty (CCP) approved by the competent authority (in accordance with Regulation (EU) No 648/2012), a framework agreement must have been concluded with the counterparty. In most cases, the framework agreement, an ISDA Master Agreement or similar agreements with terms for final settlement, have been supplemented with a credit support annex (CSA).

The ISDA Master Agreement entails, inter alia, that netting is regulated in the event of bankruptcy. A CSA means that the parties have agreed in advance to transfer collateral if the exposure exceeds a specified threshold amount. The threshold amount and the minimum amount to be transferred to or from the counterparty can vary depending on the parties' ratings. Tables 57 and

58 provide an overview of the distribution of the market value of individual derivative transactions by rating and maturity.

GMRA's are used to limit the counterparty risk associated with repo transactions. These agreements control aspects such as the transfer of collateral to or from the counterparty.

When entered into, CSAs are reconciled on a daily basis or on a weekly basis. When CSAs are in place, collateral is pledged to reduce net exposures. Wherever applicable, the posted and received collateral takes the form of cash with a transfer of title, which entitles the party that receives the collateral to use the collateral in its operations. In certain cases, under the agreements concluded by the Parent Company and SCBC, threshold and minimum transfer amounts are regulated by the parties' rating, the poorer the party's rating, the lower these amounts are. At 31 December 2018, a decline in SBAB's rating would not result in the need for SBAB to provide extra collateral to any external counterparty.

TABLE 52. ANALYSIS OF THE COUNTERPARTY CREDIT RISK (CCR) EXPOSURE BY APPROACH (EBA CCR1 TABLE)

SEK million Exposure class	Replacement cost/current market value	Potential future credit exposure	EAD post CRM	RWA
Mark to market	7,299	6,819	9,200	3,776
Financial collateral comprehensive method (for SFTs)	-	-	-	-
Total	7,299	6,819	9,200	3,776

TABLE 53. IMPACT OF NETTING AND COLLATERAL HELD ON EXPOSURE VALUES (EBA CCR5-A TABLE)

SEK million	Gross positive fair value or net carrying	Netting benefits	Netted current credit	Collateral held	Net credit exposure
Derivatives	8,313	1,014	7,299	4,919	2,380
SFTs	-	-	-	-	-
Total	8,313	1,014	7,299	4,919	2,380

TABLE 54. COMPOSITION OF COLLATERAL FOR EXPOSURES TO COUNTERPARTY CREDIT RISK (EBA TABLE CCR5-B)

SEK million	Collateral used in derivative transaction				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Total	-	-7,210	1,153	841	-	-

11.2 Credit quality in the liquidity portfolio

The primary purpose of SBAB's liquidity portfolio is to act as a provision for situations when the ability to obtain liquidity from other sources is limited or rendered materially more difficult. The portfolio comprises liquid, interest-bearing securities with high ratings. Moreover, securities holdings constitute an integrated part of the total credit risk utilisation for each issuer. Securities

holdings in the liquidity portfolio are limited by asset class and by country, and new investments must have a rating of at least Aa from Moody's or AA from Standard & Poor's upon acquisition. The exemption to the above is for covered bonds, where a rating of Aaa from Moody's or AAA from Standard & Poor's is required to permit acquisition, refer to Table 55.

TABLE 55. APPROVED RATING PER ASSET CLASS

Asset class	Moody's / Standard & Poor's	Maximal remaining time to maturity	Share of liquidity portfolio
Securities issued or guaranteed by central governments, sovereigns, supranationals and agencies and non-governmental public sector entities	Aaa/AAA	10 years	49%
	Aa/AA	6 years	3%
Covered bonds	Aaa/AAA	10 years	47%
	Aa/AA		1%

Holdings of covered bonds are risk weighted in relation to their credit quality step in the CRR. At 31 December 2018, all of SBAB's holdings of covered bonds were assigned credit quality step one, which means a risk weight of 10%. The holdings in the portfolio are long-term and at 31 December 2018, the market value was SEK 74.9 billion. At the same date, 96% of the portfolio's value had a rating of Aaa from Moody's or AAA from Standard & Poor's. The various asset classes in the portfolio are securities issued by or guaranteed by central governments, securities issued by sovereigns, supranationals and agencies, securities issued by non-governmental public sector entities and European covered bonds. The holdings in the liquidity portfolio are classified as "Hold to Collect Fair Value Option (HTC FVO)", "Hold to Collect and Sell (HTC and Sell)", or "Hold to Collect (HTC)".

TABLE 56. HOLDINGS IN LIQUIDITY PORTFOLIO

SEK million	HTC FVO	HTC and Sell	HTC
Securities issued by central governments	5,886	6,180	11,353
Securities guaranteed by central governments	715	101	785
Securities issued by sovereigns, supranationals and agencies	663	1,522	246
Securities issued by non-governmental public sector entities	366	7,062	3,825
European covered bonds	2,122	26,573	6,965
Total	9,752	41,438	23,174

All securities are recognised above at their market value, regardless of how they have been classified in the accounts.

Credit risk assessment is conducted on the basis of assessed future cash flows and the market value of the collateral.

TABLE 57. DERIVATIVES SPECIFIED BY RATING

SEK million	Net market value	Positive market values	Negative market values
AA	-6	53	-59
AA-	1,649	2,160	-511
A+	1,416	1,669	-253
A	4,018	4,356	-338
BBB+	-13	67	-80
BBB	-15	3	-18
BBB-	-75	5	-80
Total	6,974	8,313	-1,339
Collateral			5,217
Netting benefits			844

TABLE 58. DERIVATIVES

SEK million	Total nominal values	Positive market values	Negative market values
<1 year, Interest-rate-related	57,497	142	-81
>1 year, Interest-rate-related	279,516	2,748	-777
<1 year, Currency-related	8,316	148	-136
>1 year, Currency-related	96,069	5,275	-345
Total	441,398	8,313	-1,339

TABLE 59. NET CREDIT EXPOSURE FOR DERIVATIVES

SEK million	
Gross positive fair value of contracts	8,313
- Netting benefits	-1,014
= netted current credit exposure	7,299
- Collateral held	-6,045
= net credit exposure for derivatives	1,254

12 Market risk

Market risk is the risk of loss or reduced future income due to market fluctuations.

SBAB is characterised by low risk taking, with the Board determining the overall risk appetite and setting the limits for the risk metric Value at Risk (VaR). In addition to VaR, a number of supplementary risk-based metrics set by the CEO of SBAB are also subject to limitation. Risk Control checks compliance with current risk levels and limits on a daily basis. Market risk is followed up at Group level as well as individual levels.

The general principle governing SBAB’s exposure to market risk is that the level of risk taking should be low. As a general principle, interest-rate risk is to be mitigated through direct funding or the use of derivatives. Currency risks are mitigated as funding in international currency is hedged through currency swaps or invested in matching currencies.

12.1 Value at Risk

VaR is a comprehensive portfolio metric expressing the potential loss that could occur given a certain level of probability and holding period. SBAB’s model is a historical model and applies percentiles in historical market data from the past two years.

Limits for the day-to-day follow up of VaR are set at two levels: SBAB’s total market risk, and all market risks that Treasury is responsible for managing. The limit for SBAB’s total market risk is based on the VaR metric included in the model for economic capital and applies a probability level of 99.97% and a holding period of one year, while the other metric applies a probability level of 99% and a holding period of one day.

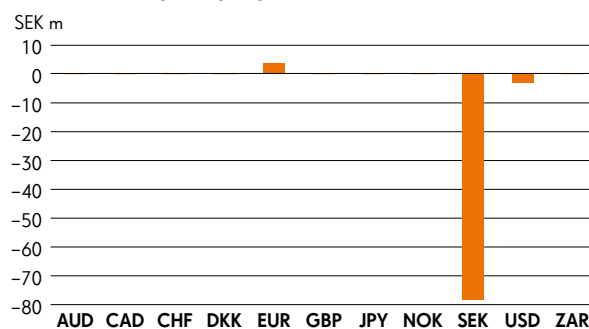
As per 31 December 2018, SBAB’s total market risk exposure was SEK 774 million (1,029), compared with the limit of SEK 1,950 million (1,950). Exposure to market risks managed by Treasury was SEK 27 million (38) and the limit was SEK 70 million (70).

12.2 Supplementary risk metrics

In addition to the overall VaR limits determined by the Board, the CEO has set a number of supplementary risk metrics for different kinds of market risks to which SBAB is exposed. For interest-rate risk, limits exist for parallel shifts and curve risk. For parallel risk, the effect on the present value of a one percentage-point shift in the yield curve is measured. Curve risk is measured as the effect on the present value in different scenarios, where the short end of the yield curve is adjusted down (up) and the long end is adjusted up (down). Currency risk is controlled by measuring the effect on present value when currency exchange rates change, and in the liquidity portfolio by controlling the matching of the principal in each currency. Limits are also in place for income volatility from basis spreads.

Income volatility from basis spreads arises because the derivatives used to hedge funding are recognised at fair value while the underlying funding is recognised at book value, in accordance with the accounting standards applied by SBAB. This causes effects to arise in operating profit that do not correspond to the actual risk to which SBAB’s portfolio is exposed. The income volatility from basis spreads is expected to decrease in the future, as SBAB has applied hedge accounting through cash-flow hedges since 2014, which means that income volatility will only be calculated for existing swap contracts that are not subject to cash flow hedges.

FIGURE 21. INTEREST-RATE RISK BROKEN DOWN BY CURRENCY IN THE EVENT OF A PARALLEL SHIFT IN THE YIELD CURVE OF +1 PERCENTAGE POINT



The interest-rate risk totalled negative SEK 41.0 million at 31 December 2018.

12.3 Interest-rate risk in other operations

Interest-rate risk in other operations is measured and reported quarterly to the Swedish FSA in accordance with FFFS 2007:4. For the calculation of interest-rate risk in other operations, a maturity of one day is assumed for deposits that are not time-limited. As per 31 December 2018, the effect on the present value was negative SEK 992.6 million (negative: 885.4) for a 2 percentage-point parallel upward shift and a positive SEK 1,017.6 million (909.3) for a 2 percentage-point parallel downward shift. The exposure distributed by currency is presented in Figure 22.

The net interest income effect is measured to capture the impact of changes in interest rates on profit or loss. The metric reflects the differences in volume and fixed-interest periods between assets, liabilities and derivatives in other operations. The net interest income effect is based on an instantaneous parallel shift of one percentage point up and down over a 12-month time horizon with no changes to the balance sheet. At the end of the year, the net interest income effect was negative SEK 67 million (negative: 53).

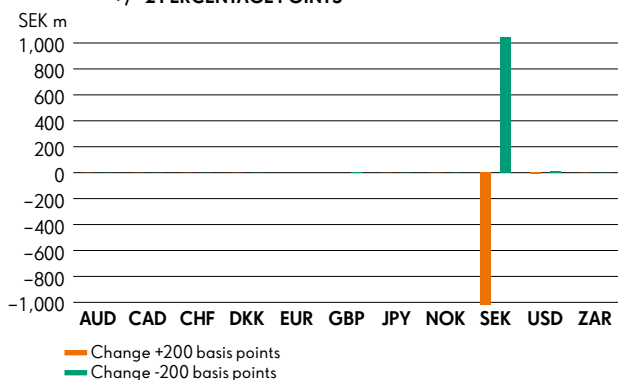
12.4. Regulatory capital requirement for market risk

SBAB uses the standardised approach to quantify capital requirements for market risk in Pillar 1. The regulatory capital requirement for market risk is shown in Table 60.

TABLE 60. MARKET RISK UNDER STANDARDISED APPROACH
(EBA TABLE MR1)

Outright products	RWAs	Capital requirements
Interest-rate risk (general and specific)	-	-
Foreign exchange risk	999	80
Total	999	80

FIGURE 22. INTEREST-RATE RISK IN OTHER OPERATIONS IN THE EVENT OF A PARALLEL SHIFT IN THE YIELD CURVE OF +/- 2 PERCENTAGE POINTS



13 Liquidity risk

Liquidity risk is defined as the risk that SBAB will not be able to meet its payment obligations at due date without the related cost of obtaining funds increasing significantly.

13.1 Liquidity strategy and liquidity risk management

Liquidity risk is defined by SBAB as a necessary risk and must be maintained at such a level that SBAB can manage a period of acute liquidity crisis without dependency on the capital market. SBAB and SCBC are managed collectively as one sub-consolidated liquidity group with regard to liquidity management and control in accordance with Regulation (EU) No. 575/2013 of the European Parliament and of the Council, which allows free disposition of liquid funds in the liquidity group. The Group has a central liquidity management function through which all of the Group's liquidity in all currencies is forecast and managed in a shared Group account structure. The overall aim of SBAB's liquidity strategy is to ensure SBAB's survival in terms of liquidity and that the company can effectively meet its payment obligations. Key features of the strategy are proactive and continuous liquidity planning, active debt management and the scope, content and management of SBAB's liquidity reserve.

Derivative transactions are used to manage financial risks that arise in conjunction with borrowing and lending. The majority of SBAB's interest-rate-related derivative transactions with external financial counterparties are cleared through clearing houses. SBAB comprises the primary swap counterparty for derivative transactions that SCBC needs to enter to hedge risks related to borrowing and lending.

13.1.1 Broad and diversified funding

SBAB has maintained an active international capital market presence since 1989. Short-term, mid-term and long-term funding takes place on a global basis. Moreover, the SBAB Group has access to the covered bond market, both in Sweden and internationally, through SCBC. In addition to issuing bonds, SBAB is funded by retail deposits. In the last few years, this source of funding has come to comprise an increasingly large share of liabilities, which has made the SBAB Group less dependent on unsecured funding. This trend is deemed to reduce the Group's refinancing risk since the market for unsecured funding is significantly more volatile than the markets for secured funding and deposits from the public.

Another key element of the SBAB Group's financing strategy is to achieve an even maturity profile over time. This is achieved by actively choosing maturities during the issue process to avoid excessive concentrations of future maturities and by continuously repurchasing and exchanging debt outstanding (active debt management). Compared with the European covered bonds market, the Swedish market has relatively large volumes outstanding of individual loans, but concentration, liquidity and

refinancing risks are mitigated by historically good possibilities for repurchasing and extension prior to loans maturing.

13.1.2 Liquidity reserve

SBAB has a liquidity portfolio in place to ensure liquidity in times when normal market funding does not function adequately or in the case of outflows of deposits. The portfolio acts as a buffer, as the securities in the portfolio can be used to generate liquidity, either through repos or through the sales of parts of the portfolio. The liquidity portfolio also comprises a business advantage in normal market conditions in the form of bridge financing for maturing debt and with ensuring intraday liquidity.

The portfolio holdings are long-term and mainly comprise liquid, interest-bearing securities with high ratings, where 100% of the portfolio's holdings can be used as collateral for repos with the Riksbank or the European Central Bank (ECB). The size of SBAB's holdings of individual securities as a percentage of the total volume outstanding is also limited with the aim of reducing concentration risk.

The liquidity reserve is defined as the reserve value of the securities in the liquidity portfolio and other liquid short-term investments. When calculating the reserve value of the securities included in the liquidity reserve, the SBAB Group applies the haircuts issued in accordance with the Riksbank's Guidelines for Collateral Management in the regulatory framework for RIX and monetary policy instruments.

Excluding pledged collateral, SBAB's liquidity reserve amounted to SEK 70.7 billion at 31 December 2018 (the reserve value at the Riksbank or the ECB). The market value amounted to SEK 73.6 billion (see Table 61) with an average maturity of 2.07 years. Moreover, unutilised issuance capacity for covered bonds comprises an additional reserve that is not included in the calculation of the above liquidity metrics.

13.1.3 Continuous monitoring of liquidity risk

Proactive and continuous liquidity planning in the relevant currencies, active debt management and the scope, content and management of the liquidity reserve are key factors in SBAB's liquidity risk management. By viewing funding activities as a natural part of both operational work and the strategic planning of liquidity risk, concentrations of excessively large funding maturities are avoided. Another important part of the ongoing liquidity risk management is the continuous monitoring and testing of the practical liquidity value of the liquidity reserve in the secondary market.

13.1.4 Contingency plan

SBAB has a contingency plan for the management of liquidity crises. The contingency plan contains a clear delegation of responsibility for the personnel concerned, as well as instructions on how the company can rectify potential liquidity deficits. The plan stipulates suitable actions to handle the implications of vari-

ous types of crisis scenarios and contains definitions of events that cause and escalate the contingency plan. The contingency plan is regularly tested and updated based on, for example, the results of stress tests.

TABLE 61. LIQUIDITY RESERVE

Liquidity reserve, SEK million	Dec 2018	DISTRIBUTION BY CURRENCY			
		SEK	EUR	USD	Other
Cash and holdings in central banks	2,515	2,515	-	-	-
Deposits in other banks available o/n	-	-	-	-	-
Securities issued or guaranteed by sovereigns, central banks or multinational development banks	25,144	15,577	7,187	2,380	-
Securities issued or guaranteed by municipalities or public sector entities	10,681	8,391	1,145	1,145	-
Covered bonds issued by other institutions	35,339	30,840	3,905	594	-
Covered bonds issued by SBAB	-	-	-	-	-
Securities issued by non-financial corporates	-	-	-	-	-
Securities issued by financial corporates (excl. covered bonds)	-	-	-	-	-
Other securities	-	-	-	-	-
Bank and loan facilities	-	-	-	-	-
Total	73,679	57,323	12,237	4,119	-
Currency distribution, %		78	16	6	-

Liquidity risk

TABLE 62. LIQUIDITY COVERAGE RATIO UNDER THE CRR (EBA LIQ1 TABLE)

	TOTAL UNWEIGHTED VALUE (AVERAGE)				TOTAL WEIGHTED VALUE (AVERAGE)			
	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
High-quality liquid assets (HQLA)								
1 Total HQLA	-	-	-	-	80,239	78,335	75,103	72,357
Cash flows								
2 Retail deposits and deposits from small business customers, of which:	96,793	93,606	90,337	86,919	7,941	7,629	7,326	6,999
3 Stable deposits	63,349	61,668	60,039	58,338	3,167	3,083	3,002	2,917
4 Less stable deposits	33,445	31,938	30,298	28,581	4,773	4,546	4,324	4,082
5 Unsecured wholesale funding	25,705	25,870	25,783	24,446	12,967	13,124	13,100	11,901
6 Operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	-	-	-	-	-
7 Non-operational deposits (all counterparties)	21,831	21,759	21,579	21,353	9,094	9,013	8,896	8,808
8 Unsecured debt	3,874	4,111	4,204	3,093	3,874	4,111	4,204	3,093
9 Secured wholesale funding	-	-	-	-	57	60	55	51
10 Additional requirements	52,221	51,737	49,895	47,346	17,996	16,601	13,999	10,666
11 Outflows related to derivative exposures and other collateral requirements	11,326	10,899	9,295	6,101	11,326	10,899	9,295	6,101
12 Outflows related to loss of funding on debt products	4,869	3,852	2,815	2,634	4,869	3,852	2,815	2,634
13 Credit and liquidity facilities	36,027	36,986	37,785	38,611	1,801	1,849	1,889	1,931
14 Other contractual funding obligations	149	141	125	124	9	9	0	0
15 Other contingent funding obligations	10,964	11,311	11,534	11,583	3,770	4,193	4,759	5,308
16 TOTAL CASH OUTFLOWS	-	-	-	-	38,955	37,414	34,479	29,612
Cash inflows								
17 Secured lending (e.g. reverse repos)	3,100	3,965	4,634	4,381	189	214	206	147
18 Inflows from fully performing exposures	1,654	1,679	1,697	1,669	1,055	1,066	1,073	1,055
19 Other cash inflows	12,381	11,671	9,817	6,617	12,381	11,671	9,817	6,617
EU-19a (Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)	-	-	-	-	-	-	-	-
EU-19b (Excess inflows from a related specialised credit institution)	-	-	-	-	-	-	-	-
20 Total cash inflows	34,269	34,630	32,294	25,333	27,250	25,900	22,192	15,639
EU-20a Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b Inflows subject to 90% cap	-	-	-	-	-	-	-	-
EU-20c Inflows subject to 75% cap	17,135	17,315	16,147	12,666	13,625	12,950	11,096	7,820
TOTAL ADJUSTED VALUE								
21 Liquidity buffer					80,239	78,335	75,103	72,357
22 Total net cash outflows					29,109	28,667	28,144	27,100
23 Liquidity coverage ratio (%)					276	273	267	267

13.2 Liquidity risk – Short-term liquidity risk

At SBAB, the risk of being exposed to insufficient liquidity in the short term is known as short-term liquidity risk. SBAB regularly monitors a number of metrics for short-term liquidity risk. A few of which are described below.

13.2.1 Liquidity coverage ratio pursuant to the European Commission delegated regulation

The liquidity coverage ratio is defined by SBAB in accordance with the European Commission delegated regulation (EU) 2015/61. This is a metric of the degree to which the liquidity reserve covers a 30-day net cash outflow in a stressed scenario. Under the regulation, the metric must amount to not less than 100% for all currencies on a consolidated basis. At 31 December 2018, the metric was 283% at the consolidated level, and 6,795% and 319%, respectively, in EUR and USD. In 2018, the LCR consolidated for all currencies never fell below 220%.

In accordance with the EBA's guidelines (EBA/GL/2017/01), detailed information is reported about the liquidity coverage ratio in Table 62 above. The values presented are simple average values for observations at the end of the month over the 12-month period preceding the end of each quarter.

In 2018, the item "Outflows related to derivative exposures and other collateral requirements" averaged SEK 11,326 billion in accordance with Table 62. The majority of the amount pertains to derivative liabilities for which SBAB has posted collateral. Slightly more than SEK 1 billion corresponds to a simulated outflow as a result of additional collateral being required in extremely stressed market scenarios pursuant to Article 30 (3) of the European Commission delegated regulation (EU) 2015/61. The amount also includes excess collateral posted by counterparties and contracted collateral that has yet to be posted by the bank.

13.2.2 Survival horizon

In addition to regulatory liquidity risk metrics, SBAB has a number of internal metrics. These include the measurement and stress testing of the liquidity risk by totalling the maximum conceivable need for liquidity for each coming day. This liquidity risk metric is referred to as the survival horizon. The calculations are based on a crisis scenario in which all loans are assumed to be extended on maturity, meaning that no liquidity is added through loan redemption, and where no funding is available. Retail deposits are treated with a conservative assumption, whereby withdrawals from the portfolio are distributed over time on the basis of historical changes. Accordingly, the maximum need for liquidity can be identified for every given future period, and the necessary liquidity reserve can be established. The survival horizon corresponds to the number of days for which the liquidity reserve covers the maximum outflow and it has been limited to a minimum of 180 days at the consolidated currency level at any given time.

At 31 December 2018, the survival horizon was 400 days at the consolidated level, and 272 days for SEK, 615 days for EUR and 138 days for USD respectively. In 2018, the survival horizon was never less than 272 days at the consolidated level.

In addition to the above metrics, the short-term liquidity risk is also mitigated through other internal metrics, for which limits apply.

13.3 Liquidity risk – Structural liquidity risk

Structural liquidity risk is a measure of the differences in maturity structures between assets and liabilities, which risks leading to a lack of liquidity in the longer term. SBAB aims to have a diversified funding. The SBAB Group has adopted a conservative approach to the management of funding. A larger share of future maturities is being pre-financed and the share of total funding attributable to short-term funding is being maintained at a low level. SBAB works actively to ensure an even distribution of maturities, while at the same time extending the maturity of the liabilities. Monitoring of upcoming maturities, repurchases, replacements and pre-financing constitute key elements of the practical management aimed at reducing the risk.

SBAB limits its dependence on market funding by applying a limit on the ratio between deposits and lending to the public. At 31 December 2018, the ratio was 34% compared with a limit of 28%.

Moreover, access to funding from covered bonds is secured by monitoring that the overcollateralisation in the cover pool at each point in time, including in stressed circumstances, exceeds Moody's requirements for Aaa ratings.

The net stable funding ratio (NSFR) according to SBAB's interpretation of the Basel Committee NSFR standard was 122% (117).

SBAB also measures its structural liquidity risk through a metric for maturity matching that measures the relationship between the maturities of assets and liabilities from a liquidity perspective at various points in the future. This can be viewed as SBAB's internal version of the NSFR, in which the maturity, in terms of liquidity, on deposits and lending is estimated by means of SBAB's own statistical models, which are based on historical data of the behaviour of SBAB's customers. The metric is subject to a one-year floor limit of not less than 90% at a consolidated level, 60% for USD and currencies for which the liability exceeds 5% of total liabilities. At 31 December 2018, maturity matching was 143% at the consolidated level, 143% in SEK, 139% in EUR and 89% in USD.

In addition to the above metrics, limits are applied to structural liquidity risk through further internal metrics, for which limits apply.

13.4 Stress tests for liquidity risk

SBAB performs regular stress tests of liquidity risk aimed at internal requirements for analytical and contingency management of liquidity risk. The stress tests have been designed in line with the Swedish FSA's regulations on liquidity management, which impose general requirements on stress tests (FFFS 2010:7). The models analyse SBAB's capacity to meet the need for cash and cash equivalents in various market scenarios and to assess the effect of protracted stress on SBAB's ability to finance its operations. The scenarios are designed on the basis of SBAB's specific risk profile and cover both company-specific and market-related scenarios that may render the financing of the operations difficult. The scenarios are divided into different stages that illustrate increasing levels of stress intensity to reflect how a crisis can continuously deteriorate.

The scenarios simulated by the stress tests include:

- The 2008/2009 financial crisis — stress in the funding operations, with funding programmes closing at various stages
- Rating-related stress, with gradually lower ratings for SBAB and SCBC
- Falling property market prices — various levels of falling prices, which increase LTV ratios, thus lowering the share of funding that can be conducted via covered bonds
- Stress of liquidity in the liquidity reserve
- Sizeable fluctuations in interest and currency exchange rates, leading to larger amounts having to be secured through CSAs, which could thus impair liquidity.

The stress tests are under continuous development and the assumptions on which the various scenarios are based are assessed regularly. The stress tests are conducted and reported quarterly, with results assessed against SBAB's established risk appetite and used to adapt strategies and guidelines.

13.5 Developments in liquidity risk regulation area

The area of liquidity risk is subject to constant regulatory development. The following regulatory changes are on the agenda for the immediate future:

13.5.1 Amended Regulation on Prudential Requirements for Credit Institutions and Investment Firms (CRR)

In November 2016, the European Commission published a proposal for an amended Capital Requirements Regulation ("CRR II"), which is intended to replace the current regulation that entered force in 2014. The most substantial amendment with regards to liquidity risk is the introduction of a mandatory requirement of 100% net stable funding ratio (NSFR). Since 2014, SBAB has regularly calculated NSFR based on the Basel Committee's standard, despite the lack of any statutory quantitative requirement. A difference between the Basel standard and CRR II is that the latter contains some new risk weights on both assets and liabilities. According to SBAB's assessment, the bank's level of NSFR will be satisfying with regards to the 100% requirement when it comes into force. According to the proposal of CRR II, the regulation will enter into force two years after adoption of the regulation, which is anticipated to be done in the near future.

13.5.2 Other regulatory changes

Pillar 2 liquidity risk requirements

In April 2018, the Swedish FSA published a memorandum requiring the introduction, within the Pillar 2 framework, of a liquidity requirement for supervision category 1 and 2 banks (which includes SBAB). The requirement means that the bank must maintain liquidity coverage ratios in EUR and USD of not less than 100%, assuming that liabilities in these currencies correspond to not less than 5% of total liabilities ("significant currencies"). The reason being the EU regulation, which sets minimum LCR requirements at consolidated currency level rather than for individual significant currencies. However, the Swedish FSA is of the opinion that the assessments on which the previous national LCR requirements for EUR and USD were based remain valid, which it deems motivates the new requirement. The procedure for establishing the requirement follows the process for capital requirements in Pillar 2 and applies from 2018. For SBAB, the requirement only

applies for EUR at present, since USD is not a significant currency. However, the introduction has no practical significance since the bank's LCR in EUR is already at a level with a very healthy margin to the new requirement.

Harmonised rules for covered bonds

In March 2018, the European Commission presented a proposal for a new directive on covered bonds. The aim is to introduce harmonised rules for covered bonds within the EU. The proposal is being discussed within the EU and at a national level, including in the Association of Swedish Covered Bond issuers (ASCB) where SBAB is represented. Uncertainty still prevails regarding the final outcome in terms of the design of the regulatory framework. The Commission's proposal includes a few items related to liquidity risk. The most tangible being the requirement for issuers to hold a separate liquidity reserve to cover net liquidity outflows from covered bond programmes for a period of 180 days. No such liquidity reserve requirement exists under the currently applicable framework. SBAB continues to monitor the development of this area in order to ensure a sound preparedness.

Changed LCR regulatory framework

In October 2018, Commission Delegated Regulation (EU) 2018/1620 was published, amending Delegated Regulation (EU) 2015/61 with regard to the liquidity coverage ratio. The changes impact the calculation of inflows and outflows linked to repos and collateral swaps. In addition, deposits reporting will become more granular, while other reporting items will disappear and some other clarifications will be introduced, for example regarding outflow weights of corporate deposits. The change has limited impact on SBAB's LCR but will entail some development and work with adjusting models and reporting routines.

14 Operational risk

Operational risk means the risk of losses due to inappropriate or unsuccessful processes, human error, faulty systems or external events. The definition includes legal risk.

14.1 Risk management

The process for managing operational risk is based on the continuous identification, analysis and assessment of risks as well as their management and follow-up. An analysis of risk levels is reported to the Board, the CEO and the Executive Management.

The Operational Risk function within the Risk department has overall responsibility for the methods and procedures used in the management of operational risk. The work with managing operational risk is conducted based on SBAB's risk appetite and the significant processes for the business. This entails constant efforts to develop employees' risk awareness and the bank's risk culture, to improve processes and procedures as well as to provide tools to efficiently and proactively manage day-to-day operational risk.

As part of strengthening SBAB's risk culture, in 2016 the bank implemented risk and compliance coordinators (RCC) in the first line. The RCCs support the business managers with a focus on risk management, process mapping, internal controls, incident management and regulatory compliance.

14.1.1 Self-evaluation

The self-evaluation process encompasses the identification and evaluation of operational risks in all significant processes. Self-evaluation is carried out using a shared method and documented in the shared system support. The result of the self-evaluation is reported annually to the Board, the CEO and the Executive Management.

14.1.2 Incident management

SBAB has procedures and system support intended to facilitate the reporting and follow-up of incidents. The Operational Risk function supports the operations with the analysis of reported incidents to ensure that root causes are identified and suitable measures are implemented. Even incidents that have not caused direct damage or financial loss are reported, to promote proactive risk management.

14.1.3 Management of material changes

SBAB's process for the management of material changes is applied for new or significantly altered products, services, markets, processes and IT systems as well as in the event of major operational and organisational changes at SBAB. The aim of the process is to evaluate any potential risks related to the change and to draw attention to any impact the change may have on capital.

14.1.4 Continuity management

SBAB works in a pre-emptive manner to prevent events that may affect the company's ability to operate. A contingency organisation has been established that is responsible for crisis and catastrophe management, and communication in case of serious incidents, crises or disasters. This organisation is tested regularly in collaboration with external crisis management experts.

14.2 Significant operational risks

SBAB has identified a number of risks that, were they to occur, are assessed as potentially having a larger impact on SBAB's operations than other risks. The development of these risk is monitored on an ongoing basis by the Executive Management and the Board, and is taken into consideration within the framework of SBAB's business planning. The significant operational risks are detailed below.

14.2.1 Cyber risk

The cyber threat to the Swedish financial sector is extensive and persistent. Breaches that can crash important systems together with any accompanying blackmail attempts or leaks of sensitive data can lead to SBAB's undertakings as a bank not being possible to fulfil.

SBAB has a dedicated security team comprised of specialists tasked with attaining and maintaining a high level of cyber security for the bank. This is achieved through proactive efforts to ensure strong, digital perimeter protection and a high level of security within this protective shield. The team endeavours to increase risk and security awareness throughout SBAB with the aim of achieving the right level of security for our customers, systems and personnel.

14.2.2 Technical liability

Market advances in technology have been rapid in recent years, which has led to parts of SBAB's infrastructure becoming obsolete and outdated. An extensive project to replace the system platform began in 2017 and has continued at full intensity and with high priority during 2018. This will continue in 2019. SBAB has identified risks indicating that despite the above, the change is not proceeding fast enough, that there are too many development-related disturbances in daily operations and that the lifecycle management of other system support is lagging behind.

Clearly defined objectives and priorities are in place for SBAB's IT strategy to ensure that the identified risks are managed effectively. The Executive Management and the Board closely monitor the development and outcome related to time plans and expenses. The shorter target and lead times entailed by the agile working method as well as shorter intervals between production increase flexibility and enable a more efficient working practices

14.2.3 Competence

SBAB aims to be an attractive workplace with dedicated and motivated employees who, on their own initiative, generate ideas, collaborate and identify solutions. Like many other companies, SBAB faces the risk of not succeeding in attracting and retaining the right skills.

SBAB uses a clearly defined and transparent HR strategy together with ambitious goals in this area to actively develop the value-driven work approach and to ensure inclusive leadership that can generate driven employees.

14.2.4 Regulatory risk

Regulatory risk is increasingly becoming a significant risk. New external regulations impacting SBAB will be implemented and training will be conducted to secure a high level of competence and thus high regulatory compliance in all parts of SBAB.

In spring 2018, the main focus was on the implementation of the General Data Protection Regulation (GDPR), which entailed changes in procedures, processes and system support, as well as the implementation of the Privacy Office to lead and coordinate activities related to personal data management and various training activities in different parts of the SBAB.

Operations continue to focus highly on compliance with anti-money laundering and terrorist financing regulations. SBAB has an Anti Financial Crime unit which, inter alia, monitors regulatory developments in the area and supports operations in this regard.

14.3 Capital requirements for operational risks

SBAB uses the standardised approach to calculate capital requirements for operational risk within the Pillar 1 framework. The capital requirement for operational risk is shown in Table 12, Risk exposure amounts and capital requirements.

15 Business risk

By business risk, SBAB means the risk of declining earnings due to harsher competition, inappropriate strategies or erroneous decisions.

Business risk also includes strategic risk, reputational risk and margin risk, which arise when the interest margins on lending and borrowing have different maturities. SBAB defines business risk as a necessary risk. New business is usually relatively similar to the business SBAB already has. Changes in the form of new products or new markets may only constitute a small part of SBAB's activities and must be implemented at such a pace that SBAB does not substantially jeopardise its earnings level and with great probability avoids pressure on its own funds.

As the accounting standards used by SBAB require that certain components of the portfolio are measured at market value while other components are recognised at their carrying amount, this has effects on the operating profit, and consequently also on own funds, that do not correspond to the actual risk to which the portfolio is exposed. To limit such effects, income volatility must be measured and limited. Business risk is included in the calculation of the Pillar 2 capital requirement as part of SBAB's stress tests. See also the section 6.3.6.3 Business risk.

A dark brown leather suitcase with a wooden ladder leaning against it. The suitcase is on the left, and the ladder is on the right, extending from the top to the bottom of the frame. The background is a dark, textured surface.

SBAB!

SBAB BANK AB (PUBL)

Corp. Reg. No. 556253-7513

Visiting address: Svetsarvägen 24

Address: Box 4209, SE-171 04 Solna, Sweden

Tel: 0771-45 30 00

Fax: 08-611 46 00

www.sbab.se