Capital adequacy and risk management 2021

Pillar 3 of the CRR regulations

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.

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.

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 is calculated based on institutions' capital requirements and consists of a risk-weighted and a non-risk-weighted (LRE) requirement. Both the risk-weighted and non-risk-weighted requirements consist of the sum of a loss absorption amount and a recapitalisation amount. The requirement is met with capital and certain types of liabilities, known as eligible liabilities. The SNDO decides on the MREL level and also how much of the requirement is to be met with subordinated eligible liabilities.

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.

CHAPTER 5 **CAPITAL ADEQUACY**

Additional requirements under Article 3 of the CRR
According to Article 3 of the CRR the Board of Directors of SBAB has previously decided to activate a surcharge for corporate exposures to small and medium-sized enterprises. The aim was to compensate for the current procyclical effect that exists in the bank's internal models for credit risk, which has resulted in PD declining in line with the favorable economic climate. SBAB´s assessment is that the implementation of the updated models, following approval from the Swedish FSA, should rectify the identified faults and therefore lead to a decreased Pillar 2 requirement. In October 2021 the board of SBAB decided to remove the Article 3 surcharge, as a result of the SFSA communicated Pillar 2 requirements.

Additional Tier 1 capital
Additional Tier 1 capital generally comprises perpetual subordinated loans that meet the requirements in Article 52 of the CRR.

Capital requirements under Pillar 1
Refers to the minimum amount of capital required 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).

Common Equity Tier 1 (CET1) capital
Common Equity Tier 1 capital is one of the components of own funds and primarily consists of equity. Deductions are made for dividends generated, intangible assets as well as the difference between expected losses and provisions made for probable loan losses.

Credit valuation adjustment risk (CVA risk)
CVA is defined as the risk of a downgrade in the credit quality of SBAB's OTC derivative counterparties, higher exposure and/or longer average duration of derivatives. Transactions with a central counterparty (CCP) should be excluded from the capital requirement for CVA risk.

Internal ratings-based approach (IRB approach)
The IRB approach is used to calculate the regulatory capital requirements 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).

MDA level (Maximum distributable amount level)
The sum of Pillar 1, Pillar 2 and buffer requirements.

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

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

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).

Risk exposure amount (REA) under CRR
The CRR 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.

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 into force on 31 December 2018.

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

Tier 2 instruments
Subordinated loans that meet the requirements in Article 63 of the CRR may be included in own funds.

Total capital ratio
Own funds divided by the risk exposure amount.

CHAPTER 6 Internally assessed capital requirement

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.

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).

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 9 Credit risk in lending operations

Credit conversion factor (CCF)
The percentage of an off-balance sheet item that is expected to be utilised before a possible future default.

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.

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.

Moratorium
Due to EBA Guidelines (EBA/GL/2020/02) customers have been able to apply for exemptions from mortgage payments during a limited period. The guidelines were introduced in April 2020 due to the current Corona pandemic.

Non-performing loans (NPL)/ Non-performing exposures (NPE)
Non-performing loans/exposures are defined as defaulted exposures plus forborne exposures. A default shall be considered to have occurred when the obligor is unlikely to pay its credit obligation to the institution or the obligor is past due more than 90 days on any material credit obligation.

NPL ratio
The computation of the NPL ratio is defined by the EBA and consists of gross carrying amount of non-performing loans and advances divided by the gross carrying amount of total loans and advances subject to the NPL/NPE definition.

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 nature, it cannot be calculated with sufficient reliability. Contingent liabilities may also comprise possible commitments, meaning it is uncertain whether or not the commitment exists.

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 12 Market risk

Interest rate risk in the banking book(IRRBB)
Interest rate in the banking book (IRRBB) refers to the current or prospective risk to the bank´s capital and earnings arising from adverse movements in interest rates that affect the bank´s banking book position.

CHAPTER 13 Liquidity risk

Liquidity coverage ratio (LCR)
The LCR is a liquidity risk metric that measures the relation between liquid assets and a 30-day net cash outflow in a stressed scenario.

Net stable funding ratio (NSFR)
NSFR is a metric that captures the structural liquidity risk and reflects 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.

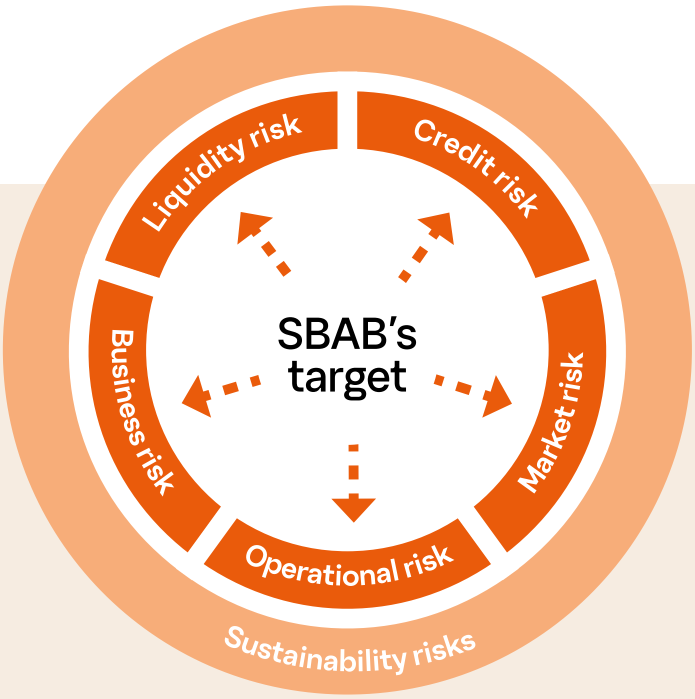
1 Introduction

In this annual report, SBAB discloses information in compliance with Part Eight of Regulation (EU) No 575/2013(CRR) and the Swedish Financial Supervisory Authority's (SFSA) regulation (FFFS 2014:12) regarding prudential requirements and capital buffers.

ABOUT SBAB
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 increased with the year-end result to 13.5 (13.4). Total risk exposure amount has increased with 8.7 billion, mainly driven by increased credit risk due to lending volumes and including the effect from the risk-weight floor.

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.

During the past year liquidity risk continued to remain low. The capital requirement for market risk has declined slightly compared to 2020 due to lower currency risk. Furthermore, the market risk in Pillar 1 comprises only currency risk.



SBAB's risk appetite

Read more on page 16.

For information about sustainability risks, refer to SBAB's 2021 Annual Report.

REGULATORY FRAMEWORK FOR PILLAR 3 REPORT

This report refers to the consolidated situation and the conditions prevailing on 31 December 2021. For periodic information, please refer to the quarterly reports "Disclosure of capital, liquidity and leverage ratio" at www.sbab.se.

Pillar 3 entails extended disclosures by banks with regard to their capital position, risk exposures and risk management processes. Pillar 3 requires all material risks to be disclosed, for investors and other market participants to assess the risk profile of individual banks.

The Pillar 3 report is prepared in accordance with the requirements of EU and Swedish regulation, in particular the Capital Requirements Regulation ((CRR) (EU Regulation No 575/2013, Part 8)). The CRR mandates the EBA, in Article 434a, to develop draft implementing technical standards (ITS) specifying uniform disclosure formats, and associated instructions in accordance with which the disclosures required under Titles II and III of Part Eight of the CRR shall be made. The EBA Final draft implementing technical standards (ITS) published in June 2020 has been adopted by EU Commission in implementing Regulation (EU) 2021/637) entered into force from 28 June 2021. The regulation which entails a consistent and complete Pillar 3 disclosure framework with uniform formats for both qualitative and quantitative information within a wider scope of risk information. The framework includes for instance disclosures of own funds, leverage ratio, countercyclical capital buffers, operational risk, disclosure of encumbered and unencumbered assets, non-performing and forborne exposures, liquidity coverage ratio and guidelines on sound renumeration policies

In addition, the SBAB Pillar 3 report is prepared according to the Swedish Financial Supervisory Authority's regulations on prudential requirements and capital buffers (FFFS 2014:12). Changes in the SFSA's regulation FFFS 2014:12 has been considered in this report.

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

Significant risks

Risk type	Risk appetite	
	Classification	**Level**
Credit risk in lending operations 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 assets 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, or in the case of concentrations toward specific regions or industries. *Read more in chapter* 9	Wanted risk	Medium
Credit risk in treasury operations Defined as the total of counterparty risk and investment risk. Counterparty risk is defined as credit risk in derivatives that arises when the value of the instrument is affected by, for example, changes in interest rates and/or currency exchange rates, which means SBAB receives a claim against the counterparty. In addition, counterparty risk entails that SBAB's financial counterparties cannot meet their commitments under repo contracts. Investment risk is defined as credit risk in financial investments and entails the risk that a debtor does not fulfil its payment obligations. Financial investments are incorporated in liquidity management, which aims to reduce liquidity risk and utilise surplus capital to contribute to increased profitability. *Read more in chapter* 11	Necessary risk	Low
Market risk In SBAB's operations, the risk of loss or reduced future income due to market fluctuations comprises interest-rate, currency, credit spread, basis and pension risk. Interest-rate risk pertains to interest rate variations that lead to losses or lower future income as assets and liabilities have different fixed-interest periods and/or interest terms. Currency risk refers to the risk of changes in SEK exchange rates leading to losses or lower future income. Credit spread risk pertains to an exposure to changing conditions between an issuer's interest expense in comparison with a reference rate. Basis risk refers to the risk associated with deposits and lending that are fixed to different interest bases. Pension risk pertains to the risk arising from value changes in the portfolio intended to cover the bank's pension commitments. *Read more in chapter* 12	Necessary risk	Low
Operational risk The risk of losses due to inadequate or failed internal processes, human error, faulty systems or from external events, including legal risks. Legal risk pertains to the risk of legal sanctions or failure to discharge legal undertakings. The category also includes compliance risks. Regulatory compliance is essential in maintaining confidence in SBAB's operations, but market practice and ethical guidelines also impact SBAB's approach to employees and customers. *Read more in chapter* 14	Necessary risk	Low
Business risk The risk of declining earnings due to harsher competition, inappropriate strategies or erroneous decisions. SBAB differentiates business risk between strategic risk, the risk of weaker earnings and reputational risk. Strategic risk pertains to the risk of a loss arising, for example, due to unfavourable business decisions, erroneous implementation of strategic decisions or changes in the political environment. The risk of weaker earnings encompasses the risk arising from, for example, more expensive financing or more intense competition. Reputational risk pertains to the risk of loss of reputation as a result of the failure to manage the above risks as well as other events. *Read more in chapter* 15	Necessary risk	Low
Liquidity risk The risk of being unable to meet its payment obligations without the cost of obtaining funds increasing significantly. Short-term liquidity risk pertains to the risk of being impacted in the short term by a lack of liquidity, while structural liquidity risk arises from differences between assets and liabilities in terms of maturities, which risks leading to a lack of liquidity in the longer term. *Read more in chapter* 13	Necessary risk	Low
Sustainability risks Sustainability risks pertain to the risk of loss or reduced future income due to sustainability-related events. These include events in three categories: i) climate; ii) personnel, societal conditions and human rights; and iii) financial crime and corruption. *Read more on page 15*	Necessary risk	Low

Risk profile	Risk management
SBAB primarily offers housing mortgages to consumers, tenant-owners' associations and property companies where collateral comprises mortgage deeds in immovable property or rights-of-use. The majority of SBAB's customer base is 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 the value of posted collateral. Credit rules and credit management are 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 major exposures are carefully monitored and followed up.
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 in matched currencies and tenors or the use of derivatives. Currency risks are mitigated as funding in international currency is hedged through currency swaps or matched against assets in the liquidity portfolio in the same currency.
Operational risk is a natural part of all business. SBAB aims to optimise the relationship between costs for reducing risk and any of its potential outcomes. Operational risk is a prerequisite for implementing the business concept efficiently and competitively, taking into account operations, strategy, risk appetite and the macro environment.	SBAB manages operational risk in a consistent manner and the analysis of risk level is conducted on a regular basis and reported to the Board, the CEO and the Executive Management. Self-evaluation of material processes is performed annually. Changes with potential to affect the bank's risk level together with related risks are identified at an early stage and, prior to decision on implementation, the second line of defence submits a report. 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 material changes. The Board receives an annual evaluation of the material risks that addresses strategic business risk and the bank's overall earnings. Moreover, business risk is evaluated in SBAB's stress tests.
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.
SBAB defines sustainability risk as a necessary risk that should be held at a level that does not materially jeopardise SBAB's assets, resources and reputation.	The assessment of whether the Group's level of sustainability risk is within the defined risk appetite is primarily performed through the monitoring and analysis of key risk indicators, scenario analyses outcomes, monitoring of the bank's strategic work with sustainability and disclosures in SBAB's reporting pursuant to the TCFD standard.

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 in relation to SBAB's risk profile and adopted short and long-term strategic, capital and financial plans.

Risk appetite and risk profile

	RISK APPETITE		RISK PROFILE	
Risk type	**Classification**	**Level**	**Limit utilisation**	**Proportion of economic capital, %**
Credit risk in lending operations	Wanted risk	Medium	Medium	75
Credit risk in treasury operations	Necessary risk	Low	Low	4
Market risk	Necessary risk	Low	Low	16
Operational risk	Necessary risk	Low	Low	5
Business risk	Necessary risk	Low	Low	–
Liquidity risk	Necessary risk	Low	Low	–
Sustainability risk	Necessary risk	Low	Low	–

SBAB CLASSIFIES RISKS AS WANTED AND NECESSARY:

- Wanted risks comprise those directly related to the business model.
- Necessary risks are those arising from activities that are regarded as a direct prerequisite for being able to implement the business model 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 credit 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.

Sustainability risk is a general risk and there are elements of sustainability risks across SBAB´s entire operations.

3 The regulatory consolidated situation

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

Outline of the differences in the scopes of consolidation *(EU LI3)*

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	–	–	Institute
AB Sveriges Säkerställda Obligationer (publ)	556645-9755	100%	Full consolidation	Full consolidation	Institute

Entities not included in the consolidated situation

Name of entity	Organisation Number	Share	Method of accounting consolidation	Method of regulatory consolidation	Description
Booli Technologies AB	556733-0567	100%	Full consolidation	Not consolidated	IT company
Boappa AB	559081-8273	58%	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 with 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.

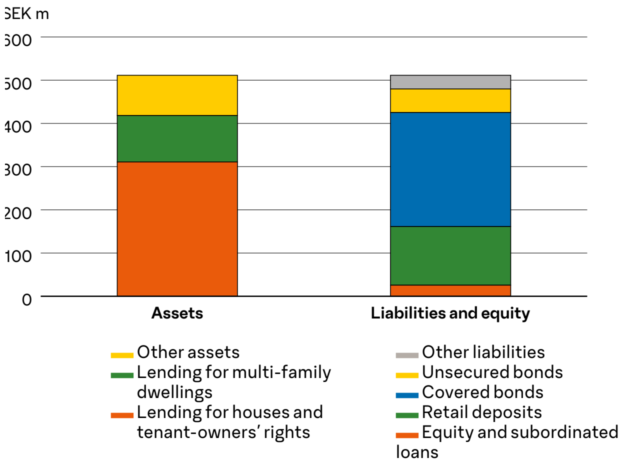
Information about the Board of Directors, the recruitment policy, the diversity policy and the risk committee are included in the Corporate Governance Report in SBAB's Annual Report. For information about related parties, please refer to Note G:2 of SBAB's Annual Report.

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.

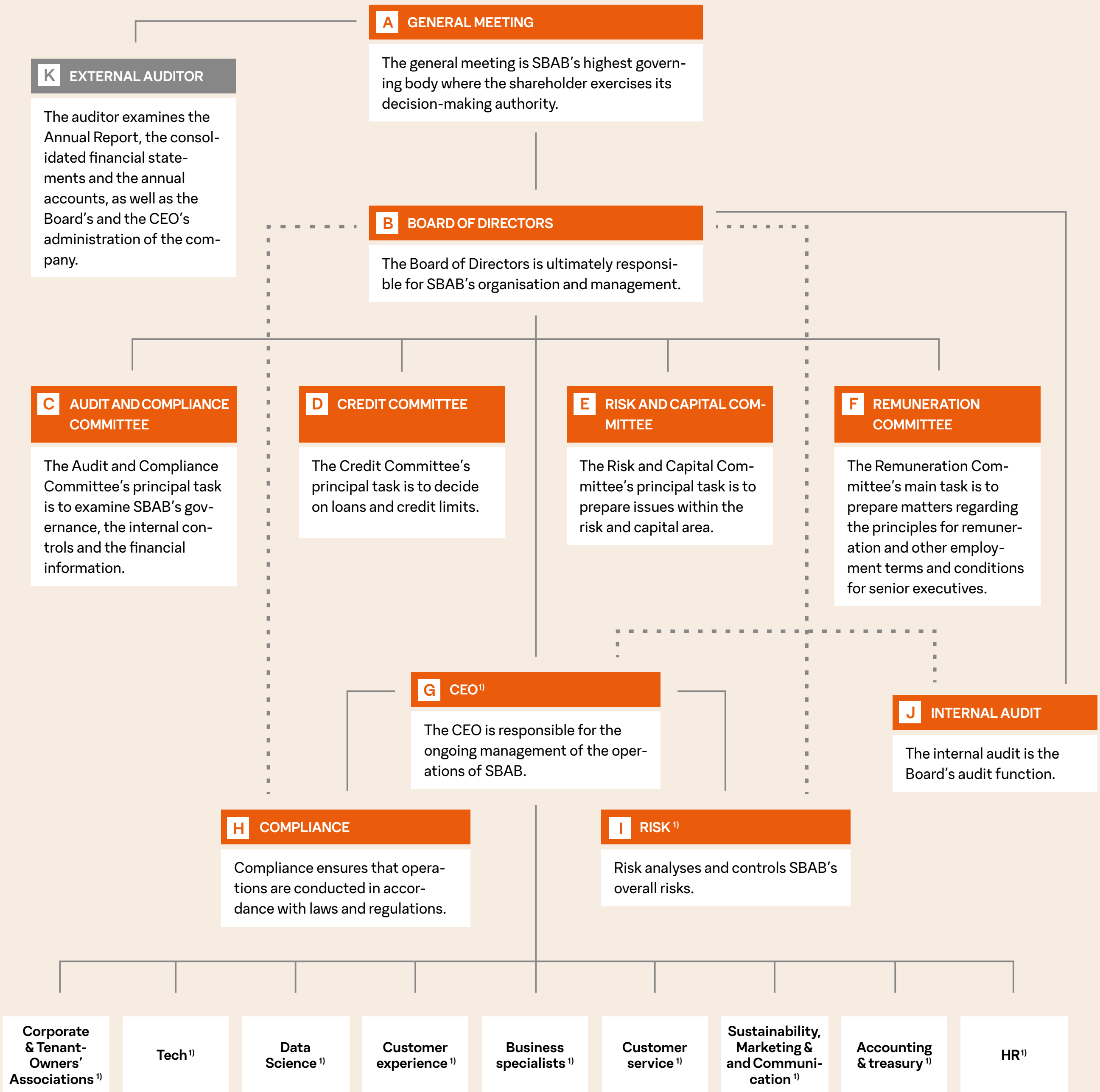
SBAB's sales activities are conducted through two channels: Retail and Corporate Clients & Tenant-Owners' Associations. Retail focuses on lending to consumers and deposits from consumers and companies. Corporate Clients & Tenant-Owners' Associations is active in the property market through lending to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

Booli Search Technologies AB (Booli) is 100% owned by SBAB. Booli develops products and services focusing on the housing market. During 2021 SBAB acquired Boappa, a communication- and administration service for tenant owners' association. Neither Booli nor Boappa is included in the consolidated situation. The consolidated situation encompasses SBAB Bank AB (publ) and its wholly owned subsidiary SCBC.

Condensed balance sheet



Organisation



[1] Included in Executive Management.

4 Risk management and risk organisation

SBAB's risk taking is low and is kept at a level compatible 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. Managing risk is a core activity in a bank and fundamental to long-term profitability.

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, ensure 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 required 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 is required to have knowledge and awareness of any risks to which the bank may be exposed. SBAB needs to be able to estimate the size of the risks to which the bank is and may become exposed to.
- All SBAB employees are responsible for managing the company's risks as part of their regular duties. SBAB is to continuously inform and educate 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 so 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 minimize 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, operational risk and sustainability 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 roles and responsibility.
- 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 competence 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 compatible 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 exposure to risk may not exceed the total risk-bearing capacity. Risk-bearing capacity primarily refers to the ability to cover unexpected and expected losses with own funds and ongoing earning capacity, as well as the ability to minimize unwanted risks through appropriate functions, strategies, processes, routines, internal rules, limits and controls. 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 two main categories: solvency and liquidity risk. 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. 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 two risk appetite categories:

- In the first category, solvency, risks are monitored to ensure that SBAB maintains sufficient capital to operate its business activities in accordance with the strategy determined by the board and that credit risk, market risk and operational risk are kept within the levels approved by the board. In addition, minimum levels are maintained with regard to capital ratios.
- In the second category, liquidity risk is monitored to ensure 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.

SBAB is tasked with continuously 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 2021:

- The CET1 capital ratio should under normal conditions be at least 0.6 percentage higher than the CET1 capital requirements communicated by the SFSA.
- The total capital ratio should under normal conditions be at least 0.6 percentage higher than the capital requirements communicated by the SFSA.
- Under normal conditions, the leverage ratio should be at least 0.2 percentage above capital requirements communicated by the SFSA.
- Own funds and eligible liabilities should under normal conditions be at least 10 percentage points higher than the binding MREL requirement, communicated by the Swedish National Debt Office. The target levels for 2022 amount to an MREL of 22.7% from a risk-weighted perspective and to an LRE of 5% from a non risk-weighted perspective.
- Own funds and eligible liabilities should under normal conditions be at least 5 percentage points above the binding subordination requirement (part of the MREL requirement) A subordination requirement of 13.5% from a riskweighted perspective and 5% from a non risk-weighted perspective.

At any given time, the capital requirements as communicated by the SFSA and which apply 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.

Decided targets for returns and capital ratios

	TARGETS		OUTCOME		DIFFERENCES	
	2021	2020	2021	2020	2021	2020
Return on equity (owner's return requirement) [1], %	10.0	10.0	11.1	10.8	1.1	0.8
CET1 capital ratio, %	9.8	8.6	13.5	13.4	3.7	4.8
Total capital ratio, %	14.5	12.8	18.1	17.6	3.6	4.8

[1] Net profit for the year divided by average equity.

4.5 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 market and liquidity risk, credit risk modelling, credit risk analysis, capital and operational risk) 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 in ensuring that the business operations have the procedures, systems and tools required to maintain the daily management of risks. Compliance is responsible 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.

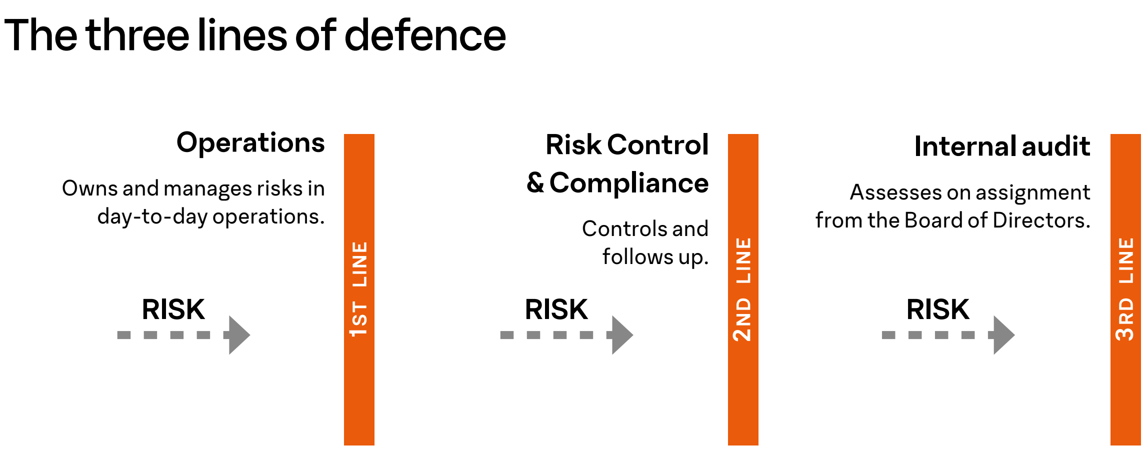
4.6 RISK ORGANISATION

SBAB's Board has the ultimate responsibility for the company's total risk exposure and determines the risk policy, capital policy and risk appetite. The Board's responsibility is 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 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 of the internal measurement and control systems 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 planning and internal pricing are discussed with the CEO. The CEO also ensures, on an ongoing basis, that reporting

The three lines of defence



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:

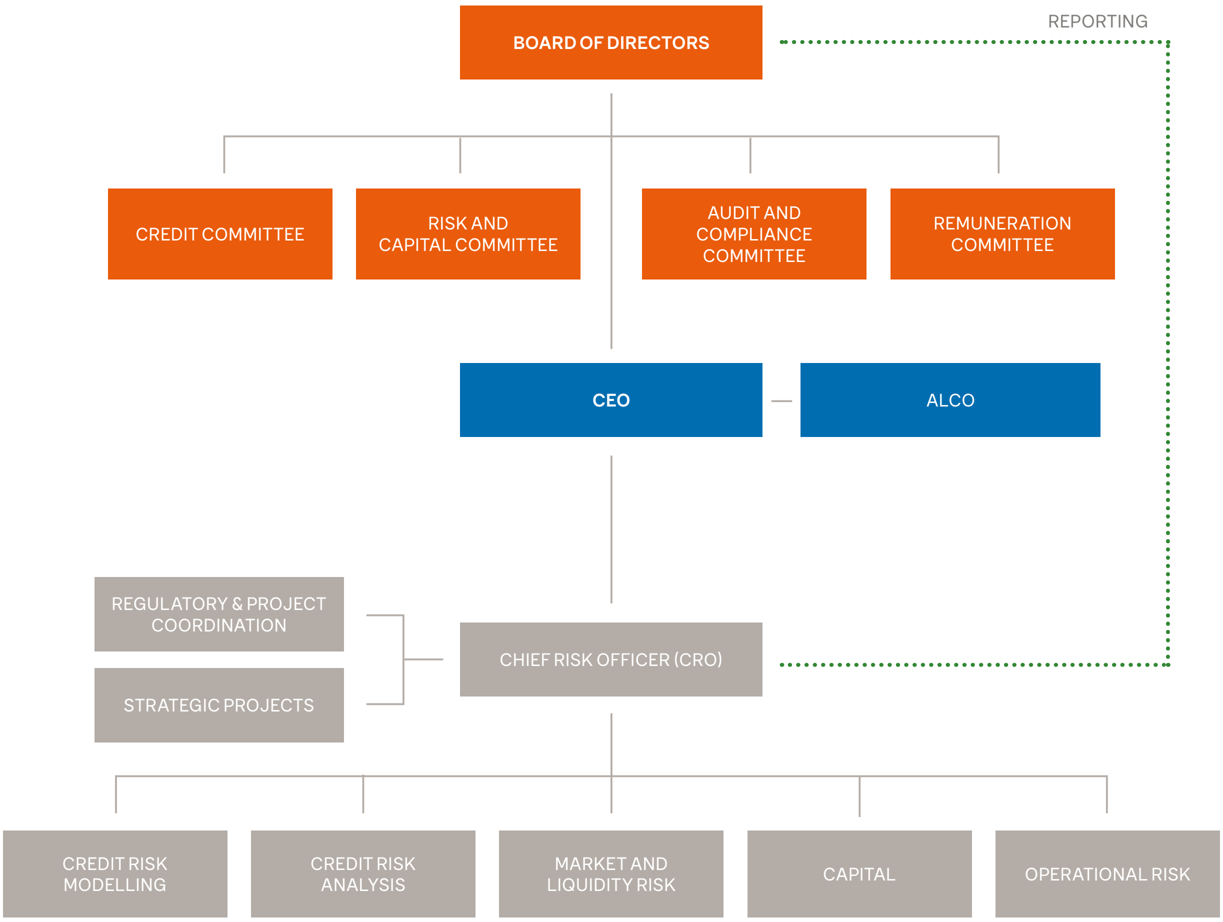
- At an overall level, developing risk-taking strategies and ensuring that SBAB's risk-taking strategies are implemented in accordance with the Board's intentions, and that policies, instructions and processes facilitate relevant follow-up;
- Identifying, measuring, analysing and reporting risk exposure 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.

The risk owners, i.e. the business operations, must, without delay, inform risk control of occurrences of significant events that could entail an increased 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.

Risk reporting



5 Capital adequacy

The rules for capital adequacy are stated in the CRR and CRD IV. Partly, the rules serve to make institutions more resilient to new crises and, partly, 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 requirements 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. SBAB continuously evaluates and adjust its capital targets when necessary.
Due to the Corona pandemic impact on the economy and the upcoming amended EU regulations SBAB ensure that all requirements are fulfilled.

Capital in accordance with Pillar 1, refers to the minimum amount of capital that the company is required to have in accordance with the CRR and CRD, 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), EU Regulation (2019/2033) on the prudential requirements of investment firms and the Swedish FSA's regulations regarding prudential requirements and capital buffers (FFFS 2014:12). During 2021, capital requirements have changed as a result of regulatory changes in CRR and CRD. The Swedish FSA has decided on regulatory amendments and change in the application of capital requirements for Swedish banks in order to adapt them to EU´s banking package. This pertains primarily the introduction of a tightened leverage ratio requirement of 3.0%, changes in the application of Pillar 2 requirements as well as implementation of Pillar 2 guidance. On 24 September, 2021, SBAB received a Supervisory Review and Evaluation Process (SREP) decision from SFSA which entailed an increased own funds requirements within Pillar requirement (P2R). The total capital requirements according to SFSA including the additional amount under Pillar 2 amounted to 13.9% on 31 December 2021, and the CET1 capital requirements was 9.2%. The total capital ratio was 18.1% on 31 December 2021, and the CET1 capital ratio was 13.5%. The leverage ratio was 4.0% and exceeds the leverage ratio requirement including Pillar 2 guidance of 3.3%.

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 regulations regarding 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 6.0% and a total capital ratio at least equal to 8.0% 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 8.0%, the bank must maintain CET1 capital to meet the combined buffer requirements, 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 4.0%.

The SFSA has decided that, in addition to a capital conservation buffer of 2.5%, a countercyclical buffer will also apply for Swedish exposures. The countercyclical buffer for Swedish exposures has decreased from 2.5% to 0.0% effective from 16 March, 2020. The background was the economic uncertainty caused by the outbreak of the corona pandemic. On 29 September, 2021, the SFSA decided to increase the countercyclical capital buffer requirements for banks from 0.0% to 1.0% which applies from 29 September, 2022.

SFSA continues to calculate the countercyclical buffer guide on a quarterly basis, the authority from 2021 only needs to set or change the countercyclical buffer rate as needed. The SFSA has also decided to recognise countercyclical buffer values of up to 2.5% set by a competent authority in another EEA country. The Government of Denmark has decided to increase the countercyclical buffer requirement from 0.0% to 1.0% with application from 30 September, 2022. In addition, Bank of Norway decided in June, to raise the countercyclical capital buffer from 1.0% to 1.5%, effective from 30 June, 2022. United Kingdom exposures are also subject to a countercyclical buffer of 1.0% with binding effect from 13 December, 2022.

Furthermore, banks considered systemically important are subject to an additional capital requirement of 4.0% to be covered by CET1 capital. The banks in Sweden that are currently considered systemically important are: Handelsbanken, SEB, Swedbank and Nordea Hypotek. SBAB is not currently subject to an institution-specific requirement. The buffer values are presented in table Amount of institution-specific countercyclical capital buffer (EU CCyB2), with risk exposure amounts and capital requirements. Furthermore, more detailed information of the countercyclical buffer rates are disclosed in the table the geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (EU CCyB1).

5.2.2 Risk-weight floor for Swedish mortgages

On 23 August 2018, the Board of Directors of the Swedish FSA decided to amend the method for applying the risk weight floor for Swedish Mortgages, which was previously applied in Pillar 2, by replacing it with the corresponding requirement within the framework of Article 458 of the CRR. The change means the capital requirement is set as a requirement in Pillar 1. The amendment entered into force on 31 December, 2018 and applied for two years. The Swedish FSA then decided to extend the capital requirement of the risk weight floor in Pillar 1 until 30 December, 2021. In September, 2021, the Swedish FSA notified the European Commission and the European Systemic Risk Board (ESRB) that it intends to adopt a decision to extend the current risk weight floor for Swedish Mortgages for a period of another two years, until 30 December, 2023, in accordance with Article 458 of the CRR.

5.3 REGULATORY CHANGES

The rate of changes in the regulatory frameworks has remained high.

5.3.1 Regulatory changes in 2021

The amended Capital Requirement Regulation (CRR2) published in the EU Official Journal on June 7, 2019, included several changes which entered into force on June 28,2021. A binding leverage ratio requirement of 3% has been introduced in CRR to complement the current system for the reporting and disclosure of the leverage ratio. The requirement was effective from June 2021. Minimum requirements for the net stable funding ratio (NSFR) – the structural liquidity measure comprising the ratio between available stable funding and the stable funding required – implemented in the EU in June 2021.

The EBA Final draft implementing technical standards (ITS) on public disclosures by institutions of the information referred to in part eight of regulation (EU) No 575/2013, published in June 2020 has been adopted by EU Commission in implementing Regulation (EU) 2021/637) and entered into force from 28 June 2021.

A new method for market risk in the banking book, which replaces the previous method, has been implemented. The new method includes interest rate risk, credit spread risk and basis spread risk. The requirement is effective from January 2021. The new methods have resulted in higher capital requirements, where the interest rate risk in the banking book and the credit spread risk has had the most effect for SBAB.

The SFSA has introduced an additional Pillar 2 requirement regarding exposures in lending to commercial real estate sector. The requirement is calculated as risk-weight floors, with established risk-weights of 35% for corporate exposures collateralised by commerical real estate and 25% for corporate exposures collateralised by commercial residential properties. The additional capital requirement corresponds to the difference between a risk weight determined by SFSA and the Bank's actual average risk weights for exposures to the commercial real estate sector. The additional capital requirement was applied during 2021 SFSA 's assessment of the banks' capital requirements as part of SFSA's annual supervisory review and evaluation process (SREP). The decision had a limited effect on SBAB's capital requirement.

Pillar 2 requirements were changed during 2021, as they were separated in a Pillar 2 requirement (P2R) and a Pillar 2 Guidance (P2G). The P2R has been implemented as a strict requirement, impacting MDA levels for Swedish banks. Furthermore, the P2R is allowed to be covered with a higher share of hybrid capital instruments compared to what has been included in Pillar 2 previously. The P2G is to be covered by CET1 capital. The P2G level for each bank is to be set through a sensitivity-based stress test that the SFSA performs, combined with other quantitative and qualitative grounds of assessment.

5.3.2 Forthcoming regulations

On 27 October 2021, the European Commission published a new "banking package 2021", which consists of three elementary legislative reviews: a proposal to amend the Capital Requirements Directive (2013/36/EU), the Capital Requirements Regulation (2013/575/EU) and the regulation in the area of resolution (the so-called daisy chain proposal).

In the banking package three main themes are highlighted. Firstly, one of the goals of the new legislative proposal is to increase the resilience of the banking sector by making sure that risks estimated by internal models are not underestimated and that the reserved capital truly covers the potential risks. Secondly, environmental, social and governance (ESG) risks should be systematically identified and disclosed. The regulatory framework plays a crucial role in a successful transition towards a sustainable society. Thirdly, the supervisory authorities will have more powerful tools in the future to conduct efficient supervision and governance.

The final proposal from Basel complements the initial phase of Basel III reforms previously finalised by the Committee. The main changes to the current approach include changes in credit risk, where a revised standardised approach will be introduced with a larger component of risk sensitivity. In addition, restrictions will be introduced on how methods based on internal models may be used. For measuring operational risk banks must use a new, uniform standardised approach based on a combination of the bank's earnings and historical operational losses. An overall risk-weight floor of 72.5% of the exposure amount is being introduced according to the standardised approach for all banks that use internal models. Due to the corona pandemic the implementation date has been postponed by one year. The new rules shall apply from 1 January 2025 with a transitional period for the output floor up until 31 December 2029.

In January 2022 the EBA published a final draft implementing technical standards (ITS) on prudential disclosures on ESG risks in accordance with article 449a CRR. The disclosure requirements will enter into force in June 2022 with first reference date December 2022. Work is in progress since 2021, due to consultation paper from the EBA published in first quarter 2021.

The Swedish National Debt Office has decided a minimum requirement for own funds and eligible liabilities (MREL) and a subordination requirement for SBAB for 2022 and on full implementation from 2024. The new MREL and subordination requirement are expressed as risk-weighted and as non risk-weighted requirements. The corresponding disclosure requirements apply from 1 January 2024.

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. It concerns the parameter estimates of PD and LGD, and their respective calibration against long-run average default rates and long-run average LGD after taking into account economic downturn periods. Work is ongoing and new IRB models are expected to be implemented by 2022. Through clarification of the regulatory requirements in these areas, the EBA hopes to achieve higher consistency among banks, whereby the same underlying credit risks are covered to an equal extent. The new regulatory

Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer *(EU CCyB1)*

	General credit exposures		Relevant credit exposures – Market risk				Own fund requirements						
Breakdown by country:	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
Sweden	29 561	531 837	0	–	–	561 398	3 108	0	–	3 108	38 851	98.0	0.0
Norway	4 848	0	0	–	–	4 848	39	0	–	39	485	1.2	1.0
Denmark	2 617	0	0	–	–	2 617	21	0	–	21	262	0.7	0.0
Canada	311	0	0	–	–	311	2	0	–	2	31	0.1	0.0
Total	**37 338**	**531 837**	**0**	**–**	**–**	**569 175**	**3 170**	**0**	**–**	**3 170**	**39 628**	**100**	

Amount of institution-specific countercyclical capital buffer *(EU CCyB2)*

SEK million	
Total risk exposure amount	138 876
Institution-specific countercyclical capital buffer rate, %	0.0
Institution-specific countercyclical buffer requirement	17

requirements will be effective from 1 January 2022 and will affect SBAB's entire rating system.

5.3.3 Regulatory changes due to the corona pandemic

In April 2020 EBA introduced moratorium guidelines aimed to give institutions the possibility to give individual customers a credit relief concerning loan payments during a limited period. The guidelines were supposed to be phased out but due to the development of the corona pandemic, they were reintroduced in December 2020. The guidelines have been adjusted with some restrictions to reduce a large balance with not correctly identified problem loans in each institution.

EBA announced in January, 2022, that the guideline will be extended until further notice. In connection with this extension, the SFSA has informed EBA that the SFSA will not follow the guideline. The guideline on reporting and publication will therefore be applied up to and including the reference date 31 December 2021.

5.4 OWN FUNDS

SBAB's own funds consist of equity as well as additional Tier 1 capital and Tier 2 capital consisting of subordinated loans. SBAB's own funds amounted to SEK 25,106 million on 31 December 2021, (detailed information of the own funds composition can be found in table EU CC1). Over the year, CET1 capital was affected by the fact that net profit/loss for the period was added. 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 919 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 868 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 12 million on CET1 capital, in accordance with Article 33, item 1b.

With reference to Articles 34 and 105 of the CRR, SEK 55 million has been deducted from CET1 capital due to the requirements for prudent valuation.

A deduction of SEK 12 million for intangible assets, according to a new calculation for activated software assets adjustments in the CET1 capital have been implemented. A deduction of SEK 43 million from the calculation of expected loss amounts were made in accordance with Article 36 of the CRR. No addition for an IRB surplus, under Article 62, item d of the CRR for own funds in December 2021.

No risk exposures have been deducted from own funds. The key metrics are presented in table EU KM1 and prudent valuation adjustments in table EU PV1.

DISCLOSURE OF OWN FUNDS

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

Disclosure of own funds *(EU CC1)*

Consolidated situation, SEK million	31 Dec 2021	31 Dec 2020
Common Equity Tier 1 (CET1): Instruments and reserves		
Capital instruments and the related share premium accounts	1,958	1,958
Retained earnings	15,652	13,995
Accumulated other comprehensive income (and other reserves)	919	2,321
Independently verified net profit for the year net of any foreseeable charge or dividend	1,271	1,855
Common Equity Tier 1 (CET1) capital before regulatory adjustments	**19,801**	**20,129**
Common Equity Tier 1(CET1) capital: Regulatory adjustments		
Additional value adjustments (negative amount)	-55	–51
Intangible assets (net of related tax liability) (negative amount)	-12	–204
Deferred tax assets that rely on future profitability excluding those arising from temporary differences(net of realted tax liability where the conditions in Article 38(3) are met)(negative amount)	–	–
Fair value reserves related to gains or losses on cash-flow hedges of financial instruments that are not valued at fair value	-868	–2,307
Negative amounts resulting from the calculation of expected loss amounts	-43	–51
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-12	–24
Other regulatory adjustments	–	
Total regulatory adjustments to Common Equity Tier 1 (CET1)	**-990**	**–2,637**
Common Equity Tier 1 (CET1) capital	**18,811**	**17,492**
Additional Tier 1 (AT1) capital: Instruments		
Capital instruments and the related share premium accounts	4,300	3,500
of which: classified as equity under applicable accounting standards	*4,300*	*3,500*
of which, classified as liabilities under applicable accounting standards	–	
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 as described in Article 486(3) of CRR	–	–
Additional Tier 1 (AT1) capital before regulatory adjustments	**4,300**	**3,500**
Additional Tier 1 (AT1) capital: Regulatory adjustments		
Total regulatory adjustments to Additional Tier 1 (AT1) capital	–	–
Additional Tier 1 (AT1) capital	**4,300**	**3,500**
Tier 1 capital (T1=CET1 + AT1)	**23,111**	**20,992**
Tier 2 (T2) capital: Instruments		
Capital instruments and the related share premium accounts	1,995	1,995
Credit risk adjustments	–	5
Tier 2 (T2) capital before regulatory adjustments	**1,995**	**2,000**
Tier 2 (T2) capital: regulatory adjustments		
Total regulatory adjustments to Tier 2 (T2) capital	–	–
Tier 2 (T2) capital	**1,995**	**2,000**
Total capital (TC=T1+T2)	**25,106**	**22,992**
Total risk exposure amount	**138,876**	**130,267**

Consolidated situation, SEK million	31 Dec 2021	31 Dec 2020
Capital ratios and requirements includingbuffers		
Common Equity Tier 1 (as a percentage of total risk-weighted exposure amount)	13.5	13.4
Tier 1 capital (as a percentage of total risk-weighted exposure amount)	16.6	16.1
Total capital (as a percentage of total risk-weighted exposure amount)	18.1	17.6
Institution CET1 overall capital requirement ((CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.2	7.0
of which, capital conservation buffer requirement	*2.5*	*2.5*
of which, countercyclical buffer requirement	*0.0*	*0.0*
of which, systemic risk buffer requirement	–	–
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	–	–
of which: additional own funds requirements to address the risks other than the risk of excessive leverage	2.2	–
Common Equity Tier 1 available to meet buffer (as a percentage of risk exposure amount)	6.9	8.9
Applicable caps on the inclusion of provisions in Tier 2		
Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	–	–
Cap on inclusion of credit risk adjustments in T2 under standardised approach	132	150
Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	0	
Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	198	173
Capital instruments subject to phase-out arrangements (only applicable between 1 January 2014 and 1 January 2022)		
Current cap on CET1 instruments subject to phase out arrangements	–	–
Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	–	–
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	–	–
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	–	–

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 2020) 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.

Prudent valuation adjustments (PVA) *(EU PV1)*

	Risk category					Category level AVA - Valuation uncertainty		Total category level post-diversification		
Category level AVA	Equity	Interest Rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA		Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
Market price uncertainty	–	–	–	–	–	–	–	–	–	–
Close-out cost	–	–	–	–	–	–	–	–	–	–
Concentrated positions	–	–	–	–	–			–	–	–
Early termination	–	–	–	–	–			–	–	–
Model risk	–	–	–	–	–	–	–	–	–	–
Operational risk	–	–	–	–	–			–	–	–
Future administrative costs	–	–	–	–	–			–	–	–
Total Additional Valuation Adjustments (AVAs)								55	–	–

Key metrics *(EU KM1)*

	CONSOLIDATED SITUATION		
SEK million	31 Dec 2021	30 Sep 2021	30 Jun 2021
Available own funds (amounts)			
Common Equity Tier 1 (CET1) capital	18,811	18,318	18,039
Tier 1 capital	23,111	22,618	22,339
Total capital	25,106	24,613	24,334
Risk-weighted exposure amounts			
Total risk exposure amount	138,876	137,666	138,024
Capital ratios (as a percentage of risk-weighted exposure amount)			
Common Equity Tier 1 ratio (%)	13.5	13.3	13.1
Tier 1 ratio (%)	16.6	16.4	16.2
Total capital ratio (%)	18.1	17.9	17.6
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)			
Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.4	3.4	1.6
of which: to be made up of CET1 capital (percentage points)	2.2	2.2	0.9
of which: to be made up of Tier 1 capital (percentage points)	2.5	2.5	1.2
Total SREP own funds requirements (%)	11.4	11.4	9.6
Combined buffer and overall capital requirement (as a percentage of risk-weighted exposure amount)			
Capital conservation buffer (%)	2.5	2.5	2.5
Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	–	–	–
Institution specific countercyclical capital buffer (%)	0.0	0.0	0.0
Systemic risk buffer (%)	–	–	–
Global Systemically Important Institution buffer (%)	–	–	–
Other Systemically Important Institution buffer (%)	–	–	–
Combined buffer requirement (%)	2.5	2.5	2.5
Overall capital requirements (%)	13.9	13.9	12.1
CET1 available after meeting the total SREP own funds requirements (%)	6.9	6.6	7.7

SEK million	CONSOLIDATED SITUATION 31 Dec 2021	30 Sep 2021	30 Jun 2021
Leverage ratio			
Total exposure measure	580.521	581,249	558,051
Leverage ratio (%)	4.0	3.9	4.0
Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)			
Additional own funds requirements to address the risk of excessive leverage (%)	–	–	–
of which: to be made up of CET1 capital (percentage points)	–	–	–
Total SREP leverage ratio requirements (%)	3.0	3.0	3.0
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)			
Leverage ratio buffer requirement (%)	–	–	–
Overall leverage ratio requirement (%)	3.0	3.0	3.0
Liquidity Coverage Ratio			
Total high-quality liquid assets (HQLA) (Weighted value -average)	79,000	77,236	76,879
Cash outflows - Total weighted value	43,300	42,713	42,464
Cash inflows - Total weighted value	9,316	8,722	8,777
Total net cash outflows (adjusted value)	33,984	33,992	33,688
Liquidity coverage ratio (%)	232.5	227.2	228.2
Net Stable Funding Ratio[1)]			
Total available stable funding	477,485	483,891	469,032
Total required stable funding	371,325	360,419	351,207
NSFR ratio (%)	128.6	134.3	133.5

[1)] A technical calculation error resulted in the publication of an NSFR for the second quarter of 2021 that was too high. The published ratio was 138.3%, but the correct ratio should have been 133.5%. The bank does not believe this will have any material effect on liquidity risk.

5.4.1 Capital instruments

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

Capital instruments

ISIN	Currency	Nominal amount	Nominal amount outstanding	First possible redemption date	Interest rate, %	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
SE0012193787	SEK	400	400	2025-03-05	3.67%	3 m stibor +3,8 %	Perpetual	400	–
SE0012193779	SEK	1,600	1,600	2024-09-05	3 m stibor+3,65	3 m stibor +3,65	Perpetual	1,600	–
SE0013102050	SEK	800	800	2026-02-25	3.047%	3 m stibor +2,8	Perpetual	800	–
SE0013102068	SEK	1,500	1,500	2026-02-25	3 m stibor+2,80	3 m stibor +2,80	Perpetual	1,500	–
XS2181907663	SEK	1,400	1,400	2025-06-03	3 m stibor+2,10	3 m stibor +2,10	Dated	–	1,397
XS2181907580	SEK	600	600	2025-06-03	2.268%	3 m stibor +2,10	Dated	–	598
Total (SEK mn)		**6,300**	**6,300**					**4,300**	**1,995**

5.5 REGULATORY CAPITAL REQUIREMENTS

When calculating capital requirements, each exposure is allocated to an exposure class, either using the standardised or the IRB approach. Table Overview of risk exposure amount *(EU OV1)*, shows the individual risk exposure amounts distributed by exposure class compared to previous quarter. The increase in total REA during the fourth quarter refer to credit risk IRB and was primarily driven by an increase in mortgage and corporate lending. Table (EU CR5) presents exposure classes within the standardised approach. Table Risk exposure amounts and capital requirements compare changes since previous year end. In October 2021 the board of SBAB decided to remove Article 3 surcharge, as a result of the SFSA communicated Pillar 2 requirement.

Overview of risk exposure amount *(EU OV1)*

	Risk weighted exposure amounts (TREAs)		Total own funds requirement
SEK million	31 Dec 2021	30 Sep 2021	31 Dec 2021
Credit risk (excluding CCR) [1]	**127,420**	**126,358**	**10,194**
of which the standardised approach	6,630	6,876	530
of which the foundation IRB (FIRB) approach	20,110	18,197	1,609
of which, the advanced IRB (AIRB) approach	12,889	12,615	1,031
CCR	**5,568**	**5,412**	**445**
of which the standardised approach	860	918	69
of which internal model method (IMM)	–	–	–
of which exposures to a CCP	**2,879**	**2,844**	**230**
of which credit valuation adjustment-CVA	1,665	1,533	133
of which other CCR	164	117	13
Position, foreign exchange and commodities risks (Market risk)	**341**	**349**	**27**
Of which the standardised approach	341	349	27
Operational risk	**5,547**	**5,547**	**444**
Of which standardised approach	5,547	5,547	444
Total	**138,876**	**137,666**	**11,110**

[1] The total risk exposure amount for credit risk (excluding CCR) includes the risk weight floor set by the SFSA, whereas the subcategories do not. Hence, the total credit risk amount is larger compared to the summed subcategories.

Standardised approach *(EU CR5)*

	Risk weight										
Exposure class, SEK million	0%	10%	20%	50%	75%	100%	150%	1,250%	Others	Total	Of which, unrated
Central governments or central banks	35,903	–	–	–	–	–	–	–	–	35,903	–
Regional governments or local authorities	13,399	–	–	–	–	–	–	–	–	13,399	–
Multilateral development banks	1,433	–	–	–	–	–	–	–	–	1,433	–
International organisations	1,903	–	–	–	–	–	–	–	–	1,903	–
Institutions[1]	–	–	1,449	7,228	–	–	–	–	–	8,677	–
Corporates	–	–	–	–	–	–	–	–	–	–	–
Retail	–	–	–	–	3,606	–	–	–	–	3,606	3,606
Exposures in default	–	–	–	–	–	5	0	–	–	5	5
Covered bonds	–	31,115	0	0	–	–	–	–	–	31,115	–
Institutions and corporates with a short-term credit assessment	–	–	70	0	–	–	–	–	–	70	–
Equity	–	–	–	–	–	150	–	–	–	150	–
Other items	348	–	–	–	–	644	–	–	–	992	992
Total	**52,986**	**31,115**	**1,519**	**7,228**	**3,606**	**799**	**–**	**–**	**–**	**97,252**	**–**

[1] The calculation includes counterparty credit risk.

Risk exposure amounts and capital requirements

	CONSOLIDATED SITUATION			
	31 Dec 2021		31 Dec 2020	
SEK million	Risk exposure amount	Capital requirement	Risk exposure amount	Capital requirement
Credit risk recognised in accordance with IRB approach				
Exposures to corporates	20,110	1,609	16,578	1,326
Retail exposures	12,889	1,031	12,181	975
– of which, exposures to SMEs	*1,070*	*86*	*913*	*73*
– of which, retail exposures secured by immovable property	*11,819*	*945*	*11,268*	*902*
Total exposures recognised with the IRB approach	**32,999**	**2,640**	**28,759**	**2,301**
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 international organisations	0	0	0	0
Exposures to institutions[1]	3,904	312	4,042	323
– of which, derivatives according to CRR, Appendix 2	*3,739*	*299*	*4,014*	*321*
– of which, repos	*164*	*13*	*28*	*2*
– of which, other	*1*	*0*	*0*	*0*
Retail exposures	2,705	216	2,613	209
Exposures in default	5	0	7	1
Exposures in the form of covered bonds	3,111	249	3,738	299
Exposures to institutions and corporates with a short-term credit rating	14	1	10	1
Equity exposures	150	12	1,266	101
Other items	644	53	327	26
Total exposures recognised with standardised approach	**10,533**	**843**	**12,003**	**960**
Market risk	**341**	**27**	**348**	**28**
– of which, position risk	–	–	–	–
– of which, currency risk	*341*	*27*	*348*	*28*
Operational risk	**5,547**	**444**	**5,212**	**417**
– of which, standardised approach	*5,547*	*444*	*5,212*	*417*
Credit valuation adjustment risk (CVA risk)	**1,665**	**133**	**1,504**	**120**
Additional requirements under Article 458 of the CRR	**87,791**	**7,023**	**81,649**	**6,532**
Additional requirements under Article 3 of the CRR	**–**	**–**	**792**	**63**
Total risk exposure amount and minimum capital requirements	**138,876**	**11,110**	**130,267**	**10,421**
Capital requirements for capital conservation buffer		**3,472**		**3,257**
Capital requirements for countercyclical buffer		**17**		**17**
Total capital requirements		**14,599**		**13,695**

[1] The risk-weighted amount for counterparty risk according to the CRR, Article 92(3)(f), amounts to SEK 3,903 million (4,042).

5.6 DIFFERENCES BETWEEN ACCOUNTING AND REGULATORY SCOPE

Reconciliation of regulatory own funds to balance sheet in the audited financial statements *(EU CC2)*

	Balance sheet as in published financial statements [1]	Under regulatory scope of consolidation
	As at period end	As at period end
Assets - Breakdown by asset classes according to the balance sheet in the published financial statements		
Cash and balances at central banks	10,100	10,100
Chargeable treasury bills, etc,	22,549	22,549
Lending to credit institutions	643	627
Lending to the public (Note 5)	467,041	467,041
Value changes of interest-rate-risk hedged items in macro hedges	−563	−563
Bonds and other interest-bearing securities	50,254	50,254
Shares and participations in Group companies	0	150
Derivatives (Note 6)	6,920	6,920
Intangible assets	460	348
Property, plant and equipment	274	270
Other assets	248	245
Prepaid expenses and accrued income	410	409
Total assets	**558,337**	**558,350**
Liabilities - Breakdown by liability clases according to the balance sheet in the published financial statements		
Liabilities to credit institutions	16,372	16,372
Deposits from the public	144,950	144,950
Issued debt securities, etc,	364,365	364,365
Derivatives (Note 6)	2,844	2,844
Other liabilities	532	527
Accrued expenses and deferred income	1,886	1,917
Deferred tax liabilities	304	302
Provisions	143	143
Subordinated debt	1,996	1,996
Total liabilities	**533,393**	**533,417**
Shareholders' Equity		
Share capital	1,958	1,958
Reserves/Fair value reserve	919	919
Additional Tier 1 instruments	4,300	4,300
Retained earnings	17,767	17,755
Net profit for the period	2,081	2,103
Total equity	**27,025**	**27,037**
TOTAL LIABILITIES AND EQUITY	**560,418**	**560,454**

[1] Includes Booli and Boappa

Differences between accounting and regulatory scopes of consolidations and the mapping of financial statement categories with regulatory risk categories *(EU LI1)* [1]

Balance sheet, SEK million	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values: Subject to the credit risk framework	Carrying values: Subject to CCR framework	Carrying values: Subject to the market risk framework[2]	Carrying values: Not subject to capital requirements or subject to deduction from capital base[3]
Assets						
Cash and balances at central banks	10,100	10,100	10,100	–	–	–
Treasury bills, etc.	22,549	22,549	22,549	–	–	–
Lending to credit institutions	643	627	70	557	–	–
Lending to the public	467,041	467,041	467,041		–	–
Value changes of interest-rate-risk hedged items in macro hedges	–563	0	0	–	–	–
Bonds and other interest-bearing securities	50,254	50,254	50,254	–	–	–
Derivatives	6,920	6,920	9	6,920	–	–
Share in subsidiaries	0	150	150		–	–
Intangible assets	460	348	348	–	–	–
Property, plant and equipment	274	270	–	–	–	–
Other assets	248	245	–	–	–	–
Prepaid expenses and accrued income	410	409	–	–	–	–
Total assets	**558,337**	**558,914**	**551,437**	**7,477**	–	–
Liabilities						
Liabilities to credit institutions	16,372	16,372	–	3,372	–	–
Deposits from the public	144,950	144,950	–	–	–	–
Debt securities issued	364,365	364,365	–	–	–	–
Derivatives	2,844	2,844	–	2,844	–	–
Other liabilities	532	527	–	–	–	–
Accrued expenses and deferred income	1,886	1,917	–	–	–	–
Deferred tax liabilities	304	302	–	–	–	–
Provisions	143	143	–	–	–	–
Subordinated debt	1996	1,996	–	–	–	–
Total liabilities	**533,393**	**533,417**	**–**	**6,216**	–	–

[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 both items deducted from own funds and those covered through new software regulation .Capital adequacy for these is calculated with a risk weight of 0% and with 100% according to new regulation regarding software calculation.

Main sources of differences between regulatory exposure amounts and carrying values in financial statements *(EU LI2)*

SEK million	Total	Items subject to: Credit risk framework[1]	Securitisation framework	CCR framework[1]	Market risk framework
Assets carrying value amount under the scope of prudential consolidation [2] (as per template LI1)	558,914	551,437	–	7,477	–
Liabilities carrying value amount under the scope of prudential consolidation (as per template LI1)	6,216	–	–	6,216	–
Total net amount under the scope of prudential consolidation	552,698	551,437	–	1,261	–
Off-balance-sheet amounts	69,539	69,539	–	–	
Differences in valuations	–	–	–	–	
Differences due to different netting rules, other than those already included in row 2	7,414	–	–	7,414	
Differences due to consideration of provisions	147	147	–	–	
Differences due to the use of credit risk mitigation techniques (CRMs)	–	–	–	–	
Differences due to credit conversion factors	–	–	–	–	
Differences due to Securitisation with risk transfer	–	–	–	–	
Other differences [2]	268	258	–	–	
Exposure amounts considered for regulatory purposes	**630,056**	**621,381**	**–**	8,675	–

[1] The framework for counterparty credit 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.

[1] Value changes of interest-rate hedges items amounting to –563 in macro hedges is not included under the scope of asset carrying value amount.

[2] Other differences consist of exposure amounts for intangble assets with 0% risk weight, that was accounted to high.

5.7 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. The table Standardised approach – Credit risk exposure and credit risk miti gation (CRM) effects (EU CR4) shows more details of exposures before and after credit risk mitigation. Whereas, the table EU CR3 discloses the CRM techniques and the table EU CR7-A the extent of CRM techniques used.

Standardised approach – Credit risk exposure and credit risk mitigation (CRM) effects *(EU CR4)*

	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWAs density	
Exposure classes, SEK million	On-balance-sheet amount	Off-balance sheet amount	On-balance-sheet amount	Off-balance sheet amount	RWAs	RWAs density (%)
Central governments or central banks	35,903	–	35,903	–	–	–
Regional governments or local authorities	12,954	–	13,399	–	–	–
Multilateral development banks	1,433	–	1,433	–	–	–
International organisations	1,903	–	1,903	–	–	–
Institutions[1]	2	–	2	–	–	20
Corporates	–	–	–	–	–	–
Retail	3,256	1,751	3,256	350	2,705	75
Exposures in default	5	–	5	–	5	101
Covered bonds	31,115	–	31,115	–	3,111	10
Institutions and corporates with a short-term credit assessment	70	–	70	–	14	20
Equity	150	–	150	–	150	100
Other items	992	–	992	–	644	65
Total	**87,781**	**1,751**	**88,227**	**350**	**6,630**	**7.5**

[1] Exposures to institutions excludes counterparty credit risk.

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	85,270	85,270
2	7,227	7,227
3	0	0
4	–	–
5	–	–
6	–	–
Total	**92,498**	**92,498**

CRM techniques overview: Disclosure of the use of credit risk mitigation techniques *(EU CR3)*

Exposure classes, SEK million	Unsecured carrying amount	Secured carrying amount	Of which secured by collateral	Of which secured by financial guarantees	Of which secured by credit derivatives
Loans and advances	24,725	453,043	452,598	445	–
Debt securities	73,008	–	–	–	–
Total	**97,733**	**453,043**	**452,598**	**445**	**–**
Of which non-performing exposures	15	184	184	0	–
Of which defaulted	19	199	199	0	–

[1] Exposures to institutions excludes counterparty credit risk.

Disclosure of the extent of the use of CRM techniques *(EU CR7-A)*

A-IRB		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
SEK million	Performing	Part of exposures covered by Financial Collaterals (%)		Part of exposures covered by Immovable property Collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)		Part of exposures covered by Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)	"Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and substitution effects)
Central governments and central banks	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Institutions	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Corporates	–	–			–	–	–	–	–	–	–	–	–	–
Of which Corporates – SMEs	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Of which Corporates – Specialised lending	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Of which Corporates – Other	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Retail	391,466	–	–	99.99	99.99	–	–	–	–	–	0.10	–	12,896	12,889
Of which Retail – Immovable property SMEs	*347,610*	–	–	*100.00*	*100.00*	–	–	–	–	–	*0.68*	–	*1,077*	*1,070*
Of which Retail – Immovable property non-SMEs	*43,856*	–	–	*99.99*	*99.99*	–	–	–	–	–	*0.00*	–	*11,819*	*11,819*
Of which Retail – Qualifying revolving	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Of which Retail – Other SMEs	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Of which Retail – Other non-SMEs	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	**391,466**	–	–	**99.99**	**99.99**	–	–	–	–	–	**0.10**	–	**12,896**	**12,889**

F-IRB		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
SEK million	Performing	Part of exposures covered by Financial Collaterals (%)		Part of exposures covered by Immovable property Collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)		Part of exposures covered by Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)	"Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and substitution effects)
Central governments and central banks	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Institutions	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Corporates	81,554	–	99.42	99.42	–	–	–	–	–	–	0.07	–	20,127	20,110
Of which Corporates – SMEs	*43,856*	–	*100.00*	*100.00*	–	–	–	–	–	–	*0.03*	–	*8,441*	*8,439*
Of which Corporates – Specialised lending	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Of which Corporates – Other	*37,698*	–	*81.40*	*81.40*	–	–	–	–	–	–	*0.13*	–	*11,686*	*11,671*
Total	**81,554**	–	**91.40**	**91.40**	–	–	–	–	–	–	**0.07**	–	**20,127**	**20,110**

5.8 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.

5.9 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 connection between the external rating provided by credit rating agencies with the credit quality steps prescribed in the CRR complies with the mapping published by the EBA (refer to table The mapping between internal and external rating for corporates).

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. Liquidity risk does not directly lead to capital requirements, instead it entails needs in form of a liquidity reserve and active debt management. 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 ACCORDING TO 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 maintain a capital amount. This capital amount's type and distribution should be enough to cover the risks to which the bank is exposed to or could be exposed to in the future. 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 of the minimum capital requirement under Pillar 1, the capital require- ment 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.

When determining the size of the capital target, assessments of investors and rating agencies regarding the company's capital target compared with the capital held by the company are also considered. The views of rating agencies 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 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 a 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 internal stress tests to assess the impact on the capital ratios and requirements during a normal economic downturn and during severe but not improbable financial stress.

In addition to economic capital, capital held 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 result of the internal capital adequacy assessment is reported to the Board and CEO. Finally, the Board establishes the process and the results of the company's internal capital adequacy assessment.

Internal capital adequacy assessment process

1 QUANTIFICATION OF RISKS	2 QUANTIFICATION AND ASSESSMENT OF OTHER RISKS (CAPITAL BUFFERS)	3 ASSESSMENT OF COMBINED INTERNAL CAPITAL REQUIREMENTS	4 OWN FUNDS (COMPARED WITH CAPITAL POLICY AND PLAN)	5 OPERATIONAL GOVERNANCE AND ALLOCATION OF CAPITAL	6 REPORTING
• Credit risk • Concentration risk • Market risk • Sovereign risk • Operational risk • CVA risk • Pension risk	• Other risks	• Comparison of economic capital and minimum capital requirements under Pillar 1 • Aggregation of capital requirements for the various risks	• CET1 capital • Additional Tier 1 capital • Tier 2 capital	• Risk-adjusted profitability • Segment analysis and cost of capital • Return on allocated capital	• Fulfilment of capital targets and combined internal capital requirements • Internal reporting • External reporting

6.3 INTERNAL CAPITAL ADEQUACY ASSESSMENT COMPONENTS

SBAB's internal assessment of the capital requirement include the minimum requirements under Pillar 1, the Pillar 2 requirement, the risk-weight floor for Swedish residential mortgages, buffer requirements. It is used to control and monitor profitability in both the company's operations and for strategic considerations.

The capital requirements for credit risk, concentration risk, 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 confidence level of a worst-case scenario. The confidence level is chosen to reflect the company's target rating. 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 potential additions in the form of business risk (See table 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 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 CRR regulation for calculating capital requirements under Pillar 1 does not consider 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, an addition 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 of 25 percentage for mortgages applied in Pillar 2 as a requirement within the framework of Article 458 of the CRR. The amendment entered into force from 31 December 2018 and was applied for two years. This has resulted in a change, as now the capital requirement for the existing risk-weight floor for mortgages in Sweden is set as a requirement in Pillar 1 instead of Pillar 2. The credit institutions encompassed by the measure are those authorized 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 exposures, have also been affected. The Swedish FSA decided to extend the application of the floor within Pillar 1 until 30 December 2023, after an approval from the European Commission.

6.3.1.3 Credit risk in treasury operations

Credit risk arises in treasury operations, in part, in the form of counterparty credit risks for the derivative contracts entered 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 credit 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 a 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 as per 31 December 2021, the internally calculated capital requirement for concentration risk was SEK 1,065 million (1, 046), of which SEK 279 million (261) pertained to geographic concentration, SEK million 260 (247) to industry concentration and SEK 526 (538) million to concentration in single name.

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, higher exposure and/or longer average duration of derivatives. Calculation of the exposure amount for counterparty credit risk is based on the SA-CCR 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 the beta factors 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 spread risk. Market risk is quantified using SBAB's Value at Risk models (VaR) and it is managed by limiting exposure within limits set by the Board and by centralising the management of these risks to the Treasury department. VaR, based on stressed market data, is used to quantify internal assessed capital requirement for credit spread risk and currency risk while basis spread risk and interest rate risk is based on the SFSA's method described in (FI dnr 19-4434).

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 potential 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. Generally, 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 spread risk
Basis spread risk mainly arises when borrowing in foreign currency and is swapped to SEK.

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 SFSA's methods for assessing individual types of risk within Pillar 2.

6.3.6 Business risk
Business risk means the risk of weaker 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 SBAB's costs. However, since the cost base largely comprises fixed expenses that cannot be reduced over a one year horizon. Hence 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.

6.4 COMPILATION OF INTERNAL CAPITAL ADEQUACY ASSESSMENT

According to the SFSA'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. SFSA´s general rule was changed during 2021 and now states that 56,25% of the Pillar 2 requirement shall be covered with CET1 capital. This general rule applies for concentration risk, interest rate risk, other market risk and pension risk. The share of Tier 1 and CET1 capital for other Pillar 2 requirements shall be in accordance with the most recently communicated Supervisory Review and Evaluation Process (SREP).

SBAB's internally calculated capital requirement with consideration for the risk-weight floor for Swedish residential mortgages is stated in table Internally assessed capital requirements. The internally assessed capital requirement corresponds to a CET1 capital ratio of 8% and a total capital ratio of 12.3%. 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 8.6% and the total capital ratio to at least 12.9% as per 31 December 2021. The internal capital requirement in table Internally assessed capital requirements is assessed with the help of SBAB's internal models for economic capital and is not fully compatible with the capital requirements published by the Swedish FSA. According to the Swedish FSA's report "Capital requirements of Swedish banks as per Q4 2021", SBAB's total capital requirement amounted SEK 19,251 million.

6.5 STRESS TESTS

Capital planning is founded on a base 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 not implausible 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 considered.

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 forecasted 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 simplified illustration of the process is provided in the figure Schematic process for conducting the bottom-up stress test. The stress test is conducted for the portfolio at one 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.

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.

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.

Internally assessed capital requirements

		CONSOLIDATED SITUATION			
		31 Dec 2021		31 Dec 2020	
		Internally assessed capital requirement		Internally assessed capital requirement	
		SEK million	%	SEK million	%
Pillar 1	Credit risk & CVA risk	3,616	2.6	3,381	2.6
	Market risk	27	0.0	28	0.0
	Operational risk	444	0.3	417	0.3
	Risk-weight floor	7,023	5.1	6,532	5.0
	Add-on, corporate exposures[1)]	–	–	63	0.1
	Total Pillar 1	**11,110**	**8.0**	**10,421**	**8.0**
Pillar 2	Credit risk	1,152	0.8	1,124	0.9
	Market risk	1,207	0.9	387	0.3
	Operational risk	–	–	–	–
	Pension risk	61	0.0	–	–
	Total Pillar 2	**2,420**	**1.7**	**1,511**	**1.2**
Buffers	Capital conservation buffer	3,472	2.5	3,257	2.5
	Countercyclical buffer	17	0.0	17	0.0
	Total Buffers	**3,489**	**2.5**	**3,274**	**2.5**
	Total	**17,019**	**12.3**	**15,206**	**11.7**
	Total own funds	**25,106**		**22,992**	

1) Add-on after decision by the Board pursuant to Article 3 of the CRR. In October 2021 the Board decided to remove the Article 3 surcharge, as a result of the Swedish FSA communicated Pillar 2 requirements.

Schematic process for conducting the bottom-up stress test

Parameters subjected to stress in the current and next three years

Demand	Prices	Interest rates
GDP growth (real)	House prices	Residential mortgages, 3 month
Disposable household income (nominal)	Prices of tenant-owners' rights	STIBOR, 3 month
Employment	Residential property prices	Government bond rate, 10-year
Unemployment		STIBOR Treasury bills
		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 an operational scenario independent of the macro scenarios, thus leading to further deterioration in earnings and decreased own funds.

Scenario

In this scenario, a set of external shocks, in combination with internal vulnerabilities, lead to a rapid recession and problems in the Swedish banking system. Historically, this kind of scenario has occurred approximately every twenty-five years.

- Major stock market falls, international growth is declining partly due to national protectionism and trade barriers. Political unrest around the world have led to a sharp fall in commodity prices such as oil and investment in international financial markets is directed towards safe assets.
- Global demand is falling, and Swedish households reduces consumptions and increase their precautionary savings. The fall in Swedish GDP-level is about 10 percent compared with baseline, which means negative growth of about 5 percent. In addition, employment and household disposable income decrease rapidly during the first years of the crisis. The economy will not stabilise until 2023.
- The Swedish krona is weakened, which contributes to keeping inflation a bit above 0 percent over the next few years.
- Foreign confidence in the banks' financial strength is eroding because of imbalances in the housing and mortgage markets. Central government's finances deteriorate because of stabilisation measures and confidence in economic policy is eroded, leading to rising risk premiums and interest rates. The banking system is coming under pressure. The Riksbank tries but fails in stimulating the economy because of the low initial interest rate situation and the rising risk premiums.
- The development of housing prices cannot be fully explained by the development of the household income and mortgage rates but is also pushed down by difficulties in taking out mortgages and a gloomy future expectations of the housing market. In total, housing prices will fall by 25-30 percent before stabilising in 2024.

7 Leverage ratio

The CRR introduced a non-risk-sensitive measure to avoid excessive leverage. This measure 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 became a binding requirement during 2021 with the requirement of 3%. The consolidated situation also have a Pillar 2 Guidance of 0,3%. The tables EU LR1, EU LR2 and EU LR3 discloses detailed information of the leverage ratio.

DESCRIPTION OF MEASURES TAKEN TO MANAGE THE RISK OF INADEQUATE LEVERAGE RATIO

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 measure 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 RATIO IN THE PERIOD TO WHICH THE PUBLISHED LEVERAGE RATIO PERTAINS

The Leverage ratio amounted to 3.98% as per December 2021, which is slightly lower than a year earlier when it amounted to 4.00%. The year-on-year change in the leverage ratio was due to:

- Tier 1 capital increased due to accrued earnings and issuance of AT1 instruments, which had a positive impact on the leverage ratio by 0.40%
- The effect of the exposure measure attributable to SFTs increased slightly, which had a negative impact on leverage ratio by 0.06%.
- The effect of the exposure measure attributable to derivatives decreased slightly, which had a positive impact on leverage ratio by 0.05%.
- The effect of the exposure measure attributable to off-balance-sheet items increased slightly, which had a negative impact on leverage ratio by 0.03%.
- An increase mainly in mortgage exposures entailed a negative impact by 0.39%.

Summary reconciliation of accounting assets and leverage ratio exposures *(EU LR1)*

	APPLICABLE AMOUNT
SEK million	2021
Total assets as per published financial statements	558,350
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	0
(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	–
(Adjustment for temporary exemption of exposures to central banks (if applicable))	–
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	–
Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	–
Adjustment for eligible cash pooling transactions	–
Adjustments for derivative financial instruments	-3,749
Adjustment for securities financing transactions (SFTs)	-5,949
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	16,493
(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	-55
(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	0
(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	–
Other adjustments	15,431
Total exposure measure	**580,521**

Leverage ratio common disclosure *(EU LR2)*

	CRR LEVERAGE RATIO EXPOSURES	
SEK million	**31 Dec 2021**	**30 Sep 2021**
On-balance sheet exposures (excluding derivatives and SFTs)		
On-balance sheet items (excluding derivatives, SFTs, but including collateral)	551,916	554,568
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	556	673
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-728	-892
(Adjustment for securities received under securities financing transactions that are recognised as an asset)	–	–
(General credit risk adjustments to on-balance sheet items)	–	–
(Asset amounts deducted in determining Tier 1 capital)	-12	-262
Total on-balance sheet exposures (excluding derivatives and SFTs)	**551,733**	**554,086**
Derivative exposures		
Replacement cost associated with SA-CCR derivatives transactions (i.e. net of eligible cash variation margin)	910	924
Derogation for derivatives: replacement costs contribution under the simplified standardised approach	–	–
Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	2,261	2,435
Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	–	–
Exposure determined under Original Exposure Method	–	–
(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	–	–
(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	–	–
(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	–	–
Adjusted effective notional amount of written credit derivatives	–	–
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	–	–
Total derivatives exposures	**3,171**	**3,359**
Securities financing transaction (SFT) exposures		
Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	24,193	21,247
(Netted amounts of cash payables and cash receivables of gross SFT assets)	-15,072	-15,072
Counterparty credit risk exposure for SFT assets	2	3
Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	–	–
Agent transaction exposures	–	–
(Exempted CCP leg of client-cleared SFT exposure)	–	–
Total securities financing transaction exposures	**9,124**	**6,179**
Other off-balance sheet exposures		
Off-balance sheet exposures at gross notional amount	69,539	75,777
(Adjustments for conversion to credit equivalent amounts)	-53,046	-58,152
(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	–	–
Off-balance sheet exposures	**16,493**	**17,625**

SEK million	CRR LEVERAGE RATIO EXPOSURES 31 Dec 2021	30 Sep 2021
Excluded exposures		
(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	0	0
(Exposures exempted in accordance with point (j) of Article 429a (1) CRR (on and off balance sheet))	–	–
(Excluded exposures of public development banks (or units) - Public sector investments)	–	–
(Excluded exposures of public development banks (or units) - Promotional loans): - Promotional loans granted by a public development credit institution - Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State - Promotional loans granted by an entity set up by the central government, regional governments or local authorities of a Member State through an intermediate credit institution)	–	–
(Excluded passing-through promotional loan exposures by non-public development banks (or units): - Promotional loans granted by a public development credit institution - Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State - Promotional loans granted by an entity set up by the central government, regional governments or local authorities of a Member State through an intermediate credit institution)	–	–
(Excluded guaranteed parts of exposures arising from export credits)	–	–
(Excluded excess collateral deposited at triparty agents)	–	–
(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	–	–
(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	–	–
(Reduction of the exposure value of pre-financing or intermediate loans)	–	–
(Total exempted exposures)	**0**	**0**
Capital and total exposure measure		
Tier 1 capital	23,111	22,618
Total exposure measure	**580,521**	**581,249**
Leverage ratio		
Leverage ratio	4.0%	3.9%
Leverage ratio excluding the impact of the exemption of public sector investments and promotional loans) (%)	4.0%	3.9%
”Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)”	4.0%	3.9%
Regulatory minimum leverage ratio requirement (%)	3.0%	3.0%
Additional own funds requirements to address the risk of excessive leverage (%)	–	–
of which: to be made up of CET1 capital (percentage points)	–	–
Leverage ratio buffer requirement (%)	0.0%	0.0%
Overall leverage ratio requirement (%)	3.0%	3.0%
Choice on transitional arrangements and relevant exposures		
Choice on transitional arrangements for the definition of the capital measure	–	–

SEK million	CRR LEVERAGE RATIO EXPOSURES 31 Dec 2021	CRR LEVERAGE RATIO EXPOSURES 30 Sep 2021
Disclosure of mean values		
Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	7,829	5,950
Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	9,122	6,176
Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	579,228	581,023
Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	579,228	581,023
Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.0%	3.9%
Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.0%	3.9%

Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) *(EU LR3)*

SEK million	CRR LEVERAGE RATIO EXPOSURES 2021
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**551,706**
Trading book exposures	–
Banking book exposures, of which:	551,706
Covered bonds	
Exposures treated as sovereigns	*52,638*
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	*0*
Institutions	*2*
Secured by mortgages of immovable properties	*463,302*
Retail exposures	*3,256*
Corporates	*–*
Exposures in default	*182*
Other exposures (eg equity, securitisations, and other non-credit obligation assets)	*1,211*

8 Risk in remuneration systems

SBAB is required 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 could have an 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 creates the conditions for profitability and long-term customer relations. This means that the credit operations are denoted by high credit quality, efficient decision-making processes, and understanding of the customer's situation. This also entails customer-oriented procedures and balanced risk taking in the lending portfolio.

9.1 CREDIT RISK MANAGEMENT

SBAB is required to have documented 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 rating targets. SBAB's credit operations are characterised by low risk taking and 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, internal models and processes related to credit risk.

The reporting structure is designed for the Board of the Parent Company and the Executive Management to receive reports on the development and current levels of the credit risk. Procedures are 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 86% of the risk exposure amount (REA) 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 borrower's inability to make interest and loan repayments or otherwise fulfil the loan agreement.

Aside from 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 receivables.

In the credit-granting process, the credit risk is initially managed by the relevant business area and, in some cases, analysed by the credit department in the first line of defense (within the Group Specialists) prior to credit decisions. Each business area deals with the operational management of credit risk during the lifecycle of the loan whereas the Risk control unit in the second line of defense is responsible for monitoring, controlling and measuring credit risk on a regular basis.

In the credit-granting process the credit risk is specifically assessed where 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 significantly exceed the prevailing market rates. Furthermore, internal rating models, according to interna ratings-based approach (IRB), are used in the analysis of the credit risk for new and existing customers in the loan portfolios.

Credit risk in lending operations is also restricted by limits determined for the customer or the group of customers. Large exposures, meaning those amounting to 10% or more of eligible capital, 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 connected customers or clients.

The granting of a new loan requires the provision of adequate collateral, usually provided in the form of a immovable property or a share in a tenant-owners' association where the loan amount to the market value (LTV) does not exceed 75–85%. A LTV of 75% applies in general to corporate customers. SBAB grants loans provided that collateral can be obtained with first lien and that the customer has an internal PD rating grade of R1–R4 for retail customers and C1–C4 for corporate customers, (for detailed mapping between internal and external ratings refer to table The mapping between internal and external rating for corporates). SBAB also grants small unsecured loans to borrowers in the retail segment, which comprise 5% of the risk exposure amount (REA) under Pillar 1, excluding the risk-weight floor. Moreover, SBAB applies a maximum debt ratio of 5.5 (gross income in relation to the loan) for new retail customers.

When lending to retail customers, the market value of the collaterals are generally determined by credit managers using approved valuation models. If the market value cannot be determined by credit managers using approved valuation models, it is determined by a competent and independent property appraiser.

When lending to corporate customers such as tenant-owners' associations and real estate companies, the market value of the collaterals are determined by internal property appraisers.

External valuations can form the basis of decisions upon approval by the credit manager in charge of valuations. If an external valuation is carried out by an approved external appraiser, the valuation does not require approval by internal appraisers. SBAB verifies the market value of the collaterals on a regular basis. For residential properties and tenant-owners' rights, the market values are verified at least every third year. For other properties, the market values are verified at least annually. In case of major changes in economic factors that affect the Swedish property market, the market value should be verified more often.

In addition to collateral in immovable property or tenant-owners' rights, it is possible to grant loans 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 up to 85% of the market value of the 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 repossessed.

The table LTV split by exposures shows the LTV distribution for corporate and retail exposures respectively. Since 86,6% of the lending is secured with collateral in immovable property or tenant-owners' rights to within 50% LTV and 99,1% within 75% LTV, the credit quality is assessed to be high with respect to collateralisation.

LTV split by exposure class

Segment, %	Below 50%	Below 75%	Below 85%	Below 100%	Exposure-weighted average LTV
Corporate exposures	80.7	99.7	99.7	99.7	63.0
Retail exposures	87.6	99.0	99.9	100.0	56.0
Total	**86.6**	**99.1**	**99.9**	**99.9**	**56.6**

9.3 INTERNAL RATINGS-BASED APPROACH (IRB)

In order to calculate own funds requirements SBAB applies an advanced internal ratings-based approach (A-IRB) for retail exposures and a foundation IRB approach (F-IRB) for corporate exposures. IRB covers 99% of total lending to the public. For other types of exposures, including unsecured loans, the standardised approach is used for own funds requirements.

A-IRB has been used since 2007 for measuring credit risk where a mortgage deed for 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. In 2015, SBAB furthermore received permission to use IRB 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 the credit risk models subject to IRB, a quantification is made of the probability of default[1)] (PD), the loss given default (LGD) and the proportion of off-balance to be converted to the balance sheet, i.e. the credit conversion factor (CCF). On the basis of these parameters and the exposure amount, expected and unexpected credit loss can be estimated. The exposure is ranked by PD to one of eight rating grades for corporate and retail exposures respectively, of which the eighth grade comprises customers in default. Customers in higher rating grades are monitored diligently and, when necessary, exposures are managed actively by credit managers as part of the insolvency process.

The credit risk models in the IRB framework are used in SBAB's lending operations for activities such as credit granting, pricing, portfolio analysis and performance monitoring per business area. The credit risk models are validated annually and, whenever required, they are recalibrated. The validations carried out for 2021 did not result in any changes to any of the PD or LGD models under IRB. However, the CCF model has been slightly adapted to account for higher disbursement rates which have been observed during the last years. The change in the CCF model will be implemented during 2022 and is assessed to have very limited impact on risk exposure amounts (REA) for retail exposures. A major challenge in the PD and LGD model validation lately has been the very low number of defaults and almost complete lack of credit losses.

For corporate customers the quantification provided by the scoring model for PD is supplemented with a systematic qualitative assessment of the customer based on a number of predefined questions. Additionally, credit analysts could override the rating grade in cases where the credit risk is not fully captured by the PD model. The figure Internal rating process for corporate customers illustrates the process to assign rating grades for PD. For customers within retail exposures, which are not tenant-owners' associations, no qualitative assessment is made to the PD.

[1)] A loan is regarded as in default if the customer is more than 90 days past due (for outstanding amount exceeding 1% of total debt and SEK 1 000 for retail exposures respectively SEK 5 000 for corporate exposures) or if an assessment of unlikeliness to pay has been made of the customer.

9.4 INTERNAL RATING METHODS

In conjunction with own funds requirements and the application of IRB, exposures are categorised into exposure classes. Retail loans and loans to tenant-owners' associations with a turnover of less than EUR 50 million and collateral in residential property are assigned to the retail exposure class. A-IRB is applied for all collateralised retail exposures. Other exposures secured by collateral are assigned to the corporate exposure class where F-IRB is used. The table Loan portfolios and exposure classes where IRB is applied, shows the distinction between retail exposures, corporate exposures and their respective approach. The standardised approach is applied for unsecured retail exposures and guarantees issued by central government or municipalities.

For internal rating according to the IRB framework SBAB uses statistical scoring models for each of the risk dimensions; PD, LGD and CCF.

For PD there are several scoring models depending on the type of customer. The models are based on logistic regression with a target to predict the probability of default over a time horizon of one year. Both internal and external data sources are used to identify appropriate risk factors in the PD models. Internal data consists of customer information, loan informa-

Internal rating process for corporates

Several statistical methods, i.e. PD models, are used to produce a quantitative PD score for different types of counterparties.

The counterparty is assessed based on qualitative variables subject to the loan regulations.

The counterparty's rating is adjusted based on possible support from its parent company.

Takes into consideration special events that justify a downgrade.

Provides an opportunity to override rating grade due to specific risk factors not captured in the PD models.

tion, default outcomes and internal payment behaviour. Data obtained externally includes income data, financial statements, external payment behaviour, market value of the property and macroeconomic factors. The scoring models for PD are based on empirical data from the end of the 1990s and to the present day. In order to calibrate PD value towards conservative through-the-cycle estimates external data from the housing crisis on the Swedish mortgage market during the middle of 1990s is also included.

The scoring models for LGD which are applied to retail exposures comprising both retail loans and loans to tenant-owners' associations are largely based on the LTV ratio of the loan. A rise in the LTV implies an increase in the probability of a write off and thus the level of credit losses. The LGD models are primarily based on internal data consisting of default outcomes, credit losses in terms of write offs and succeeding recoveries, and LTV ratios of the loans. As for PD, external loss data from the 1990s housing crisis on the Swedish mortgage market is also included to calibrate the LGD value towards downturn periods with the aim of ensuring conservative estimates.

The scoring model for CCF is applied to loan commitments in the retail exposure class. The CCF measures the probability of the loan commitment resulting in a conversion to a loan disbursement and hence an on-balance exposure. The model is mainly based on the loan commitment's progress in the credit granting process and the time elapsed since application. The CCF model is solely based on internal data consisting of application information and disbursement rates.

Loan portfolios and exposure classes where IRB is applied

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

9.5 THE MAPPING BETWEEN EXTERNAL AND INTERNAL RATINGS

SBAB's PD rating grades for corporate customers 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 internal rating 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 banks applying IRB. Accordingly, it is difficult to translate internal PD rating grades to external ratings explicitly. However, by analysing the proportion of default outcomes in SBAB's rating grades compared with the proportion of default outcomes in Standard & Poor's rating grades, it is possible to obtain a reasonable comparison. The table named The mapping between internal and external rating for corporates, shows the external rating grades that match SBAB's PD rating grades for corporates with respect to default outcomes.

The mapping between internal and external rating for corporates

Rating grade	Standard & Poor's rating
C1	AAA to AA-
C2	A+ to BBB+
C3	BBB to BBB-
C4	BB+ to BB
C5	BB- to B+
C6	B to B-
C7	CCC to C

9.6 EXPOSURE AMOUNTS AND OWN FUNDS REQUIREMENTS

The table Exposure amounts by exposure class for credit risk exposures, shows all credit risk exposures, including both on and off-balance exposures. The total amount for all credit risk exposures was SEK 630 billion per 31 December 2021.

Credit risk protection used for exposures in the IRB framework consists of government and municipal guarantees. Credit risk protection is only used to a very limited extent and exposures subject to guarantees are reported in accordance with the standardised approach.

SBAB has also obtained guarantees of SEK 35 million from business partners which serve as loan intermediaries to cover credit losses of their provided loans. The guarantees from business partners are not considered when calculating own funds requirements.

Corporate exposures comprise only 16% of the total lending portfolio for which IRB is used, but due to F-IRB without own estimates of LGD, the exposures account for 61% of the total capital requirement according to Pillar 1 subject to IRB.

The average REA for exposures recognised in accordance with IRB was 6.8% (risk-weight floor excluded), while the average REA for exposures recognised with the standardised approach was 7.5%. For detailed information of the change in risk weighted exposure amounts and asset quality under IRB can be found in table RWA flow statements of credit risk exposures under IRB (EU CR8). Exposure-weighted average PD estimate for IRB exposures amounted to 0.19% (0.33% as per December 2020) for corporate exposures. The change is explained by an inflow of exposures assigned to higher rating grade and outflow of exposure assigned to lower rating grades. For retail exposures the exposure-weighted average PD estimate amounted to 0.27% (0.30% as per December 2020). Exposure-weighted average LGD estimate for corporate exposures was 37.1% (36.9% as per December 2020) and exposure-weighted LGD estimate for retail exposures was 10.0% (10.0% as per December 2020). For clarification, the exposure-weighted amount for the LGD estimate for retail exposures is restricted by the limitation rule, which requires a lowest average LGD estimate of 10.0% for loans covered by collateral in residential properties in accordance with Article 164 item 4 of the CRR. The table Credit

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	84,150	–	84,150	59	–	9,095	81,554	6,558
Retail exposures	447,687	–	447,687	387	–	58,692	402,719	14,111
of which, houses and holiday homes	*193,108*	–	193,108	14	–	*22,641*	*175,709*	*5,256*
of which, tenant-owners' rights	*199,037*	–	199,037	0	–	*35,451*	*171,941*	*8,355*
of which, tenant-owners' associations	*55,542*	–	55,542	374	–	*600*	*55,069*	*501*
Total credit risk under the IRB approach	**531,837**	**–**	**531,837**	**446**	**–**	**67,788**	**484,273**	**20,669**
Credit risk in the lending portfolio recognised under the standardised approach								
Exposures to governments and central banks	35,903	0	35,903	–	–	–	35,903	–
Exposures to regional governments or local authorities or agencies	12,954	0	12,954	–	446	–	13,399	–
Exposures to multilateral development banks	1,433	0	1,433	–	–	–	1,433	–
Exposures to international organisations	1,903	0	1,903	–	–	–	1,903	–
Exposures to institutions	8,677	–	8,677	–	–	–	8,677	–
Exposures to corporates	–	–	–	–	–	–	–	–
Retail exposures	5,013	6	5,007	–	–	1,751	3,606	350
Exposures in default	10	5	5	–	–	–	5	–
Exposures in the form of covered bonds	31,115	0	31,115	–	–	–	31,115	–
Exposures to institutions and corporates with a short-term credit rating	70	–	70	–	–	–	70	–
Equity exposures	150	–	150	–	–	–	150	–
Other items	992	–	992	–	–	–	992	–
Total credit risk under the standardised approach	**98,219**	**12**	**98,207**	**–**	**446**	**1,751**	**97,252**	**350**
Total	**630,056**	**12**	**630,044**	**446**	**446**	**69,539**	**581,525**	**21,020**

[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.

risk exposures by exposure class and PD range (EU CR6) discloses the credit risk exposures by exposure class and PD range.

The following tables in this section correspond with the COREP reporting with regard to exposure amounts and REA. The figures related to the lending portfolio in the subsequent tables differ from the information presented in SBAB's 2021 Annual Report since total exposure amounts include accrued interest and transaction costs relating to commissions to business partners are excluded. Additionally, Booli Search Technologies AB and Boappa is excluded since the company is not part of the regulatory 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, %
81,081	65,683	22,640	20,110	1,609	24.7	15	58	0.19	37.13
402,679	375,101	13,220	12,889	1,031	3.2	120	120	0.27	10.00
175,683	*163,545*	*5,045*	*5,045*	*404*	*2.9*	*33*	*41*	*0.25*	*9.62*
171,927	*159,319*	*6,774*	*6,774*	*542*	*3.9*	*79*	*64*	*0.33*	*11.15*
55,069	*52,237*	*1,401*	*1,070*	*86*	*1.9*	*8*	*14*	*0.18*	*7.63*
483,760	**440,785**	**35,860**	**32,999**	**2,640**	**6.8**	**134**	**178**		
–	–	–	–	–	0.0	0	–	–	
–	–	–	–	–	0.0	0	–	–	
–	–	–	–	–	0.0	0	–	–	
–	–	–	–	–	0.0	0	–	–	
–	–	3,904	3,904	312	45.0	–	–	–	
–	–	–	–	–	–	–	–	–	
–	–	2,705	2,705	216	75.0	6	–	–	
–	–	5	5	0	101.4	5	–	–	
–	–	3,111	3,111	249	10.0	0	–	–	
–	–	14	14	1	20.0	–	–	–	
–	–	150	150	12	100.0	–	–	–	
–	–	644	644	52	64.9	–	–	–	
–	–	**10,533**	**10,533**	**843**	**10.8**	**11**	–	–	
483,760	**440,785**	**46,393**	**43,532**	**3,483**	**7.5**	**146**	**178**		

Credit risk exposures by exposure class and PD range *(EU CR6)*

Exposure Class	PD scale	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors	Exposure weighted average LGD (%)	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (%)	Expected loss amount	Value adjustments and provisions
A-IRB													
Of which, Retail SME	0.00 to <0.15	38,242	206	1	38,182	0.09	1,260	7.35	–	504	1.32	3	0
	0.00 to <0.10	38,242	206	1	38,182	0.09	1,260	7.35	–	504	1.32	3	0
	0.10 to <0.15	–	–	–	–	–	–	–	–	–	–	–	–
	0.15 to <0.25	13,213	131	1	13,203	0.21	598	7.97	–	353	2.68	2	0
	0.25 to <0.50	3,389	263	1	3,589	0.45	150	9.23	–	193	5.37	1	0
	0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
	0.75 to <2.50	57	0	–	57	1.16	12	9.21	–	6	10.25	0	0
	0.75 to <1.75	57	0	–	57	1.16	12	9.21	–	6	10.25	0	0
	1.75 to <2.5	–	–	–	–	–	–	–	–	–	–	–	–
	2.50 to <10.00	24	0	–	20	3.05	7	13.23	–	5	26.85	0	0
	2.5 to <5	24	0	–	20	3.05	7	13.23	–	5	26.85	0	0
	5 to <10	–	–	–	–	–	–	–	–	–	–	–	–
	10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	10 to <20	–	–	–	–	–	–	–	–	–	–	–	–
	20 to <30	–	–	–	–	–	–	–	–	–	–	–	–
	30.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	100.00 (Default)	17	0	–	17	100.00	2	10.59	–	9	53.59	7	7
Subtotal (exposure class)		**54,942**	**600**	**1**	**55,069**	**0.18**	**2,029**	**7.63**	**0**	**1,070**	**1.94**	**14**	**8**
Of which, Retail non-SME	0.00 to <0.15	241,994	30,600	0	248,257	0.04	140,356	9.90	–	3,048	1.23	10	5
	0.00 to <0.10	241,994	30,600	0	248,257	0.04	140,356	9.90	–	3,048	1.23	10	5
	0.10 to <0.15	–	–	–	–	–	–	–	–	–	–	–	–
	0.15 to <0.25	47,773	19,079	0	52,909	0.16	32,469	11.64	–	2,230	4.22	10	10
	0.25 to <0.50	29,476	7,849	0	31,298	0.42	17,667	11.44	–	2,624	8.39	15	22
	0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
	0.75 to <2.50	11,970	443	1	12,293	1.55	6,381	11.65	–	2,530	20.58	22	29
	0.75 to <1.75	11,970	443	1	12,293	1.55	6,381	11.65	–	2,530	20.58	22	29
	1.75 to <2.5	–	–	–	–	–	–	–	–	–	–	–	–
	2.50 to <10.00	1,741	68	1	1,789	4.17	1,034	10.88	–	617	34.51	8	11
	2.5 to <5	1,741	68	1	1,789	4.17	1,034	10.88	–	617	34.51	8	11
	5 to <10	–	–	–	–	–	–	–	–	–	–	–	–
	10.00 to <100.00	913	53	0	919	24.67	681	10.29	–	581	63.28	23	18
	10 to <20	–	–	–	–	–	–	–	–	–	–	–	–
	20 to <30	913	53	0	919	24.67	681	10.29	–	581	63.28	23	18
	30.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	100.00 (Default)	185	0	–	184	100.00	150	14.20	–	187	101.40	17	17
Subtotal (exposure class)		**334,053**	**58,092**	**0**	**347,650**	**0.29**	**198,738**	**10.38**	**0**	**11,819**	**3.40**	**106**	**112**

Exposure Class	PD scale	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors	Exposure weighted average LGD (%)	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount (%)	Expected loss amount	Value adjustments and provisions
F-IRB													
Of which, Corporate SME	0.00 to <0.15	27,662	91	0	27,672	0.09	174	35.25	2.5	4,092	14.79	9	1
	0.00 to <0.10	27,662	91	0	27,672	0.09	174	35.25	2.5	4,092	14.79	9	1
	0.10 to <0.15	–	–	–	–	–	–	–	–	–	–	–	–
	0.15 to <0.25	12,799	0	–	12,799	0.21	117	35.34	2.5	2,978	23.26	9	1
	0.25 to <0.50	3,115	0	–	3,115	0.45	81	36.33	2.5	1,102	35.37	5	1
	0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
	0.75 to <2.50	55	0	–	55	1.16	12	35.00	2.5	26	47.70	0	0
	0.75 to <1.75	55	0	–	55	1.16	12	35.00	2.5	26	47.70	0	0
	1.75 to <2.5	–	–	–	–	–	–	–	–	–	–	–	–
	2.50 to <10.00	72	0	–	70	3.05	5	35.09	2.5	43	61.69	1	0
	2.5 to <5	72	0	–	70	3.05	5	35.09	2.5	43	61.69	1	0
	5 to <10	–	–	–	–	–	–	–	–	–	–	–	–
	10.00 to <100.00	144	0	–	144	27.04	2	35.01	2.5	199	138.07	14	2
	10 to <20	–	–	–	–	–	–	–	–	–	–	–	–
	20 to <30	144	0	–	144	27.04	2	35.01	2.5	199	138.07	14	2
	30.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	–
Subtotal (exposure class)		**43,848**	**91**	**0**	**43,856**	**0.25**	**392**	**35.35**	**2.5**	**8,439**	**19.24**	**38**	**4**
Of which, Corporate Other	0.00 to <0.15	25,405	6,062	1	29,717	0.09	147	38.65	2.5	7,621	25.64	11	2
	0.00 to <0.10	25,405	6,062	1	29,717	0.09	147	38.65	2.5	7,621	25.64	11	2
	0.10 to <0.15	–	–	–	–	–	–	–	–	–	–	–	–
	0.15 to <0.25	3,648	2,252	1	5,333	0.21	33	40.64	2.5	2,301	43.14	5	3
	0.25 to <0.50	2,154	690	1	2,648	0.45	21	42.44	2.5	1,750	66.08	5	5
	0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
	0.75 to <2.50	–	–	–	–	–	–	–	–	–	–	–	–
	0.75 to <1.75	–	–	–	–	–	–	–	–	–	–	–	–
	1.75 to <2.5	–	–	–	–	–	–	–	–	–	–	–	–
	2.50 to <10.00	–	–	–	–	–	–	–	–	–	–	–	–
	2.5 to <5	–	–	–	–	–	–	–	–	–	–	–	–
	5 to <10	–	–	–	–	–	–	–	–	–	–	–	–
	10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	10 to <20	–	–	–	–	–	–	–	–	–	–	–	–
	20 to <30	–	–	–	–	–	–	–	–	–	–	–	–
	30.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
	100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	–
Subtotal (exposure class)		**31,207**	**9,004**	**1**	**37,698**	**0.13**	**201**	**39.19**	**2.5**	**11,671**	**30.96**	**20**	**10**
Total (all exposures classes)		**464,049**	**67,788**	**0**	**484,273**	**0.26**	**201,360**	**14.57**		**32,999**	**6.81**	**178**	**135**

RWA flow statements of credit risk exposures under IRB *(EU CR8)*

SEK million	Risk weighted exposure amount
Risk weighted exposure amount as at the end of the previous reporting period	**30,812**
Asset size (+/-)	2,435
Asset quality (+/-)	–248
Model updates (+/-)	–
Methodology and policy (+/-)	–
Acquisitions and disposals (+/-)	–
Foreign exchange movements (+/-)	–
Other (+/-)	0
Risk weighted exposure amount as at the end of the reporting period	**32,999**

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 properties for housing in the Stockholm area (51%). Only 1% of the underlying collaterals are in economically weak regions in Sweden. The geographical distribution of the exposures in the lending portfolio is 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 carried out by SBAB.
- Weak regions[1]: Municipalities with very weak or negative growth according to analyses carried out by SBAB.
- Other regions[1]: 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.

Net exposure amount by geographical area for credit risk exposures in lending operations[1]

SEK million	Greater Stockholm	Greater Gothenburg	Öresund region	University and growth regions	Other regions	Weak regions	Total
Exposures to corporates	37,845	6,881	17,904	15,173	6,180	153	84,135
Retail exposures	232,897	39,564	41,474	41,164	89,094	3,373	447,566
Total exposures with IRB approach	**270,741**	**46,446**	**59,378**	**56,336**	**95,274**	**3,526**	**531,702**
Exposures to governments and central banks	–	–	–	–	–	–	–
Exposures to regional governments or local authorities or agencies	–	–	–	–	1	–	1
Exposures to multilateral development banks	–	–	–	–	–	–	–
Exposures to international organisations	–	–	–	–	–	–	–
Exposures to institutions	–	–	–	–	–	–	–
Exposures to corporates	–	–	–	–	–	–	–
Retail exposures	345	35	38	23	4,567	–	5,007
Exposures to households secured against immovable property	–	–	–	–	–	–	–
Exposures in default	0	–	–	–	5	–	5
Exposures in the form of covered bonds	–	–	–	–	–	–	–
Exposures to institutions and corporates with a short term credit rating	–	–	–	–	–	–	–
Equity exposures	–	–	–	–	–	–	–
Other items	–	–	–	–	–	–	–
Total expsoures with the standardised approach	**345**	**35**	**38**	**23**	**4,572**	**–**	**5,013**
Total	**271,086**	**46,481**	**59,416**	**56,359**	**99,847**	**3,526**	**536,715**

[1] Net exposures after provisions pertain to both IRB and the standardised approach. Off-balance sheet exposures have been excluded.

9.8 ON-BALANCE EXPOSURES AND REMAINING MATURITY OF THE CREDIT TERMS

The table Maturity of exposures (EU CR1-A), shows on-balance sheet exposures, net of provisions, grouped into time buckets depending on the remaining maturity of the loans' credit terms. A large proportion, 55% of the exposures have less than one year remaining until maturity[1)].

The proportion of loans with a remaining credit term of up to five years accounts for 96% of the outstanding exposures.

Maturity of exposures *(EU CR1-A)*

	Net exposure values					
SEK million	**On demand**	**<= 1 year**	**> 1 year <= 5 years**	**> 5 years**	**No stated maturity**	**Total**
Loans and advances	–	275,106	184,181	18,316	165	477,768
Debt securities	–	26,294	42,437	4,277	–	73,008
Total	**–**	**301,400**	**226,618**	**22,593**	**165**	**550,776**

9.9 EXPOSURE AMOUNTS BY SECTOR AND TYPE OF PROPERTY

The table Net exposure amounts by type of property for credit risk exposures in lending operations contains on- and off-balance sheet exposures, net of provisions, by exposure classes and counterparty type. In addition, the table shows credit risk exposures only in the lending operations and type of property.

In the distribution of the lending portfolio by type of property, the proportion of lending for houses, holiday homes, tenant-owners' rights and tenant-owners' associations accounts for 74% of total exposures.

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	–	6,483	65,869	820	1,859	–	9,089	84,135
Retail exposures	170,435	163,510	54,933	–	–	–	–	58,688	447,566
Total exposure with IRB approach	**170,451**	**163,510**	**61,416**	**65,869**	**820**	**1,859**	–	**67,777**	**531,702**
Exposures to governments and central banks	–	–	–	–	–	–	–	–	–
Exposures to regional governments or local authorities or agencies	–	–	–	–	1	–	–	–	1
Exposures to public sector entities	–	–	–	–	–	–	–	–	–
Exposures to multilateral development banks	–	–	–	–	–	–	–	–	–
Exposures to international organisations	–	–	–	–	–	–	–	–	–
Exposures to institutions	–	–	–	–	–	–	–	–	–
Exposures to corporates	–	–	–	–	–	–	–	–	–
Retail exposures	429	493	–	–	–	–	2,334	1,751	5,007
Exposures to households secured against immovable property	–	–	–	–	–	–	–	–	–
Exposures in default	–	0	–	–	–	–	5		5
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	**429**	**493**	**0**	**0**	**1**	–	**2,339**	**1,751**	**5,013**
Total	**170,881**	**164,002**	**61,416**	**65,869**	**821**	**1,859**	**2,339**	**69,528**	**536,715**

9.10 CREDIT QUALITY OF PERFORMING AND NON-PERFORMING EXPOSURES

A loan is regarded as in default if the costumer is more than 90 days past due (for outstanding amount exceeding 1% of total debt and a threshold of SEK 1,000 or SEK 5,000 for retail exposures and corporate exposures respectively) or if an assessment of unlikeliness to pay has been made of the customer.

Loans subject to specific impairment requirements refer to exposures whereby individual provisions have been posted, meaning that there is an increased credit risk for future payments and the collateral does no longer cover the amount of the claim. The size of the individual provisions is assessed by comparing the cash flow according to the loans' terms and conditions with the expected future payment capacity in combination with a valuation of the collateral.

For all other loans a collective provision is made based by the model for Expected Credit Loss (ECL) and is therefore intended to cover future credit losses for events that are likely to occur but have not yet had effect on individual levels. The ECL model rank the loans and divide them according to their relative credit risk following initial recognition into three stages. Credit impaired loans are allocated to stage 3. SBAB applies the internal default definition to determine whether a loan has suffered credit deterioration. Loans with a significant increase in credit risk but which have not been credit impaired are allocated to stage 2. All other loans are allocated to stage 1.

Individual and collective provisions are carried out pursuant to the current accounting standard IFRS 9. On 31 December 2021, the total provisions, with deductions for guarantees, amounted to 60% of the total exposure for defaulted loans. All provisions have been assessed to constitute specific credit risk adjustments based on Article 1, item 5, of the EBA's RTS on specific and general risk regarding Article 110, item 4 of the CRR. EBA's GL on disclosures of non-performing exposures includes a set of common templates applicable to all banks and additional templates applicable only to significant credit institutions with a gross NPL ratio of 5% or above. SBAB has a gross NPL ratio below 5% and discloses the information in the following tables Credit quality of forborne exposures (EU CQ1), Credit quality of performing and non-performing exposures by past due days (EU CQ3), Performing and non-performing exposures and related provisions (EU CR1) and Quality of non-performing exposures by geography (EU CQ4). The table Credit quality of loans and advances to non-financial corporations by industry (EU CQ5) discloses information of the credit quality of loans and advances to non-financial corporations by industry, and table Changes in the stock of non-performing loans and advances (EU CR2) information on the changes in the stock of non-performing loans and advances.

Credit quality of forborne exposures *(EU CQ1)*

	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Non-performing forborne						
SEK million	Performing forborne		Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
Cash balances at central banks and other demand deposits	–	–	–	–	–	–	–	–
Loans and advances	14	68	68	68	0	–3	78	–
Central banks	–	–	–	–	–	–	–	–
General governments	–	–	–	–	–	–	–	–
Credit institutions	–	–	–	–	–	–	–	–
Other financial corporations	–	–	–	–	–	–	–	–
Non-financial corporations	*7*	–	–	–	*0*	–	*7*	–
Households	*7*	*68*	*68*	*68*	*0*	*–3*	*71*	–
Debt securities	–	–	–	–	–	–	–	–
Loan commitments given	–	–	–	–	–	–	–	–
Total	**14**	**68**	**68**	**68**	**0**	**–3**	**78**	**–**

Credit quality of performing and non-performing exposures by past due days *(EU CQ3)*

	Gross carrying amount/nominal amount											
	Performing exposures			Non-performing exposures								
SEK million		Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 years ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
Cash balances at central banks and other demand deposits	10,169	10,169	–	–	–	–	–	–	–	–	–	–
Loans and advances	467,506	467,278	228	230	155	25	29	16	5	–	–	230
Central banks	–	–	–	–	–	–	–	–	–	–	–	–
General governments	–	–	–	–	–	–	–	–	–	–	–	–
Credit institutions	*558*	*558*	–	–	–	–	–	–	–	–	–	–
Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
Non-financial corporations	*129,831*	*129,689*	*142*	*17*	*17*	–	–	–	–	–	–	*17*
Of which SMEs	*96,668*	*96,526*	*142*	*17*	*17*	–	–	–	–	–	–	*17*
Households	*337,118*	*337,032*	*86*	*213*	*138*	*25*	*29*	*16*	*5*	–	–	*213*
Debt securities	28,161	28,161	–	–	–	–	–	–	–	–	–	–
Central banks	–	–	–	–	–	–	–	–	–	–	–	–
General governments	*15,858*	*15,858*	–	–	–	–	–	–	–	–	–	–
Credit institutions	*12,303*	*12,303*	–	–	–	–	–	–	–	–	–	–
Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
Non-financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
Off balance sheet exposures	69,663			–								–
Central banks	–			–								–
General governments	–			–								–
Credit institutions	–			–								–
Other financial corporations	–			–								–
Non-financial corporations	*9,695*			–								–
Households	*59,967*			–								–
Total	**565,330**	**495,440**	**228**	**230**	**–**	**25**	**29**	**16**	**5**	**–**	**–**	**230**

Performing and non-performing exposures and related provisions *(EU CR1)*

	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							Collaterals and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures - accumulated impairment and provision			Non-performing exposures accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
SEK million		Of which stage 1	of which stage 2		Of which stage 2	of which stage 3		Of which stage 1	of which stage 2		Of which stage 2	of which stage 3	Accumulated partial write-off	On performing exposures	On non-performing exposures
Cash balances at central banks and other demand deposits	10,169	10,169	–	–	–	–	–	–	–	–	–	–	–	–	–
Loans and advances	467,506	446,823	20,683	230	0	230	-107	-45	-62	-31	0	-31	-1	–	0
Central banks	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General governments	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Credit institutions	*558*	*558*	–	–	–	–	–	–	–	–	–	–	–	–	–
Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-financial corporations	*129,831*	*128,713*	*1,117*	*17*	*0*	*17*	*-10*	*-7*	*-3*	*-7*	*0*	*-7*	–	–	–
Of which SMEs	*96,668*	*96,059*	*609*	*17*	*0*	*17*	*-6*	*-3*	*-2*	*-7*	*0*	*-7*	–	–	–
Households	*337,118*	*317,552*	*19,566*	*213*	*0*	*213*	*-97*	*-38*	*-59*	*-23*	*0*	*-23*	*-1*	–	*0*
Debt securities	28,161	28,161	–	–	–	–	-1	-1	–	–	–	–	–	–	–
Central banks	*0*	*0*	*0*	–	–	–	–	–	–	–	–	–	–	–	–
General governments	*15,858*	*15,858*	*0*	–	–	–	*-1*	*-1*	–	–	–	–	–	–	–
Credit institutions	*12,303*	*12,303*	*0*	–	–	–	*0*	*0*	–	–	–	–	–	–	–
Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Off balance sheet exposures	69,663	69,330	333	*0*	–	*0*	-11	-10	-1	–	–	–		–	–
Central banks	–	–	–	–	–	–	–	–	–	–	–	–		–	–
General governments	–	–	–	–	–	–	–	–	–	–	–	–		–	–
Credit institutions	–	–	–	–	–	–	–	–	–	–	–	–		–	–
Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–		–	–
Non-financial corporations	*9,695*	*9,468*	*227*	*0*	–	*0*	*-6*	*-6*	*0*	–	–	–		–	–
Households	*59,967*	*59,862*	*105*	*0*	–	*0*	*-5*	*-4*	*0*	–	–	–		–	–
Total	**565,330**	**544,314**	**21,016**	**230**	**0**	**230**	**-119**	**-56**	**-63**	**-31**	**–**	**-31**	**-1**	**–**	**0**

Quality of non-performing exposures by geography *(EU CQ4)*

	Gross carrying/nominal amount						
		Of which non-performing					
SEK million			Of which defaulted	Of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
On-balance-sheet exposures	**467,736**		**230**	**–**	**-138**		**–31**
Sweden	467,736		230		-138		–31
Off-balance-sheet exposures	**69,663**		**0**			**0**	
Sweden	69,663		0			0	
Total	**537,399**		**230**		**-138**	**0**	**–31**

Credit quality of loans and advances to non-financial corporations by industry *(EU CQ5)*

	Gross carrying amount					
		Of which non-performing				
SEK million			Of which defaulted	Of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
Agriculture, forestry and fishing	–		–		–	–
Mining and quarrying	–		–		–	–
Manufacturing	–		–		–	–
Electricity, gas, steam and air conditioning supply	–		–		–	–
Water supply	–		–		–	–
Construction	771		–		0	–
Wholesale and retail trade	–		–		–	–
Transport and storage	–		–		–	–
Accommodation and food service activities	–		–		–	–
Information and communication	–		–		–	–
Financial and insurance activities	129,077		17		–17	–
Real estate activities	–		–		–	–
Professional, scientific and technical activities	–		–		–	–
Administrative and support service activities	–		–		–	–
Public administration and defense, compulsory social security	–		–		–	–
Education	–		–		–	–
Human health services and social work activities	–		–		–	–
Arts, entertainment and recreation	–		–		–	–
Other services	–		–		–	–
Total	**129,848**		**17**		**–17**	**–**

Changes in the stock of non-performing loans and advances *(EU CR2)*

SEK million	Gross carrying amount
Initial stock of non-performing loans and advances	**241**
Inflows to non-performing portfolios	116
Outflows from non-performing portfolios	–127
Outflows due to write-offs	–14
Outflow due to other situations	–113
Final stock of non-performing loans and advances	**230**

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.

9.12 COMPARISON OF PD AND LGD ESTIMATE AND OUTCOME

The table Realised outcome in the PD and LGD dimensions, shows the exposure-weighted PD and LGD estimates as per 31 December 2020 and the realised outcomes for 2021. Default rates for 2021 are historically low and the PD estimates exceed realised outcomes for both retail and corporate exposures. Credit losses during 2021 was very low with LGD estimates exceeding realised outcomes. The LGD estimate for retail exposures is restricted by the limitation rule, which requires a lowest average LGD estimate of 10.0% for loans covered by collateral in residential properties. The table Back-testing of PD per exposure class (fixed PD ranges) (EU CR9), shows more details about average PD estimates and observed default rates for each exposure class.

Realised outcome in the PD and LGD dimensions

Exposure class	PD estimate[2], %	Realised outcome[1], %	LGD estimate[2], %	Realised outcome[1], %
Corporate exposures	0.33	0.00	36.9	0.0
Retail exposures	0.30	0.04	10.0	5.2

[1] Realised outcome has been calculated on loans in default where the default occurred during the year.

[2] The outcomes are exposure-weighted.

Back-testing of PD per exposure class (fixed PD ranges) *(EU CR9)*

A-IRB		Number of obligors at the end of previous year					
Exposure class	PD range		Of which number of obligors which defaulted in the year	Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
Of Which, Retail SME	0.00 to <0.15	1,199	–	–	0.1	0.1	–
	0.00 to <0.10	1,199	–	–	0.1	0.1	–
	0.10 to <0.15	–	–	–	–	–	–
	0.15 to <0.25	530	–	–	0.2	0.2	–
	0.25 to <0.50	118	–	–	0.4	0.4	–
	0.50 to <0.75	–	–	–	–	–	–
	0.75 to <2.50	14	–	–	1.2	1.2	–
	0.75 to <1.75	14	–	–	1.2	1.2	–
	1.75 to <2.5	–	–	–	–	–	–
	2.50 to <10.00	3	–	–	3.0	3.0	–
	2.5 to <5	3	–	–	3.0	3.0	–
	5 to <10	–	–	–	–	–	–
	10.00 to <100.00	–	–	–	–	–	–
	10 to <20	–	–	–	–	–	–
	20 to <30	–	–	–	–	–	–
	30.00 to <100.00	–	–	–	–	–	–
	100.00 (Default)	2	–	–	100.0	100.0	–
Of Which, Retail non-SME	0.00 to <0.15	144,405	4	0.0	0.0	0.0	0.0
	0.00 to <0.10	144,405	4	0.0	0.0	0.0	0.0
	0.10 to <0.15	–	–	–	–	–	–
	0.15 to <0.25	34,457	–	–	0.2	0.2	0.0
	0.25 to <0.50	18,008	1	0.0	0.4	0.4	0.0
	0.50 to <0.75	–	–	–	–	–	–
	0.75 to <2.50	6,447	6	0.1	1.6	1.6	0.1
	0.75 to <1.75	6,447	6	0.1	1.6	1.6	0.1
	1.75 to <2.5	–	–	–	–	–	–
	2.50 to <10.00	1,121	1	0.1	4.2	4.2	0.5
	2.5 to <5	1,121	1	0.1	4.2	4.2	0.5
	5 to <10	–	–	–	–	–	–
	10.00 to <100.00	774	15	1.9	24.7	24.7	2.0
	10 to <20	–	–	–	–	–	–
	20 to <30	774	15	1.9	24.7	24.7	2.0
	30.00 to <100.00	–	–	–	–	–	–
	100.00 (Default)	159	12	7.5	100.0	100.0	5.2

F-IRB

Exposure class	PD range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
Of which, Corporate SME	0.00 to <0.15	114	–	–	0.1	0.1	–
	0.00 to <0.10	114	–	–	0.1	0.1	–
	0.10 to <0.15	–	–	–	–	–	–
	0.15 to <0.25	83	–	–	0.2	0.2	–
	0.25 to <0.50	82	–	–	0.4	0.4	1.8
	0.50 to <0.75	–	–	–	–	–	–
	0.75 to <2.50	27	–	–	1.2	1.2	–
	0.75 to <1.75	27	–	–	1.2	1.2	–
	1.75 to <2.5	–	–	–	–	–	–
	2.50 to <10.00	13	–	–	3.0	3.4	–
	2.5 to <5	12	–	–	3.0	3.0	–
	5 to <10	1	–	–	–	8.2	–
	10.00 to <100.00	2	–	–	27.0	27.0	–
	10 to <20	–	–	–	–	–	–
	20 to <30	2	–	–	27.0	27.0	–
	30.00 to <100.00	–	–	–	–	–	–
	100.00 (Default)	1	–	–	100.0	100.0	–
Of which, Corporate Other	0.00 to <0.15	136	–	–	0.1	0.1	–
	0.00 to <0.10	136	–	–	0.1	0.1	–
	0.10 to <0.15	–	–	–	–	–	–
	0.15 to <0.25	34	–	–	0.2	0.2	–
	0.25 to <0.50	18	–	–	0.4	0.4	–
	0.50 to <0.75	–	–	–	–	–	–
	0.75 to <2.50	2	–	–	–	1.2	–
	0.75 to <1.75	2	–	–	–	1.2	–
	1.75 to <2.5	–	–	–	–	–	–
	2.50 to <10.00	–	–	–	–	–	–
	2.5 to <5	–	–	–	–	–	–
	5 to <10	–	–	–	–	–	–
	10.00 to <100.00	1	–	–	–	27.0	–
	10 to <20	–	–	–	–	–	–
	20 to <30	1	–	–	–	27.0	–
	30.00 to <100.00	–	–	–	–	–	–
	100.00 (Default)	–	–	–	–	–	–

9.13 COMPARISON OF EXPECTED LOSS AND OUTCOME

During the comparison period, expected loss (EL) has increased for corporate exposures and has decreased slightly for retail exposures. The increase in EL for corporate exposures is an effect of the growth of the lending over the comparison period. Realised outcomes in terms of confirmed losses amounted to SEK 6 million in 2021, attributed only to retail exposures. No confirmed losses have been observed for corporate exposures neither during 2020 nor 2021.

The table Comparison of expected loss, provision and outcome for each exposure class according to IRB, excludes off-balance sheet items.

Comparison of expected loss, provision and outcome for each exposure class according to IRB [1)]

Exposure class, SEK million	EL, IRB/F-IRB 31 Dec 2020	EL, IRB/F-IRB 31 Dec 2019	EL, IRB/A-IRB 31 Dec 2020	EL, IRB/A-IRB 31 Dec 2019	Realised outcome 2021	Realised outcome 2020	Total provisions, including guarantees 31 Dec 2021	Total provisions, including guarantees 31 Dec 2020
Exposures to corporates	74	62	–	–	–	–	8	7
Retail exposures	–	–	114	116	6	5	116	127
of which, houses and holiday homes	–	–	*45*	*50*	*4*	*3*	*31*	*39*
of which, tenant-owners' rights	–	–	*62*	*59*	*2*	*2*	*76*	*79*
of which, tenant-owners' associations	–	–	*8*	*8*			*8*	*9*
Total	**74**	**62**	**114**	**128**	**6**	**5**	**124**	**134**

[1)] Expected loss (EL) has been calculated for the loan receivables that existed at the end of 2019 and 2020. The EL is compared with the actual outcome for confirmed loan losses during the outcome years of 2020 and 2021.

9.14 MORATORIUM

In February 2020 EBA published guidelines (EBA/GL/2020/02) which gave SBAB the opportunity to grant retail or corporate customers the possibility of temporarily suspend amortisation to limit the effects of the Coronavirus pandemic. Furthermore, the Swedish FSA's general guidelines (FFFS 2020:3) clarifies exemptions from amortisation requirements of loans collateralised by residential property due to special reasons when a bank grant time-limited exemptions from the amortisation requirements stated in the regulation (FFFS 2016:16). From 30 September 2020 the bank had to assess in each individual case whether the measure meets the definition of forbearance measures and whether there has been a significant increase in credit risk in accordance with IFRS 9. Amortisation exemptions, according to Swedish FSA, was effective until 31 August 2021.

EBA announced in January, 2022 that the guideline will be extended until further notice. In connection with this extension, the SFSA has informed EBA that the SFSA will not follow the guideline. The guideline on reporting and publication will therefore be applied up to and including the reference date 31 December 2021.

Information on loans and advances subject to legislative and non-legislative moratoria

SEK million	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing			Non-performing				Performing			Non-performing			
			Of which: exposures with forbearance measures	*Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)*		*Of which: exposures with forbearance measures*	*Of which: Unlikely to pay that are not past-due or past-due <= 90 days*			*Of which: exposures with forbearance measures*	*Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)*		*Of which: exposures with forbearance measures*	*Of which: Unlikely to pay that are not past-due or past-due <= 90 days*	*Inflows to non-performing exposures*
Loans and advances subject to moratorium	45,519	45,495	–	2,663	23	–	4	–19	–17	–	–11	–1	–	–1	22
– of which, households	*45,519*	*45,495*	–	2,663	*23*	–	*4*	*–19*	*–17*	–	*–11*	*–1*	–	*–1*	*22*
– of which, collateralised by residential immovable property	*45,519*	*45,495*	–	2,663	*23*	–	*4*	*–19*	*–17*	–	*–11*	*–1*	–	*–1*	*22*
– of which, non-financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
– of which, SMEs	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
– of which, Collateralised by commercial immovable property	–	–	–	–	–	–	–	–	–	–	–		–	–	–

Breakdown of loans and advances subject to legislative and non legislative moratoria by residual maturity of moratoria

SEK million	Number of obligors	Gross carrying amount							
					Residual maturity of moratoria				
			Of which: legislative moratoria	*Of which: Expired*	*<= 3 months*	*> 3 months <= 6 months*	*> 6 months <= 9 months*	*> 9 months <= 12 months*	*> 1 year*
Loans and advances for which moratorium was offered	20,758	45,545							
Loans and advances subject to moratorium (granted)	20,758	45,519	45,519	45,519	45,519	–	–	–	–
– of which, households	–	*45,519*	45,519	45,519	*45,519*	–	–	–	–
– of which, collateralised by residential immovable property	–	*45,519*	45,519	45,519	*45,519*	–	–	–	–
– of which, non-financial corporations	–	–	–	–	–	–	–	–	–
– of which, SMEs	–	–	–	–	–	–	–	–	–
– of which, Collateralised by commercial immovable property	–	–	–	–	–	–	–	–	–

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 SFSA.

Based on the EMTN programme, SBAB has also established 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 as well as the Swedish covered bond programme 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 between the companies in the SBAB Group or with external counterparties.

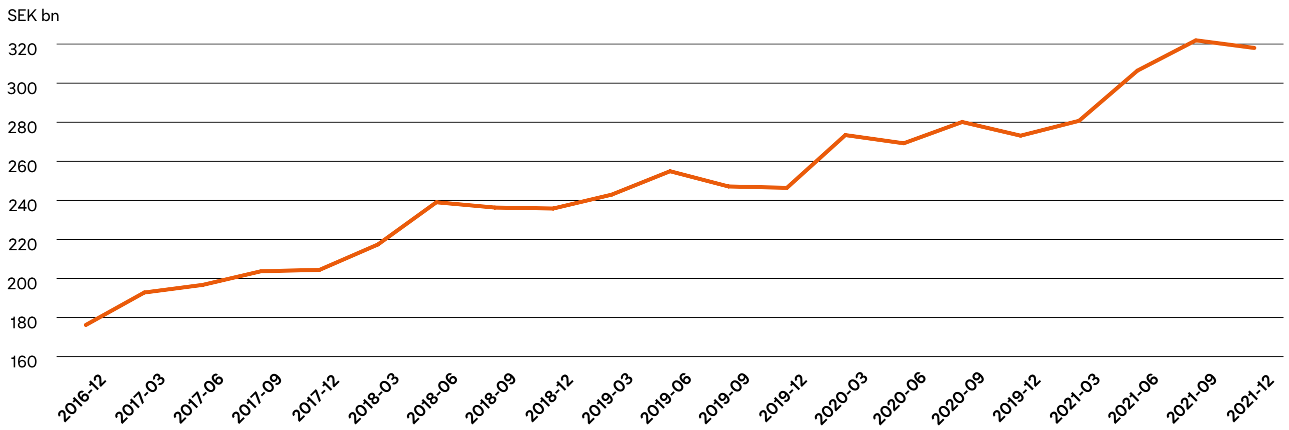
For all counterparties documentation exists in the form of ISDA Master Agreements. In most cases, an agreement is supplemented by a credit support annex (CSA). The Parent Company and SCBC may also enter into repo transactions with certain counterparties. These transactions are governed through Global Master Repurchase Agreements (GMRA). In all instances, the collateral transferred between counterparties under CSAs and GMRAs 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 Assets encumbered.

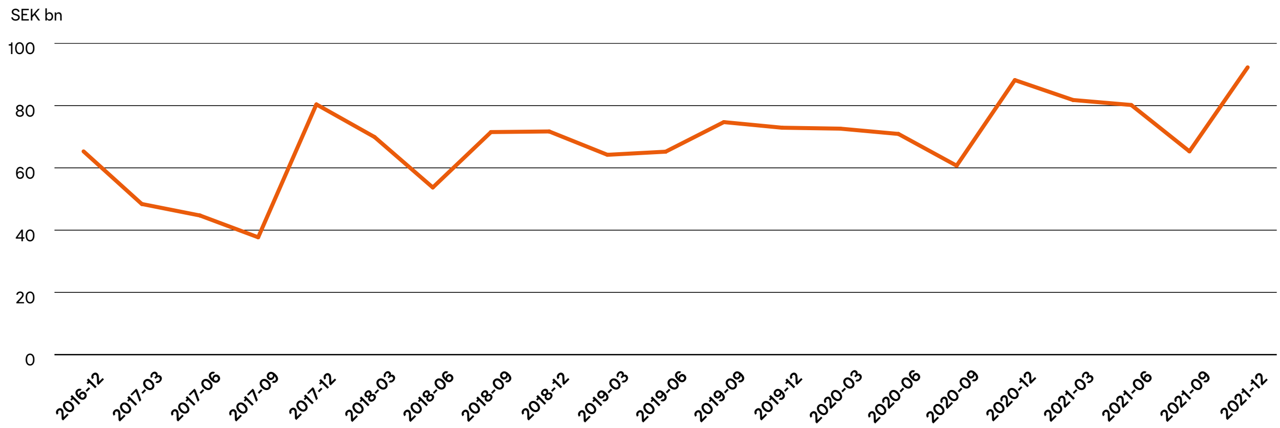
According to the Covered Bonds (Issuance) Act (2003:1223), the value of the assets in the cover pool must always exceed the value of the bonds issued with the encumbered assets as collateral (referred to as overcollateralisation, "OC"). The unutilised scope in the last four-year period is described in the figure named Unutilised scope. On 31 December 2020, 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). On 31 December 2021, this level was equal to a volume of SEK 6.3 billion.

On 31 December 2021, SCBC had assets (reserves) corresponding to SEK 17.3 billion that can constitute covered assets.

Assets encumbered



Unutilised scope



Of the assets included in table Assets encumbered disclo- sures 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 mort- gaging 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. The table EU AE2 disclosed information on received collateral and table EU AE3 the sources of encumbrance.

Asset encumbered disclosures *(EU AE1)*

Assets, SEK million	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		*of which notionally eligible EHQLA and HQLA*		*of which EHQLA and HQLA*		*of which EHQLA and HQLA*
Assets of the reporting institution	325,025	–			233,325	57,436		
Equity instruments	–	–	–	–	–	–	–	–
Debt securities	–	–	–	–	57,436	57,436	72,932	72,932
of which: covered bonds	–	–	–	–	31,022	31,022	31,107	31,107
of which: securitisation	–	–	–	–	–	–	–	–
of which: issued by general governments	–	–	–	–	26,413	26,413	41,825	41,825
of which: issued by financial corporations	–	–	–	–	31,022	31,022	31,107	31,107
of which: issued by non-financial corporations	–	–	–	–	–	–	–	–
Other assets	325,025	–			175,890	–		

Collateral received *(EU AE2)*

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	
		of which notionally eligible EHQLA and HQLA		*of which notionally eligible EHQLA and HQLA*
Collateral received by the reporting institution	–	–	23,282	23,282
Loans on demand	–	–	–	–
Equity instruments	–	–	–	–
Debt securities	–	–	23,282	23,282
of which: covered bonds	–	–	23,282	23,282
of which: securitisations	–	–	–	–
of which: issued by general governments	–	–	–	–
of which: issued by financial corporations	–	–	–	–
of which: issued by non- financial corporations	–	–	–	–
Loans and advances other than loans on demand	–	–	–	–
Other collateral received	–	–	–	–
Own debt securities issued other than own covered bonds or securitisation	–	–	–	–
Own covered bonds and securitisations issued and not yet pledged			–	–
TOTAL COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	–	–		

Sources of encumbrance *(EU AE3)*

SEK million	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
Carrying amount of selected financial liabilities	325,025	325,025

10.4 FUNDING STRATEGY

The size of the funding portfolio is a function of the volume of the loans outstanding 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.

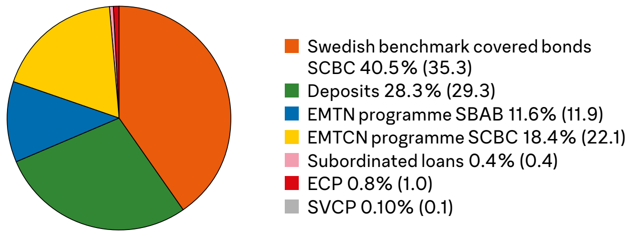
Short-term funding under SBAB's commercial paper programme must be adjusted to market conditions and needs, but always constitute a limited share of the total funding portfolio. SBAB's loan assets should be used effectively by acting as collateral for secured funding. The funding mix between SCBC and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

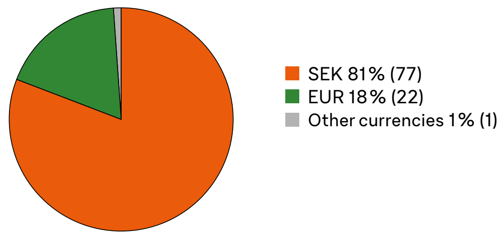
SBAB and SCBC must maintain an active market presence, with favourable and frequent relations with investors in each investor segment.

10.5 DEPOSIT STRATEGY

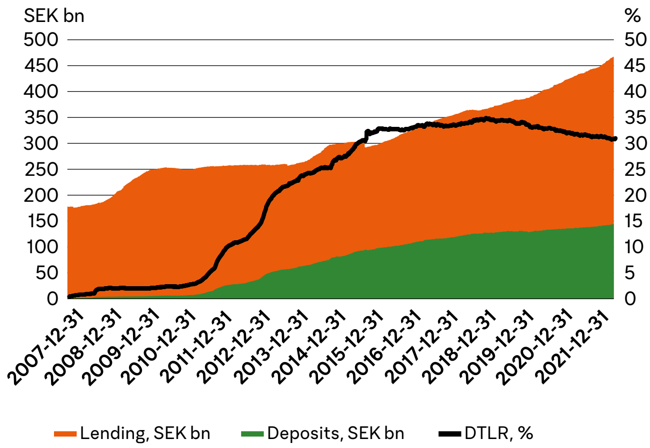
SBAB has an expressed ambition of gradually increasing the amount of deposits and their share of balance sheet liabilities. Retail deposits are to amount to a significant proportion of total liabilities. To ensure that funding is diversified and to limit dependence on capital markets, deposits are to constitute at least 28% of lending (deposit-to-loan ratio). On 31 December 2021, this ratio was 31%. SBAB:s long term goal is to raise the deposit-to-loan ratio (DTLR) further. The figure Deposits and lending trends, illustrates the trends for deposits, lending and the deposit-to-loan ratio since 2008.

Funding sources and distribution by currency for deposits and funding





Deposits and lending trends



11 Credit risk in treasury operations

Credit risk arises in treasury operations, in part, in the form of counterparty credit risks for the derivative and repo transactions 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 GMRAs 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 CREDIT RISK

Counterparty credit 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. The table Standardised approach – CCR exposures by regulatory portfolio and risk (EU CCR3), provides a breakdown of CCR exposures by risk weight on 31 December 2021. This exposure is predominantly covered by collateral agreements, where the counterparty posts collateral to reduce net exposure. To limit the potential counterparty credit risk associated with derivative transactions involving non-standardised derivatives that are not cleared through a central clearing 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. The tables Analysis of the counterparty credit risk (CCR) exposure by approach (EU CCR1) and Composition of collateral for CCR exposures (EU CCR5), provide an overview of the distribution of the market value of individual derivative transactions by rating and maturity. Whereas, the table EU CCR2 provides information on transactions subject to own funds requirements for CVA risk.

GMRAs are used to limit the counterparty risk associated with repo transactions. GMRAs also minimize wrong-way risk (WWR), which arises when the exposure to a counterparty increases together with the risk of the counterparty's default. These agreements control aspects such as the transfer of collateral to or from the counterparty.

Parts of CRR2 took effect on 28 June 2021, which means that SBAB since then calculates counterparty credit risk in accordance with the Standardised Approach to Counterparty Credit Risk (SA-CCR). This gives discrepancies in values when comparing to last year. When entered into, CSAs are reconciled on a daily basis or on a weekly basis. When CSAs are in place,

Standardised approach – CCR exposures by regulatory exposure class and risk weights *(EU CCR3)*

SEK million Exposure class	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total exposure value
Central governments or central banks	–	–	–	–	–	–	–	–	–	–	–	0
Regional government or local authorities	–	–	–	–	–	–	–	–	–	–	–	0
Public sector entities	–	–	–	–	–	–	–	–	–	–	–	0
Multilateral development banks	–	–	–	–	–	–	–	–	–	–	–	0
International organisations	–	–	–	–	–	–	–	–	–	–	–	0
Institutions	–	–	–	–	1,447	7,227	–	–	–	–	–	8,675
Corporates	–	–	–	–	–	–	–	–	–	–	–	0
Retail	–	–	–	–	–	–	–	–	–	–	–	0
Institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	0
Other items	–	–	–	–	–	–	–	–	–	–	–	0
Total exposure value	**–**	**–**	**–**	**–**	**1,447**	**7,227**	**–**	**–**	**–**	**–**	**–**	**8,675**

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. This way of handling CSA minimizes WWR in derivatives. 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. On 31 December 2021, a decline in SBAB's rating would not result in the need for SBAB to provide extra collateral to any external counterparty. Own funds requirements for CVA risk are calculated according to CRR, where exposure values are calculated according to SA-CCR as seen in the table EU CCR2. A write-off item under the net result of financial transactions in the income statement is done for expected credit loss as a result of counterparty credit risk realization. The same principles are applied to credit risk in lending operations described in Chapter 9.

Analysis of CCR exposure by approach *(EU CCR1)*

SEK million Exposure class	Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	RWEA
EU - Original Exposure Method (for derivatives)	–	–		1.4	–	–	–	–
EU - Simplified SA-CCR (for derivatives)	–	–		1.4	–	–	–	–
SA-CCR (for derivatives)	667	1,062		1.4	2,420	2,420	2,420	860
IMM (for derivatives and SFTs)			–	–	–	–	–	–
Of which securities financing transactions netting sets			–		–	–	–	–
Of which derivatives and long settlement transactions netting sets			–		–	–	–	–
Of which from contractual cross-product netting sets			–		–	–	–	–
Financial collateral simple method (for SFTs)					–	–	–	–
Financial collateral comprehensive method (for SFTs)					496	496	496	164
VaR for SFTs					–	–	–	–
Total					**2,916**	**2,916**	**2,916**	**1,024**

Composition of collateral for CCR exposures *(EU CCR5)*

	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	
SEK million Collateral type	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
Cash – domestic currency	–	602	–	301	–	0	–	0
Cash – other currencies	–	3,665	–	1,489	–	0	–	0
Domestic sovereign debt	–	–	–	–	–	–	–	–
Other sovereign debt	–	–	–	–	–	–	–	–
Government agency debt	–	–	–	–	–	–	–	–
Corporate bonds	–	0	–	2,315	–	11,481	–	11,816
Equity securities	–	–	–	–	–	–	–	–
Other collateral	–	–	–	–	–	–	–	–
Total	**–**	**4,266**	**–**	**4,106**	**–**	**11,481**	**–**	**11,816**

Transactions subject to own funds requirements for CVA risk *(EU CCR2)*

SEK million Exposure class	Exposure value	RWEA
Total transactions subject to the Advanced method	–	–
(i) VaR component (including the 3× multiplier)		–
(ii) stressed VaR component (including the 3× multiplier)		–
Transactions subject to the Standardised method	2,420	1,665
Transactions subject to the Alternative approach (Based on the Original Exposure Method)	–	–
Total transactions subject to own funds requirements for CVA risk	**2,420**	**1,665**

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, AA from Standard & Poor's or AA from Fitch upon acquisition.

The exemption to the above is for covered bonds, where a rating of Aaa from Moody's, AAA from Standard & Poor's or AAA from Fitch is required to permit acquisition. The table Approved rating per asset class, provides a breakdown of ratings for the different holdings in the liquidity portfolio.

Approved rating per asset class

Asset class	Moody's / Standard & Poor's / Fitch	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	10 years	52.1%
	AA	6 years	5.2%
Covered bonds	AAA	10 years	42.6%
	AA		–

Holdings of covered bonds are risk weighted in relation to their credit quality step in the CRR. On 31 December 2021, 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 on 31 December 2021, the market value was SEK 73.1 billion. On the same date, 95% of the portfolio's value had a rating of Aaa from Moody's, AAA from Standard & Poor's or AAA from Fitch. 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)".

Holdings in liquidity portfolio

SEK million	HTC FVO	HTC and Sell	HTC	Total
Securities issued by central governments	652	18,206	3,754	22,613
Securities guaranteed by central governments	216	–	2,787	3,004
Securities issued by sovereigns, supranationals and agencies	–	2,429	909	3,338
Securities issued by non-governmental public sector entities	–	4,489	8,493	12,982
European covered bonds	–	18,786	12,414	31,200
Total	**869**	**43,910**	**28,358**	**73,137**

All securities are recognised 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.

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) and limits related to interest rate risk in the banking book. In addition to the Board decided limits, 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. Funding in international currencies are hedged through currency swaps or invested in matching currencies to mitigate currency risk.

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 is using VaR to quantify internal assessed capital requirements for credit spread, basis spread and currency risk.

SBAB's model is a historical model and applies percentiles in historical market data from the past two years. This means that the model does not make any assumption about a certain probability distribution in advance, but the empirical distribution is used. To quantify internal assessed capital requirements a probability level of 99% and a holding period of one year are used.

Limits for the day-to-day follow up of VaR are set at three levels: SBAB's total market risk, all market risks that Treasury is responsible for managing, and stressed VaR for credit spread risk. The limit for SBAB's total market risk is based on the VaR metric and applies a probability level of 99% and a holding period of one year, while the other metric applies a probability level of 99% and a holding period of one day. The stressed measure applies fluctuations from a historical, stressed period with a probability level of 99% and a holding period of 90 days.

As per 31 December 2021, SBAB's total market risk exposure was SEK 221 million, compared with the limit of SEK 1,100 million. Exposure to market risks managed by Treasury was SEK 14 million and the limit was SEK 60 million. The exposure of the stressed measure was SEK 569 million and the limit was SEK 1,200 million.

12.2 INTEREST RATE RISK IN OTHER OPERATIONS

In addition to VaR the Board has set two limits related to interest rate risk in the banking book. One limit expressed as an overall interest rate risk measure, calculated as the effect of a parallel shift of +100 basis points and the second limit expressed as a target value for duration of own funds.

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 non-maturing deposits. As per 31 December 2021, the effect on the present value was negative SEK 214.1 million (negative: 51.4) for a 2 percentage point parallel upward shift and a positive SEK 213,4 million (46.8) for a 2 percentage-point parallel downward shift. The exposure distributed by currency is presented in figure Interest rate risk broken down by currency in the event of a parallel shift in the yield curve of +1 percentage point.

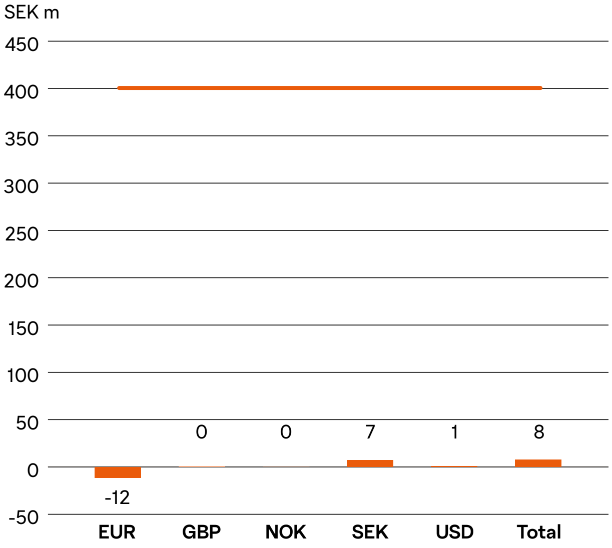
SBAB is quantifying capital requirements for interest rate risk in the banking book according to the Swedish FSA's method described in the reference memorandum (FI dnr 19-4434). As per 31 December 2021, the scenario generating the largest effect on the banking book is "flattener", which would give a change in economic value of negative SEK 564 million. During 2021 (FI dnr 19-4434) has replaced the old method described in (FI dnr 14-14414), which causes discrepancies in the values when comparing to last year.

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 calculated according to EBA Guideline (EBA/GL/2018/02) and is based on an instantaneous parallel shift of one percentage point up and down over a 12-month time horizon. At the end of the year, the net interest income effect was negative SEK 25 million.

Interest rate risks of non-trading book activities (EU IRRBB1)

	Changes of the economic value of equity		Changes of the net interest income	
Supervisory shock scenarios	Current period	Last period	Current period	Last period
Parallel up	–145	–481	25	32
Parallel down	–19	98	–25	–32
Steepener	198	125		
Flattener	–570	–529		
Short rates up	–551	–661		
Short rates down	110	163		

Interest rate risk broken down by currency in the event of parallell shift in the yield curve of +1 percentage point



The interest-rate risk totalled SEK 8 million on 31 December 2021.

12.3 IBOR-TRANSITION

The ongoing IBOR-transition will replace current Interbank rates (IBOR) with alternative risk-free rates. SBAB has relatively limited exposures to other reference rates than STIBOR.

SBAB has focused on ensuring compliance under the Benchmark Regulation (BMR), which affects SBAB both as a user of reference rates and as a reporter of data to produce the reference rates, where STIBOR is presumed to obtain approval during 2022, as well as a broader perspective within the frame for internal governance and control.

Ongoing compliance and adaption to the market is needed, which creates the need to use other reference rates, as well as risk-free rates (RFR), in the future. Therefore, the focus has been to ensure system support for the usage of RFR-linked products, mainly derivatives and bonds, as well as managing the transition of actual exposures to IBOR rates, such as EONIA and LIBOR whose end dates are known. Furthermore, SBAB has participated actively in the development of STIBOR and the process to attain approval under BMR alongside the development of the Riksbank's (Central bank of Sweden) new SWESTR.

12.4 SUPPLEMENTARY RISK METRICS

In addition to the limits determined by the Board, the CEO has set a number of supplementary risk metrics for different kind of market risks to which SBAB is exposed. For interest rate risk, limits exist for parallel shifts, as the effect on the present value of a one percentage point shift in the yield curve and curve risk 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). To limit the interest risk in the banking book the target for duration of own funds is set to 6 months. 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 basis spread risk and credit spread risk.

12.5 REGULATORY CAPITAL REQUIREMENTS FOR MARKET RISK

SBAB uses the standardised approach to quantify capital requirements for market risk in Pillar 1. The regulatory capital requirements for market risk is shown in the table Market risk under standardised approach *(EU MR1)*.

Market risk under standardised approach *(EU MR1)*

Outright products	RWEAs
Outright products	**–**
Interest rate risk (general and specific)	–
Equity risk (general and specific)	–
Foreign exchange risk	341
Commodity risk	–
Options	**–**
Simplified approach	–
Delta-plus approach	–
Scenario approach	–
Securitisation (specific risk)	–
Total	**341**

13 Liquidity risk

Liquidity risk is defined as the risk that SBAB can not meet its payment obligations without the related cost of obtaining liquidity increasing significantly.

13.1 LIQUIDITY STRATEGY AND LIQUIDITY RISK MANAGEMENT

Liquidity risk is recognized by SBAB as a necessary risk and shall be maintained at such a level that SBAB can manage a period of acute liquidity crisis without relying on the capital market. SBAB and SCBC are managed collectively as a single liquidity group according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council, which among others requires free movement of funds within the liquidity group. The group has a central liquidity management function through which the Group's entire liquidity in all currencies is forecasted 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 transactions of interest rate derivatives with external financial counterparties are cleared through clearing houses.

SBAB is the primary counterparty for SCBC's swap transactions made by SCBC 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 take 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.

Another key element of the SBAB Group's funding strategy is to achieve an even maturity profile over time. This is achieved by actively choosing maturities during the issuing process to avoid excessive concentrations of future maturities and by continuously repurchasing and exchanging outstanding debt (active debt management). Compared with the European covered bond market, the Swedish covered bond market has relatively large outstanding volumes for individual loans. Historically there have been good possibilities to mitigate concentration, liquidity and refinancing risks through bond repurchasing and maturity extension on the Swedish covered bond market.

13.1.2 Liquidity reserve

SBAB has a liquidity portfolio in place to ensure liquidity in times when normal market financing does not function adequately or in the event of large 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 by selling directly. The liquidity portfolio also brings a business advantage in normal market conditions in the form of bridge financing for maturing debt as well as ensuring intraday liquidity.

SBAB's liquidity portfolio comprises mainly of liquid and interest-bearing securities with high ratings. The entire portfolio is eligible to 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 outstanding volume is also limited in order to reduce 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 as well as the ECB list of eligible marketable assets. The market value of SBAB's liquidity reserve amounted to SEK 82.3 billion on 31 December 2021 (see table Liquidity reserve). Taking the Riksbank's and ECB's haircuts into account, the liquidity reserve amounted to SEK 78.4 billion. 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 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 the operational work and the strategic planning of liquidity, 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 liquidity reserve's value 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 for the company to rectify potential liquidity deficits.

The plan also contains definitions of various events that can cause and escalate the contingency plan and stipulates suitable actions to handle these crisis events. The contingency plan is regularly tested and updated based on, for example, the results of stress tests.

Liquidity reserve

		DISTRIBUTION BY CURRENCY			
Liquidity reserve, SEK billion	**Dec 2021**	**SEK**	**EUR**	**USD**	**Other**
Level 1 assets	**79.6**	**60.6**	**14.8**	**4.2**	**-**
Cash and balances with central banks*	11.5	11.5	-	-	-
Securities issued or guaranteed by sovereigns, central banks, MDBs and international organisations	28.1	20.7	5.5	1.9	-
Securities issued by municipalities and PSEs	12.8	4.8	5.8	2.2	-
Extremely high quality covered bonds	27.2	23.6	3.5	0.1	-
Other assets	-	-	-	-	-
Level 2 assets	**2.7**	**2.4**	**0.3**	**-**	**-**
Level 2A assets	*2.7*	*2.4*	*0.3*	-	-
Securities issued or guaranteed by sovereigns, central banks, municipalities and PSEs	-	-	-	-	-
High quality covered bonds	2.7	2.4	0.3	-	-
Corporate debt securities (lowest rating AA–)	-	-	-	-	-
Other assets	-	-	-	-	-
Level 2B assets	-	-	-	-	-
Asset-backed securities	-	-	-	-	-
High quality covered bonds	-	-	-	-	-
Corporate debt securities (rated A+ to BBB–)	-	-	-	-	-
Shares (major stock index)	-	-	-	-	-
Other assets*	-	-	-	-	-
LIQUIDITY RESERVE	**82.3**	**63.0**	**15.1**	**4.2**	**-**

* Includes central bank facilities.

Liquidity coverage ratio under the CRR *(EU LIQ1)*

		TOTAL UNWEIGHTED VALUE (AVERAGE)				TOTAL WEIGHTED VALUE (AVERAGE)			
SEK million		31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021
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					79,000	77,236	76,879	80,016
Cash outflows									
2	Retail deposits and deposits from small business customers of which:	113,707	112,190	110,925	109,823	8,979	8,881	8,808	8,757
3	Stable deposits	79,614	77,993	76,420	74,852	3,981	3,900	3,821	3,743
4	Less stable deposits	33,525	33,555	33,777	34,177	4,999	4,981	4,987	5,015
5	Unsecured wholesale funding	28,159	28,022	28,325	26,788	12,513	12,689	13,198	12,050
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	–	–	–	–	–	–	–	–
7	Non-operational deposits (all counterparties)	25,816	25,302	24,972	24,350	10,170	9,969	9,846	9,612
8	Unsecured debt	2,342	2,720	3,353	2,438	2,342	2,720	3,353	2,438
9	Secured wholesale funding					48	47	47	39
10	Additional requirements	64,827	62,515	60,618	58,386	15,507	14,936	14,314	15,722
11	Outflows related to derivative exposures and other collateral requirements	6,042	7,001	8,003	9,319	6,042	7,001	8,003	9,319
12	Outflows related to loss of funding on debt products	6,869	5,431	3,874	4,158	6,869	5,431	3,874	4,158
13	Credit and liquidity facilities	51,916	50,083	48,741	44,909	2,596	2,504	2,437	2,245
14	Other contractual funding obligations	209	190	182	215	13	13	8	17
15	Other contingent funding obligations	18,217	17,354	16,677	16,308	6,241	6,149	6,089	6,075
16	**TOTAL CASH OUTFLOWS**					**43,300**	**42,713**	**42,464**	**42,660**
Cash inflows									
17	Secured lending (e.g. reverse repos)	1,072	1,465	1,918	3,994	156	103	134	275
18	Inflows from fully performing exposures	2,025	1,999	1,958	1,866	1,279	1,266	1,247	1,201
19	Other cash inflows	7,880	7,353	7,396	7,823	7,880	7,353	7,396	7,823
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**	**10,978**	**10,818**	**11,272**	**13,683**	**9,316**	**8,722**	**8,777**	**9,299**
EU-20a	Fully exempt inflows	–	–	–	–	–	–	–	–
EU-20b	Inflows subject to 90% cap	–	–	–	–	–	–	–	–
EU-20c	Inflows subject to 75% cap	10,978	10,818	11,272	13,683	9,316	8,722	8,777	9,299
						TOTAL ADJUSTED VALUE			
21	Liquidity buffer					79,000	77,236	76,879	80,016
22	Total net cash outflows					33,984	33,992	33,688	33,361
23	Liquidity coverage ratio (%)					232	227	228	240

Net Stable Funding Ratio *(EU LIQ2)*

SEK million	Unweighted value by residual maturity: No maturity	< 6 months	6 months to < 1yr	≥ 1yr	Weighted value
Available stable funding (ASF) Items					
Capital items and instruments:	*24,101*	–	–	*1,995*	*26,096*
Own funds	24,101	–	–	1,995	26,096
Other capital instruments		–	–	–	–
Retail deposits:		*116,842*	*242*	*174*	*109,630*
Stable deposits		81,550	61	54	77,584
Less stable deposits		35,292	181	120	32,046
Wholesale funding:		*72,626*	*8,978*	*323,802*	*341,314*
Operational deposits		–	–	–	–
Other wholesale funding		72,626	8,978	323,802	341,314
Interdependent liabilities		–	–	–	–
Other liabilities:	–	*2,444*	–	*446*	*446*
NSFR derivative liabilities	–				
All other liabilities and capital instruments not included in the above categories		2,444	–	446	446
Total available stable funding (ASF)					**477,485**
Required stable funding (RSF) Items					
Total high-quality liquid assets (HQLA)					2,311
Assets encumbered for a residual maturity of one year or more in a cover pool		1,694	1,952	273,190	235,311
Deposits held at other financial institutions for operational purposes		–	–	–	–
Performing loans and securities:		*1,595*	*1,549*	*187,730*	*124,729*
Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		–	–	–	–
Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		340	–	–	17
Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		177	205	4,675	3,560
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		168	197	3,020	2,145
Performing residential mortgages, of which:		1,078	1,244	182,905	120,951
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		1,066	1,231	178,397	117,107
Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		–	100	150	200
Interdependent assets		–	–	–	–
Other assets:	–	*939*	*3*	*5,340*	*5,491*
Physical traded commodities				–	–
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		–	–	3,426	2,912
NSFR derivative assets		364	–	–	364
NSFR derivative liabilities before deduction of variation margin posted		383	–	–	19
All other assets not included in the above categories		555	3	1,914	2,196
Off-balance sheet items		61,048	75	8,537	3,483
Total required stable funding (RSF)					**371,325**
Net Stable Funding Ratio (%)					**128,6**

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 several metrics for short-term liquidity risk. A few of them are described below.

13.2.1 Liquidity coverage ratio

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% aggregated over all currencies. On 31 December 2021, the metric amounted to 228% at the consolidated currency level, 184% in SEK, 6415% in EUR and 938% in USD, respectively. In 2021, the LCR consolidated for all currencies never fell below the regulatory requirements.

Detailed information about the liquidity coverage ratio can be found in the table Liquidity coverage ratio under the CRR *(EU LIQ1)* 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 2021, the item "Outflows related to derivative exposures and other collateral requirements" averaged SEK 6,042 millions in accordance with Table 64. The majority of the amount pertains to derivative liabilities for which SBAB has posted collateral.

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 predicting the cumulative liquidity needs for each coming day, referred to as the survival horizon. The calculations are based on a crisis scenario where all lending is assumed to be extended on maturity, meaning that no liquidity is added through loan redemption, and where no extra market financing is available. A conservative assumption is applied to predictions on the retail deposits from which withdrawals are made over time. The distribution of the withdrawals is built on historical data. Thereafter, the maximum need for liquidity can be identified on a daily level for any given future period, which indicates the amount of required liquidity reserve. The survival horizon is the number of days for which all outflows can be covered by the liquidity reserve without the need for additional funding. According to SBAB's Internal limit, the survival horizon must at least amount to 180 days at the consolidated currency level.

On 31 December 2021, the survival horizon amounted to 254 at the consolidated currency level, 168 days in SEK, and 1700 days in EUR and 159 days in USD, respectively. In 2021, the survival horizon was never less than 254 days at the consolidated level.

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

13.3 LIQUIDITY RISK – STRUCTURAL LIQUIDITY RISK

Structural liquidity risk can arise from the differences in maturity structures between assets and liabilities, which potentially leads to a lack of liquidity in the longer term. SBAB aims to maintain a diversified funding. The SBAB Group has adopted a conservative approach to the management of funding. A large share of future maturities is pre-financed and the share of total funding attributable to short-term funding is maintained at a low level.

SBAB works actively to ensure an even distribution of maturities, while at the same time prepare for the events that funding instruments mature. 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 financing by applying a limit on the ratio between deposits and lending to the public. On 31 December 2021, the ratio was 31% compared with the limit of 28%.

Moreover, SBAB continuously measures the Over Collateralization (OC) in the cover pool in both normal and stressed market conditions and ensures that the OC always exceeds regulatory requirements, internal management requirements, and rating agency's requirements (for example Moody's requirements for Aaa ratings which is 1.5% in 2021). The table Over Collateralisation (OC) shows the level of OC and OC after 20% decrease in house prices as per 31 December 2021. They exceed the level of Moody's requirements, shown as "Limit" in the Table.

Over Collateralisation (OC)

	31 Dec 2021	Limit
OC	30.1%	1.5%
OC after 20% drop in house prices (excl qualified reserves)	23.8%	
OC after 20% drop in house prices (incl qualified reserves)	29.3%	1.5%

SBAB also measures its structural liquidity risk through a metric for maturity matching that captures 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 of deposits and lending is estimated by SBAB's own statistical models based on historical data of the behavior of SBAB's customers. The metric is subject to a one-year floor limit of not less than 90% at a consolidated level and 60% for individual currencies for which the liability exceeds 5% of total liabilities. SEK and other individual currencies are subject to a 60% limit if the currency is significant (constitutes at least 5% of total outstanding debt) and there is a net outflow. On 31 December 2021, maturity matching was 135% at the consolidated level, 130% in SEK, 146% in EUR and 92% in USD.

The net stable funding ratio (NSFR) amounted to 128.6% according to Regulation (EU)2019/876 of the European Parliament and the Council. Detailed information is reported about the net stable funding ratio in the table Net Stable Funding Ratio *(EU LIQ2)* above.

In addition to the above metrics, SBAB limits its structural liquidity risk through further internal risk metrics.

13.4 STRESS TESTS FOR LIQUIDITY RISK

SBAB performs stress tests of liquidity risk regularly as one of the internal requirements to analyze and perform contingency management of liquidity risk. The stress tests models 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 analyze SBAB's capacity to meet the need for cash and cash equivalents in various market scenarios and assess the effect of protracted stress on SBAB's ability to finance its operations. The scenarios are designed based on SBAB's specific risk profile and cover both company-specific and market-related scenarios that cause difficulties in financing. The scenarios are divided into different stages that illustrate increasing intensity of stress to reflect how a crisis continuously can 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 made in various scenarios 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

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 Harmonised rules for covered bonds

In November 2019, Directive (EU) 2019/2162 of the European Parliament and of the Council on the issue of covered bonds was published. The Directive introduces harmonized rules for covered bonds within the EU.

One of the most tangible changes introduced by the rules is the requirement for covered bond issuers to hold liquid assets in the cover pool to cover net liquidity outflows from covered bonds for a period of 180 days. This requirement entails an overlapping of the existing liquidity reserve requirement in the LCR regulations. Efforts are ongoing at EU level to change the LCR regulation to avoid institutions having to hold double liquidity reserves for the same outflows/periods.

The Swedish government aims to implement the Directive by changing the Swedish Covered bonds (Issuance) Act. In addition to the above-mentioned requirement of the liquidity buffer, a new reporting requirement among others is also expected as one of the changes. These changes in the Swedish Covered bonds (Issuance) Act are expected to enter into force from 8 July 2022. SBAB follows the development of the regulations closely and works continuously to ensure compliance with the law changes.

13.5.2 Other regulatory changes

Temporary relief on LCR requirement

The Swedish FSA has since March 2020 issued a temporary relief on LCR requirement for Swedish banks. The temporary relief allows banks to fall below their LCR requirement for both individual currencies and consolidated currency. The goal of the relief is to ensure that the liquidity requirement does not add difficulties to banks' financing operations during the challenging period due to the ongoing pandemic. Sound financing operation of the banks is important to maintain credit supply to the economy.

SBAB continues to monitor its liquidity situation and strives to live up to the LCR requirement despite of the temporary relief. SBAB's internal LCR requirement, which is stricter than the regulatory requirement, continues to apply for SBAB

14 Operational risk

Operational risk is defined as the risk of losses stemming from inadequate or failed internal processes and systems, human error or from external events. Operational risk includes legal risks but excludes reputational risk and is embedded in all banking products and activities.

14.1 RISK MANAGEMENT

The basis of an operational risk management process is a continuous identification, analysis and assessment, management and monitoring of risks. An analysis of the overall risk level is regularly reported to the Board of Directors, the CEO and the management body. The second line of defense (Risk) has an overall responsibility for the methods and procedures used to manage operational risks. The management of operational risks is conducted based on SBAB's risk appetite and the business essential processes. This involves continuous work on developing employees' risk awareness and the bank's risk culture, improving processes and routines and providing tools for efficient and proactive management in daily work. As part of strengthening SBAB's risk culture Risk and Regulatory Coordinators (RRS) are established in the first line of defense. The role of the RRS is to act as support to the business managers, focusing on risk management, process mapping, internal controls, incident management and compliance.

14.1.1 Risk and Control Self-Assessment (RCSA)

The RCSA-process includes the identification and evaluation of operational risks in all essential processes. The self-assessment is carried out using a common method and is documented in the joint GRC-system. The results of the RCSA are reported annually to the Board, the CEO and the management body.

14.1.2 Incident management

SBAB has routines for reporting and following up incidents. The Risk department supports the business with analysis of reported incidents to ensure that root causes are identified and that appropriate measures are taken. Incidents that have not caused any direct damage or financial loss are also reported to promote proactive risk management.

14.1.3 Control of new products and significant changes

SBAB's process for managing new products and significant changes addresses the development of new products, markets and services, and significant changes to existing ones. The process also encompasses material changes to processes, systems and organization. The purpose of the process is to ensure that changes are consistent with the risk strategy and risk appetite.

14.1.4 Business continuity management

SBAB works to prevent incidents that may affect the company's ability to conduct operations. A crisis organization responsible for crisis and disaster management as well as communication is established and tested regularly in collaboration with external crisis management experts.

14.2 SIGNIFICANT OPERATIONAL RISKS

SBAB has identified a set of risks that, if they occur, could have a greater impact on SBAB's operations than other risks. The development of these risks is monitored on an ongoing basis by the management body and the board and is considered in the framework of SBAB's business planning. The significant operational risks are described below.

14.2.1 Information security risk

The cyber threat to the Swedish financial sector is extensive and persistent. SBAB has a dedicated security team with specialists who aims to develop and maintain a high cyber security level for the bank. This is achieved through proactive work for a strong digital security perimeter and a high level of security within this perimeter. The team also works proactively to increase risk and safety awareness throughout SBAB. Furthermore, the bank has a special department for data privacy. They review the handling of personally identifiable information and set the requirements to ensure that the bank follows current regulations. In the implementation of the IT strategy the business works with small deliveries to minimize the risk of major disruptions.

14.2.2 Technical debt

The technological development in the market has been rapid in recent years, rendering that some of SBAB's infrastructure is about to become outdated. An extensive project to replace the system platform was initiated in 2016 and has been ongoing with full intensity and high priority since then. The project is planned to continue until the second quarter of 2023. SBAB's IT strategy has clearly defined goals and priorities to ensure that the identified risks are managed appropriately. The development and outcome related to the projects duration and cost are closely monitored by the management body and the board. The agile approach with shorter lead times as well as closer intervals between deployment to production increases flexibility and enables efficiency.

14.2.3 Competence

SBAB's ambition is to be an attractive workplace with committed and motivated employees. Like many other companies, SBAB faces the risk of not being able to attract and retain appropriate expertise. Through a clearly defined and transparent HR strategy and ambitious goals in the area, SBAB works actively to develop the value-driven approach and ensure an inclusive leadership that generates self-driven employees.

14.2.4 Financial crime risk

The business continues to have a high focus on compliance to counter money laundering and terrorist financing. SBAB has an Anti-Financial Crime unit that, among other things, monitors regulatory development in the area and supports operations.

14.2.5 Regulatory risk

The regulatory requirements are constantly evolving – thus, creating challenges for financial institutions to stay compliant. New regulatory frameworks or updates to existing regulation often require an update in the banks processes and systems, and hence, puts pressure on the ability to transform the organization quickly enough to meet the regulatory requirements. Therefore, risk stemming from reorganizing parts of the organization and processes are closely monitored and evaluated to capture material operational risk.

New external regulations within ESG with an impact on SBAB is being implemented internally and educational initiatives will be provided to ensure high competence and thus high compliance with regulations in all parts of SBAB. Despite the ESG framework being relatively new and embedded with requirements subject to interpretation, SBAB considers the operational risk to be low.

14.3 CAPITAL REQUIREMENTS FOR OPERATIONAL RISKS

SBAB applies the standardized approach to calculate the capital requirements for operational risk within Pillar I.

15 Business risk

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

Business risk includes strategic risk, reputational risk and the risk of weaker earnings. SBAB defines business risk as a necessary risk. The above listed components of business risk are managed by SBAB on an ongoing basis. 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. Business risk is included in the calculation of the Pillar 2 capital requirements as part of SBAB's stress tests. See also the section 6.3.6.3 Business risk.

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