

# CAPITAL AND RISK MANAGEMENT REPORT

2018

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## 1 Summary of the risk profile

This report presents comprehensive information on risks, risk management and capital adequacy required by applicable regulation. This chapter provides a summary of the risk profile and risk management arrangements of S-Bank Group (hereinafter “S-Bank”).

S-Bank produces financial and asset management services to retail and corporate customers. S-Bank’s strategy seeks strong growth in the coming years, focusing especially on services to retail customers and the asset management business. The risk strategy, which determines S-Bank’s risk capacity, risk appetite, risk objectives and organisation of risk management, are designed to support S-Bank’s business model and growth strategy.

- **Risk capacity** sets the maximum level for risk-taking in the short and long term. Securing sufficient capital adequacy, liquidity and ensuring compliance with regulation are key factors of the risk capacity.
- **Risk appetite** reflects the approved amount and type of exposures that S-Bank is willing to take in its business operations over a certain period while pursuing its set objectives. It also defines e.g. the internal minimum target levels for capital adequacy and liquidity. The risk limit structure sets numerical goals, acceptable risk limits, restrictions and decision-making levels to support the implementation of the risk strategy.
- The primary objective of risk management is to support the level of profitability, and to maintain the capital adequacy as well as liquidity above the minimum target levels defined by the Board of Directors. The objective is also to manage reputational risk and to secure business continuity in both the short and long run.

The most significant risks potentially affecting S-Bank’s profitability, capital adequacy and liquidity include several aspects. These features contain unfavorable development of business volumes, the margins in lending and borrowing, the general interest rate level, economic development, credit losses and cost-efficiency of operations.

According to the regulatory Pillar 1 capital requirements, S-Bank’s most significant risk types are credit and operational risk. In addition, to these regulatory capital requirements, S-Bank calculates an internal Pillar 2 capital requirement for all relevant risks to ensure a comprehensive evaluation of the risk profile.

Table 1 summarizes the key risk ratios at the consolidated Group level by the end of the reporting period.

**Table 1: Key risk ratios (at consolidated Group level) 31 Dec 2018**

EUR million	31 Dec 2018	31 Dec 2017
<b>Risk weighted assets (amounts)</b>		
Total risk-weighted assets	2 696,0	2 531,7
Credit and counterparty risk, standardised approach	2 419,7	2 251,9
Market risk	0,0	0,0
Operational risk, basic indicator approach	273,1	276,9
Credit valuation adjustment, CVA	3,1	2,9
<b>Own funds (amounts)</b>		
Common Equity Tier 1 (CET1) capital	401,8	372,2
Tier 2 (T2) capital	50,0	50,0
Total capital	451,8	422,2
Pillar 1 minimum capital requirement (8,0 %)	215,7	202,5
Pillar 1 total capital requirement (12,79 % in 2018 and 10,53 % in 2017)	344,8	266,7
<b>Capital ratios (as a percentage of total risk exposure amount)</b>		
Common Equity Tier 1 (CET1) ratio	14,9 %	14,7 %
Total capital ratio	16,8 %	16,7 %
<b>Leverage ratio (CRR)</b>		
Leverage ratio (%)	6,0 %	6,4 %
<b>Liquidity Coverage Ratio (LCR)</b>		
Liquidity Coverage Ratio (%)	156,4 %	162,9 %
<b>Net stable funding ratio (NSFR)</b>		
NSFR ratio (%)	145,9 %	144,6 %

Credit risk constitutes 90 % (2,4 EUR billion) of S-Bank's total risk weighted assets (RWA's). The standardised approach is used for calculating the Pillar 1 capital requirement for credit risk. The most substantial items requiring capital include mortgages, retail exposures and corporate exposures. There were no major shifts in the credit portfolio distribution between different loan types during 2018. S-Bank's sustains a low credit risk profile in line with the conservative risk appetite, supported by active risk management and monitoring measures.

S-Bank does not have a trading book. As S-Bank's market risks arise from the banking book, these are – in accordance with the Pillar 1 requirement and methods – included in the regulatory capital requirements for credit risk. In addition, market risk is measured with an internal market risk model as part of the Pillar 2 and ICAAP processes (Internal Capital Adequacy Assessment Process).

Operational risk accounts for 10 % of S-Bank's total RWA's. The basic indicator approach is used for calculating the capital requirement for the operational risk. Losses attributable to operational risks realised in 2018 were very low in comparison to the regulatory capital requirement for operational risk. S-Bank's operational risk profile is materially impacted by system failures and disruptions, fraud and possible deficiencies with external service providers.

S-Bank's capital position has remained stable, above the regulatory requirements and the internal minimum target level of 15 %. S-Bank's total capital adequacy ratio was 16,8 % on 31 of December 2018. Total RWAs increased by EUR 164,3 million to EUR 2,7 billion, mainly due to strategic growth in lending to retail customers.

S-Bank is also adequately capitalised to ensure continuity of its operations even under stressed conditions. The capital buffer in relation to the total regulatory Pillar 1 capital requirement (12,79 %) was EUR 107,0 million.

S-Bank's leverage ratio of 6,0 % is also strong, while the minimum regulatory requirement is set at 3 %. In addition, S-Bank's liquidity position was first-rate at the year-end. Liquidity coverage ratio (LCR) was 156 %.

## 2 Disclosure of Pillar 3 information

Part Eight of the EU Capital Requirements Regulation (CRR, 575/2013) sets out the requirements on disclosure of information (Pillar 3) concerning institutions' risks, risk management and capital adequacy. S-Bank complies with these disclosure requirements and publishes this report on S-Bank's website in conjunction with the financial statements once a year. Section 13 presents the disclosure index demonstrating where the information required by CRR Articles 435-451 can be found.

Risk management, capital adequacy and other risk related information is also described and disclosed as a part of the Board of Directors' Report and the financial statements. In its interim reports, S-Bank discloses risk management and capital adequacy information that is to be published more frequently than once a year in line with regulatory stipulations. Other information required by the Pillar 3 requirements, such as corporate governance statement and report on remuneration systems are available on S-Bank's website.

### 3 Description of S-Bank Group

The S-Bank Group includes the parent company S-Bank Ltd and all its subsidiaries. Figure 1 depicts the legal structure of the S-Bank Group. The owners of S-Bank are SOK Group, the regional co-operatives belonging to S-Group, LocalTapiola General Mutual Insurance Company, LocalTapiola Life, the regional LocalTapiola insurance companies and Elo Mutual Pension Insurance Company.

Figure 1: Legal structure of S-Bank Group



**S-Bank Ltd** is the parent company of S-Bank Group. S-Bank is a Finnish full-service bank with a mission to make customers' daily life easier. This is achieved by offering 3,1 million customers convenient and useful solutions in daily banking, savings, investments and the financing of purchases. S-Bank concentrates on providing services to the Finnish retail market and selected large companies, with an emphasis on geographical growth areas in Finland. The funds and asset management services offered by S-Bank Group are produced by FIM Asset Management Ltd.

**FIM Private Equity Funds Ltd** is an alternative fund manager, managing real estate and other private equity funds. S-Bank owns 100 % of FIM Private Equity Funds Ltd's share capital.

**FIM Asset Management Ltd** manages the FIM and LocalTapiola funds and provides services related to asset management to the entire S-Bank Group. S-Bank owns 100 % of FIM Asset Management Ltd's share capital.

**S-Asiakaspalvelu Ltd** is a 100 % owned subsidiary of S-Bank Ltd. S-Asiakaspalvelu provides data processing and other services related to a credit institution's core operations as a service company in accordance with the Finnish Act on Credit Institutions (610/2014).

**FIM Infrastructure Mezzanine Debt Ltd, FIM Private Debt Fund Ltd and FIM SIB Ltd** serve as general partners in funds managed by FIM Private Equity Funds Ltd. These companies do not have any other business operations and they are 100 % owned by FIM Private Equity Funds Ltd.

**FIM Real Estate Ltd** is the general partner in S-Bank Group's real estate funds. FIM Real Estate Ltd is a subsidiary of FIM Private Equity Funds Ltd. FIM Private Equity Funds Ltd owns 80 % of FIM Real Estate Ltd.

**Asian Pro Ltd** serves as general partner in FIM Asian Housing Fund I Limited partnership. The company has not started business operations and is 40 % owned by FIM Real Estate Ltd.

Table 2 provides information on the consolidation method applied to each entity within the accounting and the regulatory (CRR) scope of consolidation. There are no other significant differences in the consolidation principles that influence the preparation of the financial statements or the capital adequacy requirements.

Table 2: Outline of the differences in the scopes of consolidation (EU LI3)

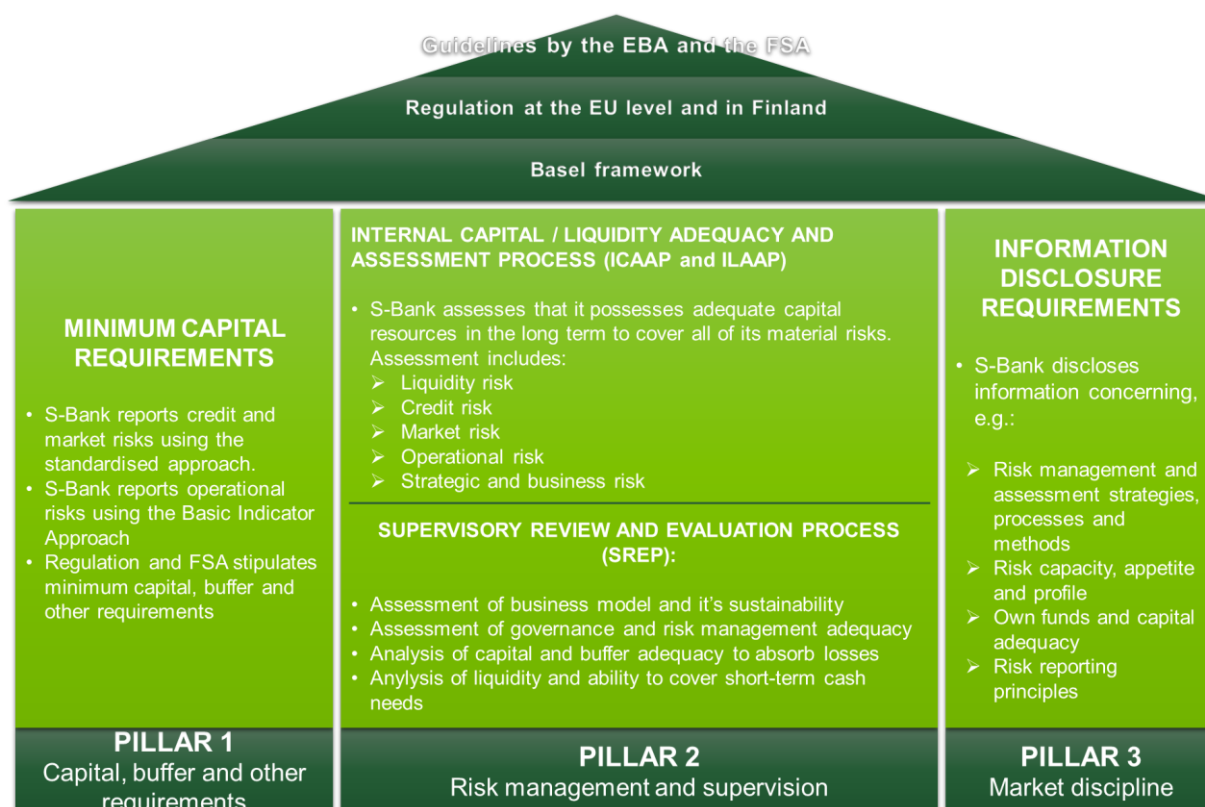
Owner	Company	Voting power of holding (%)	Industry	Method of accounting consolidation	Method of regulatory consolidation in accordance with CRR
<b>S-Bank Ltd</b>	FIM Private Equity Funds Ltd	100 %	Asset management	purchase method	full consolidation
	FIM Asset Management Ltd	100 %	Asset management	purchase method	full consolidation
	S-Asiakaspalvelu Ltd	100 %	Service entity	purchase method	full consolidation
	S-Crosskey Ltd	40 %	IT-service entity	equity method	recognised under the equity method
<b>FIM Private Equity Funds Ltd</b>	FIM Infrastructure Mezzanine Debt Ltd	100 %	Asset management	purchase method	full consolidation
	FIM Private Debt Fund Ltd	100 %	Asset management	purchase method	full consolidation
	FIM SIB Ltd	100 %	Asset management	purchase method	full consolidation
	FIM Real Estate Ltd	80 %	Real estate activities	purchase method	proportional consolidation
<b>FIM Real Estate Ltd</b>	Asian Pro Oy	40 %	Asset management	equity method	recognised under the equity method



## 4 Regulation

The Basel international regulatory framework for banks is comprised of three interlinked entities, or Pillars, illustrated in Figure 2. In addition, Basel framework is deployed through EU-level directives, regulations, standards, guidelines and national legislation. The framework is likewise specified by stipulations and guidelines issued by e.g. the European Banking Authority (EBA) and the local Financial Supervisory Authority (FIN-FSA).

**Figure 2: Basel international regulatory framework**



**Pillar 1** sets the minimum capital requirements for the three major risk areas: credit, market and operational risks. Furthermore, it sets out more specific requirements for these risk categories in terms of e.g. quality and level of capital.

**Pillar 2** provides a framework for Internal Capital and Liquidity Adequacy Assessment processes (ICAAP and ILAAP) and complements Pillar 1 by dealing with all the other risks a bank may face such as systemic, concentration, strategic, legal and reputational risks. The aim of the Pillar 2 process is to enhance the link between an institution's risk profile, its risk management and risk mitigation systems, and its capital planning. Pillar 2 also addresses firm-wide governance and risk management by setting qualitative requirements for risk management and internal control. In addition, Pillar 2 guides the annual supervisory review and evaluation process (SREP) to ensure that institutions have adequate arrangements, strategies, processes and mechanisms as well as capital and liquidity to ensure sound management and coverage of their risks, to which they are or might be exposed. SREP also includes an evaluation of risks revealed by stress testing and consequent risks institution may pose to the financial system.

**Pillar 3** supplements the first two pillars by defining the disclosure principles. Its key goal is to promote market transparency related to own funds, risk exposures, risk assessment processes, and the capital adequacy of the institution. This report contains information in line with these disclosure principles.

#### 4.1 Regulatory development

From January 1, 2018 S-Bank has applied the IFRS 9 Financial Instruments Reporting Standard. The most significant changes in deploying IFRS 9 relating to the classification and measurement of financial asset and liabilities, affecting e.g. impairments and the calculation of expected credit losses. These changes and subsequent decisions have affected S-Bank's risk management, pertinent processes, income and capital ratios. The accounting principles disclosed in the annual report present a more detailed description of the IFRS 9 criteria.

Additionally, S-Bank Group will start reporting according to IFRS standards from January 1, 2019, which will have a supplementary effect on S-Bank's financial reporting.

S-Bank is also preparing to transfer to the clearing of over-the-counter (OTC) derivative contracts through central counterparties, pursuant to the European Market Structure Regulation (EMIR) in 2019. The new deadline to transition for category 3 banks (including S-Bank) is 21 June 2019. This arrangement aims at reducing risks related to individual counterparties.

Regulatory changes affecting S-Bank's capital requirements are discussed in chapter 7.4.

#### 4.2 Minimum requirement for own funds and eligible liabilities

The Finnish Financial Stability Authority is responsible for resolution planning and decision-making in relation to the restructuring of local institutions in financial difficulties. Hence, the authority may impose a minimum requirement for own funds and eligible liabilities (MREL) on institutions. MREL requirement consists of the amount needed to cover losses and recapitalise the institution in distress.

The Finnish Financial Stability Authority has collected information on S-Bank to determine the necessity for implementing an MREL requirement. The analysis by the Financial Stability Authority is ongoing, and a decision on the matter is likely to be given during 2019.

## 5 Risk management objectives

S-Bank has a risk strategy approved by the parent company's Board of Directors. The strategy defines and sets key limits for the risk appetite and capacity. The document also describes S-Bank's risk management objectives and organisation. The risk strategy is supplemented with risk category-specific principles and procedures. S-Bank's business and support units maintain more specific instructions and descriptions to support the risk management of their own operations.

The primary objective of risk management is to support the level of profitability, and to maintain the capital adequacy and the liquidity above the minimum target levels defined by the Board of Directors. The objective is also to manage the reputational risk and to secure business continuity in both the short and long run. The risk management process is implemented in all of the Group's organisational levels. This supports the achievement of business objectives by ensuring that material risks are identified, and that their impact is analysed and managed.

Risk management is a continuous process integrated into S-Bank's strategy, processes, decision-making, reporting and internal control framework. Risk management refers to the procedures used to identify, assess, measure and monitor risks related to the company's operations. It also encompasses the maintenance and development of risk mitigation methods that will keep potential risks at an acceptable level.

### 5.1 Risk capacity and risk appetite

The Board of Directors annually define the quantitative and qualitative aspects of the risk capacity and risk appetite.

**Risk capacity** sets the maximum level for risk-taking in the short and long term. Securing sufficient capital adequacy, liquidity and ensuring compliance with regulation are key factors of the risk capacity.

**Risk appetite** reflects the approved amount and type of exposures that S-Bank is willing to take in its business operations over a certain period while pursuing its set objectives. It also defines e.g. the internal minimum target levels for capital adequacy and liquidity. The basis of risk appetite is to achieve a stable and adequate return on the Group's equity in the short and long run. The purpose is also to secure business continuity, to confirm that the confidentiality, integrity and availability of relevant information is not compromised as well as to ensure that S-Bank's risk-taking is controlled and planned. The risk limit structure defines the risk appetite by setting concise numerical goals, acceptable risk limits, restrictions and decision-making levels to support the implementation of the risk strategy.

### 5.2 Risk limits

The risk capacity and appetite are reflected in the risk limit structure and implemented in S-Bank's operations. These limits are updated regularly and whenever needed if risks associated with business operations and the operating environment so require.

The Board of Directors sets internal limits and numerical goals for different risk areas that are derived from the risk capacity and risk appetite. These limits reflect possible limitations stipulated by regulation with applicable internal buffers. Decision making mandates are defined and delegated to an appropriate level to ensure fluent daily control of business operations. These objectives and limits are monitored and controlled as part of the regular monitoring and reporting procedures (section 6.2).

In addition to the Pillar 1 capital requirements, S-Bank calculates an internal capital adequacy requirement for S-Bank's Pillar 2 risks. These requirements apply for S-Bank Group, its parent company and subsidiaries.

## 6 Governance of risk management

S-Bank's risk management is built on three lines of defence as illustrated in Figure 3.

**Figure 3: Three lines of defence in risk management**



The first line of defence consists of S-Bank's business and support units, which conduct business operations in accordance with S-Bank's strategy and business plan. The business and support units are responsible for risk-taking, the identification of risks, day-to-day risk management, risk mitigation, and risk monitoring and reporting.

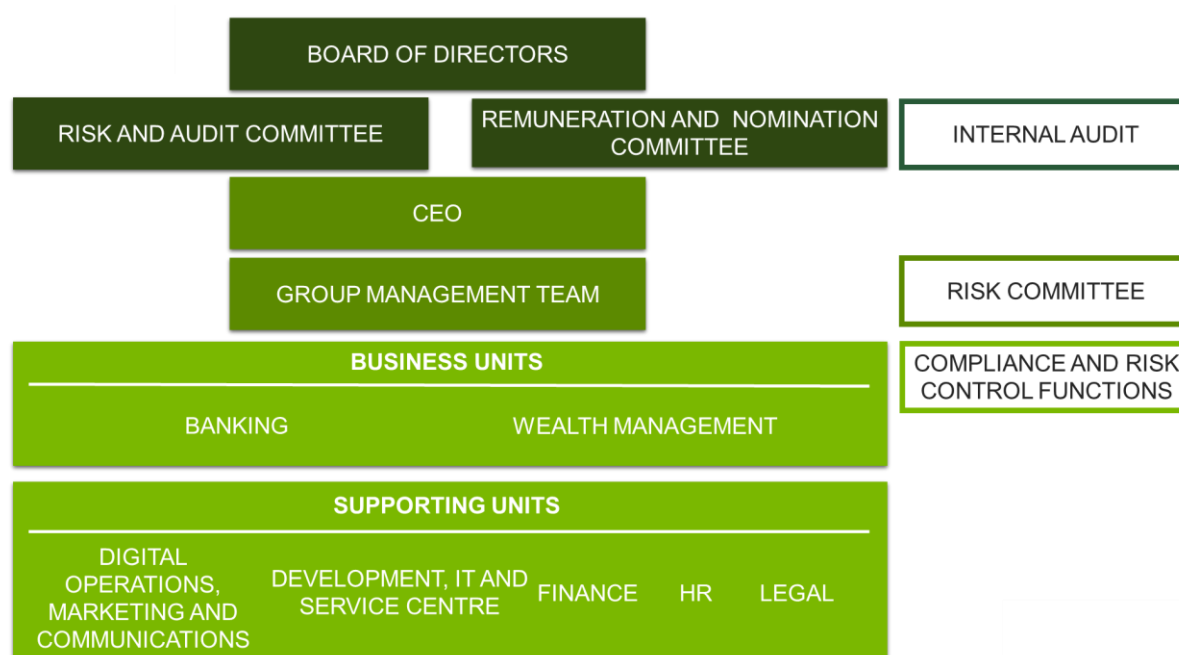
The second line of defence consists of the Group-level internal control functions: Risk Control and Compliance, which are independent of the business lines and units. The Risk Control function monitors and assesses the Group's risk-taking and the efficiency of risk management. The function also oversees the realisation of the risk strategy, total risk exposures in relation to the risk capacity and appetite, capital adequacy and liquidity. The Compliance function assesses and monitors the Group's compliance with relevant external regulations, internal policies and other pertinent management decisions.

Internal Audit is the third line of defence and is independent of the functions being audited. The purpose of the function is to audit and evaluate the effectiveness of the risk management and internal control measures carried out by the Group. Thus, Internal Audit also reviews the activities of the Risk Control and Compliance functions'.

### 6.1 Roles and responsibilities in risk management

Figure 4 depicts S-Bank's administrative structure. The roles and responsibilities of relevant governing bodies in terms of risk management are described consequently.

Figure 4: S-Bank's administrative structure



### **Board of Directors and its Committees**

Responsibility for the overall risk management in S-Bank Group is taken by the parent company's Board of Directors, ensuring that the Group's operations are appropriately organised pursuant to applicable laws and regulations. The Board approves the risk strategy, ensures that the risk management framework is implemented consistently and that the Group has appropriately documented principles supporting the accomplishment of set risk management.

The Board of Directors also ensures that S-Bank continuously has adequate capital to cover all material risks arising from business operations, changes in the external business environment and that the Group's risk capacity is adequate. All substantial risks, reports concerning compliance with the set limits, main risk management policies and pertinent changes thereto are discussed by the Board of Directors on a regular basis.

Furthermore, the Board of Directors monitors the scope, effectiveness and soundness of risk management and ensures the adequacy of the independent internal control functions. The Board of Directors oversees that Internal Audit regularly assesses the effectiveness and quality of risk management and the internal control framework in addition to the integrity and expediency of the independent internal control functions.

The Board of Directors is assisted by the Risk and Audit Committee, as well as by the Remuneration and Nomination Committee. The Risk and Audit Committee assists the Board of Directors in matters concerning S-Bank's risk strategy and risk-taking. The Committee also oversees and assesses issues related to ICAAP and ILAAP process. Also, the Committee works in co-operation with the Remuneration and Nomination Committee ensuring that S-Bank's remuneration principles are consistent with sound and efficient risk management and that they do not entail excessive risk-taking.

### **CEO and Group Management Team**

S-Bank's Chief Executive Officer (CEO), assisted by the Group Management Team, is responsible for the practical execution of risk management. The CEO and the Group Management Team ensure that Group's ongoing operations are compliant with applicable laws and regulations, Articles of Association and other relevant internal documents. The CEO and Group Management Team are responsible for the achievement of the set objectives and the monitoring and management of any risks threatening these objectives. In addition, the CEO and Group Management Team oversee that the responsibilities, authorisations, processes

and reporting procedures related to risk management have been clearly defined and described, and that the risk management resources are adequate.

### ***Business and supporting units***

The directors of S-Bank's business and support units are primarily responsible for the risks in their respective areas and for ensuring that the operations of their units are carried out in accordance with S-Bank's guidelines and principles. These units are also responsible for running the operations within the set limits. Therefore, the business and support units are responsible for identifying and assessing the risks associated with their processes, as well as managing and monitoring these risks. The units also report risk related information in accordance with the agreed instructions. Each business and support unit is responsible for the clear and adequate description of the pertinent frameworks, operations, and risk management prerequisites.

The business units have also separate Executive Teams, comprising of pertinent business unit directors. The Executive Teams are responsible for the execution, implementation and monitoring of the quantitative and qualitative goals. Executive Teams can apply their set its own risk limits that are stricter than those adopted by the Board of Directors.

### ***Risk Committee***

The Risk Committee is comprised of independent internal function members. The main duty of the Risk Committee is to ensure that the Board of Directors and the Risk and Audit Committee are provided with adequate and appropriate information on S-Bank's risks, risk management and capital adequacy. The Risk Committee confirms essential decision proposals concerning the Group's capital adequacy and liquidity for the Board's approval. Similarly, it confirms the key strategies concerning internal control and risk management. The Committee also oversees that the proposals comply with regulation, the risk capacity and appetite.

### ***Independent internal control functions***

S-Bank's Board of Directors has established independent internal control functions to ensure effective and comprehensive internal control and risk management. These functions consist of the Risk Control and Compliance functions and Internal Audit.

***Risk Control function*** is tasked with the comprehensive monitoring and assessment of S-Bank's risk-taking level and the realisation of risk management. The Risk Control function monitors the execution of the risk strategy, the total risk exposure and ensures that the risks taken by the Group are appropriately proportioned and within set limits. In addition, the Risk Control function maintains and develops risk measurement, assessment and reporting methods, and supports business operations in the identification and management of risks. The function prepares regular reports concerning S-Bank's risk exposures and management levels to the management, the Risk Committee, the Risk and Audit Committee, the Board of Directors and the authorities. To carry out its duties, the Risk Control function has the authorisation to receive any information it needs from the Group's business units and supporting functions.

***Compliance function*** is tasked with ensuring that S-Bank has adequate and appropriate policies and procedures in place for ensuring compliance with regulatory requirements. Compliance monitors changes in legislation and regulations and therefore ensures compliance with them within the Group. In addition, Compliance monitors and assesses the adequacy and effectiveness of any measures taken to remedy non-compliance.

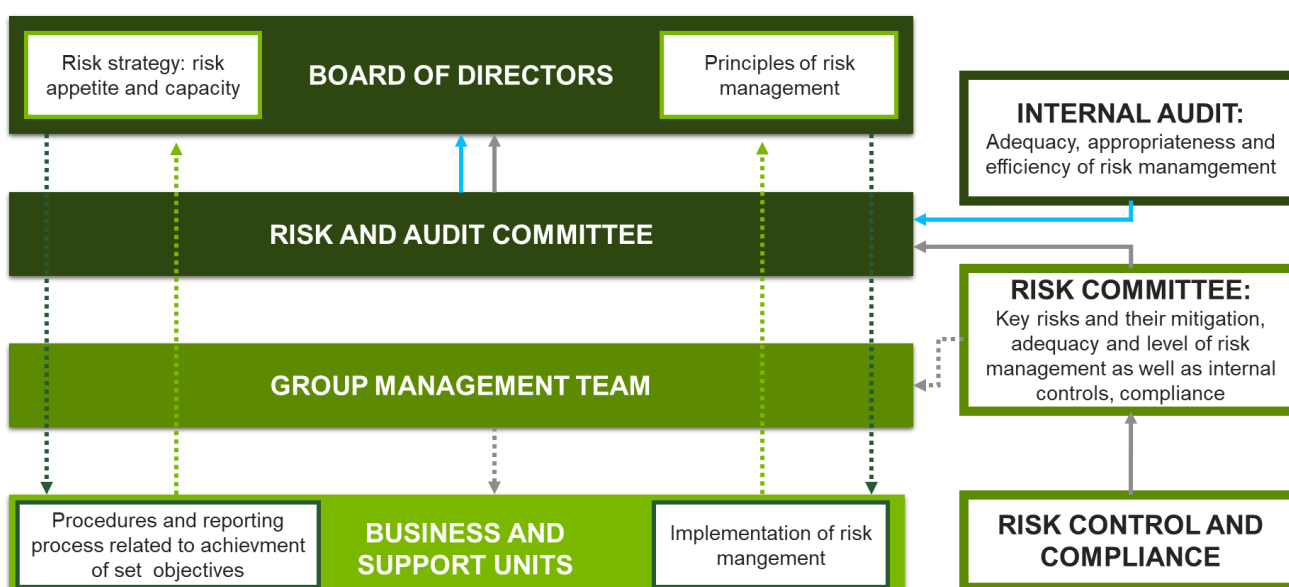
***Internal Audit function*** performs independent evaluation and verification activities that concentrate on auditing the adequacy, functionality and effectiveness of the internal control and risk management frameworks and consequent measures. These features are estimated in a risk-oriented manner in accordance with the auditing plan approved by the Board of Directors annually. When conducting audits, Internal Audit uses auditing criteria that are based on external regulations, internal guidelines and the set objectives.

## 6.2 Risk monitoring and reporting

S-Bank monitors risks on a continuous basis as part of its day-to-day routines. Each employee must be aware of their own responsibilities related to risk management, and they are tasked with observing the implementation of risk management within their area of responsibility. Employees are also instructed to report any observed deviations and deficiencies in risk management in accordance with the agreed procedures.

Risks are measured, monitored and reported in such a way that the Board of Directors and line management have adequate and relevant information on risks and their management procedures. S-Bank's internal risk reporting process includes, alongside financial reporting, regular analyses on the achievement of the set objectives. Risk-taking in relation to the risk capacity is monitored regularly and assessed e.g. when updating the ICAAP and ILAAP reports, strategy processing or when making important decisions concerning business projects or investments. Figure 5 illustrates the risk reporting process.

Figure 5: Risk reporting



As part of continuous risk reporting, the risk exposure of S-Bank and the Group companies are assessed based on set risk limits. Market and liquidity risks are monitored and reported on daily basis. Credit risks, capital adequacy and operational risks are monitored continuously and reported on monthly and quarterly basis and whenever necessary.

The Risk Control function is responsible for producing independent reports on key risks and the level of risk management to S-Bank's management, the Risk Committee, the Risk and Audit Committee and the Board of Directors as illustrated in Figure 6. In addition to regular reports, the aforementioned bodies receive a separate report and analysis if any major changes or deviations occur that may influence S-Bank's risk position or capital adequacy.

Figure 6: Risk Control function reporting



Internal Audit evaluates the processes concerning risk and capital management in accordance with the annual auditing plan. Internal Audit regularly reports on the results of the audits, key audit observations, any improvement recommendations and the realisation of the audit plan to the Risk and Audit Committee and the Board of Directors, as well as all other essential bodies.



## 7 Capital and liquidity management

### 7.1 Highlights 2018

***S-Bank is adequately capitalised to ensure continuity of its operations even under stressed conditions and is prepared for forthcoming changes in the regulatory capital requirements.***

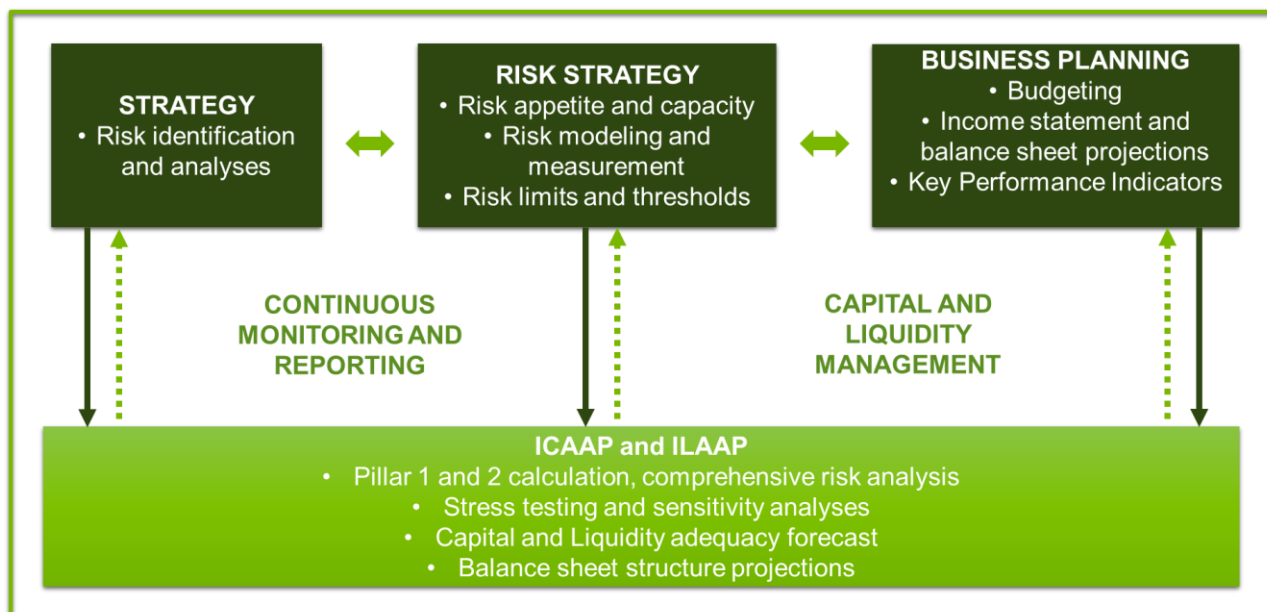
- S-Bank's capital position remained stable and well above the regulatory requirements.
- Total capital ratio grew slightly from 16,7 % (31 Dec 2017) to 16,8 % in 31 Dec 2018. The increase was mostly due to a targeted share issue (CET1) of EUR 40,0 million in December.
  - Total RWAs rose by EUR 164,3 million to EUR 2,7 billion, mainly due to strategic growth in lending to retail customers.
- S-Bank's total capital requirement at the end of the reporting period was 12,79 %, consisting of the minimum capital requirement (8 %), capital conservation buffer (2,5 %), Pillar 2 SREP requirement (2,25%) and countercyclical buffer (0,04 %).
  - The Finnish FSA set a discretionary Pillar 2 additional capital requirement (SREP) for S-Bank, which became effective on 30 September 2018. The requirement totals to 2,25 % and is based on interest rate risk in the banking book and the concentration of credit risk. The requirement must be met with CET1 capital.
  - In June 2018, the Finnish FSA set a systemic risk buffer (CET1) for all credit institutions authorised in Finland. The requirement for S-Bank is one percent. This obligation will enter into force on 1 July 2019.
- Leverage ratio was 6,0 % (6,4 %).

## 7.2 Capital and liquidity management

### 7.2.1 Risk management

Capital and liquidity management are fundamental parts of the risk management process. The objective of sound capital and liquidity management is to ensure that S-Bank has continuously an appropriate capital and liquidity position required to achieve its strategic business goals. Furthermore, the aim is to ensure that S-Bank continuously has sufficient capital and liquidity buffers for unexpected events. Figure 7 depicts the capital and liquidity management framework.

Figure 7: Capital and liquidity management framework



Capital and liquidity management is based on a proactive approach considering S-Bank's strategy, business plan, and risk strategy. The process begins with strategic analysis and comprehensive identification of risks associated with S-Bank's business. S-Bank utilises a variety of stress scenarios to estimate how potentially unfavorable developments could affect capital adequacy and liquidity at the Group level as well as at an individual subsidiary level over a certain time frame. Factors taken into consideration include various development patterns in the macroeconomic, regulatory and competitive environment. Moreover, the scenarios include potential changes in S-Bank's business volumes and in the behavior of its customers.

### 7.2.2 Stress testing

Stress testing exploits various sensitivity analyses, enabling assessment of the impact of certain assumptions and parameters in different risk categories. The sensitivities of expected credit risk losses are calculated with the Probability of Default (PD) and Loss Given Default (LGD) parameters. Concentration risks arising from corporate counterparties and the effects of potential changes in the value of immovable properties collateral are taken into account while stressing credit risk effects on capital adequacy. From a market risk point of view, Net Interest Income (NII) risk is calculated through deviation between the budgeted and the scenario specific net interest income, taking into consideration changes in the market interest rate levels. The effects of risk-free yield curve changes to market prices are calculated based on Economic Value (EV) calculations. Credit spread risk is assessed with estimated effects based on historical data and modelled by simulating the fair value reserve under the chosen scenario and pertaining credit spreads. The stressing of interest rate risk in the banking book is presented in more detail in chapter 10.4.

S-Bank prepares at least annually a long-term capital plan that provides a comprehensive overview of S-Bank's capital and risk positions in various stress scenarios. The ICAAP report also takes into account business continuity under stressed conditions by laying out a detailed plan for increasing capital adequacy and lowering S-Banks risk profile. In addition, the ICAAP process takes into account all relevant risk types for the bank. The relevant risk types identified are shown in Table 3.

**Table 3: Risk types in the ICAAP process**

Risk type, Capital allocation	Pillar 1	Pillar 2
Credit risk	Yes	Yes
Concentration risk	No	Yes
Operational risk	Yes	Yes
Market risk; Foreign exchange rate risk	Yes	Yes
Market risk; Interest rate risk in the banking book	No	Yes
Market risk; Spread risk	No	Yes
Market risk; Equity risk	No	Yes
Market risk; Real estate risk	No	Yes
Strategic and Business risk	No	Yes
Liquidity risk	No	ILAAP

Market risks in the banking book are generally included in Pillar 1 credit risk regulatory capital calculations, as S-Bank does not have a trading book. In the internal ICAAP-process, the capital requirement for market risk is calculated according to S-Bank's internal market risk metrics and model. Market risks are depicted in further detail in chapter 10. Pillar 2 capital requirements for strategic and business risks are based on various scenario analyses.

Liquidity stress tests are conducted primarily annually as a part of the ILAAP process (Internal Liquidity Adequacy Assessment Process), which uniformly with ICAAP report, provides a comprehensive overview of the S-Bank's liquidity risk position in various stress scenarios. Furthermore, the ILAAP report has a similar strategy for increasing S-Bank's liquidity as with the ICAAP report.

Liquidity stress testing is based on 30-day timespan liquidity analyses i.e. the Liquidity Coverage Ratio (LCR) and the adequacy of available long term stable funding compared to the required long-term funding i.e. the Net Stable Funding Ratio (NSFR) in different scenarios. The focal point of stress testing is to ensure the adequacy of S-Bank's liquid assets in order to cover unexpected liquidity outflows encompassed in the stress scenarios and concurrently to confirm that the LCR and NSFR ratios fluctuate in the accepted limits. S-Bank is prepared to withstand unexpectedly large cash outflows and recover its liquidity buffer under stressed conditions.

Direct short-term effects of liquidity shocks can be evaluated with the cost of accumulating S-Bank's cash and liquidity reserves, for instance potential losses due to selling securities at unfavourable costs. Indirect effects are related to the constraints and opportunity costs incurred in the business lines due to a weakened liquidity position. Longer term effects of a stressed liquidity position are related to reputation and they materialize in long-term funding costs and lower than expected business volumes. Ultimately the short and long-term direct and indirect effects of a weakened liquidity position would have negative impact on S-Bank's profitability, whether the liquidity shock is sudden or gradual.

### 7.3 Own funds

In order to support business growth and to prepare for the forthcoming regulatory capital requirement increases, S-Bank executed a targeted share issue to existing shareholders. The share issuance increased own funds by EUR 40 million (CET1) in December 2018. Tier 2 own funds in the Group consist of two debenture term loans with a total nominal value of EUR 50 million. The terms and conditions for these Tier 2 instruments are disclosed in the notes to the financial statements (Group note 26: Subordinated debt).

Table 4 presents a summary of S-Bank's own funds. The first two rows of the table illustrate the reconciliation of own funds to the balance sheet in the financial statements. IFRS 9 Financial instruments -standard became effective on 1 January 2018. The implementation of the IFRS 9 impairment model reduced S-Bank's CET1 own funds by EUR 9,2 million. Unfavourable market situation and widening credit spreads across the global fixed-income markets had a negative impact on Treasury portfolio's mark-to-market valuation. The valuation changes were the main driver behind the declining fair value reserve value.

Table 4: S-Banks own funds summary

Own funds, EUR million	12/2018	12/2017
<b>S-Bank Group's equity</b>	<b>442,1</b>	<b>414,1</b>
Minus the share of owners with no control	-0,2	-0,2
<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	<b>441,9</b>	<b>413,9</b>
Share capital	82,9	82,9
Reserve for invested unrestricted equity	283,8	243,8
Retained earnings	78,2	75,6
Fair value reserve	-3,0	11,6
Other reserves	0,0	0,0
<b>Regulatory adjustments from Common Equity Tier 1 (CET1) capital</b>	<b>-40,0</b>	<b>-41,7</b>
Intangible assets	-38,3	-38,7
Deferred tax assets	0,0	-1,7
Value adjustments due to the requirements for prudent valuation	-1,7	-1,3
<b>Common Equity Tier 1 (CET1) capital</b>	<b>401,8</b>	<b>372,2</b>
<b>Additional Tier 1 (AT1) capital</b>	<b>0,0</b>	<b>0,0</b>
<b>Tier 1 (T1) capital</b>	<b>401,8</b>	<b>372,2</b>
Subordinated debt	50,0	50,0
<b>Tier 2 (T2) capital</b>	<b>50,0</b>	<b>50,0</b>
<b>Own funds, total</b>	<b>451,8</b>	<b>422,2</b>

Table 5 constitutes the own funds disclosure template pursuant to Annex IV to Regulation No. 1423/2013. S-Bank does not have AT1 instruments.

Table 5: S-Bank's own funds (EU 1423/2013)

Own funds, EUR million	Amount on disclosure date		Regulation (EU) No 575/2013 Article Reference
	31 Dec 2018	31 Dec 2017	
<b>Common Equity Tier 1 (CET1) capital: instruments and reserves</b>			
1. Capital instruments and the related share premium accounts	82,9	82,9	26 (1), 27, 28, 29
2. Retained earnings	71,5	63,3	26 (1) (c)
3. Accumulated other comprehensive income (and other reserves)	280,8	255,4	26 (1)
5a. Independently reviewed interim profits net of any foreseeable charge or dividend	6,7	12,4	26 (2)
<b>6. Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	<b>441,9</b>	<b>413,9</b>	
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>			
7. Additional value adjustments (negative amount)	-1,7	-1,3	34, 105
8. Intangible assets (net of related tax liability) (negative amount)	-38,3	-38,7	36 (1) (b), 37
10. Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	0,0	-1,7	36 (1) (c), 38
<b>28. Total regulatory adjustments to Common Equity Tier 1 (CET1)</b>	<b>-40,0</b>	<b>-41,7</b>	
<b>29. Common Equity Tier 1 (CET1) capital</b>	<b>401,8</b>	<b>372,2</b>	
<b>44. Additional Tier 1 (AT1) capital</b>	<b>0,0</b>	<b>0,0</b>	
<b>45. Tier 1 capital (T1 = CET1 + AT1)</b>	<b>401,8</b>	<b>372,2</b>	
<b>Tier 2 (T2) capital: instruments and provisions</b>	<b>0,0</b>		
46. Capital instruments and the related share premium accounts	50,0	50,0	62, 63
<b>58. Tier 2 (T2) capital</b>	<b>50,0</b>	<b>50,0</b>	
<b>59. Total capital (TC = T1 + T2)</b>	<b>451,8</b>	<b>422,2</b>	
<b>60. Total risk weighted assets</b>	<b>2 696,0</b>	<b>2 531,7</b>	
<b>Capital ratios and buffers</b>			
61. Common Equity Tier 1 (as a percentage of total risk exposure amount)	14,9 %	14,7 %	92 (2) (a)
62. Tier 1 (as a percentage of total risk exposure amount)	14,9 %	14,7 %	92 (2) (b)
63. Total capital (as a percentage of total risk exposure amount)	16,8 %	16,7 %	92 (2) (c)
64. Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of risk exposure amount)	7,04 %	7,03 %	CRD 128, 129, 130, 131, 133
65. of which: capital conservation buffer requirement	2,5 %	2,5 %	
66. of which: countercyclical buffer requirement	0,04 %	0,03 %	
68. Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	10,4 %	10,2 %	CRD 128

## 7.4 Capital requirements

The Basel framework sets the minimum requirements for banks' own funds. The minimum requirement for the Common Equity Tier 1 (CET1) capital ratio is 4,5 % and the additional Tier 1 own fund requirement (AT1) is 1,5 %. Tier 1 capital (T1) consists of Common Equity Tier 1 and Additional Tier 1. The minimum requirement for Tier 2 is 2 %, meaning that the total minimum capital requirement is 8 %. In addition, a fixed capital buffer requirement of 2,5 % (non-discretionary, CET1) has been set for Finnish banks. The Financial Supervisory Authority can also set varying discretionary additional capital requirements: a countercyclical capital buffer of 0-2,5 % (CET1) to prevent systemic risks, an O-SII buffer (CET1) of 0-2 % for systemically important banks and a bank-specific additional capital requirement (Pillar 2, CET1) based on the supervisory review and evaluation process (SREP).

In June 2018, the Finnish FSA set a systemic risk buffer (CET1) for all credit institutions authorised in Finland. The requirement for S-Bank is one percent. This obligation will enter into force on 1 July 2019 and will be reviewed annually. So far, the Finnish FSA has not set any other countercyclical capital buffer requirements. Table 6 illustrates the calculation of the institution-specific countercyclical capital buffer in S-Bank. On 31 December 2018, the buffer was 0,04 %.

**Table 6: Geographical breakdown of credit exposures relevant for the calculation of countercyclical capital buffer and capital requirement (1555/2015)**

Geographical breakdown, EUR million	General credit exposures - Exposures value SA	Own funds requirements - Of which General credit exposures		Own funds requirements weights	Countercyclical capital buffer rate
		010	070		
010 Finland	6 637,7		174,9	95,8 %	0,00 %
010 Sweden	56,8		2,5	1,4 %	2,00 %
010 Norway	116,6		1,1	0,6 %	2,00 %
010 United Kingdom	0,2		0,0	0,0 %	1,00 %
010 Czech Republic	0,0		0,0	0,0 %	1,00 %
010 Hong Kong	0,0		0,0	0,0 %	1,875 %
010 Other countries	232,2		4,1	2,3 %	0,00 %
<b>020 Total</b>	<b>7 043,4</b>		<b>182,7</b>	<b>100,0 %</b>	<b>0,04 %</b>

**Table 7: Amount of institution-specific countercyclical capital buffer**

31 Dec 2018, EUR million		Column
		010
010	Total risk exposure amount	2 696,0
020	Institution specific countercyclical buffer rate	0,04 %
030	Institution specific countercyclical buffer requirement (EUR million)	1,1

The potential O-SII buffer does not apply to S-Bank.

In January 2018 the Finnish FSA set a discretionary Pillar 2 additional capital requirement (SREP) for S-Bank. The requirement totals to 2,25 % and is based on interest rate risk in the banking book and the concentration of credit risk. This additional capital requirement was set since it captures risks are not included in the regulatory Pillar 1 capital requirement. The discretionary additional capital requirement became effective on 30 September 2018 and it is valid until further notice, however, up to 30.9.2021. The requirement must be met with CET1 capital.

Table 8 presents S-Bank's capital requirements on 31 December 2018 as percentages and in euros.

**Table 8: S-Bank's total capital requirement, 31 December 2018**

Capital	Minimum capital requirement		Capital conservation buffer		Countercyclical buffer		Pillar 2 (SREP) additional capital requirement		Total capital requirement	
	%	EUR million	%	EUR million	%	EUR million	%	EUR million	%	EUR million
CET1	4,5 %	121,3	2,5 %	67,4	0,04 %	1,1	2,25 %	60,7	9,29 %	250,5
AT1	1,5 %	40,4							1,50 %	40,4
T2	2,0 %	53,9							2,00 %	53,9
<b>Total</b>	<b>8,0 %</b>	<b>215,7</b>	<b>2,5 %</b>	<b>67,4</b>	<b>0,04 %</b>	<b>1,1</b>	<b>2,25 %</b>	<b>60,7</b>	<b>12,79 %</b>	<b>344,8</b>

## 7.5 Capital position and capital adequacy ratios

S-Bank's Pillar 1 total capital adequacy ratio at the end of the financial year was 16,8 % (16,7 %), which is above the internal minimum target level of 15 %. This is mainly due to the increase in own funds (a targeted share issue EUR 40 million).

Table 9 presents a summary of total risk-weighted exposure amounts (RWAs). Off-balance-sheet items are reported within the appropriate exposure classes. The table also indicates the minimum capital requirement (8 %) for each exposure amount. Total RWAs increased by EUR 164,3 million to EUR 2,7 billion, mainly due to strategic growth in lending to retail customers and loans secured by mortgages on immovable property.

**Table 9: Overview of RWAs (EU OV1)**

EUR million	31 Dec 2018		31 Dec 2017	
	RWAs	Minimum capital requirements	RWAs	Minimum capital requirements
1 <b>Credit risk (excluding CCR), standardised approach</b>	<b>2 411,7</b>	<b>192,9</b>	<b>2 250,5</b>	<b>180,0</b>
Central governments or central banks	0,0	0,0	0,0	0,0
Regional governments or local authorities	0,8	0,1	0,0	0,0
Public sector entities	1,0	0,1	1,4	0,1
Institutions	133,1	10,6	126,5	10,1
Corporates	551,2	44,1	577,8	46,2
Retail	646,2	51,7	577,3	46,2
Secured by mortgages on immovable property	974,1	77,9	876,1	70,1
Exposures in default	21,3	1,7	14,8	1,2
Covered bonds	46,5	3,7	36,1	2,9
Collective investments undertakings	24,7	2,0	30,7	2,5
Equity exposures	0,5	0,0	0,3	0,0
Other exposures	12,4	1,0	9,6	0,8
6 <b>CCR</b>	<b>4,8</b>	<b>0,4</b>	<b>4,3</b>	<b>0,3</b>
7 Of which mark to market	1,6	0,1	1,4	0,1
12 Of which CVA	3,1	0,3	2,9	0,2
19 <b>Market risk</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
24 <b>Operational risk, basic indicator approach</b>	<b>273,1</b>	<b>21,8</b>	<b>276,9</b>	<b>22,2</b>
27 <b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>6,4</b>	<b>0,5</b>	<b>0,0</b>	<b>0,0</b>
29 <b>Total</b>	<b>2 696,0</b>	<b>215,7</b>	<b>2 531,7</b>	<b>202,5</b>

The following figure depicts the split of changes in RWAs during the financial period.

Figure 8: Split of changes in RWA

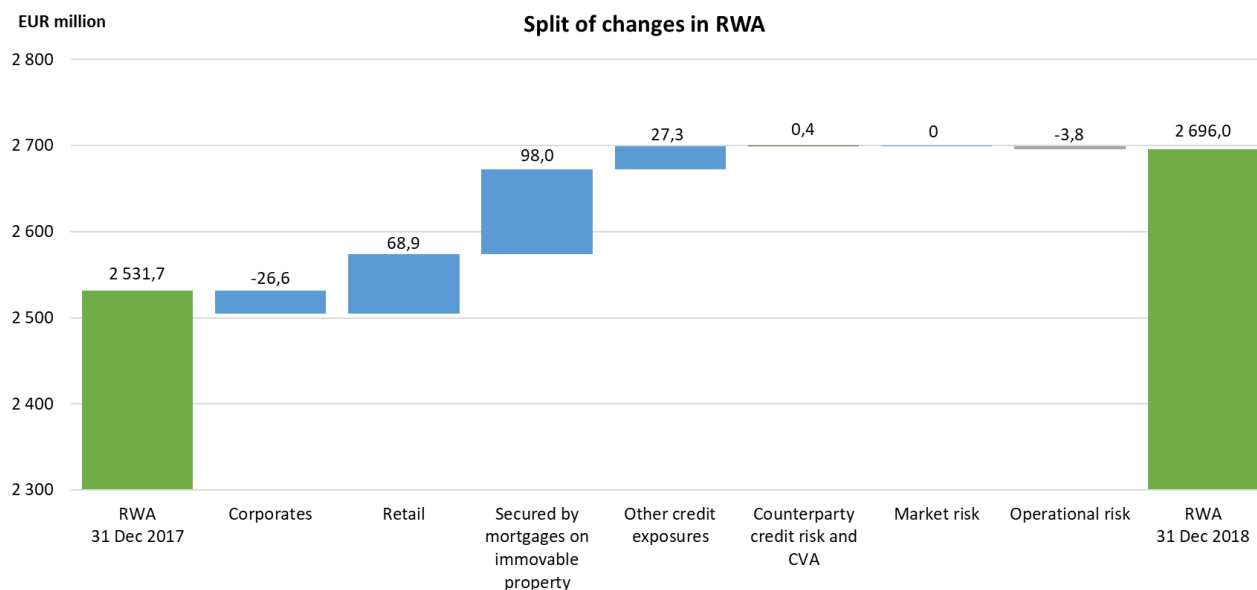
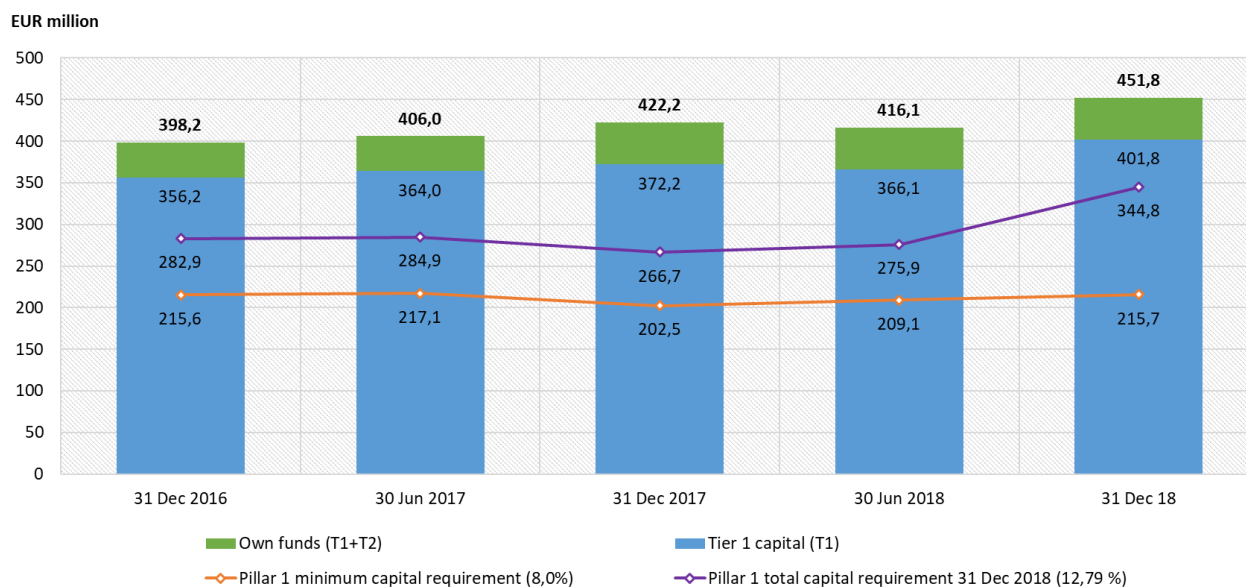


Figure 9 illustrates the euro denominated development in the Pillar 1 minimum capital requirements (8 %), the total capital requirements (12,79 %) and own funds. The additional Pillar 2 (SREP) capital requirement (2,25 %) raised the total capital requirement in the second half of 2018. At the end of the reporting period, the capital buffer in relation to the minimum capital requirement was EUR 236,2 million and EUR 107,0 million to the total capital requirement.

Figure 9: Changes in own fund and capital adequacy position



## 7.6 Leverage ratio

Table 10 presents the information related to leverage ratio. S-Bank's leverage ratio 6,0 % (6,4 %) is strong, while the minimum regulatory requirement is set at 3 %.



Table 10: Leverage ratio (EU) 2016/200

CRR Leverage Ratio, EUR million				
<b>Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures</b>			<b>31 Dec 2018</b>	<b>31 Dec 2017</b>
			<b>Applicable Amount</b>	<b>Applicable Amount</b>
1	Total assets as per published financial statements		6 448,9	5 670,6
4	Adjustments for derivative financial instruments		4,9	3,7
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)		245,2	197,8
7	Other adjustments		-38,3	-40,4
8	<b>Leverage ratio total exposure measure</b>		<b>6 660,7</b>	<b>5 831,8</b>
<b>Table LRCom: Leverage ratio common disclosure</b>			<b>31 Dec 2018</b>	<b>31 Dec 2017</b>
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>				
On-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets, but including collateral)				
1			6 409,9	5 629,2
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)		6 409,9	5 629,2
<b>Derivative exposures</b>				
4	Replacement cost associated with all derivative transactions (i.e. net of eligible cash variation margin)		0,2	0,1
5	Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)		5,3	4,6
11	Total derivatives exposures		5,5	4,7
<b>Other off-balance-sheet exposures</b>				
17	Off-balance sheet exposures at gross notional amount		2 020,4	1 578,5
18	(Adjustments for conversion to credit equivalent amounts)		-1 775,2	-1 380,7
19	Other off-balance sheet exposures		245,2	197,8
<b>Capital and total exposure measure</b>				
20	<b>Tier 1 capital</b>		<b>401,8</b>	<b>372,2</b>
21	<b>Leverage ratio total exposure measure</b>		<b>6 660,7</b>	<b>5 831,8</b>
<b>Leverage ratio</b>				
22	<b>Leverage ratio</b>		<b>6,0 %</b>	<b>6,38 %</b>
<b>Table LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)</b>			<b>31 Dec 2018</b>	<b>31 Dec 2017</b>
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:		6 409,9	5 629,2
EU-2	Trading book exposures		0,0	0,0
EU-3	Banking book exposures, of which:		6 409,9	5 629,2
EU-4	Covered bonds		465,3	360,6
EU-5	Exposures treated as sovereigns		951,2	783,4
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns		5,0	7,1
EU-7	Institutions		430,6	394,7
EU-8	Secured by mortgages of immovable properties		2 786,3	2 505,7
EU-9	Retail exposures		1 143,6	1 006,5
EU-10	Corporate		541,9	518,9
EU-11	Exposures in default		16,8	11,9
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)		69,0	40,5
<b>Row</b>	<b>Table LRQua: Free format text boxes for disclosure on qualitative items</b>		<b>Free format</b>	
1	<b>Description of processes used to manage risk of excessive leverage</b> S-Bank monitors the risk of excessive leverage as part of its continuous reporting. In addition to the regulatory minimum requirements, internal minimum target levels has been set for the Group's leverage ratio and for the CET1 capital ratio as part of the risk strategy.			
2	<b>A description of factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers</b> S-Bank's leverage ratio decreased from 6,4% to 6% during the financial year. The leverage ratio was calculated in accordance with the Capital Requirements Regulation and the Commission Delegated Regulation (EU) 2015/62.  The change during the financial year is attributable to the increase of EUR 828,9 million in the total leverage ratio exposure measure. The change was mainly driven by the strategic growth in the overall banking book lending exposures. This growth is further explained in Section 8. Credit risk and counterparty risk.  Correspondingly, the Tier 1 own funds increased by EUR 29,6 million.			



## 8 Credit and counterparty risks

### 8.1 Highlights 2018

*Credit risk refers to the probability of a counterparty failing to meet its payment obligations as agreed, in other words, causing a credit loss for S-Bank.*

***S-Bank concentrates on credit cards, consumption and housing loans to retail customers. The majority of S-Bank's corporate lending portfolio focuses on financing the construction of new housing companies' apartment buildings. S-Bank's sustains a low credit risk profile in line with the conservative risk appetite, supported by active risk management and monitoring measures.***

- Credit risk constitutes 90 % (2,4 EUR billion) of S-Bank's total risk weighted assets (RWAs). The standardised approach is used for calculating Pillar 1 capital requirements for credit risk. The most substantial items requiring capital include mortgages, retail exposures and corporate exposures. There were no major shifts in the credit portfolio's distribution between different loan types during 2018.
- Exposures secured by immovable property are mostly housing loans issued to retail customers and housing companies. This item forms the largest part of S-Bank's credit portfolio (2,8 EUR billion and 33 %). Respectively, retail exposures comprise 2,7 EUR billion and 32% of the credit portfolio. The total credit portfolio increased by approximately 17 % in relation to the year-end of 2017. This was due to the increase in lending in line with the strategy.
- The Pillar 1 credit risk capital requirement includes the Treasury portfolio, since S-Bank does not have a trading book. Market risk associated with the Treasury portfolio are described in chapter 10. The total value and the total RWA of the Treasury portfolio were 2,2 EUR billion and 494,1 EUR million, respectively.
- Total Expected Credit Losses (ECL) persevered on average around 14 EUR million throughout 2018 and at 0,2 % of the total exposures in the ECL calculation. S-Bank has continued to develop the ECL calculation process throughout the year and progress will continue during 2019.
- Accumulated write-offs remained at low level and amounted to 12,8 EUR million in 2018 (10,9 EUR million in 2017).

### 8.2 Management of credit risk

The Board of Directors approves S-Bank's credit risk strategy and credit decision mandates which are in line with good banking and lending practices in addition to external regulation. The credit risk strategy contains key lending goals and limitations that are aligned with S-Bank's strategy, business plan and risk strategy. Credit risks arising from the Treasury portfolio are described and limited in the Treasury's annual investment plan in line with S-Bank's risk strategy and risk appetite.

Credit risk management measures include the credit granting process, credit risk mitigating factors such as collateral management and guarantees, pricing, credit risk monitoring, control and reporting.

Credit risk is managed continuously by the business and support units, throughout the lifecycle of credit within the framework of the set principles and limits. The methods are based on credit and customer monitoring. Necessary measures are taken to handle potential credit payment delays, overdrafts and misdemeanours. Debt collection is arranged, and credit losses are written-off in accordance with established procedures. In addition, continuous monitoring of the credit portfolio minimises the amount of non-performing loans.

Internal credit risk models are used for the measurement of credit risk and consequently in the credit granting process, credit risk decisions, limit setting, pricing decisions, credit management and control measures. Internal credit risk models are also used to calculate Pillar 2 capital requirements and to calculate Expected

Credit Losses (ECL) under IFRS 9. The ECL calculation process applies to all credits and the Treasury's investment portfolio.

S-Bank uses the probability of default (PD), Loss Given Default (LGD) and Credit Conversion Factor (CCF) parameters for measuring risks in the credit portfolio and for calculating the impairments of financial instruments. The CCF parameter can be employed to determine the amount of liability i.e. Exposure at Default (EAD). By utilising these parameters, the expected credit losses are calculated with a formulae  $PD \times LGD \times EAD$ .

In order to assimilate forward-looking information and its impact on credit risk and the calculation of ECL, S-Bank has performed historical analyses and identified key economic variables affecting potential credit risks. The forecasted economic development is based on S-Bank's economic scenarios. Detailed descriptions concerning the measurement of credit risks, expected credit losses and development of the impairment model are disclosed in S-Bank's financial statements (Group note 1: Accounting policies and Group note 2: Group risks and their management).

S-Bank does not have securitisation positions.

### 8.2.1 Concentration risk

Concentration risk may arise from exposure concentrations in geographic, industry, collateral or single name individual exposures. Concentration risks are managed within the defined limits and followed regularly. In addition, concentration risks are assessed through stress testing in the context of capital planning (ICAAP) as apart of scenario analyses.

This single name risk is managed by limiting these exposures and closely monitoring their development and by assessing the interconnectedness of corporate clients. These risks are the only-form concentration risk for which S-Bank calculates and internal capital requirement.

S-Bank's retail and corporate loan portfolio is distributed geographically across Finland among various individual loans and loan products. Hence, concentration risk does not arise. Table 13 and Table 18 provide further information on the geographical distribution of S-Bank's exposures.

Over half of S-Bank's exposures are loans to retail customers. The corporate lending business is targeted mainly to new housing companies (part of real estate activities). These exposures do not form industry concentration risk, since the credit risk is divided among the owners of the housing company. Table 14 and Table 17 provide further information on the distribution of exposures among different industries.

Immovable property is S-Bank's largest individual category of collateral and may also produce indirect concentration risk. Nevertheless, immovable property collateral is spread to numerous individual loans and is geographically spread across Finland. The collateral values are also monitored and updated (the process is described in chapter 8.2.4) to identify and manage possible collateral concentration risks.

### 8.2.2 Credit granting process and decision levels

The granting of credit is based on a process that includes customer identification, a customer-specific analysis, a payment default check, risk classification and an assessment of the project to be funded along with the collateral (if any) required. Credit is only granted to those customers who have an adequate ability to repay the loan, regardless of potential collateral value. Customers applying for credit undergo an analysis in which the applicant's ability to meet their obligations is investigated. The information to be collected and analysed depends on the credit being applied for, its intended use and the customer group. Credit applications are evaluated with different variables and criteria describing the customer's creditworthiness, such as the customer's socioeconomic profile and repayment ability.

S-Bank's Board of Directors delegates the decision-making power concerning credit granting within the organisation. The decision-making level depends on the amount of requested credit, customer's total responsibilities, potential collateral and guarantees. Credit proposals, decisions and changes to credit are prepared, executed and documented appropriately. The credit decision process is centralised and some of the retail customers' credit decisions are made automatically based on risk scoring models. Automation of the decision-making process enhances credit risk management, profitability, operational efficiency and the

homogeneity of decisions. The material details and risks related to credit being granted are reviewed with the customer in accordance with the operating guidelines.

The FSA has set a loan cap, loan-to-collateral (LTC) ratio, defining a maximum amount for a residential mortgage in proportion to the fair value of collateral provided as security when credit is granted. The LTC ratio was tightened by 5 percentage points, to 85 % from 1 July 2018 onwards. In 2018, the average LTC-ratio for S-Bank's granted residential mortgage was 63,7 % (61,8 %).

### 8.2.3 Credit risk adjustments and non-performing loans

This chapter presents the essential concepts related to credit risk adjustments and non-performing loans. Further information concerning the credit quality of on- and off-balance-sheet exposures is provided in chapter 8.3.1.

#### *Specific and general credit risk adjustments*

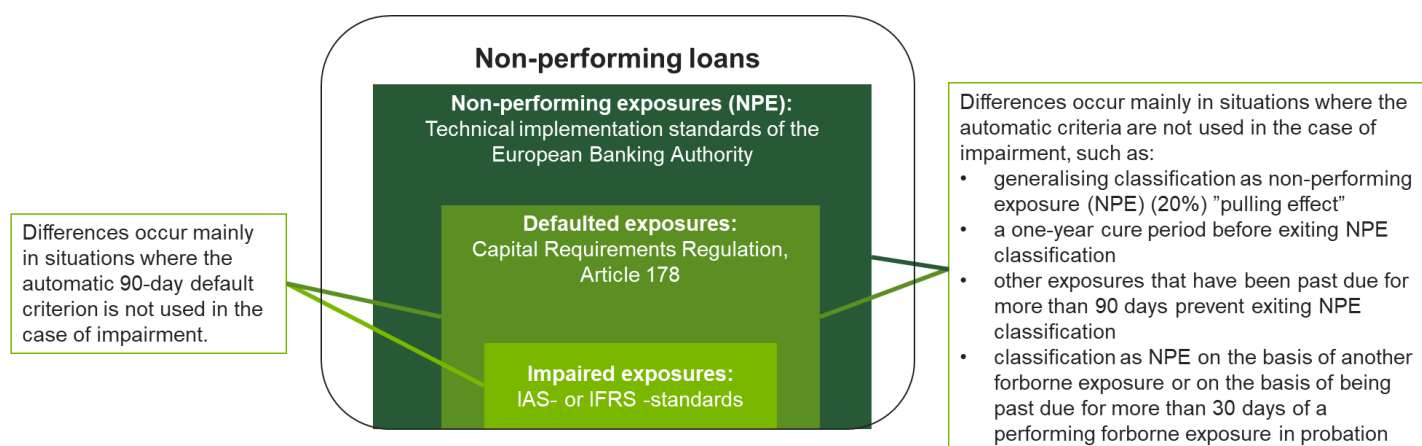
General credit risk adjustments are provisions for credit risk losses for a group of exposures for which the institution has no evidence that a loss has occurred. If exposures are to be included in general credit risk adjustments, the amounts must be freely and fully available to cover loan losses. S-Bank did not have such losses in 2018, so the amount for general credit risk adjustments is zero. Hence, all credit risk adjustments are specific.

**Non-performing loan concept** is comprised of exposures where the debtor is experiencing financial difficulties and therefore loan terms are modified (forbearance) and exposures with repayment delayed by more than 90 days (default) in addition to impaired and non-performing exposures.

Figure 10 depicts the relations and differences in the definitions of these terms between the accounting and CRR framework.

Payment delays, customers' payment ability and other aspects affecting the quality of loans are monitored daily. Necessary measures are made as soon as possible to ensure repayment of the loan. S-Bank's arrears and collections team performs these responsibilities. S-Bank is also regularly developing the effectiveness of credit control and its collection processes that are founded on risk-based monitoring methods. The involvement of non-performing loans is observed constantly and reported to relevant parties by the banking business unit in addition to the Risk Control function.

**Figure 10: Illustration of relationship between non-performing, defaulted and impaired exposures and differences in definition between the accounting and the capital requirement regulation framework**



Source: European Central Bank (Guidance to banks on non-performing loans, March 2017)

### **Impaired exposures**

Since 1 January 2018 S-Bank has been applying the IFRS 9 standard in the valuation of impairments. Hence, S-Bank's internal impairment model is based on the calculation of Expected Credit Losses (ECL), where impairments are calculated and accounted for irrespective of the exposure's credit risk level.

### **Defaulted exposures**

The defaulted concept includes e.g. past due exposures (more than 90 days), impaired exposures and unlikely to pay credit obligations. If a part of the exposure is classified as defaulted, the off-balance-sheet portion of this agreement is also deemed defaulted.

### **Forborne exposures**

Forborne exposures are concessions made to a borrower's original payment schedule to assist them with short-term financial difficulties. The key objective of granting forbearance measures is to pave the way for non-performing borrowers to exit their non-performing status, or to prevent performing borrowers from reaching a non-performing status. Forbearance measures always aim to return the exposure to a situation of sustainable repayment.

### **Non-performing exposures**

The concept of non-performing exposures is broad and includes all exposures that are impaired and defaulted. It also includes other items, such as non-performing forborne exposures. The main conditions for classifying an exposure as non-performing relate to past due and unlikely to pay statuses.

## **8.2.4 Credit risk mitigation**

S-Bank applies collateral and guarantees as credit risk mitigating measures. The Board of Directors decides on the eligible collateral categories and their valuation principles.

S-Bank requires sufficient collateral to reduce credit risk, except for retail credit card and unsecured consumption loans. The methods for assessing collateral value, its coverage, acceptability, extensivity, and liquidation are instructed thoroughly and employed in conjunction with credit granting.

The value of the collateral is calculated based on the market or fair value of the asset and reduced by a haircut. The size of the haircut used, depends on several criteria. Expected credit loss (ECL) calculations take into account the effect of collateral and the uncertainties and costs associated with its realisation as a part of the Loss Given Default (LGD) modelling.

Immovable property collateral values are monitored and updated during the lifecycle of the credit. S-Bank uses statistical methods to monitor the value of the property and to identify property in need of revaluation. The identified objects are assessed separately by an independent appraiser providing transparent documentation on the justification of the suggested revaluation and market value of the asset. This process is conducted annually. The collateral values are also examined in the context of changing the counterparty's loan terms. Immovable property collateral and stress tests are discussed previously (chapter 7.2.2).

Credit risk management techniques used in the calculation of capital requirements include collateral secured by immovable property and guarantee arrangements (such as government guarantees for student, -residential and -housing companies' mortgage as well as financial mortgages guarantees by an external service provider). By using guarantees the customer risk is transferred from the counterparty to the grantor.

Indirect concentration risk of collateral is described in chapter 8.2.1. Further information concerning credit risk mitigation is provided in chapter 8.3.2. The usage of derivatives and associated counterparty risk is described in chapter 8.2.5

## **8.2.5 Counterparty credit risks**

According to the CRR, counterparty credit risk (CCR) may arise from a derivative contract on the occasion where the counterparty is not likely to meet their contractual obligations and the contract's market value is positive. Derivative contracts are used to hedge a specific balance sheet item, position or cash flow against

future value changes. S-Bank uses derivatives solely for hedging purposes (more information in chapters 10.2 and 10.3.)

S-Bank uses the mark-to-market method for determining the CCR and the current replacement cost of all derivatives contracts with a positive market value. Further information on derivative monitoring is presented in section 10.6).

S-Bank enters into ISDA (International Swaps and Derivatives Association) and CSA (Credit Support Annex) agreements with its counterparties that have derivative contracts. These agreements reduce counterparty credit risk. The agreements specify the general terms and conditions related to derivatives and the collateral application methods between the counterparties. When calculating the maximum amount of counterparty credit risk related to financial instruments, the open position includes cash and cash equivalents, investments, deposits and other financing transactions, such as derivative contracts. The limits set for counterparties are discussed in section 5.2.

S-Bank does not have any exposures related to central counterparties (CCP).

S-Bank does not have any collateral in its possession related to derivatives and there is no collateral used in Securities Financing Transactions (SFTs).

S-Bank does not have an international credit rating. Hence, S-Bank's collateral requirements are not influenced by a credit rating.

The wrong-way risk as specified in Article 291 of the CRR does not apply to S-Bank.

Further information concerning counterparty credit risk can be found in chapter 8.3.3.

### 8.2.6 Credit risk monitoring and reporting

The banking business unit is responsible for credit risk management and the regular monitoring of the balance sheet, credit portfolios, product development and customer segment specific development. Assessed reports include e.g. information on achieving the set objectives and actualised risk levels, follow-up on different credit risk grades, the performance of credit risk models, development of non-performing loans and expected credit losses, risk concentrations and collateral values in addition to the consistency of the credit management process.

The Risk Control function monitors and ensures that the business and support units operate in accordance with the principles and limits set in the risk and credit risk strategies. The Risk Control function reports regularly on S-Bank's credit risk profile and the sufficiency of risk management procedures to the Risk Committee, the Risk and Audit Committee and the Board of Directors.

## 8.3 Credit risk exposure

This chapter presents relevant numerical and qualitative information concerning S-Bank's credit risk exposures.

Table 11 illustrates the net values of on-balance-sheet and off-balance-sheet credit risk exposures. The total credit portfolio increased by approximately 17 % in relation to the year-end situation of 2017. This was due to the increase in lending in line with the strategy. Exposures secured by immovable property form the largest part of S-Bank's credit portfolio (33,3 %). This item rose by 11 percentage points since 2017. Respectively, retail exposures (e.g. credit cards, consumption and student loans to the retail customers) comprise 32% of credit portfolio, increasing by 31 percentage points from 2017.

**Table 11: Total and average net amount of exposures (EU CRB-B)**

Exposure classes, EUR million	31 Dec 2018		31 Dec 2017	
	a Net value of exposures at the end of the period	b Average net exposures over the period	a Net value of exposures at the end of the period	b Average net exposures over the period
16 Central governments or central banks	463,2	272,7	519,3	303,4
17 Regional governments or local authorities	488,1	431,0	264,0	218,0
18 Public sector entities	5,0	6,6	7,1	7,1
21 Institutions	436,2	403,5	400,4	496,6
22 Corporates	1 013,1	1 063,4	1 032,1	1 144,5
24 Retail	2 672,7	2 470,4	2 046,7	1 813,0
26 Secured by mortgages on immovable property	2 806,3	2 689,7	2 529,8	2 437,7
28 Exposures in default	17,0	13,5	11,9	12,1
29 Items associated with particularly high risk	0,0	0,0	0,0	9,3
30 Covered bonds	465,3	448,5	360,6	328,0
32 Collective investments undertakings	24,7	27,4	30,7	27,3
33 Equity exposures	0,5	0,3	0,3	0,3
34 Other exposures	43,8	23,8	9,6	18,9
<b>35 Total standardised approach</b>	<b>8 435,9</b>	<b>7 850,9</b>	<b>7 212,4</b>	<b>6 816,1</b>

Table 12 describes the amount of credit risk exposure without taking into account collateral or other credit enhancement arrangements. The loan portfolio figures contain on- and off-balance-sheet exposures. The Expected Credit Losses (ECLs) at the end of the financial year totalled to EUR 14,5 million. The amount is within acceptable levels in relation to the credit portfolio total size. Expected credit losses have grown steadily during the financial year, in line with the increase in credit risk exposures.

In comparison with Table 11, central governments or central banks and regional governments or local authorities do not generate ECL. Therefore, these exposures are omitted from Table 12.

**Table 12: Loan portfolios and Expected Credit Losses, 31 Dec 2018**

Loan portfolios, EUR million	ECL of portfolio	Portfolio exposures	ECL / exposures ( % )
Unsecured retail loans and credits	8,1	1 396,4	0,6 %
Secured retail loans	4,7	3 536,0	0,1 %
Investments	0,9	1 251,3	0,1 %
Corporate loans (Corporates and Housing Company loans)	0,9	1 113,1	0,1 %
<b>Total</b>	<b>14,5</b>	<b>7 296,9</b>	<b>0,2 %</b>

Table 13 provides a breakdown of on-balance-sheet and off-balance-sheet exposures by geographical areas and exposure classes. The majority of the exposures (app. 92 %) are in Finland and app. 5 % are in the other Nordic countries. There were no significant changes in the geographical distribution of exposure classes in relation to 2017.



**Table 13: Geographical breakdown of exposures (EU CRB-C)**

Exposure classes 31 Dec 2018, EUR million		b	a	k	j	n
		Finland	Nordic countries	Other EU member countries	Other countries	Total
7	Central governments or central banks	463,2	0,0	0,0	0,0	463,2
8	Regional governments or local authorities	450,5	16,2	0,0	21,3	488,1
9	Public sector entities	5,0	0,0	0,0	0,0	5,0
12	Institutions	198,6	158,8	51,3	27,4	436,2
13	Corporates	957,2	54,2	0,9	0,8	1 013,1
14	Retail	2 671,0	0,3	0,6	0,8	2 672,7
15	Secured by mortgages on immovable property	2 804,3	0,6	0,9	0,4	2 806,3
16	Exposures in default	17,0	0,0	0,0	0,0	17,0
18	Covered bonds	124,7	217,4	0,0	123,2	465,3
20	Collective investments undertakings	19,3	0,0	0,0	5,4	24,7
21	Equity exposures	0,4	0,0	0,1	0,0	0,5
22	Other exposures	42,8	0,0	0,0	0,0	43,8
<b>23</b>	<b>Total standardised approach</b>	<b>7 754,1</b>	<b>447,6</b>	<b>53,9</b>	<b>179,4</b>	<b>8 435,9</b>

Exposure classes 31 Dec 2017, EUR million		b	a	k	j	n
		Finland	Nordic countries	Other EU member countries	Other countries	Total
7	Central governments or central banks	497,1	22,2	0,0	0,0	519,3
8	Regional governments or local authorities	250,9	13,1	0,0	0,0	264,0
9	Public sector entities	7,1	0,0	0,0	0,0	7,1
12	Institutions	251,5	102,2	34,7	12,0	400,4
13	Corporates	993,2	38,2	0,0	0,8	1 032,1
14	Retail	2 044,4	0,1	1,7	0,5	2 046,7
15	Secured by mortgages on immovable property	2 528,9	0,2	0,4	0,2	2 529,8
16	Exposures in default	11,9	0,0	0,0	0,0	11,9
18	Covered bonds	125,9	178,8	0,0	55,9	360,6
20	Collective investments undertakings	26,2	0,0	0,0	4,5	30,7
21	Equity exposures	0,2	0,0	0,1	0,0	0,3
22	Other exposures	9,6	0,0	0,0	0,0	9,6
<b>23</b>	<b>Total standardised approach</b>	<b>6 746,8</b>	<b>354,8</b>	<b>36,9</b>	<b>73,9</b>	<b>7 212,4</b>

Table 14 provides a breakdown of exposures by industry and exposure classes. The table includes all industries and exposure classes determined as material. Industries and exposure classes that have been deemed non-material are presented in one row ("Other exposures") or one column ("Other services, total"). Approximately 59 % of S-Bank's credit exposures are those for which an industry category has not been determined. This column contains mainly retail customers' credits. There have been no significant changes in the industry distribution of exposures from 2017.

Table 14: Concentration of exposures by industry (EU CRB-D)

Exposure classes 31 Dec 2018, EUR million		c	d	f	g	h	m	v	l	n	o	s	w	u
		Manufacturing	Electricity, gas, steam and air conditioning supply	Construction	Wholesale and retail trade	Transport and storage	Professional, scientific and technical activities	Financial and insurance activities	Real estate activities	Administrative and support service activities	Public administration and defence, compulsory social security	Other services, total	No Industry	Total
7	Central governments or central banks	0,0	0,0	0,0	0,0	0,0	0,0	439,6	0,0	0,0	23,6	0,0	0,0	<b>463,2</b>
8	Regional governments or local authorities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	484,3	3,8	0,0	<b>488,1</b>
9	Public sector entities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,0	0,0	0,0	<b>5,0</b>
12	Institutions	0,0	0,0	0,0	0,0	0,0	0,0	436,2	0,0	0,0	0,0	0,0	0,0	<b>436,2</b>
13	Corporates	111,2	53,7	40,7	366,6	22,8	20,5	76,8	257,4	38,4	0,0	25,1	0,0	<b>1 013,1</b>
14	Retail	0,1	0,0	2,0	4,3	0,4	2,6	6,5	5,1	0,8	0,0	2,3	2 648,6	<b>2 672,7</b>
15	Secured by mortgages on immovable property	0,0	0,0	0,1	0,0	0,0	0,0	49,6	489,8	0,1	0,0	0,1	2 266,6	<b>2 806,3</b>
16	Exposures in default	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	17,0	<b>17,0</b>
18	Covered bonds	0,0	0,0	0,0	0,0	0,0	0,0	465,3	0,0	0,0	0,0	0,0	0,0	<b>465,3</b>
20	Collective investments undertakings	0,0	0,0	0,0	0,0	0,0	0,0	16,2	8,5	0,0	0,0	0,0	0,0	<b>24,7</b>
21	Equity exposures	0,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,2	0,0	<b>0,5</b>
22	Other exposures	0,0	0,0	0,0	0,0	0,0	0,0	28,8	0,0	0,0	0,0	0,0	15,0	<b>43,8</b>
23	<b>Total standardised approach</b>	<b>111,3</b>	<b>53,8</b>	<b>42,8</b>	<b>371,0</b>	<b>23,2</b>	<b>23,2</b>	<b>1 519,3</b>	<b>760,8</b>	<b>39,3</b>	<b>512,9</b>	<b>31,4</b>	<b>4 947,1</b>	<b>8 435,9</b>

Exposure classes 31 Dec 2017, EUR million		c	d	f	g	h	m	v	l	n	o	s	w	u
		Manufacturing	Electricity, gas, steam and air conditioning supply	Construction	Wholesale and retail trade	Transport and storage	Information and communication	Financial and insurance activities	Real estate activities	Administrative and support service activities	Public administration and defence, compulsory social security	Other services, total	No Industry	Total
7	Central governments or central banks	0,0	0,0	0,0	0,0	0,0	0,0	491,9	0,0	0,0	27,4	0,0	0,0	<b>519,3</b>
8	Regional governments or local authorities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	264,0	0,0	0,0	<b>264,0</b>
9	Public sector entities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	7,1	0,0	0,0	<b>7,1</b>
12	Institutions	0,0	0,0	0,0	0,0	0,0	0,0	400,4	0,0	0,0	0,0	0,0	0,0	<b>400,4</b>
13	Corporates	100,6	121,7	123,4	369,5	21,3	25,9	102,1	99,4	24,9	0,0	26,5	17,0	<b>1 032,1</b>
14	Retail	1,2	0,0	2,5	0,5	0,4	1,2	8,5	47,0	0,5	0,0	5,9	1 979,0	<b>2 046,7</b>
15	Secured by mortgages on immovable property	0,0	0,0	5,2	0,0	0,0	0,0	81,7	434,3	1,9	0,0	0,3	2 006,3	<b>2 529,8</b>
16	Exposures in default	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	11,8	<b>11,9</b>
18	Covered bonds	0,0	0,0	0,0	0,0	0,0	0,0	360,6	0,0	0,0	0,0	0,0	0,0	<b>360,6</b>
20	Collective investments undertakings	0,0	0,0	0,0	0,0	0,0	0,0	21,0	9,7	0,0	0,0	0,0	0,0	<b>30,7</b>
21	Equity exposures	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	<b>0,3</b>
22	Other exposures	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	9,6	<b>9,6</b>
23	<b>Total standardised approach</b>	<b>101,9</b>	<b>121,7</b>	<b>131,2</b>	<b>370,0</b>	<b>21,7</b>	<b>27,1</b>	<b>1 466,4</b>	<b>590,4</b>	<b>27,2</b>	<b>298,5</b>	<b>32,7</b>	<b>4 023,7</b>	<b>7 212,4</b>



Table 15 illustrates the distribution of net on-balance-sheet exposures by residual maturity and exposure classes. In a divergence from the tables presented above, this table does not include off-balance-sheet exposures. Approximately 45 % of exposures have a residual maturity of more than ten years, which is common for residential mortgages.

**Table 15: Maturity of exposures (EU CRB-E)**

Exposure classes 31 Dec 2018, EUR million	b	b	c	d	d	f
	<= 3 months	> 3 months <= 12 months	> 1 years <= 5 years	> 5 years <= 10 years	> 10 years	Total
7 Central governments or central banks	439,6	0,0	1,1	22,5	0,0	463,2
8 Regional governments or local authorities	249,2	121,5	92,3	25,1	0,0	488,1
9 Public sector entities	0,0	5,0	0,0	0,0	0,0	5,0
12 Institutions	34,1	52,3	336,1	1,6	12,0	436,2
13 Corporates	124,2	53,4	156,2	40,9	167,2	541,9
14 Retail	321,1	5,7	153,2	216,6	446,9	1 143,6
15 Secured by mortgages on immovable property	60,5	13,0	263,3	207,2	2 242,2	2 786,3
16 Exposures in default	3,9	0,1	1,3	2,0	9,5	16,8
18 Covered bonds	51,1	5,1	391,6	17,4	0,0	465,3
20 Collective investments undertakings	0,0	0,0	0,0	0,0	24,7	24,7
21 Equity exposures	0,0	0,0	0,0	0,0	0,5	0,5
22 Other exposures	42,7	0,0	0,0	0,1	0,0	43,8
<b>23 Total standardised approach</b>	<b>1 326,5</b>	<b>256,4</b>	<b>1 395,2</b>	<b>533,4</b>	<b>2 903,0</b>	<b>6 415,5</b>

Exposure classes 31 Dec 2017, EUR million	b	b	c	d	d	f
	<= 3 months	> 3 months <= 12 months	> 1 years <= 5 years	> 5 years <= 10 years	> 10 years	Total
7 Central governments or central banks	518,2	0,0	1,1	0,0	0,0	519,3
8 Regional governments or local authorities	131,5	37,5	95,1	0,0	0,0	264,0
9 Public sector entities	0,0	2,0	5,1	0,0	0,0	7,1
12 Institutions	56,9	52,1	272,2	7,5	10,7	399,4
13 Corporates	187,8	28,0	213,2	38,9	51,0	518,9
14 Retail	278,8	7,0	153,0	201,8	365,9	1 006,5
15 Secured by mortgages on immovable property	104,9	8,1	267,9	206,4	1 918,4	2 505,7
16 Exposures in default	2,6	0,1	1,1	1,1	7,1	11,9
18 Covered bonds	5,1	64,9	168,7	121,9	0,0	360,6
20 Collective investments undertakings	0,0	0,0	0,0	0,0	30,7	30,7
21 Equity exposures	0,0	0,0	0,0	0,0	0,3	0,3
22 Other exposures	9,3	0,0	0,0	0,2	0,0	9,6
<b>23 Total standardised approach</b>	<b>1 295,2</b>	<b>199,7</b>	<b>1 177,3</b>	<b>577,7</b>	<b>2 384,1</b>	<b>5 633,9</b>

### 8.3.1 Credit quality and non-performing loans

Table 16 illustrates the defaulted and non-defaulted exposures as well as the credit risk adjustments and credit losses. Defaulted exposures remained at a very low level (0,2 % of the on- and off-balance sheet exposures in the 2018 financial statements). Specific credit risk adjustments increased in comparison to 2017 mainly due to implementation of the IFRS 9 impairment model. Accumulated write-offs were slightly larger than in the previous financial period, but the proportional amount in relation to the loan portfolio has remained at the same level (around 0,2 % of exposures). The last column of the table shows the net values corresponding to the accounting values in financial statements. Hence, this definition differs from the net asset value used in capital requirement calculations.

Further information on credit exposure related to the impairment model, calculation of ECL and pertinent quantitative and qualitative description is presented in financial statements (Group note 2: Group risks and their management).

Table 16: Credit quality of exposures by exposure class and instrument (EU CR1-A)

Exposure classes 31 Dec 2018, EUR million	a Gross carrying values of		c Specific credit risk adjustment	d General credit risk adjustment	e Accumulated write-offs	f Credit risk adjustment of the period	g Net values
	Defaulted exposures	Non- defaulted exposures					
37 Loans and advances	19,4	4 652,8	12,8	0,0	12,8	12,8	4 659,4
38 Debt securities	0,0	1 698,8	0,0	0,0	0,0	0,0	1 698,8
Other	0,0	90,6	0,0	0,0	0,0	0,0	90,6
<b>On-balance-sheet amount, total</b>	<b>19,4</b>	<b>6 442,3</b>	<b>12,8</b>	<b>0,0</b>	<b>12,8</b>	<b>12,8</b>	<b>6 448,9</b>
<b>Off-balance-sheet amount, total</b>	<b>0,2</b>	<b>2 020,3</b>	<b>0,8</b>	<b>0,0</b>	<b>0,0</b>	<b>0,8</b>	<b>2 019,7</b>
<b>Total</b>	<b>19,6</b>	<b>8 462,6</b>	<b>13,6</b>	<b>0,0</b>	<b>12,8</b>	<b>13,6</b>	<b>8 468,5</b>

Exposure classes 31 Dec 2017, EUR million	a Gross carrying values of		c Specific credit risk adjustment	d General credit risk adjustment	e Accumulated write-offs	f Credit risk adjustment of the period	g Net values
	Defaulted exposures	Non- defaulted exposures					
37 Loans and advances	12,4	4 241,1	4,2	0,0	10,9	4,2	4 249,2
38 Debt securities	0,0	1 331,4	0,0	0,0	0,0	0,0	1 331,4
Other	0,0	89,9	0,0	0,0	0,0	0,0	89,9
<b>On-balance-sheet amount, total</b>	<b>12,4</b>	<b>5 662,5</b>	<b>4,2</b>	<b>0,0</b>	<b>10,9</b>	<b>4,2</b>	<b>5 670,6</b>
<b>Off-balance-sheet amount, total</b>	<b>0,0</b>	<b>1 578,5</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>1 578,5</b>
<b>Total</b>	<b>12,4</b>	<b>7 241,0</b>	<b>4,2</b>	<b>0,0</b>	<b>10,9</b>	<b>4,2</b>	<b>7 249,1</b>

Table 17 shows a breakdown of on- and off-balance-sheet credit quality by industry sector. Defaulted exposures and accumulated write-offs relate to "No industry" row, including retail customers' credits secured by mortgages and other retail customer credits.

Table 17: Credit quality of exposures by industry (EU CR1-B)

31 Dec 2018, EUR million	a Gross carrying values of		c Specific credit risk adjustment	d General credit risk adjustment	e Accumulated write-offs	f Credit risk adjustment charges of the period	g Net values
	Defaulted exposures	Non- defaulted exposures					
3 Manufacturing	0,0	111,3	0,0	0,0	0,0	0,0	111,3
4 Electricity, gas, steam and air conditioning supply	0,0	54,2	0,4	0,0	0,0	0,4	53,8
6 Construction	0,0	42,7	0,0	0,0	0,0	0,0	42,7
7 Wholesale and retail trade	0,0	371,0	0,0	0,0	0,0	0,0	371,0
8 Transport and storage	0,0	23,2	0,0	0,0	0,0	0,0	23,2
11 Financial and insurance activities	0,0	1 514,7	0,2	0,0	0,0	0,2	1 514,5
12 Real estate activities	0,0	761,0	0,2	0,0	0,0	0,2	760,8
13 Professional, scientific and technical activities	0,0	23,2	0,0	0,0	0,0	0,0	23,2
14 Administrative and support service activities	0,0	39,3	0,0	0,0	0,0	0,0	39,3
18 Public administration and defence, compulsory social security	0,0	512,9	0,0	0,0	0,0	0,0	512,9
Other services	0,0	31,4	0,0	0,0	0,0	0,0	31,4
No Industry	19,6	4 977,8	12,7	0,0	12,8	12,7	4 984,6
<b>Total</b>	<b>19,6</b>	<b>8 462,6</b>	<b>13,6</b>	<b>0,0</b>	<b>12,8</b>	<b>13,6</b>	<b>8 468,5</b>

Table 18 illustrates the credit quality of S-Bank's on- and off-balance-sheet exposures by geography. Distribution of defaulted exposures and accumulated write-offs is consistent with overall distribution of S-Bank's exposures.

**Table 18: Credit quality of exposures by geography (EU CR1-C)**

31 Dec 2018, EUR million	Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					
Finland	19,6	7 785,7	13,6	0,0	12,8	13,6	7 791,7
Nordic countries	0,0	443,6	0,0	0,0	0,0	0,0	443,6
Other EU member countries	0,0	53,9	0,0	0,0	0,0	0,0	53,9
7 Other countries	0,0	179,4	0,0	0,0	0,0	0,0	179,4
11 <b>Total</b>	<b>19,6</b>	<b>8 462,6</b>	<b>13,6</b>	<b>0,0</b>	<b>12,8</b>	<b>13,6</b>	<b>8 468,5</b>

Table 19 provides an ageing analysis of accounting on-balance-sheet past-due exposures regardless of their impairment status. Most of the past due exposures fall into the less than 61 days of maturity (approx. 45 % of total past-due exposures). Consequently, past due exposures with over one-year maturity amount to around 14 %. The share of past due exposures to the on-balance-sheet gross carrying values is very low at 0,5 % (0,6 %).

**Table 19: Ageing of past-due exposures (EU CR1-D)**

Balance sheet item 31 Dec 2018, EUR million	b	c	d	e	f	Total
	> 30 days ≤ 61 days	> 61 days ≤ 91 days	> 91 days ≤ 181 days	> 181 days ≤ 1 year	> 1 year	
1 Loans	17,4	4,9	8,6	2,5	5,2	38,6
3 <b>Total exposures</b>	<b>17,4</b>	<b>4,9</b>	<b>8,6</b>	<b>2,5</b>	<b>5,2</b>	<b>38,6</b>

Balance sheet item 31 Dec 2017, EUR million	b	c	d	e	f	Total
	> 30 days ≤ 61 days	> 61 days ≤ 91 days	> 91 days ≤ 181 days	> 181 days ≤ 1 year	> 1 year	
1 Loans	13,0	5,9	4,9	3,6	4,0	31,4
3 <b>Total exposures</b>	<b>13,0</b>	<b>5,9</b>	<b>4,9</b>	<b>3,6</b>	<b>4,0</b>	<b>31,4</b>

Table 20 provides an overview of non-performing and forborne exposures. The share of on- and off-balance-sheet forborne exposures (EUR 21,3 million in total) accounts for approximately 0,3 % and the share of non-performing exposures (EUR 21,2 million) accounts for approximately 0,3 % of the gross carrying value of the on- and off-balance sheet exposures.

Table 20: Non-performing and forborne exposures (EU CR1-E)

		a	b	c	d	e	f	g	h	i	j	k	
		Gross carrying values of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				
31 Dec 2018, EUR million		Of which performing but past due > 31 <= 90 days		Of which non-performing					On performing exposures	On non-performing exposures			
							Of which defaulted	Of which impaired	Of which forborne	Of which forborne	Of which forborne	Of which forborne	
010	Debt securities	1 698,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
020	Loans and advances	4 672,2	20,8	15,6	21,0	19,4	19,1	5,5	10,1	0,3	2,7	0,9	
	Other	90,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
	<b>On-balance-sheet exposures, total</b>	<b>6 461,7</b>	<b>20,8</b>	<b>15,6</b>	<b>21,0</b>	<b>19,4</b>	<b>19,1</b>	<b>5,5</b>	<b>10,1</b>	<b>0,3</b>	<b>2,7</b>	<b>0,9</b>	
030	<b>Off-balance-sheet exposures, total</b>	<b>2 020,4</b>	<b>0,0</b>	<b>0,1</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,1</b>	<b>0,8</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	

		a	b	c	d	e	f	g	h	i	j	k	
		Gross carrying values of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				
31 Dec 2017, EUR million		Of which performing but past due > 31 <= 90 days		Of which non-performing					On performing exposures	On non-performing exposures			
							Of which defaulted	Of which impaired	Of which forborne	Of which forborne	Of which forborne	Of which forborne	
010	Debt securities	1 331,45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
020	Loans and advances	4 253,47	17,79	13,98	14,27	12,38	1,46	3,45	3,73	0,05	0,51	0,10	
	Other	89,94	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	<b>On-balance-sheet exposures, total</b>	<b>5 674,86</b>	<b>17,79</b>	<b>13,98</b>	<b>14,27</b>	<b>12,38</b>	<b>1,46</b>	<b>3,45</b>	<b>3,73</b>	<b>0,05</b>	<b>0,51</b>	<b>0,10</b>	
030	<b>Off-balance-sheet exposures, total</b>	<b>1 578,50</b>	<b>0,00</b>	<b>0,96</b>	<b>0,18</b>	<b>0,00</b>	<b>0,00</b>	<b>0,02</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	

Table 21 identifies the changes in the stock of specific credit risk adjustments held against loans and debt securities that are defaulted or impaired.

Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A)

31 Dec 2018, EUR million		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	<b>Opening balance</b>	<b>14,1</b>	<b>0,0</b>
2	Changes due to change in credit risk (net)	1,6	0,0
3	Increases due to origination and acquisition	1,7	0,0
4	Decreases due to derecognition	-1,8	0,0
5	Decrease in allowance account due to write-offs	-1,2	0,0
6	<b>Closing balance</b>	<b>14,5</b>	<b>0,0</b>
7	Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	0,0	0,0
8	Amounts written-off directly to the statement of profit or loss	0,0	0,0

Table 22 identifies the changes in the stock of defaulted loans and debt securities.

**Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)**

	31 Dec 2018, EUR million	a Gross carrying value defaulted exposures
1	<b>Opening balance</b>	12,4
2	Loans and debt securities that have defaulted or impaired since the last reporting period	28,4
3	Returned to non-defaulted status	-4,0
4	Amounts written off	-12,7
5	Other changes	-4,5
6	<b>Closing balance</b>	19,6

### 8.3.2 Credit risk mitigation

Table 23 illustrates information on exposures secured by collateral and guarantees used as credit risk mitigants in terms of calculating the risk-weighted exposure amounts (RWAs).

**Table 23: CRM techniques – overview (EU CR3)**

Exposure value 31 Dec 2018, EUR million	a Exposures unsecured - Carrying amount	b Exposures secured - Carrying amount	c Exposures secured by collateral	d Exposures secured by financial guarantees	e Exposures secured by credit derivatives
1 Total loans	3 316,8	3 363,0	2 963,5	399,5	0,0
2 Total debt securities	1 698,8	0,0	0,0	0,0	0,0
3 <b>Total exposures</b>	<b>5 015,7</b>	<b>3 363,0</b>	<b>2 963,5</b>	<b>399,5</b>	<b>0,0</b>
4 Of which defaulted	8,4	8,6	7,9	0,7	0,0

Exposures secured by collateral form 88 % of the total exposures secured. This item mostly carries immovable property, being S-Bank's largest category of collateral. In comparison to 2017, the amount of exposures secured by immovable property has increased in line with the strong growth of granted residential mortgages.

The Finnish Government is the most significant individual guarantor. The rest of the guarantee column mainly consists of guarantee insurances covering residential mortgages. Both guarantee categories have augmented during 2018 due to the growth of residential mortgages and student loans.

S-Bank's procedures regarding collateral or guarantees have not changed meaningfully during 2018. Also, there were no significant changes in the general quality of collateral held.

Table 24 presents information regarding credit risk management (CRM) techniques at the end of the financial period. On-balance sheet exposures amount to approximately 76 % of all credit risk exposures (EUR 8,4 billion) before Credit Conversion Factor (CCF) and Credit Risk Mitigation (CRM). The total density of risk-weighted exposure amounts has decreased by approximately 2,2 percentage points in relation to 2017.

Table 24: Credit risk exposure and CRM effects (EU CR4)

Exposure classes 31 Dec 2018, EUR million		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	463,2	0,0	722,4	4,7	0,0	0,0 %
2	Regional governments or local authorities	488,1	0,0	488,2	0,0	0,8	0,2 %
3	Public sector entities	5,0	0,0	5,0	0,0	1,0	20,0 %
6	Institutions	430,6	0,0	418,5	0,0	133,1	31,8 %
7	Corporates	541,9	471,2	585,0	42,0	551,2	87,9 %
8	Retail	1 143,6	1 529,1	853,3	11,7	646,2	74,7 %
9	Secured by mortgages on immovable property	2 786,3	19,9	2 786,3	4,8	974,1	34,9 %
10	Exposures in default	16,8	0,2	16,8	0,0	21,3	126,7 %
12	Covered bonds	465,3	0,0	465,3	0,0	46,5	10,0 %
14	Collective investments undertakings	24,7	0,0	24,7	0,0	24,7	100,0 %
15	Equity	0,5	0,0	0,5	0,0	0,5	100,0 %
16	Other items	43,8	0,0	43,8	0,0	18,8	42,9 %
<b>17</b>	<b>Total</b>	<b>6 409,9</b>	<b>2 020,4</b>	<b>6 409,9</b>	<b>63,2</b>	<b>2 418,1</b>	<b>37,4 %</b>

Exposure classes 31 Dec 2017, EUR million		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	519,3	0,0	687,1	3,5	0,0	0,0 %
2	Regional governments or local authorities	264,0	0,0	264,2	0,0	0,0	0,0 %
3	Public sector entities	7,1	0,0	7,1	0,0	1,4	20,0 %
6	Institutions	399,4	1,0	418,3	0,5	128,0	30,6 %
7	Corporates	518,9	513,3	578,4	35,4	577,8	94,1 %
8	Retail	1 006,5	1 040,2	760,1	12,5	577,3	74,7 %
9	Secured by mortgages on immovable property	2 505,7	24,1	2 505,7	5,1	876,1	34,9 %
10	Exposures in default	11,9	0,0	11,9	0,0	14,8	124,4 %
12	Covered bonds	360,6	0,0	360,6	0,0	36,1	10,0 %
14	Collective investments undertakings	30,7	0,0	30,7	0,0	30,7	100,0 %
15	Equity	0,3	0,0	0,3	0,0	0,3	100,0 %
16	Other items	9,6	0,0	9,6	0,0	9,6	100,0 %
<b>17</b>	<b>Total</b>	<b>5 633,9</b>	<b>1 578,5</b>	<b>5 633,9</b>	<b>57,0</b>	<b>2 251,9</b>	<b>39,6 %</b>

Table 25 presents the breakdown of on- and off-balance-sheet exposure classes and risk weights after the deduction of CRM and CCF.

S-Bank uses ratings disclosed by External Credit Assessment Institutions (ECAI's) such as Standard & Poor's, Moody's Investors Service and Fitch Ratings to determine applicable risk weights for central governments or central banks, regional governments, public sector entities, credit institutions, corporates and collective investments undertakings. The last column in the table represents the exposures for which an external credit institution's credit rating is unavailable.

Most of S-Bank's exposures fall into the 35 % risk weight category (EUR 2,8 billion). These are mortgages secured on immovable property.

Table 25: Exposures by risk weight under the standardised approach (EU CR5)

Exposure classes 31 Dec 2018, EUR million		Risk weight									Total	Of which unrated
		0 %	10 %	20 %	35 %	50 %	75 %	100 %	150 %	250 %		
1	Central governments or central banks	727,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	727,1	0,0
2	Regional governments or local authorities	484,4	0,0	3,8	0,0	0,0	0,0	0,0	0,0	0,0	488,2	3,8
3	Public sector entities	0,0	0,0	5,0	0,0	0,0	0,0	0,0	0,0	0,0	5,0	0,0
6	Institutions	11,2	0,0	239,0	0,0	173,8	0,0	0,0	0,0	0,0	424,0	2,8
7	Corporates	0,0	0,0	38,6	0,0	96,8	0,0	484,6	7,0	0,0	627,0	419,3
8	Retail	0,0	0,0	0,0	0,0	0,0	865,1	0,0	0,0	0,0	865,1	865,1
9	Secured by mortgages on immovable property	0,0	0,0	0,0	2 791,1	0,0	0,0	0,0	0,0	0,0	2 791,1	2 791,1
10	Exposures in default	0,0	0,0	0,0	0,0	0,0	0,0	7,8	9,0	0,0	16,8	16,8
12	Covered bonds	0,0	465,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	465,3	0,0
14	Collective investments undertakings	0,0	0,0	0,0	0,0	0,0	0,0	24,7	0,0	0,0	24,7	24,7
15	Equity	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,5	0,5
16	Other items	28,8	0,0	0,0	0,0	0,0	0,0	12,4	0,0	2,6	43,8	43,8
17	<b>Total</b>	<b>1 251,5</b>	<b>465,3</b>	<b>286,5</b>	<b>2 791,1</b>	<b>270,6</b>	<b>865,1</b>	<b>530,0</b>	<b>16,0</b>	<b>2,6</b>	<b>6 478,7</b>	<b>4 167,9</b>

Exposure classes 31 Dec 2017, EUR million		Risk weight									Total	Of which unrated
		0 %	10 %	20 %	35 %	50 %	75 %	100 %	150 %	250 %		
1	Central governments or central banks	690,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	690,7	0,0
2	Regional governments or local authorities	264,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	264,2	0,0
3	Public sector entities	0,0	0,0	7,1	0,0	0,0	0,0	0,0	0,0	0,0	7,1	0,0
6	Institutions	50,6	0,0	185,8	0,0	182,5	0,0	0,0	0,0	0,0	418,8	27,9
7	Corporates	0,0	0,0	0,0	0,0	78,6	0,0	528,9	6,4	0,0	613,9	446,9
8	Retail	0,0	0,0	0,0	0,0	0,0	772,6	0,0	0,0	0,0	772,6	772,6
9	Secured by mortgages on immovable property	0,0	0,0	0,0	2 510,8	0,0	0,0	0,0	0,0	0,0	2 510,8	2 510,8
10	Exposures in default	0,0	0,0	0,0	0,0	0,0	0,0	6,1	5,8	0,0	11,9	11,8
12	Covered bonds	0,0	360,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	360,6	0,0
14	Collective investments undertakings	0,0	0,0	0,0	0,0	0,0	0,0	30,7	0,0	0,0	30,7	30,7
15	Equity	0,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,3	0,3
16	Other items	0,0	0,0	0,0	0,0	0,0	0,0	9,6	0,0	0,0	9,6	9,6
17	<b>Total</b>	<b>1 005,4</b>	<b>360,6</b>	<b>192,9</b>	<b>2 510,8</b>	<b>261,0</b>	<b>772,6</b>	<b>575,5</b>	<b>12,2</b>	<b>0,0</b>	<b>5 691,0</b>	<b>3 810,5</b>

### 8.3.3 Counterparty credit risks

Table 26 presents the derivative contracts and their division for hedging and non-hedging purposes as distributed in hedging accounting. It also depicts the remaining maturity of the derivative contracts. The majority of the derivatives fall into the 1-5 years maturity class.

**Table 26: Derivative contracts and remaining maturity breakdown**

31 Dec 2018, EUR million	Nominal value	Positive fair value	Negative fair value
<b>For hedging purposes</b>			
<b>Interest rate derivatives</b>			
Interest rate swaps	746,2	0,0	-11,3
Maturity of the derivatives in hedge accounting			
less than one year	94,0		
1-5 years	562,2		
more than five years	90,0		
<b>For non-hedging purposes</b>			
<b>Interest rate derivatives</b>			
Options, bought	200,0	0,2	0,0
Options, written	150,0	0,0	-0,8
Interest rate swaps	50,0	0,0	-0,5
Maturity of the derivatives other than those in hedge accounting			
less than one year	100,0		
1-5 years	270,0		
more than five years.	30,0		
<hr/>			
<b>31 Dec 2017, EUR million</b>			
<b>For hedging purposes</b>			
<b>Interest rate derivatives</b>			
Interest rate swaps	541,2	0,2	-4,6
Maturity of the derivatives in hedge accounting			
less than one year	135,0		
1-5 years	284,0		
more than five years	122,2		
<b>For non-hedging purposes</b>			
<b>Interest rate derivatives</b>			
Options, bought	200,0	0,4	0,0
Options, written	150,0	0,0	-0,8
Interest rate swaps	160,0	0,0	-0,4
Maturity of the derivatives other than those in hedge accounting			
less than one year	150,0		
1-5 years	330,0		
more than five years.	30,0		

Table 27 presents a review of exposures to which the counterparty credit risk framework is applied. The replacement cost is the current exposure value, meaning the market value larger of zero under the mark-to-market method. Potential future credit risk is calculated based on the values of the underlying assets, using the special percentages laid down in Article 274 of the CRR. The minimum capital requirement for counterparty credit risk capital under the Pillar 1 requirements (EUR 0,1 million) is included as a part of the minimum credit risk capital requirement (Table 9). The requirement is derived from the risk-weighted exposures of the derivatives (EUR 1,6 million).



**Table 27: Analysis of CCR exposure by approach (EU CCR1)**

31 Dec 2018, EUR million		Replacement cost/current market value	Potential future credit exposure	EAD post CRM	RWAs
1	Mark to market	0,2	5,3	5,5	1,6
11	<b>Total</b>				<b>1,6</b>

31 Dec 2017, EUR million		Replacement cost/current market value	Potential future credit exposure	EAD post CRM	RWAs
1	Mark to market	0,1	4,6	4,7	1,4
11	<b>Total</b>				<b>1,4</b>

Table 28 discloses the carrying values of cash collaterals posted by S-Bank in relation to the ISDAs and CSAs. Cash collaterals have been posted to cover any counterparty credit risks related to derivatives. S-Bank's cash collaterals are unsegregated, i.e. they are not held in a bankruptcy-remote manner.

**Table 28: Composition of collateral for exposures to CCR (EU CCR5B)**

31 Dec 2018, EUR thousands	c		d	
	Fair value of posted collateral			
	Segregated		Unsegregated	
Derivative contracts	-	-	-	13,8
<b>Total</b>	-	-	-	<b>13,8</b>

31 Dec 2017, EUR thousands	c		d	
	Fair value of posted collateral			
	Segregated		Unsegregated	
Derivative contracts	-	-	-	10,7
<b>Total</b>	-	-	-	<b>10,7</b>

Derivative contracts are also prone to the risk of a credit valuation adjustment (CVA), which refers to an adjustment of the fair value (or price) of derivative instruments to account for counterparty credit risk. The CVA framework includes counterparty credit spreads as well as on the market risk factors that drive derivative's values and, therefore, exposure. At the end of the financial period, the risk-weighted exposure amounts related to CVA totalled EUR 3,1 million (Table 9) and the minimum capital requirement according to Pillar 1 requirements totalled to EUR 0,3 million (Table 9).

**Table 29: CVA capital charge (EU CCR2)**

31 Dec 2018, EUR millions		a	b
		Exposure value	RWAs
4	All portfolios subject to the standardised method	5,5	3,1
5	<b>Total subject to the CVA capital charge</b>	<b>5,5</b>	<b>3,1</b>

## 9 Operational risks

### 9.1 Highlights 2018

*Operational risk refers to the possibility of losses arising from unclear or inadequate processes, deficient systems, staff or external factors. Legal and reputational risks are included in operational risk.*

***S-Bank's operational risk profile is materially impacted by system failures and disruptions, fraud in addition to possible deficiencies with external service providers. The primary objective of S-Bank's operational risk management framework is to manage reputational risk and to secure continuous operations in both the short and long term. Losses attributable to operational risks realised in 2018 were very low in comparison to the regulatory capital requirement reserved for them.***

- Operational risk accounts for 10 % of S-Bank's total RWAs. The basic indicator approach is used for calculating the capital requirement for operational risk.
- In 2018 total operational risk losses were EUR 633 thousand.
- 56 % of the net operational risk losses are due to individual events with a loss value less than EUR 10 thousand.
- 47 % of operational risk losses are caused by external fraud. S-Bank continues to work against fraud on various preventative initiatives.
- In 2018 S-Bank achieved a Payment Card Industry Data Security Standard (PCI DSS) status as the first bank in Finland. PCI DSS provides technical and operational requirements designed to protect account data. PCI DSS obligations are implemented into S-Bank's operational processes in accordance with the security strategy.

### 9.2 Management of operational risk

The primary objective of S-Bank's operational risk management is to manage reputational risk and to secure business continuity and compliance with external regulation in both the short and long term. Operational risk management ensures that S-Bank's values and strategy are implemented in the business and support units. Operational risk management covers all material risks related to business operations. The consequences of realised operational risks may result in financial losses or as the deterioration of S-Bank's reputation.

Risk management process is implemented in all S-Bank Group's organisational levels by identifying, measuring, monitoring, assessing and reporting S-Bank's material risks. In addition, the risk management process ensures that internal control measures are functional, appropriate, cost-effective and adequate. Risk management is also integrated into S-Bank's corporate governance, decision making and procedures. Compliance risks, particularly risks related to money laundering, the financing of terrorism, compliance with external regulation and internal policies and risks related to outsourced functions are identified and assessed operational risks.

The Operational Risk Control function is independent of S-Bank's business operations and supervises and assesses the scope, and adequacy and effectiveness of S-Bank's operational risk management in a comprehensive manner. The Operational Risk Control function supports the implementation of risk management within the organisation and ensures that all risks are identified and assessed. Moreover, the function develops risk management guidelines and tools, together with the business operations and support functions.

S-Bank's business and support units identify the operational risks related to their own operations. The identified risks are assessed, and the probabilities and consequences of their occurrence are determined. The process results in an expected value of operational risks. Risk assessments specify the methods used in managing operational risk; i.e. controls for the limitation of potential losses by reducing the probability of their realisation, or the amount of the loss caused by damage. In addition, the risk assessments are updated whenever the processes or the operating environment change, and at least once a year.

New products, services and counterparties are approved in accordance with an approval process before their implementation. The approval process aims to ensure that products and services have been planned with due diligence, that all changes to internal control and risk management required have been implemented, and that the documentation is appropriate and adequate. The process ensures that an appropriate target market and sales procedures have been defined. The same approval process is also used when existing products are modified.

S-Bank mitigates potential operational risks by maintaining an insurance cover for damages of property or losses that may be caused by criminal activities or misuse, for example. Substantial disturbances in S-Bank's operations are taken into consideration in business continuity planning.

### 9.3 Operational risk monitoring and reporting

S-Bank monitors and supervises operations on a continuous basis at various organisational levels. Every employee is responsible for observing the implementation of operational risk management within their sphere of responsibility and reporting on deviations and incidents related to operational risks.

S-Bank has an operating model and reporting system for the management of materialised operational incidents. An incident report is filled in those situations and events that restrict normal everyday operations or breach regulatory requirements or S-Bank's guidelines. Incidents also include any circumstances attributable to contracting parties or subcontractors which have a deteriorating impact on S-Bank's operations. The report details the reasons that led to the event, assessments of their impact and potential costs. When necessary, the incident report includes information about measures that have been taken or planned to prevent similar events in the future. In addition, S-Bank employs a procedure which allows the confidential internal reporting of potential violations (a whistle blowing channel).

The Operational Risk Control function reports regularly to S-Bank's Board of Directors, the Risk and Audit Committee, the Risk Committee, the CEO and the Group's Management Team and the authorities on the most significant operational risks that have occurred in various business and support units. The Compliance function supervises conformance with regulations and the adequacy of internal policies. It also provides recommendations on development measures to remedy potential non-compliance and supervises the implementation of these actions.

## 10 Market risks

### 10.1 Highlights 2018

*Market risk arises from price and volatility fluctuations in the financial markets.*

***S-Bank's market risks is mainly comprised of spread risk and interest rate risk in the banking book attributable to the structural interest rate risk in the balance sheet and investment operations of the Treasury unit. Other market risks in S-Bank's banking book, which include equity risks, real estate risks and exchange rate risks, are insignificant. The market risk profile is controlled with a conservative risk appetite.***

- S-Bank does not have a trading book. As S-Bank's market risks arise from the banking book, these are – in accordance with the Pillar 1 requirements and methods – included in the regulatory capital requirements for credit risk. In addition, market risk is measured with internal market model as part of the Pillar 2 and ICAAP process.
- In 2018 the total value of the Treasury's investment portfolio increased by EUR 286 million to EUR 2.156 million (+15%), which was mainly driven by growth in deposits from retail and corporate customers. The risk profile of the portfolio relative to its size remained stable in 2018.
- S-Bank's overall interest rate risk profile has remained relatively unchanged in 2018.
  - Interest rate risk in the banking book (+100 bps parallel shift, earnings-based risk) increased by EUR 0,7 million to EUR 27,7 million (+2,5%).
  - Interest rate risk of the treasury portfolio (+100 bps parallel shift) increased by EUR 1 million to EUR 17,4 million (+6%). Interest rate sensitivity in relation to size of the portfolio has remained stable.
- S-Bank's spread risk is caused by fixed- and floating-rate bonds and money market instruments classified and measured at fair value through other comprehensive income in the Treasury's portfolio. The risk profile for spread risk remained stable in 2018.
  - In 2018 and particularly during the second half of the year, widening credit spreads across the global fixed-income markets, had a negative impact on Treasury portfolio's mark-to-market valuations.

### 10.2 Management of market risk

S-Bank's market risk arises from spread risk and interest rate risk in the banking book attributable to the structural interest rate risk in the balance sheet and investment operations of the Treasury unit. Other market risks in S-Bank's banking book, which include equity risks, real estate risks and exchange rate risks, are insignificant.

Market risk in S-Bank's internal Pillar 2 capital review covers interest rate risks in the banking book, spread risk, equity risk, currency risk and real estate risks. Diversification effects between the categories of market risks are taken into account as a part of the total Pillar 2 capital requirement for market risk.

S-Bank's market risk management is based on a conservative risk appetite and the Board of Directors has set risk limits for each market risk type. The purpose is also to optimise returns on equity within the scope of the set risk appetite. Market risk concentrations and single name exposures are managed with set limits as well. Limits are monitored and reported actively. Proactive monitoring and continuous follow-up of the external business environment is also an essential part of market risk management. Plain vanilla interest rate derivatives are used for hedging interest rate risk in the Treasury portfolio.

The Treasury unit is responsible for managing market risk and Treasury acts as the Group's internal bank and internal hedging counterparty of business operations. Treasury's strategic goals are set as a part of S-Bank's risk strategy and risk appetite and are integrated into Treasury's annual investment plan. In addition, internal transfer pricing framework is used to support the management of market risks.

See the composition of the Treasury portfolio below in Table 30.

**Table 30: Composition of Treasury portfolio**

31 Dec 2018, EUR million	Exposures	RWAs (Credit risk, standard method)	RWA density
<b>Exposure classes</b>			
Central governments or central banks	463,2	0,0	0,0 %
Regional governments or local authorities	484,3	0,0	0,0 %
Public sector entities	5,0	1,0	20,0 %
Institutions	420,3	128,2	31,5 %
Corporates	293,3	293,2	100,0 %
Covered bonds	465,3	46,5	10,0 %
Collective investments undertakings	24,7	24,7	100,0 %
Equity exposures	0,4	0,4	100,0 %
<b>Total</b>	<b>2 156,5</b>	<b>494,1</b>	

31 Dec 2017, EUR million	Exposures	RWAs (Credit risk, standard method)	RWA density
<b>Exposure classes</b>			
Central governments or central banks	516,3	0,0	0,0 %
Regional governments or local authorities	264,0	0,0	0,0 %
Public sector entities	7,1	1,4	20,0 %
Institutions	384,3	117,9	31,8 %
Corporates	307,6	310,8	101,0 %
Covered bonds	360,6	36,1	10,0 %
Collective investments undertakings	30,7	30,7	100,0 %
Equity exposures	0,2	0,2	100,0 %
<b>Total</b>	<b>1 870,9</b>	<b>497,1</b>	

### 10.3 Interest rate risk in the banking book (IRRBB)

As mentioned earlier the majority of S-Bank's Pillar 2 market risk arises from interest rate risk in the banking book (IRRBB). IRRBB is reviewed as a structural interest rate risk in the balance sheet and as the interest rate risk of securities (assets classified and measured at fair value through other comprehensive income) in the Treasury's portfolio.

The structural interest rate risk in the balance sheet is caused by differences between the interest rate fixings and maturities of assets and liabilities. Therefore, the future Net Interest Income (NII) of S-Bank and the net present value of the balance sheet (Economic Value-based risk, EV) are not entirely foreseeable. In addition to the structural interest rate risk arising from deposit and lending operations, the fluctuations of market interest rates and consequent values of securities in the Treasury's investment portfolio causes interest rate risk.

Economic value measures changes in the net present value of interest rate sensitive instruments over their remaining life resulting from interest rate movements. Earnings based analysis measures fluctuations in the expected future profitability of the bank within a given timespan resulting from interest rate movements. Market price risk relates to the interest rate sensitivity of balance sheet items and the resulting effects on the fair value of those instruments.

Interest rate risk is managed by planning the balance sheet structure, such as the maturity and interest rate fixings of assets and liabilities, and with interest rate derivatives. The Board of Directors has set a maximum amount for S-Bank's Economic value and Net Interest Income interest rate risks. Table 31 presents the breakdown of financial assets and liabilities by interest rate fixings.

Table 31: Breakdown of financial assets and liabilities by interest rate fixing

Financial assets and liabilities 31 Dec 2018, EUR million		a	b	c	d	e	f
		0-3 months	3- 12 months	1-5 years	5-10 years	More than 10 years	Total
1	Cash	468,44	0,00	0,00	0,00	0,00	468,4
2	Debt securities eligible for refinancing with central banks	188,83	68,42	661,02	84,25	0,00	1 002,5
3	Receivables from credit institutions	27,84	0,00	0,00	0,00	0,00	27,8
4	Receivables from the public and public-sector entities	1 760,63	2 348,49	59,84	17,69	0,34	4 187,0
5	Debt securities	318,41	164,28	165,64	17,11	0,00	665,4
6	Derivatives	0,65	0,00	0,00	0,00	0,00	0,6
7	<b>Financial assets total</b>	<b>2 764,8</b>	<b>2 581,2</b>	<b>886,5</b>	<b>119,1</b>	<b>0,3</b>	<b>6 351,9</b>
8	Liabilities to credit institutions	0,30	0,00	0,00	0,00	0,00	0,3
9	Liabilities to the public and public-sector entities	5 879,55	0,85	3,41	0,00	0,00	5 883,8
10	Bonds issued to the public	0,00	0,00	0,00	0,00	0,00	0,0
11	Subordinated debt	0,00	50,00	0,00	0,00	0,00	50,0
12	Derivatives	4,61	2,08	6,42	0,00	0,00	13,1
13	<b>Financial liabilities total</b>	<b>5 884,5</b>	<b>52,9</b>	<b>9,8</b>	<b>0,0</b>	<b>0,0</b>	<b>5 947,2</b>
14	<b>Financial assets and liabilities, total</b>	<b>-3 119,7</b>	<b>2 528,3</b>	<b>876,7</b>	<b>119,1</b>	<b>0,3</b>	<b>404,7</b>

Financial assets and liabilities 31 Dec 2017, EUR million		a	b	c	d	e	f
		0-3 months	3- 12 months	1-5 years	5-10 years	More than 10 years	Total
1	Cash	493,01	0,00	0,00	0,00	0,00	493,0
2	Debt securities eligible for refinancing with central banks	260,99	62,69	406,18	130,62	0,00	860,5
3	Receivables from credit institutions	25,74	0,00	0,00	0,00	0,00	25,7
4	Receivables from the public and public-sector entities	1 817,58	1 780,82	103,50	18,38	4,57	3 724,9
5	Debt securities	176,70	87,97	174,99	24,62	0,00	464,3
6	Derivatives	0,83	0,00	0,17	0,00	0,00	1,0
7	<b>Financial assets total</b>	<b>2 774,9</b>	<b>1 931,5</b>	<b>684,8</b>	<b>173,6</b>	<b>4,6</b>	<b>5 569,4</b>
8	Liabilities to credit institutions	10,11	0,00	0,00	0,00	0,00	10,1
9	Liabilities to the public and public-sector entities	5 043,23	2,06	2,23	0,00	0,00	5 047,5
10	Bonds issued to the public	0,00	0,00	0,00	0,00	0,00	0,0
11	Subordinated debt	0,00	50,00	0,00	0,00	0,00	50,0
12	Derivatives	2,39	3,26	0,61	0,00	0,00	6,3
13	<b>Financial liabilities total</b>	<b>5 055,7</b>	<b>55,3</b>	<b>2,8</b>	<b>0,0</b>	<b>0,0</b>	<b>5 113,9</b>
14	<b>Financial assets and liabilities, total</b>	<b>-2 280,9</b>	<b>1 876,2</b>	<b>682,0</b>	<b>173,6</b>	<b>4,6</b>	<b>455,5</b>

IRRBB is observed also by means of an interest rate gap analysis, in which assets and liabilities are grouped into different time periods based on their interest rate fixings and maturities. The impacts of interest rate changes are monitored with the NII and with EV methods for the entire balance sheet. Furthermore, market risks are analysed by means of allocation distribution, sensitivity analyses and stress tests scenarios.

Interest rate sensitivity is measured with several scenarios, including different parallel and non-parallel interest rate curve shifts. Interest rate risk resulting from these sensitivities are limited and used for internal Pillar 2 capital requirement calculations.

The results of the IRRBB sensitivity analysis are presented in Table 32. The figures describe the effect of parallel changes in the market interest rate curve applied to the balance sheet at all interest rate curve maturities.

**Table 32: Interest rate risk sensitivity analysis in the banking book**

Net interest income (NII) "Earnings-based" risk, EUR million	31 Dec 2018	31 Dec 2017
+100 bps	27,7	27,0
-100 bps	-7,7	-7,7

Economic value (EV), EUR million	31 Dec 2018	31 Dec 2017
+100 bps	-31,0	-25,6
-100 bps	102,5	75,6

Interest rate sensitivities of the Treasury portfolio are presented in Table 33.

**Table 33: Interest rate risk sensitivity analysis in the banking book, Treasury portfolio price risk**

Price risk, Treasury's portfolio, EUR million	31 Dec 2018			31 Dec 2017		
	Portfolio	Sensitivity	Sensitivity %	Portfolio	Sensitivity	Sensitivity %
Interest rate shock						
+100 bps	2 156,5	-17,4	-0,8 %	1 870,9	-16,4	-1,1 %
-100 bps		18,0	0,8 %		17,0	1,2 %

#### 10.4 Spread risks

S-Bank's spread risk is caused by fixed- and floating-rate bond instruments that are classified and measured at fair value through other comprehensive income in the Treasury's investment portfolio. Spread risk is related to the credit quality of the instrument's issuer and in general to the market atmosphere towards financial securities investments that contain credit risk. The spread risk limit structure is based on a conservative approach and the Treasury's investment strategy is focused on issuers and instruments with investment grade ratings and high market liquidity.

Risk exposures and the internal Pillar 2 capital requirement for spread risk are calculated daily in accordance with S-Bank's internal market risk model. The measurement of spread risk is based on historically observed stressed volatility levels of spreads. The internal market risk model uses a 12-month horizon and a 99,5 % confidence level. Furthermore, the internal Pillar 2 capital requirement for spread risk is also calculated according to the metrics and parameters of the internal market risk model.

The Board of Directors has set a maximum amount for spread risk. Single name counterparty limits are defined by evaluating the credit risk of counterparties, mainly by using the credit ratings provided by External Credit Assessment Institutions (ECAI's). The amount of spread risk is monitored regularly as a part of daily risk reporting.

#### 10.5 Other market risks

S-Bank has insignificant exposures in equity and real estate risks. These risks may materialise directly because of fluctuations in market prices. S-Bank's equity and real estate risks arise from Treasury operations aiming to diversify the market risks in the portfolio. Management and limitation of these risks is based on simple allocation limits.

The exchange rate risk in the banking book may arise mainly from customer-driven brokerage transactions. Furthermore, risk may arise if the Treasury function invests in bonds that are denominated in foreign currencies or in connection with foreign currency accounts. Permitted currencies are specified in the foreign-exchange risk limits and these risks are primarily hedged. The exchange rate risk limits are very small and below the threshold of generating any regulatory Pillar 1 capital requirement for S-Bank.



## 10.6 Market risk monitoring and reporting

S-Bank's Treasury function monitors market risk daily and the banking business unit is responsible for the operational measuring, monitoring, and reporting of market risks in compliance with the organisation's agreed upon internal procedures.

The Risk Control function also monitors market risk exposures daily. In addition, the Risk Control function assesses the management of S-Bank's market risks and the functionality as well as usage of the applied internal market risk models. The key aspects of market risks, the effectiveness of risk management and the impact of risks on capital adequacy are reported to S-Bank's management, the Risk Committee, the Risk and Audit Committee and the Board of Directors.

## 11 Liquidity risks

### 11.1 Highlights 2018

*Liquidity risk is defined as the risk that the bank is unable to meet its payment obligations in due time or that it will be forced to fund its liquidity obligations at unfavorable cost. Liquidity risk arises from the difference between the maturities of cash in- and outflows. Generally, the role of banks in maturity conversion, in which short-term deposits are used for long-term lending, exposes banks to liquidity risk.*

***S-Bank is exposed to liquidity risk in customer lending, funding and Treasury operations. S-Bank's liquidity position is strong, and the liquidity risk appetite is conservative supported by active risk management and monitoring measures. The Treasury function's main objective is to ensure that the liquidity position is at all times above the minimum regulatory requirements and the internal targets.***

- The Liquidity Coverage Ratio (LCR), which measures the adequacy of liquid assets under stressed conditions within the next 30 days, remained at a first-rate level at 156 %.
  - At year-end the liquidity buffer was EUR 1,386 billion and net outflows were EUR 886 million.
- The Net Stable Funding Ratio (NSFR), which is defined as the available stable funding relative to the required stable funding, was 142,1 %.
- S-Bank's funding is primarily based on its retail customer deposit base, and thus the main sources of funding are the deposit- and savings accounts of its retail customers. S-Bank's loan-to-deposit ratio on 31.12.2018 was 72 %. In 2018 S-Bank's loan-to-deposit ratio decreased 2 percentage points due to strong deposit growth during the year.
- In 2018, S-Bank started preparations for further diversification of funding resources.

### 11.2 Management of liquidity risk

The principles and risk appetite of liquidity risk management are defined in S-Bank's risk strategy and other liquidity risk management-specific guidelines.

S-Bank may incur liquidity risk due to bank- or market-specific issues, which include the following:

- a withdrawal of deposits in different customer segments
- an increase in the utilisation rate of (committed) credit lines and limits
- an increase in S-Bank's collateral requirements
- a decrease in securities' mark-to-market prices in the liquidity portfolio due to a weakened market environment.

S-Bank measures its liquidity position and adequacy in accordance with parameters and indicators defined by the authorities and with an internal liquidity risk model. The limits and calculation parameters applied in internal modelling comply with the risk appetite. S-Bank has set internal limits to ensure that the liquidity position is continuously above the minimum regulatory requirements. As part of the liquidity strategy, S-Bank has a continuity plan for preserving an adequate liquidity position in a stressed market environment. The plan



defines the policies and operating models used to ensure the adequacy of the liquidity buffers in exceptional conditions.

Internal modelling of the liquidity risk is part of the annual ILAAP-process (“Internal Liquidity Adequacy Assessment Process”), where S-Bank’s assesses comprehensively its liquidity risk profile through various stress tests, defines its risk appetite and updates the risk limits for liquidity risk. Moreover, internal policies and documentation are updated within this process.

Liquidity risk management in S-Bank is based on ensuring that the amount of S-Bank’s unencumbered, liquid assets exceed the liquidity net outflows in normal and stressed market environments in the short (0–2 days), medium (0–30 days) and long (more than 30 days) term. The adequacy of the liquidity reserve is primarily ensured with a strict and conservative limit structure and asset quality requirements.

Liquidity risk concentrations are linked to customer segments and the liquidity portfolio. Liquidity concentration risks related to potential liquidity outflows of different customer segments are managed by using segment-specific liquidity outflow factors. The outflow factors are conservatively evaluated in the internal liquidity risk model parametrization. In addition to these internal metrics, the outflow factors set in CRR are used daily, when calculation the daily LCR and assessing the adequacy of the liquidity portfolio. The size and quality of the liquidity portfolio is continuously assessed and balanced, considering possible changes in the liquidity outflow factors. Furthermore, any concentrations in the liquidity portfolio are restricted with the limit structure. In addition, S-Bank has pledged securities to the central bank and against this collateral S-Bank is able to get short-term funding, if necessary.

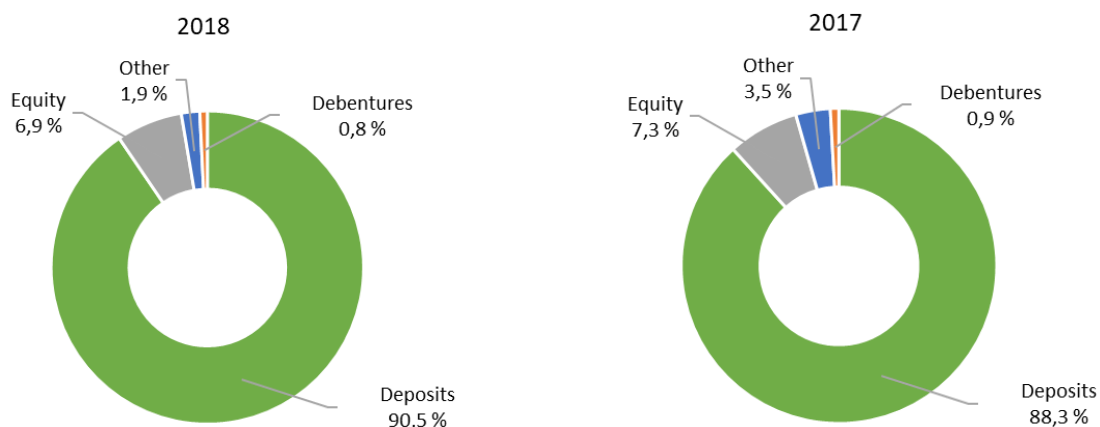
The main objectives of liquidity management also include collateral management, i.e. ensuring that S-Bank has an adequate amount of eligible liquid securities at its disposal to cover the collateral required by various business operations. Furthermore, the minimum requirements for liquidity management include meeting the central bank’s minimum reserve obligation, the regulatory Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) requirements.

Liquidity risk management in S-Bank emphasises the proactive monitoring and anticipation of the external business environment and consequent changes in various credit spreads observable in the financial markets. Applying a stricter liquidity risk appetite is appropriate if liquidity in the market is considered stressed. The LCR measures liquidity risk over a 30-day stress period and the NSFR is used to measure structural liquidity risk. NSFR is defined as the available stable funding relative to the required stable funding. Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the horizon, which extends to one year.

Operational day-to-day management of S-Bank’s liquidity risk has been delegated to the Treasury unit. Liquidity risk is transferred from the business operations to the Treasury function accordance with the principles of internal transfer pricing. Treasury is responsible for the operational execution of the risk appetite pursuant to S-Bank’s risk strategy, taking into consideration S-Bank’s business model, risk limit structure, the Treasury’s liquidity strategy and other limits defining the liquidity risk level.

### 11.2.1 Funding

S-Bank’s funding is primarily based on the deposit base and thus the main sources of funding are the deposit- and savings accounts of its retail customers. S-Bank’s loan to deposit ratio on 31.12.2018 was 72 % (74 % 31.12.2017). Other sources of funding include the Treasury’s wholesale market deposits from companies and other credit institutions as well as certificates of deposits. Figure 11 illustrates the structure of S-Bank’s funding. Even though the structure of S-Bank’s funding is focused on retail customer deposits, the funding is highly decentralised, mostly because the average deposit among S-Bank’s retail customers is very low.

**Figure 11: Structure of S-Bank's funding**

To ensure the availability of market-based funding at competitive price also in the coming years, S-Bank has started preparations for further diversification of its funding resources.

### 11.2.2 Liquidity risk monitoring and reporting

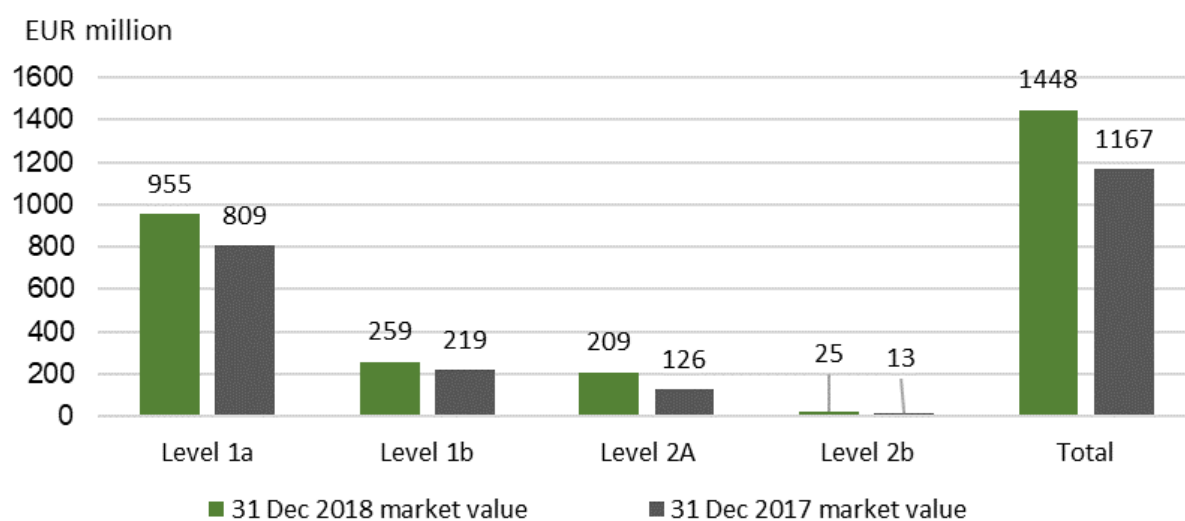
The Treasury and Risk Control functions monitor and assess S-Bank's liquidity exposures on the basis of the reports submitted to them and then report on the situation to S-Bank's management on a regular basis. Key liquidity risk exposures are reported on a daily basis. In addition, the Risk Control function assesses the management of S-Bank's liquidity risks as well as the effectiveness and use of the liquidity risk models. The key aspects of liquidity risk are reported to S-Bank's management, the Risk Committee, the Risk and Audit Committee and the Board of Directors.

### 11.3 Key liquidity risk indicators

The quantitative CRD IV/CRR liquidity regulations took effect on 1 October 2015. The minimum liquidity requirement increased to 100 % as of 1 January 2018. S-Bank's LCR on 31 December 2018 was 156 % (163 %). Table 34, Figure 12 and Figure 13 illustrate the key indicators of S-Bank's 30-day liquidity position. The figures include the valuation haircuts. Compared to the previous year, the allocation of S-Bank's liquidity buffer remained similar. Level 1 high quality assets amounted to 84 % and level 2 high quality assets to 16 % of total liquidity portfolio market value.

**Table 34: Liquidity (LCR) by balance sheet items, including CRR hair-cuts**

Liquidity coverage ratio (LCR)	31 Dec 2018		31 Dec 2017	
	Market value	Buffer value	Market value	Buffer value
<b>Level 1a</b>	<b>955</b>	<b>955</b>	<b>809</b>	<b>809</b>
Assets from regional governments or local authorities	494	494	294	294
Funds from central administrations	21	21	22	22
Central bank reserves available for withdrawal	440	440	493	493
<b>Level 1b</b>	<b>259</b>	<b>241</b>	<b>219</b>	<b>204</b>
Extremely high-quality covered bonds	259	241	219	204
<b>Level 2A</b>	<b>209</b>	<b>178</b>	<b>126</b>	<b>107</b>
High-quality covered bonds (Third Country, CQS1)	123	105	56	48
High-quality covered bonds (CQS2)	81	69	62	53
Corporate bonds (CQS1)	5	4	7	6
<b>Level 2b</b>	<b>25</b>	<b>12</b>	<b>13</b>	<b>7</b>
Corporate bonds (CQS2/3)	25	12	13	7
<b>Total</b>	<b>1448</b>	<b>1386</b>	<b>1167</b>	<b>1127</b>
<b>Liquidity out flows</b>		<b>932</b>		<b>753</b>
<b>Liquidity in flows</b>		<b>46</b>		<b>61</b>
<b>Liquidity coverage ratio (%)</b>		<b>156 %</b>		<b>163 %</b>

**Figure 12: Composition of the LCR buffer (market value), EUR million**

**Figure 13: Composition of the LCR buffer (LCR buffer value), EUR million**

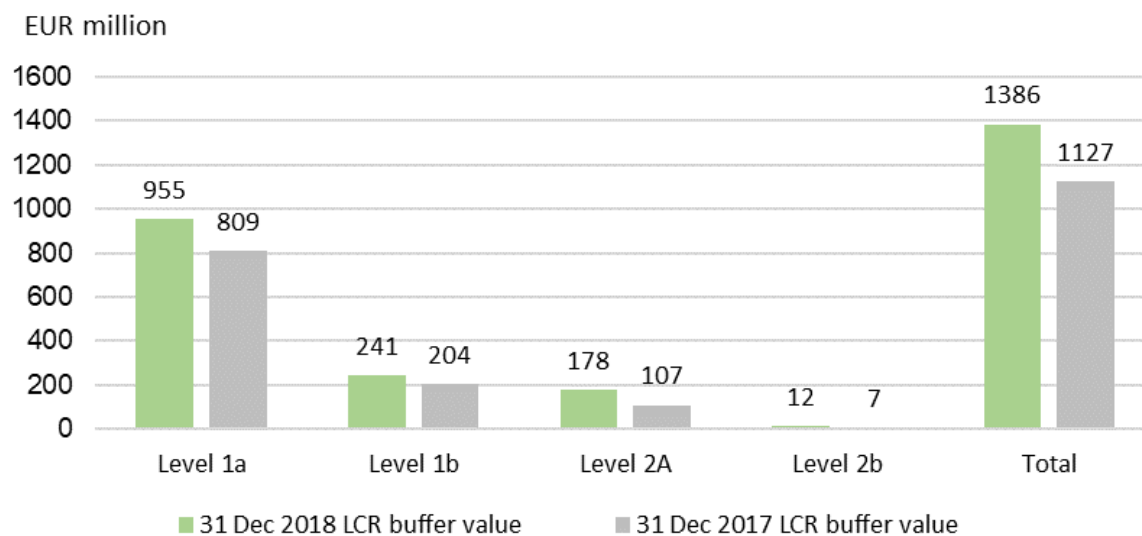


Table 34 illustrates the change in the liquidity buffer based on information at the end of the reporting period, while Table 35 presents the liquidity buffer as averages of month-end over 12-months preceding the end of each quarter in 2018. Based on 12 month averages relative growth of S-Bank's liquidity buffer exceeded liquidity net outflow relative growth. Liquidity buffer increased mainly with purchases of bonds issued by regional and local authorities and partly from purchases of extremely high-quality covered bonds. The outflow was correspondingly managed via the pricing of deposits in different customer segments.

Table 35: LCR disclosure template (EU LIQ1)

Scope of consolidation (consolidated) Currency and units (EUR million)		Total unweighted value (average)				Total weighted value (average)			
		31 March 2018	30 June 2018	30 Sept 2018	31 Dec 2018	31 March 2018	30 June 2018	30 Sept 2018	31 Dec 2018
Quarter ending on (DD Month YYYY)									
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
<b>HIGH-QUALITY LIQUID ASSETS</b>									
1	Total high-quality liquid assets (HQLA)					801,55	864,03	938,16	1 019,97
<b>CASH - OUTFLOWS</b>									
2	Retail deposits and deposits from small business customers, of which:	4 001,48	4 077,10	4 169,87	4 297,93	216,85	220,70	225,96	233,74
3	Stable deposits	3 735,87	3 803,61	3 885,23	3 992,03	186,79	190,18	194,26	199,60
4	Less stable deposits	55,34	55,41	57,09	63,77	8,30	8,31	8,56	9,57
5	Unsecured wholesale funding	848,42	870,16	907,00	993,54	417,97	429,33	454,44	506,75
6	Operational deposits (all counterparties)	231,38	238,06	220,54	219,92	57,85	59,52	55,14	54,98
7	Non-operational deposits (all counterparties)	617,04	632,10	686,46	773,62	360,13	369,82	399,30	451,77
8	Unsecured debt	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
9	Secured wholesale funding					0,00	0,00	0,00	0,00
10	Additional requirements	197,58	195,16	201,96	213,63	23,82	23,54	24,16	25,27
11	Outflows related to derivative exposures and other collateral requirements	5,60	5,60	5,57	5,53	5,60	5,60	5,57	5,53
12	Outflows related to loss of funding on debt products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
13	Credit and liquidity facilities	191,98	189,56	196,39	208,10	18,21	17,94	18,59	19,74
14	Other contractual funding obligations	26,64	30,23	29,66	26,93	2,08	2,08	2,08	0,00
15	Other contingent funding obligations	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
16	<b>TOTAL CASH OUTFLOWS</b>					660,73	675,66	706,64	765,76
<b>CASH - INFLOWS</b>									
18	Inflows from fully performing exposures	101,70	101,03	109,49	112,09	54,65	54,26	58,55	59,63
19	Other cash inflows	4,53	6,90	7,60	6,93	4,53	6,90	7,60	6,93
20	<b>TOTAL CASH INFLOWS</b>	106,23	107,94	117,08	119,02	59,18	61,16	66,15	66,56
20	<b>Inflows subject to 75% cap</b>	106,23	107,94	117,08	119,02	59,18	61,16	66,15	67,31
c									
						<b>TOTAL ADJUSTED VALUE</b>			
21	<b>LIQUIDITY BUFFER</b>					801,55	864,03	938,16	1 019,97
22	<b>TOTAL NET CASH OUTFLOWS</b>					601,55	614,49	640,49	698,45
23	<b>LIQUIDITY COVERAGE RATIO (%)</b>					<b>133 %</b>	<b>140 %</b>	<b>146 %</b>	<b>146 %</b>

Table 36 illustrates the development of the NSFR, which is defined as the available stable funding relative to the required stable funding. Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the horizon, which extends to one year.

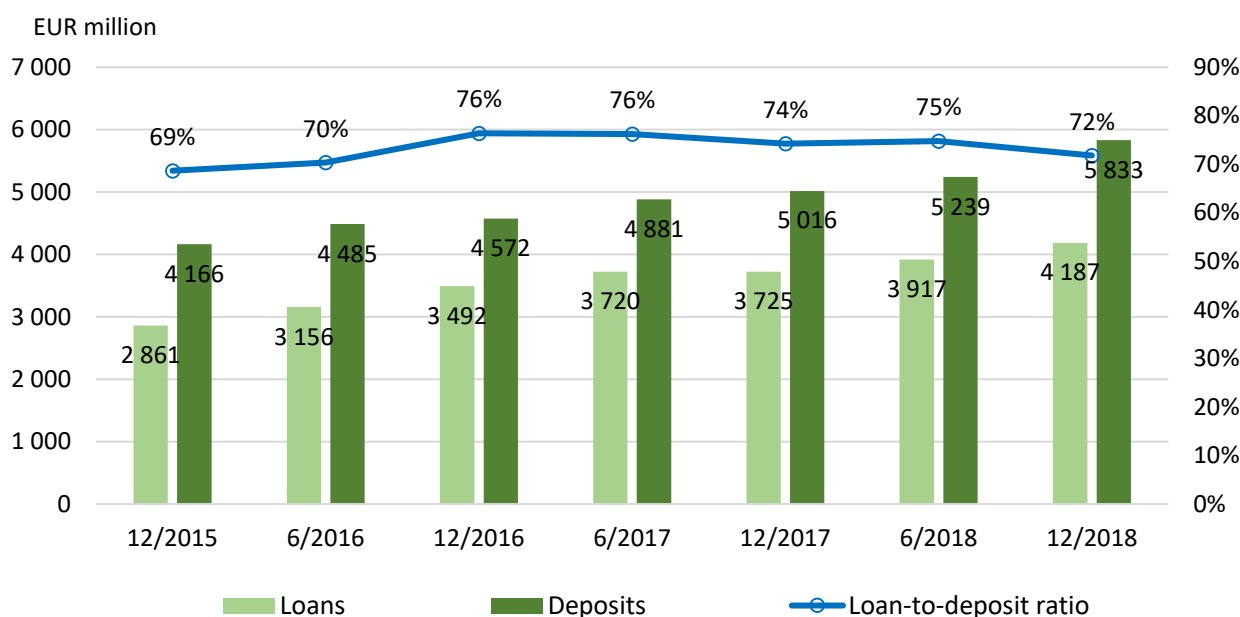
**Table 36: Net stable funding ratio (NSFR)**

Net Stable Funding Ratio (NSFR)	31 Dec 2018	31 Dec 2017
Available stable funding	5 296,6	4 645,4
Required stable funding	3 631,0	3 212,1
Net Stable Funding Ratio (NSFR)	145,9 %	144,6 %

The total amount of the available stable funding, including CRR-haircuts, exceeded the amount of the required stable funding nearly 1.5-times on 31 December 2018. The ratio has remained relatively stable compared to the previous year (Figure 14).

Another indicator of adequate long-term funding in S-Bank's business model is the ratio between lending and borrowing, which was 72 % on 31 December 2018 (74 % in 2017). This ratio is monitored continuously. The Treasury unit's liquidity strategy specifies the measures that must be taken if the ratio exceeds a specific threshold.

**Figure 14: Loan-to-deposit ratio**



#### 11.4 Asset encumbrance

Table 37 illustrates the information on asset encumbrance in compliance with regulation (EU) 2017/2295. S-Bank does not hold any collateral related to derivatives. Hence, the template is only used to report S-Bank's assets.

Table 37: Asset encumbrance (EU) 2017/2295

Template A – Encumbered and unencumbered assets								
	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
	010	030	040	050	060	080	090	100
<b>010 Assets of the reporting institution</b>	173,0	0,0	0,0	0,0	5 801,4	0,0	0,0	0,0
030 Equity instruments	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0
040 Debt securities	158,1	0,0	158,1	0,0	1 510,6	0,0	1 510,6	0,0
050 of which: covered bonds	10,0	0,0	10,0	0,0	444,7	0,0	444,7	0,0
060 of which: asset-backed securities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
070 of which: issued by general governments	16,2	0,0	16,2	0,0	461,5	0,0	461,5	0,0
080 of which: issued by financial corporations	142,0	0,0	142,0	0,0	689,7	0,0	689,7	0,0
090 of which: issued by non-financial corporations	0,0	0,0	0,0	0,0	356,3	0,0	356,3	0,0
120 Other assets	3,9	0,0	0,0	0,0	83,1	0,0	0,0	0,0

Template B – Collateral received				
	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 EHQLA and HQLA
	010	030	040	060
<b>130 Collateral received by the reporting institution</b>	0	0	0	0
<b>250 Total assets, collateral received and own debt securities issued</b>	173,0	0	0	0

Template C – Sources of encumbrance			
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and asset-backed securities (ABSs) encumbered
		010	030
<b>010 Carrying amount of selected financial liabilities</b>		8,4	10,9
011 of which: over-the-counter (OTC) derivatives		8,4	10,9

#### TEMPLATE D – ACCOMPANYING NARRATIVE INFORMATION

The tables above present information on asset encumbrance and debts related to encumbered assets. The figures are given as a median for the quarters of 2018. Assets are considered encumbered if they have been pledged or given as collateral, or if they guarantee a transaction included in the balance sheet. Other assets that are not freely available to the Group are also considered encumbered. In most cases, the encumbered assets are related to derivatives and collateral connected to trading. Of the unencumbered other assets, intangible and tangible assets, accrued income and tax liabilities, among others, cannot be used as collateral.

\* Extremely High Liquidity Assets (EHQLA)

\*\* High-quality liquid assets (HQLA)

## 12 Risk declaration and statement

Based on the continuous risk reporting it receives, and by approving this report, the Board of Directors considers that this report provides external stakeholders with a comprehensive view of S-Bank's risk management and risk profile associated with its' business strategy (EU Capital Requirements Regulation (CRR 575/2013, Article 435 (1f)). Based on the same grounds, the Board of Directors declares the risk management systems put in place to be adequate with regards to S-Bank's risk profile and strategy (CRR, Article 435(1e)). Also, the Board of Directors considers that the information disclosed in this report has been prepared in accordance with the agreed internal control processes.

**Jari Annala**

Chairman of the Board

**Jari Eklund**

Vice Chairman of the Board

**Juha Ahola**

Board member

**Juha Mäkinen**

Board member

**Heli Arantola**

Board member

**Olli Vormisto**

Board member

**Veli-Matti Liimatainen**

Board member

**Pekka Ylihurula**

Chief Executive Officer (CEO)



### 13 Disclosure index

The table below provides information on where (in the different publications of S-Bank Group) information required by the different articles in Part Eight of that regulation can be found.

Articles of CRR (575/2013)	Disclosure requirement	Section in CAR 2018 report / other reference
<b>435</b>	<b>Risk management objectives and policies</b>	
1	a) the strategies and processes to manage those risks	Chapters 5, 7, 8, 9, 10, 11.
	b) the structure and organisation of the relevant Risk Control function including information on its authority and statute, or other appropriate arrangements	Chapter 6.1
	c) the scope and nature of risk reporting and measurement systems	Chapter 6.2 and risk specific information in chapters 8.2.6, 9.3, 10.6, 11.2.2
	d) the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants	Chapters 5, and risk specific information in chapters 7, 8, 9, 10, 11
	e) a declaration approved by the management body on the adequacy of risk management arrangements of the institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy	Chapter 12
	f) a concise risk statement approved by the management body succinctly describing the institution's overall risk profile associated with the business strategy. This statement shall include key ratios and figures providing external stakeholders with a comprehensive view of the institution's management of risk, including how the risk profile of the institution interacts with the risk tolerance set by the management body	Chapter 1 and 12
2	a) the number of directorships held by members of the management body	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto
	b) the recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto
	c) the policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved;	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto
	d) whether or not the institution has set up a separate risk committee and the number of times the risk committee has met;	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto
	e) the description of the information flow on risk to the management body.	Chapter 6.2
<b>436</b>	<b>Scope of application</b>	
	a) the name of the institution to which the requirements of this Regulation apply	Chapter 3
	b) an outline of the differences in the basis of consolidation for accounting and prudential purposes, with a brief description of the entities therein, explaining whether they are:	Chapter 3 and Table 2: Outline of the differences in the scopes of consolidation (EU LI3)
	i) fully consolidated;	Table 2: Outline of the differences in the scopes of consolidation (EU LI3)
	ii) proportionally consolidated;	Table 2: Outline of the differences in the scopes of consolidation (EU LI3)
	iii) deducted from own funds;	Not applicable.
	iv) neither consolidated nor deducted;	Not applicable.
	c) any current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among the parent undertaking and its subsidiaries;	Not applicable.
	d) the aggregate amount by which the actual own funds are less than required in all subsidiaries not included in the consolidation, and the name or names of such subsidiaries	Not applicable.

	e)	if applicable, the circumstance of making use of the provisions laid down in Articles 7 and 9.	Not applicable.
<b>437</b>		<b>Own funds</b>	
<b>1</b>	a)	a full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35, 36, 56, 66 and 79 to own funds of the institution and the balance sheet in the audited financial statements of the institution	Chapter 7.3 and Table 5: S-Bank's own funds (EU 1423/2013)
	b)	a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution;	Notes to the financial statements (Group note 26: Subordinated debt).
	c)	the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	Notes to the financial statements (Group note 26: Subordinated debt).
	d)	separate disclosure of the nature and amounts of the following:	
	i)	each prudential filter applied pursuant to Articles 32 to 35;	Chapter 7.3 and Table 5: S-Bank's own funds (EU 1423/2013)
	ii)	each deduction made pursuant to Articles 36, 56 and 66;	Chapter 7.3 and Table 5: S-Bank's own funds (EU 1423/2013)
	iii)	items not deducted in accordance with Articles 47, 48, 56, 66 and 79;	Chapter 7.3 and Table 5: S-Bank's own funds (EU 1423/2013)
	e)	a description of all restrictions applied to the calculation of own funds in accordance with this Regulation and the instruments, prudential filters and deductions to which those restrictions apply	Not applicable.
	f)	where institutions disclose capital ratios calculated using elements of own funds determined on a basis other than that laid down in this Regulation, a comprehensive explanation of the basis on which those capital ratios are calculated.	Not applicable. S-Bank does not use other elements of own fund calculation than described in CRR 575/2013
<b>438</b>		<b>Capital requirements</b>	
	a)	a summary of the institution's approach to assessing the adequacy of its internal capital to support current and future activities.	Chapter 7
	b)	upon demand from the relevant competent authority, the result of the institution's internal capital adequacy assessment process including the composition of the additional own funds requirements based on the supervisory review process as referred to in point (a) of Article 104(1) of Directive 2013/36/EU	Additional own funds requirements based on supervisory review process are described in Chapter 7.4. Results of S-Bank's results on internal capital assessment process are provided upon request.
	c)	for institutions calculating the risk-weighted exposure amounts in accordance with Chapter 2 of Part Three, Title II, 8 % of the risk-weighted exposure amounts for each of the exposure classes specified in Article 112	Chapter 7.5 and Table 9: Overview of RWAs (EU OV1)
	d)	for institutions calculating risk-weighted exposure amounts in accordance with Chapter 3 of Part Three, Title II, 8 % of the risk-weighted exposure amounts for each of the exposure classes specified in Article 147	Not applicable. S-Bank does not use IRB-Approach.
	e)	own funds requirements calculated in accordance with points (b) and (c) of Article 92(3,) i.e capital requirements for market risk	S-Bank does not have a trading book. Therefore, there is no regulatory Pillar 1 capital requirement for market risk. Chapter 7.5 and Table 9: Overview of RWAs (EU OV1)
	f)	own funds requirements calculated in accordance with Part Three, Title III, Chapters 2, 3 and 4 and disclosed separately, i.e. capital requirements for operational risk	Chapter 7.5 and Table 9: Overview of RWAs (EU OV1)
<b>439</b>		<b>Exposure to counterparty credit risk</b>	
	a)	a discussion of the methodology used to assign internal capital and credit limits for counterparty credit exposures	Chapter 8.2.5 and 8.3.3
	b)	a discussion of policies for securing collateral and establishing credit reserves	Chapter 8.2.5. S-Bank does not have credit reserves.
	c)	a discussion of policies with respect to wrong-way risk exposures	Chapter 8.2.5. The wrong-way risk does not apply to S-Bank.
	d)	a discussion of the impact of the amount of collateral the institution would have to provide given a downgrade in its credit rating	Chapter 8.2.5. S-Bank does not have credit rating.
	e)	gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held and net derivatives credit exposure. Net derivatives credit exposure is the credit exposure on derivatives	Chapter 8.3.3 Table 27: Analysis of CCR exposure by approach (EU CCR1), Table 28: Composition of collateral for exposures to CCR (EU CCR5B).

		transactions after considering both the benefits from legally enforceable netting agreements and collateral arrangements	Capital requirements for counterparty credit risk are presented in Table 9: Overview of RWAs (EU OV1)
f)		measures for exposure value under the methods set out in Part Three, Title II, Chapter 6, Sections 3 to 6 whichever method is applicable	Chapter 8.2.5 and 8.3.3
g)		the notional value of credit derivative hedges, and the distribution of current credit exposure by types of credit exposure	Not applicable. S-Bank does not use credit derivative hedges.
h)		the notional amounts of credit derivative transactions, segregated between use for the institution's own credit portfolio, as well as in its intermediation activities, including the distribution of the credit derivatives products used, broken down further by protection bought and sold within each product group	Not applicable. S-Bank does not use credit derivative hedges.
i)		the estimate of $\alpha$ if the institution has received the permission of the competent authorities to estimate $\alpha$ .	Not applicable.
<b>440</b>		<b>Capital buffers</b>	
a)		the geographical distribution of its credit exposures relevant for the calculation of its countercyclical capital buffer	Chapter 7.4, Table 6: Geographical breakdown of credit exposures relevant for the calculation of countercyclical capital buffer and capital requirement (1555/2015) and Table 7: Amount of institution-specific countercyclical capital buffer
b)		the amount of its institution specific countercyclical capital buffer	Chapter 7.4, Table 6: Geographical breakdown of credit exposures relevant for the calculation of countercyclical capital buffer and capital requirement (1555/2015) and Table 7: Amount of institution-specific countercyclical capital buffer
<b>441</b>		<b>Indicators of global systemic importance</b>	Not applicable. S-Bank is not identified as a G-SII.
<b>442</b>		<b>Credit risk adjustments</b>	
a)		the definitions for accounting purposes of 'past due' and 'impaired'	Chapter 8.2.3
b)		a description of the approaches and methods adopted for determining specific and general credit risk adjustments	Chapter 8.2.3
c)		the total amount of exposures after accounting offsets and without taking into account the effects of credit risk mitigation, and the average amount of the exposures over the period broken down by different types of exposure classes	Chapter 8.3 and Table 11: Total and average net amount of exposures (EU CRB-B)
d)		the geographic distribution of the exposures, broken down in significant areas by material exposure classes, and further detailed if appropriate	Chapter 8.3 and Table 13: Geographical breakdown of exposures (EU CRB-C)
e)		the distribution of the exposures by industry or counterparty type, broken down by exposure classes, including specifying exposure to SMEs, and further detailed if appropriate;	Chapter 8.3 and Table 14: Concentration of exposures by industry (EU CRB-D)
f)		the residual maturity breakdown of all the exposures, broken down by exposure classes, and further detailed if appropriate	Chapter 8.3 and Table 15: Maturity of exposures (EU CRB-E)
g)		by significant industry or counterparty type, the amount of	Chapter 8.3.1 and Table 17: Credit quality of exposures by industry (EU CR1-B)
	i)	impaired exposures and past due exposures, provided separately	Chapter 8.3.1 and Table 16: Credit quality of exposures by exposure class and instrument (EU CR1-A)
	ii)	specific and general credit risk adjustments	Chapter 8.3.1 and Table 16: Credit quality of exposures by exposure class and instrument (EU CR1-A)
	iii)	charges for specific and general credit risk adjustments during the reporting period	Chapter 8.3.1 and Table 16: Credit quality of exposures by exposure class and instrument (EU CR1-A)
h)		the amount of the impaired exposures and past due exposures, provided separately, broken down by significant geographical areas including, if practical, the amounts of specific and general credit risk adjustments related to each geographical area	Chapter 8.3.1 and Table 18: Credit quality of exposures by geography (EU CR1-C)
i)		the reconciliation of changes in the specific and general credit risk adjustments for impaired exposures, shown separately. The information shall comprise:	Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)

	i)	a description of the type of specific and general credit risk adjustments	Chapter 8.2.3, Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)
	ii)	the opening balances	Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)
	iii)	the amounts taken against the credit risk adjustments during the reporting period	Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)
	iv)	the amounts set aside or reversed for estimated probable losses on exposures during the reporting period, any other adjustments including those determined by exchange rate differences, business combinations, acquisitions and disposals of subsidiaries, and transfers between credit risk adjustments	Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)
	v)	the closing balances	Chapter 8.3.1 Table 21: Changes in the stock of specific credit risk adjustments (EU CR2-A) and Table 22: Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)
<b>443</b>		<b>Unencumbered assets</b>	Chapter 11.4 and Table 37: Asset encumbrance (EU) 2017/2295
<b>444</b>		<b>Use of ECAIs</b>	
	a)	the names of the nominated ECAIs and ECAs and the reasons for any changes	Chapter 8.3.2
	b)	the exposure classes for which each ECAI or ECA is used	Chapter 8.3.2
	c)	a description of the process used to transfer the issuer and issue credit assessments onto items not included in the trading book	Chapter 8.3.2 and Table 25: Exposures by risk weight under the standardised approach (EU CR5)
	d)	the association of the external rating of each nominated ECAI or ECA with the credit quality steps prescribed in Part Three, Title II, Chapter 2, taking into account that this information needs not be disclosed if the institution complies with the standard association published by EBA	Not applicable. S-Bank complies with the standard association published by EBA.
	e)	the exposure values and the exposure values after credit risk mitigation associated with each credit quality step prescribed in Part Three, Title II, Chapter 2 as well as those deducted from own funds	Chapter 8.3.2, Table 25: Exposures by risk weight under the standardised approach (EU CR5)
<b>445</b>		<b>Exposure to market risk</b>  The institutions calculating their own funds requirements in accordance with points (b) and (c) of Article 92(3) shall disclose those requirements separately for each risk referred to in those provisions. In addition, the own funds requirement for specific interest rate risk of securitisation positions shall be disclosed separately.	Chapter 10
<b>446</b>		<b>Operational risk</b>  Institutions shall disclose the approaches for the assessment of own funds requirements for operational risk that the institution qualifies for; a description of the methodology set out in Article 312(2), if used by the institution, including a discussion of relevant internal and external factors considered in the institution's measurement approach, and in the case of partial use, the scope and coverage of the different methodologies used.	Chapter 9
<b>447</b>		<b>Exposures in equities not included in the trading book</b>	
	a)	the differentiation between exposures based on their objectives, including for capital gains relationship and strategic reasons, and an overview of the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation and any significant changes in these practices	Notes to the financial statements (Group note 1: Accounting policies).
	b)	the balance sheet value, the fair value and, for those exchange-traded, a comparison to the market price where it is materially different from the fair value	Notes to the financial statements (Group note 28: Fair values and carrying amounts of financial assets and liabilities)
	c)	the types, nature and amounts of exchange-traded exposures, private equity exposures in sufficiently diversified portfolios, and other exposures	Not applicable.

	d)	the cumulative realised gains or losses arising from sales and liquidations in the period; and	Notes to the financial statements (Group note 6: Net income from securities and currency trading)
	e)	the total unrealised gains or losses, the total latent revaluation gains or losses, and any of these amounts included in the original or additional own funds.	Not applicable.
<b>448</b>		<b>Exposure to interest rate risk on positions not included in the trading book</b>	
	a)	the nature of the interest rate risk and the key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits), and frequency of measurement of the interest rate risk	Chapter 10, 10.3 and 10.6
	b)	the variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks according to management's method for measuring the interest rate risk, broken down by currency	Chapter 10.3, Table 32: Interest rate risk sensitivity analysis in the banking book and Table 33: Interest rate risk sensitivity analysis in the banking book, Treasury portfolio price risk
<b>449</b>		<b>Exposure to securitisation positions</b>	Not applicable. S-Bank does not have securitisation positions.
<b>450</b>		<b>Remuneration policy</b>	
<b>1</b>	a)	information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, if applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	b)	information on link between pay and performance	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	c)	the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	d)	the ratios between fixed and variable remuneration set in accordance with Article 94(1)(g) of Directive 2013/36/EU	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	e)	information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	f)	the main parameters and rationale for any variable component scheme and any other non-cash benefits;	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	g)	aggregate quantitative information on remuneration, broken down by business area	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	h)	aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution, indicating the following	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	i)	the amounts of remuneration for the financial year, split into fixed and variable remuneration, and the number of beneficiaries	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	ii)	the amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	iii)	the amounts of outstanding deferred remuneration, split into vested and unvested portions	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	iv)	the amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	v)	new sign-on and severance payments made during the financial year, and the number of beneficiaries of such payments	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	vi)	the amounts of severance payments awarded during the financial year, number of beneficiaries and highest such award to a single person	S-Bank's website: <a href="http://www.s-pankki.fi">www.s-pankki.fi</a> > S-Pankki yrityksenä > Johto ja hallinto > S-Pankin palkitsemisjärjestelmät
	i)	the number of individuals being remunerated EUR 1 million or more per financial year, for remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and for remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million	Not applicable.

	j)	upon demand from the Member State or competent authority, the total remuneration for each member of the management body or senior management.	Not applicable.
2		For institutions that are significant in terms of their size, internal organisation and the nature, scope and the complexity of their activities, the quantitative information referred to in this Article shall also be made available to the public at the level of members of the management body of the institution.	Not applicable.
<b>451</b>		<b>Leverage</b>	
	a)	the leverage ratio and how the institution applies Article 499(2) and (3)	Chapter 7.6 and Table 10: Leverage ratio (EU) 2016/200
	b)	a breakdown of the total exposure measure as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements	Chapter 7.6 and Table 10: Leverage ratio (EU) 2016/200
	c)	where applicable, the amount of derecognised fiduciary items in accordance with Article 429(11)	Chapter 7.6 and Table 10: Leverage ratio (EU) 2016/200
	d)	a description of the processes used to manage the risk of excessive leverage	Chapter 7.6 and Table 10: Leverage ratio (EU) 2016/200
	e)	a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers	Chapter 7.6 and Table 10: Leverage ratio (EU) 2016/200
<b>452</b>		<b>Use of the IRB Approach to credit risk</b>	Not applicable. S-Bank does not use IRB-Approach.
<b>453</b>		<b>Use of credit risk mitigation techniques</b>	
	a)	the policies and processes for, and an indication of the extent to which the entity makes use of, on- and off- balance sheet netting	Chapter 8.2.4 and 8.3.2
	b)	the policies and processes for collateral valuation and management	Chapter 8.2.4 and 8.3.2
	c)	a description of the main types of collateral taken by the institution	Chapter 8.2.4 and 8.3.2
	d)	the main types of guarantor and credit derivative counterparty and their creditworthiness	Chapter 8.2.4 and 8.3.2. S-Bank does not use credit derivatives.
	e)	information about market or credit risk concentrations within the credit mitigation taken;	Chapter 8.2.4 and 8.3.2
	f)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, but not providing own estimates of LGs or conversion factors in respect of the exposure class, separately for each exposure class, the total exposure value (after, where applicable, on- or off-balance sheet netting) that is covered — after the application of volatility adjustments — by eligible financial collateral, and other eligible collateral;	Not applicable. S-Bank does not use IRB-Approach.
	g)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, separately for each exposure class, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees or credit derivatives. For the equity exposure class, this requirement applies to each of the approaches provided in Article 155	Not applicable. S-Bank does not use IRB-Approach.
<b>454</b>		<b>Use of the Advanced Measurement Approaches to operational risk</b>	Not applicable. S-Bank uses basic indicator approach for calculation of operational risk.
<b>455</b>		<b>Use of Internal Market Risk Models</b>	Not applicable. S-Bank uses standardised approach for calculation of market risk.

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