2018

Pillar 3 Report

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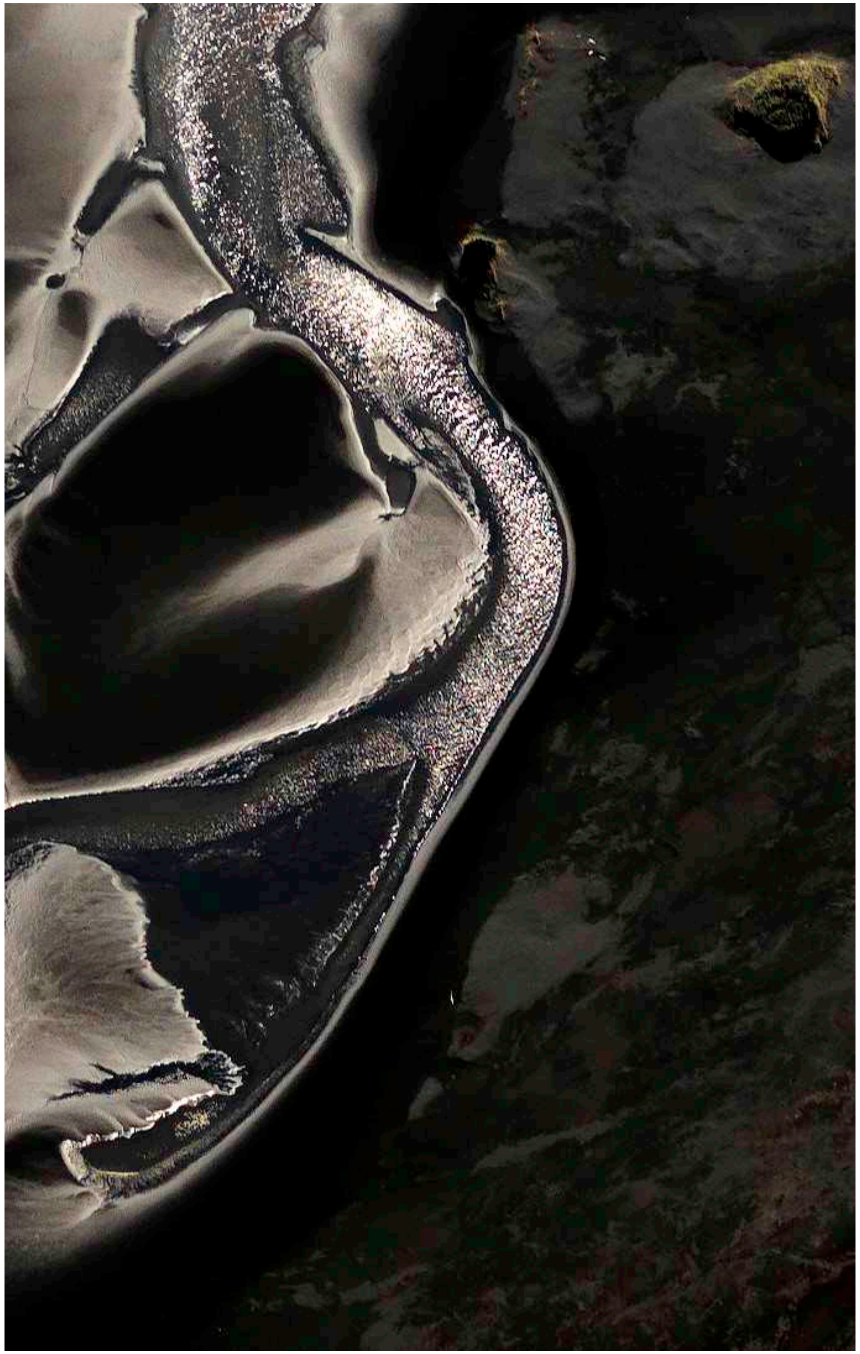


CRO Review 2018

The Bank's loan portfolio grew by almost 12% in 2018 as economic conditions in Iceland continued to be favourable, and credit quality is high on all measures. The Bank's capital position was strong throughout the year, and the capital ratio at year-end was 22.2%, well above the target range of 19.3-20.8%. The Bank's liquidity position is strong and, accordingly, the Liquidity Coverage Ratio and Net Stable Funding Ratio are well above regulatory and internal limits. The LCR for all currencies at year-end was 153% for the Bank and 172% for the Group.

The year 2018 marked an important milestone in the development of the Bank's IT infrastructure as legacy systems for payments and deposits were replaced by new core banking systems run by Reiknistofa Bankanna (RB). The preparation for the launch of the new systems began in 2015 and included a major overhaul of the Bank's infrastructure, making the Bank much better prepared for the development of digital customer journeys and open banking. The renewal of legacy IT systems is complicated and although the project reduces operational risk in the long run, the project itself entailed substantial operational risk in the short run. The project related risk was closely monitored, and risk assessment, risk management and contingency planning was an integral part of the project. The implementation was overall deemed successful by the Bank.

After careful preparation and testing, the Bank launched its first fully-automated credit processes in 2018, as credit approvals for modest overdrafts and credit card limits for individuals became automatic. Both products are offered digitally through the Bank's mobile apps, enabling instantaneous service around the clock. This development is expected to continue with more and more products being offered through digital distribution channels. This provides both challenges and opportunities for risk management. New skill sets are required for managing risk in automated processes, but effective use of data also supports better risk assessment and enables the development of risk management models as well as models for decision making. The Bank's IT risk and model risk frameworks have been strengthened to support the strategic direction towards further digitalisation.

According to Íslandsbanki Research's macroeconomic forecast, there are clear signs that the growth of the Icelandic economy is slowing down. Nevertheless, The Financial Supervisory Authority has announced an increase of the counter-cyclical capital buffer by 50 basis points in May 2019 and again by another 25 bps in January 2020. This increase will be reflected in the Bank's capital target.

Although the capital controls have effectively been fully lifted, some measures taken by the government in the wake of the financial crises are still in place, most notably taxes that were imposed on financial institutions as a temporary measure. A working group appointed by the Minister of Finance and Economic Affairs published a White Paper on a Future Vision for the Financial System in December 2018. The report confirms that risk in the Icelandic banking system has been significantly reduced since the financial crisis, banks are more capable of dealing with shocks, supervision is stronger and contingency plans have been prepared. The report also points out that the small market size, high taxes and relatively high capital requirements result in what is referred to as the "Iceland premium" on interest rates for Icelandic bank customers. According to the report, there is an opportunity to decrease the interest rate spread for Icelandic consumers by lowering the special Icelandic bank taxes.

Guðmundur Kristinn Birgisson was appointed Chief Risk Officer at Íslandsbanki in October 2018. Guðmundur joined the Bank in 2011 and was Executive Director of Lending in the Bank's Personal Banking Division before being appointed CRO. Guðmundur holds a Ph.D. in Mathematics Education from Indiana University and has a wide range of professional experience.

1 Introduction

Íslandsbanki's Pillar 3 Report contains information on risk management, risk measurement, material risk exposures, capital adequacy and liquidity adequacy, in accordance with Icelandic law and European Regulation. The report should provide market participants and other stakeholders with information that facilitates a better understanding of the Bank's risk profile and capital adequacy.

1.1 Regulatory Background

The EU Capital Requirements Directive IV[1] and the EU Regulation on Prudential Requirements for Credit Institutions and Investment Firms[2], hereafter referred to together as CRD IV, have for the most part been transposed into Icelandic law by amendments made to the Act on Financial Undertakings[3] and with the Regulation on the Prudential Requirements for Financial Undertakings.[4] These amendments incorporate, among other things, the CRD IV capital buffer requirements, disclosure requirements, minimum leverage ratio, supervisory review and evaluation process and capital definitions.

The scope of the CRD IV is broken into the following components:

- Pillar 1 – Rules for risk coverage, calculation of the capital requirements, quality of capital and minimum leverage ratio. Pillar 1 sets the minimum capital requirement for credit, market and operational risk.
- Pillar 2 – Supervisory Review and Evaluation Process (SREP) and framework for banks' Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP).
- Global liquidity standard and supervision monitoring – Rules on minimum liquidity (LCR) and stable funding (NSFR) requirements.
- Pillar 3 – Market discipline through disclosure requirements.

For each of the Pillar 1 risk factors, the CRD IV allows for different methods to be used for calculating the minimum capital requirements and thereby risk exposure amount (REA). For credit risk and market risk, the Bank uses the standardised approach to calculate the capital requirements and for operational risk the Basic Indicator Approach. The minimum capital requirements under Pillar 1 are 8% of REA.

Pillar 2 sets out total regulatory requirements for the Bank, in view of its risk profile, by means of additional capital requirements for risk factors not addressed or not adequately covered under Pillar 1. The Bank's internal capital adequacy assessment is then reviewed by the Financial Supervisory Authority (FME) through the supervisory review and evaluation process (SREP). The SREP also includes a review of the Bank's liquidity adequacy assessment and if the Bank adequately identifies and measures its liquidity risk, holds adequate liquidity in relation to its risk profile and if it uses sound risk management systems and processes to support it.

The Central Bank (CB), which is the main supervisory authority regarding liquidity risk in Iceland, has adopted the CRD IV liquidity measures into the Icelandic rules on liquidity ratio.[5]

The European Banking Authority (EBA) issued Pillar 3 Guidelines[6] on disclosure requirements under Part Eight of CRR. The guidelines include specific guidance and prescribed tables and templates, which are regarded as a significant step towards enhancing consistency and comparability between banks through their regulatory disclosures. This Pillar 3 Report contains information in accordance with the disclosure requirements in the form of standardised EBA tables. The tables are included in an Excel sheet on the Bank's website and will hereafter be referred to as Additional Pillar 3 Disclosure.[7]

The Pillar 3 Report is intended to allow market participants to assess key information on capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution.

1.2 Consolidation

The Pillar 3 Report includes figures for the consolidated group, hereafter referred to as Íslandsbanki or the Group unless specifically noted by referring to the Bank or parent. Names and primary businesses of major subsidiaries at year-end 2018 are listed in Exhibit 1.1.

[1] Directive 2013/36/EU
[2] Regulation 575/2013/EU
[3] Act no. 161/2002 on Financial Undertakings
[4] Regulation no. 233/2017 on the Prudential Requirements for Financial Undertakings
[5] Central Bank Rules no. 266/2017 on Liquidity Ratio
[6] EBA Guidelines on disclosure requirements under Part Eight of Regulation (EU) no 575/2013
[7] www.islandsbanki.is

Exhibit 1.1. Íslandsbanki's major subsidiaries at year-end 2018.

Name	Main Business	Ownership	Country
Borgun hf.	Payment acquirer and issuing processor	63.5%	Iceland
B-payment Group Szolgáltató Zrt.	Payment processing company	100%	Hungary
Íslandssjóðir hf.	Investment fund management company	100%	Iceland
Hringur-eignarhaldsfélag ehf.	Holding company	100%	Iceland
Allianz Ísland hf.	Insurance agent	100%	Iceland

1.3 Disclosure and Communication Policy

Íslandsbanki has in place a formal *Disclosure and Communication Policy* approved by the Board of Directors. The policy outlines the governing principles and framework for external disclosure and communication.

Risk and capital management disclosure aims at giving a true and fair view of the Bank's capital structure and adequacy, material risk exposures and risk assessment processes and governance. Íslandsbanki may decide not to disclose information that is considered immaterial. In addition, the Bank will not disclose information that is deemed to be proprietary or confidential. The classification of proprietary and confidential information is based on the relevant Icelandic laws and regulations as well as the Bank's own assessment.

The main channel for Íslandsbanki's risk and capital management disclosure is through the Pillar 3 Report, the Annual Report, Consolidated Financial Statements and investor presentations. All these documents are available on the Bank's website.[8] The Pillar 3 Report is published annually in conjunction with the Annual Report and the Consolidated Financial Statements. The Additional Pillar 3 Disclosure that is published in an Excel sheet on the Bank's website is partially updated quarterly and semi-annually. If material risk exposures change significantly between reporting periods, Íslandsbanki can choose to disclose information thereon more frequently.

[8] www.islandsbanki.is

1.4 Verification

The Pillar 3 Report has not been audited by external auditors and does not form a part of Íslandsbanki's audited financial statements. However, it has been appropriately verified internally and includes information from the audited Consolidated Financial Statements 2018.

The Pillar 3 Report has been prepared in accordance with the CRD IV, not in accordance with International Financial Reporting Standards (IFRS). This can cause some discrepancy between financial information in the Consolidated Financial Statements and information in the Pillar 3 Report, see LI2 in the Additional Pillar 3 Disclosure. For some parts, figures are only available, or relevant, on parent level and are clearly marked as such.

1.5 Disclaimer

The Pillar 3 Report is informative in nature and shall under no circumstances be interpreted as a recommendation to take, or not to take, any particular investment action. Íslandsbanki holds no obligation to update, modify or amend this report in the event that any matter contained herein changes or subsequently becomes inaccurate. Nothing in this report shall be interpreted as an offer to customers nor is it intended to constitute a basis for entitlement of customers. Íslandsbanki accepts no liability whatsoever for any direct or consequential loss arising from the use of this publication or its contents.

Exhibit 1.2. List of disclosures in the Additional Pillar 3 disclosures.

Disclosure	Frequency	Pillar 3 Report
Table 1 – EU OVA: Institution risk management approach	Annual	Chapter 2
Table 2 – EU CRA: General qualitative information about credit risk	Annual	Chapter 4
Table 3 – EU CCRA: Qualitative disclosure requirements related to counterparty credit risk	Annual	Chapter 4
Table 4 – EU MRA: Qualitative disclosure requirements related to market risk	Annual	Chapter 5
Table 5 – EU LIA: Explanations of differences between accounting and regulatory exposure amounts	Annual	Chapter 3
Table 6 – EU CRB-A: Additional disclosure related to the credit quality of assets	Annual	Chapter 4
Table 7 – EU CRC: Qualitative disclosure requirements related to credit risk mitigation techniques	Annual	Chapter 4
Table 8 – EU CRD: Qualitative disclosure requirements on the use of external credit ratings under the Standardised Approach	Annual	Chapter 4
Table 9 – EU CRE: Qualitative disclosure requirements related to IRB models	N/A	
Table 10 – EU MRB: Qualitative disclosure requirements for institutions using the Internal Models Approach (IMA)	N/A	
Template 1 – EU LI1: Mapping of financial statement categories with regulatory risk categories	Annual	Chapter 3
Template 2 – EU LI2: Differences between regulatory exposure amounts and carrying values in financial statements	Annual	Chapter 3
Template 3 – EU LI3: Outline of the differences in the scopes of consolidation	Annual	Chapter 1
Template 4 – EU OV1: Overview of RWA	Quarterly	Chapter 3
Template 5 – EU CR10: IRB (specialised lending and equities)	N/A	
Template 6 – EU INS1: Non-deducted participations in insurance undertakings	N/A	
Template 7 – EU CRB-B: Total and average net amount of exposures	Annual	Chapter 3
Template 8 – EU CRB-C: Geographical breakdown of exposures	Annual	Chapter 4
Template 9 – EU CRB-D: Concentration of exposures by industry or counterparty types	Annual	Chapter 4
Template 10 – EU CRB-E: Maturity of exposures	Annual	Chapter 4
Template 11 – EU CR1-A: Credit quality of exposures by exposure classes and instruments	Semi-annual	Chapter 4
Template 12 – EU CR1-B: Credit quality of exposures by industry or counterparty types	Semi-annual	Chapter 4
Template 13 – EU CR1-C: Credit quality of exposures by geography	Semi-annual	Chapter 4
Template 14 – EU CR1-D: Ageing of past-due exposures	Semi-annual	Chapter 4
Template 15 – EU CR1-E: Non-performing and forborne exposures	Semi-annual	Chapter 4
Template 16 – EU CR2-A: Changes in stock of general and specific credit risk adjustments	Semi-annual	Chapter 4
Template 17 – EU CR2-B: Changes in stock of defaulted and impaired loans and debt securities	Semi-annual	Chapter 4
Template 18 – EU CR3: Credit risk mitigation techniques – overview	Semi-annual	Chapter 4
Template 19 – EU CR4: Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects	Semi-annual	Chapter 4

Exhibit 1.3. List of disclosures in the Additional Pillar 3 disclosures (continued).

Disclosure	Frequency	Pillar 3 Report
Template 20 – EU CR5: Standardised approach	Semi-annual	Chapter 4
Template 21 – EU CR6: IRB – Credit risk exposures by exposure class and PD range	N/A	
Template 22 – EU CR7: IRB – Effect on RWA of credit derivatives used as CRM techniques	N/A	
Template 23 – EU CR8: RWA flow statements of credit risk exposures under IRB	N/A	
Template 24 – EU CR9: IRB – Backtesting of probability of default (PD) per exposure class	N/A	
Template 25 – EU CCR1: Analysis of the counterparty credit risk (CCR) exposure by approach	Semi-annual	Chapter 4
Template 26 – EU CCR2: Credit valuation adjustment (CVA) capital charge	Semi-annual	Chapter 4
Template 27 – EU CCR8: Exposures to central counterparties	Semi-annual	Chapter 4
Template 28 – EU CCR3: Standardised approach – CCR exposures by regulatory portfolio and risk.	Semi-annual	Chapter 4
Template 29 – EU CCR4: IRB – CCR exposures by portfolio and PD scale	N/A	
Template 30 – EU CCR7: RWA flow statements of CCR exposures under Internal Model Method (IMM)	N/A	
Template 31 – EU CCR5-A: Impact of netting and collateral held on exposure values	Semi-annual	Chapter 4
Template 32 – EU CCR5-B: Composition of collateral for exposures to counterparty credit risk	Semi-annual	Chapter 4
Template 33 – EU CCR6: Credit derivatives exposures	Semi-annual	Chapter 4
Template 34 – EU MR1: Market risk under standardised approach	Semi-annual	Chapter 5
Template 35 – EU MR2-A: Market risk under internal models approach	N/A	
Template 36 – EU MR2-B: RWA flow statements of market risk exposures under an IMA	N/A	
Template 37 – EU MR3: IMA values for trading portfolios	N/A	
Template 38 – EU MR4: Comparison of VaR estimates with gains/losses	N/A	
LCR disclosure template, on quantitative information of LCR	Annual	Chapter 6
Table on qualitative/quantitative information of liquidity risk	Annual	Chapter 6
Template on qualitative information on LCR, which complements the LCR disclosure template	Annual	Chapter 6

2 Risk Management and Internal Control

Risk assessment and the prudent evaluation and pricing of risk are key elements in Íslandsbanki's operations. In turn, an efficient risk assessment framework forms the foundation of the Bank's risk and capital management strategy. Íslandsbanki's risk governance is based on a three lines of defence framework and aims for informed decision-making and strong risk awareness throughout the Bank.

2.1 Risk Governance and Organisation

Íslandsbanki is exposed to various risk factors and managing these risks is an integral part of the Bank's operations. Íslandsbanki emphasises sound governance principles. The risk management and internal control framework is intended to ensure effective and efficient operations, adequate control of risks, prudent conduct of business, reliability of financial and non-financial information reported internally and externally, and compliance with the relevant laws, regulations, supervisory requirements and the Bank's internal rules and decisions.

2.1.1 Three Lines of Defence Model

The first line of defence consists of the Bank's business and support units. The business units take on risk through the extension of credit and by providing other services to the Bank's customers. The primary responsibility for managing these risks lies with the business units and their individual employees. Each business unit shall have in place effective processes to identify, measure or assess, monitor, mitigate and report on the risks taken on by the unit. Support units, whose decisions have an impact on the Bank's operational risk, are subject to the same requirements for risk identification and management as the Bank's business units.

The second line of defence comprises the Bank's internal control units. The internal control units are responsible for developing and maintaining an efficient internal control framework to facilitate adequate control of risks, prudent conduct of business, reliability of financial and non-financial information reported or disclosed, and compliance with the relevant laws, regulations, supervisory requirements and the Bank's internal policies and procedures. The Bank's internal control units are Risk Management and Compliance.

The third line of defence provides independent assurance to management and the Board of Directors of the effectiveness and completeness of the internal control framework, including both the first and the second line of defence. The third line of defence duties are performed by Group Internal Audit.

2.1.2 Organisational Hierarchy

The Bank's management body has a dual structure. The Board of Directors has a supervising role in setting and monitoring the execution of set policies, the sound control of accounting and financial management and ensuring that group internal audit, compliance and risk management are effective. The Chief Executive Officer (CEO), the Chief Risk Officer (CRO) and other members of the senior management committees are responsible for implementing risk management practises and internal control in accordance with Board authorisation. Exhibit 2.1 provides an overview of the Group's risk management and internal control governance.

2.2 Roles and Responsibilities

2.2.1 Board of Directors

The ultimate responsibility for ensuring an adequate risk management and internal control framework at Íslandsbanki lies with the Board of Directors. The Board defines and communicates the risk governance framework and the acceptable level of risk through risk management policies and the *Risk Appetite Statement*.

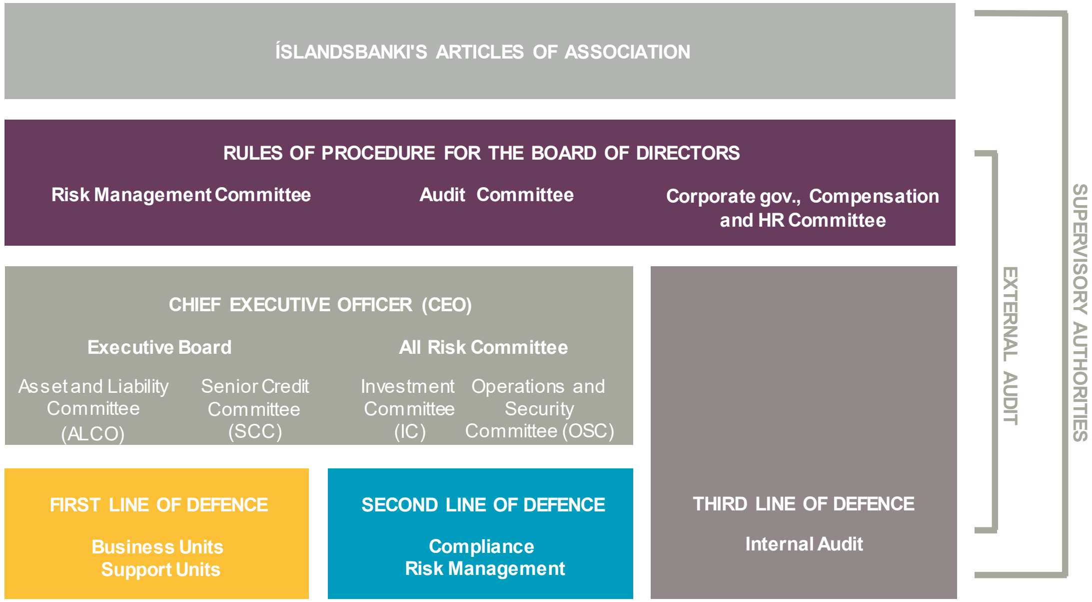
2.2.2 Board Committees

To assist the Board in fulfilling its oversight responsibilities, the Board has appointed three board subcommittees, the Risk Management Committee, the Audit Committee and the Corporate Governance, Compensation and Human Resource Committee. Further information on the Board subcommittees' role, composition and frequency of meetings can be found in the Bank's corporate governance statement in an unaudited appendix to the Consolidated Financial Statements.

2.2.3 Chief Executive Officer

The CEO is responsible for the day-to-day operations of the Bank and that the Bank's business is, at all times, in accordance with the Bank's Articles of Association, policies of the Board and the relevant law. The CEO engages the Bank's Compliance Officer and appoints members of the Exec-

Exhibit 2.1. Íslandsbanki's risk management and internal control governance.



utive Board and other Senior Management Committees.

2.2.4 Chief Risk Officer

The CRO heads Risk Management and is responsible for defining the daily tasks of the department and to assess the adequacy of its professional skills. In addition, the CRO is responsible for monitoring the risk management framework at Íslandsbanki and verifying that the Bank has the appropriate resources and organisation to manage its risks efficiently.

The CRO is selected and appointed by the CEO, subject to Board confirmation. The CRO reports directly to the Board and the Board Risk Committee on the overall risk profile of the Group and cannot be removed without the Board's prior approval. The removal or appointment of the CRO shall be publicly disclosed and the FME informed about the reasons.

The CRO is independent from the business units. The CRO chairs the All Risk Committee (ARC), is a member of the Executive Board and reports directly to the CEO. The CRO provides an independent view on the Group's exposure to risk. The CRO can veto certain risk-taking decisions of the Bank's committees if an internal control unit considers the proposed risk inconsistent with the Bank's risk appetite, policies or procedures.

2.2.5 Compliance Officer

The Compliance Officer heads the Compliance unit and is responsible for defining the daily tasks and compliance program of the function and assessing the adequacy of its professional skills. The Compliance Officer is responsible for monitoring the compliance risk management framework for the Bank and maintaining oversight for compliance risk throughout the Bank.

The Bank's Compliance Officer is selected and appointed by the CEO, subject to Board confirmation, and reports directly to the CEO. The Compliance Officer cannot be removed without the Board's prior approval. The FME and Chief Audit Executive (CAE) shall be notified of the dismissal or departure of the Compliance Officer. The Compliance Officer is a member of the ARC.

The Compliance Officer reports directly to the Board on the overall compliance risk profile of the Bank.

2.2.6 Chief Audit Executive

The CAE is appointed by the Board, reports directly to the Board and directs Group Internal Audit with a mandate from the Board. The CAE is responsible for internal audit matters within the Group.

2.2.7 Managing Directors in Business Units

The managing directors for individual business units are responsible for the risks taken on by their units and for earning an acceptable level of return on these risks. This entails the responsibility for ensuring the necessary resources and training of employees for understanding, identifying, measuring or assessing, continuously monitoring and reporting on these risks.

Managing directors for individual business units can be assigned authorisations for assuming risk on the Bank's behalf. For business decisions exceeding the authorisations of managers at individual business units, further authorisation must be requested from the relevant senior management committee.

2.2.8 Managing Directors in Support Units

The managing directors of individual support units are responsible for the implementation of the technical and operational infrastructure necessary to fulfil internal and external requirements for the identification, continuous monitoring and reporting on the risks assumed by the business units.

The responsibility for managing individual risk factors that are owned by a business unit can only be transferred to a support unit through clear documentation, mandate letters, product descriptions, service level agreements or some other formal manner.

2.2.9 General Counsel

The General Counsel heads the legal department of the Bank. The General Counsel is engaged by and reports directly to the CEO. The General Counsel provides legal advice to the Bank's senior management, including the Board of Directors, and manages the Bank's legal department that provides comprehensive legal advice to the Bank's business and support units.

2.2.10 All Employees

Each employee is responsible for understanding the risk related to their day-to-day work, for knowing and understanding the respective internal and external rules and procedures, for using the alert procedures in the event of possible fraudulent activities and for conducting business in accordance with the Bank's code of conduct.

2.2.11 Internal Control Functions

The Bank's internal control functions are responsible for developing and maintaining an efficient internal control framework to facilitate adequate risk management, prudent conduct of business, reliability of financial and non-financial information reported or disclosed, and compliance with the relevant laws, regulations, supervisory requirements and the Bank´s internal policies and procedures.

Risk Management

The Bank has an independent risk management function, Risk Management, headed by the CRO.

Risk Management is responsible for ensuring efficient implementation of the Bank's risk strategy and policies, for verifying that the Bank has in place efficient risk management processes and that each key risk that the Bank faces is identified and properly managed by the relevant function.

Risk Management is mandated to identify, understand, measure and monitor the risks that the Group is exposed to. It provides independent information, analyses and expert judgement on risk exposures, and advice on proposals and risk decisions made by senior management and business or support units as to whether they are consistent with the risk appetite and risk policies set by the Board. Emphasis is made on actively involving Risk Management at an early stage in elaborating the Bank's risk strategy and in all material risk management decisions, especially when offering new products or taking on new business.

Where necessary, Risk Management makes recommendations to senior management and the Board for improvements to the risk appetite, the risk strategy and the risk management framework to further clarify risk policies, procedures and limits.

Risk Management provides senior management and the Board with all relevant risk-related information to enable them to define the Bank's risk appetite. Risk Management takes an active part in developing the Bank's business strategy by ensuring that risks are appropriately and timely considered and that targets, which include credit ratings and rates of return on equity, are plausible and consistent. However, accountability for the business and pricing decisions taken remains with the business and support units and ultimately the senior management and the Board.

Compliance

The Bank has an independent compliance function, Compliance, headed by the Bank's Compliance Officer. Compliance is an independent control function and is a part of the second line of defence. Compliance reports at least twice a year to the Board of Directors.

Compliance is responsible for implementing the compliance risk framework, for developing and maintaining a compliance risk policy and for communicating the policy to the Bank's employees.

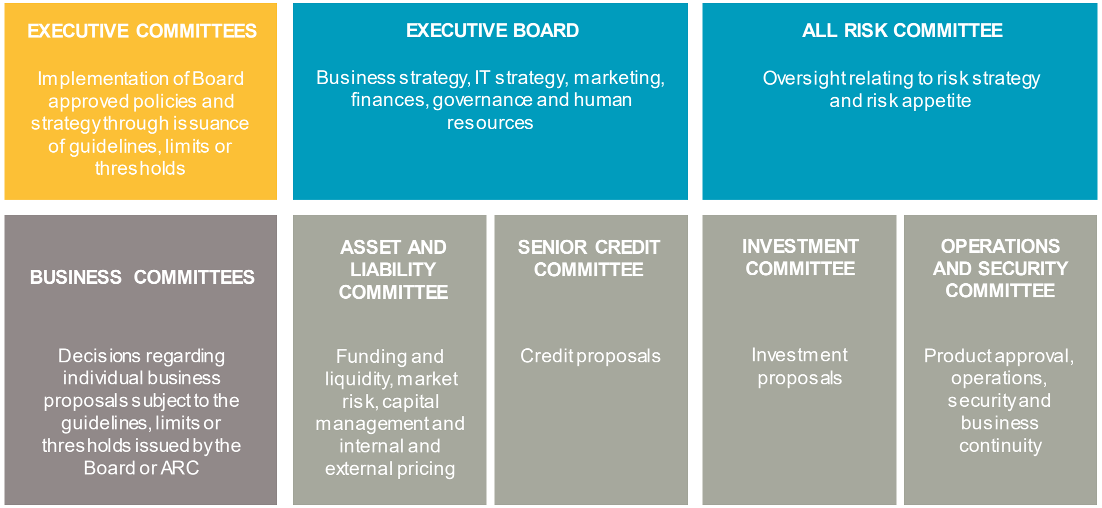
Compliance is specifically responsible for regular monitoring and assessment of the suitability and efficacy of the Bank's measures concerning securities transactions and anti-money laundering (AML) in accordance with the applicable law.

Compliance verifies, in close cooperation with Risk Management, that the process for new products and new procedures complies with the current legal framework and, where appropriate, any known forthcoming changes to the relevant legislation, regulations and supervisory requirements.

2.2.12 Group Internal Audit

Group Internal Audit is an independent function headed by the CAE and is responsible for assessing whether the Bank's risk management, internal control framework and governance processes are effective and efficient.

Exhibit 2.2. Organisational structure of the Bank's senior committees.



Group Internal Audit is not responsible for internal control or its implementation, but provides the Group with independent, objective assurance and consulting services designed to add value and improve the Bank's operations. It helps the Board and senior management evaluate and improve the effectiveness of the risk management, controls, and governance processes.

Group Internal Audit evaluates the compliance of the Bank's operations to internal policies and procedures. Group Internal Audit also assesses whether existing policies and procedures remain adequate and comply with the relevant legal and regulatory requirements.

Group Internal Audit verifies the integrity of the processes ensuring the reliability of the Bank's methods and techniques, assumptions and sources of information used in risk models and accounting measurements. Group Internal Audit is, however, not involved in the design or selection of models or other risk management tools.

The work of Group Internal Audit is performed in accordance with a risk-based audit plan which is approved by the Board Audit Committee. Group Internal Audit is furthermore responsible for internal investigations on suspected fraudulent activities.

Group Internal Audit reports directly to the Board on its findings and suggestions for material improvements to internal controls. All audit recommendations are subject to a formal follow-up procedure by the respective levels of management to ensure and report their resolution.

2.2.13 External Audit

As is provided for in the Articles of Association, the Group's external audit firm is elected at the Annual General Meeting (AGM) for a term of five years. External audit is responsible for the auditing of the annual accounts in accordance with accepted auditing standards and FME rules[1].

2.2.14 Senior Management Committees

The Bank's committee structure is divided into two categories, executive committees and business committees. There are two executive committees, the Executive Board and All Risk Committee (ARC). They are responsible for the implementation of the business strategy, risk appetite and policies. The business committees are four in total, the Asset and Liability Committee (ALCO), the Senior Credit Committee (SCC), the Investment Committee (IC), and the Operations and Security Committee (OSC). They are responsible for the approval of business proposals and the Bank's operational framework and implementation subject to internal rules and guidelines issued by the All Risk Committee and the Board.

The members of the senior management committees are appointed by the CEO, and their mandate and rules of procedure are documented in a charter. The organisation of the Bank's committees is shown in Exhibit 2.2.

Executive Board

The Executive Board, chaired by the CEO, is responsible for implementing the Board-approved business strategy, maintaining oversight for and coordinating the Bank's operations and human resources. The Executive Board also coordinates key aspects of its activities and holds decision-making power in matters entrusted to it by the CEO in accordance with the Bank's strategy, policies and risk appetite.

[1] FME Rules no. 532/2003 on the Auditing of Financial Undertakings

All Risk Committee

The All Risk Committee (ARC) is responsible for the review and implementation of risk management and internal control policies issued by the Board. ARC translates the Board-approved risk policies into risk limits or guidelines for individual business units, desks or portfolios and approves methods and assumptions used for calculating risk measures, capital and liquidity requirements and targets, impairment, internal and external pricing. The committee reviews and confirms proposals regarding risk assessment, impairments and capital and liquidity requirements prior to submission to the Board of Directors for approval.

Business Committees

The business committees decide on individual business proposals in accordance with the rules and procedures issued by the Executive Board, ARC and the Board. All business proposals discussed by the business committees are initiated and owned by a business or support unit and although authorisation has been given by a committee, the business decision itself is made and owned by the business unit.

Representatives from Risk Management attend all meetings of business committees. Their attendance is intended to ensure effective communication of risk information in the decision-making process, to ensure that the risks inherent in individual proposals are adequately addressed by the business units and to give an independent view on the risk inherent in the proposal and whether the risk is in line with the Bank's risk appetite.

The Risk Management representatives do not take part in the final decision of the business committees but can veto or escalate certain risk decisions if they consider them to be inconsistent with the Bank's risk appetite, policies or procedures.

2.3 Risk Culture

The Bank promotes strong risk culture as an important part of an effective risk management and internal control framework. The Bank's risk culture is reflected in the Bank's values and human resources strategy and is developed and maintained through the training of staff regarding policies, procedures and their responsibilities for risk. Emphasis is placed on transparency, acknowledgement, responsiveness and respect for risk throughout the Bank and open communication regarding risk is encouraged.

2.3.1 Ownership, Transparency and Accountability

A key feature of a strong risk culture is that every member of the organisation knows and understands their responsibilities relating to risk management. The *Risk Management and Internal Control Policy*, the *Risk Appetite Statement* along with other risk management policies outline these roles and responsibilities at Íslandsbanki.

All business decisions and the resulting risks are initiated and owned by a business unit and go through a clearly defined review and control process. As part of that process, the business units are responsible for identifying and describing the risks inherent in their proposals and for ensuring that all information regarding these risks is made available in a clear and comprehensive format before proposals are presented to the relevant authority within the Bank.

The business units are also responsible for ensuring that all information regarding risk exposures are correctly registered in the Bank's information systems to facilitate complete transparency, oversight and correct reporting of the Bank's overall risk exposures.

The meetings of business committees provide a formal platform for the communication of risk before a final decision is reached regarding individual business proposals.

The managing directors are responsible for ensuring that their employees have the necessary knowledge, resources and systems to monitor and manage their respective risk positions within the approved risk limits. All breaches of risk limits are reported through a formal limit breach process.

2.3.2 Training and Incentives

The Bank's performance and talent management aims at encouraging and reinforcing risk awareness and a healthy risk culture. The Bank has in place a comprehensive training programme managed by the Human Resources Department. The programme includes mandatory training on the Bank's internal policies and procedures tailored to the responsibilities of individual employees.

In 2018, the Bank recorded around 5,400 registrations for close to 300 different in-house training courses. All employees are required to read and confirm their knowledge of the Bank's operational procedures, code of conduct, security policies and rules on measures against money laundering. The ratio of confirmation is monitored by the Bank's Human Resources Department and lack of participation is escalated to the appropriate managing directors.

2.3.3 Incident Reporting

The Bank has implemented a framework to capture both actual and potential operational risk losses. The Bank emphasises a "no-blame" culture and

Exhibit 2.3. Risk types and corresponding metrics in the Risk Appetite Statement.

Type of risk	Metrics
Profitability	Minimum rate of return on capital
Capital adequacy	CET1 capital ratio Total capital ratio target
Credit risk	Annual credit losses Non-primary lending activity Concentration risk
Market risk	Market risk as a ratio of the Group's total capital Market value of listed and unlisted equities Equity and bond underwriting exposures
Liquidity risk	Regulatory liquidity ratios Deposits to loans ratio
Operational risk	Operational losses as a percentage of capital

encourages employees to register all mistakes or failures, irrespective of financial losses, into the Bank's operational risk database. All registered events are analysed and recorded, and the information used for continuous improvements to the Bank's operations and control framework.

2.3.4 Internal Alert Procedures

The Bank has an independent reporting channel enabling employees to report anonymously suspicion of fraudulent activities or actual breaches of regulatory or internal requirements. This reporting channel, which is referred to as a whistleblowing service, is provided by an external partner to ensure anonymity and whistle-blower protection. Information stored in the system is only accessible to the Bank's Group Internal Audit Fraud Investigation Team.

2.4 Risk Management Framework

The Bank's risk policies, rules and procedures, limits and reports form the Bank's risk management framework. The policies apply to the Bank and are implemented throughout the Group as applicable.

All business decisions and the resulting risks are initiated and owned by a business unit and go through a clearly defined internal review and control process. The level of authority needed to approve each business decision depends on the size, complexity and risk involved. The responsibilities regarding such decisions are outlined in the Bank's risk policies and investment policies and for material decisions summarised in the Bank's *Matrix for Material Bank Actions*.

2.4.1 Risk Appetite Statement

The Board defines the Bank's risk tolerance and financial targets in the *Risk Appetite Statement*. The *Risk Appetite Statement* is intended to support the Bank's business strategy by defining high-level limits and targets for core factors in the Bank's risk profile and operations.

The measures include target return on equity, target capitalisation level and capital composition, maximum credit losses, concentration limits, maximum amounts at risk for market risk and target liquidity ratios. Exhibit 2.3 shows the risk types and corresponding metrics in the *Risk Appetite Statement*.

2.4.2 Risk Policies and Limits

The *Risk Appetite Statement* is further implemented through risk policies, approved by the Board, and other rules, procedures and limits approved by ARC which provide more details specific to each risk type. In addition, the *Risk Assessment Framework* and the *Stress Testing Framework*, approved by the Board, describe the processes for identifying and assessing the risks inherent in the Bank's operations.

The risk policies such as the *Credit Risk Policy*, the *Market Risk Policy*, the *Operational Risk Policy*, the *Liquidity Risk Policy*, the *Compliance Risk Policy* and the *Product Governance Policy* outline in further detail the Bank´s strategy for risk identification, management and control within the three lines of defence framework. Finally, the risk appetite is translated into limits on individual desks, portfolios or risk positions.

2.4.3 Risk Identification

Identification of risks in the Bank's operations is made both from the bottom up, through the product approval process, the risk and control self-assessment process, and approval of individual transactions or portfolio and desk limits; and from the top-down through the annual risk assessment procedure as part of the Internal Capital Adequacy Assessment Process (ICAAP).

The product approval process and approval of individual transactions, or portfolios, is intended to ensure early detection and full oversight of risks in the Bank's operations. Each business unit is responsible for identifying the risks inherent in their operations and the products and services they offer.

The *Product Governance Policy* outlines the product and new business approval process within the Bank. The main objective is to ensure that the implementation of products and operations complies with the Bank's policy and the relevant legal requirements. The *Product Governance Policy* describes the synchronisation, review and control process necessary to ensure successful implementation of new products. The product approval process itself is a communication tool between product stakeholders, as well as a monitoring and risk management tool for new products.

In addition, as a part of the ICAAP, a formal and comprehensive assessment of the risks inherent in the Group operations is made annually. This review is described in the *Risk Assessment Framework* which is approved by the Board of Directors.

Risk Management is responsible for managing the annual risk assessment process. The assessment is done at the business unit level and then consolidated throughout the Group. The results from the risk assessment process are compared to the Bank's business strategy and risk appetite and used as input to the annual review of the *Risk Appetite Statement*.

For the key risk types identified through the assessment, a specific risk policy is defined and approved by the Board of Directors. The need for a specific risk policy is based on the assessment of the proportionality of the respective risk factors to the Bank's operations and business strategy.

Currently, the following four risk types have been defined as key to the Group's operations and business strategy and their assessment, management and overall limits are defined in specific risk policies:

- Credit risk (Chapter 4)
- Market risk (Chapter 5)
- Liquidity risk (Chapter 6)
- Operational risk (Chapter 7)

Concentration risk is defined as material but currently managed according to the source of concentration. Concentration risk is considered in the *Credit Risk Policy*, the *Market Risk Policy* and the *Liquidity Risk Policy*.

Other risk types that are not covered in separate risk policies are assessed through the annual ICAAP process and addressed in other risk policies and management reports in accordance with their nature and importance.

2.4.4 Risk Monitoring and Reporting

Risk Management provides a holistic view on risk, and compliance to limits, to internal and external stakeholders, and ensures an appropriate escalation in the event of limit breaches. Business and support units are, however, responsible for maintaining their independent view on the risks inherent in their operations, implementation of controls and other mitigating actions where needed, and reporting to senior management any present or foreseeable breaches from limits, policies or strategic direction. Exhibit 2.4 provides an overview of the governance of the risk management framework.

The strategic targets of the management are further defined in the Group's business plan, approved by the Board of Directors. The business plan gives a 5-year view of the development of the Group's operations and provides a basis for stress testing and capital planning.

ICAAP aims at identifying and assessing the risk inherent in the Group's operations and for integrating the Bank's business strategy and business plan on one hand and its risk profile and risk appetite on the other hand. This is to ensure that the Bank holds enough capital to support its risk profile and business strategy.

Íslandsbanki's *Risk Assessment Framework* outlines the Bank's framework for identifying the risks inherent in its operations and assessing its capital and liquidity adequacy. The scope of the Bank's risk assessment framework encompasses all material risks to which the Bank and its subsidiaries are exposed.

The Bank created a Recovery Plan for the first time in 2018 in accordance with a law which took effect in Iceland in 2018[2]. The Recovery Plan documents the relevant measures to be taken by the Bank to restore its financial position following a significant deterioration. The Recovery Plan is approved by ARC and the Board of Directors prior to being sent to the FME.

2.4.5 Internal Reporting

The Bank aims to have clearly defined and efficient reporting lines to ensure compliance with the approved risk limits and targets. Timely and accurate reporting on material risk factors is an essential part of the risk management and internal control governance.

Risk Management is responsible for providing ARC, the Board's Risk Management Committee

[2] Act. no. 54/2018, amending the Act on Financial Undertakings no. 161/2002

Exhibit 2.4. Íslandsbanki's governance risk management framework.

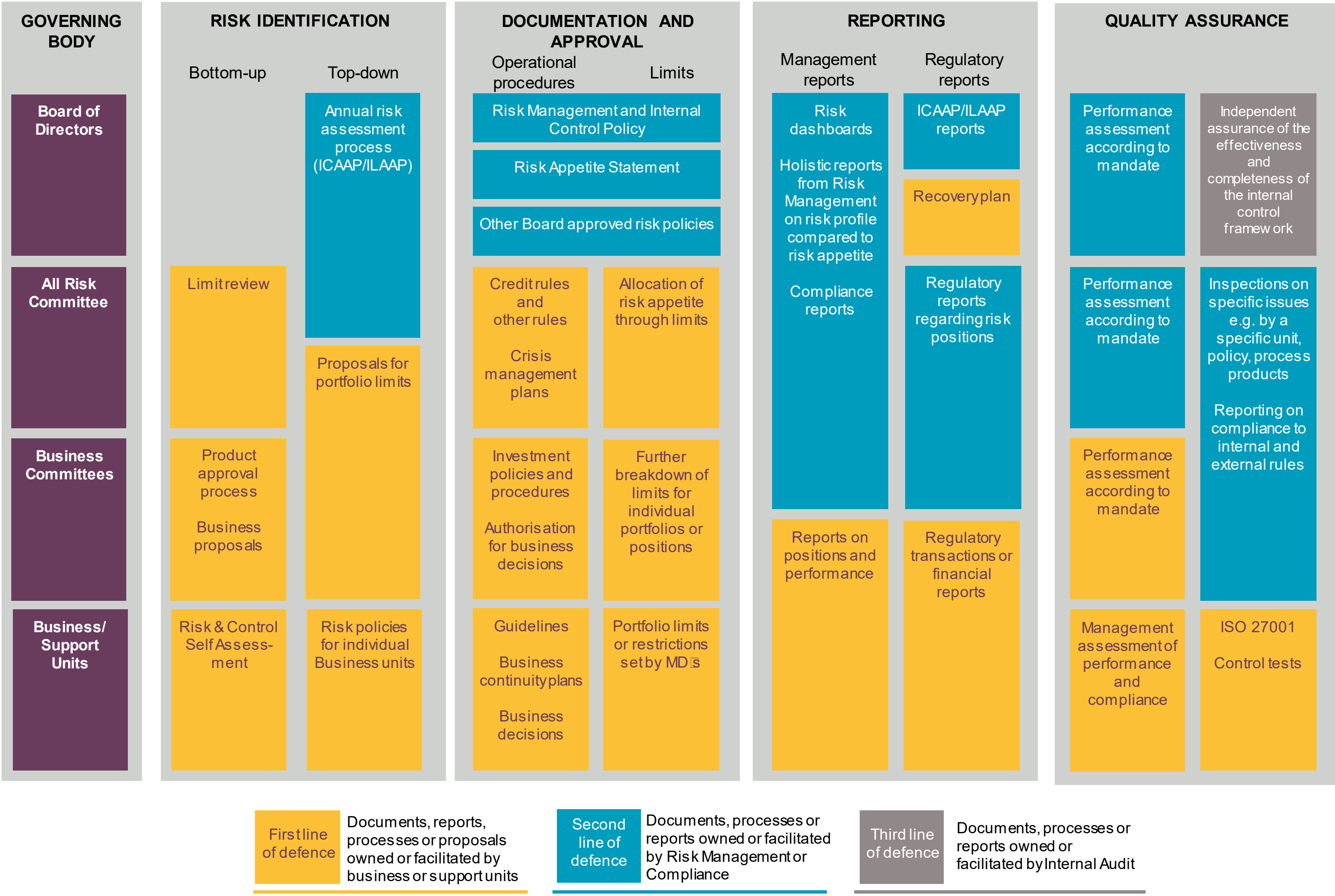


Exhibit 2.5. Risk reporting and frequency to the All Risk Committee and the Board of Directors.

Reporting	Details	Frequency
Risk Dashboard	The report provides a review of risk measures that summarise the main risk positions as compared to the risk appetite, internal and regulatory limits. This includes utilisation of limits set by the Board, Executive and Business Committees. On a quarterly basis the report also includes an assessment of capital adequacy in light of changes in risk profile (ICAAP review).	Monthly
ICAAP report (Internal Capital Adequacy Assessment Process)	The ICAAP report includes a detailed description of how the Bank identifies, measures and assesses its capital adequacy in relation to its risk profile and business model. The scope of the assessment encompasses all material risks to which the Bank and its subsidiaries are exposed.	Annual
ILAAP report (Internal Liquidity Adequacy Assessment Process)	The ILAAP report includes a detailed description of how the Bank identifies, measures and assesses its liquidity adequacy in relation to its risk profile. The report also includes a forward-looking analysis based on contractual inflows and outflows, planned issuance and new lending according to the Bank's business plan.	Annual
Recovery Plan	The document provides a comprehensive recovery plan for the Bank that sets out measures to be taken for the recovery of the Banks's financial position following a significant deterioration to restore financial stability.	Annual

and the Board with comprehensive and understandable information on the overall risk profile of the Group, including a comparison with the approved policies and limits. Exhibit 2.5 provides an overview of risk reporting and frequency to the ARC and the Board of Directors.

2.4.6 External Reporting

The Group publishes financial information mainly through the Annual Report, Consolidated Financial Statements, the Pillar 3 Report and in investor presentations. These are all available on the Bank's website[3].

The Group's financial accounts are prepared in accordance with International Financial Reporting Standards (IFRS). Regulatory reports are prepared based on the Capital Requirements Directive (CRD IV) along with discretionary rules and requirements set by the Central Bank of Iceland (CB) and the FME.

In addition, the Group works and reports according to the guidelines issued by Nasdaq Iceland for listed companies, since Íslandsbanki is an issuer of listed papers both on Nasdaq Iceland and on the Irish Stock Exchange. The framework for public disclosure regarding the Bank's risk and financial positions is described in the *Disclosure and Communication Policy* approved by the Board.

[3] www.islandsbanki.is

3 Capital Management

Íslandsbanki's capital position remained strong throughout 2018 and at year-end the Bank's capital ratio was 22.2%, exceeding both the Bank's capital target and regulatory requirements.

The Bank aims at managing its capital position and the corresponding capital ratios at a comfortable margin above the overall regulatory capital requirement. The resulting long-term capital target assumes that the Bank maintains a capital management buffer of about 0.5-2.0% in excess of the SREP results.

3.1 Strategy, Organisation and Responsibility

Banks' capital is intended to provide a buffer for unexpected losses or volatility in earnings and thereby provide protection for depositors and other creditors as well as promoting stability of the financial system. The eligible capital for calculating the capital ratio is defined by law and further outlined in relevant rules and regulations. The applicable Icelandic laws defines both the type of eligible capital and restrictions to the reliance on specific instruments.

The Bank's capital management framework is based on the CRD IV[1] as transposed into Icelandic laws.

The Board of Directors is responsible for the Bank's capital management framework and for ensuring that the Bank's capitalisation is adequate in relation to the risk inherent in the operations taking into account the Bank's business strategy and operating environment.

The All Risk Committee (ARC) governs the capital management of the Bank in accordance with the capital targets set by the Board and reviews proposals to the Board regarding issues related to capital management, including the dividend policy.

Risk Management is responsible for internal and external reporting on the Bank's capital adequacy. Risk Management is also responsible for the Bank's Internal Capital Adequacy Assessment Process (ICAAP) and for the calculations of the allocated capital to individual business units.

Treasury is responsible for the management of the Bank's capital in accordance with the targets set by the Board and is responsible for developing the Bank's dividend policy for Board approval. Finance is responsible for reporting on the risk-adjusted performance down to individual business units.

3.2 Total Capital and Capital Ratios

At year-end 2018 the Bank's common equity Tier 1 (CET1) amounted to ISK 171bn as compared to ISK 176bn at year-end 2017. The main factors contributing to the decrease in CET1 are the ISK 13.0bn dividend payment disbursed in March 2018 offset by an ISK 10.6bn profit for the year. In addition, the implementation of IFRS 9 at 1 January 2018 decreased the CET1 capital by ISK 2.5bn. The Bank's Tier 2 capital increased to ISK 16bn from ISK 11bn during the year. In August 2018, the Bank issued an SEK 500m Tier 2 bond at a spread of STIBOR +250bp. This was the Bank's second Tier 2 bond issue. For further information regarding the Bank's subordinated loans see Note 38 in the Consolidated Financial Statements. The implementation of IFRS 9 decreased the Tier2 capital because all credit risk adjustments are now considered to be specific and therefore there are no general credit risk adjustments eligible as Tier 2 capital. A breakdown of the Bank's total capital base is shown in Exhibit 3.1.

The Bank's minimum capital requirements, the corresponding risk exposure amount (REA) under Pillar 1 and the resulting capital ratios are shown in Exhibit 3.2. Details regarding the Bank's capital requirements can be found in Section 3.2.1.

The REA increased by ISK 70bn during the year. The largest increase was due to growth in the loan portfolio contributing to an ISK 69bn increase. Thereof, the corporate exposure class increased by ISK 61bn, of which ISK 10bn are due to depreciation of the ISK. The main components contributing to changes in REA can be seen in Exhibit 3.3.

3.3 Capital Requirements

The Board of Directors sets a minimum capital target for the Bank, expressed as the ratio between capital and risk exposure amount. The minimum capital target is intended to ensure that the Bank's capitalisation remains above regulatory requirements at all times. The target is based on the results from ICAAP, the views expressed by the regulator through the Supervisory Review and Evaluation Process (SREP), implementation of the CRD IV capital buffers and other factors such as uncertainties in the operating environment, a possible

[1] Capital Requirement Directive 2013/36/EU.

Exhibit 3.1. Breakdown of the capital base at year-end 2018 and 2017 (ISK m). Consolidated.

Capital	31.12.2018	31.12.2017
Common equity Tier 1 Capital	171,473	175,525
Ordinary share capital	10,000	10,000
Share premium	55,000	55,000
Other reserves	6,499	6,179
Retained earnings	102,496	107,387
Non-controlling interests	2,318	2,479
Fair value changes due to own credit standing	376	-
Tax assets	(215)	(4)
Intangible assets	(5,002)	(4,231)
Other regulatory adjustments	-	(1,285)
Tier 2 capital	16,216	11,234
Qualifying subordinated liabilities	16,216	9,505
General credit risk adjustments	-	1,729
Total capital base	187,688	186,759

target rating or other external factors. The following sections describe each component in more detail.

3.3.1 Pillar 1 Minimum Capital Requirements

The first pillar of the CRD IV defines the minimum capital requirements for credit risk, market risk and operational risk. The capital ratio, calculated as the ratio between the capital base and risk exposure amount, must exceed 8%.

Risk Exposure Amount

For each of the Pillar 1 risk factors, the CRD IV allows for different methods to be used for calculating the minimum capital requirements and thereby REA. For credit risk and market risk, the Bank uses the standardised approach to calculate the capital requirements and for operational risk the Basic Indicator Approach. The minimum capital requirements under Pillar 1 are 8% of REA.

Credit risk

The REA for credit risk is derived by assigning a risk weight, in the range of 0-150%, to the Bank's assets depending on the creditworthiness of the counterparty, the underlying collateral and the type and term of the exposure.

Market risk

For traded debt instruments, the capital requirement is generally in the range of 0-12% of the net exposure, based on the creditworthiness of the issuer and the term of the instrument. For traded equity instruments, the capital requirement is 16% of the net exposure. For foreign exchange (FX) risk, the minimum capital requirement is 8% of the maximum of the Bank's total long and total short positions in foreign currencies.

Operational risk

The minimum capital requirement for operational risk is equal to 15% of the relevant indicator, where the relevant indicator is the average over three years of the sum of net interest income and net non-interest income.

REA is determined by multiplying the capital requirements for market risk and operational risk by 12.5 (the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of REA for credit risk.

3.3.2 Pillar 2 Required Add-On (Pillar 2-R)

In addition to the minimum capital requirements for credit risk, market risk and operational risk under Pillar 1, financial institutions are required to make their own assessment of the overall capital requirements of the institution. These additional capital requirements, taking into account the risk profile of the institution, are referred to as Pillar 2-R capital requirements.

In the ICAAP 2018, the main factors contributing to additional capital requirements under Pillar 2-R for Íslandsbanki were:

- *Additional capital requirements for risk factors underestimated under Pillar 1:* Credit risk and market risk
- *Additional capital requirements for risk factors not addressed under Pillar 1:* Credit concentration risk, interest rate risk in the banking book (IRRBB), market risk arising from equities in the banking book and the inflation imbalance

Exhibit 3.2. Pillar 1 capital requirements, REA and capital ratios at year-end 2018 and 2017 (ISK m). Consolidated.

Íslandsbanki's capital requirements and REA	Minimum capital requirements	REA	Minimum capital requirements	REA
	31.12.2018		31.12.2017	
Credit risk	60,064	750,801	54,602	682,525
Central governments or central banks	-	-	-	-
Regional governments or local authorities	184	2,300	189	2,365
Administrative bodies and non-commercial undertakings	70	876	80	1,000
Financial institutions	924	11,546	628	7,850
Corporates	38,838	485,472	33,926	424,070
Retail	10,637	132,961	11,840	148,002
Secured by real estate property	5,964	74,550	4,693	58,661
Exposure in default	1,417	17,716	1,113	13,918
Collective investment undertakings	81	1,009	0	3
Fair value shares, investment in associates and shares held for sale	811	10,137	541	6,767
Property, equipment, non-current assets held for sale and other assets	1,139	14,233	1,591	19,887
Market risk	610	7,622	653	8,160
Traded debt instruments	316	3,948	258	3,222
Shares and equity instruments	216	2,700	284	3,544
Foreign exchange	78	973	111	1,393
Credit valuation adjustment	191	2,385	123	1,534
Operational risk	6,811	85,141	6,667	83,331
Total	67,676	845,949	62,044	775,550
CET1 capital		171,473		175,525
Capital base		187,688		186,759
CET1 ratio		20.3%		22.6%
Total capital ratio		22.2%		24.1%

The Pillar 2-R capital requirements are presented as a proportion of REA in addition to the regulatory capital minimum of 8% under Pillar 1. The capital requirements under Pillar 1 and Pillar 2-R form the total SREP capital requirement for the Bank (TSCR). The Bank's Pillar 2-R results are reviewed by the Financial Supervisory Authority (FME) through the SREP. Based on the 2018 SREP, the additional capital required for Íslandsbanki under Pillar 2-R was 2.2% compared to 3.2% in 2017. The decrease is mainly due to a more moderate market risk profile. As a result, the total SREP capital requirement decreased to 10.2% from 11.2%. The breakdown of the Pillar 2-R capital requirements can be seen in Exhibit 3.4.

Exhibit 3.3. Changes in risk exposure amount (ISK bn). Consolidated.

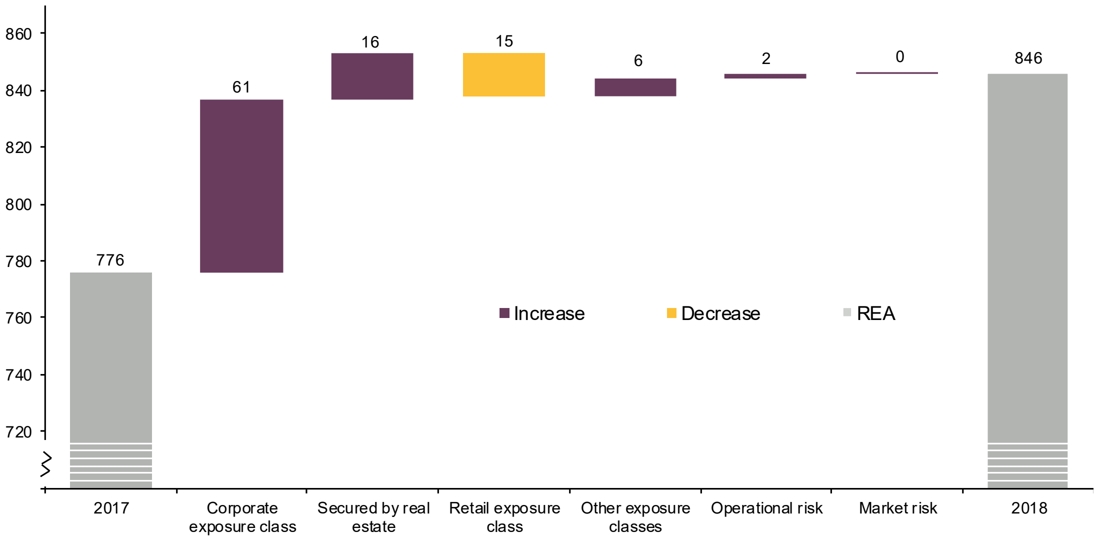


Exhibit 3.4. Breakdown of the total capital requirement. Consolidated.

SREP capital requirement	2018	2017
Pillar 1	8.0%	8.0%
Credit risk	7.0%	7.0%
Market risk	0.1%	0.1%
Operational risk	0.9%	0.9%
Pillar 2-R	2.2%	3.2%
Credit risk	0.7%	0.8%
Credit concentration risk	0.8%	0.9%
Market risk	0.7%	1.3%
Operational risk	0.0%	0.2%
Total SREP capital requirement	10.2%	11.2%

3.3.3 CRD IV Capital Buffers

The size of the capital conservation buffer is fixed by law at 2.5%. Based on recommendations from the Financial Stability Council,[2] The FME is authorised to determine the size of the countercyclical capital buffer, the capital buffer for other systemically important institutions (O-SII buffer), and the systemic risk buffer.

The FME has set the countercyclical capital buffer at 1.25%, the buffer for other systemically important financial institutions at 2.0%, and a systemic risk buffer at 3.0% of the domestic risk exposure amount. In addition, the FME has announced a 50 basis point and a 25 basis point increase in the countercyclical capital buffer that are effective in May 2019 and February 2020 respectively.

As the systemic risk buffer only applies to domestic exposures, the effective risk buffer rate is calculated by multiplying the proportion of the domestic credit risk exposure by the domestic systemic risk buffer rate.

The institution-specific countercyclical capital buffer rate applies to institution-wide total REA. The institution's specific buffer add-on amount is calculated as the weighted average of the countercyclical capital buffer rate applicable in jurisdictions in which an institution has private sector credit exposures, multiplied by total risk exposure amount.[3]

The calculations of the institution specific buffer rates are displayed in Exhibit 3.5 while Exhibit 3.6 shows combined buffer requirement for Íslandsbanki at year-end 2018 and 2017. The sum of Pillar 1, Pillar 2-R and the combined capital buffers forms the overall capital requirement.

[2] Article 86(a)-(e) of Act no. 161/2002 on Financial Undertakings.
[3] For further information on methodology see FME's Methods for setting capital buffers.

Exhibit 3.5. Calculation of effective buffers for Íslandsbanki (ISK bn). Consolidated.

	Credit risk exposure amount	Market risk exposure	Total risk exposure amount	Buffer rate	Effective buffer rate
Countercyclical capital buffer					
Iceland	707.7	2.6	710.3	1.25%	1.2%
Norway	3.8	0.0	3.8	2.0%	0.0%
United Kingdom	0.6	0.0	0.6	1.0%	0.0%
Other countries	24.0	0.2	24.1		
Total private sector REA	736.1	2.8	738.9		
Institution-specific countercyclical buffer rate					1.21%
Systemic risk buffer					
Iceland	711.1	-	711.1	3.0%	
Total	750.8	-	750.8		
Effective systemic risk buffer					2.84%

Exhibit 3.6. Combined capital buffer requirement. Consolidated.

	31.12.2018	31.12.2017
Capital conservation buffer	2.50%	2.50%
Countercyclical capital buffer	1.21%	1.22%
O-SII buffer	2.00%	2.00%
Systemic risk buffer	2.84%	2.88%
Combined buffer requirement	8.55%	8.60%

3.3.4 Pillar 2 Guidance for Stressed Conditions (Pillar 2-G)

The Pillar 2-G is based on future risk and is subject to the regulators' assessment of stress tests performed on the financial institutions (supervisory stress testing). The FME can add the Pillar 2-G as a capital reference if the results from the supervisory assessment indicate that a financial institution might not be able to meet the total SREP capital requirements over the projected economic cycle. Currently no Pillar 2-G is applicable for the Bank.

3.3.5 Management Buffer

The Bank aims at managing its capital position and the corresponding capital ratios at a comfortable margin above the overall regulatory capital requirement. This margin is referred to as the management buffer in the Bank's capital management framework. The size of the management buffer is based on factors such as views from the regulator through the SREP, volatility in the Bank's REA due to due to currency fluctuation, volatility in the Bank's REA due to lumpy asset growth, the Bank's target rating, competitive issues, funding terms, uncertainty in the operating environment not accounted for in the ICAAP and uncertainty in the regulatory environment.

The Bank's capital target set by the Board of Directors assumes that the Bank keeps a management buffer of about 0.5-2.0% in excess of the overall capital requirement resulting from the SREP. Based on the most recent SREP results, this translates to a target capital ratio of 19.3-20.8%.

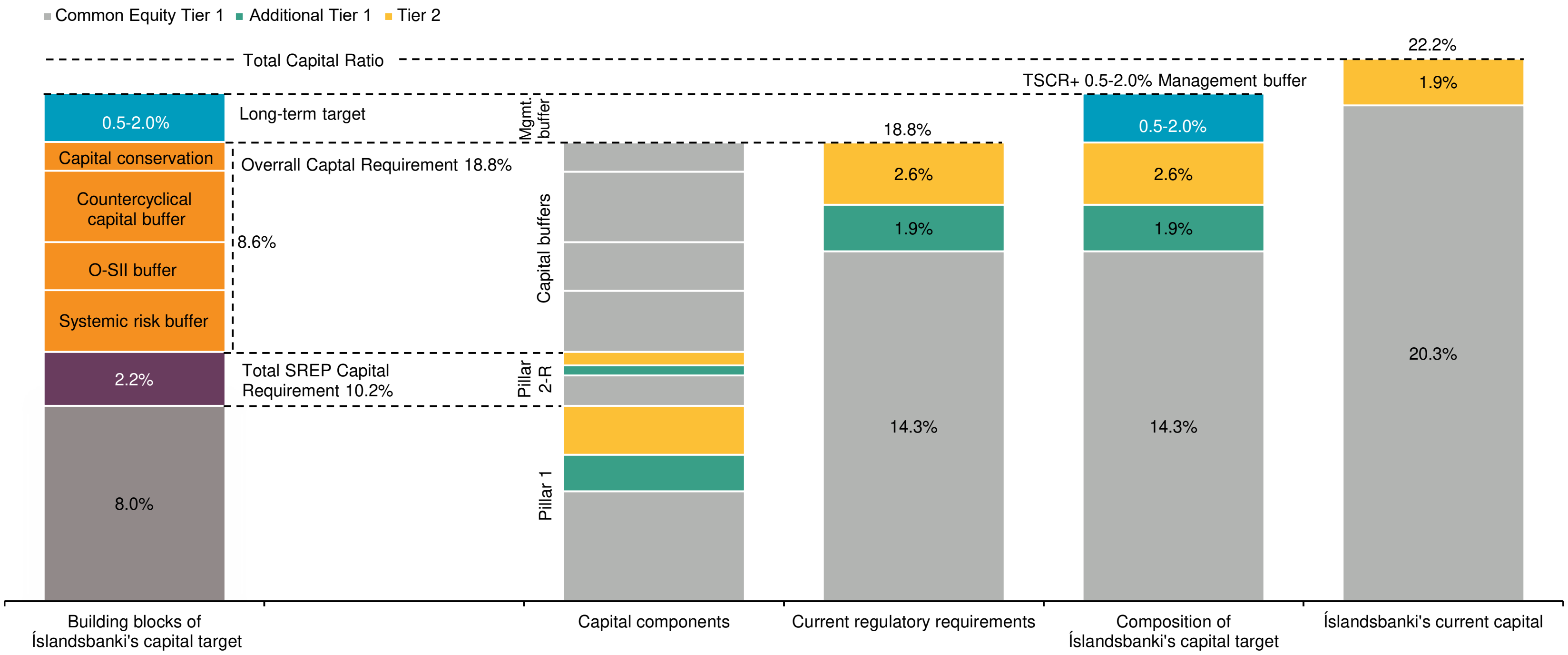
According to the CRD IV, the following restrictions apply to the composition of Pillar 1 capital:

- CET1 at a minimum 4.5% of REA
- Tier 1 capital including Additional Tier 1 (AT1) at a minimum 6.0% of REA
- A total capital ratio including Tier 2 debt at a minimum 8.0% of REA

The capital held under Pillar 2-R is subject to the same proportional restrictions as capital held under Pillar 1, the CRD IV capital buffers shall be comprised of CET1 capital only, whereas the composition of the management buffer is at the Bank's discretion.

Exhibit 3.7 shows Íslandsbanki's current regulatory requirements and how they contribute to the Group's minimum capital target as well as the composition of the Bank's capital, the minimum

Exhibit 3.7. Current regulatory requirements compared with Íslandsbanki's minimum capital target as well as the composition of the capital target. Consolidated.



requirements for CET1 capital and the resulting room for issuing AT1 or Tier 2 capital under Icelandic rules.

3.4 Stress Testing

Íslandsbanki's stress testing framework aims at detecting the sensitivity of the Bank's operations to changes in the operating environment and to ensure that the Bank holds sufficient available capital and liquid funds to meet minimum requirements, even under stressed operational conditions.

The main types of stress tests performed at Íslandsbanki are:

- *Sensitivity analysis:* Sensitivity analyses provide information about key risks and enhance understanding about concentrations in one or several risk factors. Sensitivity analysis stresses one risk driver, with different degrees of severity, to assess the sensitivity of the Bank's operations to that particular risk driver.
- *Reverse stress test:* Reverse stress testing consists of defining a significant and pre-defined negative outcome and then identifying causes and consequences that could lead to such an outcome. The purpose is to identify possible combination of events and risk concentrations that might not be included in other stress tests performed within the Bank. Thus, the reverse stress test could reveal weaknesses in the Bank's operations that might otherwise be overlooked.
- Scenario analysis: Scenario analysis can be defined as multiple sensitivity analyses performed at the same time which assess the resilience of an institution. A stress scenario is supposed to be forward looking and identify possible events or changes in market conditions that could adversely impact the Bank. The scenario should address the main risk factors that the Bank may be exposed to. The scenario should be severe but plausible and at the same time be consistent internally as well as economically.
- *Specific events:* Under this type of stress testing, the Bank assesses specific current or imminent events that could have extensive impact on its operations, the risk mitigating actions that can

Exhibit 3.8. Leverage ratio (ISK bn). Consolidated.

	31.12.2018	31.12.2017
On-balance sheet exposures	1,121	1,027
Off-balance sheet exposures	47	51
Derivative exposures	9	6
Leverage ratio total exposure measure	1,177	1,085
Tier 1 capital	171	176
Leverage ratio	14.6%	16.2%

be taken to reduce the likelihood of these events materialising and to minimise the impact for the Bank.

- *Reputational risk stress test*: Qualitative stress testing due to reputational risk are performed with different specialists across the Bank. The specialists decide on a scenario that could damage the Bank's reputation and analyse how the scenario affects the Bank's reputation, the impact it has on different stakeholders, the likelihood that it would have this effect and discuss possible countermeasures. The discussions are documented and summarised in the Bank's ICAAP Stress Testing Results.

The key assumptions for a scenario analysis and other significant stress tests are developed in cooperation with the Bank's Chief Economist, business units, ARC and the Board. The results from stress tests are compared with the Bank's capital target, other risk appetite measures and risk limits. If the results indicate a breach in the Bank's capital targets or other risk appetite or strategic measures, remedial actions may be suggested, depending on the severity and likelihood of such a breach.

3.5 CRD IV – Leverage Ratio

The leverage ratio is a measure introduced in the CRD IV, supplementing the risk-based capital requirements. A lower leverage ratio indicates higher leverage. The leverage ratio is calculated by dividing Tier 1 capital by the sum of total assets and adjusted off-balance sheet exposures. According to law, the minimum leverage ratio is 3%.

Exhibit 3.8 shows the breakdown of the exposures and the leverage ratio. The increase in the total exposure measure is due to a larger balance sheet whereas the decrease in the Tier 1 capital is due to a dividend payment. As a result, the leverage ratio decreased between years.

4 Credit Risk

The Bank undertakes credit risk by offering loans, guarantees and other credit products. Credit risk is the primary risk factor in the Bank's operations and taking on credit risk is a core activity of the Bank. The Bank has policies and procedures for accepting, measuring and managing credit risk. The objective of credit risk management is to achieve an appropriate balance between risk and return and to minimise potential adverse effects of credit risk on the Bank's financial performance.

At the end of 2018, the Bank's maximum exposure to credit risk amounted to ISK 1,255bn, compared to ISK 1,170bn at year-end 2017. The loan portfolio grew by 11.9% in 2018 after a 9.8% increase in the previous year. Credit risk accounted for 89% of capital requirements under Pillar 1 and credit risk and credit concentration risk accounted for 84% of the total capital requirements at the end of 2018.

This chapter provides a description of the Bank's credit process, risk assessment models and a detailed breakdown of the loan portfolio that gives an indication of credit concentration and credit quality.

4.1 Strategy, Organisation and Responsibility

Credit risk is defined as the current or prospective risk to earnings and capital arising from an obligor's potential failure to meet the terms of any contract with the Bank.

Credit concentration risk is the increase in risk that is driven by common underlying factors, such as sector, economy, geographical location, type of financial instrument or due to connections or relations among counterparties. This includes large individual exposures to parties under common control and significant exposures to groups of counterparties whose probability of default is driven by common underlying factors.

The ultimate responsibility for ensuring an adequate credit risk management and internal control framework at Íslandsbanki lies with the Board of Directors. The Board defines the credit risk governance framework and the acceptable level of credit risk through the *Risk Management and Internal Control Policy*, the *Risk Appetite Statement* and the *Credit Risk Policy*.

The Bank's strategy is to maintain a modest credit risk profile and it aims to have long-term average annual credit losses less than 0.9% of the loan portfolio, excluding the liquidity portfolio and the qualified retail mortgage portfolio. This risk appetite is reflected in the credit risk limit structure and guided through the use of credit risk assessment models.

Credit risk activities are controlled through exposure limits applied to counterparties, countries, sectors and products.

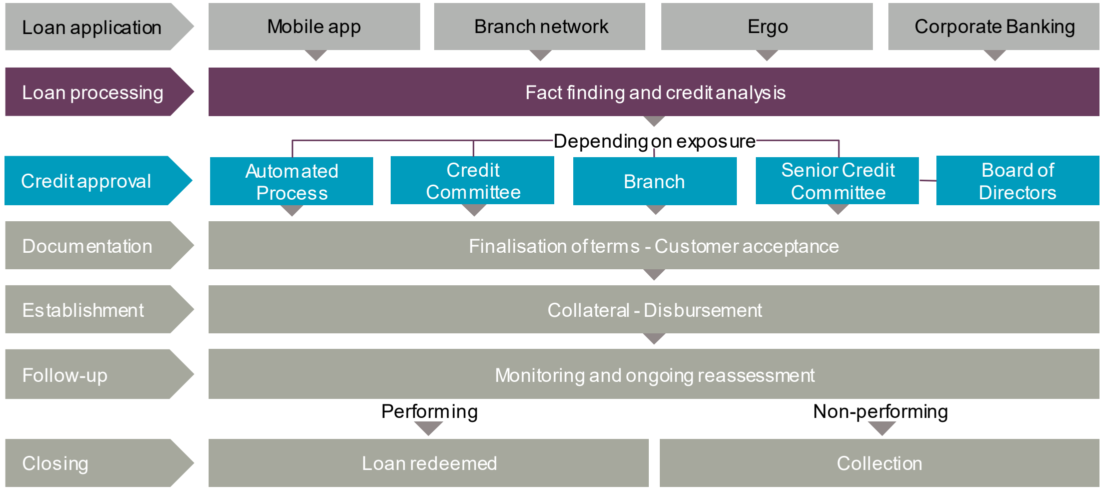
As the second line of defence, Risk Management monitors the adherence to credit risk limits and reports on credit risk to the All Risk Committee and to the Board of Directors, including current and prospective risk position compared to risk appetite.

The Bank's credit process, shown in Exhibit 4.1, is based on a committee structure where the Senior Credit Committee has the authority to approve credit proposals within authorisation limits set by the Board of Directors. The Senior Credit Committee then appoints and allocates credit authorisation limits to its subcommittees and to individual employees such as branch managers and credit managers. Credit authorisation limits can have reference to the risk class of the counterparty or to specific credit products. For certain retail products, such as overdrafts and credit cards to individuals, credit decisions are in part based on an automated approval process.

The Bank's Credit Rules outline the principles governing loans, guarantees and other products that expose the Bank to credit risk. Trust between the Bank and its customers is a prerequisite for all lending, as well as the customer's ability and willingness to repay in a timely manner. Sufficient collateral alone cannot justify lending to customers with insufficient payment capacity.

To mitigate risk, the Bank requires collateral that is appropriate for the product offered. For some products, such as relatively small overdrafts to individuals, no collateral is required, given that the customer's creditworthiness meets the Bank's criteria. Since the Bank does not seize collateral unless a borrower faces serious repayment difficulties, the valuation of collateral focuses on its future expected value at the time of default. The Bank has appointed a Collateral Board that reviews and proposes guidelines for the valuation of collateral and pledged assets. The objective is to ensure that the

Exhibit 4.1. Schematic overview of the Bank's credit process. Loan applications can be received through the Bank's Call Centre as well as the Bank's mobile and online banking platforms.



valuation of collateral is coordinated throughout the Bank.

As the first line of defence, the business units continuously monitor their loan portfolio and periodically reassess customers' performance. Collection procedures are set to be agile and swift to keep arrears at minimum. Loan covenants are monitored, and appropriate actions are taken to protect the Bank's interests if there are covenant breaches.

Customers that show signs of financial difficulties are placed on an internal watchlist and monitored carefully. When restructuring measures are more appropriate than collection procedures, the Bank can offer several measures and restructuring frameworks for customers in financial difficulties. Forbearance measures include temporary payment holidays, extension of loan terms, capitalisation of arrears and waiving of covenants. In cases when these measures are not sufficient, they may be precursors to a more formal restructuring process.

Formal legal collection and liquidation of collateral is the final step of the collection process if other measures are not successful.

4.2 Measurement and Monitoring

Portfolio credit risk is measured both in terms of current events and possible future events. Current events include non-performing ratios, the scope of forbearance agreements and impairment allowance for defaulted facilities, while possible future events are captured by measurements such as the probability of default, and since the adoption of the accounting standard IFRS 9 also in the impairment allowance for non-defaulted facilities.

To ensure that the Bank charges an adequate interest rate and that it has sufficient capital reserves to ensure long-term sustainability, the Bank estimates expected and unexpected losses of its loan portfolio.

The long-term expected credit loss on the loan portfolio is covered by a part of the interest rate margin. Due to various underlying factors, the observed annual losses can fluctuate significantly around the long-term average, sometimes up to an order of magnitude. To be able to cover these unexpected losses at any time, the Bank holds a substantial capital buffer against these fluctuations. An adequate return on this capital buffer also needs to be covered by the interest rate margin.

The annual expected loss (ECL) for a single obligor depends on the probability that the obligor defaults within the horizon of one year (PD), the expected exposure at time of default (EAD) and the loss given default (LGD), expressed as a fraction of the exposure at default:

$$\mathrm{ECL} = \mathrm{PD} \cdot \mathrm{LGD} \cdot \mathrm{EAD}.$$

Under IFRS 9, all loans are required to carry an impairment allowance of either 12-month expected credit loss or, in case of a significant increase in credit risk since origination, lifetime expected credit loss. This impairment allowance is calculated using several different scenarios for the future economic development and the final result is the probability-weighted average of the ECL in these scenarios. The calculation of the impairment allowance under IFRS 9 is further discussed in Note 72.3 in the Consolidated Financial Statements.

The main drivers for the unexpected portfolio loss are correlations between obligor defaults within the portfolio. These correlations may be due to common dependencies on macroeconomic factors or due to business relations between individual obligors.

Exhibit 4.2. Methods used to assess the default risk of different obligor types, approximate number of obligors and relative size of on-balance-sheet exposure at year-end 2018. Parent.

Obligor type	PD assessment	Number of obligors	Exposure
		(count)	(%)
Individuals	Statistical model	90,000	30.5
Small companies	Statistical model	9,000	8.5
Large companies	Hybrid model	400	38.2
Credit institutions	External rating agencies or expert model	50	5.4
Regional governments	Expert model	20	1.1
Sovereigns	External rating agencies	10	16.2
Public sector entities	Expert model	10	0.1

4.2.1 Definition of Default

The Bank's definition of default has been updated so that it simultaneously satisfies the requirements in the definition of stage 3 according to IFRS 9, the definition of default according to article 178 of CRR and the definition of non-performing exposure used in FINREP. Obligors are considered to be in default according to the current definition if (a) it is the opinion of the Bank that it is unlikely that they will fulfil the terms of their contracts or (b) they are more than 90 days past due on a material credit obligation. Defaults are defined on the obligor level rather than the facility level.

The assessment under point (a) is based on a defined set of triggers, some of which are fully objective whereas others are based on assessment. The general rule is that if any one of these triggers is activated then the customer is deemed to be in default. Furthermore, there are requirements that a customer actively demonstrates that there is no longer any reason for the Bank to say that they are in default.

Among the triggers which activate default are that the revenues of the customer do not sustain their level of indebtedness, that the customer is in serious breach of covenants in their loan contracts, that the Bank has initiated serious collection measures, that the customer has been given a serious registration on an internal watchlist and registrations on a credit bureau watchlist are also considered.

Among the triggers which indicate that a customer should no longer be considered in default are that the customer has maintained normal repayments over a certain period, that a period of probation has been completed and that the customer has improved their financial position e.g. by the injection of new capital.

4.2.2 Probability of Default

The way an obligor's probability of default (PD) is assessed depends on the obligor type. Exhibit 4.2 shows the methods used to assess the risk for different obligor types and the number of obligors and the relative size of exposure for each obligor type.

The Bank uses internal rating models to assess the default probability of companies and individuals. The rating of large companies is based on a company's most recent financial statements, together with a qualitative assessment of its management, market position and industry sector. The model assigns each obligor to one of ten risk classes. Risk class 10 is for obligors in default and risk classes 1-9 for other obligors.

For individuals and small companies[1], the Bank uses two different statistical rating models. These models are behavioural scoring models and use information about a customer's payment history, amount of debt and deposits and demographic variables to assess the probability that a customer will default on any of their obligations within 12 months of the rating assessment.

Exhibit 4.3 shows the mapping from risk classes to the probability of default (PD) for the three different rating models. The PD corresponds to the observed long-term average default rate.

4.2.3 Observed Default Frequency

The Bank's PD models predict the average long-term default rate while the observed default frequency (ODF) depends on the current state of the economy, which in 2018 was considered to be better than average.

In 2018 there were only about a dozen observed defaults for large companies, which translates to a 2.8% default frequency compared to a predicted default probability of 5.1%. The defaults were so few that a meaningful comparison of observed default frequency and predicted probability of default per risk class is not possible.

[1] For credit purposes, a company is considered to be small if the total exposure to the Bank is less than ISK 150m.

Exhibit 4.3. Average long-term PD levels per risk class for the different rating models.

Risk group	Risk class	Large companies	Small companies	Individuals
		(%)	(%)	(%)
Low	1	0.3	0.2	0.1
	2	0.4	0.4	0.2
	3	0.8	0.8	0.4
	4	1.3	1.7	0.9
Medium	5	2.3	2.7	1.7
	6	4.1	5.0	2.6
Increased	7	7.1	8.5	4.0
	8	12.5	17.0	7.3
High	9	21.8	41.1	23.4

For individuals and small companies, however, the number of defaults allow for a meaningful breakdown by risk classes as shown in Exhibits 4.4 and 4.5. Risk classes 1 through 4 are grouped together due to few defaults in those risk classes. The average long-term PD is shown in the figures as a shaded area. As expected, given the current state of the Icelandic economy, the observed default frequency is lower than the predicted long-term default rate. The observed default frequency was 2.9% compared to the 5.6% predicted probability of default for individuals, corresponding rates were 6.0% and 7.6% for small companies, respectively.

4.2.4 Loss Given Default

The loss given default (LGD) represents the percentage of the exposure which is expected to be lost if an obligor goes into default. The loss given default mostly depends on collateralisation and other credit mitigants but in many cases defaulted customers become performing again without the need to seize collateral. To take historically observed loss experience into account, while also allowing for a risk-sensitive differentiation of the portfolio, loss given default is therefore modelled using loss severity in several different scenarios. One of the scenarios considered is that the facility becomes performing again without intervention by the Bank and the probability of that scenario is the so-called cure rate. The other scenarios assume that recoveries are based on the seizing of collateral and apply different haircuts according to the type of collateral and scenario. The haircuts are applied to the most current and appropriate valuation of the pledged collateral. The haircuts take into account cost of sale, depreciation of value and discounting of recovery cash flows. The resulting amounts are allocated to eligible exposures by minimising the total uncollateralised exposure amount subject to constraints imposed by the collateral agreements. For facilities and obligors where collateral is generally not pledged the estimate of LGD may be based on a specific assessment.

Exhibit 4.4. Observed default frequency (ODF) and predicted probability of default by risk class for individuals in 2018, results for 2017 shown for comparison. Logarithmic scale. Parent.

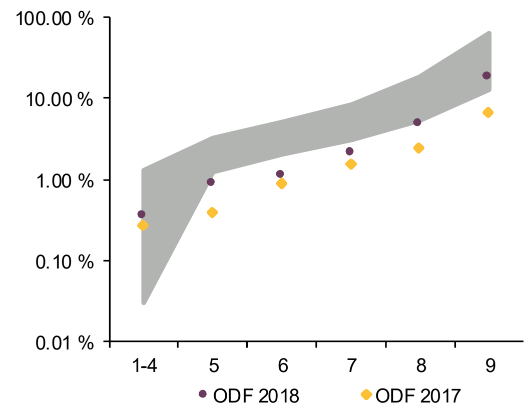
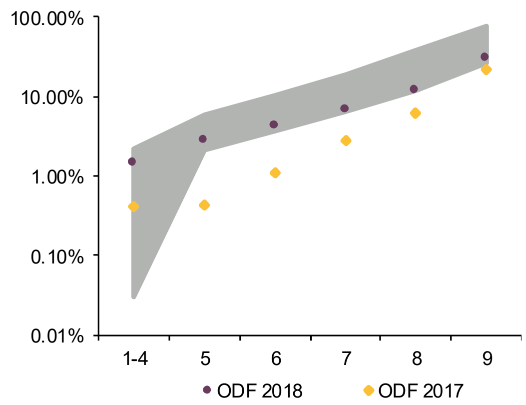


Exhibit 4.5. Observed default frequency (ODF) and predicted probability of default by risk class for small companies in 2018, results for 2017 shown for comparison. Logarithmic scale. Parent.



4.2.5 Exposure at Default

To model exposure at default (EAD), the Bank currently applies the supervisory credit conversion factors (CCF) stipulated by Basel to unutilised amounts:

$$\text{EAD} = \text{drawn amount} + \text{CCF} \cdot \text{undrawn amount}.$$

The Bank has developed models for exposure at default that take the expected amortisation schedule into account and these models are used in calculations of both the 12-month and lifetime expected credit losses in IFRS 9. The EAD shown here is, however, the one found for capital requirement purposes and not for IFRS 9.

4.3 Credit Concentration

The Bank monitors credit concentration risk which arises from the unequal and granular distribution of exposure to borrowers, industry sectors and geographic regions. The portfolio concentration is monitored and constrained by limits set in the *Risk Appetite Statement*.

4.3.1 Borrower Concentration

The Bank actively seeks to limit large exposures. A large exposure is defined as an exposure to a group of connected clients that is 10% or more of the Bank's total capital base. The exposure is evaluated both before and after application of eligible credit risk mitigating effects according to FME rules.[2] When assessing the exposure, both on-balance sheet items and off-balance sheet items from all types of financial instruments are included.

The Bank has internal criteria that define connections between clients in line with Icelandic law[3], where groups of connected clients are defined.

At year-end 2018, the Bank had four large exposures amounting to 44% of its capital base. No large exposure is above the maximum 25% single large exposure limit set by the law.

The Bank seeks to limit borrower concentration risk and has an internal limit on the aggregated exposures to the 20 largest groups of connected clients.

4.3.2 Industry Sector Concentration

The Bank defines industry sectors as groups of entities that have similar primary activities, underlying risk factors and behaviour characteristics. A see-through principle is applied for holding companies that own other companies but do not produce goods or services, i.e. a holding company may be classified in the sector of its investments and not as an investment company if all the investments are in the same sector. This is done to better capture the underlying risk of economic industry sectors.

The Bank has limits on both the exposure to any single economic industry sector as well as the aggregated exposure to the three largest economic industry sectors as a percentage of the Bank's total credit exposure. Exposure to individuals, as an economic industry sector, is also considered separately.

The tourism industry is an important economic sector in Iceland but due to the nature of tourism, its effects are not limited to hotels, car rentals and tour guides. The effects can also be seen in convenience stores, restaurants and other operations that benefit from the inflow of tourists. The Bank therefore monitors the tourism industry internally as a quasi-sector instead of a new separate sector.

4.3.3 Geographic Concentration

Country risk is the risk of losses that may occur, for example, due to economic difficulties or political unrest in countries to which the Bank has exposures. Country risk includes political risk, exchange rate risk, economic risk, sovereign risk and transfer risk, i.e. economic factors that could have significant influence on the business environment.

Specific geographical limits are established to manage country risk. The geographical limits apply to the country from where the credit risk arises. Iceland is considered to be a home market and is as such not subject to geographical limits.

Most of the Bank's activities are in Iceland but the Bank maintains a certain amount of international activities. The overseas strategy is built on a heritage of servicing the core industries in Iceland, primarily focusing on the seafood industry. The strategy focuses on the North Atlantic region, including Canada, the United States and Norway.

4.3.4 Product Concentration and Collateral Concentration

The Bank regularly monitors product concentration and collateral concentration but neither type is currently considered to be material.

4.4 Settlement Risk

Settlement risk is the risk that a party will fail to deliver on the terms of a contract at the time of settlement. Settlement loss can occur because of a default at settlement and because of any timing differences in settlement between two parties. The amount at risk or the potential loss is the principal of the transaction.

[2] FME Rules no. 233/2017 on Prudential Requirements for Credit Institutions

[3] Article (1)(a) of Act no. 161/2002 on Financial Undertakings

Exhibit 4.6. The main sources of credit risk.

Item	Obligor type	Description
Loans to customers	Individuals	Loans to individuals derive from lending activities to individuals and households. The largest product type is mortgages, but it also includes term loans, car loans and leasing agreements, credit cards and overdrafts.
	Legal entities, municipalities and state-guaranteed obligors	Loans to companies as well as municipalities and public-sector entities. This includes long-term facilities, leases and asset based financing, working capital facilities and other short-term financing, project finance and financing of income producing real estate.
Balances with the Central Bank and loans to credit institutions	Financial institutions and central banks	Mandatory reserve deposits and other balances with the Central Bank as well as other exposures to international banks and financial institutions, for example as part of the Bank's liquidity management.
Bonds and debt instruments	Government entities, issuers of listed bonds approved by the Bank's credit committees	The Bank is exposed to credit risk due to trading and investing in debt instruments, for example as part of the Bank's liquidity management and its trading activities.
Off-balance sheet items		This includes unused overdrafts and credit card limits, undrawn amounts in credit agreements and project finance agreements, letters of credit and export documentary credits.
Derivatives	Qualified counterparties with defined credit limits at the Bank	Derivatives and other financial instruments that involve contingent exposures.
Other financial assets		Unsettled transactions, account receivables.

To mitigate settlement risk on counterparties, the Bank utilises the services of clearing houses and applies the general rule of delivery versus payment. If such a rule is not applicable due to the nature of the business relationship, a settlement limit is assigned to the counterparty to limit the risk.

4.5 Counterparty Credit Risk

Counterparty credit risk (CCR) is the risk arising from the possibility that the counterparty may default on amounts owed on a derivative transaction.

Íslandsbanki takes on CCR when entering into derivatives transactions. This includes, but is not limited to, interest rate swaps and futures, cross-currency swaps, equity forwards and options. The Bank actively uses derivatives to hedge currency, interest and inflation exposures.

Derivative contracts are generally subject to ISDA master agreements with a Credit Support Annex, or similar terms, with collateral in the form of cash and eligible bonds.

Information on CCR exposures in various breakdown is provided in Tables CCR1, CCR2, CCR3, CCR5-A, CCR5-B and CCR6 in the Additional Pillar 3 Disclosures.

4.6 Credit Risk Exposures

Credit risk exposure comprises both on-balance sheet and off-balance sheet items. Exposure to credit risk for on-balance sheet assets is the net carrying amount as reported in the Consolidated Financial Statements. The exposure for off-balance sheet items is the amount that the Bank might have to pay out against financial guarantees and loan commitments, less the impairment the Bank has made for these items. The credit exposure for capital requirement purposes does not reconcile with the net carrying amount in the Consolidated Financial Statements mostly due to the contribution of off-balance sheet items, see Table

Exhibit 4.7. The main sources for credit risk at year-end 2018 and 2017 (ISK bn). Consolidated.

Credit risk	31.12.2018	31.12.2017
Loans to customers	846.6	756.9
Balances with the Central Bank and loans to credit institutions	176.6	215.7
Bonds and debt instruments	69.4	27.1
Off-balance sheet items	146.0	153.9
Derivatives	8.9	6.3
Other financial assets	7.5	9.8
Total	1,255.1	1,169.7

Exhibit 4.8. Cash and balances with the Central Bank and loans to credit institutions at year-end 2018 and 2017, with ratings based on S&P Global ratings or equivalent (carrying amount, ISK bn). Consolidated.

Type of institution	31.12.2018	31.12.2017
Central Bank	135.1	189.0
Domestic credit institutions	0.8	2.1
Foreign credit institutions	40.8	24.6
thereof rated AA- and above	5.7	1.5
thereof rated A- to A+	25.5	19.1
thereof rated BBB+ and lower	9.5	4.0
Total	176.6	215.7

LI2 in the Additional Pillar 3 Disclosures for details on the difference. For capital requirement purposes, credit conversion factors are applied to guarantees and undrawn commitments. For derivative contracts, the exposure is calculated by adding potential future credit exposure to the positive market value of the contract. The Bank currently has no direct credit exposure to securitisation.

Exhibit 4.6 summarises and describes the main sources of credit risk, while Exhibit 4.7 shows the main sources for credit risk at year-end 2018 and 2017.

4.6.1 Balances with the Central Bank and Loans to Credit Institutions

Cash and balances with the Central Bank (CB) and loans to credit institutions can fluctuate considerably between periods due to liquidity management. Exhibit 4.8 shows a breakdown of these exposures at year-end 2018 and 2017.

Cash and balances with the Central Bank include CB deposits, minimum reserve requirements and other balances with the CB.

The Bank has exposures to domestic and foreign credit institutions, mostly in the form of money-market deposits and nostro accounts.

Exposures are only granted to credit institutions that have been allocated a credit limit by the Senior Credit Committee. When applying for a credit limit for a specific credit institution, a thorough analysis of the institution is presented to the committee, including credit ratings from rating agencies, as appropriate.

4.6.2 Bonds and Debt Instruments

The Bank is exposed to credit risk as a result of trading and investing in bonds and debt instruments, for example as part of the Bank's liquidity management and as a result of restructuring activities. Exhibit 4.9 presents the Bank's position in bonds and debt instruments.

4.6.3 Off-Balance Sheet Items

The Bank's exposure deriving from off-balance sheet items totalled ISK 146bn at year-end 2018 compared to ISK 154bn the year before. For regulatory purposes a credit conversion factor is applied to calculate the exposure under the credit risk framework. Calculated in this way, the regulatory credit exposure deriving from off-balance sheet items totalled ISK 47bn at year-end 2018 compared to ISK 51bn at year-end 2017.

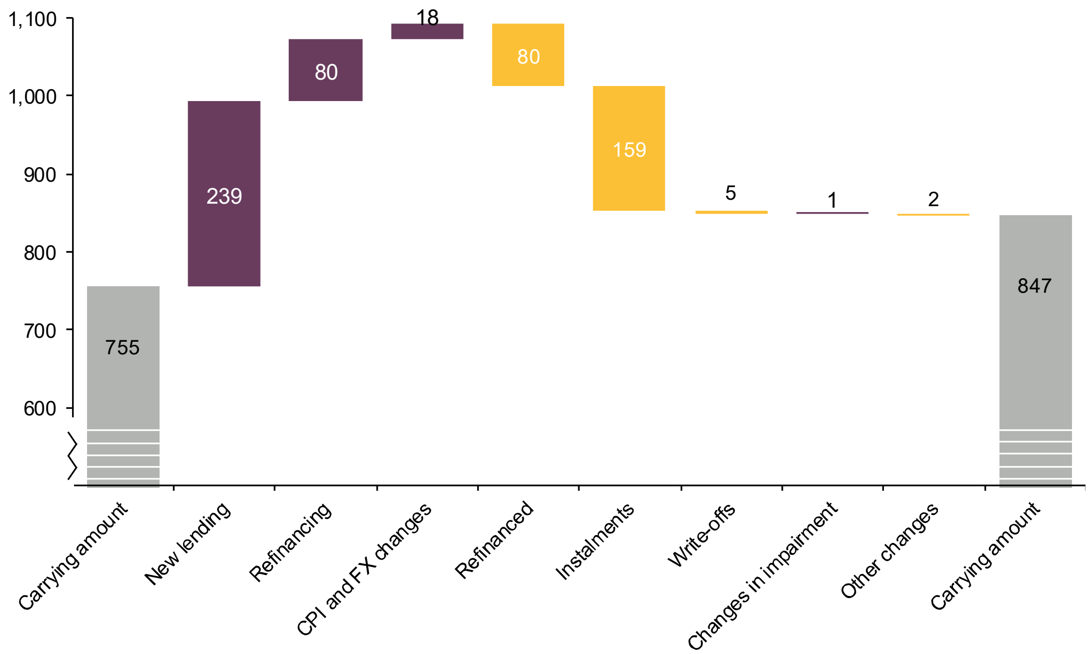
4.6.4 Derivatives

The Bank uses derivatives to hedge currency, interest and inflation exposure. The Bank carries relatively low exposure due to margin trading with clients and in these cases, the Bank holds collateral

Exhibit 4.9. Bonds and debt instruments at year-end 2018 and 2017, with ratings based on S&P Global ratings or equivalent (carrying amount, ISK bn). Consolidated.

Bonds and debt instruments	31.12.2018	31.12.2017
Icelandic Government and regional government guaranteed bonds	15.4	4.7
Foreign government bills	41.3	10.9
thereof rated AAA	24.7	10.9
thereof rated AA	16.6	-
Domestic corporates	2.1	1.9
Domestic credit institutions	10.6	9.7
Total	69.4	27.1

Exhibit 4.10. The main sources of changes in the net carrying amount of loans to customers from year-end 2017 to year-end 2018. Outstanding loans that are refinanced within the Bank are shown both as an increase and a decrease in the carrying amount. Regular instalments, pre-payments and loans that are fully repaid are all shown as instalments in this chart. The effect of facilities that do not have a fixed repayment schedule such as overdrafts and credit cards is in *Other changes*. (ISK bn). Consolidated.



to cover possible losses. Credit risk for derivatives amounted to ISK 8.9bn at year-end 2018 compared to ISK 6.3bn the year before.

See also discussion on derivatives in Sections 4.5 and 5.3.5.

4.6.5 Country Risk Exposure

Exposure to countries other than Iceland amounted to ISK 77bn at year-end 2018. This exposure relates mainly to the management of the Bank's foreign liquidity reserves. The Bank has no retail lending activities outside of Iceland but maintains a modestly-sized portfolio of lending to companies in the United States, Canada and Norway within its North-Atlantic strategy. The exposure to companies within this portfolio was ISK 22.7bn at year-end 2018.

4.7 Loans to Customers

Loans to customers, both individuals and companies, represent the largest part of the Bank's credit risk exposure. This section describes the portfolio of loans to customers and its development.

4.7.1 Development of the Loan Portfolio

At year-end 2018 the net carrying amount of the portfolio of loans to customers was ISK 847bn, having grown from ISK 755bn at year-end 2017. This growth of 12% is mainly due to new lending to new and existing customers, but also inflation and depreciation of the ISK. New lending surpasses instalments, repayments, write-offs and other items such as changes in overdrafts and credit cards. Exhibit 4.10 shows the development of the loan portfolio through 2018.

Exhibit 4.11. Currency composition of loans to customers at year-end 2018 (net carrying amount, ISK bn). Consolidated.

Industry sector	Non-indexed	CPI-linked	Foreign currency	Total
Individuals	132.6	186.6	0.2	319.4
Commerce and services	99.5	18.6	6.1	124.2
Construction	24.3	4.0	0.9	29.1
Energy	2.8	3.9	0.2	6.9
Financial services	1.7	-	-	1.7
Industrial and transportation	41.7	5.7	32.4	79.8
Investment companies	12.6	3.8	7.3	23.8
Public sector and non-profit organisations	7.3	4.8	0.0	12.1
Real estate	67.6	66.3	9.0	142.9
Seafood	8.5	0.4	97.9	106.7
Total	398.5	294.0	154.0	846.6

4.7.2 Currency Composition of Loans to Customers

As a principle, the Bank aims to have the currency composition of loans to customers in balance with customer needs. In particular, loans to customers whose income is predominantly in ISK should be denominated in ISK. The Bank has in place strict rules regarding lending in foreign currency, ensuring management of this risk. Exhibit 4.11 shows a breakdown of loans to customers by industry sector and currency types. Loans to customers are categorised into three currency types, Non-indexed ISK, Consumer Price Index (CPI) linked ISK and Foreign currency (FX).

4.7.3 Loans to Individuals

Loans to individuals amounted to ISK 319bn at year-end 2018 compared to ISK 299bn the year before. New loans and refinancing amounted to ISK 89bn.

Loans to individuals derive from lending activities to individuals and households and can be broken down into five product types, namely mortgages, term loans, credit cards, overdrafts and leasing.

The largest part of loans to individuals is in the form of residential real estate mortgages. Mortgages are granted to individuals to buy or refinance real estate for their own use. Mortgages are secured by the first lien on the residential real estate or consecutive liens from and including the first lien. The Bank actively manages the mortgage portfolio, for example by having highly trained mortgage consultants, by making payment processing effortless with automatic transfers and by actively initiating collection procedures in a timely manner by contacting customers immediately if payments are late. In July 2017, regulators set a cap of 85% of market value for the LTV of all new mortgages in Iceland but up to 90% LTV for first-time buyers.[4] The Bank's policy was already stricter than that and therefore this new regulation had no effect on the Bank's mortgage portfolio.

Term loans to individuals are often secured with residential real estate but do not satisfy all the requirements needed to be classified as the product type mortgages. These loans may have a non-standard term structure, or the purpose of the loan may not have been to acquire the underlying property. Other examples are additional loans for first-time homebuyers or loans for home improvements. These term loans are generally not as well collateralised as mortgages. A last group of term loans are loans provided to individuals for purchases of vehicles, mostly cars and campers. These loans are usually well collateralised.

Credit cards and overdrafts to individuals are usually uncollateralised short-term consumer loans. They are used to meet fluctuations in cash flows and the outstanding amounts per customer are typically low. It is expected that future earningability of individuals is sufficient for repayment without a formal collateral.

Leasing agreements are provided to individuals for purchases of vehicles, mostly cars and campers. These agreements are usually well collateralised. For credit risk purposes these leasing agreements are very similar to loans provided for the same purpose.

Note 43 in the Consolidated Financial Statements shows a breakdown of the maximum credit exposure by these product types.

The loan-to-value (LTV) ratio is an important factor when measuring the risk of a mortgage port-

[4] FME Rules no. 666/2017 on Maximum Loan to Value Ratio for New Residential Mortgages.

Exhibit 4.12. Breakdown of the mortgage portfolio by the LTV calculated for each property, year-end 2018 and 2017 (net carrying amount, ISK bn). Consolidated.

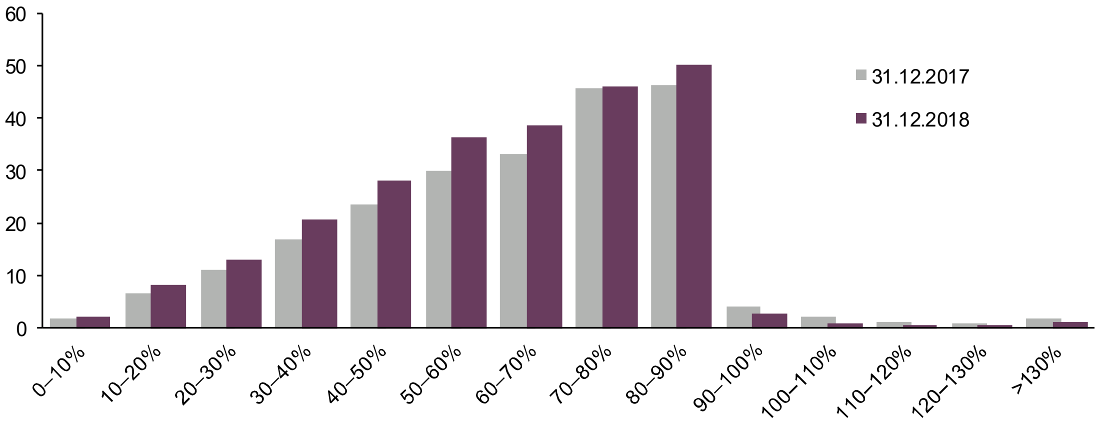
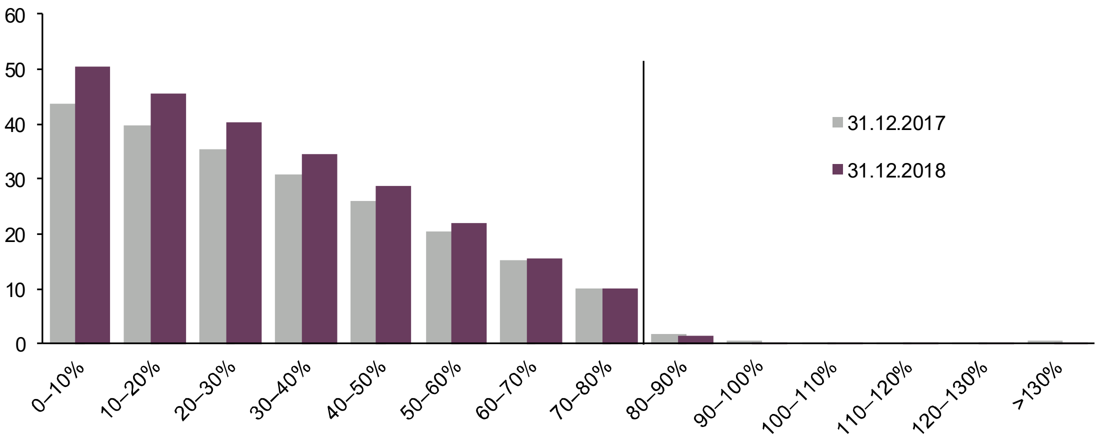


Exhibit 4.13. Breakdown of the mortgage portfolio by LTV bands, year-end 2018 and 2017 (net carrying amount, ISK bn). See main text for further explanation. Consolidated.



folio. The LTV for a single mortgage is the current net carrying amount of the loan divided by the value of the property. The value of the property is usually taken as the tax value obtained from Registers Iceland[5] but for newly granted mortgages, the purchase price of the property can be used as a valuation in the beginning while it is considered more accurate. For mortgages that are not on the first lien, the combined loan to value (CLTV) is the sum of the current carrying amount of the loan under consideration and the outstanding balance of all previous liens, divided by the value of the property. For a portfolio of mortgages, however, the LTV can be represented in various ways depending on the intended usage. Here, two such representations are presented.

The first representation is from the property point of view. To find the average LTV of a mortgage portfolio, each property is assigned the maximum CLTV value of the Bank's mortgages on that property and that value is weighted with the total carrying amount of the Bank's loans on the property. The weighted average LTV, calculated in the manner described, was 61% at year-end 2018 compared to 63% at year-end 2017.

Exhibit 4.12 shows the LTV distribution by categorising the total carrying amount of the Bank's loans on each property in the mortgage portfolio by the maximum CLTV for that property.

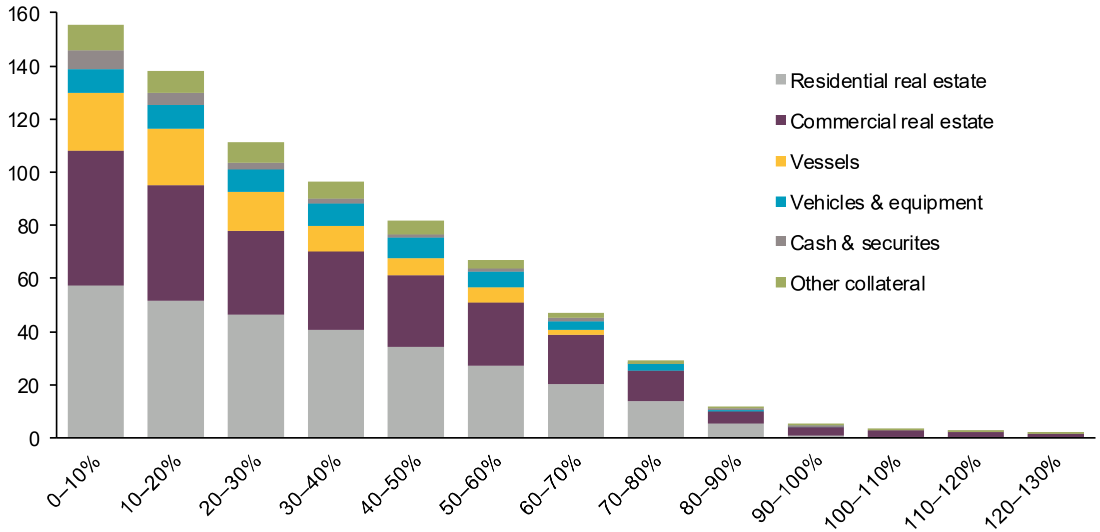
Another way to represent the LTV of a mortgage portfolio is to consider how each part of the loan amount is distributed in loan-to-value bands. In the breakdown, each part of the loan amount is categorised according to its ranking in the total debt on the property. The first band represents the part of the portfolio that falls in the 0-10% LTV band, the second represents the part that falls in the 10-20% LTV band and so on.

Exhibit 4.13 shows how the mortgage portfolio is distributed in loan-to-value bands defined in this way.

For capital requirement assessment purposes, residential real estate mortgages to individuals are divided into two segments, the part that is covered up to 80% LTV and the amount that exceeds 80%

[5] In Icelandic: Þjóðskrá Íslands. For detail see Icelandic Property Registry.

Exhibit 4.14. The continuous LTV distribution of the portfolio of loans to customers by type of underlying asset at year-end 2018 (ISK bn). Consolidated.



LTV. The part with an LTV below 80% is potentially eligible for a 35% risk weight when calculating the capital requirements as compared to 75% for the remaining part. One of the benefits of the representation shown in Exhibit 4.13 is that the part of the mortgage portfolio that is potentially eligible for a 35% risk weight is on the left side of a vertical line drawn at 80% LTV in Exhibit 4.13, this amount cannot be inferred from Exhibit 4.12.

4.7.4 Loans to Companies

The category loans to companies includes loans to companies as well as municipalities and public sector entities. These loans comprise a significant part of the Bank's balance sheet and operation. Loans to companies amounted to ISK 527bn at year-end 2018 compared to ISK 458bn at year-end 2017. New loans and refinancing of outstanding loans amounted to ISK 230bn in 2018.

Credit policies are in place to ensure to the extent possible that companies have the capacity to repay their loans. The Bank also takes collateral to minimise loss in case of default.

Notes 49 and 50 in the Consolidated Financial Statements show the maximum credit risk exposure for loans to companies, broken down by industrial sectors, product types and whether the facilities are in stage 3 or not. Note 50 furthermore shows the type of collateral held against these exposures.

The Bank's exposure to tourism has increased with the increased importance of tourism to the Icelandic economy. The exposure to tourism was 12% of the loan portfolio at year-end 2018, a slight decrease from the year before.

4.8 Loans Covered by Collateral

Collateral and other credit risk mitigants vary between types of obligors and credit facilities. Loans to eligible credit institutions are usually unsecured. For loans to individuals, the principal collateral pledged is residential property against mortgages. Unsecured loans to individuals are mostly short-term consumer loans such as overdrafts and credit cards. In the case of large companies, pledged collateral includes real estate, fishing vessels, cash and securities, as well as other collateral including accounts receivable, inventory, vehicles and equipment. Loans to government entities and to municipalities are generally unsecured.

In some cases, the Bank uses guarantees as credit enhancement but since guarantees effectively transfer credit risk from one counterparty to another they do not represent a reduction in exposure to credit risk although they may strengthen its quality. Covenants in loan agreements are also an important credit enhancement but they do not reduce credit exposure.

Valuation of collateral is based on market price, official valuation from Registers Iceland or the expert opinion of the Bank's employees, depending on availability. In the case of fishing vessels, the assigned fishing quota is included in the valuation, based on a valuation by the Bank's Collateral Council. Since the price volatility differs between asset classes it is interesting to consider how the LTV distribution of the portfolio is split between asset classes. This LTV distribution is shown in Exhibit 4.14.

To assess the financial effect of collateral on maximum credit exposure, the Bank allocates collateral to loans using an optimisation algorithm. Among other things, the algorithm ensures that collateral is not assigned in excess of its estimat-

Exhibit 4.15. Financial effect of allocated collateral for loans to customers at year-end 2018 (ISK bn). Consolidated.

Collateral	Residential real estate	Commercial real estate	Vessels	Cash & securities	Vehicles & equipment	Other collateral	Credit exposure covered by collateral
Individuals	262.7	8.5	0.0	0.1	13.7	0.0	285.1
Commerce & services	8.0	47.9	0.9	5.2	28.4	17.9	108.2
Construction	9.3	13.4	-	0.1	4.8	0.2	27.9
Energy	-	3.7	-	0.4	-	-	4.1
Financial services	-	-	-	0.2	-	-	0.2
Industrials & transportation	1.1	36.0	0.0	2.0	8.2	14.1	61.4
Investment companies	4.0	5.4	0.0	11.1	0.1	3.1	23.6
Public sector & NPO's	0.1	0.9	-	-	0.0	-	1.1
Real estate	16.5	119.3	-	2.0	0.4	0.3	138.5
Seafood	0.3	13.1	82.2	0.0	0.2	12.2	108.0
Total	302.1	248.1	83.1	20.9	55.8	47.8	757.9

ed value, in excess of any maximum amount stipulated in a collateral agreement or in excess of the claim value of the relevant loans or the maximum potential exposure in case of facilities with an undrawn component. The last constraint means that if some loans have collateral values in excess of their claim value, then the excess is removed in this assessment in order to reflect the Bank's actual exposure to credit risk.

Exhibit 4.15 shows the financial effect of allocated collateral at year-end 2018 broken down by sector and type of collateral.

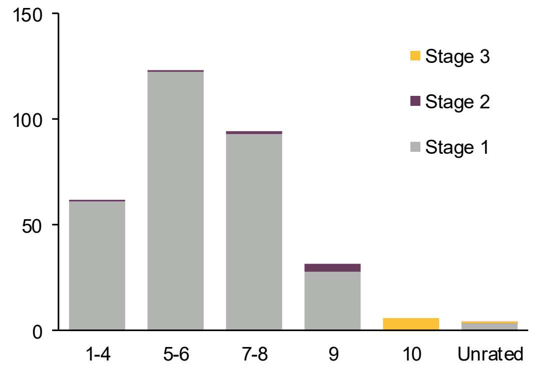
4.9 Risk Profile

As described in Section 4.2.2, each obligor is assigned a risk class depending on how likely they are considered to default in the next 12 months. Note 45 in the Consolidated Financial Statements shows the breakdown of loans to customers, off-balance sheet loan commitments and financial guarantees into risk class groups and stages. Exhibits 4.16 and 4.17 show the breakdown of loans to customers graphically where in addition, exposure to individuals and exposure to companies are shown separately. Exhibit 4.18 shows the migration of customers between risk classes in 2018.

According to IFRS 9, the impairment allowance, i.e. the difference between the gross and the net carrying amount, is the expected credit loss (ECL). Exhibit 4.19 shows the breakdown of the ECL for loans to customers by IFRS 9 stages. The columns show the contribution to the ECL from the probability of default (PD) and the loss given default (LGD). For facilities in stage 3, the PD does not apply since default has already occurred. Additionally, the LGD contribution is divided into the probability that the default will not cure, and thus lead to an economical loss (loss rate), and the expected size of the eventual economic loss (loss severity). Finally, for facilities in stage 2, the loss allowance is equal to the expected loss for any events occurring during the lifetime of the facility, the contribution of this is shown in the column Effect of lifetime loss.

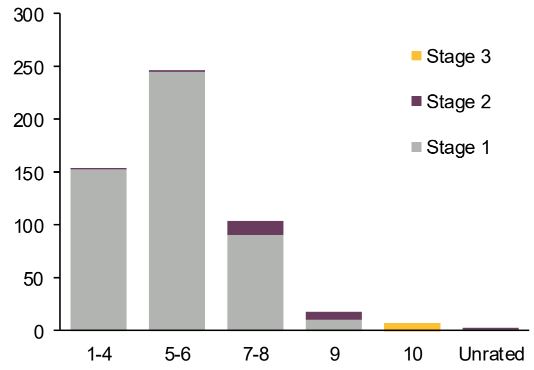
The Bank monitors the non-performing loans (NPL) ratio but due to the adoption of IFRS 9 it has been necessary to change the definition. The non-performing ratio that the Bank uses, depicted in Exhibit 4.20, is based on the gross carrying amount of loans to customers that are in default (i.e. stage 3), see Section 4.2.1 for further details on the Bank's definition of default. For comparison the NPL definition that the Bank used before the adoption of IFRS 9 is shown in Exhibit 4.21. When doing comparisons on NPL ratios between different banks it must be borne in mind that an industry standard has not yet emerged on how to define the NPL. The NPL ratio will usually not be

Exhibit 4.16. Loans individuals by risk groups and stage at year-end 2018 (net carrying amount, ISK bn). Consolidated.



comparable between banks unless they use the exact same definition. The exposure amounts used to calculate the NPL ratio can be seen in Note 52 to the Consolidated Financial Statements. The Bank's NPL ratio was 2.0% at year-end 2018. Due to the change in definition, the NPL ratio reported at year-end 2017 is not comparable.

Exhibit 4.17. Loans companies by risk groups and stage at year-end 2018 (net carrying amount, ISK bn). Consolidated.



4.10 Exposures in Default and Exposures with Forbearance

The Bank's definition of default is described in detail in Section 4.2.1. Details on exposure amounts in default can be seen in the Note 45 of the Consolidated Financial Statements where stage 3 corresponds to amounts in default. Furthermore, Exhibits CR1-A, CR1-B and CR1-C of the Additional Pillar 3 Disclosures show these amounts broken down by asset class, industry sector and geographic region.

Exhibits CR2-A and CR2-B of the Additional Pillar 3 Disclosures show the development of impairment amounts and the stock of defaulted loans throughout the year.

Forbearance measures can be granted to customers facing temporary challenges or financial difficulties. For a loan to be considered as forborne, two conditions need to apply: (1) the Bank has agreed to changes to the terms of the loan that would normally not be offered to the customer and (2) the customer was in financial difficulties, making it hard for them to uphold the loan contract, at the time the terms were changed. Such forbearance measures include temporary payment holidays, capitalisation of arrears, extension of loan terms and waiving of covenants.

For households, forbearance measures are used to accommodate temporary changes in household income, for instance due to illness or unemployment. Temporary changes in terms are also granted to companies when needed, for example to meet adverse changes in the operating environment, which affect revenue and cash flows or to meet necessary but unforeseen capital expenditures. The customer is expected to resume normal repayments after the concession period. Furthermore, when covenants are waived due to minor difficulties of customers then it may be classified as a forbearance measure.

Note 46 in the Consolidated Financial Statements provides a summary of the Bank's forborne assets.

Exhibit 4.18. Migration of risk classes in 2018 (net carrying amount, ISK bn). Consolidated.

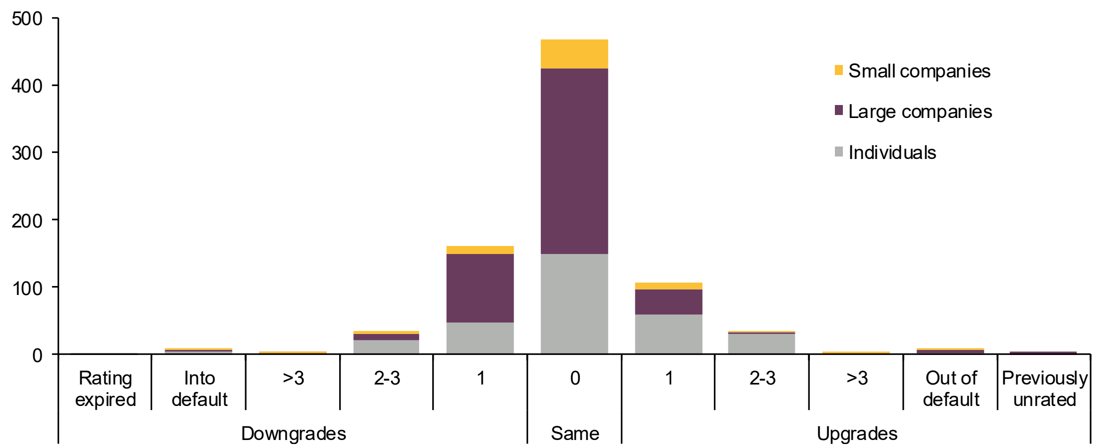


Exhibit 4.19. The expected credit loss for loans to customers at year-end 2018. See Section 4.9 in the main text for further details. Consolidated.

Stage	Gross carrying amount	PD	LGD loss rate	LGD loss severity	Effect of lifetime loss	ECL
	(bn)	(%)	(%)	(%)	(%)	(%)
Stage 1	808.4	5	37	22		0.4
Stage 2	28.9	22	55	18	164	3.7
Stage 3	17.3		66	32		21.3

Exhibit 4.20. The Bank's definition of non-performing assets, indicated by the highlighted cells.

Asset classes	Exposure	Cross default	Non-performing criteria
(can choose many)	(choose one)	(choose one)	(can choose many)
Loans to customers	Gross carrying amount	Per facility	>90 days past due
Loans to credit institutions	Net carrying amount	Per customer	Unlikeliness to pay
Off-balance sheet items	Payments in arrears	Per group of connected clients	Forbearance
Other financial assets			Cure period

Exhibit 4.21. The Bank's definition of non-performing assets before the adoption of IFRS 9, indicated by the highlighted cells.

Asset classes	Exposure	Cross default	Non-performing criteria
(can choose many)	(choose one)	(choose one)	(can choose many)
Loans to customers	Gross carrying amount	Per facility	>90 days past due
Loans to credit institutions	Net carrying amount	Per customer	Unlikeliness to pay
Off-balance sheet items	Payments in arrears	Per group of connected clients	Forbearance
Other financial assets			Cure period

4.11 Capital Requirements

The Bank reports its Pillar 1 capital requirements for credit risk according to the standardised approach of the CRD IV. Exhibit CR5 of the Additional Pillar 3 Disclosures shows exposure amounts, risk weights and corresponding risk-exposure amounts for the different portfolios at year-end 2018.

Capital add-on for credit risk under Pillar 2-R is estimated in the annual ICAAP process. This add-on includes concentration risk and underestimation of credit risk under Pillar 1. The ICAAP discussion with the regulator in Iceland has matured considerably in recent years, resulting in a stable basis for calculating the add-on for credit risk in Pillar 2-R. This includes an increased risk weight for certain asset classes where the standardised approach may not be representative of the inherent risk. These asset classes comprise municipalities with low payment capacity, loans to holding companies to buy shares in operating companies, high volatility commercial real estate and customers with forbearance agreements. Furthermore, additional capital is held against loans to customers that have been more than 30 days past due in the last 12 months. However, it remains to be settled how the changes due to IFRS 9 impact the calculation of the capital add-on.

5 Market Risk

The domestic stock market, with a 19% decrease in total turnover compared to 2017, yielded a modest return of 0.03% in 2018 according to the stock market index OMXI8GI. The return of the domestic bond market was 6.6% measured by the NOMXIBB index with a total turnover decreasing by 13% in 2018 compared to 2017. From year-end 2017 to year-end 2018 the Consumer Price Index rose by 3.7% and the ISK depreciated by 6.9% based on the Central Bank main trade-weighted ISK index.

Market risk accounted for 7.9% of the Group's total capital requirement in 2018 compared to 12.6% in 2017. The primary development of the Group's market risk over the course of 2018 was that interest rate risk in the banking book and the Group's inflation imbalance were significantly lower in 2018 compared to 2017. The interest rate risk in the banking book decreased mid-year 2018 as the Group had strategically positioned the balance sheet to take on the effect the Supreme Court ruling in late 2017 regarding interest rate reset terms on consumer mortgage contracts. The development of other market risk factors remained modest.

5.1 Strategy, Organisation and Responsibility

Market risk is defined as the current or prospective risk to earnings and capital arising from adverse movements in the level or volatility of prices of market instruments, such as those that arise from changes in interest rates, inflation, equity prices and foreign exchange rates.

Market risk has been identified as one of the key risk factors in the Bank's operations. The Bank takes on market risk as a part of its business strategy and aims to maintain a moderate market risk profile. The objective of the Bank's market risk management framework is to manage and control market risk exposures and ensure that the market risk profile is within the Board's approved risk appetite.

Market risk mainly originates in the banking book due to mismatches in assets and liabilities with respect to currencies, interest reset dates and CPI-indexation, and due to shares and equity instruments. The Bank also takes on market risk in relation to its trading activities and other activities related to investment banking or treasury.

The ultimate responsibility for ensuring an adequate market risk management and internal control framework at Íslandsbanki lies with the Board of Directors. The Board defines the market risk governance framework and the acceptable level of market risk through the *Risk Management and Internal Control Policy*, the *Risk Appetite Statement* and the *Market Risk Policy*.

The All Risk Committee (ARC) is responsible for the review and implementation of the *Market Risk Policy* and the market risk appetite. The Asset and Liability Committee (ALCO) decides on individual proposals for assuming and pricing market risk on behalf of the Bank within the appetite and limits approved by the Board and ARC. The managing director of Corporate & Investment Banking and the managing director of Finance & Treasury (CFO) are responsible for the market risk taken on or owned by their units and for earning an acceptable level of return on these risks. The directors of business units that take on market risk on behalf of the Bank are responsible for identifying and managing the risk in their portfolios within limits approved by the Board, ARC or ALCO.

5.2 Measurement and Monitoring

The Bank uses various tools to measure, monitor and limit market risk exposures. These tools include conventional risk measures, limits on notional and sensitivity measures. The Bank also uses stress tests to simulate the effects on portfolios from extreme but plausible market events and Value-at-Risk (VaR) based measures for margin requirement calculations, capital calculations and determination of trading limits. These tools provide complementary information to notional limits and sensitivity measures but the limit structure for market risk is not formally VaR based.

The business units, as the first line of defence, are responsible for continuous monitoring of the market risk inherent in their operations, for maintaining their view on these risks and for notifying senior management of any foreseeable breaches of limits, policies or strategic direction. Risk Management, as the second line of defence, monitors the overall market risk profile of the Group, ensures proper escalation of limit breaches and provides an independent view on all market risk taken on by the Group.

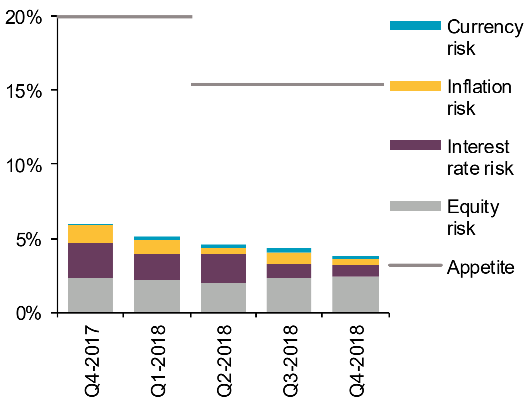
Exhibit 5.1 shows the risk factors related to market risk in the Group's operations, their origination and main limit types.

Exhibit 5.1. Main types of market risk within Íslandsbanki.

Risk type	Description	Origination	Main limit types
Interest rate risk	Current or prospective risk to earnings or capital arising from adverse movements in interest rates. Main sources of interest rate risk are as follows: – Re-pricing risk: Arising from differences between the timing of rate changes and the timing of cash flows. – Yield curve risk: Arising from changing rate relationships across the spectrum of maturities (change in slope and shape of the yield curve). – Basis risk: Arising from changing rate relationships among yield curves that affect the institution's activities. – Optionality risk: Arising from interest rate related options embedded in the institution's products.	– Bonds and debt instruments. – Interest rate derivatives. – Loans and deposits.	– Basis point value (BPV). – Total long and short positions in underlying securities. – Open delta position of underlying securities. – Duration of underlying securities.
Inflation risk (CPI risk)	The risk that earnings or capital may be negatively affected from changes in inflation due to the indexation af assets and liabilities to the Consumer Price Index (CPI).	– CPI-linked bonds and debt instruments. – CPI-linked loans and deposits. – CPI-linked derivatives.	– Size of the inflation imbalance.
Credit spread risk	The risk that earnings or capital may be negatively affected from adverse movements in bond risk premium for an issuer.	– Bonds and debt instruments.	– Issuer-specific notional limits.
Currency risk	The risk that earnings or capital may be negatively affected from the fluctuations of foreign exchange rates, due to transactions in foreign currencies or holding assets or liabilities in foreign currencies.	– Spot positions in currencies. – Foreign exchange derivatives. – Foreign-currency-denominated loans and deposits.	– Total currency balance. – Total open position per currency. – Total notional in underlying derivatives.
Price risk	The risk that earnings or capital may be negatively affected from the changes in the price level or volatility of debt instruments or equity instruments.	– Equities. – Bonds and debt instruments. – Interest rate and equity derivatives.	– Total position in equities. – Total position in individual securities.
Trading liquidity risk	The risk that the Bank is unable to easily liquidate or offset a particular position without moving market prices due to inadequate market depth or market disruption, thus negatively affecting the earnings or capital.	– Bonds and debt instruments. – Equities. – Derivatives.	– Total position in individual securities. – Total notional of foreign exchange derivatives.

Market risk at Íslandsbanki is split into two categories, trading book and banking book. Trading book exposures are related to short- and medium-term trading in securities, currencies and other capital market instruments and derivatives. The positions are undertaken mainly as a part of the Bank's flow trading, through the Bank's liquidity portfolio and as hedges against customers' derivatives contracts. Banking book exposures are securities held for long-term investment purposes, unlisted securities and holdings in subsidiaries or affiliates. In addition, a large part of the banking book market risk is due to a mismatch in the composition of assets and liabilities, for example with respect to currencies, interest rates, CPI-indexation or oth-

Exhibit 5.2. Market risk exposure and market risk appetite as a percentage of total capital base, average positions. Consolidated.



er factors that can affect the Group's earnings or earnings volatility. Derivatives used to hedge such imbalances are categorised in the banking book.

The market risk is managed with specific limits on risk factors, products and portfolios. Limits are also set to manage the concentration risk towards single issuers or instruments, as well as to manage trading liquidity risk. The Bank is also exposed indirectly to market risk through customers' derivative positions. Those positions are subject to strict margin and monitoring requirements.

5.3 Market Risk Exposure

The market risk appetite defines the maximum market risk exposure that the Group is willing to undertake. The market risk exposure is measured according to an internal framework where the amount and volatility of the underlying positions are considered. In May 2018, the Board updated the market risk appetite relative to the Group's capital such that for predetermined shifts in risk factors, the amount at risk shall not exceed 15% of the Group's total capital base, a decrease from the previous limit of 20%. Exhibit 5.2 shows how the market risk exposure evolved in 2018 with respect to the average quarterly contribution of each risk factor according to the market risk framework. In 2018, the overall market risk remained moderate and well within the Group's risk appetite. Equity risk was the largest contributing factor to market risk in the year 2018.

Exhibit 5.3. Quarterly development of equity risk in 2018. (ISK m). Consolidated.

5.3.1 Equity Risk

The Group's equity risk arises from flow trading, market making, shares acquired through restructuring of companies, and strategic investments.

The equity risk is managed through limits on aggregated market value and maximum exposure or market share in single securities. Equity risk includes bonds with equity-like features but excludes hedges against customers' equity forward positions. The quarter-end figures for the Group's equity risk in 2018 are presented in Exhibit 5.3. The trading equity exposure decreased in 2018 with an ISK 1.3bn average position compared to ISK 1.7bn in 2017. The maximum equity exposure in the trading book was ISK 2.1bn in 2018 compared to ISK 2.8bn in 2017.

The equity risk in the banking book, such as fair value shares and shares held for sale, remained relatively stable in the year 2018. The Group has no positions in equity underwriting.

An overview of the equity instruments is presented in Note 6 in the Consolidated Financial Statements. Please note that bonds with equity-like features are excluded and hedges against customers' equity forward positions are included in Note 6 which is not in line with equity risk as it is defined in the Bank from a risk management perspective. For information on equity forward positions see Note 24 in the Consolidated Financial Statements.

5.3.2 Interest Rate Risk

To manage interest rate risk, the Bank uses sensitivity measures like basis point value (BPV). The BPV measures the effect of a 0.01 percentage point (1 basis point) parallel upward shift in the yield curve on the fair value of the underlying position. The quarter-end figures for the Group's interest rate risk in 2018 are presented in Exhibit 5.4. The interest rate risk in the banking book increased in 1Q2018 due to new debt being issued and then significantly reduced in 2Q2018 due to the Group taking into account the impact of the Supreme Court ruling regarding interest rate reset terms on consumer mortgage contracts.

Interest Rate Risk in the Trading Book

The Group's interest rate exposures in the trading book arise mainly from flow trading, market making and liquidity management. All positions in the trading book are subject to BPV or duration limits, both intraday and end-of-day limits. In addi-

Exhibit 5.4. Quarterly development of interest rate risk in 2018. Presented as the change in fair value that results from a 100 basis points parallel upward shift in yield curves (100 BPV in ISK m). Consolidated.

Exhibit 5.5. End-of-quarter development of interest rate risk in the banking book in 2018 (weighted adverse BPV in ISK m). Consolidated.

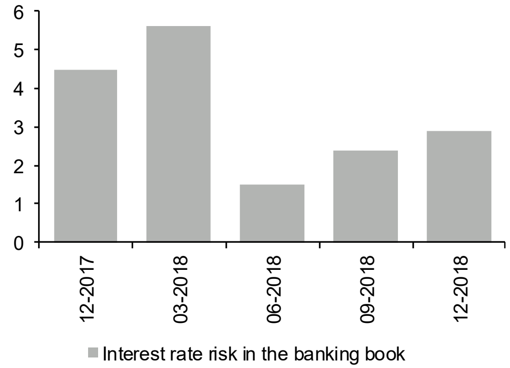
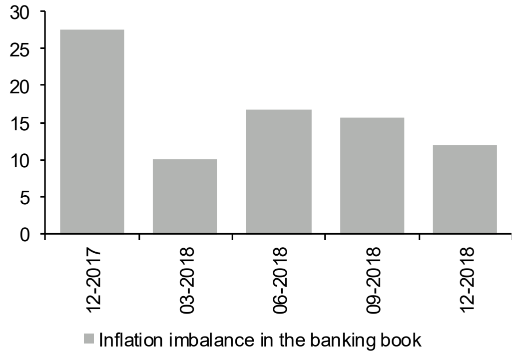


Exhibit 5.6. End-of-quarter development of the banking book inflation imbalance in 2018 (ISK bn). Consolidated.



tion to BPV limits, there are limits on the total short and long positions in underlying bonds. For foreign bonds and bills in the liquidity portfolio there are issuer rating and maturity limits. The maximum interest rate risk, measured as the absolute value of the effect of a 100 basis points parallel adverse shift in yield curves, was ISK 371m in 2018 compared to ISK 437m in 2017. An overview of the Bank's interest rate risk in the trading book is provided in Note 59 in the Consolidated Financial Statements.

Interest Rate Risk in the Banking Book

Interest rate risk in the banking book (IRRBB) arises from the Group's core banking activities. It represents the risk of loss from fluctuations in future cash flows or fair value of financial instruments as market rates change over time, reflecting the fact that the Group's assets and liabilities are of different maturities and are priced relative to different interest rates. The Group's main sources of interest rate risk in the banking book are fixed rate mortgage loans, covered bond debts and fixed-term deposits.

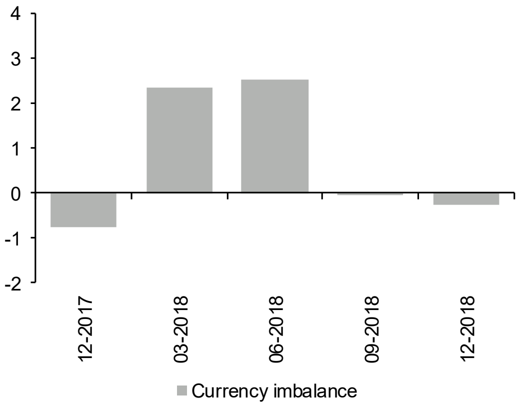
Interest rate risk in the banking book is managed by limits on the sensitivity of the fair value of the Bank's assets and liabilities to changes in market rates. All interest-bearing assets and liabilities are bucketed according to their next interest rate reset date, and the effect of a 100 basis points upward parallel shift on the interest rate exposure is measured. The sensitivity calculations are based on the duration of the underlying assets and liabilities. The calculations exclude non-performing loans since the valuation of such loans is based on the expected recovery and is not affected by changes in the underlying interest rates. An overview of the Bank's interest rate risk in the banking book is provided in Note 61 in the Consolidated Financial Statements.

In addition to a parallel shift in yield curves, the Group measures the effect of a so-called weighted adverse shift in yield curves. This entails that different weights are used to shift each yield curve in a direction that results in a loss for the Group, and the effect per yield curve is then added up to a single amount. The development of the Group's interest rate risk in the banking book in 2018 based on this weighted adverse BPV is shown in Exhibit 5.5.

5.3.3 Inflation Risk

The Group is exposed to inflation risk since assets linked to the CPI exceed liabilities linked to the CPI. The net carrying amount of all CPI-linked assets and liabilities changes according to changes in the CPI at any given time and all changes in the CPI affect the Group's profit and loss through interest income. The inflation risk inherent in the trading book positions is captured through the interest rate risk of the positions. At year-end 2018 the inflation imbalance in the banking book amounted to ISK 12.0bn compared to ISK 27.5bn at year-end 2017. The banking book inflation imbalance decreased in 2018 mainly due to new CPI-linked covered bond issuances and derivative contracts. Exhibit 5.6 displays the development of the Group's banking book inflation imbalance in 2018.

Exhibit 5.7. End-of-quarter development of the currency imbalance in 2018 (ISK bn). Consolidated.



5.3.4 Currency Risk

Currency risk arises when financial instruments are not denominated in the Group's reporting currency, especially if there is a mismatch in the currency denomination of assets and liabilities.

Currency risk is managed within internal and regulatory limits. In August 2018 the regulatory limit on the currency positions of domestic systematically important financial institutions was tightened.[1] This limit applies to the Bank and states that the net position per currency and the overall currency imbalance may not exceed 10% of the capital base, a decrease from the 15% limit that applied before. Exhibit 5.7 displays the development of the Group's currency imbalance in 2018. The currency imbalance was relatively stable throughout the year and fluctuated around zero. The overall consolidated currency imbalance was ISK -0.3bn at year-end 2018 compared to ISK -0.8bn at year-end 2017.

[1] Central Bank Rules no. 784/2018.

5.3.5 Derivatives

The Bank offers various types of derivative products to its customers. The main products are interest rate swaps (IRS), cross-currency interest rate swaps (CIRS), foreign exchange swaps (FX swaps), outright forwards (FX forwards) as well as equity and bond forwards. All derivative positions that carry market risk are subject to risk limits. The overall position in interest rate swaps and cross currency interest rate swaps is limited with BPV and duration limits while options are subject to several limits, including a limit on the open delta position per underlying instrument.

Derivatives that, since being fully hedged, do not carry direct market risk are subject to notional limits that cap the Bank's indirect exposure to the underlying risk factors. The equity and bond hedge portfolios consist of hedge positions against customers' equity and bond forward contracts. The Bank uses derivatives to hedge imbalances with respect to currency exposure, interest rate risk and inflation risk in the banking book. Other derivatives in the Group are insignificant. For further information on derivative contracts see Note 24 in the Consolidated Financial Statements and Section 4.5 in the Pillar 3 Report.

5.4 Capital Requirements

The Bank reports its Pillar 1 capital requirements for market risk according to the standardised approach of the CRD IV. An overview of the Pillar 1 capital requirements for market risk is displayed in the MR1 table in the Additional Pillar 3 Disclosures. Capital add-on for market risk under Pillar 2-R is estimated in the annual ICAAP process and reviewed by the regulator through the supervisory review and evaluation process (SREP). In 2018 the main add-on for market risk under Pillar 2-R was due to underestimation of equity risk and interest rate risk in the trading book under Pillar 1 and due to risk factors not addressed under Pillar 1, namely market risk arising from equities in the banking book, interest rate risk in the banking book and inflation risk.

6 Liquidity Risk

The Bank maintained a strong liquidity position throughout 2018 and all regulatory and internal metrics were above limits. At year-end 2018 the Bank's Liquidity Coverage Ratio (LCR) was 153% for the parent company and 172% for the Group. The Net Stable Funding Ratio (NSFR) at year-end 2018 was 115% for the parent company and 114% for the Group.

The year-end balance of deposits increased by around ISK 16bn from 2017 to 2018, mainly due to a substantial increase in retail deposits during the year (ISK 33bn). Offsetting these inflows, was an outflow of deposits from domestic and foreign financial institutions (ISK 11bn) and corporations (ISK 6bn).

The Bank's funding activities continued to evolve in 2018 as it consolidated its position in the domestic covered bond market, maintained strong liquidity ratios with further issuance of senior and subordinated debt. Íslandsbanki's credit ratings, from S&P and Fitch, were affirmed during the year at BBB+ and BBB respectively with stable outlook.

6.1 Strategy, Organisation and Responsibility

The Bank defines liquidity risk as the risk of not being able to fund its financial obligations or planned growth, or only being able to do so substantially above the prevailing market cost of funds.

Sound and efficient management of liquidity risk is a key factor to ensure the viability of the Bank's operations and to achieve and maintain a target credit rating. The Bank takes a conservative and prudent approach to manage liquidity risk and its liquidity strategy assumes that the Bank fulfils external rules on liquidity at all times and can sustain a prolonged period of stress. Following are the key principles on which the Bank's liquidity risk management framework is based:

- Roles and responsibilities with respect to management of liquidity risk shall be clear
- The definition, categorisation and management of liquid assets shall be clear
- The Bank has in place a liquidity contingency plan which shall be tested regularly
- The Bank aims for consistency and transparency in liquidity disclosure
- The Bank aims to maintain a prudent amortisation profile on its portfolio of loans to customers in order to reduce the refinancing risk of both the Bank's customers and the Bank itself
- The Bank aims to maintain a prudent balance between the maturity of assets and liabilities and to avoid spikes in the funding profile

The Bank's liquidity risk appetite is reflected in the liquidity risk framework and guided through the liquidity limit structure.

The ultimate responsibility for ensuring an adequate liquidity risk management and internal control framework at Íslandsbanki lies with the Board of Directors. The Board defines the liquidity risk governance framework and the acceptable level of liquidity risk through the *Risk Management and Internal Control Policy*, the *Risk Appetite Statement* and the *Liquidity Risk Policy*.

The All Risk Committee (ARC) is responsible for the review and implementation of the *Liquidity Risk Policy*, *Liquidity Contingency Plan* and the liquidity risk appetite. The Asset and Liability Committee (ALCO) decides on individual proposals for internal and external pricing, subject to the policies and models approved by the Board and ARC. ALCO also reviews and approves investment policies for managing the Bank's liquid assets, reviews and approves the liquidity stage assessment as part of the Bank's *Liquidity Contingency Plan* and reviews information about the liquidity position of the Bank with respect to targets and limits.

The Chief Financial Officer (CFO), as the managing director for Treasury, is responsible for ensuring the necessary resources and training of employees for understanding, identifying, measuring or assessing, monitoring, mitigating and reporting on funding and liquidity risk. Treasury is responsible for the liquidity management of the Bank, in line with the internal and regulatory limits and policies, and the associated risks. Treasury is also responsible for the Bank's funding operations and the internal pricing framework.

The Bank complies with FME guidelines on liquidity management[1] which are based on the *Principles for Sound Liquidity Risk Management and Supervision*[2], issued by the Basel Committee on Banking Supervision.

[1] FME Guidelines no. 2/2010 for Sound Liquidity Risk Management and Supervision
[2] Basel Committee on Banking Supervision, Principles for Sound Liquidity Risk Management and Supervision

6.2 Measurement and Monitoring

Key measures for the assessment of liquidity risk are the LCR and the NSFR introduced by the Basel Committee on Banking Supervision in 2010 and incorporated into European law through the CRD IV.

The implementation of the LCR and NSFR requirements differs somewhat between countries but full implementation is planned in Europe by 2019. In the preparation phase for the lifting of capital controls in Iceland, the Central Bank (CB) of Iceland implemented the LCR and the NSFR ahead of Europe and special focus was placed on setting limits regarding LCR and NSFR in foreign currencies. The CB of Iceland, which is the main supervisory authority regarding liquidity risk, has incorporated the LCR and the NSFR based on the CRD IV standards into the *Rules on Liquidity Ratio* and the *Rules on Funding Ratio in Foreign Currencies.*[3] In 2017, the CB changed the rules on liquidity ratio to make them fully comparable with European standards. At the beginning of 2018, the minimum standard for the NSFR was implemented in Europe but the CB of Iceland has not issued a plan regarding implementing the standard in Iceland for all currencies. At the beginning of 2018, the CB implemented the newly developed additional liquidity monitoring metrics (AMM)[4] to obtain a comprehensive view of the Bank's liquidity risk profile. The AMM cover a wide array of monitoring metrics, including a maturity ladder, funding concentration, concentration of counterbalancing capacity and rollover of funding.

According to the CB's rules on liquidity ratios, the Bank submits monthly reports on the LCR and NSFR ratios along with AMM reports to the CB. In addition to these regulatory measures, the Bank monitors a number of quantitative and qualitative liquidity measures, both static and forward-looking, to assess and quantify its liquidity position and thereby its liquidity risk. These include predefined triggers for the assessment of liquidity stage and forecasts of the development of the LCR. The assumptions for the internal liquidity measures are reviewed regularly.

Treasury, as a first line of defence, is responsible for continuous monitoring of the liquidity risk inherent in the Bank's operations and for notifying senior management of any foreseeable breaches from either internal or regulatory targets, limits or strategic direction. Risk Management, as the second line of defence, is responsible for providing an independent view on liquidity risk on a consolidated basis to internal and external stakeholders and for managing the annual Internal Liquidity Adequacy Assessment Process (ILAAP).

Current or prospective breaches in internal or regulatory liquidity targets or limits result in an escalation of the Bank's liquidity stage according to the definitions and triggers described in the Bank's *Liquidity Contingency Plan* which is described further in Section 6.5.

6.3 Liquidity Position

The Bank maintained a strong liquidity position throughout 2018 and all regulatory and internal metrics were above limits. The Bank continues to steer its liquidity ratios with the aim of reducing liquidity cost further while keeping the ratios comfortably above minimum requirements.

Exhibits 6.1-6.4 show the development of the LCR and NSFR ratios for Íslandsbanki in 2018 as compared to the regulatory minimum where applicable. The following chapters provide further details on the composition of the LCR and NSFR.

The Bank's Treasury invests a part of the liquidity portfolio in foreign currencies in highly liquid bonds and bills issued by foreign governments with a long-term issuer-rating of at least AA, short-term bank deposits or commercial papers issued by banks which have been allocated a credit limit. See further information in Exhibits 4.10 and 4.11 in Chapter 4.

6.3.1 Liquidity Coverage Ratio

The LCR is defined as the proportion of *High Quality Liquid Assets* (HQLA) to net cash outflow over the next 30 calendar day period. The formula for the LCR is

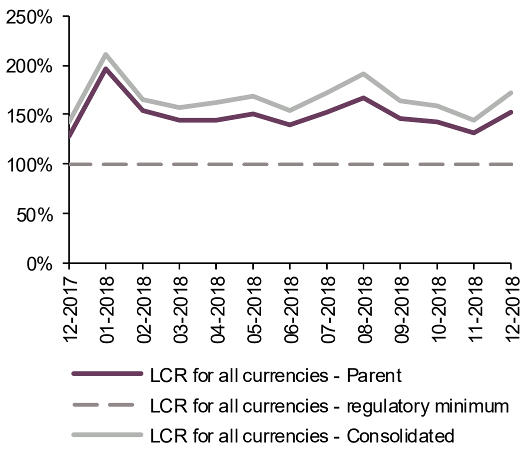
$$\frac{\text{Stock of HQLA}}{\text{Cash outflow} - \text{Min}\{\text{Cash inflow}, 75\%\ \text{Cash outflow}\}}$$

HQLA are defined as assets that can be easily and immediately converted into cash at little or no loss of value. These include cash, CB deposits, government bonds and corporate debt securities. The main outflow factors include on-demand deposits, committed credit and liquidity facilities, contractual lending obligations within a 30-day period, derivative cash outflow and other contractual cash outflows. This is offset by contractual cash inflows from outstanding exposures that are fully performing and derivative cash inflows.

To prevent banks from relying too much on anticipated inflows to meet their liquidity requirements, the amount of inflows that can offset outflows is capped at 75% of total expected cash outflows. This requires that banks must maintain a minimum stock of HQLA equal to 25% of the total cash outflows.

[3] Central Bank Rules no. 266/2017 and no. 1032/2014
[4] EBA draft implementing standards on additional liquidity monitoring metrics

Exhibit 6.1. LCR for all currencies. Consolidated and parent.



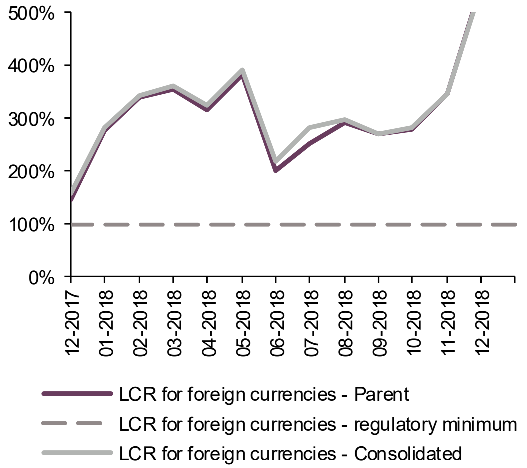
The EU LIQ1 in the Additional Pillar 3 Disclosure shows the breakdown of the Group's positions[5] underlying the LCR at year-end 2018. According to the LCR disclosure standards, the figures show the average of end-of-month positions throughout 2018 as opposed to the year-end figures in Note 55 in the Consolidated Financial Statements.

6.4 Funding

The Bank continues to be predominantly funded by deposits although borrowings through bond issuance amount to 34% of the total funding. The deposit-to-loan ratio, which has been around 70% in 2018, is expected to remain in that range over the coming years. The Bank has been gradually increasing its borrowing in recent years with covered bond issuance, foreign currency denominated bonds and subordinated debt.

[5] In accordance with Article 435(1) of Regulation (EU) 575/2013 and guidelines from the Central Bank

Exhibit 6.2. LCR in foreign currency. Consolidated and parent.



6.4.1 Net Stable Funding Ratio

A key metric for assessing the long-term viability of the Bank's funding structure is the NSFR. The ratio measures the proportion of stable funding to long-term assets for a time horizon of over one year. In particular, the NSFR is structured to ensure that long-term assets are funded with at least a minimum amount of stable liabilities and thus to limit over-reliance on short-term wholesale funding.

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}}$$

The amount of Available Stable Funding (ASF) is measured based on the assumed relative stability of an institution's funding sources reflected in the corresponding ASF factor. The available amount of stable funding is composed mostly of retail deposits, wholesale deposits with remaining maturity of greater than one year, borrowings with a residual maturity over one year and equity.

Exhibit 6.3. NSFR for all currencies. Consolidated and parent.

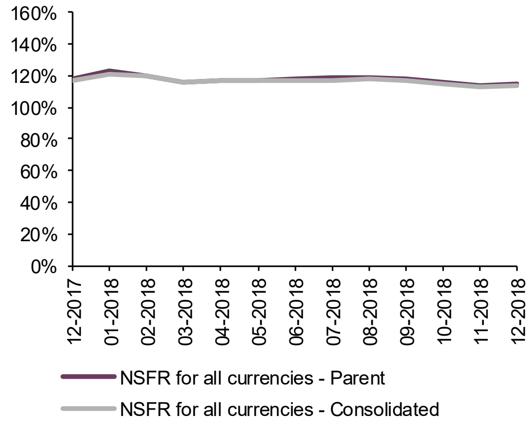
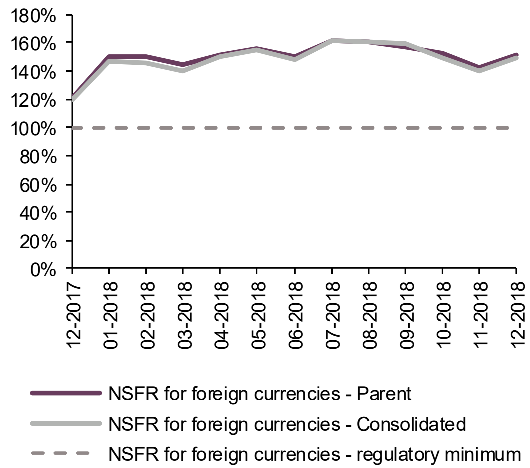


Exhibit 6.4. NSFR in foreign currency. Consolidated and parent.



The amount of Required Stable Funding (RSF) is measured based on the liquidity risk profile of an institution's assets and off-balance sheet exposures. The required amount of stable funding is mainly in the form of encumbered and unencum-

Exhibit 6.5 Breakdown of the components underlying the Group's NSFR in 2018 (ISK bn). Consolidated.

NSFR breakdown, end-of-month average through 2018	Foreign currency		All currencies	
	Balance	NSFR weighted	Balance	NSFR weighted
Tier 1 and Tier 2 capital			171	171
Other capital instruments	12	12	12	12
Unsecured financing	208	150	441	234
Secured financing	-	-	138	127
Less stable deposits (LCR classification)	16	15	229	206
Stable deposits (LCR classification)	3	3	90	86
Other liabilities	8	-	36	0
Available stable funding	247	180	1,118	836
Liquid assets	35	2	197	-
Encumbered assets (loans and securities)	-	-	174	174
Unencumbered assets (loans and securities)	200	113	702	479
Other assets	7	6	56	57
Off-balance sheet	24	1	154	7
Currency imbalance	(0)	(0)	(0)	-
Required stable funding	265	121	1,281	716
Net stable funding ratio (2018 end-of-month avg.)		149%		117%
Net stable funding ratio (year-end 2018)		149%		114%

bered assets with maturity of more than one year and other on- and off-balance sheet exposures. All categories are weighted by the appropriate RSF factor.

Exhibit 6.5 shows a high-level breakdown of the components underlying the Group's NSFR in 2018.

6.4.2 Deposits

The deposit-to-loan ratio lowered slightly in 2018 and is currently around 70%. The ratio is expected to remain in that range and deposits to continue to be the largest source of funding for the Bank in the years ahead.

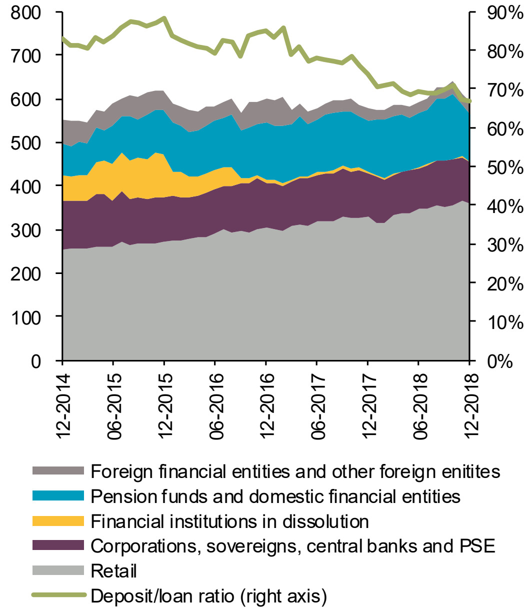
The deposit balance increased by around ISK 16bn over the course of the year 2018 as shown in Exhibit 6.6. The change was mainly due to a substantial increase in retail deposits during the year (ISK 33bn). Offsetting these inflows, was an outflow of deposits from domestic and foreign financial institutions (ISK 11bn) and corporations (ISK 6bn).

The proportion of term deposits has decreased from 29% of total deposits at year-end 2017 to 27% at year-end 2018. The decrease was mainly due to financial institutions while core retail term deposits remained stable.

The Icelandic banks serve as intermediaries for the offshore króna assets[6] that were not converted to foreign currency in the CB auction in June 2016. The deposits remain on the Icelandic banks' balance sheets but they are required to invest them fully in CB certificates of deposits. Thus, these deposits are not a source of funding for the Icelandic

[6] Act no. 37/2016 Treatment of Króna-Denominated Assets Subject to Special Restrictions

Exhibit 6.6. Deposit development from year-end 2014 to 2018 (ISK bn). Consolidated.



banks and are consequently excluded from the LCR calculations and classified as term deposits. At year-end 2018, offshore ISK deposits at Íslandsbanki amounted to ISK 3bn.

For a more detailed composition of deposits by LCR categories and term see Note 54 in the Consolidated Financial Statements.

Deposit concentration is monitored specifically since a substantial amount of the Bank's deposits are held by relatively few counterparties. The Bank's highest deposit concentrations are in wholesale deposits from foreign and domestic financial institutions and pension funds. As shown in Exhibit 6.7, deposit concentration has remained stable since year-end 2017. At year-end 2018, 14% of the Bank's deposits belonged to the 10 largest depositors remaining stable from the end of 2017. The proportion of the 100 largest depositors decreased from 38% to 35% in 2018.

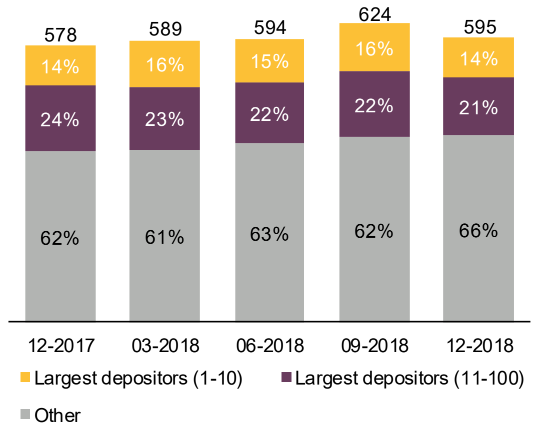
6.4.3 Capital Markets Activity

Íslandsbanki continues to be one of the largest covered bond issuers in Iceland. The Bank issued ISK 23.7bn of covered bonds in 2018, compared to ISK 41.7bn in 2017. The issuance was in line with the domestic issuance plan for 2018 which assumed covered bond issuance to be between ISK 20-25bn. Liquidity has remained strong in the Bank's covered bonds and yields have decreased from year-to-year. The total outstanding amount of covered bonds at year-end 2018 was ISK 130.1bn, thereof ISK 107.6bn CPI-linked.

In April 2013, the Bank began issuing unsecured short-dated bonds (i.e. commercial paper) in the domestic market, the first listed issue of such securities by an Icelandic bank since the autumn of 2008. At year-end, the Bank had ISK 6.9bn of debt outstanding in short-term unsecured bonds, with maturities ranging from one month to six months.

International credit markets began 2018 in a very positive spirit with investors absorbing new issues from the market at large at the tightest spreads seen since 2008. In January, the Bank issued a strongly oversubscribed €300m bond maturing in 2024, with issuer's call options from year 2023. The deal, which was widely distributed in the Nordic countries, the UK and continental Europe was priced at 75 basis points over mid-swaps. This issue was the most tightly-priced, longest-dated public senior bond offering seen from an Icelandic bank in recent times and was because of its call structure an innovation in terms of how it will help the Bank manage its NSFR ratio in the future. The transaction was managed by Goldman Sachs, JP Morgan and Nomura.

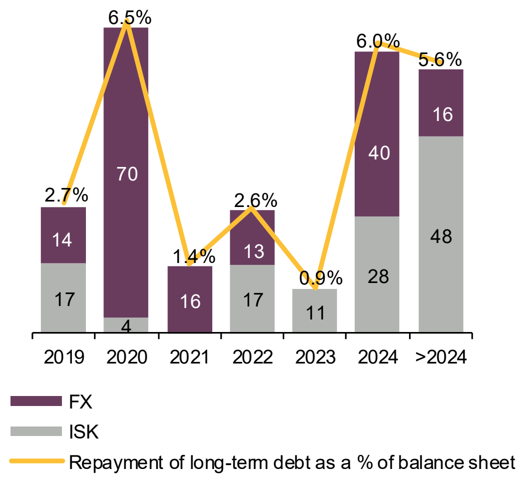
Exhibit 6.7. Development of the deposit concentration throughout 2017 (ISK bn). Consolidated.



The Bank issued in the Swedish kronor market several times in 2018, amounting to a total of just over SEK 4bn by the end of the year, both in private and public transactions. Notably, in April the Bank launched an SEK 1bn 4-year Floating Rate Note, callable from 3 years. Once again, the callable nature of the bond allows the Bank to manage more easily its funding ratios as the bond nears maturity. The issue was priced at a spread of STIBOR +80 basis points and was managed by Nordea, SEB and Swedbank.

Credit markets, as a whole, began to demonstrate increasing risk aversion from late Spring onwards, with spreads starting to widen markedly across the whole credit spectrum and across all geographies. Bearish rates environments, stalling economic performance in many developed and emerging economies and heightened geo-political risks all conspired to put markets on

Exhibit 6.8. Maturity profile of long-term funding (ISK bn) as of year-end 2018. Parent.



the back foot, and as a result the tightening spread picture reversed itself. The Bank saw the spread on its own recent 2024 widen out from its original launch spread and end the year effectively 100 basis points wider than at launch. This picture was not merely repeated just by Icelandic banks, but indeed most of the smaller bank issuers across Europe.

Despite these conditions, it remained the case that investors were still receptive to new transactions, but at more elevated spreads. The Bank issued its second Tier 2 subordinated bond in August, and once again in the Swedish local currency market. The 10-year non-call 5-year bonds were priced at STIBOR +250 basis points to the 5-year call date, and the transaction was managed by Danske Bank, Nordea and Swedbank. This was the second issue of subordinated paper by the Bank within a year, the previous deal having been issued at spread of STIBOR +200 in November 2017.

Exhibit 6.8 provides a summary of how the maturity of outstanding bond issues is distributed over the coming years and Note 27 in the Consolidated Financial Statements gives an overview of the terms of outstanding bonds issued by the Bank at year-end.

In October 2017 S&P Global Ratings (S&P) upgraded Íslandsbanki's rating to BBB+ in recognition of an improving operating environment for the Icelandic banking system following the liberalisation of capital controls and declining private sector debt. S&P affirmed the rating in July 2018, noting that "the stable outlook on Íslandsbanki reflects S&P's expectation that the Bank's RAC ratio will remain sustainably above 15%, even while the Bank prepares for an eventual sale or IPO over the next two years, and the Bank optimises its capital base by paying extraordinary dividends and issuing capital instruments. S&P expects the Bank's asset quality to improve only marginally from current levels, remaining in line with that of domestic peers. The stable outlook further balances S&P's view of the still-supportive economic development in Iceland with the relatively concentrated and volatile nature of the economy and increasing credit risks."

Fitch assigned a long-term rating of BBB-/F3 to Íslandsbanki in April 2015, making it the first Icelandic bank to be rated investment-grade since 2008. In January 2017 Fitch upgraded the Bank's rating to BBB/F3, with a stable outlook, citing continuous strengthening of the Icelandic operating environment as reflected in the extended record of robust economic growth, combined with an improved external position. Fitch affirmed Íslandsbanki ratings, at BBB/F3, with a stable outlook in November 2018 commenting that "the ratings of Íslandsbanki are underpinned by its leading Icelandic universal banking franchise, with domestic market shares of about 30% in lending and deposits, good asset quality, a stable liquidity position and high reported capital ratios. Fitch believes the Bank has established a good risk management framework and views positively the Bank's domestic-focused strategy. These factors are offset by the Bank's concentration on a small market, as its size makes Íslandsbanki more vulnerable to domestic and international shocks, as well as by only adequate profitability."

In January 2019, Íslandsbanki announced that following expiration and by agreement of parties, the credit rating service contract between Fitch Ratings and Íslandsbanki was to terminate. Fitch Ratings affirmed all its ratings on Íslandsbanki with a stable outlook, and subsequently withdrew its rating.

Exhibit 6.9 shows the credit rating history for Íslandsbanki from April 2014 to December 2018.

6.4.4 Asset Encumbrance

The asset encumbrance ratio is critical when monitoring the consequences of changes in funding sources and the ability to withstand funding stress. The Bank's asset encumbrance predominately consists of:

- Loans and securities serving as collateral for covered bond issuance which is one of the Bank's strategic long-term funding sources
- Cash and securities as collateral for currency swap agreements
- Central Bank (CB) term deposits for the payment system

Íslandsbanki's asset encumbrance ratio was 18.0% at year-end 2018, increasing from 15.2% at year-end 2017. Exhibit 6.10 shows the development of the reported encumbrance ratio since 2014. The

Exhibit 6.9. Íslandsbanki's credit rating history.

	S&P counterparty credit rating (long-term)	S&P outlook	S&P counterparty credit rating (short-term)		Fitch Long-term Issuer Default Rating	Fitch outlook	Fitch Short-term Issuer Default Rating
April 2014	BB+	Stable	B-3	April 2015	BBB-	Stable	F3
October 2014	BB+	Positive	B-3	April 2016	BBB-	Stable	F3
November 2014	BB+	Positive	B-3	January 2017	BBB	Stable	F3
July 2015	BBB-	Stable	A-3	September 2017	BBB	Stable	F3
November 2015	BBB-	Stable	A-3	December 2017	BBB	Stable	F3
January 2016	BBB-	Positive	A-3	November 2018	BBB	Stable	F3
October 2016	BBB	Positive	A-2				
November 2016	BBB	Positive	A-2				
October 2017	BBB+	Stable	A-2				
December 2017	BBB+	Stable	A-2				
July 2018	BBB+	Stable	A-2				

large increase in 2016 was due to offshore deposits that the Bank is required to fully invest in CB certificates of deposits[7] and the sharp increase in 2018 was due to changes in the minimum reserve requirements[8] of the CB.

6.4.5 Funding Outlook

Although the Bank anticipates that it will continue to be predominantly deposit funded for the foreseeable future, there nonetheless remains a range of external factors that will determine the path of its deposit-to-loan ratio. A general movement out of deposits into other asset classes is a likely eventuality as Icelandic financial markets continue to broaden. The Bank's policy is to mitigate outflow of deposits and other possibilities by putting in place a mixed funding platform that embraces deposits of various types, and capital markets funding sourced both domestically and overseas.

The Bank estimates that the total issuance of covered bonds will be between ISK 25-30bn in 2019. The Bank's chief foreign currency funding platform is its USD 2,500m Global Medium Term Note (GMTN) Programme. The GMTN Programme enables the Bank to issue transactions of all sizes in a range of currencies, with a minimum of cost and process. Bonds issued from the Programme can be listed on the Irish Stock Exchange.

Due to the Bank's strong liquidity position, both in ISK and foreign currencies, the Bank may explore buybacks or refinancing of outstanding transactions in 2019 in a continuing effort to maintain a strong balance sheet position while efficiently applying surplus liquidity.

Exhibit 6.10. Development of asset encumbrance as a percentage of total assets at year-end. Consolidated.

Year	Asset encumbrance ratio
2014	10.8%
2015	10.4%
2016	15.2%
2017	15.2%
2018	18.0%

The Bank is contemplating issuing Tier 2 and eventually Additional Tier 1 capital instruments in order to increase its capital efficiency.

[7] Act no. 37/2016 on the Treatment of Króna-Denominated Assets Subject to Special Restrictions

[8] Rules no. 585/2018 on Minimum Reserve Requirements

6.5 Liquidity Contingency Plan

The Bank has in place a *Liquidity Contingency Plan*. The main purpose of the contingency plan is to identify liquidity or funding problems as early as possible and thereby improve the Bank's ability to respond to such situations. As a part of the *Liquidity Contingency Plan*, the Bank has defined four liquidity stages reflecting different levels of severity. The liquidity stages are determined based on both predefined risk triggers and on qualitative assessment. For each stage, management and reporting actions have been defined and communicated to the relevant parties, including the Board of Directors, the CB and the FME. The *Liquidity Contingency Plan*, which forms a part of the Bank's *Business Continuity Framework*, is tested regularly and findings from the tests are used to improve the contingency plan if needed.

7 Operational Risk

A total of 500 operational loss events were registered in 2018 as compared to 460 in 2017. The largest part of the events occurred without causing a direct loss. The largest loss recorded in 2018 was related to a full realisation of the impact of a Supreme Court ruling regarding interest rate reset terms on consumer mortgage loans in 2017.

Operational risk contributed to 10.1% of the Group's risk exposure amount compared to 10.7% at year-end 2017. According to the Supervisory Review and Evaluation Process (SREP) 2018 results, the total capital requirement due to operational risk was 0.8% of REA compared to 0.9% in 2017.

7.1 Strategy, Organisation and Responsibility

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or external events. The Bank's definition of operational risk includes reputational risk, legal risk, model risk, conduct risk and compliance risk among other risk factors.

The ultimate responsibility for ensuring an adequate operational risk management and internal control framework at Íslandsbanki lies with the Board of Directors.

The operational risk management framework is based on the following principles:

- Clear responsibilities and ownership of operational risk and operational risk controls.
- The Bank accepts no unnecessary operational risk, meaning that it only assumes operational risk when the cost of mitigating that risk and preventing possible losses outweighs the benefits.
- The Bank promotes a strong risk culture, emphasising compliance to internal and external laws and regulations.
- A key feature of a strong risk culture is to foster a "no blame" environment where operational risk events are recognised and registered to enable continuous improvement to the Bank's operations.

The All Risk Committee (ARC) is responsible for the review and implementation of the operational risk framework. The Operations and Security Committee (OSC) decides on individual proposals for assuming and mitigating operational risk on behalf of the Bank within the appetite and limits approved by the Board and ARC. The OSC also reviews and approves proposals for new products, services or other risky changes of systems or procedures within the Bank in accordance with the *Operational Risk Policy* and the *Product Governance Policy*.

The managing directors for individual business and support units are responsible for the operational risk inherent in their business. This entails identifying the sources of operational risk in their operations, assessing whether the cost of avoiding the risk outweighs the benefits and ensuring that unacceptable operational risks are mitigated, and losses prevented.

Risk Management is responsible for implementing the Bank's operational risk framework, for developing and maintaining the *Operational Risk Policy* and for communicating the policy to the Bank's employees. Risk Management also monitors the overall operational risk profile of the Bank, ensures proper escalation and reporting of operational risk issues and provides an independent view on the overall operational risk inherent in the Bank's operations. Furthermore, Risk Management is responsible for reporting on operational risk events and limit breaches to senior management, the Board of Directors and to the competent authorities in accordance with internal procedures and regulatory requirements.

Compliance is responsible for implementing the Bank's compliance risk framework, for developing and maintaining the Bank's *Compliance Risk Policy* and for communicating the policy to the Bank's employees.

7.2 Measurement and Monitoring

The Bank has implemented an operational risk management framework which fulfils the criteria for the standardised approach according to the Capital Requirements Directive (CRD IV). For capital requirement calculations, the Bank currently uses the Basic Indicator Approach as further described in section 7.5.

The main processes for managing operational risk are the Business Continuity Framework including the *Crisis Management Plan*, the Risk and Control Self-Assessment (RCSA), development and monitoring of Key Risk Indicators (KRIs) and reporting of all significant operational risk events in the Bank's Loss Event Database (LED).

Aggregated registered operational risk losses in any given quarter shall not exceed a given percentage the of Bank's capital, as defined in the *Risk Ap-*

petite Statement. The *Operational Risk Policy* describes the reporting limits on operational risk losses in any given quarter to the Board of Directors.

The digital transformation within the financial markets and in people's daily lives in recent years has led to increased regulatory requirements and more focus on operational risk and operational risk management. Supervisory bodies have put tight restraints on how information technology and information security and the resulting risks should be managed, especially with respect to access to personal data. At Íslandsbanki, various measures have been taken to strengthen the operational risk management framework to accommodate to these requirements. Special focus has been on employee training with the objective to increase risk awareness and contribute to a strong risk culture. The Bank's IT risk and model risk frameworks have also been strengthened to support the strategic direction towards further digitalisation.

In the year 2018, a significant milestone was reached with a full update of the Bank's payment and deposit systems in cooperation with RB[1]. The implementation process itself entailed substantial operational risk which was closely managed with continuous risk assessment and contingency planning. The implementation was expected to have a temporary impact on the number of registered operational loss events. This impact was within expectation and the go-live of the system was deemed successful by the Bank.

An updated *Product Governance Policy* was approved by the Board of Directors late 2017. The Product approval process is a key factor in operational risk management and in the year 2018 the process was strengthened further by making risk assessment mandatory for all new products.

The Bank's compliance risk is managed and monitored within the Compliance unit. The Compliance unit uses a risk-based approach in identifying, measuring, managing and monitoring compliance risk within the Bank. By using a risk-based approach the Bank has a more comprehensive overview of the need to apply mitigation measures to reduce the risk within the Bank.

The Bank maintains an operational risk insurance covering loss events where insurance is deemed to be a cost-effective mitigation of operational risk. The insurance coverage limits financial loss caused by serious unexpected events or legal liabilities that occur despite other operational risk management procedures. The Bank's insurance also offers coverage for wrongful act claims brought solely against directors and officers of the Bank.

7.3 Operational Risk Exposure

In 2018, a total of 500 operational risk events were registered in the Bank's LED compared to 460 events in the year 2017. Most of the recorded op-

[1] RB is an IT service centre for the Icelandic financial market covering all aspects of IT services.

Exhibit 7.1. Categorisation of loss events in 2017-2018 by CRD IV event-types. Parent.

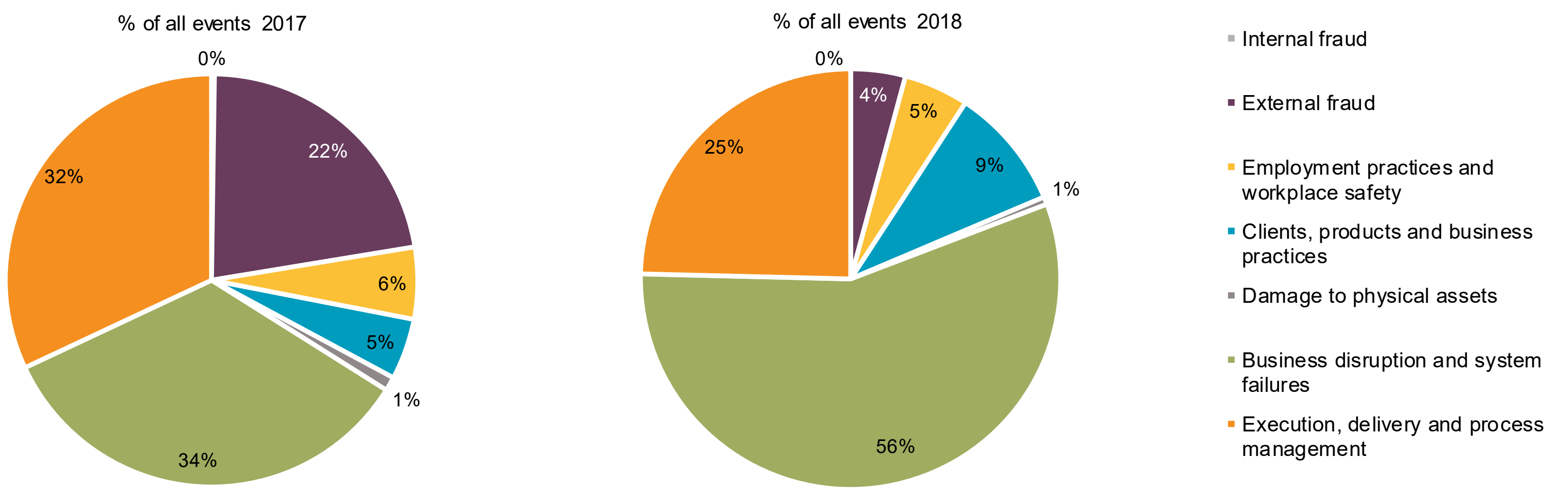
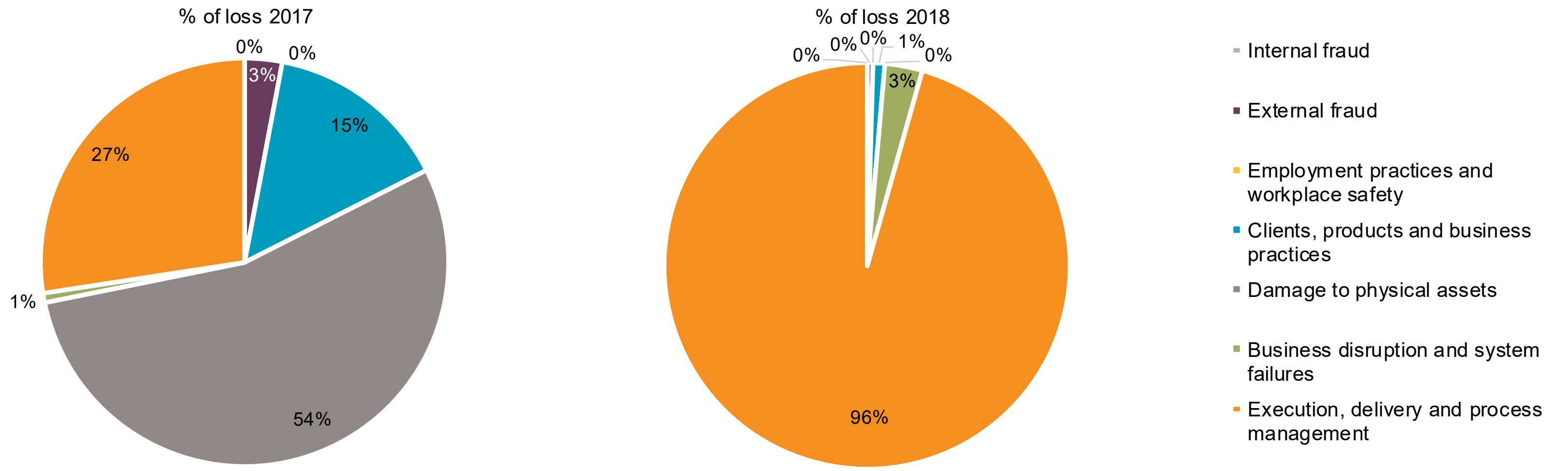


Exhibit 7.2. Categorisation of loss amounts in 2017-2018 by CRD IV event-types. Parent. Comparative amounts for year-end 2017 have been adjusted



erational risk events occurred without causing a financial loss. Further statistics for registered loss events are presented in Exhibits 7.1 and 7.2.

The loss events in the category "Business disruption and system failures" accounted for 56% of the total number of events in 2018, a large part of these events can be attributed to the core system update in cooperation with RB. Overall the implementation was deemed successful by the Bank and is expected to reduce operational risk and increase IT system stability in the long run.

The loss events in the category "Execution, delivery and process management" accounted for 96% of the total loss amount attributed to operational risk in 2018, predominantly caused by a Supreme Court ruling regarding interest rate reset terms on consumer mortgage loans in 2017, the loss was recorded in 2018 after the full impact of the ruling had been realised.

7.4 Supervisory Observations and Sanctions

In 2018 the Financial Supervisory Authority (FME) issued four transparency notifications on aspects of the Group's operations or its subsidiaries. The topics of these inquiries were:

- Assessment of the Bank's procedure for handling customer complaints: No observations were made
- Assessment of the Bank's procedures after mortgages have been fully paid off: No observations were made
- Results from SREP: Three observations were made
- Assessment of Borgun's IT systems. No observations were made

The Consumer Agency issued a decision in June 2018 that the Bank had allegedly violated Icelandic law by omitting during a marketing campaign to disclose the use of paid social media influencers. No fines were issued.

7.5 Capital Requirement

The Bank uses the Basic Indicator Approach of CRD IV to calculate the capital requirements for Pillar 1 operational risk, in accordance with Icelandic law and regulations.[2] Under the Basic Indicator Approach the capital requirement for operational risk is equal to 15% of the relevant indicator. The relevant indicator is the average over three years of the sum of net interest income and net non-interest income. According to the SREP 2018 results, the total capital requirement due to operational risk was 0.8% of REA compared to 0.9% in 2017. Operational risk contributed to 10.1% of the Group's REA compared to 10.7% in 2017.

[2] Regulation no. 233/2017 on the Capital Requirement of Financial Undertakings.

8 Remuneration

The Bank's Compensation Policy states that the Board of Directors shall not make or authorise agreements for variable compensation without the shareholders' consent and on terms agreed by shareholders at a shareholders' meeting.

8.1 Regulatory Framework

The Icelandic Financial Supervisory Authority (FME) publishes rules regarding remuneration in financial undertakings.[1] The rules reflect a conservative framework for remuneration schemes within the financial sector. According to the rules, a bank intending to pay variable remuneration to one or more employees is required to have in place a compensation policy approved by its Board of Directors. The compensation policy shall be reviewed at least annually and the Bank shall account for the policy to the FME.

8.2 Compensation Policy

The Bank's *Compensation Policy*[2] states that the Board of Directors shall not prepare or authorise any contracts for variable remuneration. An exception can be made if a prior approval has been obtained from the shareholders, and the terms are in accordance with the terms agreed upon at shareholders' meeting.

8.3 Remuneration in 2018

Exhibit 8.1 shows a breakdown of remuneration for the Board of Directors and the Executive Board in 2018. The only variable remuneration in 2018 relates to agreements that were made before the current *Compensation Policy* came into effect. For further information on the previous remuneration scheme please refer to the 2016 Pillar 3 Report.[3]

The salaries and other benefits of the Bank's management and the Board of Directors are disclosed in Note 16 in the Consolidated Financial Statements. Please note that the amounts displayed in Exhibit 8.1 are not fully comparable to the figures in the Annual Report as the basis for preparation differs.

[1] Rules no. 388/2016 on Remuneration Policy for Financial Undertakings in accordance with Act no. 161/2002 on Financial Undertakings.
[2] Íslandsbanki Compensation Policy

[3] Íslandsbanki's Pillar 3 Report 2016

Exhibit 8.1. Total remuneration for the Board of Directors and the Executive Board broken down by fixed and performance-based remuneration (ISK m).

Total remuneration earned in the financial year 2018 broken down by fixed and performance based remuneration	Board of Directors	Executive Board
Total annual remuneration	66	364
Number of beneficiaries	9	8
Total fixed remuneration	66	345
Total variable remuneration	-	19
Cash	-	19
Other	-	-
Variable remuneration % of fixed	-	5.5%
Outstanding deferred remuneration for the financial year 2018	-	-
Sign-on and severance pay granted during the financial year 2018	-	-

9 Legal and Regulatory Changes

As a financial institution, Íslandsbanki must comply with a comprehensive set of laws and regulations. The legal and regulatory environment of the Bank is constantly changing and the Bank puts substantial resources into monitoring and implementing these changes to ensure full compliance.

This chapter provides an overview of the main legal and regulatory changes in Iceland relevant to the Bank's operations that came into effect in 2018.

9.1 New Legislation

Act no. 15/2018 on Derivatives Trading, Central Counterparties and Derivative Trade Repositories

The Act transposed Regulation no. 648/2012 of the European Parliament and of the Council on OTC (over-the-counter) derivatives, central counterparties and trade repositories (European market infrastructure, EMIR) into Icelandic law. The Act suspends certain OTC derivative contracts with central counterparties, i.e. those contracts that are derivatives not traded on a regulated market. The Act introduces the term central counterparty which is a new licensed financial market member that sets itself up between the parties and becomes a new buyer towards each vendor and vice versa. The Act took effect 1 October 2018.

Act no. 34/2018 amending Act no. 161/2002 on Financial Undertakings, with subsequent amendments (netting, netting agreements and nullification)

The Act amends Chapter XII of the Act on Financial Undertakings no. 161/2002. The chapter deals with the restructuring of financial undertakings' finances, their dissolution and mergers with other financial undertakings. The amendments are meant to clarify the exceptions applying to the principle. There are two kinds of provisions. Firstly, there are rules which further specify the laws of any Member State to apply to claims on the basis of cancellation of contracts with the winding-up of financial undertakings. Secondly, there are rules that apply to netting on the winding-up of a financial undertakings and netting agreements. The Act lays down statutory rules based on Directive 2001/24/EC of 4 April 2001 on the restructuring and liquidation of credit institutions. The substantive rules set forth in the Act are only intended to apply to a financial undertaking that has its head office in Iceland and operates in another EEA state. The rules, therefore, do not apply to a financial undertaking's contractual relationship with companies or individuals outside the EEA area. The Act took effect 16 May 2018.

Act no. 54/2018 amending Act no. 161/2002 on Financial Undertakings, with subsequent amendments (reform plan, timely interventions, consolidation supervision, supervisory powers, etc.)

The Act makes changes to the Act's definitions. The changes relate to large exposures, new figures relating to parent companies and provisions relating to the grounds for revocation, risk control systems and restrictions on large exposures. The Act moreover introduces a new chapter on recovery plans. The Act took effect 21 June 2018.

Act no. 90/2018 on Personal Data Protections and Processing

The Act transposed Regulation 2016/679/EU of 27 April 2016 on General Data Protection (GDPR) of the European Parliament and the Council into Icelandic law. GDPR entails very extensive changes in the field of privacy and, with it, the fundamental rights of individuals in the digital world are strengthened and at the same time made way for the development of the internal digital market by simplifying rules for companies. The Act provides, on the one hand, for the provisions of the GDPR, as incorporated into the EEA Agreement, and, on the other hand, to supplement further provisions of GDPR it authorises or recommends that special rules be laid down in national law. The adoption of the Act is a prerequisite for Iceland's participation in a pan-European regulatory framework for the protection of personal data and the processing of personal data.

The Act thus includes a modified and enhanced role for national supervisory authorities, increased rights of individuals, new security certificates and enforcement powers. The Act promotes personal information in accordance with the fundamental principles and rules on privacy. To ensure the reliability and quality of such information and their free flow in the internal market of the European Economic Area (EEA). The Act took effect 15 July 2018.

Act no. 140/2018 replacing Act no. 64/2006 on Measures Against Money Laundering and Terrorist Financing

The main changes include the requirement for a written risk assessment being done on operations, transactions, increased due diligence for riskier customers and a risk assessment of new products and new technologies.

The Act entails that the reporting of tax evasion is now mandatory and the Director of Internal Revenue is a new supervisory authority which supervises parties not supervised by the Financial Supervisory Authority. Moreover, a new chapter on sanctions was integrated into the Act. The Act took effect 1 January 2019.

Act no. 151/2018 amending the Act on Official Registration, the Act on Electronic Commerce and other Electronic Services and the Act on Additional Revenues of the National Treasury (electronic official registration)

The Act makes official registration by an electronic entry equivalent to official registration of a document. At first, an electronic entry bill will be limited to a particular type of document and to a particular registrar. It is assumed that a regulation will further define which documents can be registered via electronic transaction. It is expected that with more experience in the electronic process, it will be possible to increase the number of documents that will be registered electronically. The Act lays the foundation for electronic and thus automatic registration. At first, electronic registration will be restricted to mortgage documents, e.g. bonds and documents related to them, such as change of terms and mortgage solutions. Yet the aforementioned examples are in no way exhaustive. The Act will take effect 1 April 2019, however provisions relating to the correction of creditors' registration have already taken effect.

9.2 Regulation

Regulation no. 40/2018 on the entry into force of the European Union Regulation on the activities of credit rating agencies

The regulation introduces the EU regulation covering the activities of credit rating agencies. The regulation is transposed with the adaption of the EEA Joint Committee in accordance with its decision. The regulation covers the activities of credit rating agencies that operate according to Act no. 50/2017 on credit rating agencies. The regulation was introduced on the basis of paragraph 1 of Article 8 of the Act no. 50/2017 on Credit Rating Agencies. The regulation took effect 25 January 2018.

9.3 Rules

Rules no. 784/2018 replacing rules no. 950/2010 on Foreign Balance

The rules are set on the basis of Article 13 of the Act on the Central Bank of Iceland no. 36/2001, as well as Article 8 of the Act on Foreign Exchange no. 87/1992. The rules apply to parent companies and groups of financial undertakings licensed according to figure 1-4 of paragraph 1 Article 4 of the Act on Financial Undertakings no. 161/2002, with subsequent amendments. The rules took effect 30 August 2018.

Rules no. 877/2018 replacing rules no. 492/2001 on Price Indexation of Savings and Loans

The rules were set by the Central Bank of Iceland and mainly introduce a simplification of calculations for indexation within a month. The rules were introduced on the basis of the first two paragraphs of Article 15 of Act no. 38/2001 on Interest and Price Indexation. Furthermore, the rules were agreed upon by the Ministry of Finance and Economic Affairs, in accordance with paragraph 1 of Article 15 of Act no. 38/2001. The rules were supposed to take effect 1 November 2018, but were later partially postponed, see the next item.

Rules no. 949/2018 amending rules no. 877/2018 and rules no. 492/2001 on the Indexation of Savings and Loans

The rules amended Article 5 of rules no. 877/2018 in regards to the entry into force. Instead of coming into effect 1 November 2018, the rules will come into effect 1 February 2019, with the exception of Paragraph 2 of Article 7 which came into effect 1 November. The rules were introduced on the basis of the first two paragraphs of Article 15 of Act no. 38/2001 on Interest and Price Indexation. Furthermore, the rules were approved by the Ministry of Finance and Economic Affairs, in accordance with paragraph 1 of Article 15 of Act no. 38/2001. The rules took effect 1 November 2018.

Rules no. 963/2018 amending the rules of the Central Bank of Iceland no. 490 on special reserve requirements for new foreign currency inflows

The rules involved a change to paragraph 1 of Article 4 of rules no. 490/2016, where the former 40% binding rate was lowered to 20%. The rules took effect 3 November 2018.

Rules no. 1001/2018 on the Normal and Healthy Business Practices of Financial Undertakings, Payment Institutions and Electronic Money Companies replacing rules no. 672/2017

The rules were introduced by the FME and broadened the scope of former rules no. 672/2017 on the normal and healthy business practices of financial undertakings. The new rules now also cover business practices of payment institutions and electronic money companies. The change is due to the FME's duty to ensure that the old rules also covered payment institutions and electronic money companies, therefore the name of the rules was changed.

The rules are set with notice to the limits of authority between the FME and the Consumer Agency, Act on Supervision of Business Practices and Marketing, the Consumer Credit Act, the Act on Real Estate Mortgages to Consumers, regulations and rules issued on the basis of the abovementioned Act and Decisions of the Consumer Agency. The rules made a minor change clarifying the wording of Article 9, defining the starting point of the preservation of complaints in a clearer manner. The rules took effect on 18 October 2018.

Definitions

Basel
International recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision.

Basel III
A set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector.

Basis Point Value (BPV)
The BPV measures the effect of a 0.01 percentage point (1 basis point) parallel upward shift in the yield curve on the market value of the underlying position. Thus, a BPV of ISK 1 million means that a 0.01 percentage point upward shift in the yield curve would result in a reduction of approximately ISK 1 million in the market value of the underlying asset.

Basis Indicator Approach
Standardised approach to calculate the capital requirement for operational risk.

Capital Requirements Directive IV (CRD IV)
The CRD IV rules are based on the Basel III guidelines and came into force on 17 July 2013. The supervisory framework in the EU is designed to ensure the financial soundness of credit institutions and reflects EU global liquidity standards on banking capital adequacy.

Carrying Amount
Book value of loans as displayed in the Financial Statements. The difference between gross carrying amount and net carrying amount is the impairment allowance.

Claim Value
The remaining amount of obligor's debt.

Collateral Board
The All Risk Committee has appointed a Collateral Board that reviews and proposes guidelines for the valuation of collateral and pledged assets to ensure that the valuation of collateral is co-ordinated throughout the Bank.

Concentration Risk
The significantly increased risk of any type that is driven by common underlying factors, e.g. sector, economy, geographical location, type of financial instrument or due to connections or relations among counterparties. This includes large individual exposures or liabilities to parties under common control and significant exposures to groups of counterparties whose likelihood of default is driven by common underlying factors.

Country Risk
The risk of losses that may occur due to economic difficulties or political unrest in countries to which the Bank has exposures.

Credit Risk
Current or prospective risk to earnings and capital arising from an obligor's potential failure to meet the terms of any contract with the Bank or otherwise fail to perform as agreed.

Credit Risk Exposure
Credit risk exposure comprises both on-balance sheet and off-balance sheet items. Exposure to credit risk for on-balance sheet assets is the net carrying amount as reported in the Consolidated Financial Statements. The exposure for off-balance sheet items is the amount that the Bank might have to pay out against financial guarantees and loan commitments, less provisions the Bank has made because of these items. Because of off-balance sheet items, the credit exposure does not reconcile with the carrying amount in the Consolidated Financial Statements. For capital requirement purposes, credit conversion factors are applied to guarantees and undrawn commitments. For derivative contracts, the exposure is calculated by adding potential future credit exposure to the positive market value of the contract.

Currency Risk
The risk that earnings or capital may be negatively affected from the fluctuations of foreign exchange rates, due to transactions in foreign currencies or holding assets or liabilities in foreign currencies.

Default
The Bank's definition of default simultaneously satisfies the requirements in the definition of

stage 3 according to IFRS 9, the definition of default according to article 178 of CRR and the definition of non-performing exposure used in FINREP. Obligors are in default if (a) it is the opinion of the Bank that it is unlikely that they will fulfil the terms of their contracts or (b) they are more than 90 days past due on a material credit obligation. Defaults are defined on the obligor level rather than the facility level.

Expected Credit Loss (ECL)

The annual expected credit loss (ECL) for a single obligor depends on the probability that the obligor defaults within the horizon of one year (PD), the expected exposure at time of default (EAD) and the loss given default (LGD).

Under IFRS 9, all loans are required to carry an impairment allowance of either 12-month expected credit loss or, in case of a significant increase in credit risk since origination, lifetime expected credit loss. This impairment allowance is calculated using several different scenarios for the future economic development and the final result is the probability-weighted average of the ECL in these scenarios.,

Exposure at Default (EAD)

Expected credit exposure of a facility at the time of default.

Forbearance

For a loan to be considered as forborne, two conditions need to apply: (1) The Bank has agreed to changes to the terms of the loan that would normally not be offered to the customer and (2) the customer was in financial difficulties, making it hard for them to uphold the loan contract, at the time the terms were changed.

High Quality Liquid Assets (HQLA)

Assets that can be easily and immediately converted into cash at little or no loss of value and include Central Bank certificates of deposits, government bonds and corporate debt securities.

Indirect Exposure

An exposure to counterparties that is not direct but becomes direct at the event of default of other counterparties.

Inflation Risk

The risk that earnings or capital may be negatively affected due to inflation (changes in the Consumer Price Index or CPI).

Interest Rate Risk

Current or prospective risk to earnings or capital arising from adverse movements in interest rates. Main sources of interest rate risk are re-pricing risk, yield curve risk, basis risk and optionality risk.

Internal Capital Adequacy Assessment Process (ICAAP)

The ICAAP includes an evaluation of the capital required under Pillar 2-R. The Bank identifies and measures its risks and ensures sufficient capital in accordance to the *Risk Appetite Statement*. The assessment is based on minimum capital under Pillar 1 and capital required add-on for other risk factors under Pillar 2-R. In the ICAAP process, the Bank performs stress tests, aiming to detect the sensitivity of the Bank's operations to changes in the operating environment and to ensure that the Bank holds sufficient available capital, even under stressed operational conditions. Once a year a full ICAAP report is submitted to the FME.

Internal Liquidity Adequacy Assessment Process (ILAAP)

The ILAAP aims at ensuring that the Bank adequately identifies and measures its liquidity risk, holds adequate liquidity at all times in relation to its risk profile and uses sound risk management systems and processes to support it. Once a year a full ILAAP report is submitted to the FME.

Large Exposure

An exposure to a group of connected clients that is 10% or more of the Group's capital base.

Legal Risk

The risk to earnings or capital arising from uncertainty in the applicability or interpretation of contracts, law or regulation, for example when legal action against the Bank is concluded with unexpected results, when contracts are not legally enforceable or rendered illegal by a court's ruling.

Leverage Ratio

A non-risk based measure which is calculated by dividing Tier 1 capital with the sum of total assets and adjusted off-balance sheet exposures. A lower leverage ratio indicates higher leverage.

Liquidity Coverage Ratio (LCR)

The proportion of HQLA to net cash outflow over the next 30 calendar day period.

Liquidity Risk

The risk of not being able to fund financial obligations or planned growth, or only being able to do so substantially above the prevailing market cost of funds.

Loan-to-Value Band
The loan-to-value (LTV) of a portfolio can be represented by considering how each ISK lent is distributed in loan-to-value bands. In the breakdown, every ISK is categorised according to its seniority in the total debt on the underlying property. The first band represents the part of the portfolio that falls in the 0-10% LTV band, the second represents the part that falls in the 10-20% LTV band and so on.

Loss Given Default (LGD)
Expected loss on a credit facility in the case of default, as fraction of the exposure at default. Any cost relating to repossession of collateral is included in the LGD.

Loss Rate
The probability that the Bank will need to claim collateral or experience a loss, given that the obligor defaulted.

Loss Severity
The percentage of exposure at default that is lost in the case of loss or repossession of collateral.

Market Risk
Current or prospective risk to earnings and capital arising from adverse movements in the level or volatility of prices of market instruments, such as those that arise from changes in interest rates, equity prices and foreign exchange rates.

Net Stable Funding Ratio (NSFR)
The proportion of long-term assets to long-term stable funding with a time horizon of one year.

Non-Performing Loans (NPL) Ratios
A way to measure asset quality for loans to customers. A facility is non-performing if it is in stage 3 according to IFRS 9 or the obligor is in default. The ratio is based on the gross carrying amount.

Obligor
A customer that has a loan or other credit facility with the Bank.

Observed Default Frequency (ODF)
The ratio of customers that defaulted during the observed period.

Operational Risk
The Bank's definition of operational risk includes reputational risk, legal risk, model risk, conduct risk and compliance risk among other risk factors.

Pillar 1
This contains generic rules for calculating credit, market and operational risks to determine a bank's risk exposure amount (REA). It also stipulates the minimum capital requirement.

Pillar 2-R
Supervisory Review and Evaluation Process (SREP) and framework for banks' Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment (ILAAP).

Pillar 3
Disclosure requirements which promote market discipline by allowing market participants to assess the capital structure, risk exposures, risk assessment process and hence the capital adequacy of the institution.

Probability of Default (PD)
Probability that a counterparty will default within the time horizon of 12 months.

Reputational Risk
The risk to earnings or capital arising from adverse perceptions of the Bank by customers, counterparties, shareholders, investors or regulators.

Risk and Control Self Assessment (RCSA)
A structured approach to identify and assess all potential risks in order to plan appropriate actions to mitigate them. The ultimate purpose of this framework is to improve the way a bank operates through a regular review of policies, processes and systems. The RCSA process is undertaken at least once a year by all units within the Bank.

Risk Class
Each obligor is categorised in one of ten risk classes. The risk classes 1-9 are for performing obligors and reflect the 12-month probability of default. Risk class 10 is for obligors that are in default.

Risk Exposure Amount (REA)
Risk weighted exposure value i.e. the exposure value after considering the risk inherent in the asset.

Settlement Risk
The risk that a party will fail to deliver on the terms of a contract at the time of settlement. Settlement loss can occur because of default at settlement and because of any timing differences in settlement between two parties. The amount at risk or the potential loss is the principal of the transaction.

Subordinated Debt
Debt that ranks after other debts should a company fall into receivership or go bankrupt.

Supervisory Review and Evaluation Process (SREP)

Through the SREP, the regulator assesses the risk management framework of the Bank and whether the Bank's capitalisation and liquidity is adequate for its risk profile and business strategy. As part of the SREP, the regulator reviews the Bank's ICAAP and ILAAP reports but the review can also include on- or off-site inspections of specific parts of the operations.

Tier 1 Capital

Tier 1 capital is composed of Common Equity Tier 1 capital and Additional Tier 1 capital, less regulatory deductions.

- *Common Equity Tier 1 capital*: Consists of paid-in share capital, share premium account and other premium accounts, reserve accounts and retained earnings, net of the book value of own shares or guarantee capital certificates, goodwill, deferred tax credit and other intangible assets.
- *Additional Tier 1 capital*: Contingent convertible capital and non-innovative hybrid capital subject to conditions on maturity, repayment, interest and conversion to equity as defined in rules and regulations.
- Regulatory deductions include for example holdings in financial institutions and tax assets.

Tier 2 Capital

Tier 2 allows for inclusion of subordinated loans which state clearly that the repayment period of the loan is not less than five years with further restrictions defined in rules and regulations.

Total Capital Base

Tier 1 capital in addition to Tier 2 capital.

Total Capital Ratio

Total capital base divided by risk-weighted assets. (Also referred to as solvency ratio.)

Trading Liquidity Risk

The risk that the Bank is unable to easily liquidate or offset a particular position without moving market prices due to inadequate market depth or market disruption, thus negatively affecting the earnings or capital.

Value-at-risk (VaR)

A statistical method used to measure and quantify the level of financial risk within a portfolio over a specified time horizon at given confidence levels.

Yield Curve

A curve displaying interest rates across the spectrum of maturities for bonds which are otherwise identical or very similar.

Abbreviations

AGM	Annual General Meeting
ALCO	Asset and Liability Committee
AML	Anti-Money Laundering
AMM	Additional Monitory Metrics
ARC	All Risk Committee
ASF	Available Stable Funding
AT1	Additional Tier 1
BPV	Basis Point Value
CAE	Chief Audit Executive
CB	Central Bank
CCF	Credit Conversion Factor
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CIRS	Cross-Currency Interest Rate Swaps
CIU	Collective Investment Undertakings
CLTV	Combined Loan to Value
CPI	Consumer Price Index
CRD IV	The most recent CRD and CRR
CRD	Capital Requirements Directive
CRR	Regulation on Prudential Requirements for Credit Institutions and Investment Firms
CRO	Chief Risk Officer
COREP	Common Reporting Standards
EAD	Exposure at Default
EBA	European Banking Authority
EEA	European Economic Area
ECL	Expected Credit Loss
EU	European Union
FINREP	Financial Reporting Standards
FME	The Icelandic Financial Supervisory Authority
FS	Financial Statements
FX	Foreign Currency
GDPR	General Data Protection Regulation
GMTN	Global Medium-Term Note
HQLA	High Quality Liquid Assets
IAS	International Accounting Standard
IC	Investment Committee
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
IRRBB	Interest Rate Risk in the Banking Book
IRS	Interest Rate Swaps
ISDA	International Swaps and Derivatives Association
ISK	Icelandic Króna
KRI	Key Risk Indicators
LCR	Liquidity Coverage Ratio
LCP	Liquidity Contingency Plan
LED	Loss Event Database
LGD	Loss Given Default
LTV	Loan to Value
NPL	Non-Performing Loans
NSFR	Net Stable Funding Ratio
ODF	Observed Default Frequency
OSC	Operations and Security Committee
O-SII	Other Systemically-Important Institutions
PD	Probability of Default
RB	Reiknistofa Bankanna
RCSA	Risk and Control Self-Assessment
RSF	Required Stable Funding
REA	Risk Exposure Amount
SCC	Senior Credit Committee
SREP	Supervisory Review and Evaluation Process
STIBOR	Stockholm Interbank Offered Rate
TSCR	Total SREP Capital Requirement
VaR	Value at Risk