



# Risk and Capital Management 2019

Landsbankinn hf. Pillar III risk report  
31.12.2019

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## **Landsbankinn hf. in brief**

*Landsbankinn hf. was founded on 7 October 2008 by the Ministry of Finance on behalf of the Icelandic State Treasury. The Bank is a limited liability company incorporated and domiciled in Iceland. The Bank is licensed as a commercial bank and operates in accordance with Act No. 161/2002, on Financial Undertakings. The Bank is subject to supervision by the Financial Supervisory Authority of Iceland (FME) in accordance with Act No. 87/1998, on Official Supervision of Financial Activities.*

*Landsbankinn hf. is the largest financial undertaking in Iceland and provides reliable universal financial services based on long-standing business relationships to individuals, corporates and investors throughout Iceland.*

*The National Treasury of Iceland holds 98.2% of shares in the Bank. The Bank itself owns 1.6% of shares and other shareholders own 0.2% of shares in the Bank.*

# Contents

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<b>1</b>	<b>2019 Highlights and Outlook</b> .....	<b>4</b>
<b>2</b>	<b>Risk Management</b> .....	<b>10</b>
<b>3</b>	<b>Capital Management</b> .....	<b>22</b>
<b>4</b>	<b>Credit Risk</b> .....	<b>36</b>
<b>5</b>	<b>Market Risk</b> .....	<b>60</b>
<b>6</b>	<b>Liquidity Risk</b> .....	<b>67</b>
<b>7</b>	<b>Operational Risk</b> .....	<b>79</b>
<b>8</b>	<b>Regulatory developments</b> .....	<b>85</b>
<b>9</b>	<b>Remuneration report</b> .....	<b>91</b>
<b>10</b>	<b>Disclosure Policy</b> .....	<b>94</b>

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The disclosures have solely been comprised to explain the basis of preparation and disclosure of certain capital requirements and provide information about the management of certain risks. They do not constitute any form of audited financial statement. They should not be relied upon in making judgements about the Bank. The disclosures will only be subject to external verification to the extent that they are equivalent to those made under accounting requirements.

In the interest of simplifying text, Landsbankinn Group, which consists of the parent entity, Landsbankinn, and its subsidiaries, is referred to as the 'Bank' in the disclosures. Where necessary, a distinction is made in the report between the group and the parent entity. For further information, see Note No. 88.1 – Consolidation in the Bank's Consolidated Financial Statements for 2019.

This publication, Risk and Capital Management 2019, has not been audited by external auditors. However, it includes information from the audited Consolidated Financial Statements 2019 and has been verified internally and approved by the Board of Directors. There may be some discrepancy between this report and financial information in the Consolidated Financial Statements 2019, as the report has been prepared for the purpose of Article 18 of Act No. 161/2002, on Financial Undertakings, cf. Article 11 of Act No. 96/2016, and the provisions in CRD IV and CRR incorporating the Basel Pillar III disclosure requirements, rather than in accordance with IFRS.

Additional Pillar III disclosures required under Regulation [EU] No. 575/2013 of the European Parliament and of the Council of 26 June 2013 [CRR] can be downloaded from <https://corporate.landsbankinn.com/investor-relations/reports-and-financials/>

# 1 2019 Highlights and Outlook

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The Bank's overall risk position decreased slightly in 2019 both in terms of economic capital and in the ratio of risk exposure amount to total assets, despite increased lending. Market risk decreased significantly due to lower exposure in the Bank's trading portfolio in equities and the Bank's liquidity ratios are strong. All of the Bank's positions were within risk appetite limits in 2019 and the Bank aims to maintain a similar risk profile in 2020 with moderate risk position, in line with the Bank's risk appetite.

The Central Bank of Iceland changed the Rules on Liquidity Coverage Requirements for Credit Institutions in December 2019, effective as of 1 January 2020. The changes include a new minimum requirement for the liquidity coverage ratio in ISK, that will ultimately be 50% in 2022.

The Bank still maintains the position that increasing regula-

tory requirements, such as the aforementioned liquidity requirements in ISK, ever increasing requirements on capital and special Icelandic taxation on banks will possibly have a negative long-term effect on the Bank's lending capabilities, profitability and ultimately financial stability. The effect of this is already starting to show, e.g. growth in corporate lending, which reduced significantly in 2019 compared to previous years, especially in ISK.

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## Capital position

The Bank's total capital ratio remained high in 2019 with a year-end position of 25.8%, well above the regulatory minimum requirement of 20.5% set by the Financial Supervisory Authority of Iceland (FME) through the Supervisory Review and Evaluation Process (SREP). The Bank's capital target (management

buffer) is to be 1.5 – 2.5% above the FME requirements as well as being in the highest category for S&P's RAC ratio. Both capital targets were met in the year 2019.

Risk exposure amount increased by ISK 19.5 billion or 1.9% in 2019. The Bank's capital base increased by ISK 13.6 billion between 2018 and 2019. The increase was partly due to new issuance of subordinated liabilities amounting to ISK 5.5 billion in 2019.

The Bank measures internal capital requirements by economic capital for all material risks with regards to risk weighted assets. The internal assessment of economic capital decreased slightly in 2019 to ISK 98 billion at year end. The ratio to REA declined by 0.4 percentage points to 9.6%.

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## Credit risk

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The carrying amount of the Bank's loan portfolio to customers grew by 7.1% in 2019. The increase was primarily driven by increased residential mortgage lending to individuals. Demand for non-indexed mortgages continued to be high throughout the year and non-indexed mortgages represent ISK 51 billion of the total ISK 56 billion growth in residential mortgages. After significant growth in recent years, residential housing prices were relatively stable in 2019 with modest growth in line with inflation. The average loan-to-value of the mortgage portfolio remains strong at 56.0% and continues to decrease.

The Bank's corporate portfolio grew by 3.4% in 2019, or ISK 22 billion. The growth was mainly to the construction and service

sectors. A total of 5 exposures are classified as large exposures at year-end 2019 as opposed to 4 at year-end 2018. After credit risk mitigation, 3 exposures are classified as large exposures at year-end 2019, the same number as at year-end 2018.

The credit risk of the total loan portfolio remains stable and in line with risk appetite, decreasing slightly in 2019. The economic capital for the loan portfolio decreased slightly in 2019 despite a modest growth in the portfolio. The economic capital for credit risk for other assets increased mainly to due higher exposure to equities in the banking book following an increase in their valuation.

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## Market risk

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The Bank's market risk decreased slightly in 2019 and all market

risk factors were well within the Bank's risk appetite during the year. The Bank decreased its exposure in the trading portfolio in equities while the fixed income portfolio grew and the Bank's net FX balance decreased in 2019. The Bank's CPI imbalance decreased even further in 2019 due to increased borrowing as well as decreased lending in CPI-linked loans. The imbalance was 52% of equity at year end, compared to 72% at year-end 2018. Overall, market risk remains modest and in line with the Bank's risk appetite.

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## Liquidity risk and funding

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Liquidity risk continues to be a significant risk factor and great emphasis is put on monitoring and managing liquidity risk within the Bank. The Bank's total LCR at year end was 161% and 769% in foreign currencies, well

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above regulatory limits and the Bank's risk appetite. The Central Bank of Iceland made changes to the Rules on Liquidity Ratio in December 2019, implementing a minimum requirement for liquidity ratio in ISK. Effective as of January 1 2020, the minimum LCR in ISK was 30%. Hence, the Bank now publishes its liquidity ratio in ISK, which was 61% at year end. The Bank's net stable funding ratio in foreign currencies is strong, 143% and total NSFR was 117% at year end.

The Bank continued to diversify its market funding in 2019, with further EMTN issuance and other unsecured loans, covered bonds and subordinated bond issuance. At year-end 2019 bond issuance in foreign currencies amounted to ISK 223 billion, increasing by ISK 24 billion during the year. Other unsecured loans in foreign currency amounted to ISK 19 billion at the same time. The size of the programme for

covered bond issuance is ISK 200 billion and was increased from ISK 120 billion in 2019. At year end, outstanding covered bonds issuance amounted to ISK 140 billion, increasing by ISK 34 billion during the year 2019. In December, the bank issued subordinated bonds for ISK 5,480 million under the ISK 50 billion debt issuance programme. The bonds are inflation-linked and with a 10NC5 structure. The bond issuance was the Bank's inaugural subordinated bond issuance in the domestic market.

The Bank's credit has been rated by the international rating agency S&P Global Ratings from the beginning of 2014. In July 2019 the outlook of the credit rating was changed from stable to negative and the credit rating is currently estimated as BBB+/A-2 with a negative outlook. The negative outlook reflects the possibility that S&P might lower the Bank's rating over the next 24

months if the operating environment in Iceland becomes even more difficult. At the same time, S&P acknowledged that the Bank shows higher market shares, better efficiency and return metrics than domestic peers.

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### **Operational risk**

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Information and communication technology (ICT) risk and third-party risk management continues to be very important to the Bank. In the last year the internal and external framework for third-party risk management and that of operational risk in general has continued to evolve. One of the pillars of how the bank controls operational risk and keeps information assets secure is the continued ISO 27001 certification. This certification continues to be an important part of adherence to GDPR and impending ratification of PSD II.

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ITC risk and third-party risk management is more important than ever with the emphasis that the Bank has put on digital services and straight through processing. The Bank is becoming more integrated with and reliant on IT service providers. RB continues to be the most important of these and the focus will continue to be on ensuring the stability of the core banking system, product development on the deposit platform as well as continuing to develop digital banking services with the aid of data analysis

For the Bank's customers, fraud and cybercrime remain a risk factor. In response to this, the Bank continues to highlight measures to reduce the likelihood of customers falling prey to such criminal activity.

The Bank has put in place the resources to ensure continued vigilance over the Bank's assets

and its customers when it comes to cybercrime. The Bank continues to use external resources to assist with the estimation and protection against cybercrime, e.g., as a member of the Nordic Financial CERT.

The Bank suffered no major operational incidents in 2019 and most incidents that did occur were due to weaknesses in processes or systems.

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### **Economic outlook**

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After a long period of robust growth alongside low and stable inflation, economic growth slowed down to 0.2% Y/Y for the first 9 months of 2019, following a contraction in the tourism sector. The economic outlook for 2020 is for a modest recovery and return to growth. The Bank's Economic Research department's forecast for the next three years

predicts a 2.3% average economic growth over the period, slightly below long-term trend growth.

The inflation outlook has improved significantly since mid-2019 after a period with inflation slightly above target due to relatively sharp depreciation of the ISK in the latter half of 2018 and into 2019. Stabilisation of the ISK, and relatively moderate collective bargaining agreements for essentially all of the private labour market for the next three years, have driven inflation expectations back down to a level in line with the Central Bank's inflation target. Inflation is further forecasted to remain close to the target throughout the forecast period.

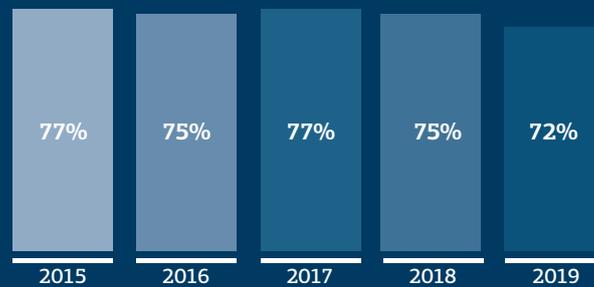
# Risk metrics overview

Risk exposure amount



**1,020**  
**ISK bn**

REA to total assets



**72%**

Total capital ratio



**25.8%**

Loans and advances to customers



**1,140**  
**ISK bn**

Large exposures to eligible capital



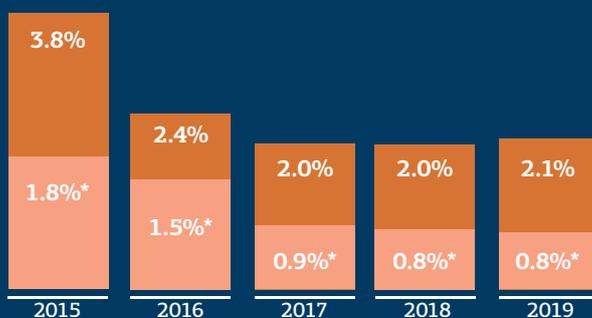
**38%**

Economic capital



**98  
ISK bn**

Stage 3 loans\*\*



**2.1%**

Liquidity coverage ratio total



**161%**

\* Of which 90 days past due.

\*\* Staging of loans was implemented in 2018. For 2015-2017, defaulted and impaired loans are used as a proxy for stage 3.

# 2 Risk management

2.1 Risk appetite.....	11
2.2 Risk identification .....	12
2.3 Risk management structure .....	12
2.4 Risk measurement.....	16
2.5 Risk monitoring .....	20



# Risk Management

Risk is inherent in the Bank's activities. It is managed through a process of on-going identification, measurement, management and monitoring, subject to risk limits and other controls. Risk identification involves finding the origins and structures of possible risk factors in the Bank's operations and undertakings. Risk measurement entails measuring identified risk for management and monitoring purposes. Finally, risk controls and limits promote compliance with rules and procedures, as well as adherence with the Bank's risk appetite.

The objective of the Bank's risk policies and procedures is to ensure that the risks in its operations are detected, measured, monitored and effectively managed. Exposure to risk is managed to ensure that it remains within limits and that the risk appetite adopted by the Bank complies with regulatory re-

quirements. In order to limit and manage fluctuations that might affect the Bank's equity, liquidity and performance, the Bank has adopted policies regarding the risk structure of its asset portfolio which are covered in more detail under each risk type.

Risk policy is implemented through risk appetite, goal setting, business strategy, internal policies and limits that comply with the regulatory framework of the financial markets.

## 2.1 Risk appetite

The Bank's risk appetite for 2020 has been reviewed, revised and implemented. Section 2.4 lists the metrics monitored by the risk appetite, the target set for each of them and their year-end values for the past three years. The Bank's risk policy is as follows:

The Bank's operations, risk diversification and decisions shall always be in accordance with its risk appetite, sound business practices, financing, liquidity and equity position at any given time. The Bank seeks to ensure diversified and sound financing and a sustainable risk profile in its balance sheet. The Bank has set internal limits that provide for a strong capital and liquidity position which, along with active risk management, ensure long-term profitability and strong standing. In this manner, the Bank aims to minimise fluctuation in its operations and is well positioned to withstand stress scenarios.

Risk appetite defines the risk, both in terms of type and extent, which the directors are willing to take to meet the Bank's business objectives. The Bank has set itself objectives regarding financial position, asset quality, exposures and sustainable long-term profit-

Figure 2-1



Principal risk	Personal Banking	Corporate Banking	Markets	Treasury
Credit risk	High	High	Low	Low
Operational risk	Medium	Medium	High	Medium
Market risk	Low	Low	Medium	High
Liquidity risk	n/a	n/a	n/a	High

Table 2-1

ability. In pursuit of its goals, the Bank only takes on risks that it understands, and is able to evaluate and manage.

The Bank seeks to maintain solid business relationships, having regard for its own position as well as that of its customers at all times, and with due regard for any internal connections between customers. The Bank pursues long-term business relationships and aims to avoid reputational risk.

The Bank has set a policy on corporate social responsibility that integrates economic, social and environmental concerns in its operations. The policy aims to promote sustainability in Icelandic society, to ensure that the Bank is a dynamic force in the community and that it operates in accordance with the principles of good corporate governance.

The Bank is obligated to comply with relevant laws and regulations in all its operations. The main focus areas within the

Bank's risk culture are adherence to rules, integrity, ethical behaviour, professionalism and the promotion of good risk culture by all senior management. understands, and is able to evaluate and manage.

## 2.2 Risk identification

The Bank is exposed to the following material risks that arise from financial instruments:

- » Credit risk
- » Market risk
  - Currency risk
  - Interest rate risk
  - Other market risk
- » Liquidity risk
- » Operational risk

Table 2-1 provides a link between the Bank's business units and the principal risks that they are exposed to. The risk significance is assessed within the context of the Bank as a whole and is measured based on allocation of economic capital (EC) within the Bank.

The Bank also manages other relevant risks, including, but not limited to, concentration risk, business risk, legal risk, reputational risk, conduct risk, compliance risk, data risk and modelling risk.

## 2.3 Risk management structure

The Bank aims to operate in line with international best practice and guidelines on risk management. The Bank devotes substantial resources to developing and maintaining its risk management systems and operations.

The Bank's risk management is based on guidelines, policies and instructions determined by the Board of Directors. The Bank has prepared specific instructions on risk management for individual business units based on the general policies set by the Board of Directors. At the unit level, these instructions are used, among other things, as the basis for business and control procedures.

### 2.3.1 Risk committees

The Bank's risk management governance structure at year-end 2019 is shown in Tables 2-2 and 2-3:

Effective sub-committees provide important preparation for Board meetings. The establishment of sub-committees is designed to facilitate discussion and deeper analysis of issues for the Board's attention and its efficacy.

The Board assesses its need for sub-committees at the Board level, according to legal requirements and the size and scope of the Bank at each time, as well as the composition of the Board. The Bank's corporate governance statement is required to provide information on the establishment and appointment of sub-committees. There are currently four sub-committees of the Board of Directors.

The Audit Committee's role is to ensure the quality of the Bank's financial statements and other financial information, as well as the independence of its auditors. The Committee's function is,

among other things, to supervise accounting procedures. The Committee also monitors the organisation and function of internal auditing. Moreover, the Committee supervises auditing of the Bank's financial and consolidated statements and assesses the independence of the Bank's external auditors. It also supervises other tasks performed by external auditors and submits proposals to the Board of Directors for the selection of external auditors.

The Risk Committee serves as a consulting entity to the Board of Directors in the development of the Bank's risk strategy and risk appetite. The Committee also advises the Board on the Bank's risk culture and on the organisation

and effectuation of the Bank's risk policy as well as reviewing the Bank's policy as set forth in risk rules at least annually. The Committee assesses the Bank's risk management framework on an annual basis, concerning all significant risk factors and reviews reports from internal control functions on internal control factors that relate to risk management. The Committee also reviews policies on capital management and funding, ICAAP/ILAAP reports, the results of stress tests, credit decision issues, the status of the Bank's loan portfolio, procedures for impairment calculations, the activities of Compliance and other types of risks as and where applicable.

#### Board of Directors

Table 2-2

#### Supervision by the Board of Directors and its sub-committees

Audit Committee
Remuneration Committee
Risk Committee
Strategic Development Committee

#### Key risk management bodies and committees

Table 2-3

Committee	Chair	Other members
Executive Board	CEO	Managing Directors
Risk & Finance Committee	CEO	CFO, CRO, Head of Legal Department
Credit Committee	CEO	CRO, MD of Corporate Banking
Operational Risk Committee	CRO	MD of Personal Banking, MD of IT, Compliance Officer, Senior Director of Operation, Director of Operational Risk
Project Committee	CEO	Managing Directors

The Remuneration Committee reports annually to the Board of Directors. The Committee guides the Board of Directors and the CEO on remuneration policy and monitors the implementation of that policy after it has been approved. For further details on the Bank's remuneration policy, see Section 9.

The Strategic Development Committee prepares the Board of Directors for discussion and decisions on the future vision and strategy of the Bank. The Strategic Development Committee monitors changes in the Bank's operating environment and deliberates on the Bank's position and business plan with regard to strategic development. The Committee is also tasked with prioritising objectives in relation to the Bank's strategy.

The Board of Directors has overall responsibility for the establish-

ment and oversight of the risk management framework, risk appetite, and setting risk limits. The CEO is responsible for the effective implementation of the framework and risk appetite through the corporate governance structure and committees. The CEO has established and is a member of the Executive Board, the Risk & Finance Committee and the Credit Committee.

The Credit Committee deals with credit risk – individual credit decisions, credit limits on customers and credit risk policy – while the Risk & Finance Committee primarily covers market risk, liquidity risk and legal risk. The Risk & Finance Committee monitors the Bank's overall risk position, is responsible for enforcing the Bank's risk appetite and risk limits, and reviews and approves changes to risk models before presentation to the Board of Directors. The Executive Board

serves as a forum for consultation and communication between the CEO and the managing directors, addressing the main current issues in each division, makes decisions on operating matters that are not under consideration in other standing committees, and approves funding for larger investment projects. The Operational Risk Committee is a forum for discussion and decisions on operational risk issues and review of the effective implementation of the operational risk framework. The Project Committee selects, prioritises and oversees the Bank's bigger projects, and contributes to their successful progress and conclusion.

Governance pertaining to specific risks is discussed in the relevant sections.

Figure 2-2



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### 2.3.2 Risk Management Division

The Risk Management Division is responsible for the Bank's risk management framework. Subsidiaries of the Bank have their own risk management functions and the Risk Management Division receives information on exposures from the subsidiaries and collates them into Group exposure. The Risk Management Division is also responsible for comprehensive risk reporting on risk positions to various internal departments and committees and supervisory authorities.

The Risk Management Division comprised seven departments at year-end 2019:

- » The Credit Management Department reviews, and confirms or vetos credit decisions made by the Bank's business units when credit applications exceed the business units' limits. Confirmation by Credit Management implies that Credit Management has reviewed the credit application and does not exercise its veto rights. Credit applications exceeding the confirmation limits of the Risk Management Division are referred to the Bank's Credit Committee. The Department also oversees regular updates of the Bank's Credit policies and other rules related to the credit process.
- » The Credit Risk Department is responsible for measur-

ing and monitoring credit risk as well as for providing the Bank with systems and processes to measure, monitor and control credit risk in credit and policy decisions. Credit Risk is further responsible for analysis and reporting on credit risk, economic capital and impairment. Credit Risk is also responsible for setting rules and procedures regarding credit risk, such as procedures for impairment measurement, credit mitigation and forbearance.

- » The Market Risk Department is responsible for measuring, monitoring and reporting on market risk, liquidity risk and interest rate risk in the Bank's banking book along with limit monitoring and reporting. The Department develops and maintains the Bank's market risk models and maintains the Bank's Market Risk Policy and Liquidity Risk Policy, as well as implementing processes to measure and monitor market risk and liquidity risk within the Bank. Market Risk is also responsible for monitoring all derivatives trading the Bank enters into, both for hedging and trading purposes, as well as FX balance monitoring for the Bank.
- » The Operational Risk Department is responsible for ensuring that the Bank's operational risk is monitored and that the Bank

implements and maintains an effective operational risk management framework. The Department assists the Bank's managers with operational risk assessment incidents related to normal operations and operational loss incidents analysis, and oversees business continuity plans. The Bank's policy on operational risk as well as the rules on new products, are the responsibility of the Department. The Department is partly responsible for the security system of the online banking platform. The Operational Risk Department heads the work on the Bank's certification under the ISO 27001 standard for information security.

- » The Risk Manager for Pension Funds is responsible for development and implementation of risk policy and risk governance, execution of risk assessment and correspondence with regulators such as the Central Bank and its financial supervisory function. The Risk Manager also makes sure that monitoring of regulatory compliance is carried out, reviews calculations and results and performs tolerance interval monitoring. The Risk Manager has direct access to the boards of the pension funds and also reports to their managing directors.
- » The Internal Modelling Department is responsible for providing the Bank with

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IRB and EC models and related processes to estimate credit risk and link the risk to equity, as well as for providing support during the implementation of those models and processes within the Bank. The Department is also responsible for the development of models for pre-approved limits.

- » The Risk Solutions Department develops and operates external solutions used by the Risk Management Division, as well as maintaining the development and reporting environments of the Risk Management Division. The Department is also responsible for monitoring and maintaining periodic executions of code by the Division and reporting to supervisory parties. The Department has also been responsible for the implementation of the Basel Committee on Banking Supervision for the effective risk data aggregation and risk reporting standard, or BCBS 239.

### 2.3.3 Compliance

Compliance is an independent management unit, reporting directly to the CEO, operating in accordance with a letter of appointment from the Board of Directors. Compliance uses its independence from other units to help shape its operations.

As part of the Bank's second level control, Compliance is responsible for monitoring adherence to

laws and actions against money laundering and financing of terrorist activities, laws on securities trading and data protection laws. Compliance also monitors the efficiency of the Bank's policy on abidance with laws, regulations and internal rules.

Compliance consults and instructs management on the effects of changes to the legal environment on the Bank's operations, measures to prevent conflict of interest, and any action necessary to ensure that the Bank operates in accordance with proper and sound business practices with the aim of strengthening the credibility of and confidence in financial markets.

The Data Protection Officer works independently out of Compliance, in accordance with a letter of appointment from the Board of Directors.

### 2.3.4 Internal Audit

Internal Audit is an independent, objective assurance and consulting activity that is a part of the Bank's organisational chart and an element of its monitoring system. The Board of Directors oversees Internal Audit and appoints the Chief Internal Auditor. The role of Internal Audit is to improve and protect the Bank's value with risk-focused and objective verification, consultation and insight. Internal Audit evaluates and improves the risk management framework, control and governance processes according to systematic and disciplined practices and thus supports the Bank in accomplishing its objectives. The

Chief Audit Executive is responsible for ensuring that Internal Audit works in accordance with laws, recommendations from the Financial Supervisory Authority No. 3/2008, and standards and guidelines cited therein, including the benchmarks of the Institute of Internal Auditors (IIA).

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## 2.4 Risk measurement

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The Bank regularly monitors and assesses its current risk profile in important business areas and for the most significant, measurable risk types. It also constantly seeks to improve the process for setting risk appetite in order to supplement the risk management framework and to support the business model.

The risk appetite framework considers key risks relevant to the Bank's business activities by setting risk appetite targets and limits. On an aggregate level, the risk appetite is represented in terms of credit risk, market risk, liquidity risk, operational risk and funding risk. Each target or limit varies in detail, as well as which metrics are used, depending on their properties, and how suited they are to facilitating risk management in an efficient manner. In addition, the Bank measures and monitors other key risk indicators which address process risk as well as additional credit, market, operational and funding risk.

Economic capital (EC) is a key element in the management of the Bank's risk and capital structure,

Table 2-4

Overview of risk appetite metrics						
Risk category	Risk type	Metric	31.12. 2019	2019 year-end Target	31.12. 2018	31.12. 2017
<b>Credit risk</b>	Credit quality	Expected loss (% of total loans)	0.4%	<0.55%	0.4%	0.6%
		Probability of default	2.4%	<2.7%	2.5%	2.8%
		Loss given default	14.5%	<18%	14.7%	19.6%
	Industry concentration	Largest industry (% of total loans)	20.6%	<25%	21.1%	22.0%
	Single name concentration	Large exposures (% of eligible capital)*	38.0%	<50%	33.6%	21.5%
<b>Market risk</b>	Market risk	Total market risk (% of REA)	1.2%	<5.5%	1.8%	1.9%
	Equity	Risk-weighted position in the trading book (% of REA)	0.4%	<2.0%	0.9%	1.1%
	Bonds	Risk-weighted position in the trading book (% of REA)	0.4%	<2.0%	0.2%	0.3%
	Currency	Risk weighted currency position (% of REA)	0.4%	<3.0%	0.6%	0.5%
	Interest rate risk	Interest rate & inflation risk in the banking book (% of equity)	3.4%	<10%	3.0%	4.1%
	Inflation risk	Net position (% of equity)	52.2%	<100%	71.5%	89.8%
<b>Liquidity risk</b>	Liquidity risk	Liquidity coverage ratio – Total	160.5%	>140%	158.0%	156.8%
		Liquidity coverage ratio – FX	768.8%	>150%	531.9%	931.4%
		Liquidity coverage ratio – ISK	60.6%	>60%		
<b>Operational risk</b>	Change in REA	12-month change in REA	-0.6%	+/-6.0%	5.1%	8.7%
	Change in REA	Quarterly change in REA	-2.5%	+/-3.0%	-0.1%	0.9%
<b>Funding risk</b>	Funding	Net stable funding ratio – FX	143.9%	>120%	165.7%	178.8%
	Funding	Net stable funding ratio – Total	117.0%	>120%	-0.1%	0.9%
	Economic capital	EC / REA	9.6%	<10.5%	10.0%	10.7%
	Capital ratio	Management buffer	5.3%	>1.5%	4.4%	5.3%
	Risk-weighted capital	S&P's Risk Adjusted Capital (RAC) ratio	17.9%	>15%	17.9%	19.4%

\*In addition to monitoring large exposures as a % of eligible capital, the Bank also monitors the largest single exposure as a % of eligible capital. The goal is <20% and as at 31.12.2019, the largest exposure is well below that goal. External regulation mandates that the ratio is <25%.

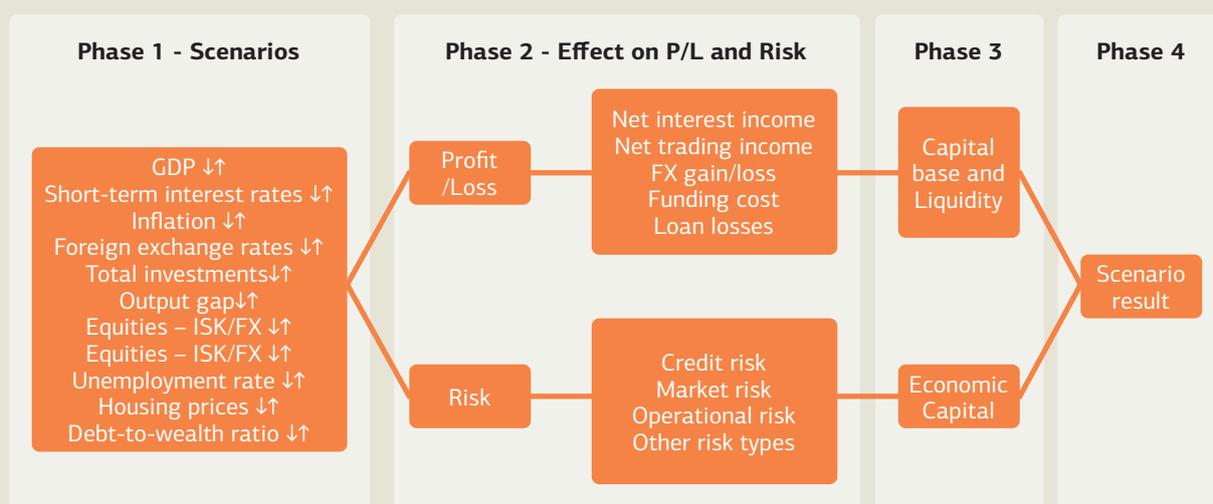


Figure 2-3

as well as in day-to-day financial management. EC is the estimated capital required to cover the Bank's unexpected loss over the next twelve months. One of the benefits of EC is that it presents an aggregate figure for all measurable risk types, products and business units. It thus produces a unified risk measurement expressed as a single unit of value, and the capital will at any time reflect the Bank's risk for the next year. Further details on EC are provided in Section 3.4.2.

### 2.4.1 Stress testing and sensitivity analysis

Stress testing and sensitivity analysis are important tools used to quantify risk in severe, unlikely yet plausible, scenarios. This section provides an overview of stress testing and sensitivity analysis for different risk types within the Bank.

#### 2.4.1.1 Capital management

Stress testing is an important part of the Bank's capital and

liquidity planning process. Internal stress tests are used as an important risk management tool in order to determine how severe, unlikely yet plausible, changes in the business and macro environment affect the Bank's capital and liquidity future positions. Stress tests reveal how the capital and liquidity ratios vary during a stress scenario, where impact on financial statements, risk appetite and regulatory requirements are demonstrated. The stress testing process is comprised of the following steps:

- » Scenario development and approval
- » Scenario translation
  - Translation model to determine loan loss
  - Translation method to determine the effect on financial statements
  - Translation model to determine EC
- » Calculation
- » Management actions
- » Analysis and reporting

The Bank aims to develop scenar-

ios which are dynamic, forward-focused and simultaneously cover key aspects of the Bank's operations, including system-wide interactions and feedback effects.

In 2019, the Bank developed eight scenarios, including a baseline scenario. These scenarios assume developments of key macro indicators over a three-year period. Scenarios demonstrate an alternative development of key economic variables induced by various shocks compared to the baseline macroeconomic forecast of the Bank's Economic Research Department. Idiosyncratic events are also defined within the scenarios to stress specific asset classes or operations of the Bank.

When scenarios have been developed and approved by the Board, a scenario translation is applied. The Bank uses both statistical models as well as expert judgement.

The Bank uses a loan loss model which incorporates macroeconomic variables and produces

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probability of default (PD), default rates, as well as loss given default (LGD), which can then be translated into loan losses for a given scenario. In addition to the loan loss model results, expert judgement is applied for loan loss on selected large exposures by industries hit by the scenario shock.

Scenario results are compared with the Bank's current business plan, risk appetite, and the Bank's solvency.

The effect on financial statements is translated and calculated with a resulting impact on the capital base and liquidity position. EC for the Bank is calculated for each scenario, as well as various risk metrics within the Bank's risk appetite. If the risk appetite constraints are violated, management actions are required within the scenario.

In June 2018, Act No. 161/2002, on Financial Undertakings, was amended to incorporate a part of the Bank Recovery and Resolution Directive 2014/59/EU (BRRD), which was implemented within the European Union in January 2015. The amendments are the first step towards transposing BRRD into Icelandic law with the incorporation of a recovery plan, early intervention and intra-bank financial support.

In response, the Bank has pre-

pared a recovery plan on a group level, based on consolidated financial information as at 30 September 2019. In accordance with Article 82(a) of the Act, the Bank has identified a total of 20 recovery indicators with the aim to assess the overall financial strength of the Bank, as well as relevant threshold levels indicating the need for pre-emptive measures to be taken.

#### 2.4.1.2 Market risk

The Bank conducts stress tests and sensitivity analysis pertaining to market risk on a regular and ad-hoc basis. Comprehensive market risk stress testing is conducted as a part of the Bank's ICAAP/ILAAP once a year with a time horizon of three years. Other stress tests and sensitivity analyses of the Bank's trading and non-trading portfolios with regard to equity and interest rate risk and currency risk are made on a case-by-case basis. These stress tests are subjective in nature and may pertain to specific portfolios, instruments or issuers, and usually stem from concerns regarding the Bank's operating environment, economic conditions, portfolio composition, or other reasons relevant to the Bank at the time.

The Bank uses value-at-risk (VaR) and expected shortfall (ES) as a common ground for measuring market risk in different products.

An internal VaR model is in place for the quantification of market risk and estimation of EC, and the Bank calculates daily VaR at the 99% confidence interval using at least one year of historical data. Both parametric and historical VaR for the Bank's trading books in equity, fixed income and FX are calculated and reported to relevant business units.

Back-testing is used to evaluate the quality of the Bank's VaR model. Back-testing is done according to the Basel III market risk framework comparing the output of the model (i.e. VaR numbers) to actual and hypothetical P&L values ("hypothetical" means using changes in portfolio value that would occur if end-of-day positions were to remain unchanged). A period of one year is used.

It is important to note that all VaR models are subject to certain assumptions and approximations that may or may not hold in real adverse market conditions and can have a major effect on model outcomes. The limitations of VaR include the use of historical data as an indicator of future events, assumptions of being able to liquidate or hedge positions fully within the relevant time horizon, and potential losses beyond the given confidence interval. Furthermore, domestic markets are relatively small and shallow. Hence, it is necessary

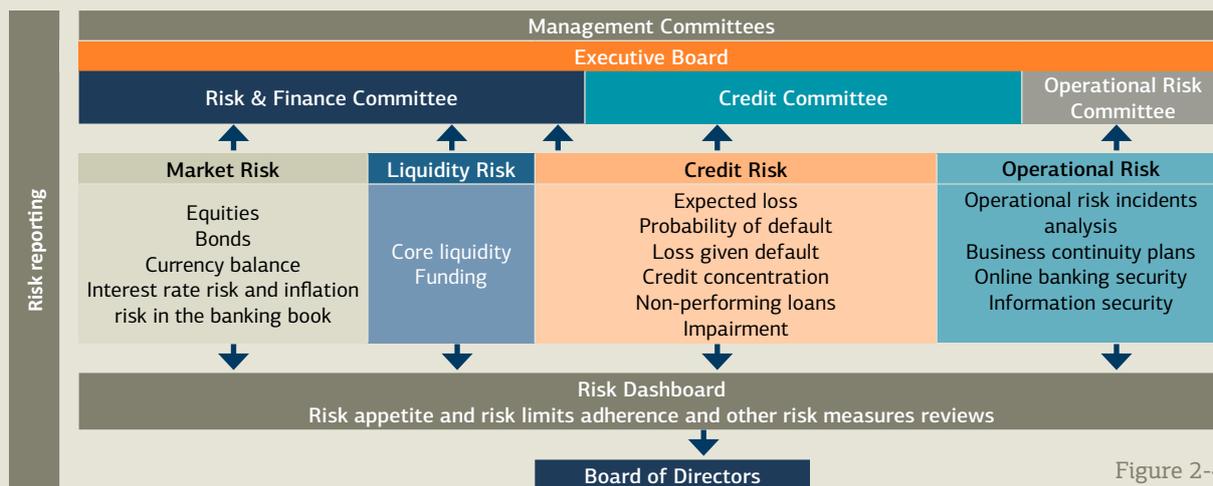


Figure 2-4

to complement VaR calculations with subjective stress testing and sensitivity analysis to estimate possible losses due to market risk. In light of this, the Bank does not employ VaR to control market risk or set trading book limits, but rather views it as one of several indicators to better enable market risk management.

#### 2.4.1.3 Liquidity risk

Various stress tests have been constructed to try to efficiently model how different scenarios affect the Bank's liquidity position and liquidity risk. The stress tests are based on the Bank's balance sheet mixture and take the Bank's current operating environment into account. Key liquidity metrics are also mapped onto annual internal stress tests that are used as an important risk management tool in order to determine how severe, unlikely yet plausible, changes in the business and macro environment affect the capital need and liquidity position of the Bank. The Bank's own subjective views, historical trends and expert opinion are key factors in constructing the stress tests. All stress tests are

regularly reviewed by the Risk & Finance Committee and the stress test results are a part of the Bank's early warning indicators for liquidity risk. The Bank also performs other internal stress tests that may vary from time to time. position of the Bank. The Bank's own subjective views, historical trends and expert opinion are key factors in constructing the stress tests. All stress tests are regularly reviewed by the Risk and Finance Committee and the stress test results are a part of the Bank's early warning indicators for liquidity risk. The Bank also performs other internal stress tests that may vary from time to time.

## 2.5 Risk monitoring

The Bank has implemented a policy on risk data in compliance with BCBS 239 (Basel Committee on Banking Supervision's guideline 239 on effective risk data aggregation and risk reporting). The policy defines which reports should be submitted where, the frequency of those submissions, and the responsible parties. The Board of

Directors receives thorough risk reports six times a year for different risk types, as well as a comprehensive monthly risk overview. Furthermore, the Board reviews the Bank's liquidity risk on a more regular basis. Risk-related material is also reported through an integrated monthly management report to the Board of Directors. The Risk & Finance Committee and the Executive Board receive a monthly risk report, or more frequently if required, and a weekly report on the Bank's liquidity. Furthermore, the Bank has implemented an internal online risk dashboard for executive managers where up-to-date risk material is available. The Board and executive management are actively involved in the process of generating an expanded ICAAP/ILAAP report, which is ultimately submitted to the Board for approval once a year. The ICAAP/ILAAP report is then subject to the FME's Supervisory Review and Evaluation Process (SREP). Finally, a detailed EC report is submitted to the Board of Directors annually.

Table 2-5

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**Principal reporting to the Board of Directors**


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**Annual**


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<b>Risk and capital management report</b>	Pillar III disclosures
<b>ICAAP/ILAAP report*</b>	Evaluation of the risk profile and solvency need. The report contains conclusions drawn from stress testing, including the effect of various scenarios on expected losses and capital needs
<b>Economic capital report</b>	Thorough analysis of EC developments and EC breakdown by risk types and business units as well as REA and other related aspects

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**Bi-annual**


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<b>Credit risk report</b>	Thorough risk report providing analysis of such issues as development in risk appetite, past due loans, average exposure weighted probability of default (PD), default rate vs. PD, distribution of loan portfolio in rating categories and migration analysis and other analysis of credit risk aspects
<b>Market &amp; liquidity risk report</b>	Thorough risk report summarising the Bank's liquidity risk and market risk exposures and any concerns regarding liquidity and/or market risk
<b>Operational risk report</b>	Thorough risk report providing analysis of operational risk aspects

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**Monthly**


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<b>Risk report</b>	An aggregate report containing information on the Group's risk appetite and material from the credit, market, liquidity and operational risk reports. The report is interactive and available electronically
<b>Executive management report</b>	An aggregated report containing risk related material such as risk appetite, EC and RAROC

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**Bi-weekly or more often**


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<b>Market &amp; liquidity risk report**</b>	Market and liquidity risk report highlighting the Bank's market risk exposures, risk appetite, market risk limit utilization and liquidity risk and any concerns regarding liquidity and/or market risk
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\*Twice a year during adverse conditions

\*\*Daily during adverse conditions



# 3 Capital management

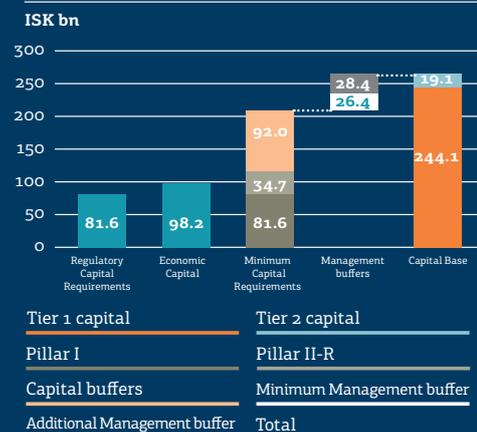
3.1 Capital management framework, roles and responsibilities .....	23
3.2 Capital policy, capital requirement and capital targets .....	24
3.3 Capital position .....	26
3.4 Capital assessment .....	30
3.5 Leverage ratio.....	34

# Capital Management

**The purpose of the Bank's capital management is to support the Bank's strategy and ensure that it has sufficient capital to cover its risks at all times.**

- » The Bank's total capital ratio increased by 0.8 percentage points in 2019 to 25.8%
- » A dividend payment of ISK 0.42 per share in the total amount of ISK 9.9 billion was made in 2019
- » The overall economic capital decreased slightly in 2019 while the risk exposure amount increased resulting in an EC/REA ratio of 9.6%
- » Compared to the most recent SREP requirement of 20.5%, the Bank's excess capital is 5.4 percentage points or ISK 55 billion.

## Landsbankinn Capital position as at 31.12.2019



### 3.1 Capital management framework, roles and responsibilities

The purpose of the Bank's capital management framework is to support the Bank's strategy and ensure that it has sufficient capital to cover its risks at all times. The capital management framework of the Bank is comprised of 4 interdependent activities: capital assessment, risk appetite/capital target, capital planning, and reporting/monitoring.

The Bank uses standardised approaches in measuring the regulatory capital requirement for Pillar I risks and economic capital (EC) for capital management purposes.

The Bank's capital management governance structure at year-end 2019 is as follows:

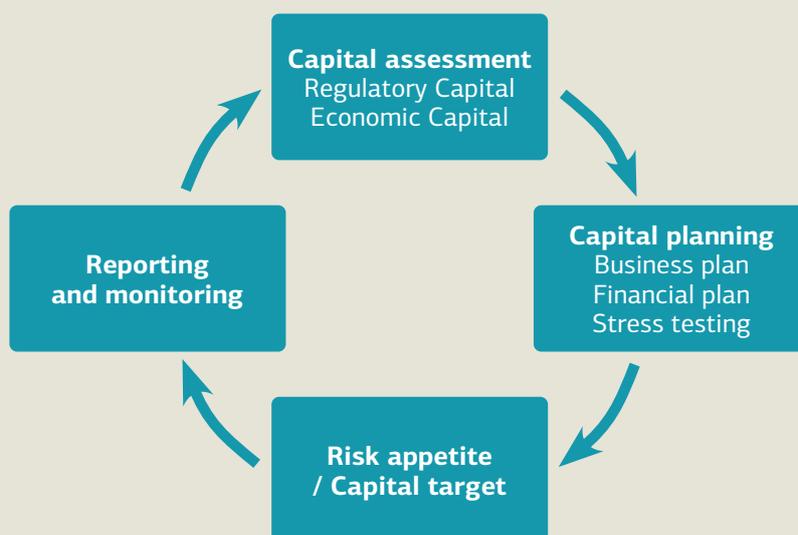
### Board of Directors

The Board of Directors of Landsbankinn is responsible for reviewing and approving the Bank's business strategy and policy on aggregate exposure

and determines the Bank's risk appetite. The Board of Directors entrusts implementation of the policy to the CEO. The Board of Directors approves the Bank's current issuance programme and subordinated borrowings. The

### Capital management framework

Figure 3-1



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Board of Directors shall be actively involved in the design and implementation of stress tests and ensure that they are based on robust and efficient governance and methodology.

### **CEO, Risk & Finance Committee**

The CEO is responsible for implementation of the capital structure policy. The CEO has formed the Risk and Finance Committee to manage and oversee the implementation. The Committee is responsible for ensuring compliance with the policy in the development of the Bank's business and financial plans. The Risk & Finance Committee is responsible for the design and presentation of stress tests and scenarios.

### **Finance**

The CFO is responsible for the day-to-day capital management and funding of the Bank and reports to the Risk & Finance Committee. Finance is tasked with monitoring the risk-weighted asset base, the capital base and capital position at any given time, and reporting on these matters. Reporting incorporates regular reports on developments in the capital base and equity requirements and plans, as well as the ICAAP/ILAAP report. Finance is responsible to the Risk & Finance Committee for the design and presentation of scenarios and implementation of stress testing of the Bank's capital structure. Treasury, a department within Finance, is responsible to the Risk & Finance Committee for the management of the Bank's funding, both in ISK and foreign currency.

### **Risk Management**

The CRO is responsible for risk assessment and monitoring of risk factors and reports to the Risk & Finance Committee. Risk Management is also responsible for the EC framework and measurement and the Pillar III risk report.

### **Managing directors of income-generating divisions**

The managing directors of income-generating divisions shall comply with the capital structure policy in their activities. This means inter alia that business decisions taken within these divisions shall comply with the business plan and budget, risk appetite and the Bank's current profitability target.

### **Internal Audit**

Internal Audit shall regularly review and comment on the framework and work procedures related to the capital structure policy and, thereby, help ensure that the policy extends to and is proportional to the nature, scope and risk inherent in the Bank's operation.

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### **3.2 Capital policy, capital requirement and capital targets**

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The Bank has a policy on capital structure, the objective of which is to ensure appropriate management, efficiency and economic utilisation of the Bank's equity, while additionally ensuring that the Bank fulfils regulatory capital requirements. With active capital management, the Bank

ensures that dividend payments are based on its dividend policy and do not violate equity and liquidity positions in excess of set limits, and that the Bank can at all times meet increased risk in its operating environment.

The total capital ratio target is reviewed annually. When setting the target, EC, Pillar I and II capital requirements, regulatory capital buffers, management capital buffer, risk appetite, and strategic objectives are considered. The Bank's aim is to maintain a capital ratio above the FME's total capital requirement at any given time, plus a management buffer specified in the Bank's risk appetite. The Bank also aims to be in the highest category for risk-adjusted capital ratio, as determined and measured by the relevant credit rating agencies.

The Bank aims to pay regular dividends to shareholders up to  $\geq 50\%$  of the previous year's profit. In addition, and in line with the Bank's target capital and liquidity ratios, the aim is also to make special dividend payments to optimise the Bank's capital structure.

In determining the amount of dividend payments, the Bank's continued strong financial position shall be ensured. Risk in the Bank's internal and external environment, growth prospects and the maintenance of a long-term, robust equity and liquidity position shall be taken into account, as well as compliance with regulatory requirements of financial standing at any given time.

The Internal Capital / Liquidity Adequacy Assessment Process (ICAAP/ILAAP) under Pillar II

31.12.2019	CET1	Tier 1	Total
Pillar I	4.5%	6.0%	8.0%
Pillar II-R	1.9%	2.6%	3.4%
<b>Minimum requirement under Pillar I and Pillar II-R</b>	<b>6.4%</b>	<b>8.6%</b>	<b>11.4%</b>
Systemic risk buffer	2.87%	2.87%	2.87%
Capital buffer for systematically important institutions	2.00%	2.00%	2.00%
Countercyclical capital buffer	1.70%	1.70%	1.70%
Capital conservation buffer	2.50%	2.50%	2.50%
<b>Combined buffer requirement</b>	<b>9.07%</b>	<b>9.07%</b>	<b>9.07%</b>
<b>Total capital requirement</b>	<b>15.5%</b>	<b>17.7%</b>	<b>20.5%</b>

Table 3-1

is the Bank's own assessment of its capital need. It is based on EC calculations, stress testing and current results from the Supervisory Review and Evaluation Process (SREP) by the FME. ICAAP/ILAAP and SREP form the foundation for the Bank's capital planning, including the business and financial plan for the next 3 years. The Bank's most recent capital requirements, as determined by the FME, are shown in Table 3-1 (%/REA):

Based on the current regulatory capital requirement of a 20.5% capital ratio and a management buffer of 1.5-2.5%, the Bank's

capital targets are shown in Table 3-2.

On 23 July 2019, the credit rating agency S&P Global Ratings (S&P) affirmed the Bank's long and short-term ratings of BBB+/A-2 and BBB+/A-2 with a negative outlook. S&P's reports and announcements are accessible on the Bank's website. S&P's announcement referred, among other things, to challenges in the economic environment of Icelandic banks, pointing out that an economic slowdown is expected in 2019, together with falling interest rates, continuing high taxation and stiff competition

from pension funds. All these factors are expected to negatively affect the Bank's profitability. S&P also states that the Icelandic economy is expected to grow once more in 2020 and that an improvement in the Bank's operating environment could mean a re-adjustment of the outlook to stable. S&P's announcement mentioned specifically that the Bank's market share is higher than that of other Icelandic banks, and that its operations are both more efficient and more profitable. It also pointed out that Icelandic banks have made good progress in digital development and IT, and are better prepared

Ratio	Goal	2019	2018	2017	Comment
Total capital ratio	≥23%	25.8%	24.9%	26.7%	Long-term goal.
Common equity Tier 1	≥18%	23.9%	23.6%	26.3%	Long-term goal.
Dividend pay-out ratio	≥50%	52%	78%	78%	Regular dividend payment as a percentage of last year's profit. In addition, special dividend payments were agreed at the AGM for 2017 and 2018. Targeted dividend pay-out ratio updated from 60 - 80% to ≥50% of previous year's profit.

Table 3-2

to face competition based on new technology than many other European banks. Furthermore, their market share is sound and their funding and liquidity are comparable to foreign banks. S&P's reports and announcements are accessible on the Bank's website.

### 3.3 Capital position

The Bank's equity increased by ISK 8.1 billion in 2019 and amounted to ISK 247.7 billion (2018: ISK 239.6 billion) at 31 December 2019. The capital adequacy ratio is calculated in accordance with Article 84 of Act No. 161/2002, on Financial Undertakings. The Bank's total capital

ratio remained strong increasing by 0.8 percentage points in 2019 and was 25.8% at 31 December 2019 (2018: 24.9%).

The capital base consists of 23.9% CET1 which is based on core equity only and 1.8% Tier 2 capital with two instruments in form of subordinated liabilities. Firstly, EUR 100 million (ISK 13.6 billion)

The capital base consists of CET1 and Tier 2 capital and the breakdown is as follows:

#### The capital base

Table 3-3

Capital base	31.12.2019	31.12.2018
Share capital	23,625	23,625
Share premium	120,630	120,630
Reserve	14,334	12,130
Retained earnings	89,145	83,225
<b>Total equity attributable to owners of the Bank</b>	<b>247,734</b>	<b>239,610</b>
Intangible assets	-2,296	-2,622
Deferred tax assets	-20	-134
Fair value hedges	-1,327	-602
<b>CET1</b>	<b>244,091</b>	<b>236,252</b>
Non-controlling interests	0	0
<b>Tier 1 capital</b>	<b>244,091</b>	<b>236,252</b>
Subordinated liabilities	19,081	13,340
General credit risk adjustment	0	0
<b>Tier 2 capital</b>	<b>19,081</b>	<b>13,340</b>
<b>Capital base</b>	<b>263,172</b>	<b>249,592</b>
<b>Risk exposure amount (REA)</b>		
Credit risk	908,249	887,372
Market risk	11,754	17,739
Operational risk	100,394	95,815
<b>Total REA</b>	<b>1,020,396</b>	<b>1,000,926</b>
CET1 ratio	23.9%	23.6%
TCR	25.8%	24.9%

with final maturity in September 2028 but callable in September 2023 and, secondly, an ISK 5.5 billion fixed rate inflation linked with final maturity in December 2029 but callable in December 2024.

A dividend payment of ISK 0.42 per share in the total amount of ISK 9.9 billion was made in 2019. Dividends were paid in two equal instalments on 10 April and 2 October 2019. The dividend payment represents around 52% of profit for the year 2018. This is in line with the Bank's capital and dividend policy as well as the Bank's risk appetite. Changes in the Bank's TCR for the year 2019 are demonstrated in Figure 3-2.

The Board of Directors intends to propose to the annual general meeting (AGM) that a dividend of ISK 0.40 per share be paid to shareholders in two equal payments in 2020. If the AGM approves the dividend proposal,

Change in capital ratio

Figure 3-2



the capital of the Bank will be reduced by an amount equivalent to the dividend payment and the Bank's capital ratios, in accordance with the Act on Financial Undertakings, will decrease by 0.9 percentage points.

## Capital requirement

Table 3-4

Capital requirement and REA	31.12.19		2019 change		31.12.18	
	CR	REA	CR	REA	CR	REA
<b>Credit risk breakdown</b>						
Central governments or central banks	69	867	4	50	65	817
Regional governments or local authorities	159	1,984	9	115	150	1,869
Institutions	802	10,024	-423	-5,289	1,225	15,313
Corporations	45,185	564,810	-523	-6,537	45,708	571,347
Retail	9,217	115,214	-510	-6,372	9,727	121,586
Secured by real estate property	12,220	152,747	2,109	26,363	10,111	126,384
Past due items	2,118	26,481	295	3,697	1,823	22,784
Items belonging to regulatory high-risk categories <sup>1</sup>	0	0	0	0	0	0
Short-term claims on institutions and corporate	0	0	0	0	0	0
Other items	2,890	36,122	708	8,850	2,182	27,272
<b>Credit risk</b>	<b>72,660</b>	<b>908,249</b>	<b>1,670</b>	<b>20,877</b>	<b>70,990</b>	<b>887,372</b>
<b>Market risk breakdown</b>						
Traded debt instruments	293	3,658	130	1,621	163	2,037
Equities	305	3,807	-401	-5,016	706	8,823
CVA	8	106	-29	-358	37	464
Currency risk	335	4,183	-178	-2,232	513	6,415
<b>Market risk</b>	<b>940</b>	<b>11,754</b>	<b>-479</b>	<b>-5,986</b>	<b>1,419</b>	<b>17,740</b>
<b>Operational risk</b>	<b>8,032</b>	<b>100,394</b>	<b>367</b>	<b>4,579</b>	<b>7,665</b>	<b>95,815</b>
<b>Total capital requirement and REA</b>	<b>81,632</b>	<b>1,020,396</b>	<b>1,558</b>	<b>19,470</b>	<b>80,074</b>	<b>1,000,926</b>

### 3.3.1 CET1 capital and statutory deductions

CET1 capital consists of core equity less statutory deductions according to requirements of the FME based on Article 10 of Act No. 161/2002.<sup>2</sup> The Bank makes deductions in order to determine its CET1 capital where applicable:

- » Carrying amounts of intangible assets
- » Deferred tax assets
- » Capital holdings in other credit and financial institutions amounting to more than 10% of their capital.
- » Foreseeable dividends in next year's operations

<sup>1</sup> See Staðalaðferð <http://www.stjornartidindi.is/Advert.aspx?ID=f051707c-8c23-4e99-a305-68dcb6f97a29>

<sup>2</sup> Article 55, see <http://www.althingi.is/lagas/145b/2002161.html>

Table 3-5 summarises how the Bank calculates its EC for the risks included in the framework.

<b>Economic capital</b>	
<b>Risk</b>	<b>Calculation method</b>
<b>Credit risk</b>	The credit risk EC model is the asymptotic single risk factor (ASRF) model from the Basel framework internal rating based (IRB) approach's risk weight formula, i.e., EC equals the capital requirements of the IRB approach in the capital requirements directive. The main inputs to the model are the risk parameters probability of default (PD), loss given default (LGD) and exposure at default (EAD).
<b>Market risk</b>	Market risk EC includes EC for interest rate risk in the trading book and EC for equity price risk in the trading book.  Each EC is calculated according to a stressed VaR model as specified in the internal model's approach in the capital requirements directive (CRR). The model inputs are calibrated to historical data from the previous 5 years.  EC for credit valuation adjustment (CVA) equals the capital requirements for CVA.
<b>Currency risk</b>	EC for foreign exchange risk is calculated according to a modified stressed VaR model, where the model inputs are calibrated to historical data from a period of significant stress relevant to the Bank's net FX position. The time horizon is one year.
<b>Concentration risk</b>	EC for single name concentration is calculated by adjusting for the granularity and non-homogeneity in the loan portfolio. This is necessary as the credit risk EC model assumes that the portfolio is infinitely large and homogeneous; hence, the single name concentration EC is given as an add-on.  An internal model is used to measure the additional EC for credit risk related to industry concentrations in the loan portfolio, i.e. a concentration add-on. The model calculates the industry concentration risk for the loan portfolio and subtracts the industry concentration risk for Iceland <sup>3</sup> to get the EC add-on for industry concentration.
<b>Interest rate risk and inflation risk in the banking book</b>	EC for interest rate risk and inflation risk in the banking book is equal to the sum of: <ul style="list-style-type: none"> <li>i The loss in economic value corresponding to the 99.9th percentile for ISK and the 99th percentile for significant foreign currencies of risk factor changes estimated by a Monte Carlo simulation model.</li> <li>ii The loss in economic value due to a +/- 200 bps shift of risk factors in other currencies (whichever results in a larger loss).</li> </ul>
<b>Operational risk</b>	EC for operational risk is calculated using the basic indicator approach, which means that it equals the Bank's capital requirement.
<b>Business risk</b>	EC for business risk is measured at least annually in the ICAAP and is based on the effects of the base case scenario on the Bank's balance sheet and operations and its effect on the Bank's capital base.
<b>Legal and regulatory risk</b>	EC for legal and political risk is calculated by adding the potential loss of on-going disputes weighted by their status within the legal system.

<sup>3</sup> The national sector distribution is published by the Central Bank of Iceland in their Financial Stability report.

<b>Economic capital ISK million</b>	<b>2019</b>	<b>2018</b>
Credit risk - Loans to customers and credit institutions	62,574	62,956
Credit risk - Other assets	6,815	5,144
Market risk	1,511	2,769
Currency risk	776	1,369
Operational risk	8,031	7,665
Single name concentration risk	6,331	5,401
Industry concentration risk	1,539	1,246
Interest rate and inflation risk	8,587	7,171
Business risk	0	3,833
Legal and political risk	2,067	2,092
<b>Total</b>	<b>98,232</b>	<b>99,646</b>
REA	1,020,396	1,000,926
<b>EC/REA</b>	<b>9.6%</b>	<b>10.0%</b>

Table 3-6

### 3.4 Capital assessment

#### 3.4.1 Minimum capital requirement

The regulatory minimum capital requirement (CR) under Pillar I of the Directive is 8% of risk-weighted assets for credit risk, market risk and operational risk. The Bank uses the standardised approach in measuring Pillar I capital requirements for credit

risk and market risk. For operational risk, it uses the basic indicator approach.

The Bank's risk exposure amount (REA) was ISK 1,020 billion at year-end 2019 and increased by ISK 19 billion, or 1.9%, for the year. Accordingly, the minimum capital requirement for the Bank is ISK 81.6 billion. Credit risk is the single largest risk type or 89% of total REA and minimum capital requirement.

#### 3.4.1.1 Small and medium-sized enterprises (SME) factor

Given that customers fulfil certain requirements, an SME factor can be used to decrease the risk exposure amount (REA) for credit risk from loans to customers. The Bank's REA for credit risk from loans to customers and credit institutions is ISK 873 billion at year-end 2019 but if the Bank was allowed to use the SME factor, the REA would decrease by ISK 13 billion and amount to ISK 860

Credit risk as at 31 December 2019	PD	LGD	EAD	EC
Financial institutions	0.2%	45.0%	49,413	807
Public entities	0.1%	45.0%	85,613	165
Retail*	2.1%	25.0%	545,597	13,408
Corporates	2.4%	33.9%	698,380	48,195
<b>Total</b>	<b>2.1%</b>	<b>31.5%</b>	<b>1,379,002</b>	<b>62,574</b>

Credit risk as at 31 December 2018	PD	LGD	EAD	EC
Financial institutions	0.1%	45.0%	71,606	1,146
Public entities	0.1%	45.0%	125,117	149
Retail*	2.6%	25.7%	493,358	14,129
Corporates	2.4%	35.9%	685,874	47,531
<b>Total</b>	<b>2.1%</b>	<b>33.5%</b>	<b>1,375,955</b>	<b>62,955</b>

\*Retail exposure consists of individuals and small and medium-sized enterprises with total exposure under ISK 75 million and which meet the criteria of EU Directive 2003/361/EC on SMEs and individuals.

Table 3-7

billion. Customers must fulfil the following requirements so that the factor can be used:

1. A consolidated financial statement must be available.
2. The customer's operating income must be EUR 50 m or lower.
3. The customer's on-balance position must be EUR 1.5 m or lower.
4. The exposure must be classified as 'corporate', 'retail' or 'secured by mortgages on immovable property'.

From 01.01.2020 onwards, the Bank is authorized to apply the SME factor to customers that fulfil these requirements.

### 3.4.2 Economic capital

Economic capital (EC) is a risk measure that is applied to all material risks. It captures unexpected losses and reduction in value or income for which the Bank needs to hold capital to

avoid insolvency. It arises from the unexpected nature of losses as distinct from expected losses. EC is defined as the difference between unexpected losses and expected losses, where unexpected loss is defined as the 99.9% Value-at-Risk (VaR), with a one-year time horizon.

The purpose of the EC framework is to enable the Bank to assess the amount of capital it requires to cover the economic effects of risk-taking activities, as well as to compare different risk types using a common "risk currency". The EC framework further measures unexpected losses, decomposes EC on various levels to enable capital allocation, limit-setting, pricing of products, risk-adjusted performance measurement and value-based management.

The framework covers the following risk types: credit risk, market risk, currency risk, operational risk, concentration risk, interest

rate risk in the non-trading book, inflation risk, legal risk and business risk.

EC amounted to ISK 98.2 billion at 31 December 2019 and decreased by 1.4% during the year (2017: ISK 99.6 billion). The ratio of EC to REA decreased from 10.0% to 9.6 % during the year.

Credit quality increased in 2019 and EC to cover credit risk due to loans to customers and credit institutions decreased slightly despite increased lending. EC to cover credit risk due to other assets increased by ISK 1.7 billion.

EC for market risk and currency risk decreased significantly in 2019, from ISK 4.1 billion at year-end 2018, to ISK 2.3 billion at year-end 2019. This drop in EC is first and foremost because of significantly lower exposure to listed equities in the Bank's trading portfolio. EC for interest and inflation risk in the banking book increased from ISK 7.2 billion at

Table 3-8

<b>SREP results</b>		<b>2019</b>	<b>2018</b>
		<b>% REA</b>	<b>% REA</b>
<b>Pillar I</b>	Credit risk	7.1%	6.8%
	Market risk	0.1%	0.3%
	Operational risk	0.8%	0.8%
	<b>Minimum capital requirement</b>	<b>8.0%</b>	<b>8.0%</b>
<b>Pillar II</b>	Credit, counterparty and concentration risk	1.9%	1.9%
	Market risk and IRRBB	1.3%	2.0%
	Other risk	0.2%	0.1%
	<b>Additional P-II R</b>	<b>3.4%</b>	<b>4.0%</b>
	<b>Additional P-II G</b>	<b>0.0%</b>	<b>0.0%</b>
	<b>Minimum requirement under Pillar I and Pillar II-R</b>	<b>11.4%</b>	<b>12.0%</b>

year-end 2018, to ISK 8.6 billion at year-end 2019. This increase in EC is due to higher interest rate sensitivity (see section 5.4.2), where a decrease in interest rate decreases the value of the banking book.

The Bank revised its methodology for estimating EC due to business risk at year-end 2019. The risk is now estimated at least annually in the ICAAP and is based on the effects of the base case scenario on the Bank's balance sheet and operations and its effect on the Bank's capital base.

The Bank revised its sector concentration risk model in 2019 and implemented a new rating grade model for individuals. The effects of the implementation of the new rating grade model on EC were insignificant.

Table 3-7 shows a further breakdown for credit risk, probability

of default by asset class, as well as LGD, EAD and EC.

### 3.4.3 Pillar II

Pillar II sets forth the framework for the supervisory review process (SREP) and the framework for the Bank's internal capital/liquidity adequacy assessment process (ICAAP/ILAAP). The Bank is exposed to many risks, and they are not limited to those that are quantified under Pillar I (credit, market and operational risks). Pillar II concerns the Bank's risks in a wider sense, yet is still specific to its operation, i.e. risk profile and business environment.

Table 3.8 shows the results of the 2019 SREP as published on 12 September 2019, applicable at year-end 2019. The Pillar II requirements are 3.4% of REA and as a result, the Bank's minimum capital requirement under Pillar I and Pillar II-R is 11.4% plus capi-

tal buffers. The Pillar II requirement dropped by 0.6 percentage points from 2018 to 2019 due to a decrease in market risk.

### 3.4.4 Capital buffers

On 1 January 2014, a framework for prudential requirements for banking entered into force in the EU. The framework, referred to as CRD IV, consists of two parts: an updated Directive (CRD IV, Capital Requirements Directive) and a Regulation (CRR, Capital Requirements Regulation). CRD IV was incorporated into Icelandic law in 2016. The phasing in of capital buffers has been completed for the three large Icelandic banks, including Landsbankinn.

Capital buffers at year-end 2019 for the Bank as recommended by the Icelandic Financial Stability Council (FSC) to the FME are 9.25% of REA.

Following recommendations from the FSC, the FME decided to raise the countercyclical capital buffer to 1.75% on 15 May 2019 and further increase it to 2.00% on 1 February 2020. The FME requires the Bank to maintain a capital ratio that reflects the fully phased-in capital buffers currently at 9.25% and 9.50% from 1 February 2020. As previously mentioned, the Bank has determined a range for a management buffer of 1.5%-2.5% in its risk appetite in addition to the official capital buffers under CRD IV.

The capital buffers are expressed as a proportion of consolidated REA. However, the systemic risk buffer and the counter-cyclical buffer only apply to domestic REA, meaning that the effective requirement for the two aforementioned buffers is somewhat lower than defined by the financial authorities. The effective countercyclical capital buffer is determined using the weighted average of the prevailing capital buffer level in the countries where the Bank has exposure. For the systemic risk buffer, only the proportion of domestic exposures to total REA determines the effective percentage of the buffer.

Table 3-10	2019	2018
Domestic REA	95%	94%
Foreign REA	5%	6%
Total	100%	100%

Table 3-9	1.11.2017	15.5.2019	1.2.2020
Systemic Risk Buffer	3.00%	3.00%	3.00%
O-SII Buffer	2.00%	2.00%	2.00%
Counter-cyclical Buffer	1.25%	1.75%	2.00%
Capital Conservation Buffer	2.50%	2.50%	2.50%
<b>Total</b>	<b>8.75%</b>	<b>9.25%</b>	<b>9.50%</b>

Domestic REA accounted for 95% of the Bank's total REA meaning only 5% REA is originated in foreign countries. This results in a 2.87% effective systemic risk buffer and 1.70% countercyclical buffer and a combined capital buffer requirement of 9.07% at year-end 2019.

### 3.4.5 Capital allocation to business lines

The Bank makes an internal capital allocation across business divisions on the basis of each unit's contribution to the Bank's total risk as estimated by the Bank's EC model. Capital exceeding the Bank's minimum capital target and the management buffer is allocated to Treasury. Allocated capital plus retained earnings per business unit at year-end 2019 is shown in Figure 3-3.

### 3.4.6 Risk-adjusted return on capital

To analyse the Bank's risk-adjusted profit and profitability, i.e. including the cost of risk, the measures risk-adjusted profit

### Capital allocation pr. business line

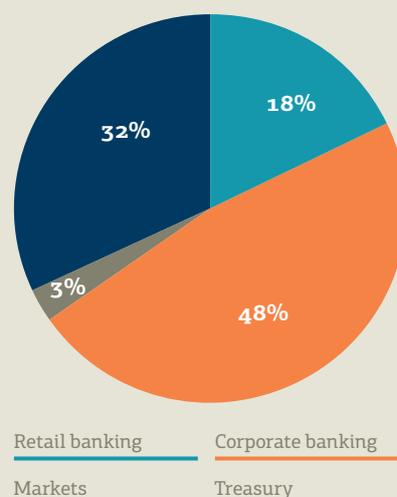


Figure 3-3

(RAP) and risk-adjusted return on capital (RAROC), are reported monthly to senior management. The objective of these metrics is to assess shareholder value creation and profitability in relation to the equity capital needed to cover the undertaken risks, i.e., the economic capital. The measures enable risk-based pricing, increase incentives to measure

and manage risk appropriately, focus on long-term profit, and support the assessment of the Bank's optimal capital structure. These measures have been implemented throughout the Bank and are used in individual credit decisions for large corporate customers, as well as to determine the pricing of loan products for smaller corporate customers and individuals.

### 3.5 Leverage ratio

The Capital Requirements Regulation (CRR), as part of the Basel

III framework, requires banks to measure, report and monitor their leverage ratios. The ratio is defined as CET1 capital as a percentage of total leverage exposure (see table 3-11) and acts as a credible supplementary measure to the risk-based capital requirements.

A credible leverage ratio is one that ensures broad and adequate capture of both the on and off-balance sheet sources of the Bank's leverage, aimed at revealing hidden leverage on the Bank's balance sheets. The ratio reinforces the risk-based requirements with a simple non-risk based "backstop" measure and is

intended to restrict the build-up of leverage in the banking sector. The leverage ratio minimum requirement is 3%.

At 31.12.2019, the Bank's leverage ratio was 15.7%. Further information about the leverage ratio can be found in the additional disclosures accompanying this document.

### Leverage ratio

Table 3-11

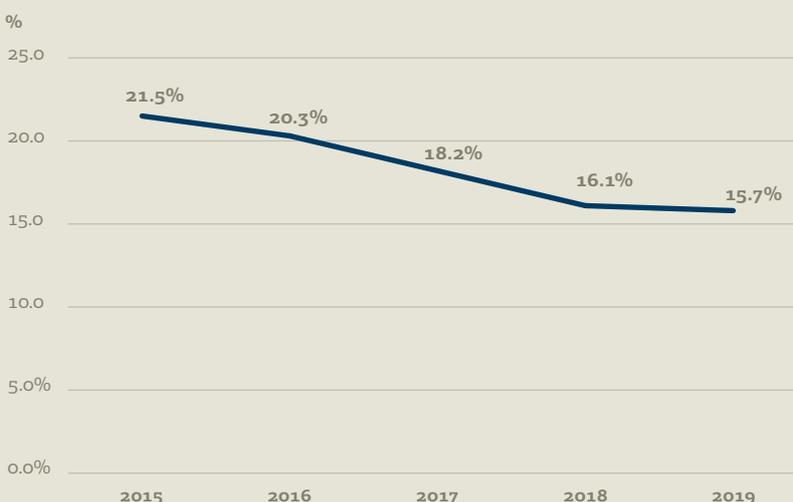
	2019	2018
Tier 1 capital	244,091	236,252
<b>Leverage exposure</b>		
- On balance sheet exposure (excluding derivatives)	1,423,634	1,324,118
- Derivatives instrument exposure	2,695	1,923
- Potential future exposure on derivatives	1,625	1,674
- Off balance sheet exposure	125,848	147,010
- Regulatory adjustments to Tier 1 capital	-3,643	-3,358
<b>Total leverage exposure</b>	<b>1,550,158</b>	<b>1,471,367</b>
<b>Leverage ratio</b>	<b>15.7%</b>	<b>16.1%</b>

Figures 3-4 and 3-5 show the Bank's leverage ratio for the past 5 years. Despite trending downwards in this period, the ratio is still over five-fold the minimum 3% requirement. The main drivers of the decreasing leverage ratio are increasing total assets and decreasing Tier 1 capital, in line with the Bank's policy to better optimize its capital structure.

In theory, if the Bank would want to decrease its leverage ratio and aim for the minimum of 3%, it would not be able to do so without violating other regulated ratios first. Furthermore, off balance sheet exposures and derivatives instrument exposure are not significant factors of the Bank's leverage ratio. Therefore, the risk of excessive leverage is not considered a significant risk factor for the Bank. Nevertheless, lever-

### Leverage ratio

Figure 3-4

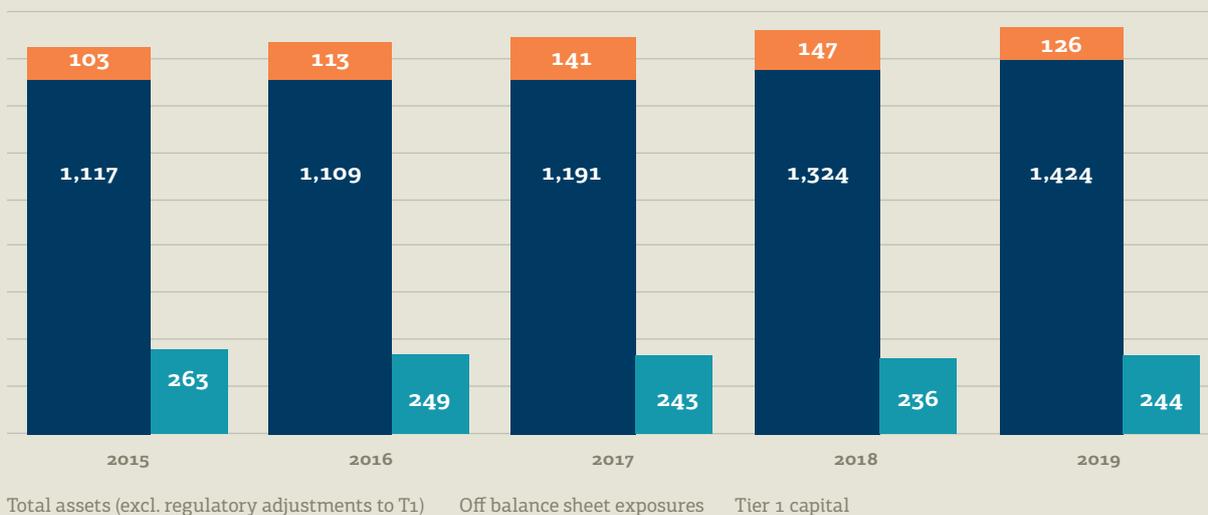


age ratio is a part of the Bank's risk appetite and is considered a relevant risk indicator both in the Bank's ICAAP/ILAAP as well as within BRRD. The Bank has man-

agement actions in place to meet scenarios that would adversely affect the Bank's leverage ratio.

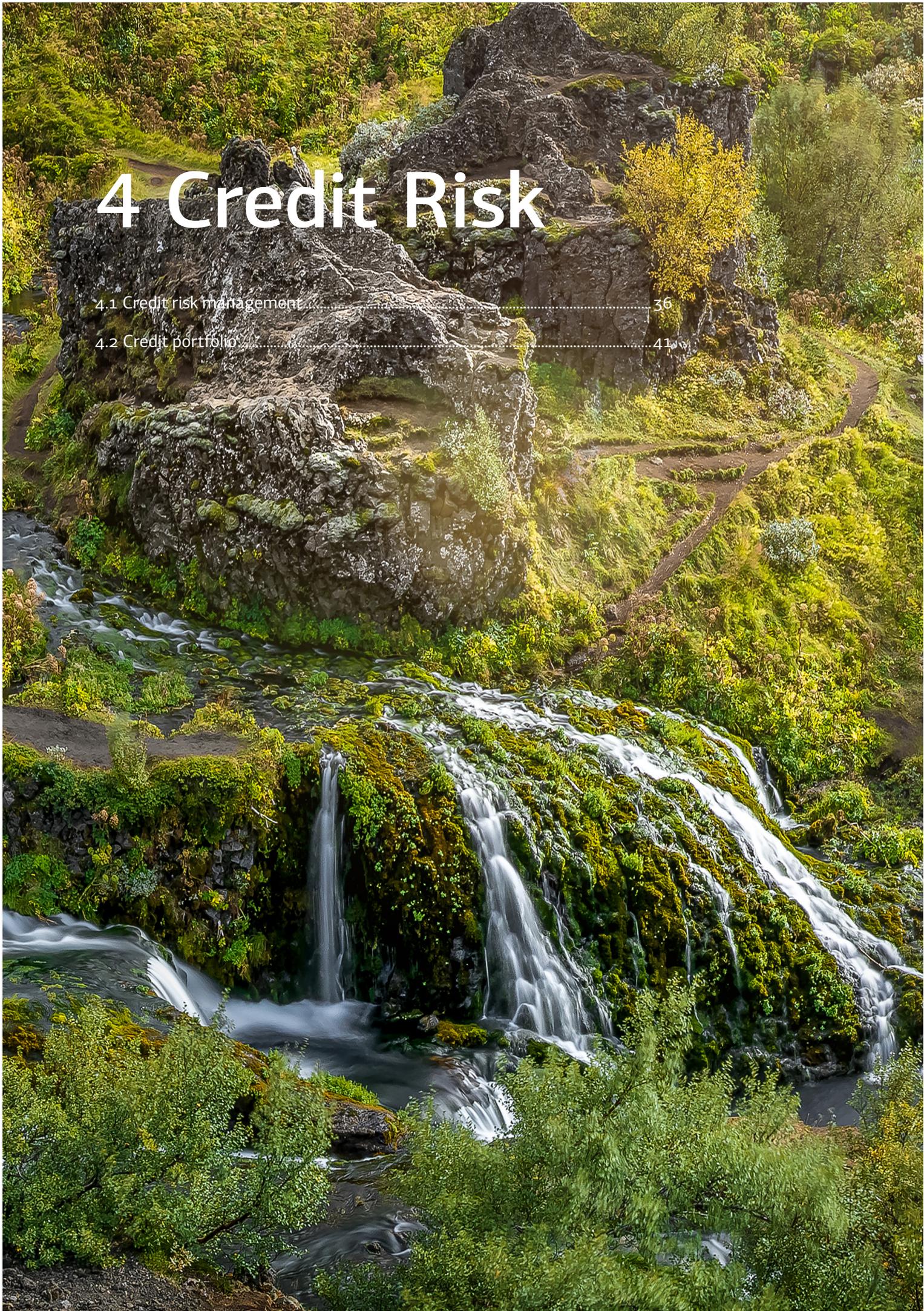
### Leverage ratio breakdown (ISK bn)

Figure 3-5



# 4 Credit Risk

4.1 Credit risk management .....	36
4.2 Credit portfolio .....	41



# 4 Credit Risk

**Credit risk is defined as the risk of loss if customers fail to fulfil their agreed obligations and the estimated value of pledged collateral does not cover existing claims.**

- » Probability of default, weighted by gross carrying amount, was 2.4% at year end 2019 (2018: 2.5%), excluding loans to financial institutions.
- » Economic capital due to credit risk from loans to customers and credit institutions remained stable in 2019
- » Total expected credit loss was ISK 15 billion at year end 2019 (2018: ISK 13 billion)

## Economic capital



The Bank offers loans, credits, guarantees and other credit-related products as part of its business model and thus takes on credit risk.

At year-end 2019, 89% of the Bank's risk exposure amount (REA) was due to credit risk. On the same date, total loans and advances amounted to ISK 1,188 billion (2018: ISK 1,136 billion), with ISK 1,140 billion coming from lending activities (2018: ISK 1,065 billion) and ISK 48 billion from loans and advances to financial institutions (2018: ISK 71 billion).

Credit exposure from lending activities accounts for most of the Bank's credit exposure and is the focus of this section.

Managerial efforts to moderate credit risk continued to support

the Bank's credit risk profile in 2019. Overall credit quality remained stable, with 76% of total credit exposure having rating grades from 5 to 10. Impairment charges increased by ISK 2 billion in 2019 but credit risk metrics remain well within the Bank's risk appetite. The credit risk profile is monitored and strengthened in accordance with the credit risk appetite, which encompasses credit quality (expected loss) and credit risk concentration (limits on single names and industries). Regular risk reporting enables the ongoing monitoring of the Bank's credit risk position relative to its risk appetite. The credit risk appetite is converted by the business units to their specific key performance indicators (KPIs) in collaboration

with Risk Management. Monitoring functions determine whether credit facilities are granted in accordance with the risk appetite. Risk Management monitors and challenges the performance and reports the progress to the Executive Board and the Board of Directors.

### 4.1 Credit risk management

Credit risk is primarily managed through the credit process and the Bank's credit risk models which include PD, LGD and EAD modelling. The models are used for various purposes, such as in provisioning and management reporting.

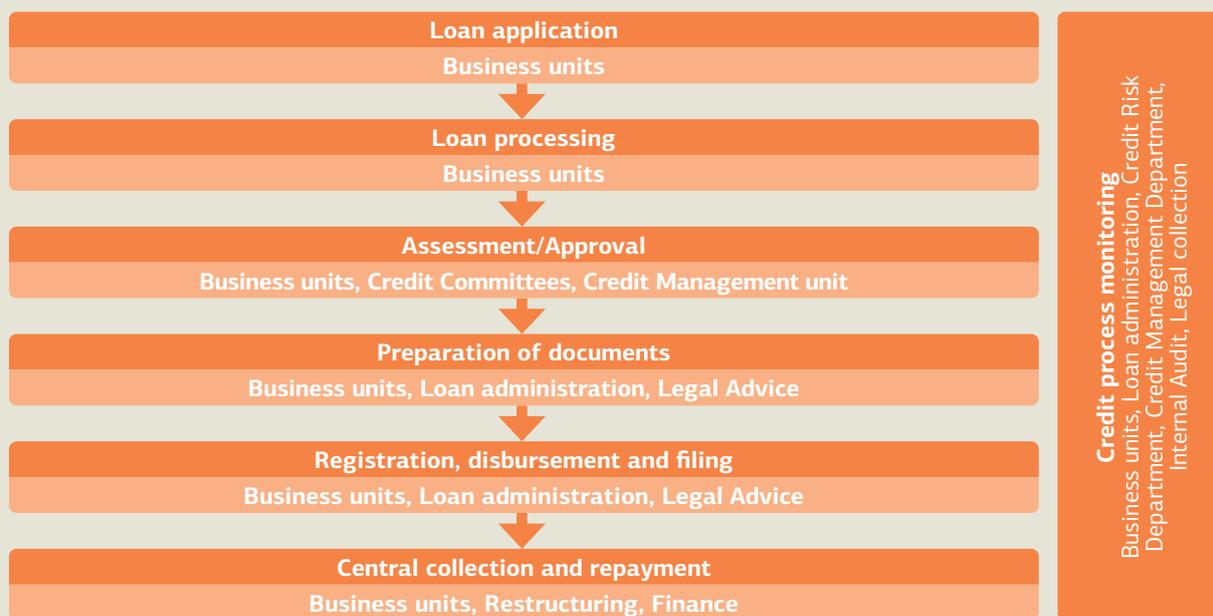


Figure 4-1

#### 4.1.1 Identification

Credit risk is defined as the risk of loss if customers fail to fulfil contractual obligations and the estimated value of pledged collateral does not cover existing claims.

The Bank's activities may give rise to risk at the time of settlement of transactions and trades. Settlement risk is the risk of loss due to the failure of an entity to honour its obligations to deliver cash, securities or other assets as contractually agreed. Settlement risk is deemed immaterial in the Bank's operations.

Credit risk is the greatest single risk faced by the Bank and arises principally from loans and advances to customers and from investments in debt securities, but also from commitments, guarantees and documentary credits, counterparty credit risk in derivatives contracts, and the aforementioned settlement risk.

#### 4.1.2 Assessment

Credit risk is measured in three main dimensions: probability of default (PD), loss given default (LGD) and exposure at default (EAD). For the purpose of measuring PD, the Bank has developed an internal rating system,

including a number of internally developed rating models. The objectives of the rating system are to provide a meaningful assessment of obligor characteristics; a meaningful differentiation of credit quality; and accurate and consistent quantitative estimates of default risk, i.e. probability of default (PD). Internal ratings and associated PD are essential in the risk management and decision-making process, and in the credit approval and corporate governance functions.

The rating system has an obligor rating scale which exclusively reflects quantification of the risk of obligor default, or credit

quality. The obligor rating scale has 10 rating grades for non-defaulted obligors from 1 to 10, with 10 indicating the highest credit quality, and the grade 0 for defaulted obligors. The rating assignment is supported by rating models, where information such as industry classification, financial accounts and payment behaviour is taken into account.

The internal rating system is used to assign ratings and calculate risk-weighted exposure amounts for the majority of the Bank's customers for economic capital. However, there are a few exceptions. External ratings, from Standard & Poor's, Moody's and Fitch, are used for foreign

**Internal mapping from internal rating grade to external rating agencies**

Internal rating grade	Standard & Poor's and Fitch	Moody's	Lower PD	Upper PD
10	AAA/AA+/AA/AA-	Aaa/Aa1/Aa2/Aa3	0.00%	0.04%
9	A+/A/A-	A1/A2/A3	0.04%	0.10%
8	BBB+	Baa1	0.10%	0.21%
7	BBB/BBB-	Baa2/Baa3	0.21%	0.46%
6	BB+/BB	Ba1/Ba2	0.46%	0.99%
5	BB-	Ba3	0.99%	2.13%
4	B+	B1	2.13%	4.54%
3	B	B2	4.54%	9.39%
2	B-	B3	9.39%	18.42%
1	CCC/C	Caa1/Caa2/Caa3/Ca/C	18.42%	99.99 %

Table 4-1

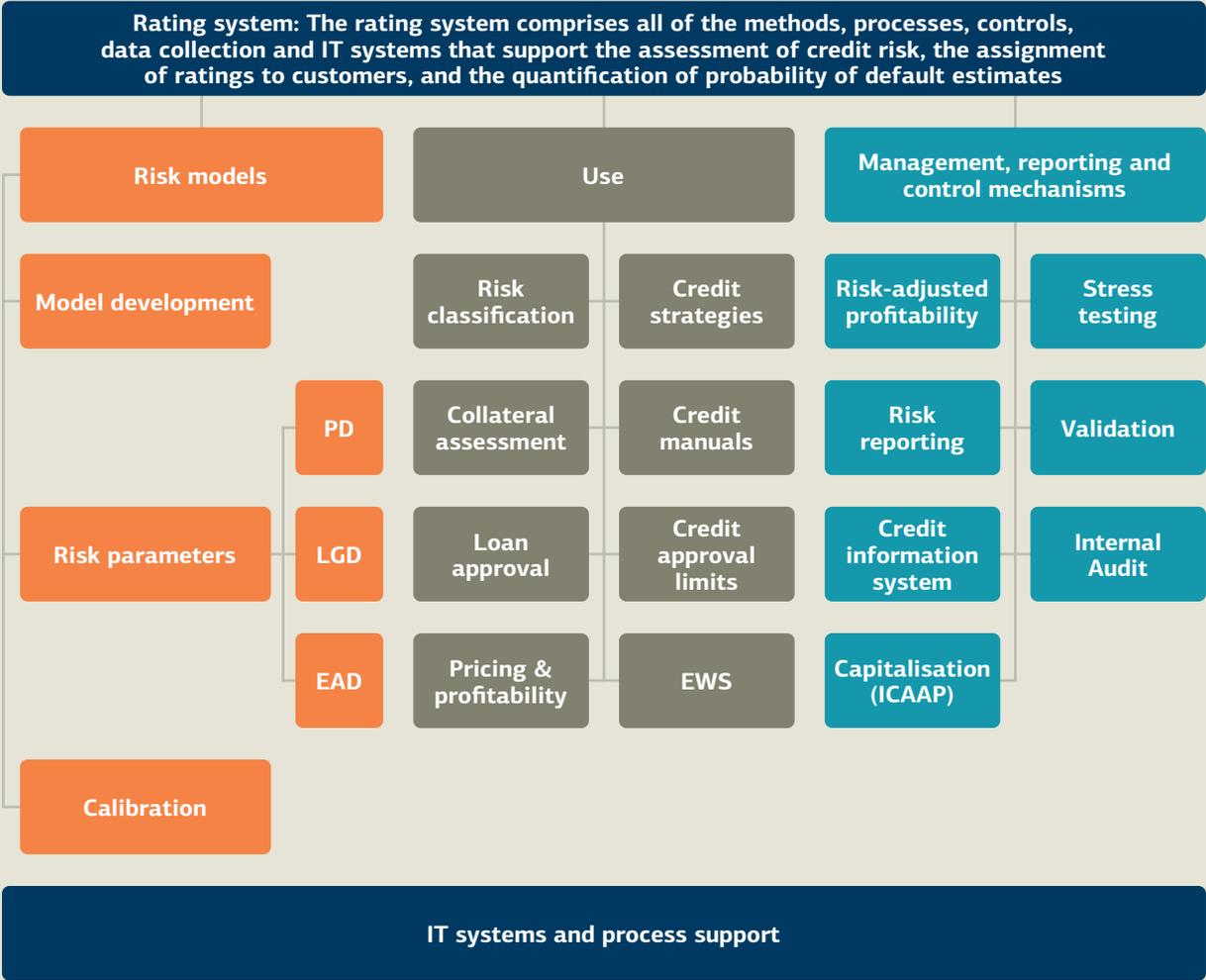


Figure 4-2

credit institutions and ratings from CreditInfo are used for new retail customers.

The rating assignment and approval is an integrated part of the credit approval process and assignment shall be updated at least annually, or when material information on the obligor or exposure becomes available, whichever is earlier.

The Bank's estimation and validation process includes quality controls to assess the performance of models, procedures and systems, and are designed to ensure the accuracy of the parameters through adjustments where necessary.

The rating models are validated quantitatively and qualitatively annually. The quantitative validation includes statistical tests of the models' discriminatory power, i.e. the models' ability to distinguish default risk, and absolute accuracy, i.e. the ability to predict default levels.

The PD parameters are re-estimated and validated annually by a quantitative and qualitative assessment. The quantitative assessment includes statistical tests to ensure that the estimates remain valid when new data is added. PD estimates are based on observed default frequency in available internal data and adjusted to long term default frequencies through an addon. The



Figure 4-3

adjustment for the length of internal data available is embedded in the margin of conservatism which also includes an addon to compensate for statistical uncertainty in the estimation.

LGD is measured using an internal LGD model for the purpose of EC calculations and provisioning. The internal LGD model takes into account more types of collateral and is more sensitive to the collateralisation level than the Basel model.

Exposure at default is an estimate of the amount outstanding (drawn amounts plus likely future drawdowns of yet undrawn lines) in case the borrower defaults. The Bank uses the standard approach for estimating EC, but uses inter-

nal models for provisioning.

#### 4.1.3 Management and policy

The Bank's credit risk management objective is to ensure compliance with the Bank's credit policy, which entails that the only risk taken is one that the Bank understands, can measure and manage.

The Bank's credit risk management is based on active monitoring by the Board of Directors, the CEO, the Risk & Finance Committee, the Credit Committee, the credit departments within the Risk Management Division and the business units. The Bank manages credit risk according to its risk appetite statement and credit policy approved by the

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Board of Directors, as well as detailed credit policies approved by the CEO. The risk appetite and credit policy include limits on large exposures to individual borrowers or groups of borrowers, concentration of risk and exposure to certain industries. The CEO ensures that the risk policy is reflected in the Bank's internal framework of regulations and guidelines. The Bank's executives are responsible for ensuring that the Bank's business units execute the risk policy appropriately and the CEO is responsible for the oversight of the process as a whole.

Incremental credit authorisation levels are defined based on size of units, types of customers and the lending experience of credit officers. The Bank has also set industry policies that describe its appetite to provide credit to specific industries. Credit decisions exceeding authorisation levels of business units are subject to confirmation by Credit Management. The Corporate Banking Credit Committee has authorisation levels exceeding that of individual business unit managers and meets regularly to make credit decisions. Credit Management has veto powers over the decisions of the Corporate Banking Credit Committee. Credit decisions exceeding the signing limits of the Corporate Banking Credit Committee are subject to approval by the Bank's Credit Committee. Credit decisions exceeding the limits of the Credit Committee are subject to approval by the Board of Direc-

tors, which holds the highest credit authorisation within the Bank.

#### 4.1.4 Mitigation

Mitigating risks in the credit portfolio is a key element of the Bank's credit policy, as well as an inherent part of the credit-decision process. Securing loans with collateral is the main method of mitigating credit risk, whereas for some loan products collateral is required by legislation, as in the mortgage finance market, or is standard market practice.

The most important types of collateral are real estate, vessels and financial assets (shares or bonds).

The amount and type of collateral required depends on an assessment of the credit risk associated with the counterparty. Valuation parameters and the acceptability of different types of collateral are defined in the Bank's credit policy. Credit extended by the Bank may be secured on residential or commercial property, land, listed and unlisted securities, transport vessels, fishing vessels together with their non-transferable fishing quotas, etc. The Bank also secures its loans by means of receivables, inventory and operating assets, such as machinery and equipment. Residential mortgages involve the underlying residential property. Less stringent requirements are set for securing short-term personal loans, such as overdrafts and credit card borrowings.

The Bank regularly assesses the

market value of received collateral. The Bank has developed models to estimate the value of the most frequent types of collateral. For collateral where no valuation model exists, the Bank estimates the value as the market value less a haircut. A haircut in this context is a discount factor which represents a conservative estimate of the costs to sell in a forced sale. Costs to sell include maintenance costs in the period over which the asset is up for sale, fees for external advisory services, and any loss in value. For listed securities, haircuts are calculated with an internal model based on variables, such as price volatility and marketability.

The Bank monitors the market value of mark-to-market collateral and may require additional collateral in accordance with the underlying loan agreements.

In order to further limit the credit risk arising from financial instruments, the Bank enters into netting agreements, under which the Bank is able to set off all contracts covered by the netting agreement against the debt in cases of default. The arrangements generally include all market transactions between the Bank and the customer.

Generally, collateral is not held over loans and advances to financial institutions, nor is it usually held against bonds and debt instruments.

The Bank includes all collateral to which a value is assigned in

accordance with its internal procedures. Guarantees are included if they imply lower risk weights than the original exposure. In addition, collateral is volatility-adjusted (by means of a haircut) in order to take price volatility and the expected costs of repossession and sale of the pledge into account.

#### 4.1.4.1 Derivative financial instruments

In order to mitigate credit risk arising from derivatives, the Bank chooses the counterparties for derivatives trading based on stringent requirements. The Bank also enters into standard International Swaps and Derivatives Association (ISDA) master netting agreements and similar general netting agreements with financial counterparties.

Commensurate collateral and margin requirements are in place for all derivative contracts the Bank enters into. Collateral management and monitoring is performed daily, and derivative contracts with customers are usually fully hedged.

The Bank's supervision system monitors both derivatives exposure and collateral value and calculates an intraday credit equivalent value for each derivative. It also issues margin calls and manages netting agreements.

Amounts due to and from the Bank are offset when the Bank has a legally enforceable right to set off a recognised amount and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously. External ratings are used

where applicable to assist in managing the credit risk exposure of bonds. Otherwise the Bank uses fair value estimates based on available information and the Bank's own estimates.

#### 4.1.5 Control and monitoring

The Bank monitors exposures to identify signs of weakness in customer earnings and liquidity as soon as possible. To monitor customers, the Bank uses an Early Warning System, which is supplemental to ratings and classifies credit exposures to four credit risk groups (green, yellow, orange and red). The colour classification is as follows:

- » Green: the customer is considered as performing without signs of repayment problems;
- » Yellow: the customer shows indication of deteriorating financial strength, which could lead to financial difficulties;
- » Orange: the customer is or has been in financial difficulties or default;
- » Red: the customer is in default and in legal collection and/or restructuring.

The Credit Risk Department within Risk Management is together with the business units responsible for the colour classification of customers.

#### 4.1.6 Impairment process

As at 1 January 2018, the Bank implemented the three-stage expected credit loss model under IFRS 9. Allowance is calculated

as the 12-month expected credit loss (ECL) or the lifetime expected credit loss.

The Bank recognises loss allowances for ECL on the following financial instruments that are not measured at fair value through profit or loss:

- » Cash and balances with Central Bank
- » Bonds and debt instruments
- » Loans and advances to financial institutions
- » Loans and advances to customers

Off-balance sheet exposures:

- » Financial guarantees and underwriting commitments
- » Undrawn loan commitments
- » Undrawn overdraft/credit card facilities

When measuring ECL, the Bank uses a forward-focused model in compliance with IFRS 9. This requires considerable judgement over how changes in economic factors affect ECL. ECL reflects the present value of cash shortfalls due to possible default events either over the following twelve months or over the expected life of a financial instrument, depending on credit deterioration from inception.

The Credit Risk Department is responsible for assessing impairment on loans and receivables and a Valuation Team, comprised of the CEO, the managing directors of Finance, Risk Management, Corporate Banking and Personal Banking, reviews and approves the assessment.

In general, all impairment charges are loan-specific based

on the aforementioned ECL models. If needed, the Valuation Team can assess and issue additional general impairment charges.

## 4.2 Credit portfolio

### 4.2.1 Credit exposure

The Bank's credit exposure shown in Table 4-2 is defined as balance sheet items and off-balance-sheet items that carry credit risk. For on-balance sheet items, the exposure is calculated net of accumulated ECL. Off-balance sheet amounts are the maximum amounts the Bank might have to pay out in guarantees, loan commitments in their full amount,

and undrawn overdraft and credit card facilities. Most of the exposure derives from lending activities in the form of loans with and without collateral.

At year-end 2019, the total on-balance carrying amount is ISK 1,401 billion. ISK 1,140 billion is derived from lending activities, ISK 115 billion from bonds and debt instruments, and ISK 2.7 billion is derived from the mark-to-market value of derivatives. The total off-balance exposure at year-end 2019 is ISK 183 billion. ISK 95 billion is derived from undrawn loan commitments, ISK 64 billion from undrawn overdraft/credit card facilities and ISK 24 billion from financial guarantees and underwriting commitments.

#### 4.2.1.1 Credit exposure from lending activities

At year-end 2019, the Bank's total credit exposure from lending activities amounted to ISK 1,140 billion, increasing by 7% from ISK 1,065 billion at year-end 2018. In 2019, growth in the corporate portfolio decreased from previous years and was a modest 3.4%. Credit exposure to construction companies, service companies and information, communication & technology companies grew the most. Credit exposure to individuals also grew by 13%, primarily due to an increase in mortgage lending. Together with on-going growth of the credit portfolio, the Bank

## Classification of the Bank's financial assets carrying credit risk

Table 4-2

As at 31 December 2019	Carrying amount				
	Financial institutions	Public entities	Individuals	Corporations	Total
<b>Financial assets</b>					
Cash and balances with Central Bank	-	69,824	-	-	69,824
Bonds and debt instruments	11,423	102,181	-	1,658	115,262
Equities and equity instruments in the banking book	1	-	-	17,706	17,706
Derivative instruments	2,202	-	9	483	2,694
Loans and advances to financial institutions	47,929	-	-	-	47,929
Loans and advances to customers	-	4,135	467,945	668,104	1,140,184
Other financial assets	2,767	26	76	4,950	7,819
<b>Total on-balance sheet exposure</b>	<b>64,322</b>	<b>176,166</b>	<b>468,030</b>	<b>692,901</b>	<b>1,401,418</b>
<b>Off-balance sheet exposure</b>	<b>3,598</b>	<b>5,051</b>	<b>33,553</b>	<b>141,275</b>	<b>183,477</b>
Financial guarantees and underwriting commitments	306	168	775	22,718	23,967
Undrawn loan commitments	-	-	-	95,478	95,478
Undrawn overdraft/credit card facilities	3,292	4,883	32,778	23,079	64,032
<b>Maximum exposure to credit risk</b>	<b>67,920</b>	<b>181,217</b>	<b>501,583</b>	<b>834,175</b>	<b>1,584,895</b>

As at 31 December 2018	Carrying amount				
Financial assets	Financial institutions	Public entities	Individuals	Corporations	Total
<b>Cash and balances with Central Bank</b>	-	70,854	-	-	70,854
<b>Bonds and debt instruments</b>	3,507	63,222	-	10,329	77,058
<b>Equities and equity instruments in the banking book</b>	-	-	-	13,485	13,485
<b>Derivative instruments</b>	1,529	-	11	383	1,923
<b>Loans and advances to financial institutions</b>	71,385	-	-	-	71,385
<b>Loans and advances to customers</b>	-	4,720	413,699	646,113	1,064,532
<b>Other financial assets</b>	1,903	27	108	2,826	4,864
<b>Total on-balance sheet exposure</b>	<b>78,428</b>	<b>138,823</b>	<b>413,818</b>	<b>673,032</b>	<b>1,304,101</b>
<b>Off-balance sheet exposure</b>	<b>3,760</b>	<b>2,936</b>	<b>31,099</b>	<b>166,888</b>	<b>204,683</b>
<b>Financial guarantees and underwriting commitments</b>	255	-	784	17,056	18,095
<b>Undrawn loan commitments</b>	-	-	15	123,982	123,997
<b>Undrawn overdraft/credit card facilities</b>	3,505	2,936	30,300	25,850	62,591
<b>Maximum exposure to credit risk</b>	<b>82,188</b>	<b>141,759</b>	<b>444,917</b>	<b>839,920</b>	<b>1,508,784</b>

Table 4-2

continued its focus on services to existing customers and loan refinancing as well as restructuring loans for customers in financial distress.

At year-end 2019, the total average PD weighted by gross carrying amount was 2.3% (2018: 2.4%). Excluding loans to financial institutions, the average PD was 2.4% (2018: 2.5%). The average PD for individuals was 1.8% (2018: 2.3%) and the average PD for corporates was 2.9% (2018: 2.7%). The slight decrease in the overall PD represents the Bank's focus on lower risk in new lending, especially in the mortgage portfolio where the low average PD of new loans is driving the

decrease in PD for individuals.

The carrying amount of loans in stage 3 net of accumulated ECL as a percentage of the total portfolio increased slightly in 2019, having decreased slightly in 2018. The overall ratio is 2.1% at year-end 2019. The ratio increases in both the corporate and the individual portfolio, standing at 0.9% for individuals and 2.9% for corporates at year-end 2019. For individuals, the ratio increases both for individuals with and without mortgages. In the corporate portfolio, the ratio decreases for most sectors. However, a substantial increase in stage 3 loans for retail and service companies causes the overall ratio to

increase slightly.

The carrying amount of loans and advances to customers past due by 6-90 days increased slightly in 2019. The total increase is driven by an increase in the service sector. The ratio decreased by 0.25 percentage points for individuals.

The modest decrease in LGD is explained by a slight increase in collateral value due to e.g. rising housing prices and the Bank's strict requirements of collateralization for new lending. At year-end 2019, the total average LGD weighted by gross carrying amount, excluding loans to financial institutions, was 14.5% (2018: 14.7%). The average LGD

## Exposures subject to forbearance measures

Table 4-3

(ISK millions)	31.12.2019		31.12.2018	
	Performing	Non-performing	Performing	Non-performing
Modification	16,291	22,757	15,249	16,079
Refinancing	424	1,680	1,026	1,223
- of which: Under probation	2,281	0	2,616	0
<b>Total</b>	<b>16,716</b>	<b>24,437</b>	<b>16,275</b>	<b>17,301</b>

for individuals was 9.5% (2018: 10.0%) and the average LGD for corporates was 17.9% (2018: 17.6%).

#### 4.2.1.2 Forbearance

The Bank adopts forbearance plans to assist customers in financial difficulty with the goal of protecting the Bank's long-term interests. Concessions granted to customers include interest-reduction schedules, interest-only schedules, temporary payment holidays, term extensions, cancellation of outstanding fees and settlements.

Forbearance plans must comply with the Bank's Credit Policy. They are used as an instrument to maintain long-term customer relationships during economic downturns if there is a realistic possibility that the customer will be able to meet obligations again, and are used for minimising loss in the event of default.

The Bank has implemented the European Banking Authority's (EBA) definition of loans subject to forbearance measures. Table 4-3 is based on EBA's definition where exposures with forbearance measures are divided into performing and non-performing loans.

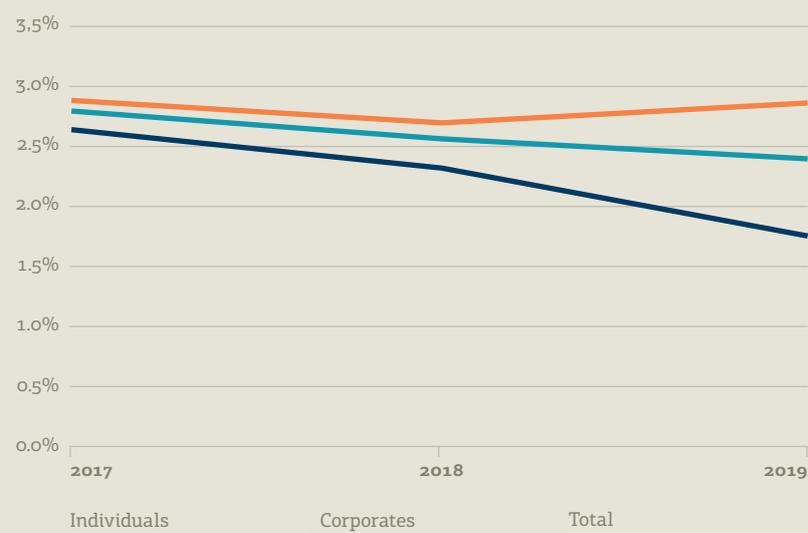
Total exposures subject to forbearance measures increase from ISK 34 billion at year-end 2018 to ISK 41 billion (3.6% of the total portfolio) at year-end 2019.

#### 4.2.2 Credit risk by industry sectors

Table 4-4 shows the carrying amount of loans and advances by industry sectors along with key risk metric values. A more thorough description of certain industry sectors follows.

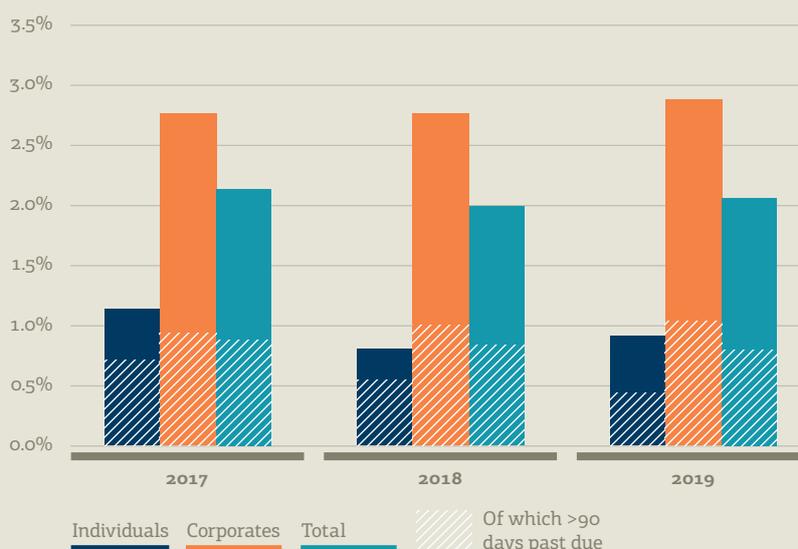
Probability of Default (PD)

Figure 4-4



Stage 3 loans

Figure 4-5



This section describes developments in credit quality for the three largest corporate sectors in the Bank's lending portfolio, as well as in the mortgage portfolio for 2019.

**Overview of credit risk measures by industries**

Table 4-4

As at 31 December 2019	Carrying amount	PD	LGD	Past due 6-90 days	Stage 2 loans	Stage 3 loans	Total ECL
<b>Public entities</b>	4,135	1.4%	52.2%	0.0%	2.7%	0.0%	35
<b>Individuals</b>	<b>467,945</b>	<b>1.8%</b>	<b>9.5%</b>	<b>1.6%</b>	<b>7.5%</b>	<b>0.9%</b>	<b>2,151</b>
Individuals – Mortgage	391,905	1.6%	6.5%	1.4%	6.2%	0.8%	848
Individuals – Other	76,040	2.7%	24.5%	2.6%	14.3%	1.8%	1,303
<b>Corporates</b>	<b>668,104</b>	<b>2.9%</b>	<b>17.4%</b>	<b>1.6%</b>	<b>9.5%</b>	<b>2.9%</b>	<b>12,697</b>
Real estate companies	136,000	3.2%	14.5%	3.3%	9.0%	2.7%	2,174
Construction companies	98,536	4.5%	22.8%	0.7%	19.2%	1.6%	1,677
Holding companies	26,154	3.6%	9.5%	0.1%	7.3%	0.3%	129
Fisheries	151,336	1.6%	9.6%	0.1%	3.2%	0.3%	456
Manufacturing	20,365	2.1%	32.5%	0.7%	11.5%	13.7%	2,295
Agriculture	8,918	2.6%	15.6%	0.3%	33.2%	3.2%	112
ITC*	32,943	1.3%	38.1%	0.4%	0.8%	0.1%	121
Retail	60,525	2.2%	18.5%	0.9%	7.8%	2.1%	949
Services	133,326	3.4%	20.0%	3.0%	11.3%	6.8%	4,784
Other	1	-	-	-	-	-	0
<b>Total loans to customers</b>	<b>1,140,184</b>	<b>2.4%</b>	<b>14.5%</b>	<b>1.6%</b>	<b>8.6%</b>	<b>2.1%</b>	<b>14,883</b>
Financial institutions	47,929	0.1%	55.1%	0.0%	0.0%	0.0%	1
<b>Total loans including financial institutions</b>	<b>1,188,113</b>	<b>2.3%</b>	<b>16.1%</b>	<b>1.5%</b>	<b>8.3%</b>	<b>2.0%</b>	<b>14,884</b>

## Overview of credit risk measures by industries

Table 4-4

As at 31 December 2018	Carrying amount	PD	LGD	Past due 6-90 days	Stage 2 loans	Stage 3 loans	Total ECL
<b>Public entities</b>	4,720	1.4%	52.8%	0.4%	60.8%	0.0%	147
<b>Individuals</b>	<b>413,699</b>	<b>2.3%</b>	<b>10.0%</b>	<b>1.8%</b>	<b>11.4%</b>	<b>0.8%</b>	<b>2,369</b>
Individuals – Mortgage	335,799	1.9%	6.8%	1.6%	9.5%	0.6%	886
Individuals – Other	77,900	4.1%	23.6%	2.8%	19.2%	1.6%	1,482
<b>Corporates</b>	<b>646,113</b>	<b>2.7%</b>	<b>18.0%</b>	<b>1.1%</b>	<b>5.9%</b>	<b>2.8%</b>	<b>10,613</b>
Real estate companies	137,343	3.3%	16.7%	1.6%	4.0%	2.8%	1,655
Construction companies	87,510	4.4%	22.8%	1.2%	6.9%	2.8%	1,950
Holding companies	30,971	2.8%	14.2%	0.4%	0.6%	0.1%	197
Fisheries	146,912	1.4%	9.9%	0.1%	5.7%	0.8%	386
Manufacturing	21,936	2.5%	24.3%	0.6%	5.4%	17.2%	2,296
Agriculture	8,559	2.6%	18.9%	2.5%	26.6%	5.9%	175
ITC*	29,799	1.1%	32.8%	0.0%	0.5%	0.1%	127
Retail	63,644	1.8%	21.6%	1.1%	6.9%	1.4%	835
Services	119,439	3.3%	20.9%	2.2%	8.7%	4.1%	2,991
Other	0	-	-	-	-	-	0
<b>Total loans to customers</b>	<b>1,064,532</b>	<b>2.5%</b>	<b>15.2%</b>	<b>1.4%</b>	<b>8.3%</b>	<b>2.0%</b>	<b>13,128</b>
Financial institutions	71,385	0.1%	55.1%	0.0%	0.0%	0.0%	7
<b>Total loans including financial institutions</b>	<b>1,135,917</b>	<b>2.4%</b>	<b>17.7%</b>	<b>1.3%</b>	<b>7.8%</b>	<b>1.9%</b>	<b>13,135</b>

### Loss given default (LGD)

Figure 4-6



### Ratio of loans past due 6-90 days

Figure 4-7



#### 4.2.2.1 Fisheries

Loans and advances to customers in the fisheries industry amounted to ISK 151 billion as at 31 December 2019 (2018: ISK 147 billion). Credit exposure to the sector represented 13% of the Bank's loan portfolio. The increase is mostly due to a depreciation of the ISK as 93% of the gross carrying amount of loans to companies in the fisheries industry are in FX, in line with the underlying income of companies in the industry.

After a decline in 2018, the average PD value for the sector, weighted by gross carrying amount, increased slightly in 2019 and was 1.6% at year end. The average LGD value for the sector, weighted by gross carrying amount, has been stable and slightly decreasing for the last few years and was 9.6% at year-end 2019. 0.3% of loans in the sector were in default at year-end 2019, compared to 0.8% at year-end 2018.

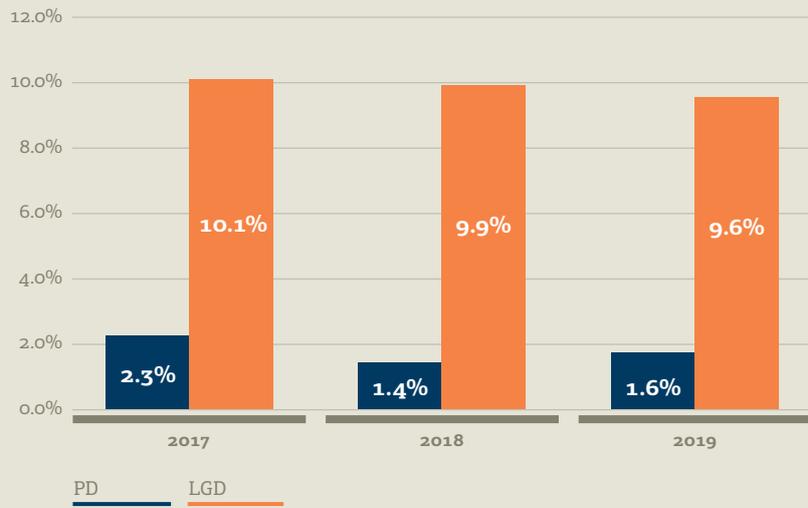
Credit extended by the Bank to the fisheries industry is primarily secured by fishing vessels together with their non-transferable fishing quotas, or 70% of the sector's total collateral.

The realised default rate for the fisheries sector has consistently been below the average PD values for the past few years. Both the default rate and the PD have been on a downward trend as the sector remains one of the strongest in the Bank's portfolio with low underlying risk.

The ratio of stage 2 and stage 3 loans to the total carrying amount of loans in the fisheries sector decreased in 2019 and the ratio of stage 3 loans to the total carrying amount of loans has

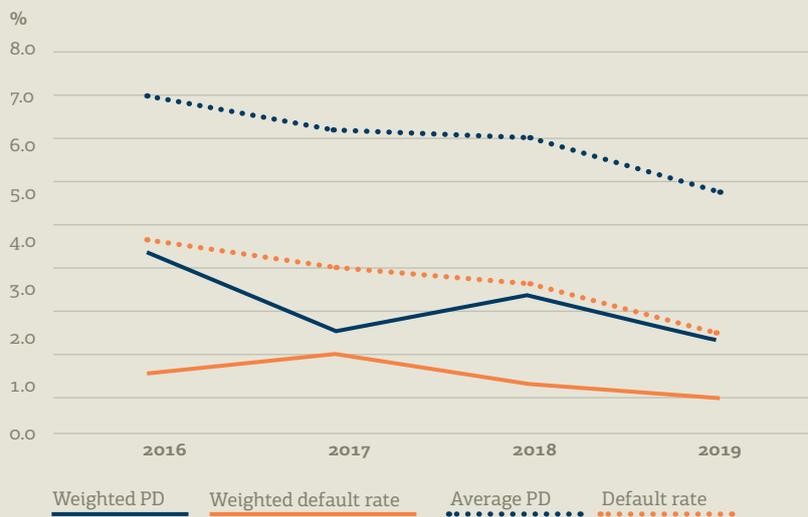
PD & LGD - Fisheries

Figure 4-8



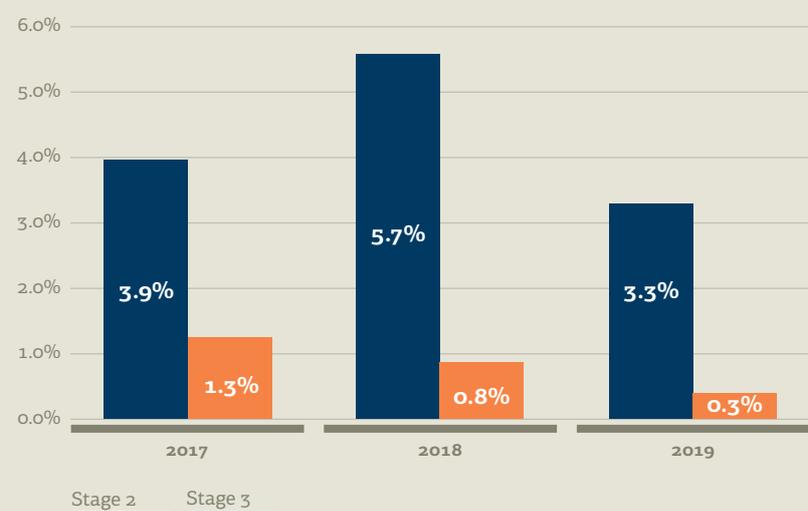
Default rate vs. PD - Fisheries

Figure 4-9



Staging - Fisheries

Figure 4-10



decreased by a whole percentage point in the past two year, standing at 0.3% at year-end 2019.

Total ECL for the fisheries sector increased by ISK 73 million in 2019 to a total of ISK 456 million at year end, mostly due to the gross carrying amount of loans in the sector increasing by ISK 4.4 billion.

#### 4.2.2.2 Real estate companies

Loans and advances to customers in the real estate industry amounted to ISK 136 billion as at 31 December 2019 (2018: ISK 137 billion). Credit exposure to the sector represented 11% of the Bank's loan portfolio.

The average PD value for the sector, weighted by gross carrying amount, decreased slightly in 2019 and was 3.2% at year end (2018: 3.3%). The average LGD value for the sector, weighted by gross carrying amount, has decreased considerably in the last two years, as housing prices have risen, and was 14.5% at year-end 2019.

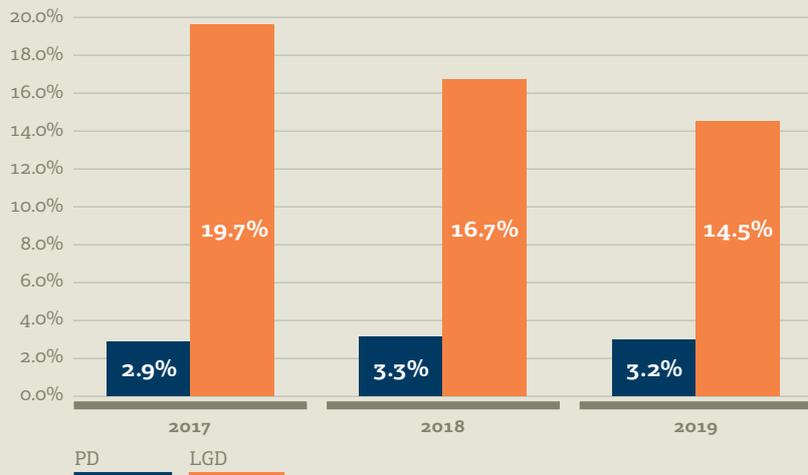
The realised default rate for real estate companies decreased in 2019 after increasing in 2018 and was 2.8%. The realised default rate for the sector has been consistently below the average PD values for the past few years.

The ratio of stage 2 loans to the total carrying amount of loans in the sector increased considerably in 2019 mostly due to an increase in probability of default measured point-in-time with the effects of economic conditions. The ratio of stage 3 loans to the total carrying amount of loans decreased slightly in 2019 and was 2.7% at year end.

Total ECL for the real estate sec-

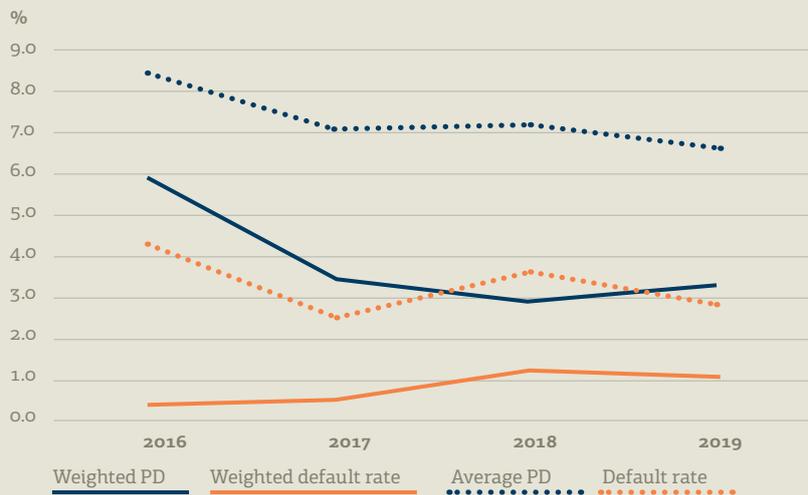
### PD & LGD - Real estate companies

Figure 4-11



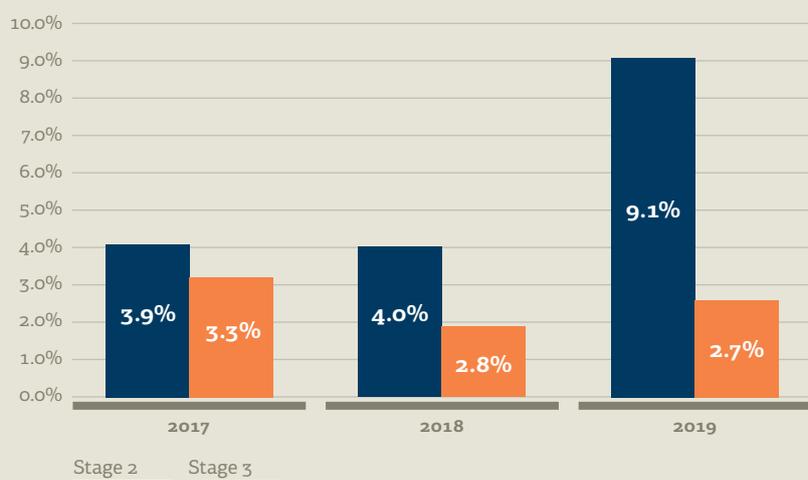
### Default rate vs. PD - Real estate companies

Figure 4-13



### Staging - Real estate companies

Figure 4-14



tor increased by ISK 566 million in 2019 to a total of ISK 2,174 million at year end, primarily due to increase in point-in-time PD and increased impairment for stage 3 loans.

#### 4.2.2.3 Construction companies

Loans and advances to construction companies amounted to ISK 99 billion as at 31 December 2019 (2018: ISK 88 billion). Credit exposure to the sector represented 7% of the Bank's loan portfolio.

The average PD value for the sector, weighted by gross carrying amount, increased slightly in 2019 and was at year end 4.5% (2018: 4.4%). The average LGD value for the sector, weighted by gross carrying amount, remains unchanged and was 22.8% at year-end 2019.

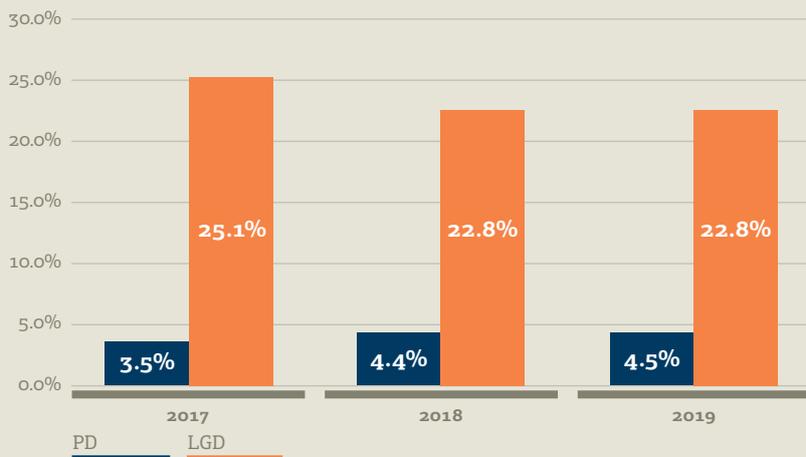
The realised default rate for construction companies decreased in 2019 after increasing in 2018 and was 3.1%. The realised default rate for the sector has been consistently below the average PD values for the past few years.

The ratio of stage 2 loans to the total carrying amount of loans in the sector increased considerably in 2019, from 6.9% to 19.2%. The ratio of stage 3 loans to the total carrying amount of loans decreased in 2019 and was 1.6% at year end.

Total ECL for the construction sector decreased by ISK 118 million in 2019 to a total of ISK 1,677 million at year end.

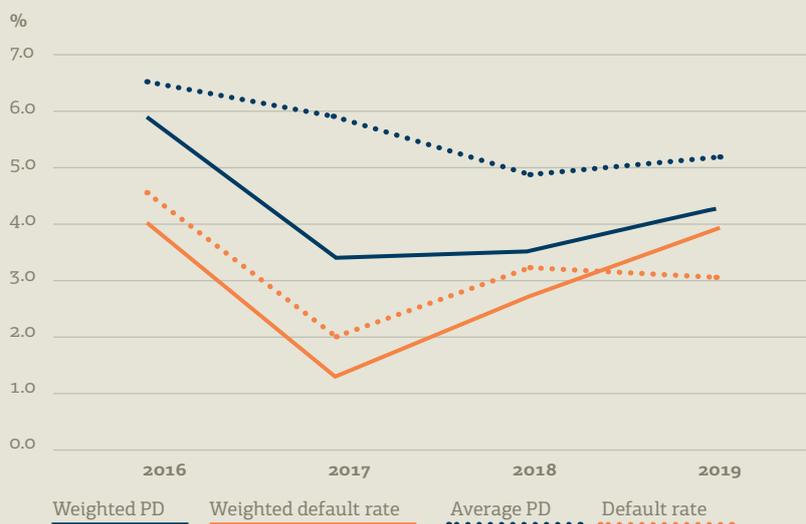
### PD & LGD - Construction companies

Figure 4-15



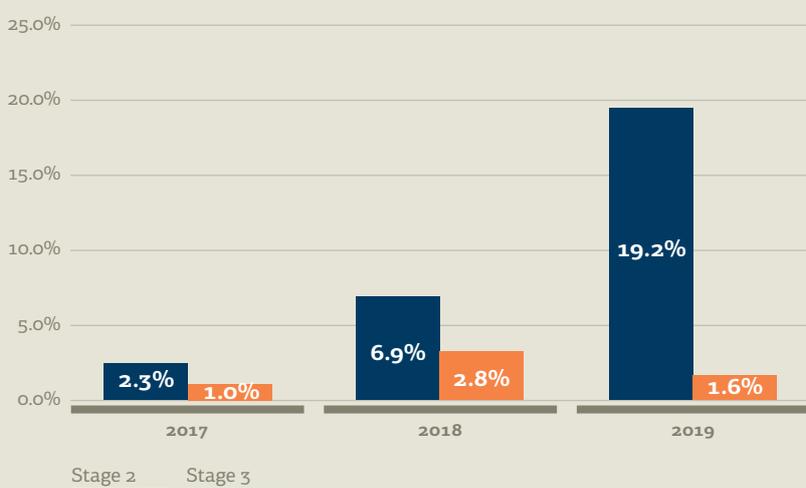
### Default rate vs. PD - Construction companies

Figure 4-16



### Staging - Construction companies

Figure 4-17



#### 4.2.2.4 Services

Loans and advances to customers in the services industry amounted to ISK 133 billion as at 31 December 2019 (2018: ISK 119 billion). Credit exposure to the sector represented 11% of the Bank's loan portfolio.

The average PD value for the sector, weighted by gross carrying amount, increased slightly in 2019 and is 3.4% at year end

(2018: 3.3%). The average LGD value for the sector, weighted by gross carrying amount, has been decreasing slightly for the last few years and is 20.0% at year-end 2019.

The realised default rate for the service sector was 2.1% in 2019. The default rate weighted by gross carrying amount was 6.0%.

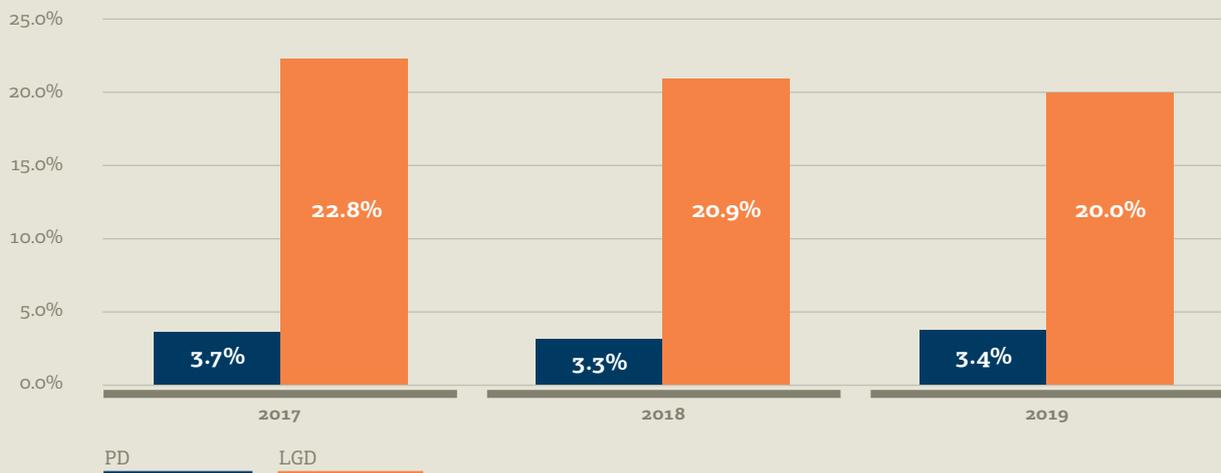
The ratio of stage 2 and stage 3 loans to the total carrying

amount of loans in the sector increased considerably in 2019. The stage 3 ratio increased by 2.7 percentage points after having decreased in 2018 and was 6.8% at year-end 2019.

Total ECL for the service sector increased by ISK 1.8 billion in 2019 to total of ISK 4,784 million at year end. The increase in ECL was mainly due to an increase in stage 3 impairment.

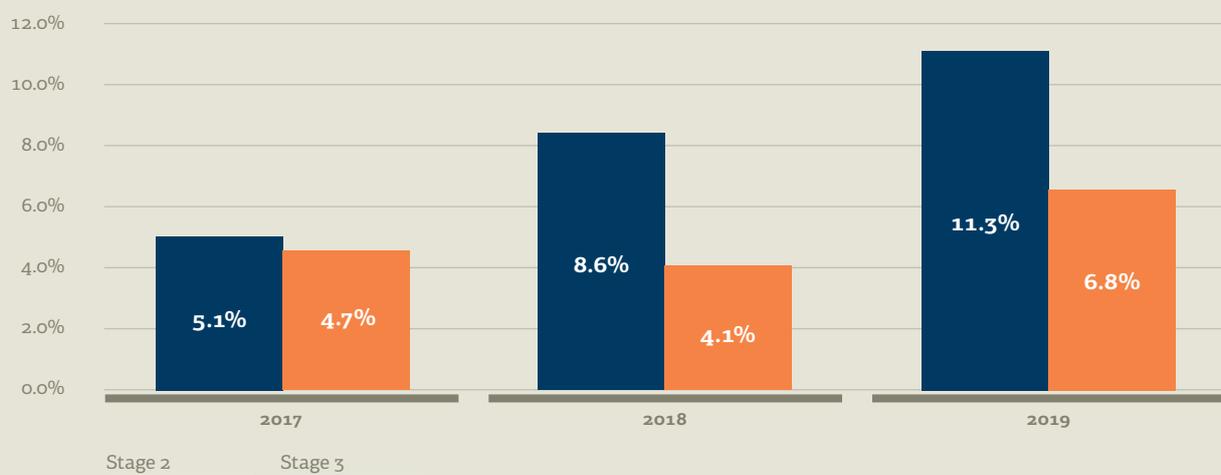
#### PD & LGD - Services

Figure 4-18



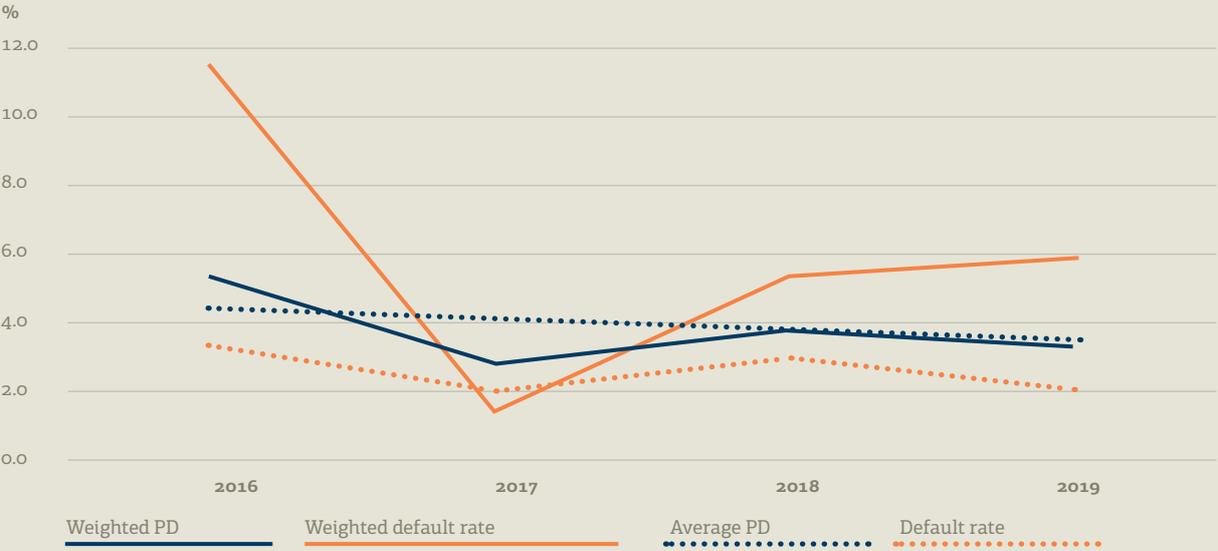
#### Staging - Services

Figure 4-19



Default rate vs. PD - Services

Figure 4-20



**The travel sector**

Loans to the travel industry account for ISK 96 billion (72%) of the service sector (2018: ISK 81 billion). Credit exposure to the travel sector represented

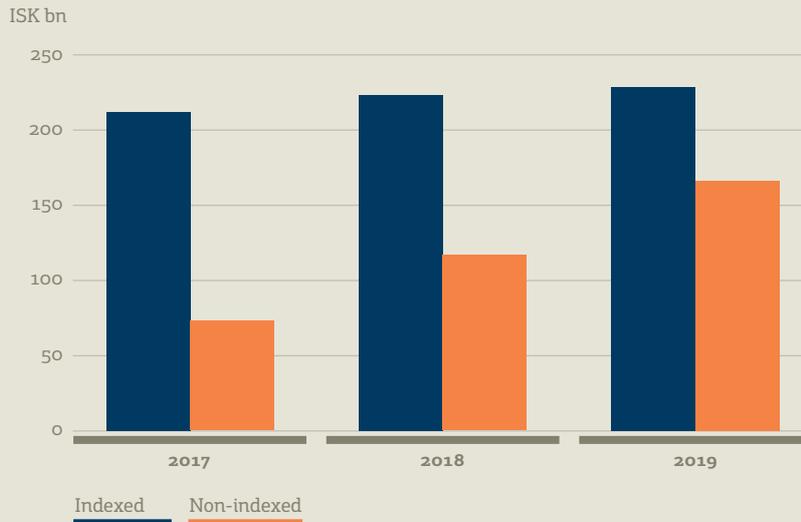
8% of the Bank’s loan portfolio at year-end 2019. The average PD, weighted by gross carrying amount, for the sector remained unchanged at 3.9% in 2019.

Total ECL for the travel sec-

tor grew from ISK 1.1 billion to ISK 3.3 billion at year-end 2019. This increase is explained by a significant increase in exposures in stage 3, growing from 3.7% to 7.1%, resulting in an increase in impairment.

## Indexed vs. non-indexed mortgages

Figure 4-21

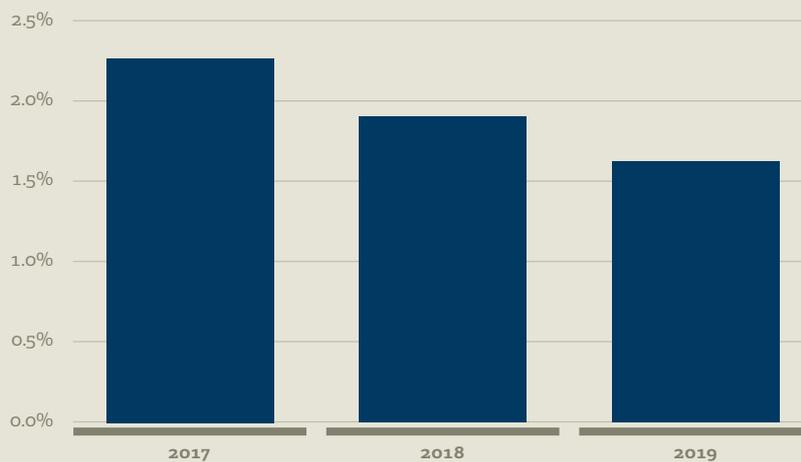


### 4.2.2.5 Mortgages

The carrying amount of mortgages in the portfolio was ISK 392 billion at year-end 2019 (2018: ISK 336 billion). Credit exposure in mortgages represented 33% of the Bank's loan portfolio at year-end 2019. Demand for non-indexed mortgages has grown in the past few years and at year-end 2019, such loans represented 42% of the gross carrying amount of the mortgage portfolio (2018: 34%), having represented only 25% of the mortgage portfolio in 2017.

## PD - Mortgages

Figure 4-22

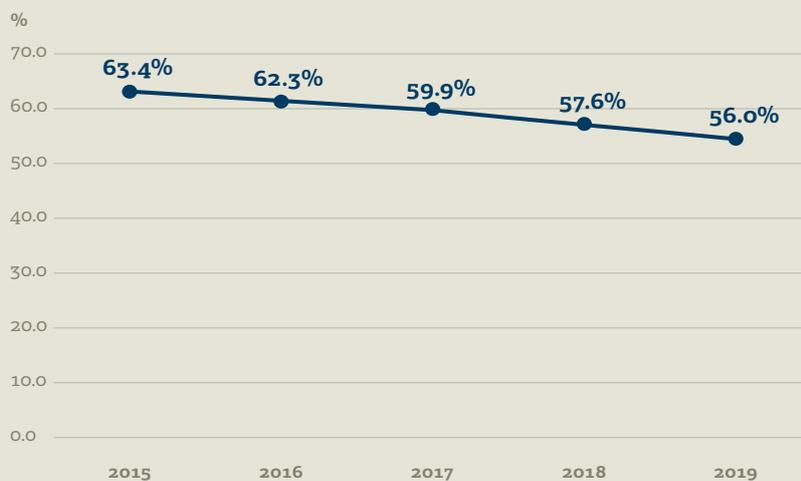


The loan-to-value (LTV) of mortgage loans, i.e., the ratio of loan value to the value of the underlying collateral has decreased in the past few years as housing prices in Iceland have risen consistently.

The average PD value for mortgages, weighted by gross carrying amount, continued to decrease in 2019 and was 1.6% at year end (2018: 1.8%). Total ECL for mortgages decreased slightly in 2019 and was ISK 848 million at year end (2018: ISK 886 million).

## Loan-to-value (LTV) - Mortgages

Figure 4-23



### 4.2.3 Risk concentration

Concentration risk includes (i) single name concentrations of large (connected) individual counterparties and (ii) significant exposures to groups of counterparties whose likelihood of default is driven by common underlying factors, e.g. sector, economy, geographical location, instrument type, or other.

Limit management for single name and segment concentrations is set, monitored and managed through the Bank's risk appetite and its limit management structure. The Bank's risk profile for concentration risks is reported monthly to the Risk & Finance Committee and the Board of Directors according to internal guidelines.

The Bank uses the identification of risk concentration in the credit portfolio as a credit risk management parameter. Risk concentrations arise in the credit portfolio

as an inevitable consequence of the Bank's business strategy. Concentration risk is credit risk related to the degree of diversification in the credit portfolio and includes both single name concentration risk and segment concentration risk.

According to FME Regulation No. 233/2017, on prudential requirements for credit institutions and investments firms, exposures to a single customer or a group of related customers – after the deduction of particularly secure claims – may not exceed 25% of the capital base. No exposure to a single customer or a group of related customers exceeded 25% in the year 2019, and at year end the largest single-customer exposure was well below 25%.

The Bank's risk profile for large exposures is reported monthly to management and the Board of Directors according to internal guidelines.

As for single name concentration, the Bank's Board of Directors sets portfolio limits for segment concentration in the Bank's risk appetite.

It is a logical consequence of the Bank's business model that credit exposure from lending activities is concentrated to some industries. At year-end 2019, lending to individuals represented 41% of the Bank's total credit exposure (2018: 39%). Most of the demand from individuals is for property financing, and the Bank's lending to individuals is therefore mostly secured by real estate.

The Bank's credit exposures are primarily to Icelandic corporate customers. Companies in the real estate, fisheries and service sectors represent the largest exposure to single industry sectors.

Customers domiciled in Iceland accounted for 97% of the Bank's total credit exposure in 2019 (2018: 96%). The majority of ex-

### Industry concentration

Figure 4-24

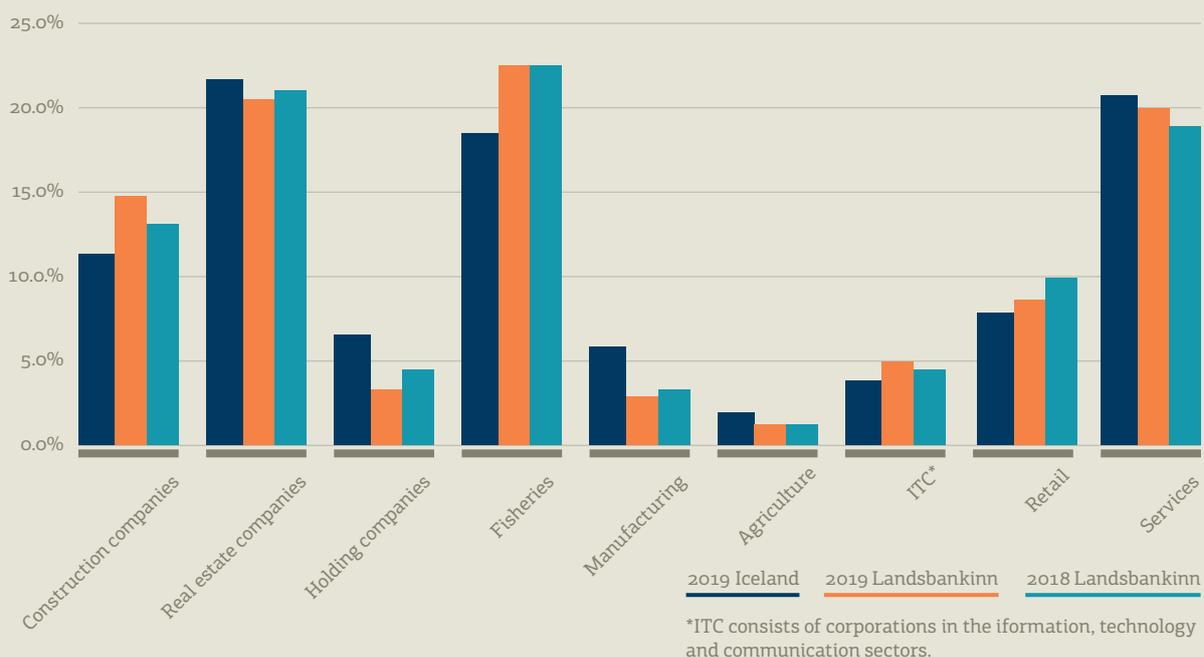
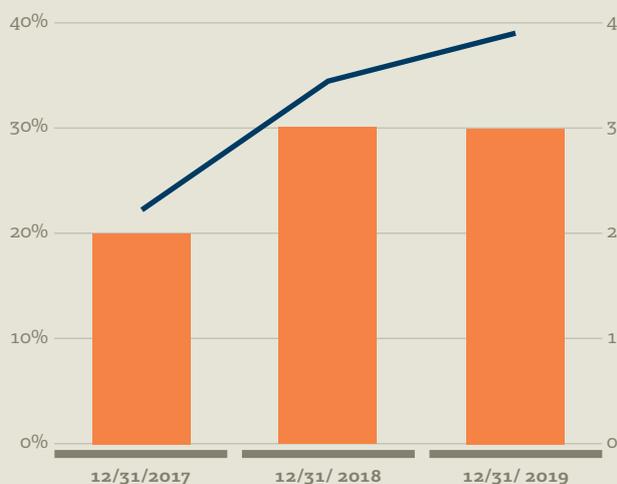


Figure 4-25

**Large exposure between 10% and 20% of the Group's eligible capital**



Number of large exposure - right axis

Large exposures to eligible capital - left axis

Figure 4-26

**Loans and advances by geographical area**



Loans and advances to financial institutions

Loans and advances to customers

Figure 4-27

**Rating grade distribution - Corporates**

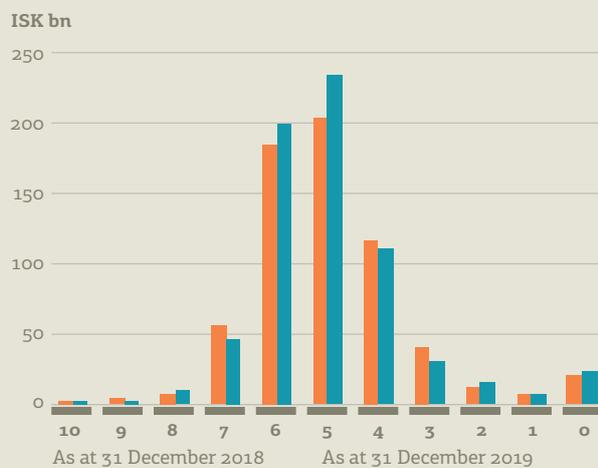
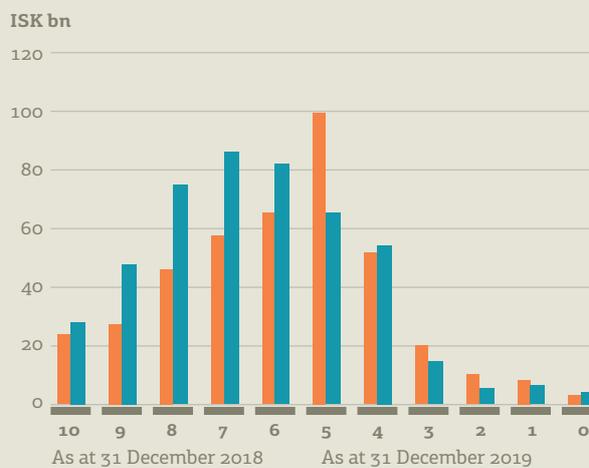


Figure 4-28

**Rating grade distribution - Individuals**



posures to foreign counterparties relate to the management of the Bank's foreign liquidity reserves.

The Bank estimates sector concentration risk as the difference between sector concentration for Iceland and the sector concentration in the Bank's portfolio.

Figure 4-25 shows a comparison of industry concentration between the Bank's portfolio and the Icelandic loan market as a whole. Data for Iceland is from the Central Bank of Iceland.

**4.2.4 Probability of default & migration analysis**

Migration analysis in this section is based on the Bank's rating scale and PD estimates. At year-end 2019, the total average PD weighted by gross carrying amount was 2.3% (2018: 2.4%). Excluding loans to financial institutions, which as mentioned above relates to the management of the Bank's foreign

Figure 4-29

Rating migration of corporates in 2019

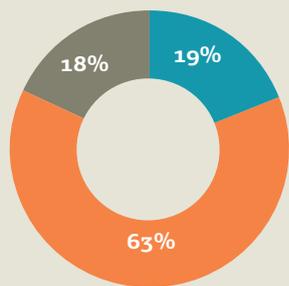


Figure 4-30

Rating migration of individuals in 2019



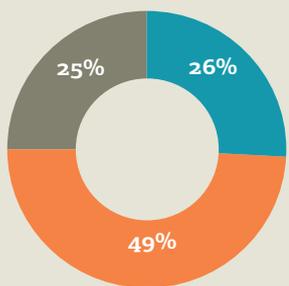
Rating migration of corporates in 2019  
Carrying amount



Downgrades  
Unchanged  
Upgrades

Figure 4-31

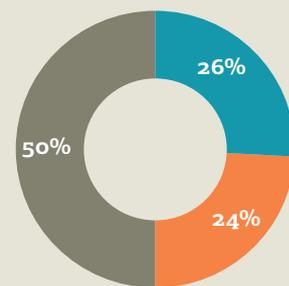
Rating migration of corporates in 2019  
No. of customers



Downgrades  
Unchanged  
Upgrades

Figure 4-32

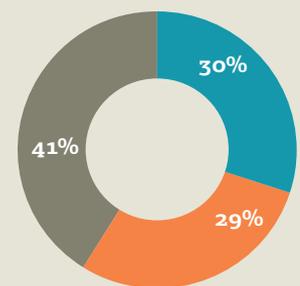
Rating migration of individuals in 2019  
Carrying amount



Downgrades  
Unchanged  
Upgrades

Figure 4-33

Rating migration of individuals in 2019  
No. of customers



Downgrades  
Unchanged  
Upgrades

Figure 4-34

liquidity reserves, average PD was 2.4% (2017: 2.5%).

The overall credit quality of the loan portfolio increased slightly in 2019. Credit quality in the individual portfolio increased significantly during 2019 while the corporate portfolio slightly declined in credit quality during the year. Most notable is the decline in credit quality in the retail and

service sector as well as a significant decline for holding companies. A low average PD of new loans and a high average PD of derecognised loans are both factors in the decrease in overall PD. The effect of defaults during the year on the decrease in the overall PD is about the same as for the other two factors combined. Other underlying factors, such as rating migration for existing performing

customers, had a slightly negative effect on the overall PD.

Figures 4-26 and 4-27 show the rating grade distribution of the loan portfolio for corporates and individuals. In 2019, a new rating model for individuals was implemented, explaining the drastic change in the rating distribution.

Figure 4-35

**12 month default rate vs. probability of default band - Corporates 2019**

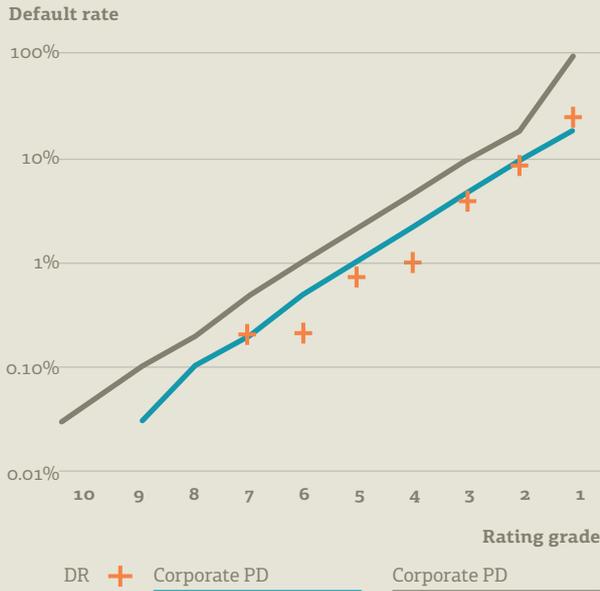
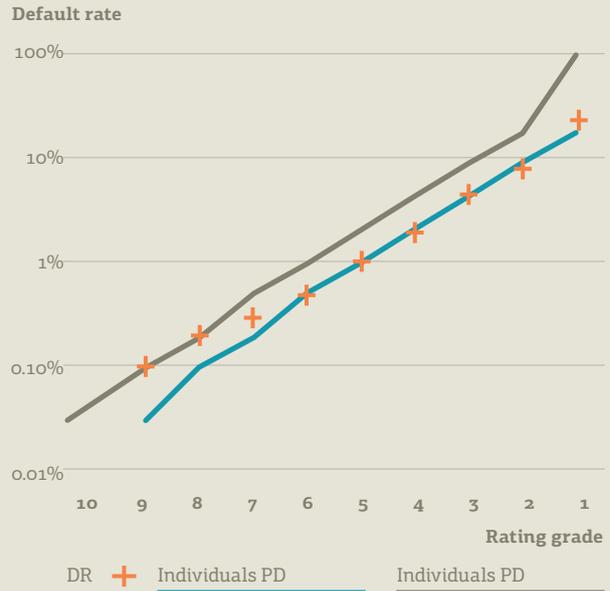


Figure 4-36

**12 month default rate vs. probability of default band - Individuals 2019**



**4.2.5 Loan impairment**

Total ECL amounted to ISK 15.2 billion at year-end 2019, as compared to ISK 13.1 billion at the start of the year. The increase in ECL during the year 2019 is primarily due to changes in models and risk parameters, movements from stage 1 to stage 2, and an increased impairment for exposures moving to stage 3. Details on the development of ECL dur-

ing the year can be found in note 66 in the Bank's annual financial statement for 2019.

ECL increased across all stages in 2019. For individuals, the total ECL decreased by ISK 191 million while ECL in the corporate portfolio increased by ISK 2.4 billion, most notably in the service sector. The ratio of ECL to total loans in stage 1 decreased significantly for individuals in

2019 but increased slightly for corporates. A decrease in this ratio signifies increased credit quality for performing loans without significantly increased credit risk. The ratio of ECL to total loans in stage 2 increased both for individuals and corporates in 2019. The ratio of ECL to total loans in stage 3 decreased for individuals but increased slightly for corporates.

Figure 4-37

Expected credit loss by stage

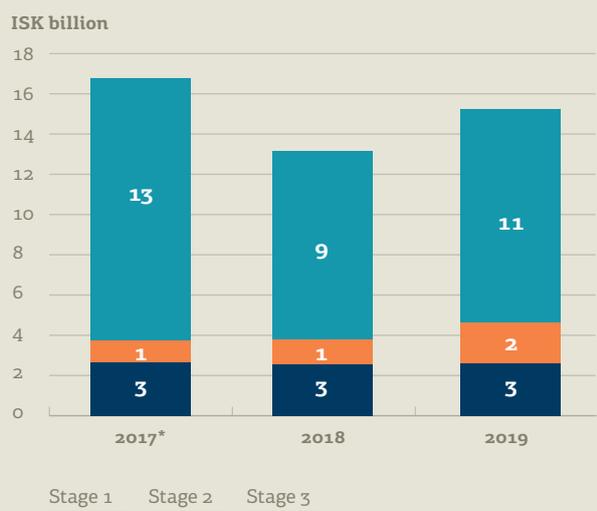


Figure 4-38

ECL to gross carrying amount - Stage 1



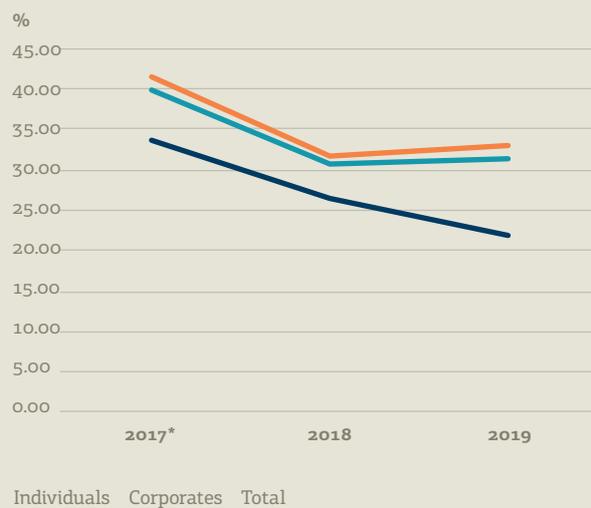
Figure 4-39

ECL to gross carrying amount - Stage 2



Figure 4-40

ECL to gross carrying amount - Stage 3



\*IFRS9 was not yet implemented in 2017. Specific and general impairment is used as a proxy

# 5 Market Risk

5.1 Market risk management and policy .....	61
5.2 Control and monitoring .....	62
5.3 Market risk exposure .....	62
5.4 Measuring market risk.....	63



# Market Risk

**Market risk is the risk that changes in market prices will adversely impact the fair value or future cash flows of financial instruments. Market risk arises from open positions in currency, equities and interest rate products, all of which are exposed to general and specific market movements and changing volatility levels in market rates and prices, for instance in interest rates, inflation, foreign exchange rates and equity prices.**

- » The Bank's market risk decreased significantly in 2019, first and foremost due to lower exposure to equities in the trading book and lower net FX balance;
- » Total market risk in the Bank's trading book together with foreign exchange risk and CVA risk, as measured by economic capital, was ISK 2.3 billion at year-end 2019 compared to ISK 4.1 billion at the end of 2018;
- » The majority of the Bank's exposures that entail market risk consist of equities and equity derivatives, bonds and fixed income products and open currency positions.

## Economic capital

ISK bn



Market risk is the risk that changes in market prices will adversely impact the fair value or future cash flows of financial instruments. Market risk arises from open positions in currency, equities and interest rate products, all of which are exposed to general and specific market movements and changing volatility levels in market rates and prices, for instance in interest rates, inflation, foreign exchange rates and equity prices.

The majority of the Bank's ex-

posures that entail market risk consist of equities and equity derivatives, bonds and fixed income products, and open currency positions.

The Bank's market risk decreased significantly in 2019, mainly due to significantly lower exposure in the Bank's trading portfolio in equities and lower net FX balance. Total market risk in the Bank's trading book together with foreign exchange risk, as measured by EC, was ISK 2.3 billion at year-end 2019 compared to

ISK 4.1 billion at the end of 2018. The Bank's market risk remains modest and well within the Bank's risk appetite.

## 5.1 Market risk management and policy

The Board of Directors is responsible for determining the Bank's market risk appetite, and the CEO and the Risk & Finance Committee are responsible for developing detailed market risk management

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**Total net exposure subject to market risk**

Table 5-1

---

	Net position at year-end	
	2019	2018
Equities and equity instruments in the trading book	1,759	4,284
Bonds and debt instruments in the trading book	5,924	-256
FX balance	2,989	5,420

---

policies and setting market risk limits. Market risk is managed centrally by Treasury as well as within trading units, in accordance with the Bank's policies, limits and risk appetite. The objective of market risk management is to identify, locate and monitor market risk exposures and to analyse and report them to appropriate parties. Together, the risk appetite of the Bank and the market risk policies set the overall limits for market risk management within the Bank in accordance with the Bank's three lines of defence principle.

The Bank separates its exposure to market risk into trading and non-trading portfolios, managing each separately. Trading portfolios include positions arising from market-making, hedges for derivative sales and proprietary position-taking. Non-trading portfolios include positions arising from the Bank's retail and commercial banking operations, proprietary position-taking as part of asset and liability management, and funding transactions, managed by Treasury. Treasury is also responsible for daily liquidity management, which entails exposure to market risk. Market risk mitigation reflects the Bank's overall risk appetite

by identifying the target level for market risk factors and to limit exposure in line with the Bank's risk appetite. Other market risk mitigation plans are made on a case-by-case basis involving hedging strategies and risk reduction through diversification.

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## 5.2 Control and monitoring

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The aim of the market risk management process is to ensure that market risk levels are within the Bank's risk appetite and mitigate the risk of losses while maintaining acceptable profitability. This entails quickly detecting and correcting deficiencies in compliance to policies, processes and procedures along with limit monitoring, handling limit breaches, risk modelling and reporting. The Bank monitors various indicators that can provide warning of an increased risk of future losses. Market risk indicators need to be concise, reported in a timely manner, give clear signals, and highlight portfolio risk concentrations and reflect current risk positions. Risk reports show the Bank's total risk in addition to summarising risk concentration in different business units and asset classes, as well as across

other attributes, as appropriate, pursuant to the Bank's activities.

Market risk arising from trading and non-trading activities is measured, monitored and reported on a daily, weekly and monthly basis. The market risk limits set by the Risk & Finance Committee are monitored by Market Risk, and all exceptions and breaches of limits are reported on a regular basis to the Risk & Finance Committee and other relevant parties as necessary. Furthermore, summarised reports highlighting market risk, risk appetite measurements and any concerns regarding market risk are sent to the Board of Directors on a regular basis.

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## 5.3 Market risk exposure

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Table 5-1 summarises the Bank's exposure to market risk at year-end 2019.

The Bank also faces counterparty credit risk arising from derivative contracts with customers and financial institutions. Counterparty credit risk is, however, very low compared to other credit risk and is mitigated through strict collateral requirements and lim-

## Total market risk (REA measure) at year-end

Table 5-2

	2019		2018	
	REA	Ratio to REA	REA	Ratio to REA
Equity price risk in the trading book	3,807	0.4%	8,823	0.9%
Interest rate risk in the trading book	3,658	0.4%	2,037	0.2%
Foreign exchange risk	4,183	0.4%	6,415	0.6%
CVA risk	106	0.0%	464	0.0%
<b>Total</b>	<b>11,754</b>	<b>1.2%</b>	<b>17,739</b>	<b>1.8%</b>

its. Further information about the Bank's exposure to counterparty credit risk can be found in the additional disclosures accompanying this document (see also 4.1.4.1).

### 5.3.1 Banking book exposures

The banking book exposures of the Bank pertaining to market risk are exposures in equities and bonds. The vast majority of the equities are unlisted and are, for the most part, legacy positions obtained through corporate restructuring, or acquired when the Bank was established in 2008. The bond holdings in the banking book are comprised of strategic investments and liquidity management instruments. Capital reserved against these exposures is classified as credit risk.

## 5.4 Measuring market risk

The Bank uses risk exposure amounts (REA) and economic capital (EC) as a common denominator for measuring risk across different asset classes, including those assets subject to market risk. Risk exposure amounts are determined by applying specific risk weights to the Bank's assets, according to capital requirement regulations. Several other

## Total Market Risk (Ratio to total REA)

Figure 5-1



indicators are used as measures of market risk as well, including Value-at-Risk (VaR), profit and loss analysis, delta positions and net positions across different attributes such as the currency and issuer. These risk measurements are supplemented by specific stress tests and scenario analyses as appropriate, taking the Bank's balance sheet composition and operating environment into account.

Total market risk, measured as the ratio of risk exposure amounts to total REA, is relatively low, amounting to 1.2% at

year-end 2019 (compared to 1.8% at year-end 2018), well within the Bank's market risk appetite.

### 5.4.1 Equity price risk in the trading book

Equity price risk is the risk of equity value fluctuations due to open positions in equity-based instruments. The Bank's equity trading portfolio is comprised of proprietary trading positions and exposures due to market making, including equity derivatives and hedging positions. All equity-based derivative contracts are usually fully hedged with regards

to market risk and are subject to various, strict limit requirements.

#### 5.4.2 Interest rate risk in the trading book

Interest rate risk is the risk of loss arising from the impact of adverse changes in market interest rates. The Bank's trading portfolios contain exposures due to market making and proprietary trading, highly concentrated on government-guaranteed bills/

bonds, as well as covered bonds and fixed income derivatives. As with equity-based derivatives, all fixed income derivative contracts are usually fully hedged with regards to market risk and are subject to strict limit requirements.

#### 5.4.3 Interest rate risk in the banking book

Interest rate risk in the banking book is the current or prospective risk to earnings and capital arising from adverse movements in interest rates. Changes in interest rates on the Bank's assets and liabilities impact its interest rate margin and/or the value of its equity. This risk is primarily the result of duration mismatch of assets and liabilities. Net positions

### Assets and liabilities in the banking book by interest rate fixing period

Table 5-3

	Net position at year end 2019				
	Up to 3 M	3-12 M	1-5 Y	Over 5 Y	Total
Total assets	1,037,797	152,484	148,684	44,747	1,383,712
Total liabilities	-814,888	-29,735	-253,303	-62,706	-1,160,632
Net on-balance sheet position	222,909	122,749	-104,619	-17,959	223,080
Effect of derivatives held for risk management	-85,357	3,877	81,480	0	0
Net off-balance sheet position	16,143	10,192	-24,335	-2,000	0
<b>Total interest repricing gap</b>	<b>153,695</b>	<b>136,818</b>	<b>-47,474</b>	<b>-19,959</b>	<b>223,080</b>
	Net position at year end 2018				
	Up to 3 M	3-12 M	1-5 Y	Over 5 Y	Total
Total assets	1,050,239	75,301	106,190	58,886	1,290,616
Total liabilities	774,639	22,522	205,726	65,177	1,068,064
Net on-balance sheet position	275,600	52,779	311,916	-6,291	222,552
Effect of derivatives held for risk management	-83,861	0	83,861	0	0
Net off-balance sheet position	16,957	56	-14,711	-2,303	0
<b>Total interest repricing gap</b>	<b>208,696</b>	<b>52,835</b>	<b>-30,386</b>	<b>-8,594</b>	<b>222,552</b>

## Interest rate risk (fair value sensitivity) in the banking book at year end

Table 5-4

	2019		2018	
	+100 bps	-100 bps	+100 bps	-100 bps
ISK non-indexed	205	-248	-916	962
ISK indexed	4,437	-4,510	426	170
EUR	1,405	-1,478	2,283	-2,413
SEK	141	-142	226	-229
USD	28	-28	-157	164
Other	31	-31	-40	42
<b>Total</b>	<b>6,247</b>	<b>-6,437</b>	<b>1,822</b>	<b>-1,304</b>

of assets and liabilities in the banking book by the interest rate fixing period, at year-end 2019 and 2018, are shown in Table 5-3:

The Bank employs a monthly stress test of the interest rate risk in the banking book by measuring the impact of shifting the relevant interest rates for every currency on the fair value of all interest-rate sensitive assets and liabilities in the banking book.

Table 5-4 summarises the sensitivity of the Bank's banking book fair value resulting from a flat 100 bps upward and downward shift of all yield curves at year end.

The fair value sensitivity increased significantly during the year, mainly due to the Bank's composition of CPI-linked assets

and liabilities; shorter duration of inflation-linked assets and increased borrowing through inflation-linked covered bonds had an adverse effect on the Bank's interest rate risk.

### 5.4.4 Foreign exchange risk

Foreign exchange risk (FX risk) is the risk of loss due to exchange rate fluctuations. Foreign exchange risk within the Bank may arise from holding assets in one currency and liabilities in another, or from a spot or forward

### Net FX balance

Table 5-5

	Net position at year-end	
	2019	2018
CHF	-142	128
EUR	2,540	3,842
GBP	489	-123
JPY	-21	92
USD	335	1,085
Other	-212	396
<b>Total</b>	<b>2,989</b>	<b>5,420</b>

foreign exchange trade, currency swaps or other currency contracts that are not matched with an offsetting contract. The net FX balance at year-end 2019 and 2018 can be seen in Table 5-5.

#### 5.4.5 Other market risk

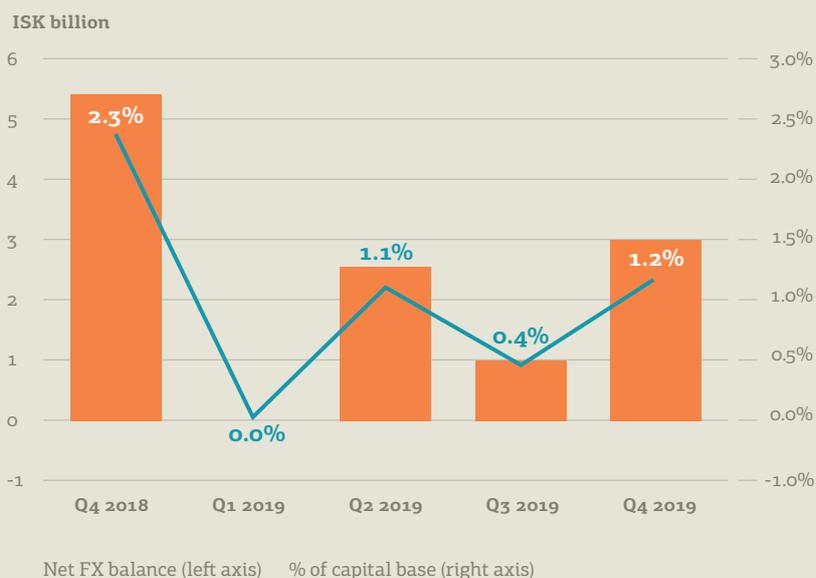
Other market risk within the Bank is comprised of indexation risk and risk due to credit valuation adjustment (CVA).

CVA is an adjustment to the fair value (or price) of derivative instruments to account for counterparty credit risk. The derivative contracts the Bank enters into that entail CVA risk are well collateralised, reducing CVA risk. Hence, the Bank's CVA risk is low and considered immaterial.

Indexation risk is the risk that the fair value or future cash flows of CPI-indexed financial instruments may fluctuate due to changes in the Icelandic CPI index. Mismatched CPI-linked assets and liabilities expose the Bank to indexation risk. The Bank's total CPI indexation balance decreased even further in 2019, amounting to ISK 129 billion at year-end 2019 as compared to ISK 171 billion at year-end 2018, mainly due to increased borrowing as well as decreased lending in CPI-linked loans.

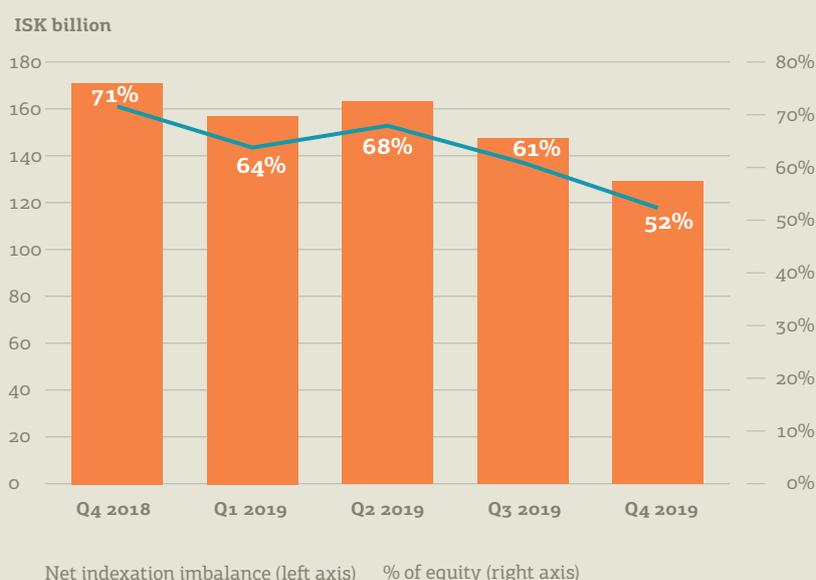
Net FX balance

Figure 5-2



Indexation imbalance

Figure 5-3



# 6 Liquidity Risk

6.1 Identification.....	69
6.2 Management.....	69
6.3 Assessment.....	73
6.4 Control and monitoring .....	75
6.5 Funding .....	76



# Liquidity Risk

**Liquidity risk is the risk that the Bank will encounter difficulty in meeting its financial liability obligations with cash or other financial assets, or having to do so at excessive cost. This risk arises from earlier maturities of financial liabilities than financial assets.**

- » Liquidity risk is identified as one of the Bank's key risk factors and great emphasis is placed on liquidity risk management within the Bank, which is reflected in both its risk appetite as well as in internal liquidity management policies and rules. The Bank's policy remains to sustain a strong liquidity position in the near- and longer-term as is reflected in the Bank's business plan;
- » The Bank's liquidity position is well above regulatory requirements and the Bank's risk appetite. Total liquidity coverage ratio was 161% at year end 2019 (year end 2018: 158%) and the Bank's LCR in foreign currencies was 769% at year end 2019 (year end 2018: 534%).
- » The Central Bank of Iceland made changes to the Rules on Liquidity Ratio in December 2019, implementing a minimum requirement for liquidity ratio in ISK. Effective as of January 1st 2020, the minimum LCR in ISK is 30%. The Bank's LCR in ISK was 61% at year end 2019.

**Total Liquidity Coverage Ratio**



Liquidity risk is the risk that the Bank will encounter difficulty in meeting its financial liability obligations that are settled by delivering cash or another financial asset, or of having to do so at excessive cost. This risk arises from earlier maturities of financial liabilities than financial assets.

Liquidity risk is identified as one of the Bank's key risk factors and great emphasis is placed on liquidity risk management within the Bank, which is reflected in

both its risk appetite as well as in internal liquidity management policies and rules. The Bank's policy is to sustain a strong liquidity position in the near and longer term, which is reflected in the Bank's risk appetite and its business plan.

The Bank's liquidity position is sound and well above regulatory requirements and the Bank's risk appetite. The total liquidity coverage ratio was 161% at year-end 2019 (year-end 2018: 158%) and the Bank's LCR in foreign

currencies was 769% at year-end 2019 (year-end 2018: 534%). The Central Bank of Iceland made changes to the Rules on Liquidity Ratio in December 2019, implementing a minimum requirement for the ISK-denominated liquidity ratio. Effective as of 1 January 2020, the minimum LCR in ISK is 30% and is due to increase to 50% over the next two years in 10 percentage-point annual increments. The Bank's LCR in ISK was 61% at year-end 2019. For further information, see 6.2.1.

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## 6.1 Identification

The Board sets a liquidity risk management policy for the Bank. Liquidity risk management refers to the internal policies and procedures containing quantitative and qualitative objectives, limits and reporting put in place. The policy describes how the Bank identifies, evaluates, measures, monitors, manages and reports its liquidity. The policy clearly outlines the structure, responsibilities and controls for managing liquidity risk within the Bank and includes a liquidity contingency plan. The contingency plan provides a framework for detecting an upcoming liquidity event with predefined early warnings and actions for preventing temporary or longer term liquidity disruptions.

## 6.2 Assessment

The Bank measures two key indicators, LCR and NSFR, to monitor and manage short-term liquidity risk and medium to long-term liquidity risk respectively. The Bank complies with the liquidity rules set by the Central Bank of Iceland, No. 266/2017. The liquidity rules are based on the liquidity requirements set forth in the CRD IV/CRR framework, which was fully implemented in Iceland in 2017 (Regulation No. 233/2017). The Bank also follows Regulation No. 1032/2014, on funding, set by the Central Bank of Iceland as well as following Guidelines No. 2/2010 from the Icelandic Financial Supervisory Authority (FME) on best practice for managing liquidity in banking organisations. The guidelines further promote sound management and supervision of liquidity within the Bank,

which is reflected in the Bank's risk appetite and internal processes and policies.

The Bank submits regular reports on its liquidity position to the Central Bank and the FME.

### 6.2.1 Liquidity coverage ratio (LCR)

The Bank measures the liquidity coverage ratio (LCR) as a key indicator for short-term liquidity. The objective of the ratio is to promote short-term resilience by ensuring that the Bank has sufficient high-quality liquid assets to withstand a significant stress scenario lasting 30 calendar days. Quantitative information on the Bank's LCR at year-end 2019 is shown in the EU LIQ1 template below. Further information can be found in the additional disclosures accompanying this document.

Table 6-1

		Total unweighted value*	Total weighted value*
		31.12.2019	31.12.2019
<b>Number of data points used in the calculation of averages</b>		12	12
<b>HIGH-QUALITY LIQUID ASSETS</b>			
1	Total high-quality liquid assets (HQLA)		100,004
<b>CASH-OUTFLOWS</b>			
2	Retail deposits and deposits from small business customers, of which:	328,594	27,836
3	Stable deposits	136,361	6,818
4	Less stable deposits	192,233	21,018
5	Unsecured wholesale funding	191,252	106,141
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	0	0
7	Non-operational deposits (all counterparties)	190,078	104,967
8	Unsecured debt	1,174	1,174
9	Secured wholesale funding		0
10	Additional requirements-	112,747	13,231
11	Outflows related to derivative exposures and other collateral requirements	2,234	2,234
12	Outflows related to loss of funding on debt products	1,370	1,370
13	Credit and liquidity facilities	109,144	9,628
14	Other contractual funding obligations	4,577	473
15	Other contingent funding obligations	23,195	5,927
16	<b>TOTAL CASH OUTFLOWS</b>		153,609
<b>CASH-INFLOWS</b>			
17	Secured lending (e.g. reverse repos)	0	0
18	Inflows from fully performing exposures	123,732	94,705
19	Other cash inflows	9,689	2,056
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)		0
EU-19b	(Excess inflows from a related specialised credit institution)		0
20	<b>TOTAL CASH INFLOWS</b>	133,421	96,761
EU-20a	<b>Fully exempt inflows</b>	0	0
EU-20b	<b>Inflows Subject to 90% Cap</b>	0	0
EU-20c	<b>Inflows Subject to 75% Cap</b>	133,421	96,761
			<b>TOTAL ADJUSTED VALUE</b>
21	<b>LIQUIDITY BUFFER</b>		<b>100,004</b>
22	<b>TOTAL NET CASH OUTFLOWS</b>		<b>57,604</b>
23	<b>LIQUIDITY COVERAGE RATIO (%)</b>		<b>178%</b>

\*Values are a simple arithmetic average of end of month data for each month preceding 31 December 2019.

## Total deposits by groups

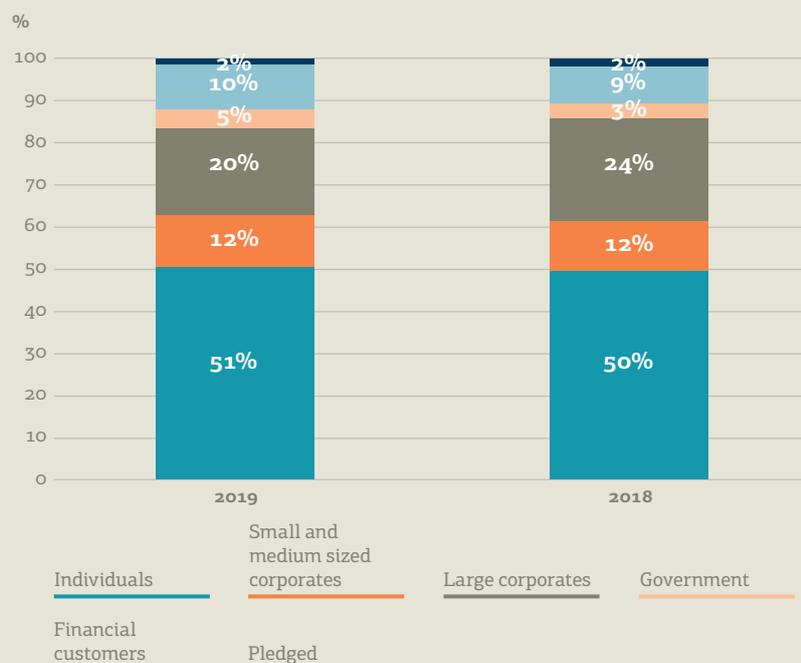
Table 6-2

As at 31 December 2019	Run off rate	0-30 days	Over 30 days	Total
Retail deposits				
Individuals	5% - 100%	269,432	115,493	384,925
Small and Medium Sized Corporates	5% - 100%	64,672	7,145	71,817
Operational deposits				
	5% - 25%	0	0	0
Non-operational deposits				
		0	0	0
Large Corporates	20% - 40%	108,386	20,477	128,863
Government	20% - 40%	25,416	9,459	34,875
Financial customers	100%	55,330	71,375	126,705
Other*		8,297	392	8,689
<b>Total deposits</b>		<b>531,533</b>	<b>224,341</b>	<b>755,874</b>

\*Pledged deposits that are not included in the Bank's LCR but are included in the Bank's financial statements.

## 0-30 days maturity deposits by groups\*

Figure 6-2



## Total deposits by maturity

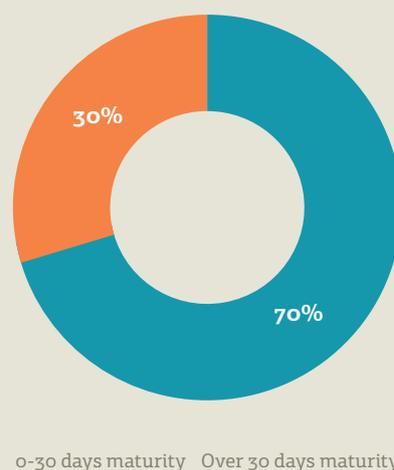


Figure 6-3

\*According to the Central Bank's Rules on Liquidity Coverage Requirements

Table 6-2 shows the Bank's deposit base at year-end 2019. Run-off rates are used to estimate deposit outflows under stressed conditions for the next 30 calendar days and are set according to liquidity rules No. 266/2017. Figure 6-2 and Figure 6-3 show further breakdown of the Bank's deposit base.

The Central Bank of Iceland changed the Rules on Liquidity Coverage Requirements for Credit Institutions in December 2019, effective as of 1 January 2020. The changes include a new minimum requirement for the liquidity coverage ratio in ISK (LCR-ISK). The implementation of the new minimum require-

ment is according to a schedule set forth by the Central Bank which requires the Bank to have a minimum LCR-ISK of 30% as of 1 January 2020, 40% as of 1 January 2021 and 50% as of 1 January 2022.

Liquidity coverage ratio in ISK is a part of the Bank's liquid-

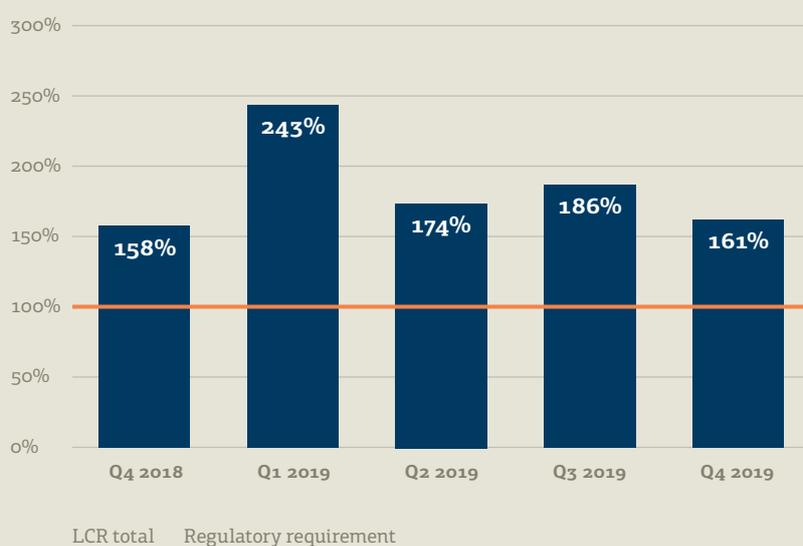
ity management policy and the Bank's risk appetite, which together define target levels and constraints for liquidity management in ISK. The Bank will continue to work to strengthen its liquidity ratio in ISK, in line with the Bank's risk appetite and the implementation schedule set forth by the Central Bank. Figure 6-6 shows the development of the Bank's LCR in ISK.

### 6.2.2 Net Stable Funding Ratio (NSFR)

The net stable funding ratio has a longer time horizon. Its objective is to capture structural issues in the balance sheet with the aim to provide a sustainable maturity structure of assets and liabilities. The aim of NSFR is to promote more medium and long-term funding. It establishes a minimum acceptable amount of stable funding based on the Bank's liquidity risk profile and limits over-reliance on short-term wholesale funding.

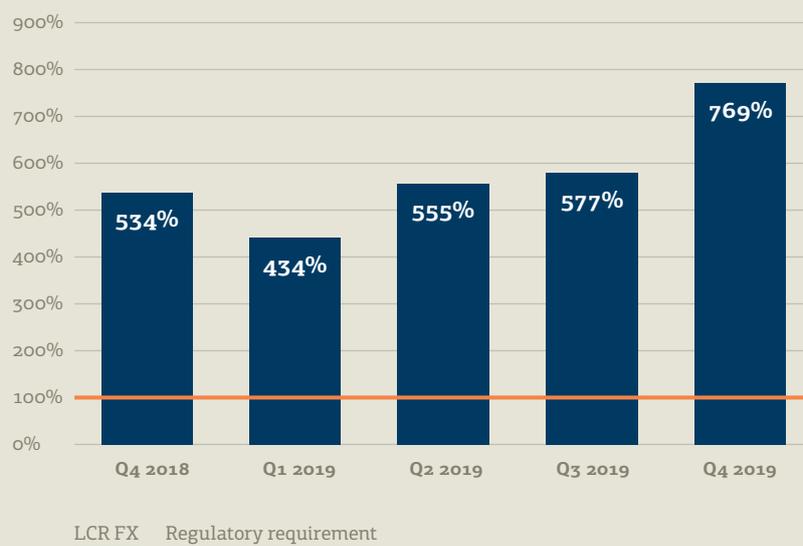
Liquidity Coverage Ratio (Total)

Figure 6-4



Liquidity Coverage Ratio (FX)

Figure 6-5



NSFR is defined as the ratio between the amount of available stable funding to the amount of required stable funding:

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

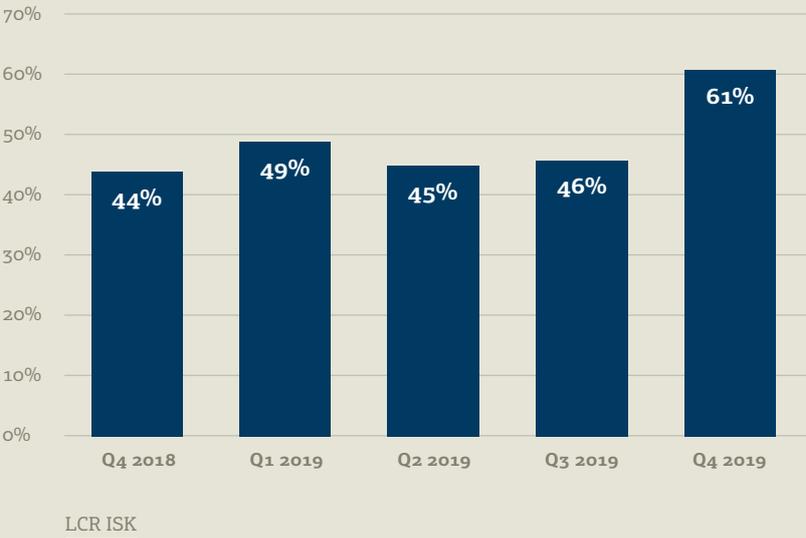
Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR. The amount of such stable funding required of the Bank is a function of the liquidity characteristics and residual maturities of the various assets held by the institution, as well as those of its off-balance sheet (OBS) exposures. The Bank's total NSFR was 117% at year-end, and the NSFR in foreign currencies was 143%.

### 6.3 Management

The objective of the liquidity management policy is to ensure that sufficient liquid assets and funding are available to meet financial obligations and sustain withdrawals of deposits in a timely manner and at a reasonable cost, even under stressed conditions.

**Liquidity Coverage Ratio (ISK)**

Figure 6-6



**Net Stable Funding Ratio (Total)**

Figure 6-7



The policy aims to ensure that the Bank does this by maintaining an adequate level of unencumbered, high-quality liquid assets that can readily be converted into cash. The Bank has also implemented stringent stress tests that have a realistic basis in the Bank's operating environment to further measure the Bank's ability to withstand different and adverse scenarios of stressed operating environments.

The Bank's liquidity risk is managed centrally by Treasury and is monitored by Market Risk. This allows management to monitor and manage liquidity risk throughout the Bank. The Risk & Finance Committee monitors the Bank's liquidity risk, while the Bank's Internal Audit function assesses whether the liquidity management process is designed properly and is operating effectively.

The Bank's liquidity management process entails procedures, measurements, monitoring and reporting of both short-term and longer-term liquidity risk as well as structural issues in the balance sheet. An integral part of the management process is conducting forward looking analysis

### Net Stable Funding Ratio (FX)

Figure 6-8



to estimate future liquidity position, taking the Bank's commitments into account.

The liquidity management policy is largely built on the European regulation, Capital Requirements Regulation (CRR), defined by the European Banking Authority (EBA), as well as taking the Bank's operating environment into account.

#### Short-term liquidity risk

Intra-day  
30-90 days (LCR)  
Stress testing and scenario analysis

#### Longer-term liquidity risk

Medium to long-term (NSFR)  
Cash flow projections  
Stress testing and scenario analysis

#### Structural issues

Balance sheet mismatches  
and maturity profiling  
Concentration of liquidity  
Contingency planning

Figure 6-9

## 6.4 Control and monitoring

The Bank's Treasury Department is responsible for day-to-day liquidity management, which entails closely monitoring current trends and potential market developments that may present significant and complex challenges for the Bank's liquidity strategy.

Liquidity risk is primarily controlled through limits set in the Bank's risk appetite and the Bank's liquidity management policy. Limit management is supplemented by regular monitoring and reporting of liquidity position under normal and stressed business conditions.

The Risk Management Division of the Bank regularly evaluates the Bank's liquidity position and monitors internal and external events and factors that may affect the liquidity position.

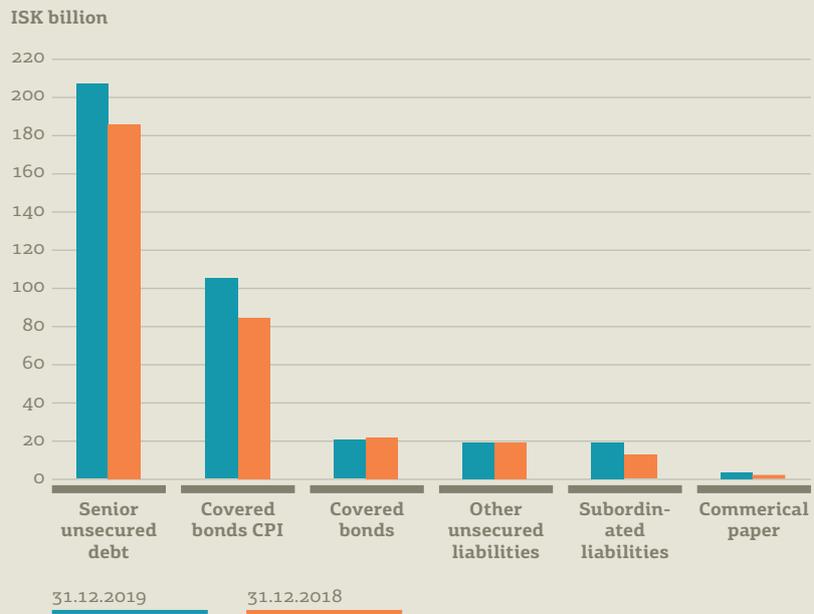
### 6.4.1 Liquidity Contingency Plan

The Bank has a contingency plan in place, which is set to provide a framework for detecting an upcoming liquidity event with predefined early warning indicators and actions for preventing temporary or longer term liquidity disruptions.

The Liquidity Contingency Plan stipulates the actions that shall be taken to monitor the likelihood or imminence of the occurrence of a liquidity event or a confidence crisis. It also includes a detailed action plan and proce-

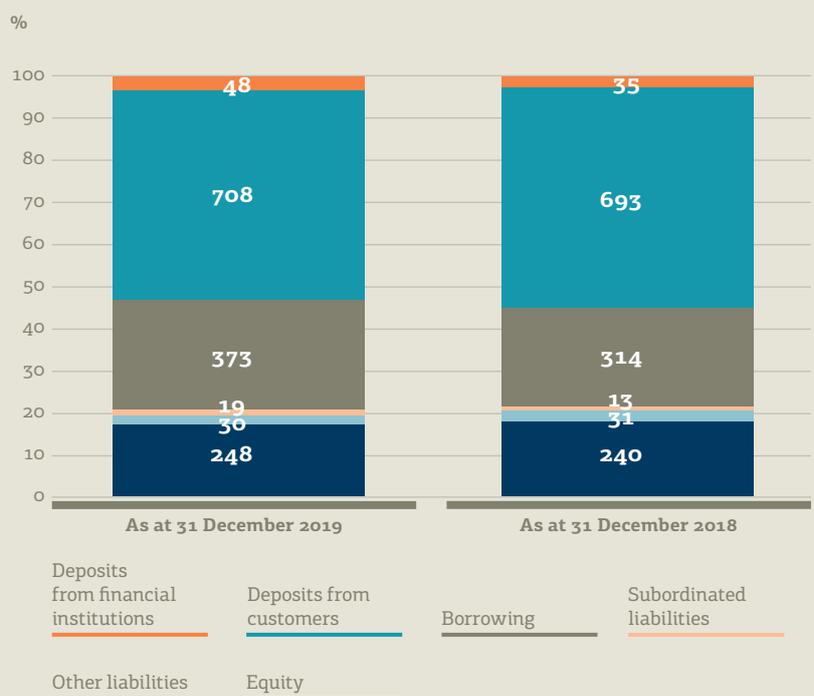
## Borrowings and Subordinated Liabilities

Figure 6-10



## Funding profile - ISK billions

Figure 6-11



## EMTN Programme

Table 6-3

As at 31 December 2019	Currency	Final maturity	Outstanding principal	Contractual interest rate
<b>Senior unsecured</b>				
LBANK FLOAT 06/20	SEK	22.06.2020	700	STIBOR + 1%
LBANK 0.75 06/20	SEK	22.06.2020	300	FIXED 0.75%
LBANK FLOAT 11/20	SEK	24.11.2020	250	STIBOR + 1.50%
LBANK 1.375 11/20	SEK	24.11.2020	750	FIXED 1.375%
LBANK FLOAT 11/20 - NOK	NOK	27.11.2020	300	NIBOR + 0.83%
LBANK FLOAT 11/20 - SEK 2	SEK	29.11.2020	600	STIBOR + 0.85%
LBANK 1.625 03/21	EUR	15.03.2021	500	FIXED 1.625%
LBANK 1.375 03/22	EUR	14.03.2022	300	FIXED 1.375%
LBANK FLOAT 02/22 - SEK	SEK	21.02.2022	500	STIBOR + 1.75%
LBANK FLOAT 02/22 - NOK	NOK	21.02.2022	1,000	NIBOR + 1.75%
LBANK 1 05/23	EUR	30.05.2023	300	FIXED 1%
<b>Subordinated</b>				
LBANK 3.125 28NC23 T2	EUR	06.09.2028	100	FIXED 3.125%

dures for managing a liquidity event. The Contingency Plan includes the following items:

- » A list of potential confidence crisis scenarios and their likely effects on the Bank's liquidity position;
- » A list of potential liquidity events and their effects on the Bank's liquidity management;
- » Various management actions aimed at resolving liquidity disruptions.

The contingency plan is supplemented by the monitoring of early warning indicators along with their defined warning and trigger levels to detect potential liquidity problems. These early warning indicators are either internal, such as changes in the Bank's

balance sheet composition, decreasing liquidity ratios, deposit outflows or a downward trend in financial ratios, or external, such as rating downgrades, third party evaluations or market price fluctuations. The Bank determines four levels of stress for each early warning indicator. These four levels of stress are risk alert levels and each level further indicates the increasing likelihood of funds leaving and increased likelihood of a liquidity event. The indicators are monitored weekly by the Risk and Finance Committee and reviewed at least annually by the Board of Directors.

### 6.5 Funding profile

The Bank continued diversifying the Bank's funding profile in 2019, especially in market

funding. The Bank completed its inaugural subordinated bond issuance in the domestic market and was also an active issuer on the domestic bond market with issuance of covered bonds and commercial paper. Furthermore, the Bank issued bonds in foreign currencies under its EMTN programme along with other unsecured loans.

In July 2019 the outlook of the Bank's credit rating (S&P) was changed from stable to negative and the credit rating is currently estimated as BBB+/A-2 with negative outlook.

#### 6.5.1 Funding

As before, the Bank's funding rests on three main pillars. Deposits from customers are the Bank's primary funding source but the Bank is also funded

## Covered bonds

Table 6-4

As at 31 December 2019	Currency	Final maturity	Outstanding principal	Fixed contractual interest rate
LBANK CB 21	ISK	30.11.2021	5,760	5.50%
LBANK CB 23	ISK	23.11.2023	15,480	5.00%
LBANK CBI 22	ISK	28.04.2022	19,540	3.00%
LBANK CBI 24	ISK	15.11.2024	38,120	3.00%
LBANK CBI 28	ISK	04.10.2028	48,280	3.00%
LBANK CBI 28	ISK	04.10.2028	30,700	3.00%

through borrowing in the form of bond issuance, both in the international markets in foreign currencies as well as in the domestic market in ISK. Furthermore, the Bank is funded with contributions from owners in the form of equity. Figure 6-10 shows the breakdown of the Bank's borrowings while Figure 6-11 shows the Bank's funding structure as of year-end 2019 and 2018.

### 6.5.2 Deposits from customers

The largest part of the Bank's funding is in the form of deposits from customers which amounted to ISK 708 billion at year-end 2019, mostly non-indexed and on demand. Deposits from customers increased by 15 billion during the year 2019. Inflation-linked deposits amounted to ISK 121 billion at year-end 2019, increasing by ISK 7 billion from previous year.

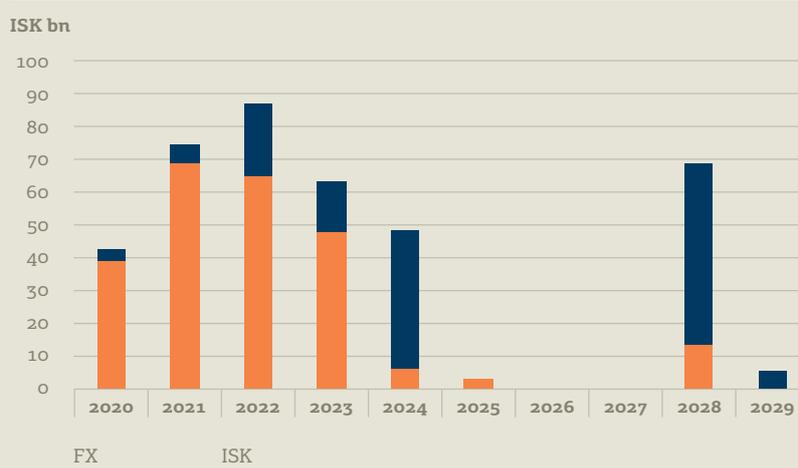
### 6.5.3 Borrowings

#### 6.5.3.1 EMTN Programme and other unsecured loans

The size of the Bank's EMTN programme is EUR 2 billion and was increased in size from 1.5 billion during the year 2017. The

## Maturity Profile

Figure 6-12



inaugural issuance under the programme was made in the fall 2015 with continued issuance on a regular basis to date.

In February, the Bank issued a 3-year bond for SEK 500 million and NOK 1,000 million. In May the bank issued a 1.5-year bond for SEK 600 million and NOK 300.

Bonds in the amount of SEK 350 million and NOK 500 million matured in June and the remaining outstanding principal was paid in full on the maturity date.

At year-end 2019 bond issuance

in foreign currency amounted to ISK 223 billion, increasing by ISK 24 billion during the year. Other unsecured loans in foreign currency amounted to ISK 19 billion at the same time.

#### 6.5.3.2 Covered bonds

The size of the programme for covered bond issuance is ISK 200 billion and was increased from ISK 120 billion in 2019. The covered bond issuance is primarily intended to fund the bank's mortgage portfolio and to mitigate interest rate risk. Regular auctions of covered bonds were held in 2019 where previously issued bonds

## Commercial Paper

Table 6-5

As at 31 December 2019	Currency	Final maturity	Outstanding principal
LBANK 200228	ISK	28.2.2020	2,840
LBANK 200528	ISK	28.5.2020	800

were tapped. One non-indexed series, LBANK CB 19, matured in 2019. Agreements with market makers in the secondary market for covered bonds were renewed in the year. At year-end outstanding covered bonds issuance amounted to ISK 140 billion, increasing by ISK 34 billion during the year 2019.

### 6.5.3.3 Commercial Paper

Three auctions of commercial paper were held in 2019 with commercial paper issued under the ISK 50 billion debt issuance programme. Outstanding issuance of commercial paper amounted to ISK 4 billion at year-end 2019 compared to ISK 3 billion at the end of 2018.

### 6.5.3.4 Subordinated bond issuance

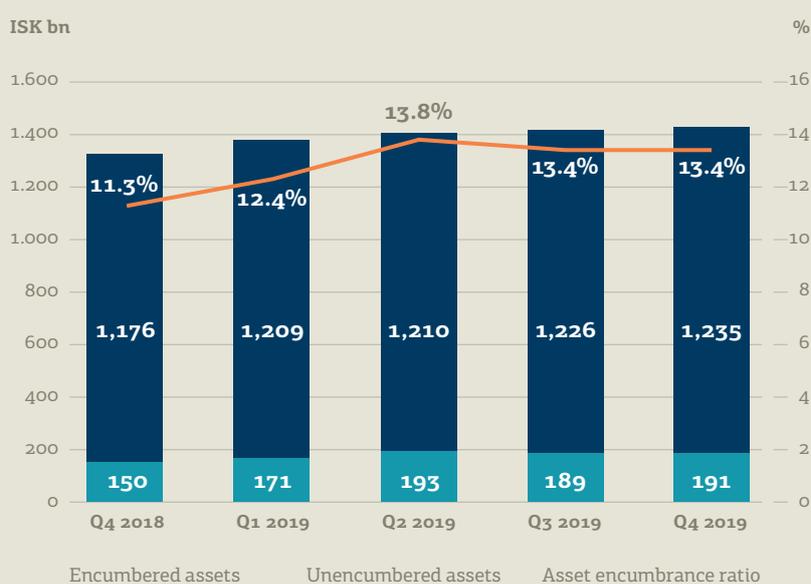
In December, the Bank issued subordinated bonds for ISK 5,480 million under the ISK 50 billion debt issuance programme. The bonds are inflation-linked and with a 10NC5 structure. The bond issuance was the Bank's inaugural subordinated bond issuance in the domestic market.

### 6.5.3.5 Equity

The Bank's equity was ISK 248 billion at year-end 2019, increasing by ISK 8 billion over the course of the year, and Lands-

## Asset encumbrance ratio

Figure 6 13



bankinn's total capital ratio was 25.8% at year-end 2019.

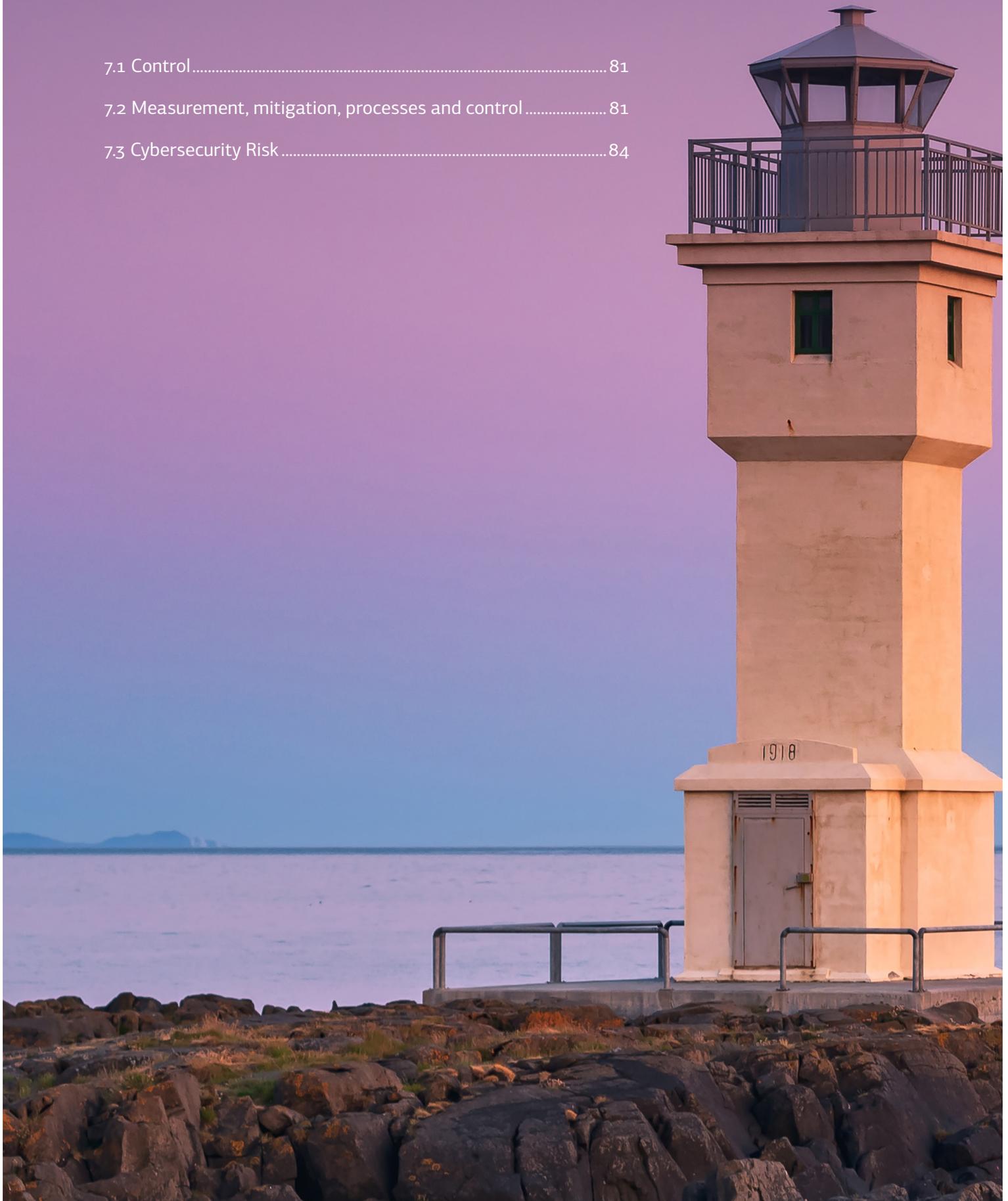
### 6.5.4 Asset encumbrance ratio

The Bank's liquidity and funding risk framework includes measures of encumbered assets as a ratio to total assets. Encumbered assets are primarily comprised of loans and advances which are pledged against covered bonds and secured bonds issued by the Bank. Other encumbered assets are pledged as collateral to the Central Bank, pledged as collateral to secure trading lines, and

credit support for GMRA/ISDA master agreements and other pledges of similar nature. The Bank's asset encumbrance ratio remains low.

# 7 Operational Risk

7.1 Control.....	81
7.2 Measurement, mitigation, processes and control.....	81
7.3 Cybersecurity Risk.....	84



# Operational Risk

**Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.**

- » The number of loss incidents in 2019 was similar to that in 2018
- » ICT risk becomes increasingly important with changes in the regulatory framework

## Economic capital



The Bank is exposed to operational risk through its activities. Loss may result from inadequate or failed internal processes, people and systems, or from external events. This includes factors such as information and communication technology risk (ICT), conduct risk, model risk, compliance risk and risk involved with outsourcing.

ICT risk is the risk of loss due to a breach of confidentiality, failure of integrity of systems and data, unavailability of systems and data within a reasonable time frame, this includes cyber risk. Conduct risk involves risks associated with the way the bank relates to customers. Effective model risk management involves reducing the risk of flaws in the development, implementation and use of models. Compliance risk is the exposure of the bank to legal penalties if it fails to act in accordance with laws and regulations, internal policies and

prescribed best practices. Outsourcing risk is the risk involved in outsourcing important functions and loss of control over those functions. These factors are all relevant in the Bank's current environment.

The Bank identifies the types of operational risk to which it is exposed in order to better understand its operational risk profile and assess its vulnerability to these risks. The aim is to identify and assess the operational risk inherent in all existing or new material products, activities, processes and systems.

Effective operational risk identification and assessment processes are crucial in establishing a framework for operational risk monitoring and control.

In identifying operational risk, the Bank examines both internal and external factors that could adversely affect its performance

and prevent the achievement of its objectives, such as:

- » Risk culture, human resource management practices, organisational changes and employee turnover
- » The nature of the Bank's customers, products, contractors and activities, including sources of business, distribution mechanisms and volume of transactions
- » The design, implementation, review and operation of the processes and systems involved in the operating cycle of the Bank's products and activities
- » The external operating environment and industry trends, including political, legal, technological and economic factors, as well as the competitive environment and market structure

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## 7.1 Control

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The Board of Directors sets the Bank's policy regarding operational risk and risk appetite. The operational risk rules set out the policy regarding operational risk, the roles and responsibilities of stakeholders in the Bank and the operational risk tolerance in terms of limits.

The Operational Risk Committee is responsible for all risk relating to operational risk, including ICT risk and physical security. All rules connected to the remit of the Operational Risk Committee are approved by it.

The Operational Risk Department, which is responsible for developing and maintaining the framework for managing operational risk and supporting the organization in the implementation of the framework, is a part of the Risk Management Division. Part of this framework is the business continuity plans of the Bank, as well as the security system for the online bank. The Department is also responsible for the ISO 27001 certification of the bank.

Internal Audit is responsible for auditing the effectiveness of the

operational risk framework and the work of the Operational Risk Department.

Operational risk measurements are reported to the Board in a comprehensive manner as part of the regular reporting done by Risk Management. Managing directors receive semi-annual reports on the key risk indicators relevant to operations under their control.

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## 7.2 Measurement and mitigation

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In order to understand the effects of the exposures to operational risks, the Bank continually assesses its operational risks. A number of tools are used to identify and assess operational risk.

- » Self-assessment. The Bank assesses its operations and activities against a menu of potential risk vulnerabilities. As a part of this internally driven procedure, the Bank has set up a well-documented process to identify strengths and weaknesses in the operational risk environment. The self-assessment is done by

senior directors for operations under their control and then reported to managing directors. This is done on a two-year cycle, and more often if there are material changes in the operational risk environment of departments. The self-assessment identifies control gaps, enabling appropriate corrective action to be taken;

- » Risk mapping. This process involves mapping all reported incidents by risk type and to business units. This exercise reveals areas of weakness, leads to corrective action and assists in prioritising subsequent management action;
- » Risk assessments on important IT systems and as a part of project management;
- » Key risk indicators (KRIs) are statistics and/or metrics, often financial, which can provide insight into the Bank's risk position. These indicators are reviewed periodically to alert the Bank of changes that indicate risk concerns;

- » The Bank is certified in accordance with ISO 27001, the international standard on information security. This standard helps the Bank in assessing and monitoring operational risk in the certified areas.

For some time now, “Execution, delivery and process management” has by far had the largest number of events, 46 in 2017, 37 in 2018 and 41 in 2019.

The Bank categorises operational incidents into deviation from rules or processes, weakness in processes or systems, external circumstances, or security violations.

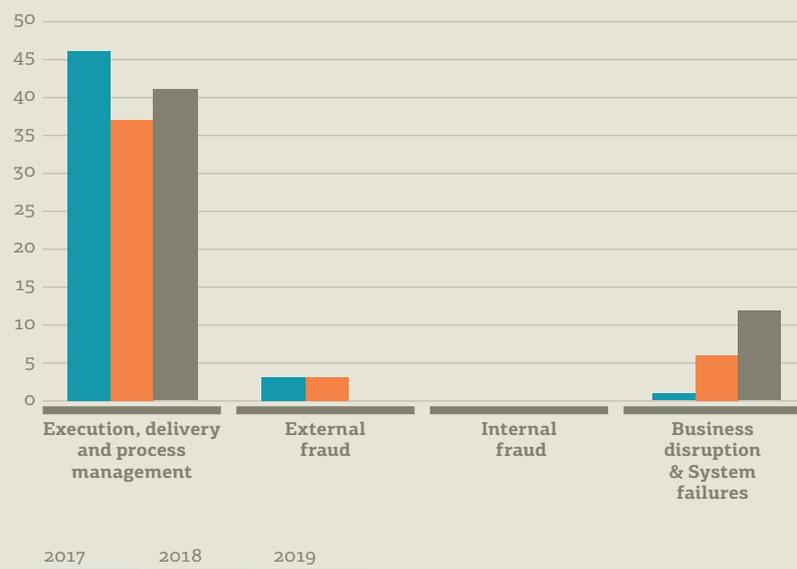
### 7.2.1 Mitigation

The Bank utilises insurance as part of its mitigation technique when it comes to operational risk. This is done through a Bankers’ Comprehensive Crime policy, as well as a Cyber liability insurance policy.

Clear procedures are in place

### Number of loss incidents based on Basel II classification

Figure 7-1



regarding the mitigating actions that result from self-assessment. There are separate procedures in place for how the Bank handles operational incidents and corrective and mitigating actions resulting from these incidents.

The architecture of the Bank’s

information systems is based on two mirrored data centres, primary and secondary, located in two different buildings linked with high speed communication. This setup allows the Bank to run its core systems with access to mission critical data, even if one data centre (for instance the

primary data centre) becomes unusable. In the event of a failure, core systems will automatically switch from one site (the failed one) to the other.

There are business continuity plans in place for all operations considered to be mission critical to the Bank. These plans are all tested on a yearly basis, apart from the IT Department's plan, which is tested more frequently.

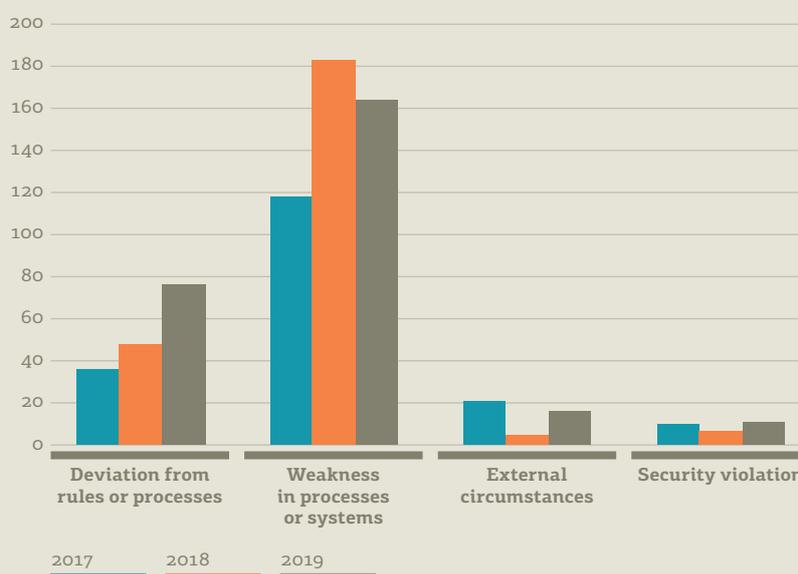
### 7.2.2 Control and monitoring

The Board and CEO set detailed rules on operational risk governance and responsibilities. Day-to-day management of operational risk is a part of every manager's responsibility, who are further responsible for monitoring and controlling the operational risk in their departments. Managers evaluate operational risk through risk self-assessment, focusing on key risks identified with top-down management involvement.

Information security, physical security, education and training activities are important components of the management of operational risk, and close co-operation is maintained with the relevant departments involved in these processes. Internal Audit and Compliance are key functions in the framework that the Bank has established to monitor

## Operational incidents

Figure 7-2



and control operational risk. The Bank has a programme in place to ensure full compliance with GDPR from when it took effect in Iceland in July 2018. This programme has been led by a designated Data Protection Officer (DPO) within the Bank.

Incident reporting, auditing and follow-up is an important part of operational risk management, as the identification and remedial action helps to limit losses resulting from inadequate and failed processes. The Operational Risk Department is responsible for

business continuity management and for maintaining the Bank's disaster recovery plans. A number of documents, policies, rules and work procedures cover key aspects of the responsibilities of the Operational Risk Department. These include the Bank's policy on information security, rules on operational risk, rules on information security, rules on operational risk assessment, and rules on documents and document handling.

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### 7.3 Cybersecurity risk

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Cybersecurity risk is information technology security risk that affect the confidentiality, availability or integrity of information or information systems.

The Bank uses the National Institute of Standards and Technology - Cyber Security framework as a template for the Bank to build its cyber resilience around the following five bullet points:

- » **Identify** – Gaining the institutional understanding to identify which systems need to be protected, assess priority in light of organisational mission, and manage processes to achieve cost-effective risk management goals, and to aim to know vulnerability;
  - » **Prevent** – Categories of management, technical, and operational activities that enable the organisation to decide on the appropriate
- outcome-based actions to ensure adequate protection against threats to business systems that support critical infrastructure components;
- » **Detect** – Activities that identify (through ongoing monitoring or other means of observation) the presence of undesirable cyber risk events, and the processes to assess the potential impact of those events;
  - » **Respond** – Specific risk management decisions and activities enacted based upon previously implemented planning (from the Prevent function) relative to estimated impact;
  - » **Recover** – Categories of management, technical, and operational activities that restore services that have previously been impaired through an undesirable cybersecurity risk event.
- Based on the Bank's knowledge of cyber incidents in 2019, the current focus is threefold. Firstly, to educate and increase awareness among both customers (the public) and the Bank's staff. Secondly, intelligence sharing is an important part of collaboration with other FIs that helps all parties to prevent future incidents. Thirdly, building a layered security approach on the knowledge obtained from partners and colleagues (FIs). This is a reliable approach that is reviewed on a regular basis to ensure the implementation of the right procedures and policies to cope with major cybersecurity related threats. This also allows the Bank to provide better support for customers who experience cyber incidents.

# 8 Regulatory Developments

8.1 New regulatory requirements .....	86
8.2 Expected regulatory requirements .....	88



# Regulatory Developments

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Landsbankinn monitors regulatory developments to ensure that its operations comply with the laws, regulations and rules (hereafter “regulations”) applicable at any given time. This section provides an overview of new or revised regulatory requirements of which the Bank has knowledge and are considered by the Bank to be of significance to its operations. The section firstly summarises new regulatory requirements that came into effect in 2019 and, secondly, expected regulatory requirements in 2020 and beyond.

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## 8.1 New regulatory requirements in 2019

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### Amendments to the Act on Financial Undertakings

Act No. 8/2019 amended the provisions of Act No. 161/2002, on Financial Undertakings, on limitations placed on the participation by directors of the board and

executives of financial undertakings of systemically important institution in the management of other companies. The amendments are based on Directive 2013/36/EU (CRD IV). The Act also amended provisions on the auditing of financial undertakings, inter alia, amendments to the provision on auditors’ mandatory disclosure to the Financial Supervisory Authority in accordance with the rules of European law.

Act No. 91/2019 amended Act No. 161/2002, on Financial Undertakings, on the occasion of the merger of the Central Bank of Iceland and the Financial Supervisory Authority. The amendments are intended to unite provisions on prudential supervision and requirements under the same articles. Changes were made, inter alia, to the legal framework for supervision of liquid assets and stable funding, in addition to an amendment stipulating that employment of capital buffers for systemic risk, for systemically

important financial institutions and the countercyclical capital buffer shall be based on administrative provisions instead of administrative acts as hitherto. Other changes are related to the new organisational structure of the Central Bank of Iceland and changed role of the Financial Stability Counsel. The aforementioned amendments do not transpose into Icelandic law new substantive rules of European law; rather, they look to EEA law in the transfer of provisions from the Act on the Central Bank of Iceland to the Act on Financial Undertakings.

### Amendments to the Act on a Special tax on Financial Undertakings

Act No. 131/2019 amended Act No. 155/2010, on a Special Tax on Financial Undertakings, to provide for incremental lowering of the special tax on financial undertakings in four steps, from 0.376% to 0.145% in the period 2021-2024.

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### **Contribution to the Depositors' and Investors' Guarantee Fund**

This Act amends Act No. 98/1999, on Deposit Guarantees and an Investor Compensation Scheme. The general premium has been lowered from 0.225% of the annualised premium base to 0.02% per annum of all deposits up to ISK 10 billion and 0.16% on deposits exceeding that amount.

### **Act on Auditors and Auditing**

A new comprehensive Act on Auditors and Auditing, No. 94/2019, incorporates inter alia the transposition of Directive (EU) 2014/56, on mandatory auditing of annual financial statements and consolidated statements, and Regulation (EU) No. 537/2014, on special requirements for mandatory auditing of undertakings considered public-interest entities, into Icelandic law. The aforementioned Regulation (EU) No. 537/2014 provides for the employment of auditors and audit firms engaged to perform audits for financial undertakings and its provisions now apply to the auditing of financial undertakings in Iceland.

### **Act on the Central Bank of Iceland**

A new comprehensive Act on the Central Bank of Iceland, No. 92/2019, which entered into effect on 1 January 2020, merged the Central Bank of Iceland (CBI) and the Financial Supervisory Authority, Iceland (FME), into one institution. Upon its entry into force, all tasks previously assigned to the FME were transferred

to the CBI, which institution is henceforth responsible for financial supervision. The Act does not provide for changes to the tasks for which the two institutions were responsible under earlier legislation; rather, the changes provide for the merger of tasks under one institution and changes to the organisational structure and governance practices.

### **Amendments to the Act on Treatment of Króna-Denominated Assets Subject to Certain Restrictions and the Foreign Exchange Act**

Act No. 14/2019 amended Act No. 37/2016, on the Treatment of Króna-Denominated Assets Subject to Certain Restrictions, to widen significantly exemptions from limitations of the right to dispose of assets subject to the law. The Act is one of the final steps of the authorities towards removing capital controls enacted during the Icelandic financial crisis in 2008. The Act amends limitations on withdrawals from accounts subject to special restrictions to allow all owners of offshore ISK assets the option to withdraw their assets. The Act also provides for amendment to Temporary Provision III of the Act on Foreign Exchange, No. 87/1992, providing for authorisation by the CBI to attach special reserve requirements to capital inflow. The amendment provides for authorisation to discharge reserve requirements with repo transactions with the CBI.

### **Act on Interchange Fees**

Act. No. 31/2019, on Interchange Fees, transposes Regulation (EU) No. 751/2015, on interchange fees for card-based payment transactions (IFR), into Icelandic law. The Act caps interchange fees for debit and credit card use and is intended to decrease the cost of retailers and consumers, boost transparency and competition in the payment card market and encourage cross-border integration of payment card markets within the EEA.

### **Act on Security of Network and Information Systems of Important Structure**

Act No. 78/2019, on Network and Information System Security of Important Structures, transposed into Icelandic law the substantive provisions of Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union. The Act applies to important structures, including operators of necessary services in banking and the infrastructure of financial markets. According to the Act, important structures must document appropriate processes and policies on risk management related to their systems. In addition, the Act stipulates that important structures must have in place a recovery plan and business and service continuity plans to limit damages due to serious disruptions to their operations.

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### **Act on the Registration of Real (Beneficial) Owners**

Act No. 82/2019, on the Registration of Real (Beneficial) Owners, transposed into Icelandic law provisions on real (beneficial) owners from the fourth Anti-Money Laundering Directive 2015/849/EU (AML IV) and appropriate provisions of the fifth Anti-Money Laundering Directive 2018/843/EU (AML V), and responded to the FATF report on deficiencies in measures against money laundering in Iceland. The Act sets out rules on the registration of real (beneficial) owners as defined in Act No. 140/2018, on Actions to Combat Money Laundering and Terrorist Financing. To ensure current, accurate and dependable information about real (beneficial) owners, in order to analyse and prevent money laundering and terrorist financing, it is considered necessary to identify each individual who owns or controls a legal entity. The real (beneficial) owners of entities subject to the Act will be registered in the Register of Enterprises. The legal entity is required to register the name of the real (beneficial) owner, his/her domicile, Id. No. or date of birth, nationality, holding (size) and type of holding, and submit documentation to verify the information.

### **Act on Freezing of Assets and Registration of Parties on Sanctions List in connection with Terrorist Financing and Proliferation**

Act No. 64/2019 provides for procedures to freeze assets and register parties on sanctions lists in connection with terrorist

financing and the proliferation of weapons of mass destruction. The Act provides that certain reporting parties, in accordance with the Act on Actions to Combat Money Laundering and Terrorist Financing, including financial undertakings, are required to maintain appropriate control systems or processes and methods of assessing whether customers are on sanctions lists. Customers shall be assessed at the outset of the business relationship and regularly during the contractual relationship. The Act also provides for per diem and administrative fines for violations of the Act.

### **Parliamentary resolution confirming the Decision of the EEA Joint Committee, No. 79/2019 amending Annex IX (Financial service) to the EEA Agreement**

In November of 2019, the Icelandic parliament Althingi confirmed the Decision of the EEA Joint Committee No. 79/2019 providing for the incorporation of CRD IV/CRR in the EEA Agreement. This rescinded the Icelandic constitutional proviso on incorporation of the directives in the EEA Agreement. Subsequently, the directives, including CRR, have formally been incorporated in the EEA Agreement. As a result, Articles 500 and 501 of CRR have entered into effect in Iceland, cf. the third paragraph of Article 92 of Regulation No. 233/2017, on Prudential Requirements on the Operation of Financial Undertakings.

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## **8.2 Expected regulatory requirements**

### **Securities settlement and securities depositories**

A Bill of Legislation on securities settlement and securities depositories was submitted to Althingi in November 2019. The Bill proposes the transposition of Regulation (EU) No. 909/2014, on improving securities settlement in the European Union and on central securities depositories (CSDR), into Icelandic law. The Regulation altered the framework for the operation of securities depositories to a considerable degree and involves various increased requirements of securities depositories, the settlement of financial instruments and securities settlement systems. The Bill also proposes necessary amendments to Act No. 131/1997, on Electronic Registration of Title to Securities.

### **Managers of Alternative Investment Funds (AIFs)**

A Bill of Legislation on a comprehensive law on the managers of AIFs was submitted to Althingi in November 2019. The Bill proposes the transposition of AIFMD Directive 2011/61/EU on AIF managers which provides for the operation of AIF managers, i.e. all funds other than undertakings for the collective investment in transferable securities (UCITS). The Bill proposes changes which will impact managers of AIFs in Iceland, to a varying degree depending on size. If the operation exceeds certain

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financial amounts, the managers of AIFs become subject to operating permits. Operating permits are based on certain conditions, such as initial capital contributions, equity and governance structure. The impact on smaller managers under the set financial amounts will be less stringent yet they will be required to register with the Financial Supervisory Authority and fulfil certain minimum requirements. The Bill also contains provisions for organisational and operating permit conditions, transparency, custodians and marketing.

### **Resolution of credit institutions and securities houses**

A Bill of Legislation for a new, comprehensive law on the resolution of credit institutions and securities houses was submitted to Althingi in November 2019. The Bill involves the transposition of the latter part of the Bank Recovery and Resolution Directive 2014/59/EU (BRRD) into Icelandic law. The Bill provides for the resolution process, from preventative measures and preparation for resolution, to decision-making and the implementation of resolution. The Bill also provides for a new administrative unit, the Resolution Authority, which will be responsible for preparation and implementation of resolution and a special funding resource, the Resolution Fund, which is intended to finance the resolution process. Due to interconnections, the Bill includes the transposition of part of Directive 2014/49/EU, on deposit guarantee schemes (DGS<sub>2</sub>), into Act No.

98/1999, on Deposit Guarantees and an Investor Compensation Scheme, in that it provides for a new maximum insurance coverage to the equivalent amount in ISK of EUR 100,000.

### **Prospectus to be published when securities are offered to the public or admitted to trading on a regulated market**

A Bill of Legislation for a new comprehensive law on prospectuses to be published when securities are offered to the public or admitted to trading on a regulated market was submitted to Althingi in December 2019. The Bill involves the transposition of the Prospectus Regulation (Regulation (EU) No. 2017/1129) into Icelandic law. The main substance of the Bill is to codify the Regulation and necessary related provisions, such as on scope, on implementing supervision of the provisions of the Act, on authorisation for information gathering granted to regulators, the enforceability of decisions by the EFTA Surveillance Authority and the EFTA Court, and penalty provisions. It proposes changes to the reference amounts of public offerings of securities as regards exemption from the publication of prospectuses. The exemption is currently set at EUR 5,000,000 or the equivalent in ISK; it is proposed that the reference amount be increased to EUR 8,000,000. The Bill further proposes changes from current rules, the aim of which is to make it easier and less expensive for SMEs to obtain funding within the EEA.

### **Limitation on the extent of investment banking activity**

A Bill of Legislation is expected to be submitted to the spring session of Althingi, on the amendment of the Act on Financial Undertakings, No. 161/2002, proposing that the investments of banks on own account be limited to a certain percentage of equity. The aim is to limit direct and indirect exposure by systemically important commercial banks to 15% of their equity base. The legislation is intended to minimise risk to deposit owners and the National Treasury from the investment banking activities of commercial banks while simultaneously ensuring that commercial banks can receive and process appropriated assets and provide services such as market making and underwriting.

### **Cross-border operation and group-oriented surveillance**

Another Bill is in the pipeline for Another Bill is in the pipeline for spring 2020 to amend the Act on Financial Undertakings to mostly finalise the transposition of Directive 2013/36/EU, on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (CRD IV), and Regulation (EU) No. 575/2013, on prudential requirements for credit institutions and investment firms (CRR). Expected changes are connected to capital buffers, branches and cross-border service, control and prudential requirements on a consolidated basis and collabora-

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tion and exchange of information between regulators.

#### **Conditions for residency of directors of the board and executives**

Changes are also planned to Act No. 161/2002, on Financial Undertakings, and Act No. 100/2016, on Insurance Activities, on the conditions for residency of directors of the board and executives, harmonising the provisions with the conditions for residency provided for in the Act on Limited-liability Companies, No. 2/1995. The second paragraph of Article 66 of the same Act provides that executives and at least half of directors of the board must reside domestically unless by special exemption. The condition for residency does not apply to EEA and EFTA nationals, or nationals of the Faroe Islands, nor residents of the EEA.

#### **Restrictions on the use of inflation-indexation in consumer loan agreements**

A Bill amending Act No. 36/2001, on Interest and Indexation, is expected to be presented to the

spring session, based on the government's statement on the effective abolishment of indexation from 3 April 2019 as part of the government's actions to support the so-called Living Standard Agreement of the social partners. The statement includes seven actions the government will enact to attain abolishment of inflation-indexation. The Bill provides for the first three actions, i.e. limitations on the maximum and minimum lifetime of inflation-indexed annuities and that the consumer price index less housing form the basis for price indexation.

#### **Markets for financial instruments**

Submission to Althingi of a Bill on a new comprehensive law on markets for financial instruments, which entails the transposition of the MiFID II Directive 2014/65/EU and the accompanying MiFIR Regulation No. 600/2014 into Icelandic legislation, is expected in early 2020. This represents considerable modification of the current legislation, calling for amendments to Act No. 161/2002 on

Financial Undertakings, Act No. 108/2007, on Securities Transactions, and Act No. 110/2007, on Stock Exchanges. The Bill involves considerable changes to requirements applying to regulated markets, multilateral trading facilities and securities houses. Enhanced requirements will apply to transparency, investor protection and business practices, to boards, governance and general organisation of securities houses and regulated markets. The Bill further proposes various changes in response to market developments and technological changes since Directive 2004/39/EU (MiFID<sub>1</sub>) was transposed into Icelandic law.



# 9 Remuneration report

9.1 Remuneration report .....	92
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# Remuneration report

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## 9.1 Remuneration report

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### 9.1.1 Introduction

The Bank emphasises hiring and employing exceptional personnel. The aim of the remuneration policy is to make the Bank a desirable workplace for qualified employees to ensure the Bank's competitiveness, continued development and acceptable profitability. The remuneration policy shall support sound operations in the long-term and not encourage unreasonable risk-taking. It is the Bank's aim that the terms of employment of executives and other employees are competitive but modest and not market-leading. In determining terms of employment, responsibility and performance shall be taken into account, as well as equal rights perspectives. The remuneration policy applies to the Board of Directors, the Executive Board of Landsbankinn, and all

Landsbankinn employees. The subsidiary of Landsbréf has its own remuneration policy and Remuneration Committee.

### 9.1.2 Governance

The remuneration policy of the Bank is approved by its Board of Directors. Furthermore, the remuneration policy is submitted to the Bank's Annual General Meeting for approval or rejection. The remuneration policy may be reviewed more than once yearly, and any amendments shall be submitted to a shareholders' meeting for approval. The remuneration policy serves as an indicative guideline for the Bank and the Board of Directors. The Board of Directors shall enter any deviations from the remuneration policy and substantiation thereof in the minutes. Deviations shall be presented to the Bank's next AGM.

The Remuneration Committee of the Bank is comprised of three Directors. The role of the Remuneration Committee is to provide guidance to the Board of Directors and CEO on salary and benefits for key executives and to advise the board on the remuneration policy. The Committee reviews that the terms of employment of the Bank's executives are within the framework provided by the remuneration policy and report on its implementation yearly in connection with the Bank's AGM. The Committee shall monitor the developments of collective bargaining agreements, trends in salary expenses and number of employees. The Board of Directors has issued Terms of Reference for the Committee, within which its role and duties are defined.

At the start of 2019 the Remuneration Committee members were Chairman of the board, Helga Björk Eiríksdóttir (Chairman

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of the Remuneration Committee) and Berglind Svavarsdóttir. Samúel Guðmundsson, a former member of the Board of Directors resigned from the Board, and therefore from the Committee as well, in November 2018. Following the AGM in April 2019 Hersir Sigurgeirsson joined the committee. In addition, the CEO of the Bank, Head of HR and Head of Legal regularly attend certain parts of Remuneration Committee meetings.

In the year 2019, the Committee reviewed the remuneration policy prior to the annual meeting and made several changes to the policy. Most notable was the change that the Remuneration committee is to give the Board a summary of the annual remuneration review for key executives and the CEO and to publish remuneration for key executives in the annual report. During 2019 the Committee held 5 meetings.

### **9.1.3 Remuneration policies for the Bank's Board of Directors and CEO**

Board members shall receive set monthly remuneration in accordance with the decision of the AGM each year, as provided for in Article 79 of Act No. 2/1995, on Public Limited Companies. In determining the remuneration amount, consideration shall

be taken to the hours spent on the job, the responsibilities borne by the board members and the Company's performance. The Remuneration Committee presents the Board of Directors with a substantiated proposal for remuneration to Board members in the coming operating year. The Board of Directors deliberates on the Committee's proposal and submits a final proposal on remuneration to the AGM. The Bank reimburses Directors domiciled outside the capitol region for travel expenses. Board members may not conclude severance agreements with the Bank.

The Board of Directors appoints the Bank's CEO and determines the remuneration of the Bank's CEO in accordance with the remuneration policy.

The CEO hires the Bank's key executives, and their terms of employment shall be competitive, but modest and not market-leading. The Bank publicly publishes the terms of employment of each of the Directors and key executives in its annual report. For Managing Directors, the Bank strives to maintain a gender balance of at least 60/40. Currently there are four male and three female Managing Directors.

All employees in the Bank receive a fixed salary, according to posi-

tion and function. The salary level is evaluated on an annual basis. Employee benefits are offered to all employees. All employees have mandatory pension contributions and paid holidays in line with general market terms and as negotiated by the employee's union.

The Bank does not offer variable remuneration, and has no plan to implement variable remuneration. Any decision to implement variable remuneration has to be presented to a shareholders' meeting for approval.

As further detailed in the 2014 and 2013 Remuneration reports, the Bank offered a one-off employee incentive scheme in an agreement made by the Minister of Finance on behalf of the State, Landsbankinn hf. and Landsbanki Íslands hf. dated 15 December 2009. The scheme was compliant with FME rules on performance linked remuneration with financial undertakings. As a result employees appear on the list of shareholders.

The Remuneration Committee performs an annual comparison with market data on the Bank's remuneration to ensure remuneration is competitive, modest and not market-leading.

# 10 Disclosure Policy

10.1 Introduction.....	95
10.2 Disclosure policy.....	95
10.3 Frequency of publication .....	96
10.4 Verification.....	96
10.5 Media and location of publication.....	96



# Disclosure Policy

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## 10.1 Introduction

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The Basel III Accord, implemented in the European Union through the Capital Requirements Directive (CRD 2013/36/EU (the 'Directive')) establishes a revised regulatory capital framework across Europe, governing the amount and nature of capital that must be maintained by credit institutions. Parts of the Directive have been implemented into Icelandic law by amendments to the Act on Financial Undertakings (Act No. 57/2015 and Act No. 69/2016, amending Act No. 161/2002 on Financial Undertakings). The amendments to Icelandic law incorporate, among other things, the CRD IV capital buffer requirements, disclosure requirements, minimum leverage ratio, supervisory review and evaluation process and capital definitions.

The Basel framework consists of three 'Pillars':

- » Pillar I sets out the minimum capital amount that meets the firm's credit, market and operational risk;
- » Pillar II requires the firm to assess whether its Pillar I capital is adequate to meet its risks (Internal Capital / Liquidity Adequacy Assessment Process, ICAAP/ILAAP) and is subject to annual review by the FME in the Supervisory Review and Evaluation Process (SREP);
- » Pillar III requires disclosure of specified information about the underlying risk management controls and capital position.

This publication, Risk and Capital Management 2019, reviews the Bank's organisation and pro-

cesses relating the identification and management of the risk type characteristic of a financial group with its type of business concept. It also describes the Bank's risk position based on the requirements under Pillar III.

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## 10.2 Disclosure policy

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In accordance with the Directive, the Bank has adopted a formal disclosure policy in that it will comply with the requirement to publicly disclose relevant information.

The rules provide that one or more of the required disclosures may be omitted if it is believed that the information is immaterial. Materiality is based on the criteria that the omission or misstatement of material information would be likely to change or influence the assessment or

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decision of a user relying on that information for the purposes of making economic decisions. If a disclosure is considered to be immaterial, it will be stated in the relevant section.

One or more of the required disclosures may be omitted if the information is regarded as proprietary or confidential. Proprietary information is that which, if it were shared, would undermine a competitive position. Information is considered to be confidential if there are obligations binding the Bank to confidentiality with customers and counterparties. If information is omitted for either of these reasons, it will be stated in the relevant section along with the rationale. Further general information on required disclosures will be published where appropriate.

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### **10.3 Frequency of publication**

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The disclosures will be reviewed on an annual basis at least and, if appropriate, more frequently. Disclosures will be published as soon as is practicable following any revisions.

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### **10.4 Verification**

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The disclosures have been put together to solely explain the basis of preparation and disclosure of certain capital requirements and provide information about the management of certain risks. They do not constitute any form of audited financial statement and have been produced solely for the purpose of Pillar III. They should not be relied upon in making judgements about the Bank. The disclosures will only be subject to external verification to the extent that they are equivalent to those made under accounting requirements.

The disclosures are reviewed and approved by the Bank's Board of Directors and Risk & Finance Committee.

This publication, Risk and Capital Management 2019, has not been audited by external auditors. However, it has been appropriately verified internally and includes information from the audited Consolidated Financial Statements 2019. There may be some discrepancy between financial information in the Consolidated Financial Statement 2019 and information in the Risk and Capital Management 2019, as the report has been prepared in accordance with the Capital Requirements Directive and the Basel III capital framework, rather than in accordance with IFRS.

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### **10.5 Media and location of publication**

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The disclosures will be published on the Bank's website.

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