

Declaration and Risk Statement	3
1 Introduction	6
2 Risk Management and Internal Control	10
3 Capital Management	20
4 Credit Risk	27
5 Market Risk	43
6 Liquidity Risk	48
7 Operational Risk	54
8 Sustainability Risk	57
9 Remuneration	65
Abbreviations	66

# **Declaration and Risk Statement**

### **Declaration**

The Bank is exposed to various risks and the management of these risks is an integral part of the Bank's operations. The Bank has focused on building up a responsible internal risk culture among the Bank's employees although the ultimate responsibility for ensuring an adequate risk management framework lies with the Board of Directors. The Board defines and communicates the acceptable level of risk through the Bank's Risk Appetite Statement and risk management policies that are reviewed at least annually, and the CEO is responsible for ensuring that risks are managed within those limits.

The Board hereby declares that the Bank's risk management arrangements are satisfactory in relation to the Bank's profile and strategy.

# **Risk Statement**

Islandsbanki's purpose is to move Iceland forward by empowering customers to succeed and the Bank's vision is to be #1 for service. Islandsbanki is a universal bank, offering a full range of banking service to personal and corporate customers in Iceland. Outside Iceland, the Bank's operations are limited to the extension of credit to a small number of corporate clients in the seafood industry. This means that the Bank's core business is taking on risk through the extension of credit and the rendering of other financial services to its customers.

Risk assessment and the prudent evaluation and pricing of risk are key elements in Íslandsbanki's operations and value creation, and the business strategy is aligned with the risk appetite as set by the Board. The Board of Directors reviews the risk appetite and the risk management framework at least once a year. The risk management and internal control framework is based on the three lines of defence model and aims for informed decision-making and strong risk awareness throughout the Bank. The framework is intended to ensure effective and efficient operations, adequate control of risks, prudent conduct of business, reliability of financial

and non-financial disclosures, as well as compliance with law, regulations, supervisory requirements and the Bank's internal rules and decisions. Íslandsbanki promotes a strong risk culture as an important part of an effective risk management and internal control framework. Emphasis is placed on transparency, acknowledgement, responsiveness, and respect for risk throughout the Bank and open communication regarding risk is encouraged. All business decisions and the resulting risks are initiated and owned by a business unit and go through a clearly defined review and control process. The level of authority needed to approve each business decision depends on the size, complexity, and risk involved.

The Bank has a healthy and well-diversified funding base and a strong capital framework based on the regulatory Standardised Approach. At year-end the Bank's total capital ratio was 22.2%, which is 2.3 percentage points above the regulatory requirement. Íslandsbanki aims to have a management buffer of 0.5-2.0 percentage points in addition to the total regulatory requirement in order to cover volatility in risk exposure amount and earnings. An increase in the countercyclical capital buffer from 0% to 2% came into effect in September 2022.

The leverage ratio was 12.1% at the end of 2022 compared to 13.6% at year-end 2021, indicating low leverage.

The Bank is predominantly a **credit risk** operation with credit risk accounting for almost 90% of the Bank's REA. The credit risk policy aims for a modest credit risk profile resulting in a well-diversified loan book with conservative collateralisation. The Bank has a long-standing, conservative credit risk culture and is shifting most retail products to digital channels with data driven decision-making with significant risk management benefits. The Risk Appetite Statement includes tolerance thresholds for credit quality, a limit on non-primary lending activity and limits on concentration risk.

The COVID-19 pandemic had elevated the level of credit risk in the Bank's loan portfolio. However, the considerable Governmental support for those affected by the pandemic, and a strong tourist season in 2022 has reduced the uncertainty substantially. Inflation rose in Iceland in 2022 and variable mortgage rates as well. Despite higher debt-service payments there has not been any observable increase in loans past due. The ratio of loans with significant increase in credit risk (stage 2) fell from 9.6% to 2.5% in 2022 and the non-performing loans ratio (stage 3) fell from 2.0% to 1.8%. The growth in the loan book has mainly been in the form of residential real estate mortgages that now comprise 43% of loans to customers.

Market risk accounts for a small proportion of the Bank's REA but is carefully managed through limits, in particular for interest rate risk, currency and inflation risk, and equity risk that arises from a small portfolio of strategic equity investments and market making activities.

The Bank manages its **liquidity risk** in accordance with the liquidity risk policy and has internal limits for Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR), and the Encumbrance ratio. The Bank maintained a strong liquidity position throughout 2022 and all key metrics were well above limits. The Bank continued to be a leading bond issuer domestically in both covered and senior unsecured formats and initiated its covered bond programme in foreign currency with a EUR 300 million 5-year bond issued in September.

**Operational risk**, which covers reputational, legal, ICT & security, model, conduct and compliance risks, among other risk factors, is managed in accordance with the operational risk policy and a number of supplementary policies and guidelines. The Bank monitors and manages operational risk through Risk and Control Self-Assessment and Key Risk Indicators and the follow up of all significant operational risk events in the Loss Event Database.

The Bank has emphasised ICT and security risk and business continuity management as the risk of cyber security events has increased globally. The Bank's controls against such events have proven effective

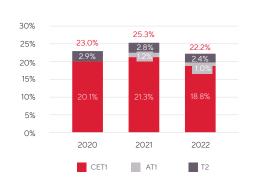
but the Bank is constantly seeking ways to strengthen its defences against cyber-attacks. The Bank's Information Security Management System is ISO/IEC 27001:2013 certified.

The latest addition to the risk management framework is **sustainability risk** which is managed in accordance with the sustainability policy and risk appetite. In 2022 the Bank continued to emphasise sustainability risk and further develop its methods to identify, measure, and manage it. The highlights of the year include setting initial sector-specific emission reduction targets according to Net-Zero Banking Alliance guidelines in time for COP 29 and carrying out an ESG risk assessment for over 70% of corporate customers.

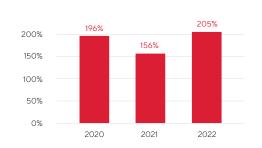
Board of Directors 9 February 2023

# **Key metrics**

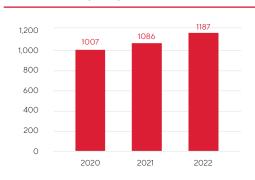
### Capital ratios



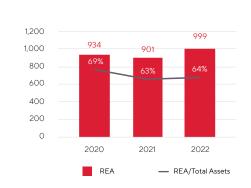
Liquidity Coverage Ratio (LCR)



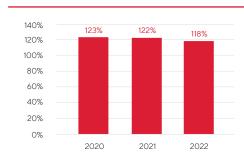
Loans to customers (ISK bn)



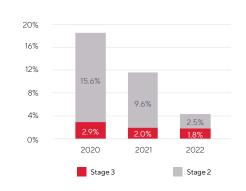
# Risk Exposure Amount (ISK bn)



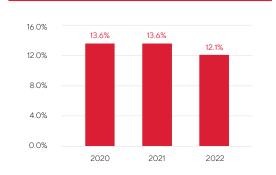
Net Stable Funding Ratio (NFSR)



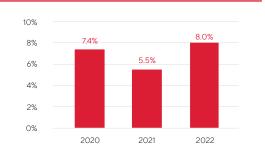
Loans to customers: Share in stage 2 and 3



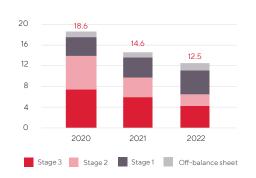
### Leverage Ratio



# Market risk as a percentage of total capital base, year-end



Loans to customers: Impairment allowance account (ISK bn)



# 1 Introduction

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

# 1.1 Regulatory Background

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

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

**Pillar 1** – Rules for risk coverage, calculation of the capital requirements, quality of capital and minimum leverage ratio. Pillar 1 sets the minimum capital requirement for credit, market and operational risk.

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

**Global liquidity standard and supervision monitoring** – Rules on minimum liquidity (LCR) and stable funding (NSFR) requirements.

**Pillar 3** - Market discipline through disclosure requirements.

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

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

The Pillar 3 Report is in accordance with Commission Implementing Regulation (EU) 2021/637 on disclosure requirements under Part Eight of the CRR. This Pillar 3 Report contains information in accordance with the disclosure requirements in the form of standardised tables and templates. They are included in spreadsheets on the Bank's website and will hereafter be referred to as Additional Pillar 3 Disclosure.

Additional Pillar 3 Disclosure

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

### 1.2 Consolidation

The Pillar 3 Report includes figures for the consolidated group, hereafter referred to as Íslandsbanki or the Group. When figures are shown for the parent company, it is specifically noted by referring to the Bank or parent. Further details on the Bank's subsidiaries can be seen in LI3 in the Additional Pillar 3 Disclosure.

# 1.3 Disclosure and Communication Policy

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

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

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

### 1.4 Verification

The Pillar 3 Report has not been audited by external auditors and does not form a part of Íslandsbanki's audited financial statements. However, it has been appropriately verified internally and includes information from the audited Consolidated Financial Statements 2022.

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

### 1.5 Disclaimer

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

Exhibit 1.1. List of disclosures in the Additional Pillar 3 Disclosures.

Overview of risk management, key metrics and risk-weighted assets	Additional	Format	Frequency of	Reference in
FILOW O	Pillar 3 Disclosure		Disclosure	Pillar 3 Report
EU OV1: Overview of RWA	OV1	Template	Quarterly	Chapter 3
EU KM1: Key metrics template	KM1	Template	Quarterly	Chapter 1
EU OVA: Institution risk management approach	OVA	Table	Annual	Chapter 2
EU OVB: Disclosure on governance arrangements	OVB	Table	Annual	Chapter 2
EU OVC: ICAAP information	OVC	Table	Annual	Chapter 3
Composition of capital				
EU CC1: Composition of regulatory own funds	CC1	Template	Semi-annual	Chapter 3
EU CC2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements	CC2	Template	Semi-annual	Chapter 3
EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments	CCA	Table	Annual	Chapter 3
Comparison of own funds, capital and leverage ratios in regards to IFRS 9 (IFRS 9 - FL)	IFRS9	Template	Quarterly	Chapter 3
Countercyclical capital buffer				
EU CCyB1: Geographical distribution of credit exposures relevant to the calculation of the countercyclical buffer	CCyB1	Template	Semi-annual	Chapter 3
EU CCyB2: Amount of institution-specific countercyclical capital buffer	CCyB2	Template	Semi-annual	Chapter 3
Scope of application				
EU LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories	LI1	Template	Annual	Chapter 3
EU LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements	LI2	Template	Annual	Chapter 3
EU LI3: Outline of the differences in the scopes of consolidation	LI3	Template	Annual	Chapter 1
EU LIA: Explanations of differences between accounting and regulatory exposure amounts	LIA	Table	Annual	Chapter 3
EU LIB: Other qualitative information on the scope of application	LIB	Table	Annual	Chapter 3
Credit risk				
EU CRA: General qualitative information about credit risk	CRA	Table	Annual	Chapter 4
EU CRB: Additional disclosure related to the credit quality of assets	CRB	Table	Annual	Chapter 4
EU CR1: Performing and non-performing exposures and related provisions	CR1	Template	Semi-annual	Chapter 4
EU CR1-A: Credit quality of exposures by exposure classes and instruments	CR1-A	Template	Semi-annual	Chapter 4
EU CR2: Changes in stock of non-performing loans and advances	CR2	Template	Semi-annual	Chapter 4
EU CQ1: Credit quality of forborne exposures	CQ1	Template	Semi-annual	Chapter 4
EU CQ2: Quality of forbearance	CQ2	Template	Semi-annual	Chapter 4
EU CQ3: Credit quality of performing and non-performing exposures by past due days	CQ3	Template	Annual	Chapter 4
EU CQ4: Quality of non-performing exposures by geography	CQ4	Template	Semi-annual	Chapter 4
EU CQ5: Credit quality of loans and advances by industry	CQ5	Template	Semi-annual	Chapter 4
EU CQ6: Collateral valuation - loans and advances	CQ6	Template	Semi-annual	Chapter 4
EU CQ7: Collateral obtained by taking possession and execution processes	CQ7	Template	Semi-annual	Chapter 4
EU CQ8: Collateral obtained by taking possession and execution process - vintage breakdown	CQ8	Template	Semi-annual	Chapter 4
EU CRC: Qualitative disclosure requirements related to credit risk mitigation techniques	CRC	Table	Annual	Chapter 4
EU CR3: Credit risk mitigation techniques - overview	CR3	Template	Semi-annual	Chapter 4
EU CRD: Qualitative disclosure requirements on institutions' use of external credit ratings under the Standardised Approach for credit risk	CRD	Table	Annual	Chapter 4
EU CR4: Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects	CR4	Template	Semi-annual	Chapter 4

Exhibit 1.1. List of disclosures in the Additional Pillar 3 Disclosures (continued).

	CCRA		of Disclosure	Pillar 3 Report
EU CCR1: Analysis of the counterparty credit risk (CCR) exposure by approach		Table	Annual	Chapter 4
	CCR1	Template	Semi-annual	Chapter 4
EU CCR2: Transactions subject to own funds requriements for CVA risk	CCR2	Template	Semi-annual	Chapter 4
EU CCR3: Standardised approach - CCR exposures by regulatory portfolio and risk.	CCR3	Template	Semi-annual	Chapter 4
EU CCR5: Composition of collateral for CCR exposures	CCR5	Template	Semi-annual	Chapter 4
EU CCR6: Credit derivatives exposures	CCR6	Template	Semi-annual	Chapter 4
EU CCR8: Exposures to central counterparties	CCR8	Template	Semi-annual	Chapter 4
Operational risk				
EU ORA: Qualitative information on operational risk	ORA	Table	Annual	Chapter 7
EU OR1: Operational risk own funds requirements and risk-weighted exposures amounts	OR1	Template	Annual	Chapter 7
Market risk				
EU MRA: Qualitative disclosure requirements related to market risk	MRA	Table	Annual	Chapter 5
EU MR1: Market risk under standardised approach	MR1	Template	Semi-annual	Chapter 5
Leverage ratio Leverage ratio				•
EU LR1: LRSum: Summary reconciliation of accounting assets and leverage ratio exposures	LR1	Template	Semi-annual	Chapter 3
	LR2	Template	Annual	Chapter 3
*	LR3	Template	Semi-annual	Chapter 3
EU LRA: Dislosure of Leverare ratio qualitative information	LRA	Table	Annual	Chapter 3
Liquidity ratio				·
	LIQ1	Template	Quarterly	Chapter 6
	LIQA	Table	Annual	Chapter 6
	LIQB	Table	Quarterly	Chapter 6
	LIQ2	Template	Semi-annual	Chapter 6
Remuneration	-	· · · · · · · · · · · · · · · · · · ·		
	REMA	Table	Annual	Chapter 9
• •	REM1	Template	Annual	Chapter 9
•	REM2	Template	Annual	Chapter 9
	REM3	Template	Annual	Chapter 9
	REM4	Template	Annual	Chapter 9
	REM5	Template	Annual	Chapter 9
Asset encumbrance				
	AE1	Template	Annual	Chapter 6
	AE2	Template	Annual	Chapter 6
	AE3	Template	Annual	Chapter 6
	AE4	Table	Annual	Chapter 6
Interest rate risk in the banking book				
	IRRBB1	Template	Semi-annual	Chapter 5
Disclosure on ESG risks			Join dillida	J. 10, 10, 10
	Table 1	Table	Annual	Chapter 8
	Table 1	Table	Annual	Chapter 8
•	Table 3	Table	Annual	Chapter 8

# 2 Risk Management and Internal Control

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

# 2.1 Risk Governance and Organisation

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

### 2.1.1 Three Lines of Defence Model

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

on the Bank's operational risk and sustainability risk, are subject to the same requirements for risk identification and management as the Bank's business units

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

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

# 2.1.2 Organisational Hierarchy

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

# 2.2 Roles and Responsibilities

### 2.2.1 Board of Directors

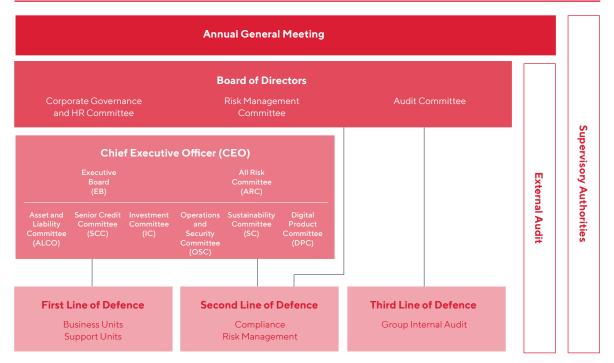
The ultimate responsibility for ensuring an adequate risk management and internal control framework at Íslandsbanki lies with the Board of Directors.

The Board defines and communicates the risk governance framework and the acceptable level of risk through risk management policies and the *Risk Appetite Statement*.

### 2.2.2 Board Committees

To assist the Board in fulfilling its oversight responsibilities, the Board has appointed three board subcommittees, the Risk Management Committee, the Audit Committee and the Corporate Governance and Human Resource Committee. Further information on the Board subcommittees' role,

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



composition and frequency of meetings can be found in the Bank's corporate governance statement in an unaudited appendix to the Consolidated Financial Statements.

### 2.2.3 Chief Executive Officer

The CEO is responsible for the day-to-day operations of the Bank and that the Bank's business is managed in accordance with the Bank's Articles of Association, policies of the Board and the relevant law. The CEO appoints members of the Executive Board and other Senior Management Committees.

### 2.2.4 Chief Risk Officer

The CRO heads Risk Management and is responsible for defining the daily tasks of the department and

to assess the adequacy of its professional skills. In addition, the CRO is responsible for monitoring the risk management and compliance framework at Íslandsbanki and verifying that the Bank has the appropriate resources and organisation to manage its risks efficiently.

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

The CRO is independent from the business units. The CRO chairs the All Risk Committee (ARC), is a member of the Executive Board and reports directly to the CEO. The CRO provides an independent view on the Group's exposure to risk. The CRO has the right but not the responsibility to escalate certain risk-taking decisions of the Bank's business committees if an internal control unit considers the proposed risk inconsistent with the Bank's risk appetite, policies or procedures.

## 2.2.5 Chief Compliance Officer

The Chief Compliance Officer (CCO) heads the Compliance unit and is responsible for defining the daily tasks of the department and to assess the adequacy of its professional skills. The CCO is responsible for monitoring the risk management and compliance framework specific to measures concerning securities transactions and anti-money laundering in accordance with Icelandic law.

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

### 2.2.6 Chief Audit Executive

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

### 2.2.7 Managing Directors in Business Units

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

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

# 2.2.8 Managing Directors in Support Units

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

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

### 2.2.9 General Counsel

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

## 2.2.10 All Employees

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

### 2.2.11 Internal Control Functions

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

# Risk Management

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

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

Risk Management is mandated to identify, understand, measure and monitor the risks that the Group is exposed to. It provides independent information, analyses and expert judgement on risk exposures, and advice on proposals and risk decisions made by senior management and business or support units as to whether they are consistent with the risk appetite and risk policies set by the Board.

Emphasis is made on actively involving Risk Management at an early stage in elaborating the Bank's risk strategy and in all material risk management decisions, especially when offering new products or making material changes to the Bank's operations.

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

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

### Compliance

The Bank has an independent compliance function, Compliance, headed by the CCO, which is a part of the second line of defence.

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

and the Board of Directors on all relevant compliance risk related information. Other compliance risk control processes and monitoring are managed and performed within Risk Management as part of the operational risk management framework.

Compliance verifies, in close cooperation with Risk Management, that new products and new procedures comply with laws and regulations pertaining to securities transactions and anti-money laundering.

### 2.2.12 Group Internal Audit

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

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

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

Group Internal Audit verifies the integrity of the processes ensuring the reliability of the Bank's methods and techniques, assumptions and sources

of information used in risk models and accounting measurements. Group Internal Audit is, however, not involved in the design or selection of models or other risk management tools.

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

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

### 2.2.13 External Audit

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

## 2.2.14 Senior Management Committees

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

The members of all senior management committees are appointed by the CEO, and each committee's mandate and rules of procedure is documented in a charter. The organisation of the Bank's committees is shown in Exhibits 2.1 and 2.2.

Exhibit 2.2. The Bank's senior committees and the number of meetings in the year 2022. In addition, the Credit Committee which is a sub-committee of the Senior Credit Committee had 122 meetings discussing credit proposals for lower exposure.

Committee	Role	Number of meetings
Executive Board	Business strategy, finances, IT strategy, marketing, governance and human resources	45
All Risk Committee	Risk strategy and risk appetite	23
Asset and Liability Committee	Funding and liquidity, market risk, capital management and internal and external pricing	52
Senior Credit Committee	Credit proposals	87
Investment Committee	Investment proposals	14
Operations and Security Committee	Product approval, operations, security and business continuity	20
Sustainability Committee	Reviews sustainability related matters and business opportunities	23
Digital Product Committe	New committee formed in 2022. Reviews and implements the Bank's digital strategy	3

### Executive Board

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

### All Risk Committee

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

### **Business Committees**

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

Representatives from Risk Management attend all meetings of business committees. Their attendance

is intended to ensure effective communication of risk in the decision-making process, to ensure that the risks inherent in individual proposals are adequately addressed by the business units and to give an independent view on the risk inherent in the proposals and whether the risk is in line with the Bank's risk appetite.

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

### 2.3 Risk Culture

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

# 2.3.1 Ownership, Transparency and Accountability

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

All business decisions and the resulting risks are initiated and owned by a business unit and go through a clearly defined review and control process.

As part of that process, the business units are responsible for identifying and describing the risks inherent in their proposals and for ensuring that all information regarding these risks is made available in a clear and comprehensive format before proposals are presented to the relevant authority within the Bank.

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

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

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

# 2.3.2 Training and Incentives

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

In 2022, the Bank recorded over 7300 registrations for over 250 different in-house training courses,

on-demand courses online and live online courses which is an average of 10 courses per employee. All employees are required to read and confirm their knowledge of the Bank's operational procedures, code of conduct, security policies and rules on measures against money laundering. The ratio of confirmation is monitored by the Bank's Human Resources Department and lack of participation is escalated to the appropriate managing directors.

## 2.3.3 Incident Reporting

The Bank has implemented a framework to capture both actual and potential operational risk losses.

The Bank emphasises a "no-blame" culture and encourages employees to register all mistakes or failures, irrespective of financial losses, into the Bank's operational risk database. All registered events are analysed and recorded, and the information used for continuous improvements to the Bank's operations and control framework.

### 2.3.4 Internal Alert Procedures

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

### 2.4 Risk Management Framework

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

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

# 2.4.1 Risk Appetite Statement

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

The Bank aims for a modest credit risk profile and takes on credit risk through a clearly defined authorisation framework, and a conservative credit risk culture. This results in a diversified and well collateralised loan portfolio, broadly reflecting the Icelandic economy, and a modest international seafood portfolio.

The Bank has a strong and diversified funding base, an ample liquidity buffer and a robust capital framework based on CRD IV standardised approach.

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

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

Type of risk	Metrics
Profitability	Long-term rate of return on capital Cost-to-income ratio Target divident ratio
Capital adequacy	CET1 Capital ratio Total Capital target MREL ratio threshold
Credit risk	Average annual credit losses Non-primary lending activity Concentration risk
Market risk	Market risk as a ratio of the Groups total capital Market value of listed and unlisted equities Equity and bond underwriting exposures
Liquidity risk	Liquidity coverage ratio  Net stable funding ratio  Encumbrance ratio
Operational risk	Operational losses as a percentage of capital
Sustainability risk	Alignment with Sustainability Principles

### 2.4.2 Risk Policies and Limits

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

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

The risk policies are all subject to an annual review managed by Risk Management. The policy review process focuses on changes in the regulatory environment, changes in the Bank's operations and gaps that have been identified after an assessment of policy effectiveness.

### 2.4.3 Risk Identification

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

The process for new products and material changes and approval of individual transactions, or portfolios, is intended to ensure early detection and full

oversight of risks in the Bank's operations. Each business unit is responsible for identifying the risks inherent in its operations and the products and services they offer.

The New Products and Material Changes
Policy outlines the synchronisation, review and
control process necessary to ensure successful
implementation of new products and material
changes. The main objective is to ensure that the
implementation of products and operations complies
with the Bank's policies and the relevant legal
requirements.

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

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

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

Currently, the following five risk types have been defined as key to the Group's operations and business strategy according to the Bank's Risk Taxonomy. Their

assessment, management, mitigation techniques, and overall limits are defined in specific policies:

- Credit risk (Chapter 4)
- Market risk (Chapter 5)
- Liquidity risk (Chapter 6)
- Operational risk (Chapter 7)
- Sustainability risk (Chapter 8)

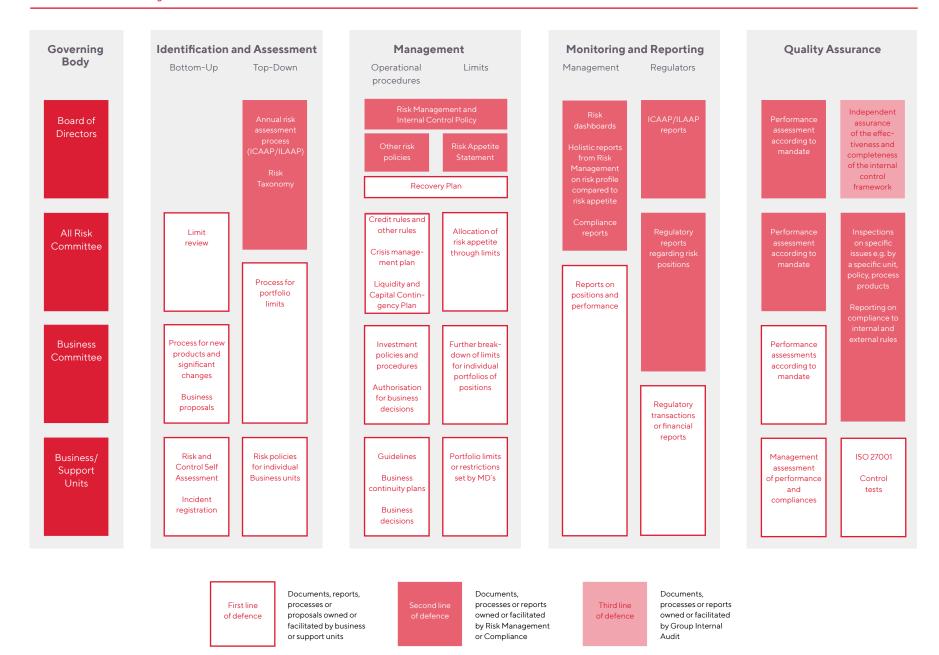
Concentration risk is defined as material but currently managed according to the source of concentration. Concentration risk is considered in the *Credit Risk Policy*, the *Market Risk Policy*, and the *Liquidity Risk Policy*. Anti-money laundering is considered a part of operational risk in this context.

Risk types that are not covered in separate risk policies are assessed through the annual ICAAP process based on the Bank's Risk Taxonomy and addressed in other risk policies and management reports in accordance with their nature and importance.

# 2.4.4 Risk Monitoring and Reporting

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

Exhibit 2.4. Íslandsbanki's risk governance framework.



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

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

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

## 2.4.5 Liquidity and Capital Contingency Plan

The Bank's Liquidity and Capital Contingency Plan describes the process for assessing the liquidity risk and capital adequacy position according to three different levels of severity called contingency stages. The main purpose of the contingency plan is to provide the Bank's management with an instrument that identifies actions and contingency options to restore financial strength and viability of the Bank in case it should come under capital or liquidity stress. Moreover, it defines the internal roles and responsibilities at each contingency stage and the contingency options the Bank may take at each stage in order to return to normal business conditions. The plan also defines the management of internal and external disclosure, communication and reporting at each contingency stage. The Liquidity and Capital Contingency Plan is tested regularly and findings from the tests are used to improve the contingency plan if needed.

### 2.4.6 Recovery Plan

The Bank has implemented a comprehensive framework to ensure the viability of its operations in the unlikely event of significant financial stress. In accordance with Icelandic law, the Bank has in place a Recovery Plan setting out the relevant measures to be taken by the Bank to restore its financial position following a significant deterioration in capital or liquidity. The Recovery Plan contains several recovery options that have been tested against different stress scenarios to ensure that the Bank is able to recover under different circumstances and return its core business lines and critical functions to business as usual.

The activation of recovery options can include extraordinary measures subject to the Board's or even the shareholder's approval. The status of the Bank's contingency indicators and contingency stages is reported monthly to the All Risk Committee and the Board of Directors as a part of the Risk



Exhibit 2.5. Risk reporting and frequency to the Board of directors, Board's Risk Committee and All Risk Committee.

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

Dashboard. The Board is responsible for the approval and submission of the Recovery Plan to the Central Bank.

### 2.4.7 Internal Reporting

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

Risk Management is responsible for providing ARC, the Board's Risk Management Committee and the Board with comprehensive and understandable information on the overall risk profile of the Group, including a comparison with the approved policies and limits. Exhibit 2.5 provides an overview of risk reporting and frequency to the ARC and the Board of Directors. In addition, risk positions are reported to various business committees like the Asset and Liability Committee, Operations and Security Committee and the Sustainability Committee.

# 2.4.8 External Reporting

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

Reports 2022

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

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

# 3 Capital Management

Islandsbanki's capital position remained strong throughout 2022 and at year-end the Group's capital ratio was 22.2%, exceeding both the capital target and regulatory requirements. The CET1 ratio was 18.8%, well above the long-term target of 16.5%. The capital management strategy is to aim for the long-term target of CET1 while satisfying various conditions set by the risk framework. This can lead to an optimisation of the capital structure by adjusting the share of AT1 or Tier 2 capital through further issuance and lowering CET1 through dividend payments or similar methods.

# 3.1 Strategy, Organisation and Responsibility

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

The Board of Directors is responsible for the Bank's capital management framework and for ensuring that the Bank's capitalisation is adequate in relation to the risk inherent in the operations considering the Bank's business strategy and operating environment. The Board defines the capital governance framework and the adequate capitalisation through the Risk Management and Internal Control Policy, the Risk Appetite Statement, Risk Assessment Framework, and the Capital Management and Pricing Policy.

In addition to the current internal requirement of adequate capitalisation, the Board has defined a long-term capital target as a part of the business strategy.

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

The Asset and Liability Committee (ALCO) is responsible for capital allocation to the business units within the framework set by the Board. ALCO reviews and approves the contingency stage assessment as a part of the Bank's *Liquidity and Capital Contingency Plan* and reviews information about the capital adequacy position of the Bank with respect to business targets and risk limits.

Risk Management is responsible for internal and external reporting on the Bank's capital adequacy. Risk Management is also responsible for the Bank's

Internal Capital Adequacy Assessment Process (ICAAP) and for the calculations of the allocated capital to individual business units.

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

# 3.2 Total Capital and Capital Ratios

At year-end 2022 the Bank's common equity Tier 1 (CET1) amounted to ISK 197bn as compared to ISK 192bn at year-end 2021. The main factor contributing to the increase in CET1 is the ISK 24bn profit for the year. The transitional adjustments due to IFRS 9 where impairment allowance is partially added back to CET1 is currently 25% of the incremental provision for credit risk compared to 50% in 2021. This change leads to an ISK 1.4bn decrease in CET1. The adjustment will decrease all the way down to 0% in 2023.

The Annual General Meeting of Íslandsbanki hf. held on 17 March 2022 authorised the Board of Directors to acquire on behalf of the Bank up to 10% of issued share capital of the Bank. The Central Bank of Iceland has furthermore granted a permission for the Bank to acquire, through buyback, share capital of the Bank equivalent to ISK 15bn, which is within the 10% authorisation from the AGM. The approved amount of ISK 15bn is subtracted from the capital base. The capital distribution is subject to market conditions. The target dividend payment amounting to 50% of

the Group's profit for 2022 is also deducted from the capital base.

The Bank's Tier 2 capital decreased from ISK 25bn to ISK 24bn during the year, due to the appreciation of the ISK against SEK in which all the Tier 2 issuance are denominated. On 4 October 2022, the Bank launched a two-tranche Tier 2 issue of ISK 10.5bn, one transaction is CPI-linked and the other paying a nominal yield, both with maturities in April 2033. The Bank exercised the option to call the notes on Tier 2 notes that were due November 2027, amounting to SEK 750m (ISK 10.2bn).

The capital requirements and capital ratios are presented in terms of the Risk Exposure Amount (REA) that is determined by multiplying the capital requirements for market risk and operational risk by 12.5 (the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of the risk weighted assets for credit risk (see more in Section 3.4).

The Bank's minimum capital requirements and the corresponding risk exposure amounts are shown in Exhibit 3.2, and the resulting capital ratios in Exhibit 3.3. Details regarding the Bank's capital requirements can be found in Section 3.4.

The REA increased by ISK 98bn during the year and the main components contributing to changes can be seen in Exhibit 3.4. The largest increase was due to growth in the loan portfolio (ISK 50bn) and unused credit commitments (ISK 21bn). Loans to credit institutions contributed ISK 15bn to growth in REA with rise in liquid assets. REA due to operational risk which is based on average income for the past three years increased in line with increased operations.

Exhibit 3.1. Breakdown of the capital base at year-end 2022 and 2021 (ISK m).

Capital	31.12.2022	31.12.2021
Ordinary share capital	10,000	10,000
Share premium	55,000	55,000
Reserves	9,158	6,085
Retained earnings	144,716	132,624
IFRS 9 reversal due to transitional rules	1,302	2,768
Fair value changes due to own credit standing	(1,786)	1,054
Foreseeable dividend payment and approved buyback	(27,267)	(11,863)
Tax assets	(116)	(94)
Intangible assets	(3,279)	(3,352)
Common equity Tier 1 Capital	187,727	192,223
Additional Tier 1 capital	10,062	10,626
Tier 1 Capital	197,789	202,848
Tier 2 capital	24,330	25,136
Total capital base	222,119	227,985

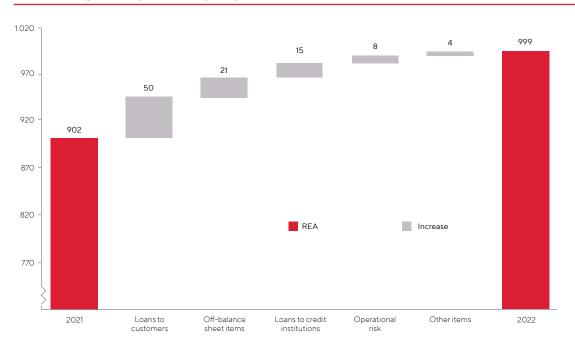
Exhibit 3.2. Pillar 1 capital requirements and REA at year-end 2022 and 2021 (ISK m).

	31.12.202	.2	31.12.2021		
Íslandsbanki's capital requirements and REA	Minimum capital requirements	REA	Minimum capital requirements	REA	
Credit risk	71,449	893,110	64,172	802,147	
Market risk	1,233	15,417	1,368	17,100	
Credit valuation adjustment	220	2,756	146	1,830	
Operational risk	7,057	88,208	6,446	80,570	
Total	79,959	999,491	72,132	901,646	

Exhibit 3.3. REA and capital ratios at year-end 2022 and 2021.

	31.12.2022		31.12.2022 31.12.2021		21
	ISK m	% of REA	ISK m	% of REA	
REA	999,491		901,646		
CET1 capital	187,727	18.8%	192,223	21.3%	
Tier 1 capital	197,789	19.8%	202,848	22.5%	
Capital base	222,119	22.2%	227,985	25.3%	

Exhibit 3.4. Changes in risk exposure amount (ISK bn).



# 3.3 Internal Capital Adequacy Assessment Process

The internal capital adequacy assessment process (ICAAP) aims at identifying and assessing the risk inherent in the Bank's operations and for integrating the Bank's business strategy and business plan on one hand and the risk profile on the other hand to ensure that the Bank holds enough capital to support its risk profile and business strategy through a period of severe stress.

The Board of Directors is ultimately responsible for the ICAAP and is actively involved in the assessment process. The process is carried out by Risk Management with active participation of the business and support units through risk identification and appropriate reviewal of the capital adequacy assessment and stress testing results.

In an annually revised 5-year business plan, the Bank's risk strategy is aligned with the business strategy, and the financial targets are translated into a base case projection of the financial results under normal business conditions. The business plan forms the basis for pro forma financial statements that allow for a comprehensive business and strategic stress testing whereby the impact of all relevant risk drivers is assessed.

# 3.4 Capital Requirements

The Board of Directors sets minimum capital thresholds for the Bank, expressed as the ratio between capital and risk exposure amount. The minimum capital thresholds are intended to reduce the likelihood that the regulatory overall capital requirement is ever breached. The minimum is based on the results from ICAAP, the views expressed

by the regulator through the Supervisory Review and Evaluation Process (SREP), implementation and announced changes of the capital buffers, and other factors such as uncertainties in the operating environment or other external factors. The following sections describe each component in more detail.

## 3.4.1 Pillar 1 Minimum Capital Requirements

The first pillar of the CRD IV defines the minimum capital requirements for credit risk, market risk, and operational risk. The minimum capital requirement under Pillar 1 is 8% of the risk exposure amount. For each of the Pillar 1 risk factors, the CRD IV allows for different methods to be used for calculating the minimum capital requirements and thereby REA.

# Credit Risk

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

### Market risk

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

### Operational risk

The Bank uses the Standardised Approach to calculate capital requirements for Pillar 1. The minimum capital requirement for operational risk

varies by business lines and equals 12-18% of the average over three full calendar years of the sum of net interest income, net fee and commission income, and net other financial income in that business line.

# 3.4.2 Pillar 2 Required Add-On (Pillar 2-R)

In addition to the minimum capital requirements for credit risk, market risk and operational risk under Pillar 1, financial institutions are required to make their own assessment of the overall capital requirements in the ICAAP process. These additional capital requirements, taking into account the risk profile of the institution, are referred to as Pillar 2-R capital requirements. The sum of Pillar 1 and Pillar 2-R is referred to as total SREP capital requirement (TSCR).

In the ICAAP 2022, the main factors contributing to additional capital requirements under Pillar 2-R were:

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

The Pillar 2-R capital requirements are presented as a proportion of REA and come as an addition to the regulatory capital minimum of 8% under Pillar 1. The Bank's Pillar 2-R results are reviewed by the Central Bank through the SREP. Based on the 2022 SREP, the additional capital required for Íslandsbanki under Pillar 2-R was 2.6% of REA, an increase of 0.1% from 2021. The breakdown of the Pillar 2-R capital and the total SREP capital requirements can be seen in Exhibit 3.5.

Exhibit 3.5. Breakdown of the total SREP capital requirement.

SREP capital requirement	2022	2021
Pillar 1	8.0%	8.0%
Credit risk	7.2%	7.1%
Market risk	0.1%	0.2%
Operational risk	0.7%	0.7%
Pillar 2-R	2.6%	2.5%
Credit risk and concentration risk	1.7%	1.6%
Market risk	0.9%	0.9%
Total SREP capital requirement	10.6%	10.5%

### 3.4.3 Combined Capital Buffer Requirement

Four capital buffers are introduced through the CRD IV and applicable for Icelandic financial institutions: (1) Capital conservation buffer, (2) institution specific countercyclical buffer, (3) buffer for systemically important institutions and (4) systemic risk buffer. Together these buffers form the combined buffer requirement. The capital buffers are generally intended to enhance banks' ability to withstand adverse changes in the environment and reduce fluctuations related to the business cycle.

The size of the capital conservation buffer is fixed by law at 2.5% while the size of the other capital buffers is stipulated in rules issued by the Central Bank.

The Central Bank of Iceland has increased the countercyclical capital buffer (CCB) from 0% to 2%, effective from September 2022. The buffer had previously been reduced from 2% to 0% as a response to COVID-19.

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

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

The calculation of the institution specific countercyclical capital buffer rate is displayed in sheet CCyB2 in the Additional Pillar 3 Disclosures. Exhibit 3.6 shows combined buffer requirement for Íslandsbanki at year-end 2022 and 2021.

The sum of Pillar 1, Pillar 2-R and the combined capital buffers form the overall capital requirement.

Exhibit 3.6. Combined capital buffer requirement.

	31.12.2022	31.12.2021
Capital conservation buffer	2.50%	2.50%
Countercyclical capital buffer	1.96%	0.00%
O-SII buffer	2.00%	2.00%
Systemic risk buffer	2.84%	2.84%
Combined buffer requirement	9.31%	7.34%

Exhibit 3.7. Composition of the regulatory capital requirements at year-end 2022.

SREP capital requirement	CET1	AT1	Tier 2	Total
Pillar 1	4.5%	1.5%	2.0%	8.0%
Pillar 2	1.5%	0.5%	0.7%	2.6%
Combined buffer requirement	9.3%	-		9.3%
Overall capital requirement	15.3%	2.0%	2.7%	19.9%

# 3.4.4 Pillar 2 Guidance for Stressed Conditions (Pillar 2-G)

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

### 3.4.5 Management Buffer

The Bank aims at managing its capital position and the corresponding capital ratios at a comfortable margin above the overall regulatory capital requirement. This margin is referred to as the management buffer in the Bank's capital management framework. The size of the management buffer is based on factors such as views from the regulator through the SREP, volatility in the Bank's REA due to currency fluctuation, volatility in the Bank's REA due to lumpy asset growth, the Bank's target rating, competitive issues, funding terms, uncertainty in the operating environment not accounted for in the ICAAP, and uncertainty in the regulatory environment. Currently the management buffer is 0.5%-2.0% as defined in the Risk Appetite Statement set by the Board of Directors.

# 3.4.6 Capital Composition

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

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

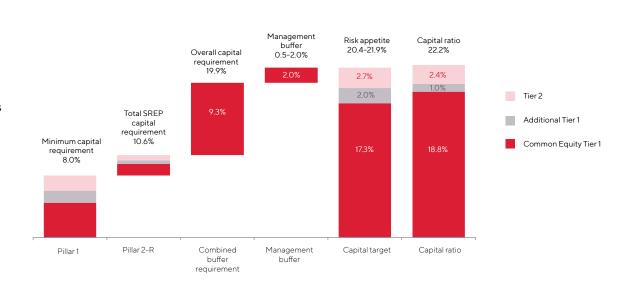
The capital held under Pillar 2-R is subject to the same proportional restrictions as capital held under Pillar 1, while the CRD IV capital buffers shall be comprised of CET1 capital only. Exhibit 3.7 shows the composition of the overall capital requirement.

# 3.4.7 Capital Target

The Bank's risk management framework stipulates a management buffer of 0.5–2.0% above the overall capital requirement resulting from the SREP. Based on the most recent SREP results, this translates to capital thresholds of 20.4–21.9% with the composition of the capital satisfying the constraints presented above.

In addition to the capital thresholds defined in the Risk Appetite Statement, the Board of Directors has set a long-term CET1 capital target for the business plan of 16.5%.

Exhibit 3.8. Regulatory requirements compared with Islandsbanki's risk appetite as well as the composition of the Bank's current capital ratio.



The capital management strategy is then to aim for the long-term target of CET1 while satisfying the conditions set by the risk framework. This can lead to an optimisation of the capital structure by adjusting the share of AT1 or Tier 2 capital through further issuance and lowering CET1 through dividend payments or similar canals.

# 3.5 Stress Testing

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

The main types of stress tests performed at Íslandsbanki are:

- 1. Sensitivity analysis: Sensitivity analyses provide information about key risks and enhance understanding about concentrations in one or several risk factors. Sensitivity analysis stresses one risk driver, with different degrees of severity, to assess the sensitivity of the Bank's operations to that particular risk driver.
- 2. Reverse stress test: Reverse stress testing consists of defining a significant and pre-defined negative outcome and then identifying causes and consequences that could lead to such an outcome. The purpose is to identify possible combinations of events and risk concentrations that might not be included in other stress tests performed within the Bank. Thus, the reverse stress test could reveal weaknesses in the Bank's operations that might otherwise be overlooked.

- 3. Scenario analysis: Scenario analysis can be defined as multiple sensitivity analyses performed at the same time which assess the resilience of an institution. A stress scenario is supposed to be forward-looking and identify possible events or changes in market conditions that could adversely impact the Bank. The scenario should address the main risk factors that the Bank may be exposed to. The scenario should be severe but plausible and at the same time be consistent internally as well as economically.
- 4. Specific events: Under this type of stress testing, the Bank assesses specific current or imminent events that could have an extensive impact on its operations, the risk mitigating actions that can be taken to reduce the likelihood of these events materialising and to minimise the impact for the Bank.
- 5. Reputational risk stress test: Qualitative stress testing due to reputational risk are performed by experts from across the Bank. The experts come up with a scenario that could damage the Bank's reputation and analyse how the scenario affects the Bank's reputation, the impact it has on different stakeholders, the likelihood that it would have this effect and discuss possible countermeasures. The discussions are documented and summarised in the Bank's ICAAP Stress Testing Results.

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

# 3.6 Leverage Ratio

The leverage ratio is a measure supplementing the risk-based capital requirements. The leverage ratio is calculated by dividing Tier 1 capital by the sum of total assets and adjusted off-balance sheet exposures. According to law, the minimum leverage ratio is 3%. The leverage ratio is monitored monthly through the Risk dashboard. The level of the Bank's overall requirement as well as the current RWA density deter excessive leverage.

The leverage ratio was 12.1% at year-end 2022, compared to 13.6% at year-end 2021. The increase in exposure together with the decrease in Tier 1 capital explain the decline in the leverage ratio. Template LR2 of the Additional Pillar 3 Disclosures shows the components of the leverage ratio calculations.

# 3.7 Minimum Requirements for Own Funds and Eligible Liabilities

In addition to the previously discussed capital requirements that are intended to ensure that the Bank holds enough capital to support its risk profile and business strategy through a period of severe stress, new regulatory requirements are forming with the intention to ensure that the Bank maintains a minimum amount of equity and debt to support an effective resolution. These are called Minimum Requirements for Own Funds and Eligible Liabilities (MREL).

With the implementation of the Bank Recovery and Resolution Directive (BRRD), credit and financial institutions in the EU are required to hold a certain amount of bail-in-able resources to fulfil the minimum requirement for own funds and eligible liabilities. The purpose of the MREL is to ensure that institutions can absorb potential losses and be recapitalised with no recourse to public funds.

In December 2021, the Icelandic Resolution Authority published its MREL policy for Icelandic banks and in September 2022 the Resolution Authority announced that a resolution plan had been approved for Íslandsbanki and thereby the MREL requirement based on the MREL policy.

The resolution plan stipulates that the MREL requirement for Íslandsbanki is the sum of the Loss absorption amount (LAA) and Recapitalisation amount (RCA), both equal to the total SREP capital requirement of 10.6%, resulting in an MREL requirement of 21.2% of REA. Note that no market confidence charge is applied in Iceland. The requirement can be met with the total capital base in addition to senior non-preferred and senior preferred debt with some conditions, such as having more than one year to maturity. This debt is referred to as eligible liabilities. The subordination requirement provided for in BRRD II has not been implemented in Iceland.

Since any CET1 capital that is maintained to meet the combined buffer requirement (CBR) is excluded, the effective requirement can be monitored as 30.5% of REA. The Bank's effective MREL ratio was 34.5% at year-end 2022, 4.0% above the requirement.

Exhibit 3.9. Minimum requirement for own funds and eligible liabilities (MREL) and Own fund and eligible liabilities at year-end 2022.

Minimum Requirements for Own Funds and Eligible Liabilities	ISK m	(%REA)
MREL	211,892	21.2%
Combined buffer requirement	93,028	9.3%
MREL including CBR	304,920	30.5%
Own funds and eligible liabilities	ISK m	(%REA)
Own funds	222,119	22.2%
Eligible liabilities	122,925	12.3%
Own funds and eligible liabilities	345,044	34.5%



# 4 Credit Risk

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

At the end of 2022, the Bank's maximum exposure to credit risk amounted to ISK 1,756bn, compared to ISK 1,567bn at year-end 2021. The loan portfolio grew by 9.2% in 2022, compared to 7.9% increase in the previous year. As the COVID-19 pandemic came to a halt, most were hoping that the year 2022 would yield to a period of greater equilibrium. The year has, however, been characterised by significant volatility in the global economy and financial markets, following Russia's invasion of Ukraine. Although inflation has proven more stubborn and interest rates have risen in the past year, the share of loans with significant increase in credit risk continued to decrease in 2022, currently at 2.5% compared to 9.6% the year before. Credit risk accounted for 89% of capital requirements under Pillar 1 and credit risk and credit concentration risk accounted for 83% of the total capital requirements, as determined in SREP.

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

# 4.1 Strategy, Organisation and Responsibility

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

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

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

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

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

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

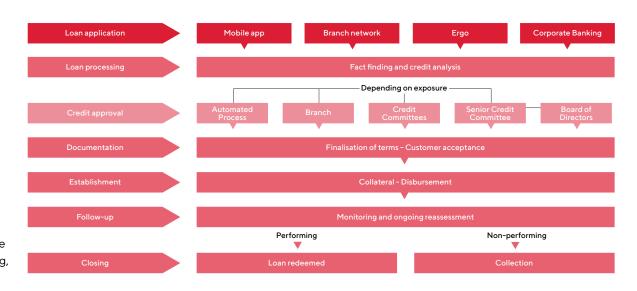
The Bank's credit process, shown in Exhibit 4.1, is based on a committee structure where the Senior Credit Committee has the authority to approve credit proposals within authorisation limits set by the Board of Directors. The Senior Credit Committee then appoints and allocates credit authorisation limits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

The All Risk Committee approves frameworks for rule-based and automated approval processes. The frameworks include appropriate control mechanisms, continuous monitoring and reporting, assessment of the risk associated with the process, and mitigating actions. To further strengthen the quality of frameworks for rule-based or automated approval processes, they shall be reviewed annually with the results presented to the Board of Directors. Automated approval processes do not relieve the business units granting the credit of their responsibilities regarding credit quality or accountability.

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

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

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



valuation of collateral is coordinated throughout the Bank.

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

Customers that show signs of financial difficulties are placed on an internal watchlist and monitored carefully. When restructuring measures are more appropriate than collection procedures, the Bank can offer several measures and restructuring frameworks

for customers in financial difficulties. Forbearance measures include temporary payment holidays, extension of loan terms, capitalisation of arrears, and waiving of covenants. In cases when these measures are not sufficient, they may be precursors to a more formal restructuring process. Formal legal collection and liquidation of collateral is the final step of the collection process if other measures are not successful.

# 4.2 Measurement and Monitoring

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

probability of default and the impairment allowance for non-defaulted facilities.

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

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

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

### ECL = PD · LGD · EAD

Under IFRS 9, all loans are required to carry an impairment allowance of either 12-month expected credit loss or, in case of a significant increase in credit risk since origination, lifetime expected credit loss. This impairment allowance is calculated using several different scenarios for the future economic development and the final result is the probability-weighted average of the ECL in these scenarios. The calculation of the impairment allowance under IFRS 9 is further discussed in Note 61.4 in the Consolidated Financial Statements.

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

### 4.2.1 Definition of Default

The Bank's definition of default has been designed so that it simultaneously satisfies the requirements in the definition of stage 3 according to IFRS 9, the definition of default according to Article 178 of CRR, and the definition of non-performing exposure used in FINREP. Defaults are defined on the obligor level rather than the facility level. Obligors are considered to be in default according to the current definition if

- (a) it is the opinion of the Bank that it is unlikely that they will fulfil the terms of their contracts or
- **(b)** they have been more than 90 days past due on material credit obligations.

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

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

Among the triggers which indicate that a customer should no longer be considered in default are that the customer has maintained normal repayments over a certain period, that a period of probation has been completed, and that the customer changed due to an event such as a merger or acquisition of the customer or any other similar transaction that significantly improved their financial position.

At the end of September 2021, the Central Bank of Iceland set for the first time a harmonised level for the materiality threshold for credit obligations that are past due in Iceland. The harmonised threshold has an absolute component of ISK 15,000 for retail obligors and ISK 75,000 for others and a relative component of 1% of the obligor's total exposure. Íslandsbanki has been using a similar absolute component in its definition of default under point (b) but the relative component was added in the year 2022. At the same time the method for counting days past due was changed so that a partial repayment of an amount past due does not affect the number of days past due if the remaining amount past due owed by the same obligor still exceeds the materiality threshold.

# 4.2.2 Probability of Default

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

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

Exhibit 4.2. Methods used to assess the default risk of different obligor types, approximate number of obligors and relative size of on-balance-sheet exposure at year-end 2022.

Obligor type	PD assessment	Number of obligors	Exposure
		(approx. count)	(%)
Individuals	Statistical model	92,000	38.0%
Small companies	Statistical model	10,000	6.6%
Large companies	Hybrid model	500	32.1%
Credit institutions	Expert model	100	9.1%
Regional governments	Expert model	20	0.7%
Sovereigns	Expert model	10	13.4%

Exhibit 4.3. Average long-term PD levels per risk class for the different rating models at end of year 2022.

Risk group	Risk class	Large companies	Small companies	Individuals
		(%)	(%)	(%)
Low	1	0.3	0.2	0.1
	2	0.4	0.4	0.4
	3	0.8	0.8	0.9
	4	1.3	1.6	1.4
Medium	5	2.3	2.7	2.1
	6	4.1	4.2	3.1
Increased	7	7.1	7.3	5.4
	8	12.5	15.3	11.9
High	9	21.8	37.1	35.4

classes. Risk class 10 is reserved for obligors in default and risk classes 1-9 for other obligors.

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

# 4.2.3 Observed Default Frequency

The Bank's PD models predict the long-term average of the one-year default rate while the observed default frequency (ODF) depends on the current state of the economy.

In 2022 there were a handful of observed defaults for large companies, which translates to a 1.3% default frequency compared to a predicted default probability of 5.5%. The defaults were so few that a meaningful comparison of the observed default frequency and the predicted probability of default per risk class is not possible.

For individuals and small companies, however, the number of defaults allow for a meaningful breakdown by risk classes, as shown in Exhibits 4.4 and 4.5. Risk classes 1 through 4 are grouped together due to few defaults in those classes. In the case of individuals, the mapping from PD to risk classes for year 2022 differs from previous years, due to a recalibration of the rating model in year-end 2021.

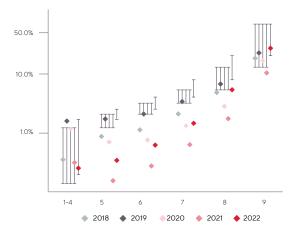
As expected, due to COVID-19 measures such as moratoria, the observed default frequency is lower than the predicted long-term default rate. Since the PD models were fitted on regular business cycle data, a discrepancy between ODF and predicted default rates is not necessarily a cause for concern. Although inflation has proven more stubborn and interest rates have risen in the past year, households and businesses have shown to be resilient in historical context. The observed default frequency was 1.1% compared to the 2.9% predicted probability of default for individuals, while corresponding rates were 2.5% and 7.5% for small companies, respectively.

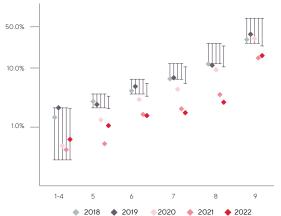
## 4.2.4 Loss Given Default

The loss given default (LGD) represents the percentage of exposure which is expected to be lost if an obligor goes into default. The loss given default mostly depends on collateralisation and other credit mitigants but in many cases defaulted customers become performing again without the need to seize collateral. To take historically observed loss experience into account, while also allowing for a risk-sensitive differentiation of the portfolio, loss given default is modelled using loss severity in several different scenarios. One of the scenarios considered is that the facility becomes performing again without intervention by the Bank and the probability of that scenario is the so-called cure rate. The other scenarios assume that recoveries are based on the

Exhibit 4.4. Observed default frequency (dots) and the range of the predicted through-the-cycle probability of default (vertical lines) by risk class for individuals in 2022, results from other years shown for comparison. Logarithmic scale.

Exhibit 4.5. Observed default frequency (dots) and the range of the predicted through-the-cycle probability of default (vertical lines) by risk class for small companies in 2022, results from other years shown for comparison. Logarithmic scale.





seizing of collateral and apply different haircuts according to the type of collateral and scenario. The haircuts are applied to the most current and appropriate valuation of the pledged collateral. The haircuts take into account cost of sale, depreciation of value, and discounting of recovery cash flows. The resulting amounts are allocated to eligible exposures by maximising the total collateralisation of the exposure amount subject to constraints imposed by the collateral agreements. For facilities and obligors, where collateral is generally not pledged, the estimate of LGD may be based on a specific assessment.

### 4.2.5 Exposure at Default

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

EAD = Drawn amount + CCF · Undrawn amount

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

### 4.3 Credit Concentration

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

# 4.3.1 Borrower Concentration

The Bank actively seeks to limit large exposures. A large exposure is defined as an exposure to a group of connected clients that is 10% or more of the Bank's

Tier 1 capital. The exposure is evaluated both before and after application of eligible credit risk mitigating effects according to relevant rules. When assessing the exposure, both on-balance sheet items and off-balance sheet items from all types of financial instruments are included. The Bank has internal criteria that define connections between clients in line with Icelandic law and EBA guidelines, where groups of connected clients are defined.

At year-end 2022, the Bank had five large exposures after eligible credit risk mitigating effects that amounted to 57% of the Bank's Tier 1 capital.

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

### 4.3.2 Industry Sector Concentration

The Bank defines industry sectors as groups of entities that have similar primary activities, underlying risk factors, and behaviour characteristics. The sector classification is generally based on information from the tax authorities although the Bank has the possibility to reclassify customers internally based on a "see-trough principle" when another sector is more descriptive of the underlying risk.

In the case of real estate companies, this can be appropriate if the real estate is specialised and the credit risk depends more on the operations located in the building than general real estate or rental prices.

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

an economic industry sector, is also considered separately.

The tourism industry is an important economic sector in Iceland but due to the nature of tourism, its effects are not limited to hotels, car rentals and tour guides. The Bank therefore monitors the tourism industry internally as a quasi-sector instead of a new separate sector.

# 4.3.3 Geographic Concentration

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

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

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

# 4.3.4 Product Concentration and Collateral Concentration

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

Credit exposure that is not a part of the Bank's principal lending activity is limited in the Bank's Risk Appetite Statement. Primarily, this includes lending to holding companies collateralised by shares in operating companies.

#### 4.4 Settlement Risk

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

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

# 4.5 Counterparty Credit Risk

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

The Bank takes on CCR when entering into derivatives transactions. This includes, but is not limited to, interest rate swaps and futures, crosscurrency swaps, equity forwards, and options.

Customers enter into derivatives contracts with the Bank either to take on speculative positions or to hedge risk for the customer's own risk mitigation purposes. Derivatives contracts with customers are generally done on margin where customers post collateral to the Bank. The Bank's objective in setting

margin requirements is to have adequate collateral to absorb any losses that the position could suffer before the Bank is able to close the position. Margin requirements are decided based on the underlying product and its characteristics, such as volatility and liquidity. In addition to cash, the Bank accepts selected stocks and bonds as collateral posted for margin trades. Non-cash collateral is subject to haircuts depending on risk characteristics such as the issuer and duration in the case of bonds and volatility and liquidity in the case of stocks. The Bank uses netting across contracts of the same counterparty to allow profits in one contract to offset collateral requirement in another contract. To mitigate wrong-way risk, the Bank generally does not accept collateral that is correlated with the asset underlying the respective customers' derivatives contracts. The Bank may waive collateral requirements where the purpose of the derivatives contract is to mitigate the customer's own risk, subject to certain conditions, including an approved credit limit based on the customer's creditworthiness. Limits are also set to manage the concentration risk towards single issuers or instruments and thus to manage the risk of the instruments becoming illiquid.

The Bank actively uses derivatives to hedge currency, interest, and inflation exposures. Such derivatives contracts are generally subject to ISDA master agreements with a Credit Support Annex, or similar terms, with collateral in the form of cash and eligible bonds. Counterparties in these contracts are also subject to approved credit limits.

When setting credit limits for counterparties in derivatives contracts, the Bank follows the same process as for other credit exposure and, as for credit concentration risk in general, credit limits

for counterparties are constrained by various concentration limits, many of which are defined in terms of the Bank's capital base. This is discussed further in section 4.3.

Information on CCR exposures, broken down by various characteristics, is provided in CCR1, CCR2, CCR3, CCR5, and CCR6 in the Additional Pillar 3 Disclosures.

# 4.6 Credit Risk Exposures

Credit risk exposure comprises both on-balance sheet and off-balance sheet items. Exposure to credit risk for on-balance sheet assets is the net carrying amount as reported in the Consolidated Financial Statements, see Template LI1. The maximum credit exposure for off-balance sheet items is the

amount that the Bank might have to pay out against financial guarantees and loan commitments, less the impairment the Bank has made for these items. The credit exposure for capital requirement purposes does not reconcile with the net carrying amount in the Consolidated Financial Statements mostly due to the contribution of off-balance sheet items, see Template LI2 in the Additional Pillar 3 Disclosures for details on the difference.

For capital requirement purposes, credit conversion factors are applied to guarantees and undrawn commitments. For derivative contracts, the exposure is calculated by adding potential future credit exposure to the positive market value of the contract. The Bank currently has no direct credit exposure to securitisation.

Exhibit 4.6 summarises and describes the main sources of credit risk, while Exhibit 4.7 shows the main sources for credit risk at year-end 2022 and 2021.

# 4.6.1 Cash and Balances with Central Bank and Loans to Credit Institutions

Cash and balances with the Central Bank and loans to credit institutions can fluctuate considerably between periods due to liquidity management. Exhibit 4.8 shows a breakdown of these exposures at year-end 2022 and 2021.

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

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

Exhibit 4.6. The main sources of credit risk.

Item	Obligor type	Description	
Loans to customers	Individuals and households	Loans to individuals derive from lending activities to individuals and households. The largest product type is mortgages, but it also includes term loans, car loans and leasing agreements, credit cards, and overdrafts.	
	Legal entities, municipalities, and state-guaranteed obligors	Loans to companies as well as municipalities and public-sector entities. This includes long-term facilities, leases and asset-based financing, working capital facilities and other short-term financing, project finance, and financing of income producing real estate.	
Cash and balances with Central Bank and loans to Financial institutions and central banks redit institutions		Mandatory reserve deposits and other balances with the Central Bank as well as ot exposures to international banks and financial institutions, for example as part of th Bank's liquidity management.	
Bonds and debt instruments  Government entities, issuers of listed bonds approved by the Bank's credit committees		The Bank is exposed to credit risk due to trading and investing in debt instruments, example as part of the Bank's liquidity management and its trading activities. In terr of capital requirement these exposures are however treated as market risk.	
Off-balance sheet items		This includes unused overdrafts and credit card limits, undrawn amounts in credit agreements and project finance agreements, letters of credit and export documentary credits.	
Derivatives	Qualified counterparties with defined credit limits at the Bank	Derivatives, short positions and other financial instruments that involve contingent exposures.	
Shares and equity instruments		Shares and equity instruments in the banking book mainly consist of equity investments within proprietary trading.	
Other assets		Account receivables, property and equipment, non-current assets and disposal groups held for sale.	

Exhibit 4.7. The main sources for credit risk at year-end 2022 and 2021 (Carrying amount, ISK bn). Consolidated.

	31.12.	2022	31.12.2021	
Credit risk	Maximum exposure to credit risk	Exposure under the credit risk framework	Maximum exposure to credit risk	Exposure under the credit risk framework
Loans to customers	1,186.6	1,186.6	1,086.3	1,086.3
Cash and balances with Central Bank and loans to credit institutions	204.8	204.8	157.7	157.7
Bonds and debt instruments	130.8	-	132.3	-
Off-balance sheet items	203.1	68.7	164.3	49.2
Derivatives	25.3	18.0	21.5	11.9
Shares and equity instruments	19.7	6.1	32.6	7.0
Other assets	13.6	9.8	14.1	14.0
Total	1,783.9	1,494.0	1,608.9	1,326.2

Exhibit 4.8. Cash and balances with the Central Bank and loans to credit institutions at year-end 2022 and 2021, by risk weights (net carrying amount, ISK bn). Consolidated.

Type of institution	31.12.2022	31.12.2021
Central Bank	94.4	113.7
Domestic credit institutions	1.0	1.0
Foreign credit institutions	109.3	43.0
thereof in risk weight 20%	102.3	6.1
thereof in risk weight 50%	7.1	33.1
thereof in risk weight 100%	-	0.2
Total	204.8	157.7

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

### 4.6.2 Bonds and Debt Instruments

The Bank is exposed to credit risk as a result of trading and investing in bonds and debt instruments, mostly as part of liquidity management. In terms of capital requirements these exposures are treated under the market risk framework and is further discussed in Section 5.

### 4.6.3 Off-Balance Sheet Items

The Bank's maximum exposure to credit risk deriving from off-balance sheet items totalled ISK 203bn at year-end 2022 compared to ISK 164bn the year before see Exhibit 4.9. For regulatory purposes a credit conversion factor is applied to calculate the exposure under the credit risk framework. Calculated in this way, the regulatory credit exposure deriving

from off-balance sheet items totalled ISK 69bn at year-end 2022 compared to ISK 49bn at year-end 2021.

### 4.6.4 Derivatives

The Bank uses derivatives to hedge currency, interest, and inflation exposure. The Bank carries relatively low exposure due to margin trading with clients and in these cases, the Bank holds collateral to cover possible losses. Exposure under the credit risk framework for derivatives amounted to ISK 25.3bn at year-end 2022 compared to ISK 21.5bn the year before.

# 4.6.5 Country Risk Exposure

Exposure to countries other than Iceland amounted to ISK 154bn at year-end 2022. This exposure relates mainly to the management of the Bank's foreign liquidity reserves. The Bank has no retail lending activities outside of Iceland but maintains a modest portfolio of lending to companies in the United States, Canada, and Norway within its North-Atlantic strategy. The exposure to companies within this portfolio was ISK 16bn at year-end 2022.

### 4.7 Loans to Customers

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

### 4.7.1 Development of the Loan Portfolio

At year-end 2022 the net carrying amount of the portfolio of loans to customers was ISK 1,187bn, having grown from ISK 1,086bn at year-end 2021. This growth of 9.2% is mainly due to the increase in the mortgage portfolio which grew by ISK 50bn on the back of ISK 455bn in lending, a part of which was due

Exhibit 4.9. Off-balance sheet items at year-end 2022 and 2021, by product type. Consolidated.

	31.12.2022			31.12.2021			
Product type	Maximum exposure to credit risk	After CCF	Effective CCF	Maximum exposure to credit risk	After CCF	Effective CCF	
	ISK bn	ISK bn		ISK bn	ISK bn		
Undrawn loan commitments	184.5	59.3	32%	145.1	39.5	28%	
Financial guarantees	18.7	9.4	50%	19.2	9.7	52%	
Total	203.1	68.7	34%	164.3	49.2	31%	

to strong growth in the housing market and partly due to refinancing of outstanding mortgages.

Exhibit 4.10 shows the development of the loan portfolio through 2022.

# 4.7.2 Currency Composition of Loans to Customers

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

### 4.7.3 Loans to Individuals

Loans to individuals amounted to ISK 571bn at yearend 2022 compared to ISK 518bn the year before. New loans and refinancing amounted to ISK 142bn.

The strong rise in residential real estate prices continued in year 2022, where the 12-month price increase in the capital area and its neighbouring municipalities showed a trend of around 17%

increase, which largely explains the 10% increase in loans to individuals. In June 2022, the Central Bank introduced further restrictions on mortgage lending by lowering the maximum LTV ratio for first-time buyers and tightened the rules from 2021 on maximum debt service-to-income (DSTI) ratios by introducing minimum interest rates into the

calculation of the ratio. These measures, together with a rise in the key interest rate from 2.0% to 6.0% throughout the year, resulted in a reduction in the annual increase in real estate prices in the later months of the year.

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

The largest part of loans to individuals is in the form of residential real estate mortgages. Mortgages are granted to individuals to buy or refinance real estate for their own use. The Bank utilises a fully digital and automatic credit score evaluation for

Exhibit 4.10. The main sources of changes in the net carrying amount of loans to customers from year-end 2021 to year-end 2022. Outstanding loans that are refinanced within the Bank are shown both as an increase and a decrease in the carrying amount. Regular instalments, pre-payments and loans that are fully repaid are all shown as instalments in this chart. The effect of facilities that do not have a fixed repayment schedule such as overdrafts and credit cards is in Other changes. (ISK bn). Consolidated.

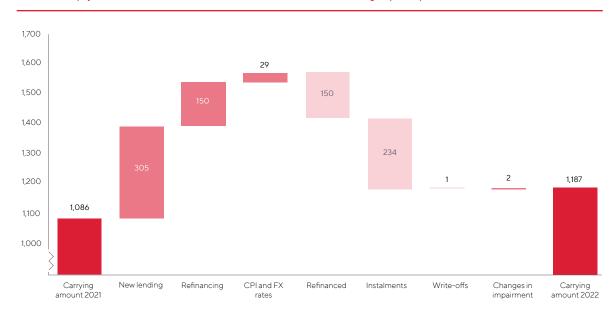


Exhibit 4.11. Currency composition of loans to customers at year-end 2022 (net carrying amount, ISK bn). Consolidated.

Industry sector	Non-indexed	CPI-linked	Foreign currency	Total
Individuals	353.3	217.1	0.1	570.5
Commerce & Services	141.8	14.1	16.3	172.2
Construction	58.8	1.0	-	59.8
Energy	8.3	2.0	0.1	10.4
Financial services	2.6	-	-	2.6
Industrials & Transportation	48.7	2.7	37.4	88.7
Investment companies	25.2	5.3	9.9	40.3
Public sector & non-profit organisations	10.2	0.8	0.0	11.0
Real estate	86.3	39.4	3.0	128.7
Seafood	2.7	0.2	99.4	102.3
Total	737.9	282.5	166.2	1,186.6
Total as %	62.2%	23.8%	14.0%	100.0%
Total at year-end 2021	60.6%	22.7%	16.7%	100.0%

mortgages. The customer permits the Bank to gather information from third parties, such as other financial institutions and tax authorities, and receives a credit score within three minutes. The loan application is fully automated, from the customer's selection of a property, through the selection of a loan structure and to the submittal of loan application. Applicants can track the status of their application and most signatures in the process are electronic.

Mortgages are secured by the first lien on the residential real estate or consecutive liens from and including the first lien. The Bank actively manages the mortgage portfolio by making payment processing effortless with automatic transfers and by actively initiating collection procedures in a timely manner by contacting customers immediately if payments are late.

Term loans to individuals are often secured with residential real estate but do not satisfy all the requirements needed to be classified as the product type mortgages. These loans may have a non-standard term structure, or the purpose of the loan may not have been to acquire the underlying property. These term loans are generally not as well collateralised as mortgages. Other examples are uncollateralised consumer loans granted by an automated process through the Bank's app. The last group of term loans are loans provided to individuals for purchases of vehicles, mostly cars and campers. These loans are usually well collateralised.

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

Leasing agreements are provided to individuals for purchases of vehicles, mostly cars and campers.

These agreements are usually well collateralised. For credit risk purposes these leasing agreements are very similar to loans provided for the same purpose.

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

The first representation is from the property point of view. To find the average LTV of a mortgage portfolio, each property is assigned the maximum CLTV value of the Bank's mortgages on that property and that value is weighted with the total carrying amount of the Bank's loans on the property. The weighted average LTV, calculated in the manner described, was 60% at year-end 2022 compared to 66% at year-end 2021.

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

calculation is based on available data at year-end and for newly granted mortgages there is a few weeks lag in the official lien registration. The classification for loans with over 90% CLTV is temporary and not descriptive for long-term collateralisation.

Another way to represent the LTV of a mortgage portfolio is to consider how each part of the loan amount is distributed in loan-to-value bands. In the breakdown, each part of the loan amount is categorised according to its ranking in the total debt

Exhibit 4.12. Breakdown of the mortgage portfolio by the LTV calculated for each property, year-end 2022 and 2021 (net carrying amount, ISK bn). Consolidated.

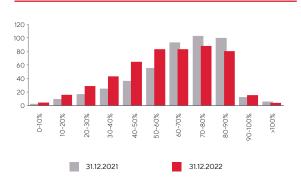


Exhibit 4.13. Breakdown of the mortgage portfolio by LTV bands, year-end 2022 and 2021 (net carrying amount, ISK bn). See main text for further explanation. Consolidated.



on the property. The first band represents the part of the portfolio that falls in the 0-10% LTV band, the second represents the part that falls in the 10-20% LTV band and so on. Exhibit 4.13 shows how the mortgage portfolio is distributed in loan-to-value bands defined in this way.

For capital requirement assessment purposes, residential real estate mortgages to individuals are divided into two segments, the part that is covered up to 80% LTV and the amount that exceeds 80% LTV. The part with an LTV below 80% is potentially eligible for a 35% risk weight when calculating the capital requirements as compared to 75% for the remaining part. One of the benefits of the representation shown in Exhibit 4.13 is that the part of the mortgage portfolio that is potentially eligible for a 35% risk weight is on the left side of a vertical line drawn at 80% LTV in Exhibit 4.13, this amount cannot be inferred from Exhibit 4.12.

#### 4.7.4 Loans to Companies

The category *loans to companies* includes loans to companies as well as municipalities and public sector entities. These loans comprise a significant part of the Bank's balance sheet and operation. Loans to companies amounted to ISK 616bn at year-end 2022 compared to ISK 566bn at year-end 2021. New loans and refinancing of outstanding loans amounted to ISK 313bn in 2022.

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

Notes 47 in the Consolidated Financial Statements show the maximum credit risk exposure for loans to companies, broken down by industrial sectors, and the type of collateral held against these exposures. The Bank's exposure to companies operating in the tourism industry sector is around 9% of the loan portfolio. The tourism sector was significantly affected by the COVID-19 pandemic, due to ongoing public health restrictions and reduction in foreign tourists. As the pandemic came to a halt, the tourism sector began to recover. This is discussed in some detail in Section 4.10.

# 4.8 Loans Covered by Collateral

Collateral and other credit risk mitigants vary between types of obligors and credit facilities. Loans to eligible credit institutions are usually unsecured. For loans to individuals, the principal collateral pledged is residential property against mortgages. Unsecured loans to individuals are mostly short-term consumer loans such as overdrafts and credit cards. In the case of large companies, pledged collateral includes real estate, fishing vessels, cash and securities, as well as other collaterals such as accounts receivable, inventory, vehicles and equipment. Loans to government entities and municipalities are generally unsecured. The measured credit risk exposure of loans is not affected by the pledged collateral.

In some cases, the Bank uses guarantees as credit enhancement but since guarantees effectively transfer credit risk from one counterparty to another they do not represent a reduction in exposure to credit risk, although they may strengthen its quality. The guarantees which the Bank accepts are from parties which have some association with the obligor, e.g. direct ownership. Thus, the Bank does not use general credit derivatives to mitigate credit risk. Covenants in loan agreements are also an important credit enhancement though they do not reduce credit exposure.

Valuation of collateral is based on market price, an official valuation from Registers Iceland, or the expert assessment of the Bank's employees, depending on availability. In the case of fishing vessels, the assigned fishing quota is included in the valuation, based on a valuation by the Bank's Collateral Council. Valuations can only be valid for a certain amount of time and must therefore be reassessed regularly. Since the price volatility differs between asset classes it is interesting to consider how the LTV distribution of the portfolio is split between these classes. This LTV distribution is shown in Exhibit 4.14.

#### 4.9 Risk Profile

As described in Section 4.2.2, each obligor is assigned a risk class depending on how likely they are considered to default in the next 12 months. Note 48 in the Consolidated Financial Statements shows the breakdown of loans to customers, off-balance sheet loan commitments, and financial guarantees into risk class groups and stages. Exhibits 4.15 and 4.16 show the breakdown of loans to customers graphically where in addition, exposure to individuals and exposure to companies are shown separately. Exhibit 4.17 shows the migration of customers between risk classes in 2022.

According to IFRS 9, the impairment allowance, i.e. the difference between the gross and the net carrying amount, is the expected credit loss (ECL). Exhibit 4.18 shows the breakdown of the ECL for loans to customers by IFRS 9 stages. The columns show the contribution to the ECL from the probability of default (PD) and the loss given default (LGD). For facilities in stage 3, the PD does not apply since default has already occurred. Additionally, the LGD contribution is divided into the probability that the default will not cure, and thus lead to an economical

Exhibit 4.14. The continuous LTV distribution of the portfolio of loans to customers by type of underlying asset at year-end 2022 (ISK bn). Consolidated.

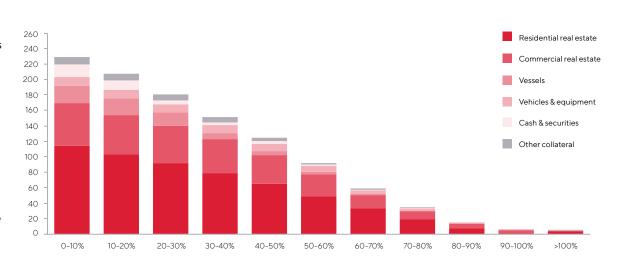


Exhibit 4.15. Loans to individuals by risk groups and stage at yearend 2022 (net carrying amount, ISK bn). Consolidated.

Exhibit 4.16. Loans to companies by risk groups and stage at yearend 2022 (net carrying amount, ISK bn). Consolidated.

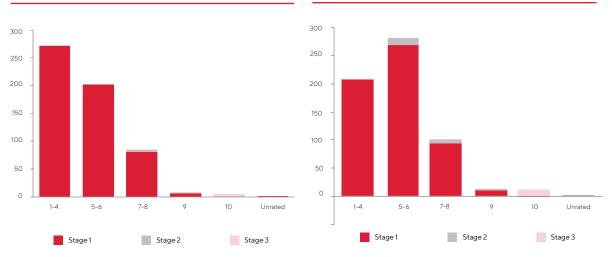
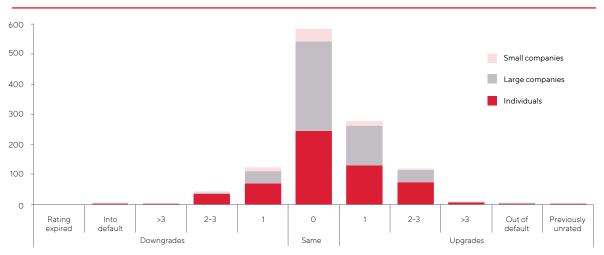


Exhibit 4.17. Migration of risk classes in 2022 (net carrying amount, ISK bn). Consolidated.



loss (loss rate), and the expected size of the eventual economic loss (loss severity). Finally, for facilities in stage 2, the loss allowance is equal to the expected loss for any events occurring during the lifetime of the facility, the contribution of this is shown in the column Effect of lifetime loss.

The non-performing ratio that the Bank uses, depicted in Exhibit 4.20, is based on the gross carrying amount of loans to customers that are in default (i.e. stage 3), see Section 4.2.1 for further details on the Bank's definition of default. The Bank monitors the non-performing loans (NPL) ratio on a regular basis, however when comparing NPL ratios between different banks it must be borne in mind that an industry standard has not yet emerged on how to define the NPL. The NPL ratio will usually not be comparable between banks unless they use the exact same definition. The exposure amounts used to calculate the NPL ratio can be seen in Note 48 in the Consolidated Financial Statements. The Bank's NPL ratio was 1.8% at year-end 2022 compared with 2.0% at year-end 2021.

Exhibit 4.18. The expected credit loss for loans to customers at year-end 2022. See Section 4.9 in the main text for further details. Consolidated.

Stage	Gross carrying amount	PD	LGD loss rate	LGD loss severity	Effect of lifetime loss	ECL
	(bn)	(%)	(%)	(%)	(%)	(%)
Stage 1	1,146.9	4	43	22	100	0.4
Stage 2	29.8	18	72	27	217	7.5
Stage 3	21.1	100	68	30	100	20.2

Exhibit 4.19. The expected credit loss for loans to customers at year-end 2021. Consolidated

Stage	Gross carrying amount	PD	LGD loss rate	LGD loss severity	Effect of lifetime loss	ECL
	(bn)	(%)	(%)	(%)	(%)	(%)
Stage 1	972.5	4	41	23	100	0.4
Stage 2	105.8	10	49	24	309	3.6
Stage 3	21.6	100	62	44	100	27.5

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

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

#### 4.10 COVID-19 Considerations

The COVID-19 pandemic has had a pronounced impact on the Bank's customers, although the impact varies significantly across sectors, with tourism being the hardest hit corporate sector. While some customers' cash flow was negatively affected, the Bank has been mindful not to exacerbate the crisis unduly, as its interests, as well as those of the broader Icelandic economy, generally lie with supporting viable firms through the COVID-19 crisis, which is generally perceived to be temporary.

In response to the pandemic, the Icelandic Government offered guarantees, full or partial, on new bank loans to companies, whose revenues had fallen by at least 40% as a result of COVID-19. As of year-end 2022, the Bank had loans amounting to ISK 1,840 million subject to 100% Government guarantee, ISK 917 million to 85% Government guarantee and ISK 453 million to 70% Government guarantee. From the end of the pandemic around ISK 658 million of the government guarantee loans have been repaid.

In 2020, the Bank entered into a temporary agreement with other financial institutions and lenders in Iceland to provide a moratorium for both households and corporate customers, uniformly executed across institutions. In accordance with guidelines from EBA and the Central Bank of Iceland, these moratoria did not trigger classification as forbearance. After the agreement expired, further extension of moratoria has been granted on a case-by-case basis, but such extensions are classified as forbearance. The definition of forbearance includes a 24-month probation period and therefore loans are classified with forbearance even after normal payments have resumed. At the end of 2022, loans amounting to ISK 47bn are classified as performing

with forbearance. Performing loans with forbearance that have not yet started regular payments are almost exclusively in the tourism industry.

The impairment process allows for temporary changes to the impairment model to account for unexpected risk factors that have not been appropriately considered in the credit risk rating or modelling process under unprecedented circumstances. The COVID-19 pandemic caused such circumstances, especially for the tourism industry, and therefore such adjustment was warranted.

To account for the uncertainty in the operating environment of companies in the tourism industry, not reflected in their current risk class, they were classified into four impact groups based on an assessment of how vulnerable they were expected to be to various assumptions on when the pandemic would subside, and international tourists would begin visiting Iceland again. This classification reflected an assessment of how much an increase in credit risk these companies faced in the short, medium, and long term.

**Impact Group 1:** Viable even though fewer tourists arrive than expected

**Impact Group 2:** Viable with forbearance even though fewer tourists arrive than expected

**Impact Group 3:** Viable if the number of tourists is similar to general expectations

**Impact Group 4:** Viable only if the tourism industry fairs better than expected

From the start all loans to customers in groups 2-4 were transferred to Stage 2 and thus carried a life-time expected credit loss. In addition, an overlay factor was applied to the expected credit loss, comparable to an increase in up to three risk classes. A higher haircut was applied to the value of collateral for the higher impact groups in the more severe scenarios. As the pandemic progressed and much of the uncertainty diminished, the higher haircut and increased overlay factor was suspended in Q1 2022 followed by the suspension of the transfer to Stage 2 in Q3 2022.

As the financial performance of companies turned out to be better than initially expected, the distribution in impact groups improved throughout the pandemic. The proportion of exposure in impact groups 3 and 4 decreased from 70% in June 2020 to just 15% in June 2022 demonstrating the overall improvement of the portfolio. The expected credit loss was at maximum at year-end 2020 and steadily diminished as the situation improved, decreasing by 83% during the period as shown in Exhibit 4.21. During the period the writeoff was ISK 1 bn, predominantly due to customers within impact group 4 being realized in 2022. The classification development, shown in Exhibit 4.22, was based on the Bank's best assessment at a given time and was reviewed every quarter.

The development of the risk class of the impact groups throughout the pandemic from year-end 2019 to year-end 2022 is shown in Exhibit 4.23. There are expected migration within the groups but the main shift in group 2 to a higher risk class is attributed to a single large customer. Similarly, there is a shift in improvement in group 3 that is attributed to car rentals that performed much better in the pandemic than initially was expected. The proportion of new non-performing loans within the impact groups was 1.0% for group 2,

Exhibit 4.21. Expected credit loss to the tourism industry by impact group throughout the pandemic. Customers are grouped here by the impact group categorization at June 2020 (ISK bn).

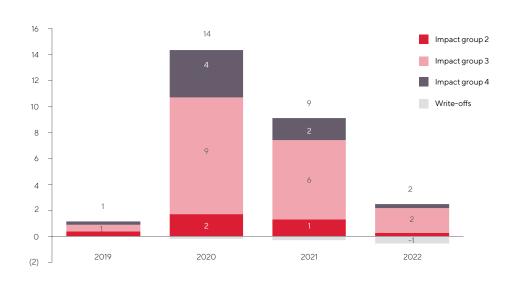


Exhibit 4.22. Exposure to tourism by impact group from the start of the pandemic. The focus in the beginning was on the 2020 tourist season while at year-end 2021 the definition shifted towards 2022. Net carrying amount, a proportion of approximately ISK 100bn. Customers are grouped here by the impact group categorization at each reporting date.



1.5% for group 3 and 4.6% for group 4 demonstrating a significant risk increase within group 4.

Since the temporary changes to the impairment model due to COVID-19 have now been turned off, the Bank expects that this will be the last time that this section is included in the report.

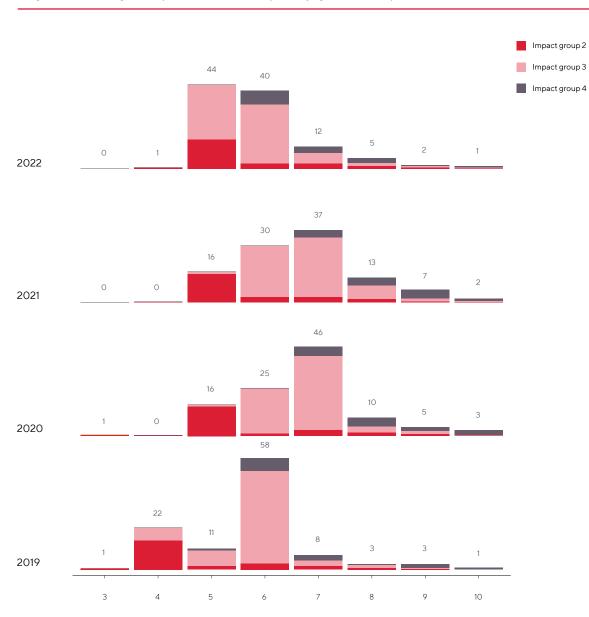
# 4.11 Exposures in Default and Exposures with Forbearance

The Bank's definition of default is described in detail in Section 4.2.1. Details on exposure amounts in default can be seen in Note 48 of the Consolidated Financial Statements where stage 3 corresponds to amounts in default. Furthermore, Templates CR1, CQ4, and CQ5 of the Additional Pillar 3 Disclosures show these amounts broken down by asset class, geographic region, and industry sector.

Template CR2 of the Additional Pillar 3 Disclosures shows the development of impairment amounts and the stock of defaulted loans throughout the year.

For bearance measures can be granted to customers facing temporary challenges or financial difficulties. For a loan to be considered as forborne, two conditions need to apply: (1) the Bank has agreed to changes to the terms of the loan that would normally not be offered to the customer and (2) the customer was in financial difficulties, making it hard for them to uphold the loan contract at the time the terms were changed. Such forbearance measures include temporary payment holidays, capitalisation of arrears, extension of loan terms, and waiving of covenants. Generally, forbearance measures are less severe than recovery actions for defaulted exposures and they do not lead to economic loss for the Bank. When the restructuring of loans corresponds to an economic

Exhibit 4.23. Migration of risk classes throughout the pandemic or from year-end 2019 to 2022. Customers are grouped by the impact group categorization at the height of the pandemic, in June 2020. (Net carrying amount, ISK bn) Consolidated.



loss then the obligor is classified as in default and any subsequent forbearance actions are classified as forbearance on non-performing facilities.

For households, forbearance measures are used to accommodate temporary changes in household income, for instance due to illness or unemployment. Temporary changes in terms are also granted to companies when needed, for example to meet adverse changes in the operating environment, which affect revenue and cash flows or to meet necessary but unforeseen capital expenditures. The customer is expected to resume normal repayments after the concession period. Furthermore, when covenants are waived due to minor difficulties of customers then it may be classified as a forbearance measure. Note 49 in the Consolidated Financial Statements provides a summary of the Bank's forborne assets.

# **4.12 Capital Requirements**

The Bank reports its Pillar 1 capital requirements for credit risk according to the standardised approach of the CRD IV. Template CR5 of the Additional Pillar 3 Disclosures shows exposure amounts, risk weights and corresponding risk-exposure amounts for the different portfolios at year-end 2022.

Capital add-on for credit risk under Pillar 2-R is estimated in the annual ICAAP process. This add-on includes credit concentration risk and underestimation of credit risk under Pillar 1.

# **5 Market Risk**

The Central Bank raised its policy rate six times in 2022 in response to rising inflation, raising the rate from 2% to 6% during the year. Inflation was above the Central Bank's target in 2022 as the Consumer Price Index rose by 9.6% and the ISK depreciated by 2.2% based on the Central Bank main trade-weighted ISK index. The domestic stock market declined by 24.4% in 2022 according to the stock market index OMXI10GI. The domestic bond market declined by 2.9%, as measured by the NOMXIBB index, with total turnover increasing by 12% in 2022 compared to 2021.

Market risk accounted for 9.9% of the Bank's total SREP capital requirement, compared to 10.5% in the previous process. Market risk as percentage of total capital base, increased in 2022, mainly due to higher interest rate risk in the banking book.

# 5.1 Strategy, Organisation and Responsibility

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

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

Market risk at Íslandsbanki is split into two categories, trading book and banking book. Market risk due to

mismatches in assets and liabilities with respect to currencies, interest reset dates and CPI-indexation falls in the banking book. Market risk in the banking book also includes exposures held for long-term investment purposes, in unlisted securities and holdings in subsidiaries or affiliates. Market risk exposures in the trading book are related to short-and medium-term trading in securities, currencies and other capital market instruments and derivatives. The positions are undertaken mainly as a part of the Bank's flow trading, through the Bank's liquidity portfolio and as hedges against customers' derivatives contracts

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

The All Risk Committee (ARC) is responsible for the review and implementation of the Market Risk Policy

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

### 5.2 Measurement and Monitoring

The Bank uses various tools to measure, monitor and limit market risk exposures. These tools include conventional risk measures. limits on notional and sensitivity measures. The Bank's overall market risk exposure is measured according to the Bank's Market Risk Measurement Framework (MRMF) and the Risk Appetite Statement mandates that the Bank's market risk shall not exceed 15% of the Bank's capital base. The MRMF uses stress tests to calculate potential losses from extreme but plausible market events for each risk exposure, both for the current position of each portfolio, as well as the maximum position within the limits for the given portfolio. Limits are also set to manage the concentration risk towards single issuers or instruments, as well as to manage trading liquidity risk. The Bank is also exposed indirectly to market risk through customers' derivative positions. Those positions are subject to strict margin and monitoring requirements.

Exhibit 5.1. Main types of market risk within Íslandsbanki.

Risk type	Description	Origination	Main limit types
Equity risk	The risk that earnings or capital may be negatively affected from the changes in the price level or volatility of equity instruments	- Equities	- Total position in equities - Total position in individual securities
Interest rate risk	Current or prospective risk to earnings or capital arising from adverse movements in interest rates. Main sources of interest rate risk are as follows:  Gap risk: Arising from mismatches in the timing of cash flows of assets and liabilities in the banking book and the resulting effects of changes in the yield curve (change in slope and shape of the yield curve)  Basis risk: Arising from changing rate relationships among yield curves that affect the Bank's activities  Optionality risk: Arising from interest rate related options embedded in the Bank's products  Price risk: Arising from price changes of bonds due to changes in interest rates	- Loans and deposits - Bonds and debt instruments - Interest rate derivatives	- BPV (basis point value) - Total position in individual securities
nflation risk	The risk that earnings or capital may be negatively affected from unexpected changes in inflation	- Inflation-linked loans and deposits - Inflation-linked bonds and debt instruments - Inflation-linked derivatives	- Size of the inflation imbalance
Currency risk	The risk that earnings or capital may be negatively affected from the fluctuations of foreign exchange rates, due to transactions in foreign currencies or holding assets or liabilities in foreign currencies	- Spot positions in currencies - Foreign exchange derivatives - Foreign-currency-denominated loans and deposits	- Total currency imbalance - Total open position per currency - Total notional in underlying derivatives
Credit spread risk	The risk that earnings or capital may be negatively affected from adverse movements in bond risk premium for an issuer	- Bonds and debt instruments	- Issuer-specific notional limits

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

Exhibit 5.1 shows the main types of market risk in the Group's operations, the source of the risk and main limit types.

# 5.2.1 New Regulatory Limit on Positions in Financial Instruments and Commodities

On January 1, 2022 an amendment to Act No. 161/2002 on Financial Undertakings came into effect along with an accompanying regulation from the Central Bank meant to limit potential risk posed by investment banking activities of commercial banks in Iceland. The regulation defines a limit on positions in financial instruments and commodities, excluding bonds in the banking book. Specifically, the regulation places a limit of 15% of total capital base on the aggregate total capital requirement for (1) equities in the trading book, (2) equities in the banking book, (3) bonds in the trading book and (4) indirect positions in financial instruments and commodities. The total capital requirement shall be measured in line with the Central Bank's SREP Supervisory Benchmarks.

The first three components fall directly under market risk whereas the fourth is defined as credit risk due to loans to holding companies with limited debt repayment capacity. The Bank measures and monitors this new ratio, but the regulatory limit is not expected to be constraining given the Bank's market risk profile and appetite.

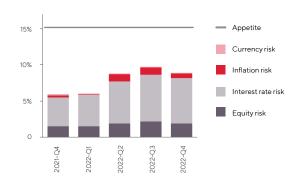
# **5.3 Market Risk Exposure**

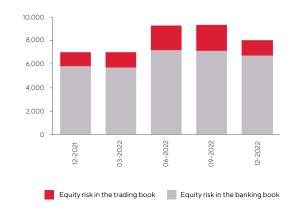
Market risk, as measured by the MRMF, increased in 2022. This was mainly due to increasing interest rate risk in the banking book and higher inflation risk after the first quarter. The overall market risk remains moderate and well within the Group's risk appetite, as Exhibit 5.2 shows.

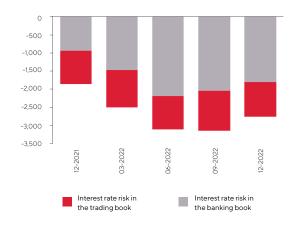
Exhibit 5.2. Market risk exposure and market risk appetite as a percentage of total capital base, average positions. Consolidated.

Exhibit 5.3. Quarter-end development of equity risk in 2022. (ISK bn). Consolidated.

Exhibit 5.4. Quarter-end development of interest rate risk in 2022. Presented as the change in fair value that results from a 100 basis points parallel upward shift in yield curves (100 BPV in ISK m). Consolidated.







# 5.3.1 Equity Risk

Equity risk arises from flow trading, market making, shares acquired through restructuring of companies, and strategic investments.

The equity risk is managed through limits on aggregate market value and maximum exposure or market share in single securities. Equity risk includes bonds with equity-like features but excludes hedges against customers' equity forward positions. The quarter-end figures for equity risk in 2022 are presented in Exhibit 5.3. Equity exposure in the trading book decreased in 2022 with an average position of ISK 1.7bn compared to ISK 1.9bn in 2021. The maximum equity exposure in the trading book was ISK 3bn in 2022, compared to ISK 2.9bn in 2021. Equity exposure in the banking book, including fair-value shares and shares held for sale increased in 2022, going from ISK 5.8bn in year-end 2021 to ISK 6.9bn in end of 2022. The Bank has no equity underwriting positions.

#### 5.3.2 Interest Rate Risk

To manage interest rate risk, the Bank uses sensitivity measures like basis point value (BPV). The BPV measures the effect of a 0.01 percentage point (1 basis point) parallel upward shift in the yield curve on the fair value of the underlying position. In 2022, the interest rate risk in the trading book was relatively stable while the volume of fixed-rate non-index linked mortgages increased. That increased the net interest rate exposure as measured by a 100 bp parallel shift across currencies, shown in Exhibit 5.4.

# Interest Rate Risk in the Trading Book

Interest rate exposures in the trading book arise mainly from flow trading, market making and liquidity management. All positions in the trading book are subject to BPV or duration limits, both intraday and end-of-day limits. In addition to BPV limits, there are limits on the total short and long positions in underlying bonds. For foreign bonds and bills in the liquidity portfolio there are issuer rating and

maturity limits. Interest rate risk in the trading book remained stable in 2022 as the Bank maintained its ISK liquidity bond portfolio, which has been the main source of interest rate risk in the trading book since the spring of 2020 when the Bank started to move a larger share of its ISK liquidity portfolio from Central Bank deposits to interest rate sensitive bonds. The maximum interest rate risk, measured as the absolute value of the effect of a 100 basis points parallel adverse shift in yield curves, was ISK 1,025m in 2022 compared to ISK 960m in 2021. An overview of the Bank's interest rate risk in the trading book is provided in Note 56 in the Consolidated Financial Statements.

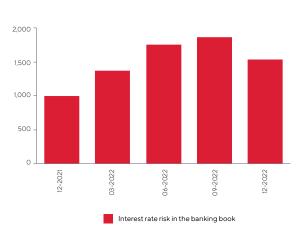
#### Interest Rate Risk in the Banking Book

Interest rate risk in the banking book (IRRBB) arises from core banking activities. It represents the risk of loss from fluctuations in future cash flows or fair value of financial instruments as market rates change over time, reflecting the fact that the Group's assets and

liabilities are of different maturities and are priced relative to different interest rates. The main sources of interest rate risk in the banking book are fixed rate mortgage loans, covered bond debts and fixed-term deposits.

Interest rate risk in the banking book is managed by limits on the sensitivity of the fair value of the Bank's assets and liabilities to changes in market rates. All interest-bearing assets and liabilities are bucketed according to their next interest rate reset date, and the effect of a 100 basis points upward parallel shift on the interest rate exposure is measured. The sensitivity calculations are based on the duration of the underlying assets and liabilities. The calculations exclude non-performing loans since the valuation of such loans is based on the expected recovery and is not affected by changes in the underlying interest rates. An overview of the Bank's interest rate risk in the banking book is provided in Note 55 in the Consolidated Financial Statements.

Exhibit 5.5. Quarter-end development of interest rate risk in the banking book in 2022 (weighted adverse 100 BPV in ISK m). Consolidated.

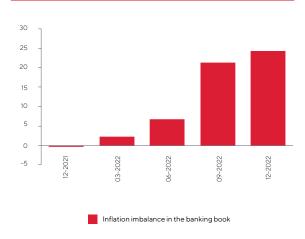


In addition to a parallel shift in yield curves, the Group measures the effect of a so-called weighted adverse shift in yield curves. This entails that different weights are used to shift each yield curve in a direction that results in a loss for the Group, and the effect per yield curve is then added up to a single amount. The development of the interest rate risk in the banking book in 2022 based on this weighted adverse 100 BPV is shown in Exhibit 5.5. Measured this way, interest rate risk in the banking book rose in 2022, as the gap between non-index-linked assets and liabilities widened. The interest rate exposure for index-linked assets and liabilities changed from being long liabilities to being long assets.

#### 5.3.3 Inflation Risk

The Bank is exposed to inflation risk since assets linked to the CPI exceed liabilities linked to the CPI. The net carrying amount of all CPI-linked assets and liabilities changes according to changes in the CPI at any given time and all changes in the CPI affect the profit and loss through interest income. The inflation

Exhibit 5.6. Quarter-end development of the banking book inflation imbalance in 2022 (ISK bn). Consolidated.



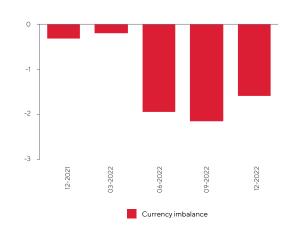
risk inherent in the trading book positions is captured through the interest rate risk of the positions. The inflation imbalance in the banking book rose in 2022, mainly due to a growth in inflation-linked assets in the second half of the year. Exhibit 5.6 shows the development of the banking book inflation imbalance in 2022. The rise in inflation imbalance in 2022 is a part of a strategy that aims to keep the imbalance not at zero but at a neutral position. The goal is to minimise changes to the Bank's capital ratio arising from unexpected inflation.

### 5.3.4 Currency Risk

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

Currency risk is managed within regulatory and internal limits, with separate limits for the banking book and the trading book. Exhibit 5.7 shows the development of the currency imbalance in 2022.

Exhibit 5.7. Quarter-end development of the currency imbalance in 2022 (ISK bn). Consolidated.



The size of the currency imbalance was modest throughout the year. The overall consolidated currency imbalance was negative by ISK 1.6bn at year-end 2022 compared to negative ISK 0.3bn at year-end 2021.

#### 5.3.5 Derivatives

The Bank offers various types of derivative products to its customers and uses derivatives to hedge risks on its own balance sheet. The main products offered to customers are interest rate swaps (IRS), cross-currency interest rate swaps (CIRS), foreign exchange swaps (FX swaps), outright forwards (FX forwards) as well as equity and bond forwards. The Bank uses derivatives to hedge imbalances with respect to currency exposure, interest rate risk and inflation risk in the banking book. Other derivatives are insignificant.

All derivatives positions that carry direct market risk are subject to risk limits. The overall position in interest rate swaps and cross currency interest rate swaps is subject to both BPV and duration limits, while options are subject to several limits, including a limit on the open delta position in each underlying instrument.

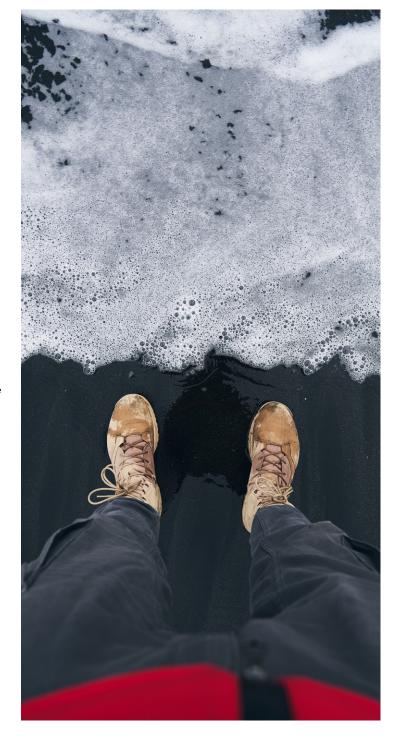
At year-end 2022, Íslandsbanki's aggregate gross forward position in foreign currency against the ISK amounted to 31% of the Bank's total capital base, well within the regulatory limit of 50%.

Derivatives positions that are fully hedged do not carry direct market risk but are exposed to indirect market risk due to counterparty credit risk. These positions include customers' forward contracts on equities, bonds and foreign exchange. Such positions are subject to notional limits that cap the Bank's

indirect exposure to the underlying risk factors. The Bank's counterparty credit risk management is discussed in Section 4.5. For further information on derivative contracts see Note 24 in the Consolidated Financial Statements.

### **5.4 Capital Requirements**

The Bank reports its Pillar 1 capital requirements for market risk according to the standardised approach of the CRD IV. An overview of the Pillar 1 capital requirements for market risk is displayed in the MR1 table in the Additional Pillar 3 Disclosures. Capital add-on for market risk under Pillar 2-R is estimated in the annual ICAAP process and reviewed by the regulator through the SREP. In 2022 the main add-on for market risk under Pillar 2-R was due to underestimation of equity risk and interest rate risk in the trading book under Pillar 1 and due to risk factors not addressed under Pillar 1, namely market risk arising from equities in the banking book, interest rate risk in the banking book and inflation risk.



# **6 Liquidity Risk**

The Bank maintained a strong liquidity position throughout 2022 and all regulatory metrics were well above limits. At year-end 2022 the Bank's Liquidity Coverage Ratio (LCR) was 205% and the Net Stable Funding Ratio (NSFR) was 118%.

The year-end balance of deposits rose by approximately ISK 48bn or 6.4% from 2021 to 2022. The change was mainly due to an increase in retail deposits (ISK 27bn) and deposits from corporations (ISK 31bn), offset by a fall in deposits from pension funds (ISK 12bn).

The Bank continued to be a leading bond issuer domestically in both covered and senior unsecured formats. The Bank inaugurated its revised covered bond programme, signed in June 2022, with a EUR 300m 5-year Covered bond issued in September. The Bank continued its sustainable progress in 2022 tapping its green bond in ISK, for a total of ISK 9.0bn, bringing the size of the bond to ISK 10.3bn.

# 6.1 Strategy, Organisation and Responsibility

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

Sound and efficient management of liquidity risk is a key factor to ensure the viability of the Bank's operations and to achieve and maintain a target credit rating. The Bank takes a conservative and prudent approach to managing liquidity risk and its liquidity strategy assumes that the Bank always fulfils regulatory requirements, internal thresholds and can

sustain a prolonged period of stress. Following are the key principles on which the Bank's liquidity risk management framework is based:

- Clear responsibilities and ownership of liquidity risk and liquidity risk control.
- The definition, categorisation and management of liquid assets shall be clear.
- The Bank maintains a portfolio of liquid assets to be able to service its liabilities even if access to funding markets is impaired.
- The Bank has in place a Liquidity and Capital Contingency Plan which shall be tested regularly.

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

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

The All Risk Committee (ARC) is responsible for the review and implementation of the *Liquidity Risk* 

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

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

The Bank complies with guidelines on liquidity management¹ which are based on the *Principles for Sound Liquidity Risk Management and Supervision*², issued by the Basel Committee on Banking Supervision.

<sup>&</sup>lt;sup>1</sup>FME Guidelines no. 2/2010 for Sound Liquidity Risk Management and Supervision

<sup>&</sup>lt;sup>2</sup>Basel Committee on Banking Supervision, Principles for Sound Liquidity Risk Management and Supervision

### 6.2 Measurement and Monitoring

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

The Central Bank of Iceland has incorporated the LCR and the NSFR based on the CRD IV standards into the Rules on Liquidity Ratio and the Rules on Credit Institutions' Minimum Net Stable Funding Ratios.<sup>3</sup> At the beginning of 2023 a new rule takes effect with an 80% minimum liquidity ratio in euros for credit institutions whose euro-denominated liabilities equal 10% or more of their total liabilities. Concurrent with the introduction of the new requirements, the 100% liquidity ratio requirement for all foreign currencies combined has been abolished.<sup>4</sup> In addition, credit institutions are required to satisfy at least 50% of their liquidity requirement in Icelandic krónur.

The minimum of 100% for the overall NSFR was implemented in 2021 superseding the previous rules that required the Bank to maintain a 100% funding ratio in foreign currencies. In addition, the Central Bank receives additional liquidity monitoring metrics (AMM)<sup>5</sup> to obtain a comprehensive view of the Bank's liquidity risk profile. The AMM cover a wide array of monitoring metrics, including a maturity ladder, funding concentration, concentration of counterbalancing capacity and rollover of funding.

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

Treasury, as a first line of defence, is responsible for continuous monitoring of the liquidity risk inherent in the Bank's operations and for notifying senior management of any foreseeable breaches from either internal thresholds, regulatory limits, or strategic direction. Risk Management, as the second line of defence, is responsible for providing an independent view on liquidity risk on a consolidated basis to internal and external stakeholders and for managing the annual Internal Liquidity Adequacy Assessment Process (ILAAP). The Bank's ILAAP report is approved by the Board of Directors and submitted to the Central Bank which then reviews the report in its Supervisory and Review Process (SREP).

# **6.3 Liquidity Position**

The Bank maintained a strong liquidity position throughout 2022 and all regulatory and internal metrics were above limits. The Bank continues to steer its liquidity ratios with the aim of reducing liquidity cost further while keeping the ratios comfortably above minimum requirements.

# 6.3.1 Liquidity Coverage Ratio

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

### Stock of HOLA

I CR =

Cash outflow - min (Cash inflow, 75% Cash outflow)

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

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

Even though the LCR is mostly stable over time, significant changes can arise from new bond issues, large deposit changes and large issues maturing within the 30-day window. The LCR showed a steady increase in the latter half of the year mainly due to increased issuance by the Bank. The outflow remained relatively stable throughout the year as inflows increased. The LCR in domestic currency

<sup>&</sup>lt;sup>3</sup> Central Bank Rules no. 266/2017 and no. 750/2021

<sup>&</sup>lt;sup>4</sup>Central Bank Rules no. 1529/2022

<sup>&</sup>lt;sup>5</sup>EBA draft implementing standards on additional liquidity monitoring metrics

showed a slight decrease in 2022 mainly due to decreasing HQLA. Level 1 HQLA assets hold the most significant portion of the Bank's total HQLA for the period. Level 1 assets primarily include cash and balances with the Central Bank and government bonds. Level 2A assets solely comprise covered bonds and amount to less than 10% of the HQLA. The Bank calculates and monitors LCR for all significant currencies (exposure over 5%) and foreign currencies combined. The currency mismatch risk is not considered a material driver for the LCR.

The EU LIQ1 in the Additional Pillar 3 Disclosure shows the breakdown of the Group's positions underlying the LCR in 2022. According to the LCR disclosure standards, the figures show the average of end-of-month positions throughout 2022 as opposed to the year-end figures in Note 53 in the Consolidated Financial Statements.

#### 6.4 Funding

The Bank monitors the concentration of funding to avoid undue reliance on individual funding sources and continues to be predominantly funded by deposits although borrowings through bond issuance amount to 38.5% of the total funding. The Bank has been gradually increasing its borrowing in recent years with the issuance of covered bonds and unsecured bonds in foreign and local currencies, as well as subordinated debt. Note 34 in the Consolidated Financial Statements gives an overview of the terms of outstanding bonds issued by the Bank at year-end.

# 6.4.1 Net Stable Funding Ratio

A key metric for assessing the long-term viability of the Bank's funding structure is the NSFR. The ratio measures the proportion of stable funding to

long-term assets for a time horizon of over one year. In particular, the NSFR is structured to ensure that long-term assets are funded with at least a minimum amount of stable liabilities and thus to limit over-reliance on short-term wholesale funding.

NSFR = Available amount of stable funding
Required amount of stable funding

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

The amount of *Required Stable Funding* (RSF) is measured based on the liquidity risk profile of an institution's assets and off-balance sheet exposures. The required amount of stable funding is mainly in the form of encumbered and unencumbered assets with maturity of more than one year and other on- and off-balance sheet exposures. All categories are weighted by the appropriate RSF factor.

The EU LIQ2 in the Additional Pillar 3 Disclosure shows the breakdown of the Group's positions underlying the NSFR at year-end 2022.

#### 6.4.2 Deposits

The Loan-to-deposit ratio for households and non-financial corporations was 175% at year-end 2022 compared to 178% at year-end 2021. The reduction is mainly due to growth in loans to customers exceeding

growth in deposits to customers. The ratio is expected to remain in this range and deposits to continue to be the largest source of funding for the Bank in the years ahead.

The deposit balance rose by approximately ISK 48bn over the course of the year 2022 as shown in Exhibit 6.5. The change was mainly due to an increase in retail deposits (ISK 27bn) and deposits from corporations (ISK 31bn) which was offset by a reduction in deposits from pension funds (ISK 12bn).

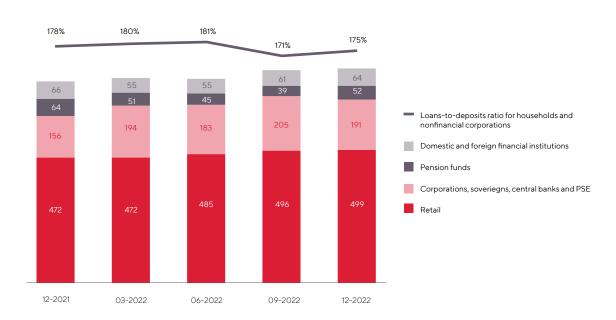
The proportion of term deposits remained stable in 2022 at 18% of total deposits at year-end 2022 and year-end 2021. The main change was mainly due to an increase in term deposits from retail deposits. For a more detailed composition of deposits by LCR categories and term see Note 53 in the Consolidated Financial Statements.

Deposit concentration is monitored since a substantial amount of the Bank's deposits are held by relatively few counterparties. The Bank's highest deposit concentrations are in wholesale deposits from foreign and domestic financial institutions and pension funds. The deposit concentration in 2022 remained 12% of the Bank's deposits belonging to the 10 largest depositors but increased slightly from 28% to 29% belonging to the 100 largest depositors.

# 6.4.3 Capital Markets Activity

Íslandsbanki is one of the largest issuers of covered bonds in the domestic market. Domestically, the Bank is also an issuer of unsecured senior bonds. The Bank's USD 2.5bn Euro Medium-Term Note (EMTN) Programme is the Bank's platform for funding in international markets, alongside a updated Covered Bond Programme.

Exhibit 6.5. Deposits by liquidity coverage ratio category in 2022 (ISK bn) and the Loan-to-deposit ratio for households and nonfinancial corporations. Consolidated.



Íslandsbanki has a EUR 2.5bn covered bond programme in place, issued under Act 11/2008 on Covered Bonds. Issuance is regulated by the Central Bank which additionally appoints an independent inspector to monitor the programme. Íslandsbanki sold ISK denominated covered bonds over the year 2022 worth ISK 19bn, compared to ISK 39bn in 2021. The total outstanding nominal amount of ISK covered bonds at year-end 2022 was ISK 195bn, compared to ISK denominated 199bn at year-end 2021.

The beginning of 2022 saw credit spreads widening across all markets in response to fears of global inflation, various geopolitical concerns and speculation about the progress of the COVID-19 pandemic.

The credit spreads on foreign-currency denominated lcelandic bank bonds had already started creeping up over the turn of the new year, but Íslandsbanki took the view that the outlook was so uncertain that prefunding was an appropriate course of action. Therefore, in January the Bank issued a EUR 300 million senior bond due January 2025 at a spread of 83 basis points over mid-swaps.

The Bank inaugurated its revised covered bond programme, signed in June 2022, with a EUR 300 million 5-year bond issued in September. The issue, which was priced at mid-swaps +70 basis points, was placed with investors across Europe, many of them buying Íslandsbanki paper for the first time. The covered bonds are rated A+ by S&P Global

Ratings and the programme brings to the Bank an opportunity to diversify sources of funding at advantageous levels.

Following the Russian invasion of Ukraine, the market dramatically worsened and risk aversion remained the dominant sentiment of credit markets for the remainder of the year. Icelandic bank secondary senior bond spreads widened steadily through the spring and summer, before rising steeply in September and onwards. This spread underperformance was the result of senior issuance by Icelandic banks in a market that was not greatly receptive to smaller, less liquid issuers.

Islandsbanki announced a new FUR 300 million senior transaction in November in tandem with tenders to buy back two outstanding EURdenominated benchmarks. Investor feedback. at a time of substantial market dislocation, suggested that the Bank might be better served by issuing in Scandinavian local currency markets instead. Therefore, the Euro mandate and the two tenders were shelved and a NOK/SEK dual tranche transaction was launched two days later on 10 November. The Bank issued an SEK 800 million 2-year FRN at STIBOR +425, and a NOK 1.4 billion 3-year FRN at NIBOR +475. The cost of these transactions was significantly better in Euro terms than would have been the case had the Bank proceeded with a Euro-denominated issue outright. The Bank also issued two 5-year senior green ISK denominated transaction domestically totalling ISK 9bn.

Following this new issue activity, the Bank tendered for the EUR 300 million senior bond due January 2024 in December. The tender resulted in a buyback

of EUR 263 million, or 87.6%, of the issue. The remaining balance of that bond was called at its first call date in January 2023.

By the end of 2022, the January 2025 bond issued at the beginning of the year at mid-swaps +83 basis points was being quoted in the area of +450 basis points. This spread underperformance was entirely typical of smaller borrowers in the Euro market and overwhelmingly reflected market liquidity issues, rather than any fundamental concerns about Iceland or its banks.

In November, Íslandsbanki exercised the first call option on its inaugural SEK 750 million Tier 2 bond that was issued in 2017. That transaction, with a 10-year non-call 5-year term structure, was priced at STIBOR +200 basis points to maturity. Despite the adverse economics of exercising the call, the option was nonetheless exercised. As the new issue terms available to the Bank for Tier 2 in SEK or NOK were unfavourable, the Bank instead issued its inaugural Tier 2 issue domestically of ISK 10.5bn in early October.

Exhibit 6.6 provides a summary of how the maturity of outstanding bond issues is distributed over the coming years and Note 34 in the Consolidated Financial Statements gives an overview of the terms of outstanding bonds issued by the Bank at year-end.

Exhibit 6.6. Maturity profile of long-term funding (ISK bn) as of year-end 2022. Parent.

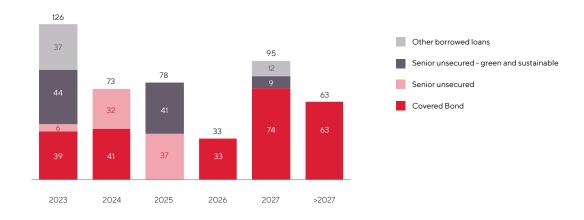
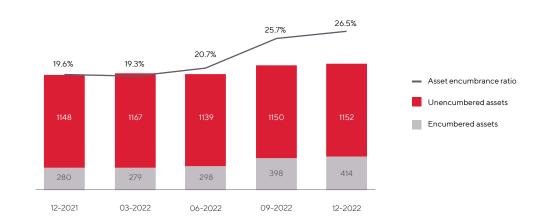


Exhibit 6.7. Development of asset encumbrance in 2022 (ISK bn). Consolidated.



#### 6.4.4 Asset Encumbrance

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

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

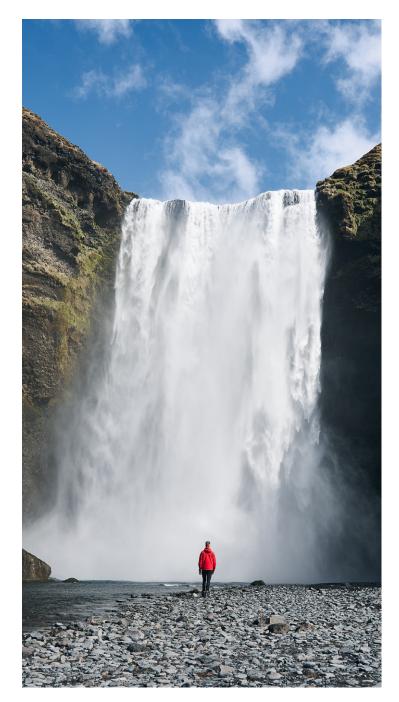
Íslandsbanki's asset encumbrance ratio was 26.5% at year-end 2022 and Exhibit 6.7 shows the development of the reported encumbrance in 2022.

# 6.4.5 Funding Outlook

The Bank has considerable maturities of ISK denominated covered bonds in 2023 and plans to refinance most of them. In addition, the Bank plans to continue issuing senior bonds in ISK in a continued effort to promote and develop the domestic bond market. The timing and size of such issues depend on the Bank's funding needs and market conditions.

Issuance under the EMTN Programme will depend largely on loan growth in foreign currencies as well as on upcoming maturities. There is a EUR 300 million sustainable bond maturing in November 2023 that will drive some refinancing, whether in EUR or in other currencies. The Bank also has a call option on a SEK 500 million Tier 2 bond in August 2023. Although the Bank aims to continue optimising its capital structure by issuing further Additional Tier 1 capital instruments, market conditions are unlikely to be suitable to do so in 2023.

The Bank will look at further opportunities to diversify funding channels where appropriate. At the same time, sustainable financing in 2023 will be in line with the Bank's strategy, both issuing new sustainability bonds and tapping existing issues.



# 7 Operational Risk

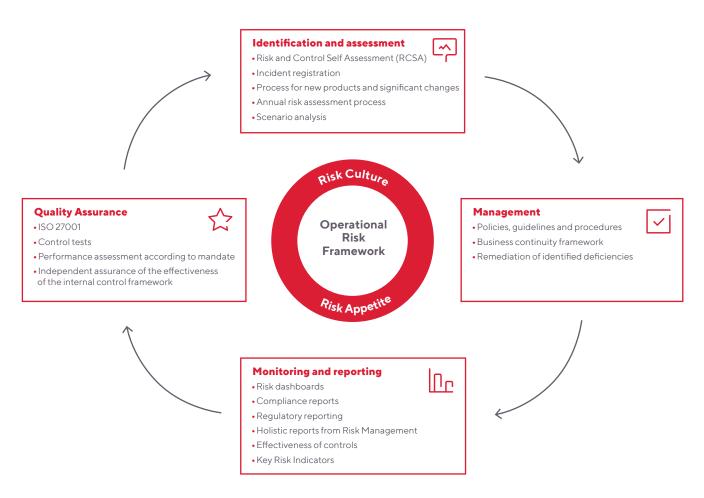
The overall level of operational risk was acceptable over the year and remains within the risk appetite limits. The Bank has increased its focus on ICT and security risk as the risk of cyber security events has increased over the last years. The Bank's controls against such events have proven to be effective but the Bank is continuously improving its defences and controls against ICT and security risk.

# 7.1 Strategy, Organisation and Responsibility

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or external events. The Bank's definition of operational risk includes reputational risk, legal risk, ICT and security risk, model risk, outsourcing risk, business and strategic risk, process risk, conduct risk and compliance risk.

A healthy risk culture, supported by a clear risk appetite limit, is a key factor in a sound operational risk framework. The framework is maintained and developed further through staff training regarding policies, processes, risk strategy and the awareness of risk-taking by employees.

The ultimate responsibility for ensuring an adequate operational risk management and internal control framework at Íslandsbanki lies with the Board of Directors which establishes both the *Operational Risk Policy* and the *Risk Appetite* for operational risk.



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

- Clear responsibilities and ownership of operational risk and operational risk controls.
- The Bank accepts no unnecessary operational risk, meaning that it only assumes operational risk when the cost of mitigating that risk and preventing possible losses outweigh the benefits.
- With the aim of ensuring business continuity and minimising customer impact the Bank shall have adequate processes, procedures and resources to ensure quick discovery, analysis and resolution of IT incidents; define and meet service-level objectives for digital solutions, in line with the Bank's vision to be #1 for service; and protect information and data from loss of confidentiality.
- A key feature of the business continuity
  management framework is based on having clear
  overview of core business activities, and clear
  roles and responsibilities in regarding business
  continuity management, with regular testing of
  all business continuity plans.
- The Bank promotes a strong risk culture, emphasising compliance to internal and external laws and regulations.
- The Bank has no appetite for compliance risk that can lead to financial loss or loss of reputation.
- A key feature of a strong risk culture is to foster a "no blame" environment where operational risk events are recognised and registered to enable continuous improvement to the Bank's operations.
- The Bank takes appropriate measures, in all its operations, to ensure the safety and health of its customers and employees.

The All Risk Committee (ARC) is responsible for the review and implementation of the operational risk framework. The Operations and Security Committee (OSC) decides on individual proposals for assuming and mitigating operational risk on behalf of the Bank within the appetite and limits approved by the Board and ARC. The OSC also reviews and approves proposals for new products, services, outsourcing and other material changes within the Bank.

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

Risk Management is responsible for implementing the Bank's operational risk framework, for developing and maintaining the *Operational Risk Policy* and for communicating the policy to the Bank's employees. Key risk factors related to operational risk are addressed in other policies such as the *Security Policy, Outsourcing Policy* and *New Products and Significant Changes Policy*. These policies outline the risk management and internal controls specific to these risk categories.

Risk Management monitors the overall operational risk profile of the Bank, ensures proper escalation and reporting of operational risk issues and provides an independent view on the overall operational risk inherent in the Bank's operations. Furthermore, Risk Management is responsible for reporting on operational risk events and limit breaches to senior management, the Board of Directors and to the

competent authorities in accordance with internal procedures and regulatory requirements.

The Compliance function is responsible for monitoring compliance risk regarding Anti-money laundering laws and regulations and to monitor that the Bank is in compliance with its obligations as provided for in the Act on markets for financial instruments and Act on Measures Against Market Abuse.

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

### 7.2 Measurement and Monitoring

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

In the year 2022, there was a 13% decrease in the number of risk events in the Bank's LED compared to 2021. Most of the recorded operational risk events occurred without financial loss. The LED is categorised according to the Basel event type classification. The loss events in the categories "Business disruption and system failures" and "Execution, delivery and Process Management"

accounted for 62% of the total number of events in 2022. The loss events in the category "Execution, delivery and process management" accounted for 72% of the total loss amount attributed to operational risk in 2022.

Aggregated registered operational risk losses in any given quarter shall not exceed a given percentage of the Bank's capital, as defined in the Risk Appetite Statement. The Operational Risk Policy describes the reporting limits on operational risk losses in any given quarter to the Board of Directors.

A part of the monitoring framework are regular assessments and monitoring of compliance with risk policies and underlying processes. Model validation is also an important part of this framework to identify and mitigate model risk.

Money laundering risks are identified in accordance with the Act on Measures against Money Laundering and Terrorist Financing. Procedures for monitoring

money laundering risks include the collection and review of customer information and the monitoring of transactions in accordance with a risk-based approach. All employees receive regular training and information regarding changes in regulations and new trends and patterns, as well as regarding methods that may be used for money laundering and terrorist financing. The Bank has a process for providing information regarding suspicion of money laundering to the Icelandic Financial Intelligence Unit.

An increase has been observed in cyber security related events and incidents worldwide in recent years. The cyber security landscape is becoming more challenging year by year with leaps in technology and risks like Al that need to be constantly monitored. Criminal organisations target individuals and companies usually with simple tactics like phishing, smishing, investment fraud and ransomware. Financially backed hackers were responsible for a number of cyber-attacks and data breaches targeting

government and private entities around the world using sophisticated tactics like supply chain attacks and zero-day vulnerabilities in 2022. The Bank is continuously reviewing and strengthening its controls in this area and offering training to employees and customers on how to respond to fraudulent incidents to minimise possible losses and disruptions. Further information regarding online security is on the Bank's website.

# 7.3 Capital Requirement

The Bank uses the Standardised Approach of CRD IV to calculate capital requirements for Pillar 1. Details on the operational risk own funds requirements and risk-weighted exposure amounts can be seen in OR1 in the Additional Pillar 3 Disclosure.



# 8 Sustainability Risk

Sustainability risk is the risk of being directly or indirectly negatively affected by externalities within the areas of environmental, social, and governance considerations, such as climate change, biodiversity, anti-corruption, human rights, labour conditions, data privacy, or business ethics.

In 2022 the Bank continued to emphasize sustainability risk and further develop its methods to identify, measure, and manage sustainability risk. The highlights of the year include setting initial sector-specific emission reduction targets according to Net-Zero Banking Alliance guidelines in time for COP 29, carrying out an ESG risk assessment for over 70% of corporate customers, and measuring for the first time the financed emissions of funds managed by Íslandssjóðir. Reitun, an Icelandic rating company in the field of sustainability, gave the Bank 90 points out of a 100 in an ESG assessment, which is the highest rating the company has currently given in Iceland.

This chapter is based on implementing technical standards on prudential disclosures on ESG risks in accordance with Article 449a CRR and recommendations from the Task Force on Climaterelated Financial Disclosures (TCFD) and thus comprises sections on Governance, Strategy, Risk Management, and Metrics and Targets. In addition, other non-climate related risks have been considered using the same structure.

#### 8.1 Governance

The Board of Directors has approved the *Sustainability Policy* and sets the Bank's strategy and risk appetite in terms of sustainability risk. The Board is regularly updated on corporate sustainability matters and the usage of the Bank's Sustainable Financing Framework. The *Corporate Governance, Compensation,* and *Human Resource* subcommittee of the Board assists the Board in fulfilling its oversight responsibilities concerning sustainability. The monthly Risk Dashboard includes a section on current sustainability risk and the Bank's ICAAP methodology mandates a separate chapter on possible future sustainability risk, both are discussed at the Board-level.

Sustainable Financing Framework

The CEO is responsible for executing the strategy and has appointed a Sustainability Committee as a main building block of the governance structure. The Committee is the formal forum for discussions on all issues related to sustainability risk, sustainable procurement, and business opportunities related to sustainability. The Committee is independent from credit committees and needs to approve proposals for sustainable loans and investments before they are included in the Sustainable Financing Framework. The committee is chaired by the CEO and manned by the CFO, Head of Sustainability, senior representatives from business departments and Risk Management. A separate Sustainability Working Group consists of employees from different business areas and departments within the Bank, and mainly focuses on educating members on important issues around sustainability.

The Board sets the Risk Appetite Statement, which includes a qualitative statement on sustainability risk which is in line with the Bank's Sustainability Principles, as stated in the Sustainability Policy. When taking on new business or evaluating proposals, in relation to existing business relationships, the Bank shall aim for full alignment with the Sustainability Principles.

Sustainability risk is one of five main risk types according to the Bank's Risk Taxonomy and relevant sustainability risk issues are reviewed by the All-risk Committee and included in the Risk Assessment Framework.

# 8.2 Strategy

Íslandsbanki will focus on integrating sustainability considerations into its activities, in addition to its profit objectives. The Bank continues to initiate broad collaboration and increase awareness on responsible business practices that both contribute to sustainable development in the Icelandic economy, supporting the Icelandic Government's Climate Action Plan, and supporting the United Nations Sustainable Development Goals (UN SDGs). The Bank has specifically selected UN SDGs in the areas of education, gender equality, innovation, and climate action to quide its sustainability efforts.



The Bank seeks to set a positive precedent by taking immediate action, thereby gaining and maintaining customers' trust. As part of this, the Bank has defined seven main sustainability goals to be achieved in the year 2025 and will set and disclose annual targets for each main goal.

# The seven main goals in 2025



- 1. Achieve full carbon neutrality no later than 2040.
- 2. Offer its customers a wide range of sustainability products.



- 3. Encourage equality and inclusion through products and services.
- 4. Further increase diversity and inclusion in the workplace.



- 5. Work with suppliers and partners that champion sustainability.
- 6. Assess and disclose sustainability risks and build a robust sustainability governance framework.



7. Support four of the UN SDGs in the areas of education, gender equality, innovation, and climate action.

The Bank is committed to reach net-zero emissions by 2040 and an important step on that journey is the report published in 2022: Road to net-zero. The report includes initial sector-specific emission reduction targets covering 61% of total lending and 71% of total emissions. The net-zero commitment is mainly focused on the Bank's financed emissions, as the operations have been carbon neutral since 2019. To honour the commitment the Bank joined PCAF in 2020 and the Net-Zero Banking Alliance in 2021. The PCAF partnership is aimed to harmonize greenhouse gas accounting methods and stipulate a consistent method to measure the emissions financed by its loans and investments. The initiative focuses on how companies achieve their carbon reduction targets so they align with the Paris agreement. For financial institutions the framework addresses the lending and investment activities. After careful considerations. the Bank concluded in 2022 that the industry sectors that have approved pathways under the Science Based Targets initiative are not properly aligned with the Bank's portfolio. The Bank will consider publishing Science Based Targets at a later stage when more sectors have been covered by the initiative.

#### Road to Net-Zero

Íslandssjóðir, a subsidiary of the Bank, is a member of UN Principles for Responsible Investments (PRI). The six principles, which include incorporating ESG issues into investment practices, encourage investors to use responsible investment to enhance returns and better manage risks.

The Bank has a Code of Ethics for its Suppliers based on ESG criteria. The aim of the Code is that the Bank and its suppliers can work together on implementing ESG considerations into their operations, based on the Bank's Sustainability Policy and UN SDGs. By utilising the Code, the Bank ensures that purchases of goods and services are efficient, non-discriminating, and transparent. The Bank assesses its suppliers according to ESG risk and the assessment is used both as a tool for the Bank to distinguish risk and to encourage suppliers to increase their focus on sustainability.

# Íslandsbanki is part of the following networks

























Equality and the participation of all are important to the Bank that strives to ensure equality and diversity within its ranks. A limit has been set to ensure that the proportion of any gender in the Bank's management team does not reach above 60%. Specific equality goals have been set in the Bank's investment banking and information technology departments where the gender proportion is currently not equal. The Bank has a Gender Equality Policy on equal pay, which supports wage decisions, based on informed decisions, and prevents gender-based discrimination.

# 8.2.1 Sustainable Financing Framework

Íslandsbanki was the first Icelandic bank to publish a sustainable financing framework in late 2020. This Sustainable Financing Framework follows ICMA's Green Bond Principles from 2018, Social Bond Principles from 2020, and the Sustainability Bond Guidelines from 2018. It is based on best practices in Europe and benchmarked with similar frameworks from financial institutions that have been leading the way in sustainability and sustainable finance activities.

Under this framework, the Bank uses funding options from public and private, and listed and non-listed instruments, referred to as "Sustainability Instruments". These Sustainability Instruments are issued under the terms Green, Blue, Social, and/or Sustainability Instruments.

An amount equal to the net proceeds of the Sustainability Instruments are used for Eligible Assets which support the transition towards sustainability. These Eligible Assets comply with at least one of the Project Categories, classified as either Green: for the environment; Blue: for sustainable fisheries; and Social: for supporting social initiatives.

The Bank has issued several bonds in international

and domestic markets under this framework and in 2022 sustainable deposit accounts and a wholesale loan from the Nordic Investment Bank were added to the mix. The impact is further described in an annual Allocation and Impact Report published on the Bank's website.

# 8.2.2 Sustainability Policy

As part of the Sustainability Policy, credit granting at the Bank is always carried out in compliance with the relevant regulatory instruments, including consumer protection provisions and anti-money laundering and anti-corruption rules, and the policy reiterates that this applies to the overall credit process and the credit risk culture at the Bank. The Policy further states that loans shall always be processed without reference to nationality, gender, race, religious beliefs, or other comparable factors. In addition, the Policy states that the Bank shall consider sustainability and ESG criteria, as well as other risk factors, when taking credit decisions and pricing risk. Through its lending activities, the Bank is committed to supporting companies and households in their efforts to adopt more sustainable practices.

In 2022, the Bank's exclusion list was added as an appendix to the Sustainability policy. The list includes a set of activities that the Bank will not finance, neither directly nor indirectly.

The principles in the Sustainability Policy aim to align the Bank and its business model with society's goals as expressed in the UN SDGs and the *Paris Climate Agreement*.

#### 8.2.3 Sector guidelines

The Bank has published sector guidelines that introduce sustainability to companies and provide them with an overview of risks and opportunities related to sustainability within different industries. The guidelines are a set of standards and recommendations that the Bank suggests that customers adopt in their operations. The guidelines are constantly evolving and are expected to change in line with general standards and requirements. So far, the Bank has published guidelines for three sectors, namely construction, tourism, and seafood industry.

Sector guidelines (in Icelandic)

# 8.3 Risk Management

The Bank continues to further improve and develop how sustainability risk is identified, assessed, and managed within the Bank. Sustainability risk is a part of the Bank's Risk Taxonomy and entails both physical and transitional climate risk, as well as social and governance risk.

Climate-related risks consist of two major categories that are often called transition risks and physical risks. Transition risks include policy, legal, technology, reputational, and market changes due to adoption of new requirements related to climate change and a transition to a low carbon economy. Physical risks are related to physical impacts of climate change such as extreme weather and long-term shift in sea temperature and acidity.

Transition risks can disrupt the business models of the Bank's customers due to changes in demand for products and services. The expectation of impending changes in demand will also need to drive business decisions and in sectors where this does not happen organically, tax incentives, and disincentives are likely to play a role. For example, during the transition towards cleaner energy in the transport sector, tax incentives are expected to be given for cars which use cleaner energy whereas carbon tax may be significantly increased.

The Bank's customers are exposed to physical risk related to climate change, for instance in the seafood industry where the availability of fish and shellfish might diminish due to temperature and acidity changes in the ocean around Iceland. Physical risks can have direct financial impact through damaged assets and supply chain disruptions. As awareness of the potential impact increases, exposed assets are liable to a decrease in value and higher insurance premiums.

Even though the Bank's operations are not carbon intensive and climate change does not influence day-to-day operations, the Bank is exposed to climate risk through its customers. Both transition risk and physical risk can cause, for example, lower profitability in some sectors and decrease real estate value through specific acute events such as flooding and mudslides, resulting e.g., in higher probability of default and loss given default.

#### 8.3.1 Climate Risk Assessment

To assess climate-related risks in the loan portfolio, the Bank analyses the potential financial impact of both transition risk and physical risk across business sectors in the form of a heatmap. The heatmap is a qualitative assessment that maps out where possible climate related risk factors may lie in the portfolio. It is divided into two time periods, 1-5 years, and 5 years and longer.

Exhibit 8.1. The transmission channels of climate risk. Source: Adapted from EBA report on Management and supervision of ESG risks for Credit institutions and investment firms.

#### Climate risk

# TRANSITION RISK

Policy and legal Technology

Market behavior

Reputational

#### PHYSICAL RISK

Acute Chronic

# Transmission channels

Lower profitability
Lower real estate value
Lower household wealth
Lower asset performance
Increased cost of compliance
Increased legal cost

# Financial risk

#### **CREDIT RISK**

Probability of default and loss given default increases Lower collateral valuations

#### MARKET RISK

Shift in market prices Asset stranding

#### **OPERATIONAL RISK**

Physical damage Business continuity

#### LIQUIDITY AND FUNDING RISK

Clients withdrawing money Refinancing risk Non sensitive

Non sensitive

Low

Low

Exhibit 8.2: Climate-related risks and potential financial impacts, transition risk. \*GHL emissions from 2021 as 2022 results will not be available until later this year.

High

High

Sector			Transition risk								
				Legal an	d policy	Techr	nology	Market	behavior	Reputa	ational
	% of portfolio	% of tCO <sub>2</sub> eq	1-5 years	5 years +	1-5 years	5 years +	1-5 years	5 years +	1-5 years	5 years+	
Construction	3%	9%									
Real Estate	10%	1%									
Industry	4%	20%									
Agriculture	1%	13%									
Transportation	4%	26%									
Seafood	11%	11%									
Energy	1%	1%									
Commerce and services	15%	5%									
Road vehicles to indviduals	2%	11%									
Total	51%	96%									

Exhibit 8.3: Climate-related risks and potential financial impacts, physical risk. \*GHL emissions from 2021 as 2022 results will not be available until later this year.

Moderate

Moderate

Sector				Physi	cal risk	
			Ac	ute	Chr	onic
	% of portfolio	GHG emission	1-5 years	5 years +	1-5 years	5 years +
Seafood	11%	10%				
Mortgages to individuals	43%	0,5%				
Total	54%	11%				

The Bank considers transition risk to potentially have the greatest impact on its customers. Within transitional risk, regulatory changes, technological changes and changing market behaviour due to climate awareness are the main risk factors. In the short-term, transition risk within the transportation sector is considered to have the greatest impact. Physical risk has been identified for residential real estate mortgages, but the greatest impact could in the long term be due to chronic physical risk in the seafood sector.

The heat map for transition risk covers around half of the Bank's loan amount but over 90% of the financed greenhouse gas emissions.

The Bank has performed exploratory climate stress tests scenarios against its portfolio. The aim of the analysis is to identify what sectors of the Bank's portfolio may have high adverse impacts on the environment. The sectors are then further analysed in comparison to the Climate Action Plan of the

Exhibit 8.4: Overview of different types of climate risks that have been identified.

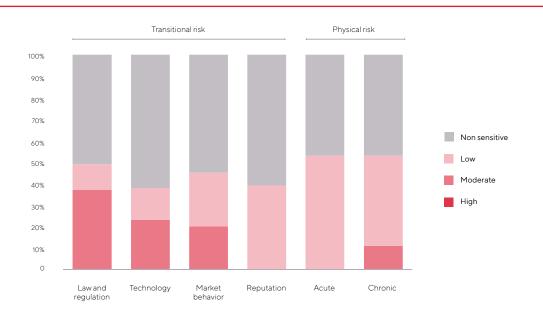
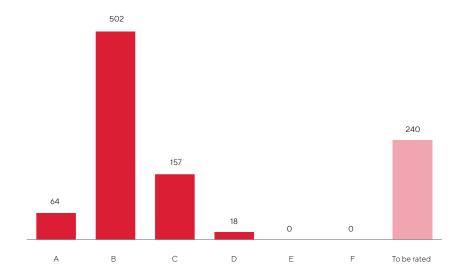


Exhibit 8.5: The distribution of the asset portfolio in ESG risk classes. Around 75% has already been covered (ISK bn).



Government of Iceland. The Bank will continue to further enhance the climate stress testing methodologies in the year 2023.

The Bank conducts regular training sessions for employees on climate risk to further enhance their abilities to engage with customers, as well as identify opportunities and threats related to climate related matters. The Bank also mitigates risk by offering a wide variety of educational courses on social and governance related matters. The aim of the courses is to educate staff, open the discussion and be an inclusive workplace for all of society, regarding both customers and staff.

#### 8.3.2 ESG Risk Assessment

To systematically identify and manage ESG risks, the Bank has set up a framework that analyses borrowers based on environmental, social, and governance factors. The Bank uses a scale with six categories from A (best) to F (worst) to rank customers in terms of sustainability related matters.

The aim is to assess customers and counterparties behind most of the Bank's asset portfolio, including loans to customers, loans to credit institutions, bonds and debt instruments, equities, and investments. The ESG assessment should reflect risks that may lead to borrowers not being able to repay loans or the value of assets declining. It is therefore an assessment of financial risk for the Bank.

Ratings A and B are for customers that have demonstrated clear intention to manage their own ESG risk, C is neutral while D and E require the Bank to engage with the customer to motivate or educate them on sustainability matters. The rating F is similar to a default and will only be used in the unlikely case when customers willingly go against the Bank's

sustainability policy. Loans to customers with rating D or worse are not eligible for the sustainable financing framework.

The Bank has so far assessed customers comprising around ISK 700bn in exposures. The most common rating is B but E and F have not yet been used. In light of this result, the Bank is considering splitting B up into B plus and B minus. The Bank will continue to assess borrowers with regards to ESG risks in 2023 and as more experience is gained targets can be set for the optimal distribution. Exhibit 8.5 shows the distribution of the asset portfolio in ESG risk classes.

# **Biodiversity**

The Bank has recently started to look closer into biodiversity and aspires to perform and report in 2023 on an initial assessment of risks and opportunities related to biodiversity and the impact from loans and investments. The materiality assessment should identify areas where the Bank can make a positive contribution or prevent biodiversity loss.

# 8.4 Metrics and Targets

The Bank has measured its emission of greenhouse gases, both direct and indirect, and has done so from the year 2017. The Bank reports detailed information about the environmental, social, and governance impact of its operation in accordance with the Nasdaq ESG Guidelines and relevant GRI standards. The Bank has measured and published its scope 3 financed emission for the years 2019, 2020 and 2021. The measurement was conducted according to the PCAF methodology.

Íslandssjóðir published for the first time their financed emission in accordance with PCAF for the years 2020 and 2021. The results can be seen in the report Road to Net-Zero.

Exhibit 8.6: Sector-specific emission reduction targets.

Share of balance sheet at YE 2019					Reduction targets vs. 2019		
Sector	Amount	Emissions	Comment	2030	2040	2050	
Aviation and maritime shipping	3%	63%	Estimated aviation and maritime shipping emission reductions in 2020 and 2021 were significantly more than required by IEA NZ2050 pathway (1.5-degree compatible). After COVID-19 recovery in 2022 emissions are projected to decline by 3% annually.	>65%	>75%	>95%	
Road vehicles	5%	7%	In 2030 importing new fossil fuel passenger vehicles to Iceland will be prohibited and financed emissions for passenger cars will reach zero by 2037. In addition, 95% of heavyduty vehicles should run on clean energy by 2040.	>50%	>75%	>95%	
Commercial and residential real estate	52%	<1%	About 85% of houses in Iceland are heated with geothermal energy and renewable energy provided almost 100% of electricity. Therefore, emissions from operating real estates are already low but expected to grow in line with GDP until 2030.	<0%	<0%	<0%	
Power generation	1%	<1%	Íslandsbanki's power generation funding is 100% hydropower generation (one of the least emission intensive electricity generation methods available) hence the sector-specific target is to keep the emissions unchanged.	0%	0%	0%	
Total	61%	71%					

Note that Íslandsbanki has negligible (and no plans to increase) credit exposure for other carbon-intensive sectors specified by NZBA: aluminum, cement, coal, iron and steel, oil and gas.

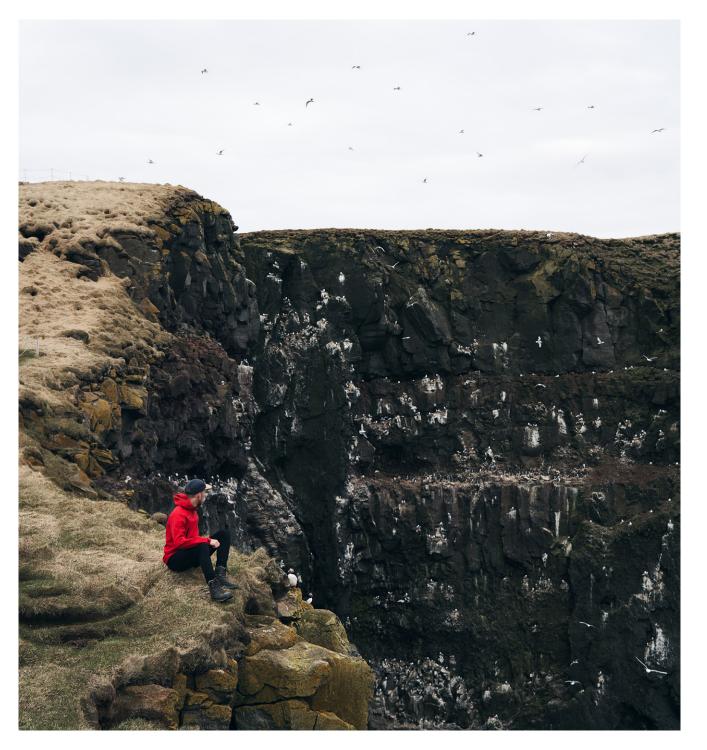
The Bank published its **Road to net-zero report** in accordance with Net-Zero Banking Alliance Guidelines. Sector targes have been set for transport, power generation and both commercial and residential real estate. The Bank's net-zero 2040 ambition is highly challenging, but still attainable for most domestic sectors. Emissions from balance sheet activities are projected to fall 60% by 2030 and 85% by 2040 but aviation and maritime shipping will be a larger task due to technological challenges and longer lifetime of aircrafts and vessels.

By publishing the report, the Bank wants to contribute, and increase the chances that the government's climate goals will be achieved.

# 8.5 Next Steps

With the publication of the Road to net-zero, the Bank took big steps in mapping the road to carbon neutrality by 2040. The path will be troubled and is not fully mapped and includes many variables that can affect the progress. The Bank will have to take further actions to achieve the goal before 2040, such as finding pathways for more sectors, including the seafood industry, and motivate customers to take part in the transition.

Climate risk is the most urgent ESG risk factor, but other environmental risks need to be considered, including biodiversity and water management. In 2022, the Bank was efficient in the initial ESG assessment of its corporate customers, and valuable experience was gained for both employees and customers. The Bank intends to further enhance the ESG risk assessment framework in order to better assess the threats, and opportunities, that lie within the portfolio.



# 9 Remuneration

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

## 9.1 Regulatory Framework

The Central Bank of Iceland publishes rules regarding remuneration in financial undertakings. The rules reflect a conservative framework for remuneration schemes within the financial sector. According to the rules, a bank intending to pay variable remuneration to one or more employees is required to have in place a compensation policy approved by its board of directors. The compensation policy shall be reviewed at least annually, and the bank shall account for the policy to the Central Bank.

# 9.2 Compensation Committee

The Compensation Committee comprises three members from the Boards of Directors. The role of the committee is to guide the Board of Directors and CEO on deciding the terms of employment of senior management and other key employees, as well as ensuring that the terms of employment are in accordance with the Compensation Policy. The committee had six meetings in the year 2022. Further information on composition of the committee and its mandate can be found on the Bank's website.

Compensation Committee

# 9.3 Compensation Policy

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

The Compensation Policy shall support sound operations in the long term and not encourage unreasonable risk-taking. It is the Bank's goal that the terms of employment of executives and other employees are competitive yet balanced without being leading in the market. In determining the terms of employment, responsibility and performance shall be taken into account, as well as equal rights perspectives.

The Bank has in place an Equal pay policy which is intended to guarantee the rights that employees must be paid equal wages for the same or equally valuable work, regardless of gender. Equal pay means that remuneration must be determined in the same way for everyone, regardless of gender. To implement the policy, Íslandsbanki complies with the Equal Pay Standard on equal pay systems. The equal pay system covers all employees of Íslandsbanki.

# Compensation Policy

### 9.4 Remuneration in 2022

Salary and other benefits of the Bank's management and the Board of Directors are disclosed in Note 11 in the Consolidated Financial Statements. No deferred remuneration is outstanding from previous remuneration scheme. Further information regarding remuneration can be found in the remuneration tables REM1 – 5 in the Additional Pillar 3 Disclosures.

# **10 Abbreviations**

ALCO	Asset and Liability Committee	EU	European Union	LGD	Loss Given Default
AMM	Additional Monitory Metrics	FME	The Icelandic Financial Supervisory Authority	LTV	Loan-to-Value
ARC	All Risk Committee		of the Central Bank of Iceland	MRMF	Market Risk Measurement Framework
ASF	Available Stable Funding	FX	Foreign Currency	MREL	Minimum Requirement for Own
AT1	Additional Tier 1	GRI	Global Reporting Initiative		Funds and Eligible Liabilities
BPV	Basis Point Value	HQLA	High Quality Liquid Assets	NPL	Non Performing Loans
CAE	Chief Audit Executive	IC	Investment Committee	NSFR	Net Stable Funding Ratio
СВ	Central Bank of Iceland	ICAAP	Internal Capital Adequacy	ODF	Observed Default Frequency
CCF	Credit Conversion Factor		Assessment Process	OSC	Operations and Security Committee
CEO	Chief Executive Officer	IFRS	International Financial Reporting	PCAF	Partnership for Carbon Accounting
CET1	Common Equity Tier 1		Standards		Financials
CFO	Chief Financial Officer	ILAAP	Internal Liquidity Adequacy	PD	Probability of Default
CLTV	Cumulative Loan to Value		Assessment Process	RSF	Required Stable Funding
CPI	Consumer Price Index	IRRBB	Interest Rate Risk in the Banking Book	REA	Risk Exposure Amount
CRD	Capital Requirements Directive	IRS	Interest Rate Swaps	SCC	Senior Credit Committee
CRR	Capital Requirements Regulation	ISDA	International Swaps and Derivatives	SICR	Significant Increase in Credit Risk
CRO	Chief Risk Officer		Association	SME	Small and Medium-sized Enterprises
DSTI	Debt service to income	ISK	Icelandic Króna	SREP	Supervisory Review and Evaluation
DPC	Digial Product Committee	KRI	Key Risk Indicators		Process
EAD	Exposure at Default	LCR	Liquidity Coverage Ratio	TCFD	Task Force on Climate-related
EBA	European Banking Authority	LCCP	Liquidity and Capital Contingency		Financial Disclosures
ECL	Expected credit loss		Plan	UN SDG	s United Nations Sustainable Development Goals
ESG	Environmental, social and governance	LED	Loss Event Database		

