Periodical Part

Economy of Iceland / Central Bank of Iceland. 2022

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CENTRAL BANK OF ICELAND

ECONOMY OF ICELAND

2022

Economy of Iceland is a triennal publication. Economy of Iceland describes the structure of the Icelandic economy and is intended to serve as background material for understanding its fundamentals and evolution.

The publication does not provide a detailed account of recent developments. A more up-to-date analysis of recent developments and prospects is provided in the Central Bank's quarterly *Monetary Bulletin* and semi-annual *Financial Stability* reports. The Bank's *Annual Report* describes the Central Bank of Iceland's general activities during the respective year.

In *Economy of Iceland*, monetary figures are generally presented in euros; however, in certain instances, amounts are expressed in US dollars. The amount in Icelandic krónur is included in parentheses, as most figures are originally in krónur. Stocks at the end of the period are calculated using the period-end exchange rate, whereas flows are calculated using the average exchange rate for the period. The analysis presented in this publication is based on data available in August 2022.

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Boxes

Icelandic letters:
ð/Ð (pronounced like th in English this)
þ/Þ (pronounced like th in English think)
In Monetary Bulletin, ð is transliterated as d and þ as th in personal names, for consistency with international references, but otherwise the Icelandic letters are retained.

Symbols:

*	Preliminary or estimated data.
0	Less than half of the unit used.
-	Nil.
...	Not available.
.	Not applicable.

Country and people

I

This chapter gives an overview of the country of Iceland – its geography and the main characteristics of its people, society, and political and institutional structure – and of Iceland as a welfare state. It also reviews Iceland's external relations and its status in a global context.

Geography

Iceland is an island located in the North Atlantic, between Norway, Scotland, and Greenland. It is the second-largest island in Europe and the third-largest in the Atlantic Ocean, with a land area of some 103 thousand square kilometres, a coastline of 6,088 kilometres and a 200-nautical-mile exclusive economic zone (EEZ) extending over 758 thousand square kilometres in the surrounding waters.

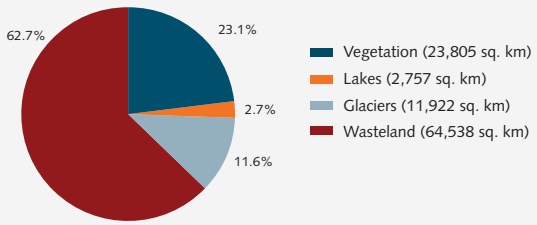
Iceland enjoys a warmer climate than its northerly location would indicate because a part of the Gulf Stream flows around the southern and western coasts of the country. In the capital, Reykjavík, the average temperature is about 12°C in July and just above 0°C in January.

Iceland is mostly mountainous and of volcanic origin, with the highest peak reaching 2,110 metres. Lowlands stretch from the coast towards the interior, mainly in the south and the west. Several glaciers, one of them the largest in Europe, distinguish the landscape. The coasts are rocky and of irregular outline, with numerous fjords and inlets, except for the south, where there are sandy beaches with no natural harbours. Only around 23% of the total land area is classified as vegetated land, most of it located in the southern and western part of the country and in several fertile valleys stretching from the coast.

Iceland is endowed with abundant natural resources. These include the fishing grounds around the island,

Chart I-1

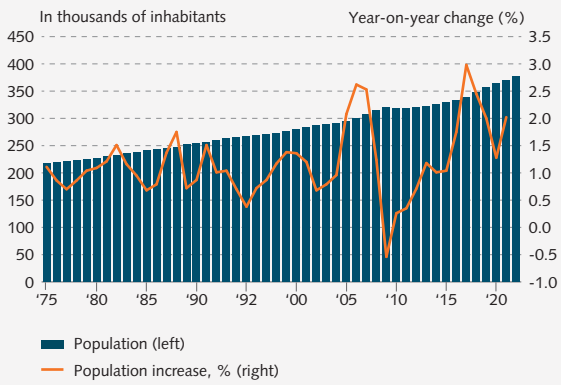
Geography of Iceland[1]



1. The size of Iceland is 103,000 square kilometers.
Source: Statistics Iceland.

Chart I-2

Population of Iceland[1]



1. Population 1 January each year.
Source: Statistics Iceland.

within and outside the country's 200-nautical-mile EEZ. Furthermore, Iceland has abundant hydroelectric and geothermal energy resources.

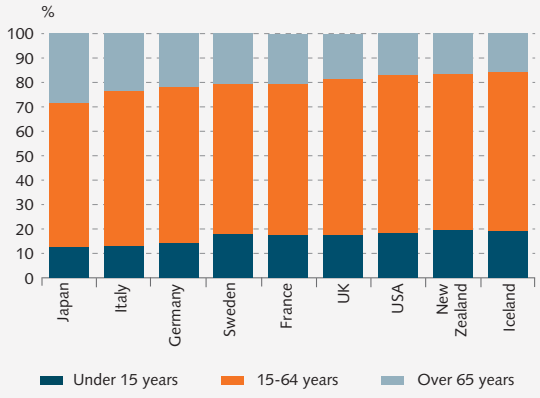
People

Iceland was settled in the ninth century A.D. The majority of the settlers were of Norse origin, with a smaller Celtic element. A general legislative and judicial assembly, the Alþingi, was established in 930, and a uniform code of laws for the country was established at the same time. In 1262, Iceland entered into a union with the Norwegian monarchy. When the Kalmar Union was dissolved in 1523, Iceland came under Danish rule, which lasted for more than five hundred years. Iceland was granted a new constitution in 1874 and obtained home rule in 1904. With the Act of Union in 1918, Iceland became a sovereign state in a monarchical union with Denmark. In 1944, Iceland terminated this union with Denmark and founded a republic. The native language, Icelandic, belongs to the Nordic group of the Germanic languages.

With only 3 inhabitants per square kilometre, Iceland is one of the least densely populated countries in Europe. On 1 January 2022, Iceland's population was just over 375 thousand. In 2000–2021, annual average population growth was 1.4% and the natural increase (births less deaths) 0.6%. Around 64% of the population live in the capital city of Reykjavík and its surrounding municipalities. The largest town outside the capital area is Akureyri, located in North Iceland, with a population of 19 thousand. Most of the remaining inhabitants live in small towns along the coast.

Chart I-3

Age structure of the population in selected countries 2021[1]



1. Ranked by share of population 65 and over.
Sources: World Bank, Statistics Iceland.

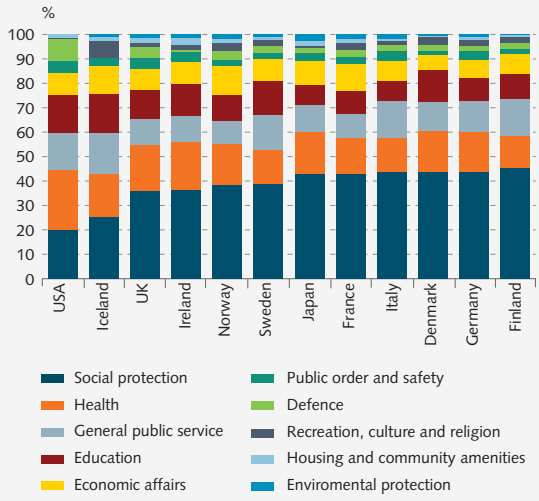
As in other advanced countries, the population of Iceland is ageing, but at a relatively slower pace than in most OECD countries. In 2021 the ratio of the total population aged over 65 to the population of working age was 25%, tenth-lowest in the OECD.

Society and the welfare state

Iceland is a modern welfare state that guarantees its citizens access to universal health care, education, and a high degree of social security. In international comparison spending on social protection measures lower than in most countries due to the structure of the pension fund system (see Chapter 2). Public spending on health, education, social security, welfare, and other social affairs increased during the COVID-pandemic, reaching a peak at 27.8% of GDP in 2020 but decreased slightly in 2021 when it amounted to 27.4% of GDP.

Chart I-4

General government expenditure by function in 2019[1]



1. Percentage breakdown of total expenditure.
Source: OECD.

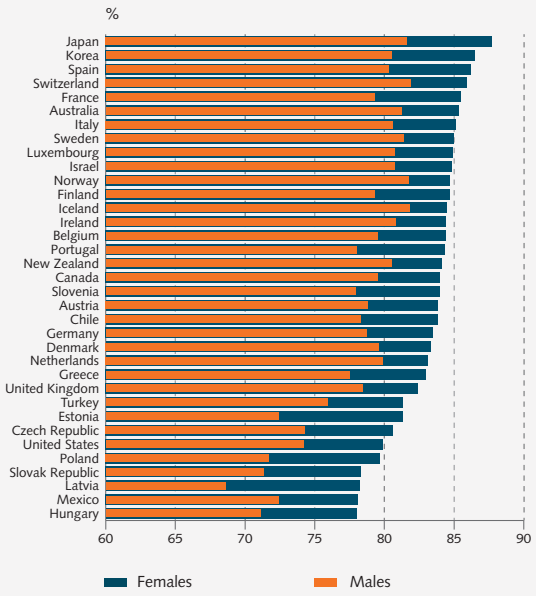
Life expectancy, which is among the highest in the world, and one of the world's lowest infant mortality rates (2.9 per 1,000 live births in 2020) testify to the advanced state of health care in Iceland, both primary health care and hospitals. The Icelandic health care system is a tax-financed universal system for all persons who have had legal residence in Iceland for more than six months. Health care services are provided mainly free of charge, although user charges have been on the rise. The main exception is dental health care, where adult patients are charged the full cost of service, while children under 18 years of age pay only a nominal fee.

The standard of education is high, and public education is compulsory between the ages of 6 and 16. Good command of English and the Scandinavian languages is widespread. Education is offered free of charge or for a nominal fee at three levels. First, there are ten years of compulsory education at the primary level (age 6-16). This is followed by three years at the upper secondary level, which provides general education and vocational training in a wide range of fields. Finally, higher education is offered at several universities.

In Iceland, as in most OECD countries, university enrolment among those completing secondary education has increased substantially in recent years. In 2020, 41% of the adult population held a university degree, up from 29% in 2005. The ratio of pre-school enrolment is also one of the highest among OECD countries.

Chart I-5

Life expectancy at birth 2021[1]



1. 2021 or latest.

Source: OECD.

Institutional framework

Political and judicial system

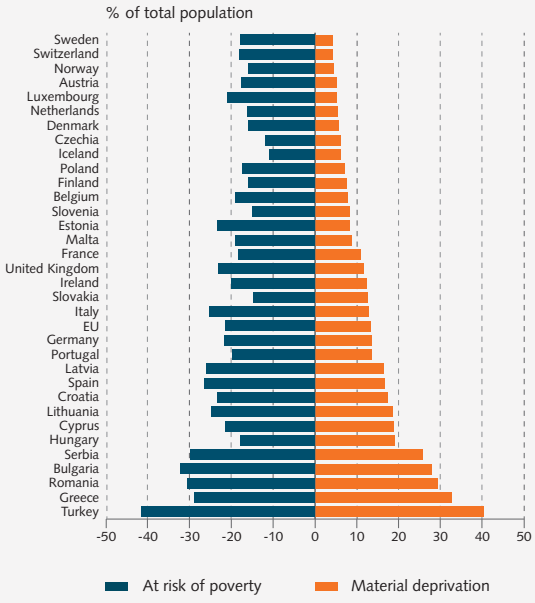
Iceland is a constitutional republic with a multi-party parliamentary system of government. The Constitution was adopted on 17 June 1944, when the Republic was established. Legislative power is vested in Parliament (Alþingi) and the president, in that bills of legislation are passed by Parliament and submitted to the president for confirmation by his or her signature. Upon such confirmation, the bill in question acquires the force of law. The Government must be supported by a majority of Parliament in order to remain in power. The 63 members of Parliament are elected from six constituencies on the basis of proportional representation, for a term of four years. Over the past thirty years, the participation of women in politics has increased significantly and their share of seats in Parliament is currently 47,6%. The president is the head of state and is elected for a term of four years by a direct vote of the electorate.

Since Iceland gained autonomy from Denmark in 1918, its governments have normally been formed by a coalition of two or more political parties that have together held a majority in Parliament. The most recent election was held on 25 September 2021. The results of the elections were as follows: the Independence Party obtained 24,4% of votes and 16 seats; the Progressive Party 17,3% and 13 seats; the Social Democratic Alliance 9,9% and 6 seats; the Left Green Movement 12,6% and 8 seats; the Centre Party 5,4% and 3 seats; the Pirate Party 8,6% and 6 seats; the People's Party 8,8% and 6 seats; and the Reform party 8,3% and 4 seats. A coalition government of the Independence Party, the Left Green Movement and the Progressive Party (with a total of 37 seats) took office for a second consecutive term in November 2021. General elections are generally held every four years, but the Constitution allows for early dissolution of Parliament, which triggers early elections.

Iceland's judicial system is divided into three levels: District Courts, which are the courts of first instance; a new court of the second instance (Court of Appeal),

Chart I-6

Material deprivation and risk of poverty in Europe 2020[1]



1. 2020 or latest.

Source: OECD.

introduced on 1 January 2018; and the Supreme Court, which holds the highest judicial power in Iceland. The Constitution provides for the courts' independence, according to which judges have judicial power, shall only abide by the law in their official duties, and cannot be discharged from office except by judicial decision.

Central Bank of Iceland

The Central Bank of Iceland was established by an Act of Parliament in April 1961. The Bank is an independent institution owned by the State but under separate administration. The Prime Minister's Office oversees matters pertaining to the Central Bank, insofar as they belong to the political sphere. The Bank has a seven-member Supervisory Board elected by Parliament. The objective of the Central Bank is to promote price stability, financial stability, and sound and secure financial activities. An inflation-targeting regime was adopted in 2001. Decisions on the use of monetary policy instruments are taken by the Monetary Policy Committee (see Chapter 5). Decisions on the application of the Central Bank's financial stability policy instruments are taken by the Financial Stability Committee. As of 1 January 2020, the Central Bank is responsible for the tasks entrusted by law and Governmental directives to the Financial Supervisory Authority, and the financial supervision is now part of the Central Bank. Decisions entrusted to the Financial Supervisory Authority by law or Governmental directives fall under the remit of the Financial Supervision Committee.

External relations

Iceland participates actively in international cooperation. It belongs to the group of Nordic countries that includes Denmark, Finland, Norway, and Sweden, as well as Greenland and the Faeroe Islands. The Nordic countries have wide-ranging cooperation in a variety of fields, including economic affairs and international representation, in which the Baltic countries also play an active part. Iceland is a member of the Nordic Council, the Nordic Council of Ministers, and specialised institutions such as the Nordic Investment Bank. Iceland is also a member of the Arctic Council and a number of other regional bodies.

Iceland became a member of the United Nations in 1946 and is an active participant in most of its affiliated agencies. It is a founding member of the Bretton Woods institutions established in 1945, the International Monetary Fund (IMF), and the International Bank for Reconstruction and Development (World Bank). The Central Bank of Iceland is a shareholder in the Bank for International Settlements (BIS) and participates actively in its activities.

Iceland is a founding member of the North Atlantic Treaty Organization (NATO), established in 1949. The United States maintained a permanent military presence in Iceland from 1951 until 2006. The bilateral defence agreement between Iceland and the United States remains in effect.

Iceland is one of the original members of the Organisation for Economic Cooperation and Development (OECD) and of the European Bank for Reconstruction and Development (EBRD). It joined the Council of Europe in 1950 and has participated in the Organisation for Security and Cooperation in Europe (OSCE) since the organisation's inception in 1975.

In 1964, Iceland became a party to the General Agreement on Tariffs and Trade (GATT), the predecessor to the World Trade Organization (WTO). Iceland joined the European Free Trade Association (EFTA) in 1970 and entered into a free trade agreement with the European Economic Community in 1972. In May 1992, the member states of EFTA and the European Union signed an agreement to establish a zone for the free movement of goods, services, capital, and persons, the European Economic Area (EEA), which took effect on 1 January 1994. Through this agreement, Iceland is a part of the

Table 1 Iceland's membership of international organisations and institutions

	Year of association
International Monetary Fund (IMF)	1945
International Bank for Reconstruction and Development (World Bank)	1945
United Nations (UN)	1946
North Atlantic Treaty Organization (NATO)	1949
Organisation for Economic Cooperation and Development (OECD)	1949
Bank for International Settlements (BIS)	1950
Council of Europe	1950
Nordic Council	1952
International Finance Corporation (IFC)	1956
International Development Association (IDA)	1961
General Agreement on Tariffs and Trade (GATT)	1964
European Free Trade Association (EFTA)	1970
Nordic Investment Bank	1975
Organization for Security and Cooperation in Europe (OSCE)	1975
European Bank for Reconstruction and Development (EBRD)	1990
Western European Union (WEU)	1992
Barents Euro-Arctic Council (BEAC)	1993
European Economic Area (EEA)	1994
Council of Baltic Sea States (CBSS)	1995
World Trade Organization (WTO)	1995
Arctic Council	1996
Implementation of the Shengen agreement	2001
Asian Infrastructure Investment Bank (AIIB)	2016

single market of the European Union. Iceland is a party to numerous free trade agreements with other countries through its EFTA membership. Furthermore, Iceland has negotiated bilateral free trade agreements with China, Greenland, and the Faeroe Islands. Iceland signed an association agreement on participation in the Schengen cooperation in December 1996 and fully implemented it in March 2001, which ended internal border checkpoints and controls. Iceland is a founding member of the Asian Infrastructure Investment Bank and ratified its Articles of Agreement in 2016.

Structure of the economy

II

This chapter focuses on the structure of the Icelandic economy, with particular emphasis on size, composition of output and expenditure, and foreign investment. Different sectors of the economy are analysed, particularly to include recent developments and the contribution of each sector to GDP. Furthermore, the labour market and pension system in Iceland are discussed. The chapter also presents a review of Iceland's international investment position, describes changes in foreign direct investment, and provides figures on external debt and asset levels. Finally, it describes corporate and household balance sheets in Iceland. The Icelandic economy displays the characteristics of an advanced economy, with high income levels and a relatively large services sector. Its distinguishing features are its large marine and energy sectors based on ample resources, a large and growing tourism sector, and a high labour participation rate.

Macroeconomic framework

Size and income level

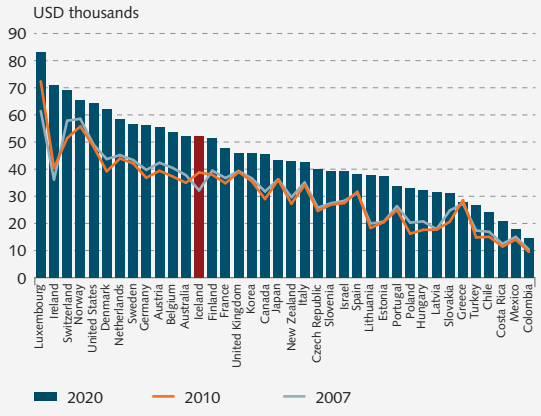
The Icelandic economy is the smallest within the OECD in nominal terms, generating GDP of 21.5 billion US dollars (2,928 b.kr.) in 2021. This amounted to around 1/1000 of the US economy, 1/16 of the Danish economy, and a little over 1/4 of the economy of Luxembourg. The small size of the Icelandic economy mainly reflects the country's small population, which was about 376,000 on 1 January 2022. According to World Bank data, GNI per capita measured in terms of Purchasing Power Parities (PPP) amounted to roughly 52,000 US dollars in 2020, the twentieth-highest in the world and the thirteenth-highest among the OECD countries. Iceland's GNI per capita is higher than that in Finland and above the EU average, but lower than in the other Nordic countries.

Drivers of growth

Historically, Iceland's prosperity has been based largely on its comparative advantages in abundant marine and energy resources, with investment and services the main drivers of growth. Following the financial crisis in 2008, the country's favourable competitive position sparked a growth spurt in tourism and related activity, which continued to grow rapidly until 2018. This affected other services and, later on, construction activity. Terms of trade developed favourably alongside growth in tour-

Chart II-1

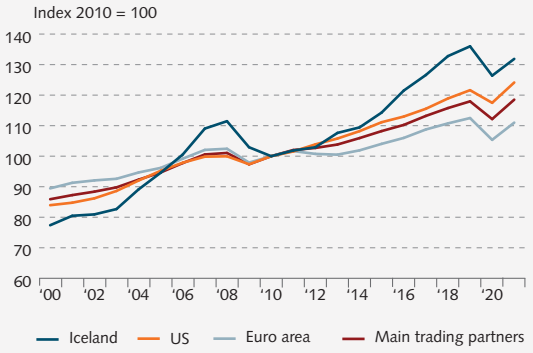
Gross national income per capita in OECD countries 2020[1]



1. World Bank data on PPP adjusted national income per capita.
Source: Thomson Reuters.

Chart II-2

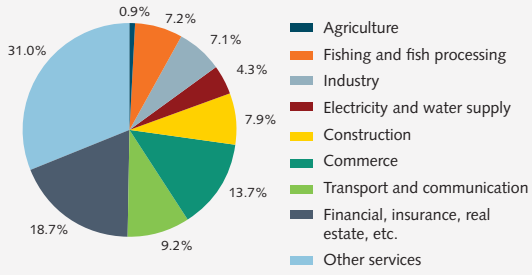
GDP in Iceland and its main trading partners 2000-2021



Sources: Eurostat, U.S. Bureau of Economic Analysis, Refinitiv Datastream, Statistics Iceland.

Chart II-3

Breakdown of GDP by sector 2021



Source: Statistics Iceland.

ism. This boosted national income, which in turn helped support a substantial increase in household demand and private consumption. Like many other countries, Iceland suffered an economic shock in the wake of the COVID-19 pandemic in 2020, with widespread effects across all sectors. The composition of the economic contraction was somewhat different from other advanced economies, however, due to the relative importance of tourism, which was drastically affected by the virtual collapse of international air travel during the pandemic (see Box 2.1). Other services sectors were also affected by the decline in tourist numbers and public health measures, which caused a marked change in the composition of private consumption. After a sharp contraction in 2020, robust domestic demand and favourable terms of trade boosted the recovery in 2021, and the economy has moved towards its pre-pandemic composition. Looking ahead, further near-term growth is expected in exports of services, tourism in particular, as the sector continues to recover from the pandemic. Other export sectors – including aquaculture, pharmaceuticals, intellectual property, and other technical services – are also expected to continue growing in the coming term.

Box 1

Policy responses during the COVID-19 pandemic and the road to recovery

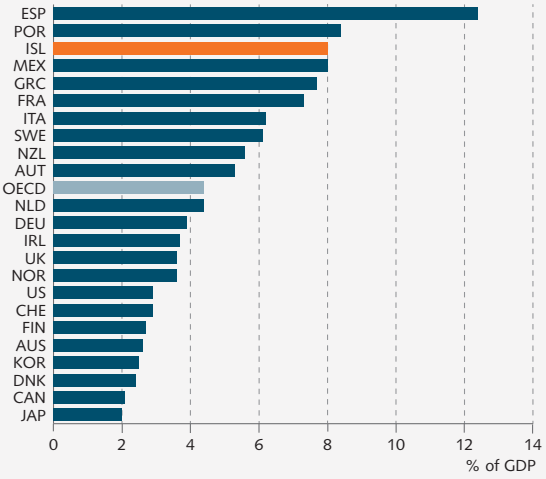
The COVID-19 pandemic began to spread in early 2020, and governmental authorities the world over adopted a broad range of public health measures. Public gatherings were limited, curfews were imposed, travel was restricted, and the operations of many companies were scaled down significantly. The pandemic and the associated response measures to safeguard public health caused a severe economic contraction worldwide. Iceland quickly felt the effects, particularly in the tourism sector, which weighed heavily in the domestic economy (Chart 1).

At the beginning of the Covid-19 pandemic, Iceland's foreign liabilities were at a twenty-year low, its international reserves ample, and its net international investment position (NIIP) positive and at its most favourable level since World War II. Private sector debt was also at its lowest level since the global financial crisis. Furthermore, sizeable fiscal policy buffers had been accumulated over the previous decade, as the ratio of public debt to GDP had declined by more than 50 percentage points since the financial crisis, providing ample space for significant fiscal stimulus at the onset of the pandemic. Moreover, pension fund assets were equivalent to 173% of GDP at year-end 2019, greatly enhancing the resilience of the economy.

The domestic economy was therefore well positioned to face deteriorating external conditions, and there was ample space for policy action. Fiscal and monetary policy responses, together with more accommodative macroprudential and regulatory policies, supported households and firms during the pandemic while preserving social, economic, and financial stability. The response included cutting the Central Bank's key interest rate to a historical low and announcing changes to the Bank's liquidity management framework. Furthermore,

Chart 1

Weight of tourism in GDP in selected OECD countries



1. Weight of tourism in GDP in 2019, or previous years if 2019 data are not available. Weight in total gross value added instead of GDP for Canada, Denmark, Finland, Germany, Greece, Italy, Mexico, Netherlands, New Zealand, Portugal, Switzerland, United Kingdom and the United States. Data for Spain includes indirect effects of tourism.

Sources: OECD, Statistics Iceland.

the Bank announced that it would purchase Treasury bonds, for the first time in its history, ranging up to a maximum amount of 150 b.kr. (5% of GDP) to ensure that the more accommodative monetary stance would be transmitted to households and businesses. However, there was limited need for this facility.[1] The Bank established special temporary credit facilities in the form of collateralised loans and temporarily expanded the list of securities eligible as collateral, owing to potential uncertainty about financial institutions' liquidity. Financial institutions' capital requirements were eased so as to afford them greater scope to restructure distressed households' and businesses' debt while maintaining lending capacity. The countercyclical capital buffer was lowered from 2% to 0%, giving credit institutions additional scope to expand their loan portfolios by 12.5%, or 350 b.kr. Furthermore, owing to the substantial uncertainty prevailing in 2020, the results of the 2019 SREP assessment concerning additional capital requirements (Pillar II-R) were not changed, and supervisory stress tests were suspended in line with European Banking Authority (EBA) guidelines.

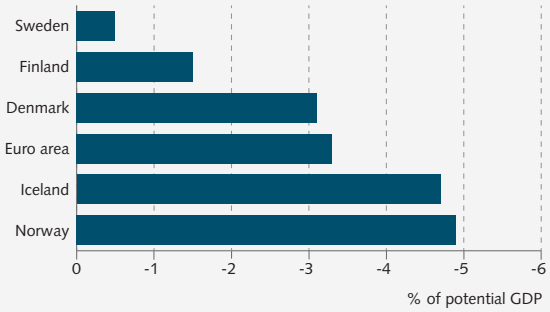
The Bank intervened in the foreign exchange market as it deemed necessary in order to mitigate short-term exchange rate volatility. From September 2020 till May 2021, the Bank conducted regular foreign currency sales with the aim of deepening the market and improving price formation.

1 The Central Bank was not very active in the bond market in 2020-2021. In total the Bank bought Treasuries for 20 b.kr. (0,6% of GDP), and decided to stop submitting bids for the time being in August 2021.

The overriding aim of fiscal policy was to protect firms and households, particularly those most directly affected by the crisis. By protecting the integrity of the most affected firms, including in tourism, and by providing investment initiatives, fiscal support played a key role in preserving production capacity and laid the groundwork for a new period of sustainable growth. In addition to significant support from automatic fiscal stabilisers, the authorities provided assistance through countermeasures in form of foregone revenues, various support programmes, and investment initiatives. These measures amounted to 3.3% of GDP in 2020 and 3.6% of GDP in 2021. From 2019-2021, the cyclically adjusted balance of the general government budget deteriorated by more than 4½% of GDP, roughly the same as in Norway over the same period but more than in other Nordic countries and the euro area (Chart 2). The above-mentioned automatic fiscal stabilisers widened the deficit further, from 1.5% of GDP in 2019 to 8.9% in 2021.

Chart 2

Change in cyclically adjusted primary balance 2019-2021



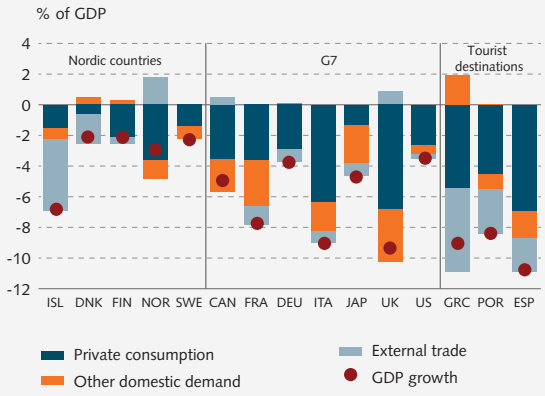
Source: IMF's Fiscal Monitor April 2022.

The magnitude of the COVID-induced shock varied widely from one country to another. In Iceland, the contraction measured 6.8%, and its composition was different from that in most other advanced economies, reflecting the impact of the pandemic on the tourism industry. Economic activity in Iceland's main trading partner countries shrank by an average of 4.9% in 2020, particularly in Spain (10.8%), the UK (9.3%), and Italy (9%). The contraction was considerably smaller in the US (3.4%) and the Nordic countries (2.5%, on average).

The main reason economic activity in Iceland contracted as much as it did in 2020 was the steep decline in exports. This was particularly the case for tourism-related exports, as international passenger flights were severely limited after the pandemic struck, owing to tight travel restrictions and border closures all over the world. Pandemic-related restrictions on

Chart 3

Size and composition of 2020 economic contraction[1]

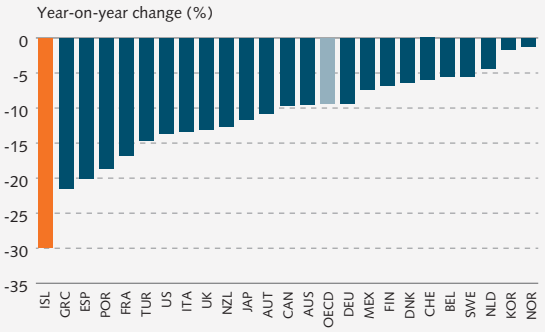


1. The contribution from other domestic demand is the sum of the contributions from public consumption, gross capital formation, and inventory changes, plus possible errors and omissions, as the sum of components may not equal GDP growth because of chain-volume linking in the national accounts. Figures for Norway exclude the production and shipping of oil and gas.

Sources: Norges Bank, OECD, Statistics Iceland.

Chart 4

Exports in 2020 in selected OECD countries[1]



1. Seasonally adjusted volume indices for exports of goods and services.

Source: OECD.

international travel were felt more in Iceland than in most other advanced economies, as the weight of tourism in the domestic economy was about double the OECD average before the COVID crisis (Chart 4). Iceland's tourism exports contracted by 76% in 2020, and total services exports fell by 51%. The pandemic also triggered contractions in other export sectors. Exports of goods and services shrank by 30% in 2020, about three times the OECD average (Chart 5). Even though imports also contracted more in Iceland than elsewhere in the OECD, or by 21.5%, the contribution of net trade to output growth was negative by nearly 5 percentage points. Therefore, about ¾ of Iceland's economic contraction in 2020 was due to a negative contribution from external trade. Thus the composition of Iceland's contraction in GDP, although different from that in most other advanced economies, was broadly similar to that in countries that rely heavily on tourism (Chart 1).

Iceland's recovery has also been slower than the trading partner average, owing to the lagged recovery of the tourism sector. At year-end 2021, output in Iceland was 1.2% above its 2019 level, whereas in trading partner countries it was 2.6% above the 2019 level. Iceland's year-2021 GDP growth was driven instead by domestic demand. Among the factors contributing to the economic recovery were low interest rates, a decade of real wage growth, and a steep drop in unemployment in 2021, with labour participation bouncing back to its 2019 level.

Although the tourism sector has recovered more slowly than other sectors, its recovery has nonetheless been more rapid both domestically and internationally than had been expected in the wake of the pandemic. In June 2022, international air traffic in Europe was already back to 80% of the 2019 level, and traffic between North America and Europe was over 12% above its 2019 level. Euro-Asia flight traffic is still far below its 2019 level, however. Because Iceland relies mainly on tourists from Europe and the US, the tourism sector recovered rapidly in summer 2022. The number of tourists visiting Iceland reached 96% of its 2019 level, and foreign tourists' spending in Iceland looks set to exceed the 2019 level in summer 2022.

Debt levels have risen in the wake of the COVID crisis – mainly government debt, which is nevertheless fairly low.[2] General government debt had declined markedly during the years leading up to the pandemic, measuring 66% of GDP at the end of 2019, down from 138% in 2011. Large fiscal deficits incurred in 2020 and 2021 as a result of pandemic response measures increased government debt to 75% of GDP by the end of 2021. Credit to households grew as well. Increased demand for mortgage loans in the low interest rate environment after the pandemic has supported household lending. Lending to households increased by 9% in 2020 and by a further 10% in 2021, to 84% of GDP at the end of 2021 (74% at year-end 2019). Corporate lending remained subdued during the pandemic, as it had been since late 2019.

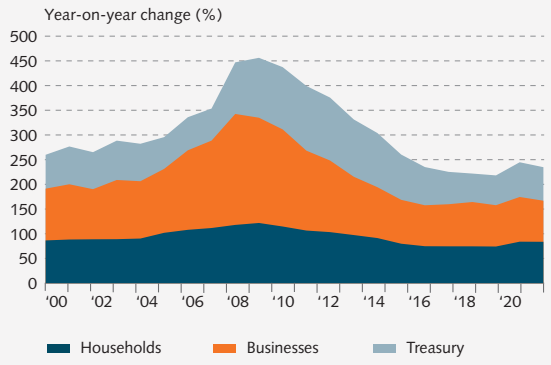
Over the course of 2022, the government steadily withdrew its COVID-related support measures, and the fiscal deficit shrank rapidly. Central government debt-to-GDP ratio is expected to halt in 2022, and the fiscal stance is expected to tighten more during the year than was previously assumed. According to the most recent fiscal budget proposal, the stance could tighten by an additional 1½% of GDP in 2023.

The Central Bank of Iceland began raising interest rates in May 2021, after the economic outlook began to improve. Over 75% of the population aged 16 and over was vac-

2 Total government debt excluding pension liabilities and accounts payable.

Chart 5

Credit-to-GDP ratio



Sources: Statistics Iceland, Central Bank of Iceland.

cinated by then, and the pandemic-related restrictions that had affected day-to-day life had been lifted. In September 2021, the Financial Stability Committee decided to increase the countercyclical capital buffer back to 2%, effective in September 2022, as uncertainty about financial institutions' position had receded and loan quality had improved. As a result, cyclical systemic risk had returned at least to its pre-pandemic level. Interest rates were raised rapidly in 2022, and by September they had been increased by 4.75% from the trough, as the inflation outlook had deteriorated and GDP growth looked set to measure nearly 6% for the year as a whole.

Composition of output and expenditure

As in other developed economies, services form the bulk of economic activity, accounting for nearly ¾ of GDP in 2021. The marine sector accounted for 7% of GDP in 2021 and remains one of the pillars of export revenues, together with energy-intensive exports and tourism-related services. Manufacturing (excluding marine products) accounted for roughly 10% of GDP in 2021, and construction accounted for nearly 8%. Financial services (other than insurance services and pension funds) accounted for an average of 4.9% of GDP in 2015-2021.

Private consumption contributed an average of about 50.4% of GDP in 2015-2021, and gross fixed capital formation contributed 21.3%, respectively. The investment-to-GDP ratio fell well below its long-term average of 21% of GDP following the financial crisis in 2008, but it has been rising over the past decade and exceeded 23% in 2021. The ratio of public consumption to GDP has averaged around 25% of GDP in the past decade, well above the OECD average of 19% of GDP.

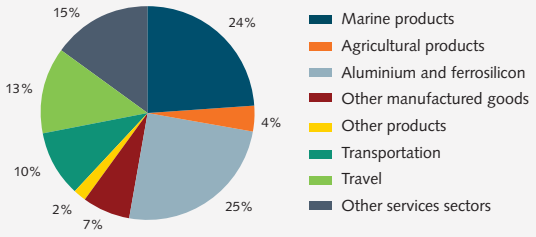
Foreign trade

Iceland is a fairly open economy, with imports and exports of goods and services amounting to 40% and 38% of GDP, respectively, in 2021. This is relatively low in historical terms, however, due to effects of the COVID-19 pandemic. In the period from 2010 through 2021, trade openness, measured as the ratio of imports and exports of goods and services to GDP, averaged 91%, well above the OECD average. Although trade still involves a relatively large share of primary products and commodities, exports have diversified significantly since the turn of the century. Openness is nevertheless restricted by factors such as geographic distance from major population centres, limited intra-industry and transit trade, and protection of domestic agriculture.

Chart II-4

Exports by type 2021[1]

Percentage of total exports



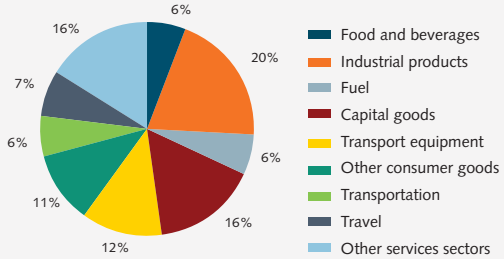
1. The composition of exports in 2021 differs from previous years due to the effects of COVID-19 on tourism-related exports.

Source: Statistics Iceland.

Chart II-5

Imports by type 2021

Percentage of total imports



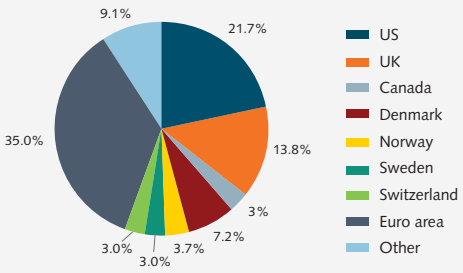
Source: Statistics Iceland.

Marine products and manufactured goods have been the mainstay of goods exports in the 21st century. Aluminium holds the largest share in manufactured goods, although exports of ferrosilicon and other manufactured goods have grown in importance as well. The share of aquaculture in total goods exports has also been gradually increasing in the last decade – from 0.5% in 2011 to roughly 5% in 2021 – and is expected to continue growing. Furthermore, exports of services have increased as the economy has grown and become increasingly service-oriented. Tourism has soared over the past decade and has been one of the main drivers of export growth (Chart 2.4).

Iceland imports a wide range of manufactured goods and commodities, reflecting both the small size of the economy and the limited range of natural resources. Imports of industrial supplies accounted for 28% of total goods imports and 20% of total imports in 2021. Capital goods constituted 23% of total goods imports and consumer goods 32% (16% and 22%, respectively, of total imports in 2021), while services contributed 29% of total imports (Chart 2.5).

Chart II-6

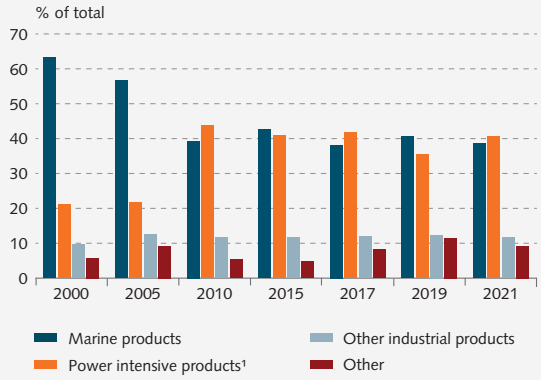
Currency area share in services exports 2021



Source: Statistics Iceland.

Chart II-7

Composition of goods export by product categories



1. Manufacturing services are included under energy-intensive industrial goods as in Statistics Iceland's trade figures.

Source: Statistics Iceland.

Iceland's ratio of services trade to total trade rose rapidly with the growing tourism sector after the 2008 financial crisis, averaging 46% in 2016-2018. In 2021 it had fallen to 33%, broadly in line with its share at the beginning of the century, due to effects of the COVID-19-pandemic. The US dollar and the euro are the most common currencies used for services exports in Iceland, accounting for 22% and 35% of total services exports (Chart 2.6), respectively, in 2021. The pound sterling, at 14%, is the only other currency with a share over 10%. In the past decade, the geographical distribution of exports has been influenced by the increased share of tourism in total exports, causing the share of North America to rise, as visitors from the United States account for the largest share by nationality.

The geographical composition of services exports differs from goods exports, which are concentrated to a greater extent in European countries. In 2021, 66% of goods exports went to European Economic Area (EEA) member countries, which were also the source of 47% of imports. Currently, Iceland's largest trading partner countries are the Netherlands, the US, Germany, the UK, Norway, and Spain. Trade with China has increased over the last decade, and China is now Iceland's seventh-largest trading partner. In terms of currency, the euro area constitutes the largest goods trading area, accounting for 35% of imports and 61% of exports. In recent years, Iceland has generally had a trade surplus with the Netherlands, the Iberian countries, the US, France, and the UK, but a deficit with its Nordic neighbours, Germany, Brazil, China, and Ireland.Nordic neighbours, Germany, Brazil, China, and Ireland.

Sectoral developments

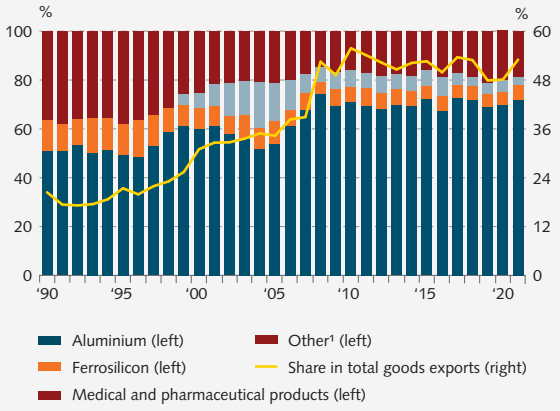
Manufacturing and energy-intensive industries

The production structure of Iceland's manufacturing sector is unique among industrialised countries. First, the manufacturing sector is dominated by aluminium production, which has accounted for an average of roughly 70% of total manufacturing in the past decade. Food processing equipment for export has also been an important subsector in the manufacturing industry, but production of machinery and other investment goods is relatively limited. The majority of Iceland's manufacturing goods are exported, and exports of aluminium products accounted for roughly 72% of total manufacturing exports in 2021 (Chart 2.8).

Iceland's aluminium industry is based primarily on competitive energy costs, strategic location, a skilled labour force, and access to green and sustainable energy. Production rose sharply in 2008 and 2009 but has remained relatively stable in recent years, averaging around 870,000 mtpy since 2017 (Chart 2.9), or around 1.3% of global aluminium production.[1] Production is estimated to remain relatively stable in the coming term. A number of other export-oriented manufacturing companies have emerged in the last two decades, most of them focusing on product innovation, R&D, information and communications technology (ICT), and strategic marketing.

Chart II-8

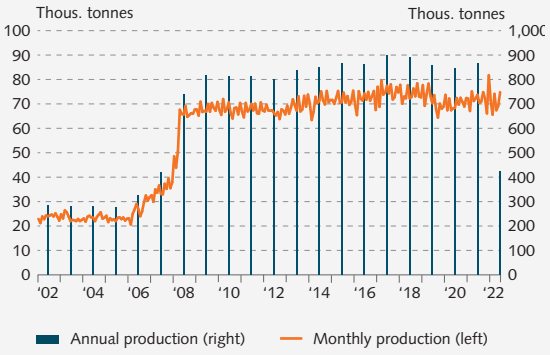
Composition of manufacturing exports and share in total merchandise exports



1. Medicinal and pharmaceutical products are included until 2002.
Source: Statistics Iceland.

Chart II-9

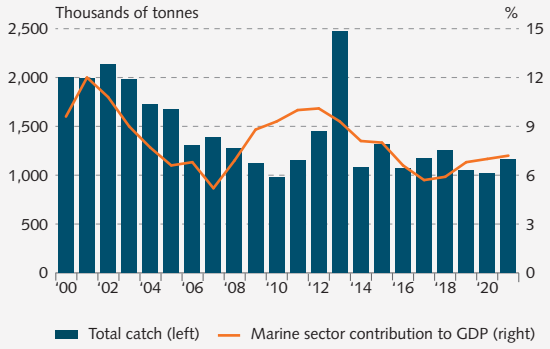
Aluminium production



Source: Statistics Iceland.

Chart II-10

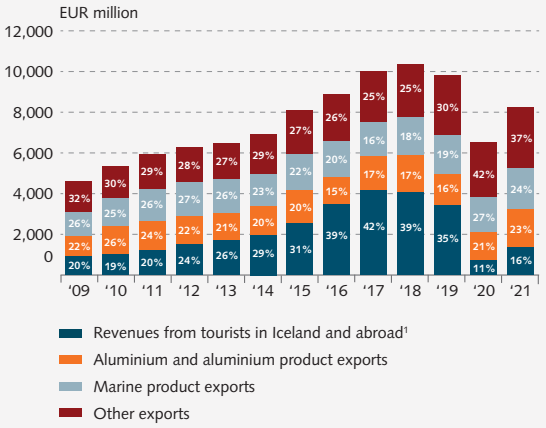
Fish catch by Icelandic vessels



Source: Statistics Iceland.

Chart II-11

Goods and services exports



1. Revenues from tourists in Iceland and abroad is the sum of "Travel" and Item 1.2.1, "Passenger transport by air". Annual data.
Sources: Statistics Iceland, Central Bank of Iceland.

Marine sector

Throughout most of the twentieth century, the marine sector was of key importance to the Icelandic economy. Its share of total exports has declined since the early 1990s, however, due to growth in other export sectors.

Its contribution to GDP has fluctuated between 5% and 10% in the past decade, in part due to fluctuations of the exchange rate of the króna (Chart 2.10). Fisheries and fish processing are still one of the main pillars of export activities in Iceland: in 2021, 39% of goods exports and roughly 24% of all revenues from goods and services exports came from fisheries, although the negative impact of COVID-19 on tourism somewhat affected its share in 2021 (see Box 2.1).

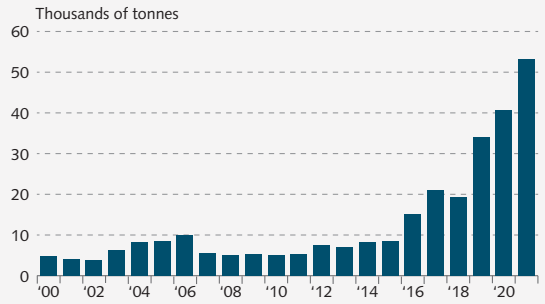
The marine sector is highly diversified in terms of species, processing methods, and markets. Fishing and processing of groundfish and pelagic species are the principal focus of Iceland's marine sector. The introduction of value-added processing techniques and implementation of high-scale automatisation has led to increased efficiency and profitability of the sector in recent decades. Value has also been boosted by a shift towards fresh seafood products instead of frozen and salted products.

1 International Aluminium Institute, 2022.

Furthermore, fisheries companies have enhanced their efficiency through mergers, acquisitions, and vertical integration of all parts of the value chain in recent decades. The comprehensive fisheries management system (FMS) based on individual transferable quotas (ITQ) was implemented in 1990 to manage the fish stocks and promote sustainability and economic efficiency (see Box 2.1).

Iceland's aquaculture industry has developed relatively rapidly in recent years, increasing from 15,000 tonnes of production of ungutted fish in 2015 to more than 50,000 tonnes in 2021. Growth has been strongest in salmon farming, although production of Arctic charr and rainbow trout has increased significantly as well (Chart 2.12). Reasonable growth is expected in the years to come.

Chart II-12
Aquaculture production in Iceland



Source: Statistics Iceland.

Box 2

The individual transferable quota system

Fishing of all commercially important marine species is regulated under the individual transferable quota (ITQ) system. The current quota system is based on the following factors:

- Each year, the total allowable catch (TAC) is set by the Minister of Food, Agriculture, and Fisheries, after the Minister has received advice from the Marine and Freshwater Research Institute based on a biological assessment of the stocks and forecasts of near-term developments.
- The quota shares that determine each year's quotas must be registered to a fishing vessel.
- A vessel's annual quota for a species is equal to its quota share for that species multiplied by the TAC, after adjusting for special allocations amounting to 5,3% of TAC; e.g., for regional support and coastal fisheries of small vessels.
- Quota shares and annual quotas are transferable and can be traded on the quota market, subject to certain restrictions.

The law prescribes maximum holdings of quotas, or 12% of aggregate quotas of all species, by individual fishing companies, measured in value terms by socalled "cod equivalent kilos", a relative price index of landing prices by species. Regulations also cover maximum holdings of the more important individual species range 12-20% for individual companies. The fishing fee for each calendar year is calculated on the basis of earnings before taxes (EBT) from catching of each species two years prior to the levy. The fishing fee in 2021 was approximately 53 million euros (8 b.kr.), or 5.5% of the total 2019 catch value. The fee is part of the State budget.

Box 3

Sectoral limitations on foreign direct investment

The only restrictions on investment by non-residents in Iceland apply to foreign direct investment in fisheries and primary processing of fish, energy production and distribution, aviation companies,[1] and real estate.[2] Restrictions on investment in the fisheries sector have the purpose of protecting the nation's exclusive rights to the fishing grounds surrounding Iceland. Direct foreign ownership of fisheries is prohibited, but domestic companies that are up to 25% foreign-owned (33% in certain circumstances) may own fishing companies. Energy harnessing rights and production and distribution of energy are restricted to EEA entities. Entities domiciled outside the EEA may not own more than 49% of shares in Icelandic aviation companies. No non-EEA entities may acquire the right to own or use real property in Iceland, including fishing and hunting rights, water rights, or other real property rights, whether by free assignation or enforcement measures, marriage, inheritance, or deed of transfer, unless an exemption is granted by the Minister. Furthermore, before disposing of farmland, either indefinitely or for longer than seven years, non-resident persons must acquire permission from the relevant Minister.[3]

1 Act on Foreign Investment in Enterprises, no. 34/1991.

2 Act on the Right of Ownership and Use of Real Property, no. 19/1966. Exemptions may be granted to either individuals or legal entities, for which it is necessary to acquire the right of ownership, or the right of utilisation, over properties and the appurtenant property rights for direct utilisation in their business operations, or to individuals if they are considered to have a close connection with Iceland; for example, through marriage to an Icelandic citizen. Moreover, if an exemption is granted, the permit shall pertain to a specific property, the size of which shall not exceed 3.5 hectares, and the owner may not own other properties in Iceland. Exemptions may be granted from the conditions regarding size and number of properties if it is demonstrated to be necessary for the owner's business operations, in which the size of the property may not exceed 25 hectares.

3 Act on Farmland, no. 81/2004. The requirement for permission from the Minister is subject to two conditions: (1) the real property is a farm, and the receiver of the rights and affiliated entities own five or more farms exceeding 50 hectares in size in total; or (2) if the receiver of the rights and affiliated entities own properties that fall under the scope of the Act on Farmland exceeding 1,500 hectares or more in size.

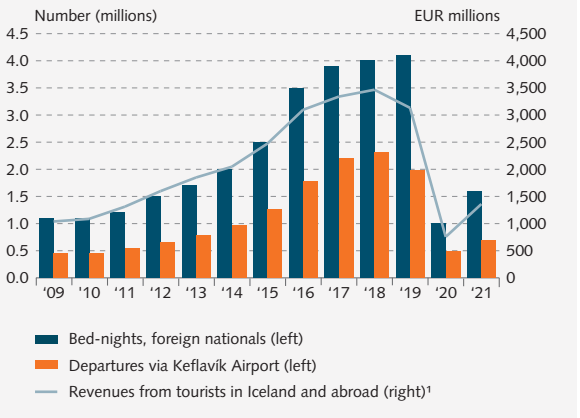
Tourism and transport

Tourism grew rapidly in Iceland in the decade preceding the COVID-19 pandemic and established itself as the third main pillar of the Icelandic economy. The number of foreign tourists increased from 470,000 in 2008 to 2.3 million in 2018, and tourism-generated foreign exchange revenues averaged 40% of total export revenues in 2016-2018, compared to 20% in 2009-2012. The number of employees on tourism operators' payroll nearly doubled from 2010 to 2018, to around 15% of total employment. The pandemic hit the sector hard, however, when international air travel shut down almost overnight in March 2020 and the travel industry came to a virtual standstill globally. Icelandic tourism had already sustained a blow in 2019, when one of the country's airlines collapsed, resulting in a 14% contraction in tourist arrivals in 2019, followed by the pandemic-induced contraction of 76% in 2020, which pushed tourist numbers back to 2008 levels. The sector has recovered rapidly, however, with tourist numbers projected to reach 1.7 million in 2022. Growth is likely to continue in coming years as tourism recovers internationally. The US and the UK have accounted for the largest number of tourists, with a combined average of 42% of the total in 2016-18 and 38% in the first eight months of 2022. The recovery has centred on North America and Europe, whereas it has lagged in other markets, particularly Asia which had been growing before the pandemic.

The rapid increase in tourism is also reflected in air traffic at Keflavik Airport. In 2010, three airlines offered scheduled flights from Keflavik, but by summer 2018, a total of 28 airlines offered 96 destinations. The summer of 2022 was close to its pre-pandemic level, with a total

Chart II-13

Number of foreign tourists, hotel bed-nights and revenues from tourism

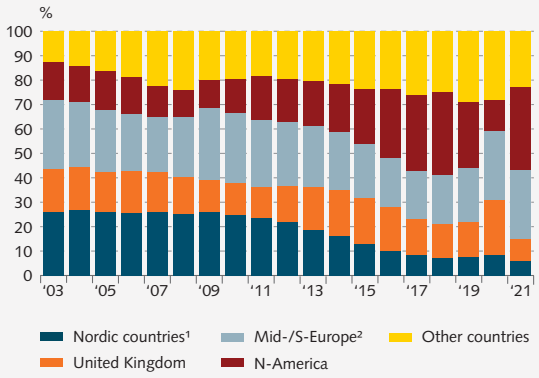


1. At constant exchange rate 2021.
Source: Statistics Iceland.

of 24 airlines offering flight services from Keflavik Airport to 76 destinations.

Iceland's two main shipping lines operate scheduled services to major ports in Europe and the east coast of the US. Both of them operate transport networks on land and sea in Iceland, Europe, and North America, as well as offering freight forwarding around the world.

Chart II-14
Nationality of tourists



1. Norway, Denmark, Sweden, Finland. 2. France, Netherlands, Italy, Spain, Switzerland, Germany.
Source: Statistics Iceland.

Financial sector

Four commercial banks and five savings banks are currently operating in Iceland, and the State is the majority owner of one of the commercial banks. At year-end 2021, financial sector assets (including insurance companies and pension funds) amounted to 470% of GDP and accounted for 3% of total employment (see Chapter 3 for a detailed discussion of the financial system).

Technology and communications

The information and communications technology (ICT) has diversified and grown significantly in the last 10-15 years. Although its share in the business economy remained relatively stable, operating income in the ICT sector has doubled in real terms over the past decade.[4] Around 1800 companies of varying size are active in the ICT sector, offering a wide range of services; e.g., specialising in medical, computer games, cloud computing via data centres, logistics support activities, and operating management systems. Most of the technology businesses are engaged in export activities, owing to the small size of the home market. Exports of ICT services have increased by approximately 50% over the past five years, and the sector's share of total service exports has grown substantially. Iceland's telecommunications infrastructure is extensive, modern, and robust, with fibre-optic internet connections and 5G mobile networks both widely available and commonly used. In 2021, 98% of Icelandic households were internet-connected, and 98% of the population were regular users of the internet, the highest percentage in Europe.

Agriculture and farming

Approximately a fifth of the total land area of Iceland is vegetated land or pasture. Roughly 6% of this area is cultivated, with the remainder used for grazing or left undeveloped. Meat and dairy products are mainly for domestic consumption, and the principal crops are hay, cereals for animal feed, root vegetables, and green vegetables, which are cultivated primarily in greenhouses heated with geothermal water. Imports of meat, dairy products, and some vegetables that compete with domestic production are subject to tariffs, import quotas, and non-tariff import restrictions.

Icelandic agriculture is heavily subsidised, with total on-budget transfers to agriculture averaging around 1% of GDP in recent years. In terms of the OECD producers support estimate (PSE), Icelandic agriculture has one of the highest PSEs in the OECD, at 58% in 2021, as compared with the EU15 average of 17.6%.

Other characteristics of the Icelandic economy

Energy and the environment

Iceland is at the forefront globally in the use of renewable energy resources. Of the total primary energy supply in Iceland, nearly 90% is from renewable resources, up from 77% in 2000, compared to an average of 40% in the other Nordic countries and 11% in the OECD countries. Electricity production per capita is the highest in the world, at approximately 55 megawatt hours (MWh), as compared with the EU average of less than 6 MWh. Total installed hydropower is around 2,000 MW in more than 80 power plants of various sizes, which generate 70% of used electricity. The remaining 30% is generated with geothermal power from six geothermal power plants. Iceland has large potential sources of renewable energy, and its hydropower and geothermal resources have only been partly harnessed. Iceland is the only country in Europe that still has a considerable amount of large-scale hydropower and geothermal yet to harness.

Iceland ratified the 1992 United Nations Framework Convention on Climate Change (UNFCCC) in 1993. In

4 The term *business economy* refers to all companies excluding pharmaceuticals, financial, and insurance firms.

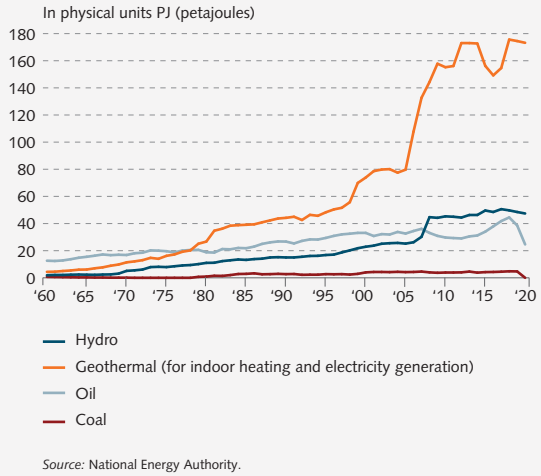
1995, the Government of Iceland adopted an implementation strategy based on the commitments of the Framework Convention. An agreement to conserve biodiversity was signed by authorities at the Convention on Biological Diversity, CBD, in Rio de Janeiro. The agreement entered into force in Iceland 1994. A total of 196 countries have signed the agreement aiming at safeguarding biodiversity through various measures including wetland restoration, protecting fragile ecosystems or natural surroundings, and promoting sustainable use of resources.

Because almost 100% of Iceland's stationary energy comes from renewable sources, climate mitigation actions focus on reducing emissions from transport and fisheries and increasing carbon uptake through afforestation and revegetation. The Icelandic government announced in 2017 that Iceland aims to be carbon-neutral before 2040.

Greenhouse gas emissions from Icelandic industry are regulated in a manner comparable to that applying to EU Member States, within the EU Emissions Trading System (ETS). About 40% of Iceland's greenhouse gas emissions fall under the ETS system. Iceland ratified the Paris Agreement in September 2016 and aims to participate jointly with EU Member States and Norway in reducing net emissions by 55% relative to 1990 levels by 2030. The Icelandic government has set an independent national target of a 55% reduction in emissions for which Iceland is directly responsible by 2030, relative to 2005 levels. According to the Climate Act, Iceland's Government Offices, municipalities, state entities, and companies controlled through a majority state ownership shall set for themselves a climate policy with defined objectives for a reduction in greenhouse gas emissions and carbon offset of their activities. The Climate Action Plan, published in June 2020, is Iceland's main instrument for the fulfilment of its commitment under the Paris Agreement – specifically, its emissions reduction goals for 2030. It is also the main instrument for Iceland's attainment of its stated goal of carbon neutrality by 2040. Emphasis is on a rapid transition to clean energy in transport and increased efforts in the land use, land use change, and forestry (LULUCF) sector, where Iceland has great mitigation potential in afforestation, revegetation, and wetland reclamation. The Climate Action Plan addresses all major sources and sinks, however, and outlines climate mitigation measures in transport, fisheries, energy, industry, chemicals, agriculture, waste management, and LULUCF.

Chart II-15

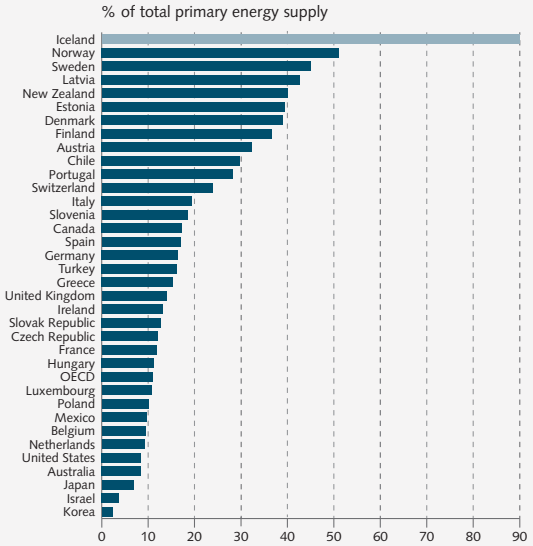
Primary energy consumption by source in Iceland



Source: National Energy Authority.

Chart II-16

Contribution of renewables to energy supply in OECD countries 2016



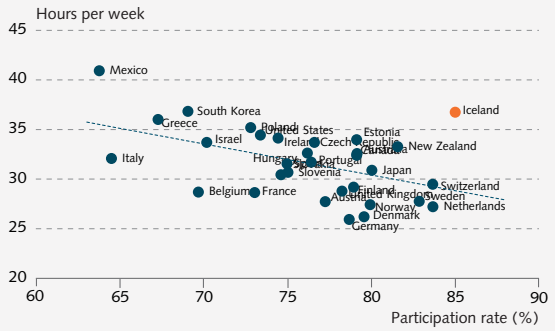
Source: OECD.

Labour market

Over the past decade, the Icelandic labour market has had a participation rate of around 85%, one of the highest in the OECD. The participation rate among women has also been very high in international comparison. Female participation is the highest in the OECD countries, with women accounting for 46% of the labour force and supplying 39% of total hours worked in 2021. Participation rates among the young (aged 15-24) and the elderly (aged 65 and over) are also among the highest in the OECD. Furthermore, Icelanders tend to work long hours. In 2020, 41% of the adult population held a university degree, up from 31% in 2010.

Chart II-17

Participation rate and hours per week in OECD countries 2021[1]

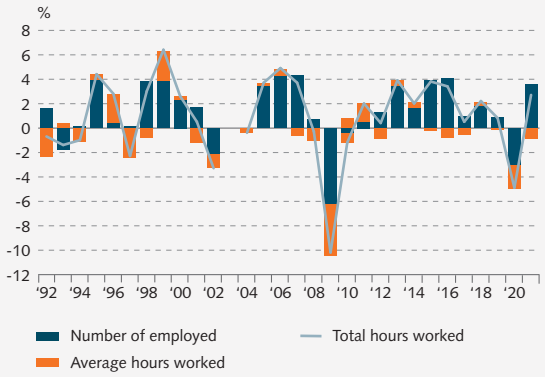


1. The chart shows labour participation among the population aged 15-64 in all countries except Iceland, which shows participation for the group aged 16-64. Hours per week are annual hours actually worked per worker for the total economy divided by 52 calendar weeks. 2020 figures or latest.

Sources: OECD, Statistics Iceland.

Chart II-18

Changes in employment and hours worked



Source: Statistics Iceland.

The Icelandic labour market is quite flexible, with substantial labour mobility, flexible hours, and variable participation and wages. A comparison with other OECD countries shows that Icelandic companies have considerable flexibility to lay off workers. Companies can easily adjust to demand by expanding or reducing staffing levels or by raising or lowering the number of hours worked by those already employed; furthermore, the number of part-time and full-time employed varies with the business cycle.

There is also some flexibility in labour force supply. In particular, there is a strong connection between net emigration of Icelandic nationals and output growth; moreover, migration of foreign nationals in tandem with the business cycle increased substantially with the expansion of the pan-European labour market. Moreover, even in the case of significant shifts in sectoral or regional employment, a high degree of labour mobility prevents large differences in regional unemployment from emerging.

Some 90% of the labour force is unionised, and employers are highly organised as well. This has given rise to wage-setting that is characterised by significant centralisation and coordinated bargaining, most frequently by national federations, and it leads to more or less nationwide settlements that provide for the minimum wage increases. In addition, the tailoring of the national framework for wage agreements in sectoral and firm-level negotiations makes it possible to take specific local conditions into account. The Government has frequently been involved in wage settlements, either through tax concessions and social transfers or through legislative acts aimed at accomplishing moderate settlements.

Pension system

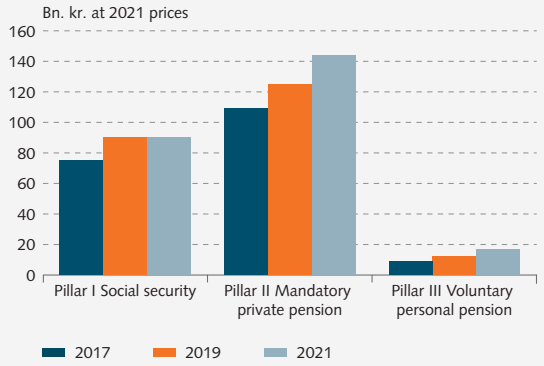
The main characteristic of Iceland's three-pillar pension system is the relatively large role of mandatory autonomous occupational private pension funds. In 1969 these funds became generally available to wage-earners by means of collective labour market agreements. Contributions to the pension funds were made mandatory by law in 1974, as a result of a wide-ranging tripartite collective agreement among labour unions, the Confederation of Icelandic Employers, and the State.

The Pillar I pension is a social security system with the main goal of ensuring the livelihood of workers unable to work because of old age or disability. The system is unfunded and provides old-age pensions, disability pensions, and maternity and survivors' pensions. The system is financed directly with taxes, without direct contributions from workers. Adjustments of pension amounts are made through the State budget, taking account of wage trends and the consumer price index. In order to enjoy full benefits, individuals must have lived in Iceland for at least 40 years between the ages of 16 and 67. Benefits depend on income, which can result in zero benefits for individuals with relatively high income at retirement.

The Pillar II mandatory private pension is provided by 21 autonomous pension funds. The minimum contribution rate by law is 12%, with a targeted replacement rate of 56%, based on 40 years of average CPI-indexed career income. Nevertheless, most employees benefit from a 15.5% contribution provided for in collective wage agreements. The employee contribution of 4% is levied on the pension fund member's gross pre-tax income. At retirement, the payout phase is by default a lifelong annuity. The pension funds are the main provider of retirement income in Iceland, accounting for close to 58% of old-age benefits paid, while the social security system accounts for 36%. The coverage ratio in the Pillar

Chart II-19

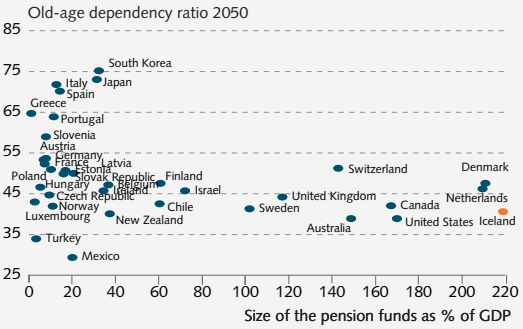
Sources of old age pension benefits



Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-20

Size of pension funds and old-age dependency ratio in OECD countries 2050[1]



1. Population aged 65 years and over per 100 persons aged 15-64 years 2050. Value for the size of pension funds in Iceland is for 2021.

Sources: OECD, United Nations.

II system is about 90% of the working-age population, with nearly 225,000 members contributing in 2021.

The Pillar III voluntary personal pension scheme was set up as part of the general pension reform of 1997, following the passage of new legislation on tax incentives for voluntary personal pension savings. The reform made it possible for employees to deduct contributions to personal pension schemes from their taxable income.

The personal pension savings programme came into effect in 1999. Employees' maximum tax-deductible contributions under the programme amount to 4% of their gross earned income. In addition, according to collective wage agreements, employers contribute a minimum of 2% to employees' voluntary pension savings if employees match the amount with at least the same percentage. The total contribution can therefore range up to 6% of the employee's gross earned income.

Voluntary participation in the personal pension scheme is relatively high, with a coverage ratio close to 50% of the working-age population. Five types of personal pension products are currently available. In most cases, when fund members reach age 60, they can withdraw their voluntary pension savings as a programmed withdrawal or as a single lump-sum payment. The personal pension savings schemes offered by Icelandic pension providers are classified as defined contribution (DC) plans, where pension benefits are determined by investment returns. However, there are also a few foreign programmes with some guaranteed saving components.

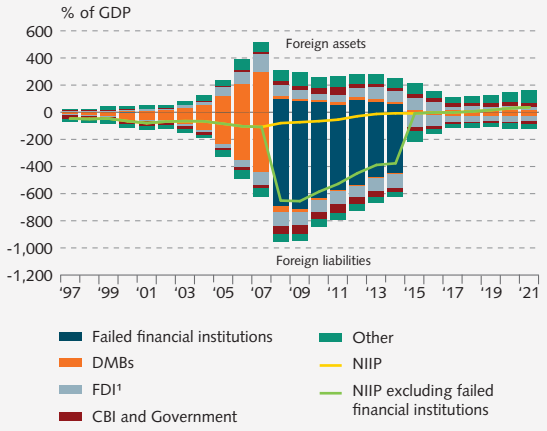
External position

Net international investment position

Iceland's international balance sheet expanded rapidly after the capital account liberalisation of the 1990s and grew even further following the privatisation of the banks in 2002-2003.[5] In 2008, before the financial crisis, gross external liabilities amounted to approximately 900% of GDP and gross external assets around 700% of GDP, resulting in a negative net international investment position (NIIP) in the amount of about 200% of GDP. The NIIP continued to worsen as a result of the financial crisis but improved radically in the post-crisis period, through debt repayment facilitated by the current account surplus, debt write-offs due to bankruptcies of private sector entities and other factors, and composition agreements of the failed financial institutions' estates in late 2015 (see Box 5.1). With the settlements of the failed financial institutions at year-end 2015, the NIIP improved to -5% of GDP, the country's most favourable position in about half a century. Since then, the NIIP has

Chart II-21

Net international investment position



1. Excluding failed financial institutions from 2008-2014 and SPEs from 2013.

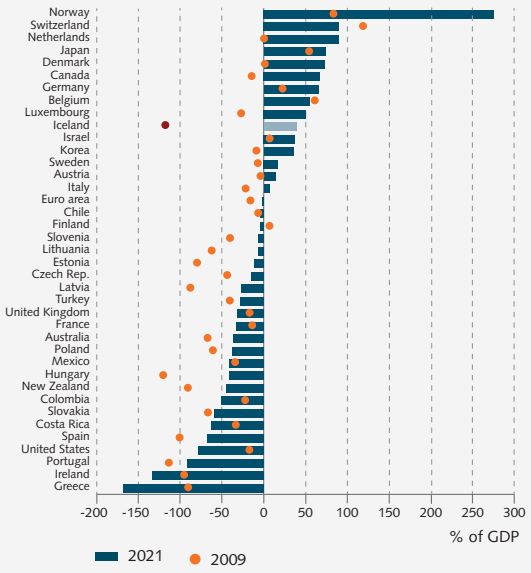
Sources: Statistics Iceland, Central Bank of Iceland.

5 See, for example, Central Bank of Iceland Special Publiction no. 14: Iceland's balance of payments, external position, and vulnerabilities.

continued to improve. In 2017, it turned positive for the first time since measurements began, and by end-2021 it was positive by 40% of GDP. Iceland's NIIP is rather favourable in comparison with other OECD countries and is now somewhat better than in the euro area as a whole.

Chart II-22

Net international investment position of OECD countries



1. The dots show the NIIP for year-end 2009. 2. Based on underlying position for Iceland, i.e., adjusted for the effects of settling the failed banks' estates.

Sources: IMF, Statistics Iceland, Central Bank of Iceland.

Foreign assets and liabilities

At year-end 2021, gross external assets totalled 158% of GDP. This includes FDI assets, at around 17% of total assets, international reserves, at 18% (which is considerably higher than before the financial crisis), and portfolio assets (held largely by pension funds), at 55%. Other investment accounted for 10% of total assets, almost half of it in the form of deposits.

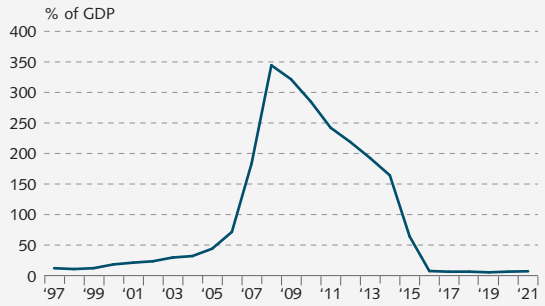
Gross external liabilities declined considerably due to debt write-offs and deleveraging by private entities after the financial crisis. They amounted to 118% of GDP at year-end 2021, broadly the same as at the turn of the century. The share of FDI liabilities was greater than in the pre-crisis era, however, at 31% of total liabilities. External portfolio debt amounted to 43% of total liabilities, and other investments (mostly loans) accounted for 26% of total liabilities at year-end 2021. The decline in external liabilities after the financial crisis went hand-in-hand with the decline in external assets as the process of winding up the failed financial institutions' holding companies progressed.

Based on debt with a known payment profile, the short-term debt ratio is low in historical context.[6] Foreign short-term debt based on original maturities equalled 7% of GDP at the end of 2021 and has been broadly unchanged in recent years. In comparison, short-term debt was around 20% of GDP at the turn of the century and rose rapidly during the lead-up to the financial crisis, reaching a pre-crisis peak of around 350% of GDP. Highly liquid króna-denominated assets held by non-residents – such as domestic Treasury bonds and deposits – are also low in historical context, at around 3% of GDP, after peaking at roughly 40% just after the crisis.

In recent years, currency depreciation has influenced the NIIP differently than it did in the pre-crisis period. At year-end 2021, 98% of external assets were denominated in foreign currency, as opposed to only 79% of external liabilities. As a result, a depreciation of the króna increases the value of external assets relative to liabilities, leading to a material improvement in Iceland's NIIP. This mitigates the risk associated with currency depreciation.

Chart II-23

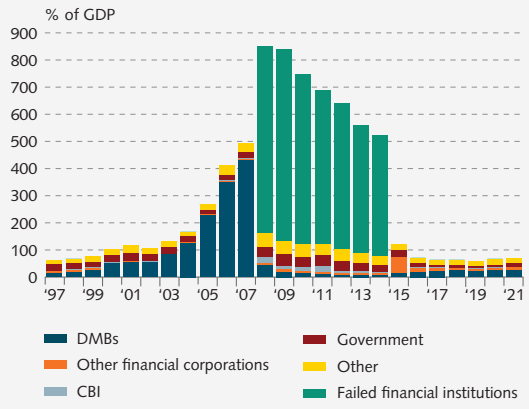
Foreign short-term debt



Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-24

Estimated foreign debt by sector[1]



1. External liabilities, excluding FDI, derivatives, equity and unit shares.

Sources: Statistics Iceland, Central Bank of Iceland.

6 Excluding equity securities, unit shares, equity in foreign direct investment, and debt relating to derivatives.

Public sector foreign assets and liabilities

Iceland's positive current account balance during the post-crisis period resulted in financial outflows. Since year-end 2014, these flows have been used, among other things, to build up the international reserves and reduce public sector debt. At year-end 2021, the reserves amounted to 30% of GDP, up from 12% of GDP at the end of 2007. The public sector retired a substantial amount of its debt during the pre-crisis period. The depreciation of the króna in 2008 and the need to strengthen the Central Bank's international reserves increased the external liabilities of the general government and the Central Bank from 23% of GDP at year-end 2007 to the post-crisis peak of 64% of GDP at year-end 2011 (see Chapters 4 and 5). Only a portion of the increase in public sector foreign debt had a direct effect on the NIIP, however, as loans taken to expand the reserves were mostly offset by assets. By year-end 2019, public sector external liabilities had fallen to 12% of GDP, but since then they have risen to 15% of GDP as a result of COVID-19 mitigation measures taken by the Central Bank of Iceland (see Box 2.1).

Private sector foreign assets and liabilities

The private sector NIIP turned positive in the beginning of 2019 and has continued to grow, reaching 26% of GDP at year-end 2021. Total foreign assets amounted to 129% of GDP, and liabilities came to 103% of GDP. The private sector NIIP has undergone major changes in the past two decades. In the years before the financial crisis, the deterioration in the NIIP was due mainly to a surge in private sector debt intermediated by the domestic banking sector. The NIIP worsened further as a result of the financial crisis but has recovered quickly since then, especially following the composition agreements reached of the failed financial institutions at year-end 2015. The capital controls introduced in 2008 were lifted almost entirely in March 2017 and fully abolished with the passage of the new Foreign Exchange Act in June 2021 (see Box 5.1). The private sector NIIP has improved markedly at the same time, mainly as a result of asset accumulation by pension funds, which hold a large share of Iceland's private sector external assets. By year-end 2021, the pension funds' external asset holdings had reached a peak of 16.3 billion euros (2.416 b.kr.), or around 75% of Iceland's GDP, and had more than doubled in size since year-end 2018. In 2021, the pension funds owned almost half of Icelandic residents' total external assets and 86% of total external portfolio holdings. Pension funds' external debt amounted to roughly 9% of GDP at year-end 2021, reflecting their obligations to residents abroad. Private sector NIIP excluding the pension funds was negative by 40% of GDP at year-end 2021, a slight deterioration from year-end 2015 but a large improvement from the pre-crisis trough of -102% of GDP in 2008.

Inward and outward foreign direct investment

At the end of 2021, the outward stock of FDI assets was 25% of GDP and the inward stock 36% of GDP.[7] Capital flows during the post-crisis period were influenced by the capital controls, which restricted capital outflows and probably influenced FDI inflows as well. Furthermore, certain types of investment by non-residents are restricted in Iceland; i.e., investment in fisheries and energy companies (see Box 2.2). Post-crisis FDI flows have mainly been related to the winding-up of the failed financial institutions, the restructuring of international pharmaceutical companies' position, and delisting of special-purpose entities with substantial gross assets and liabilities but with little effect on the NIIP. After the capital controls were lifted in March 2017, FDI inflows and outflows have both averaged 0.4% of GDP per quarter.[8]

Table 2.1 Breakdown of external liabilities, loans, and debt securities.

% of GDP	*1999*	*2003*	*2007*	*2009*	*2013*	*2015*	*2017*	*2021*
Loans	42	42	155	306	215	15	12	13
Short-term loans	6	13	81	190	135	1	0	0
Long-term loans	35	30	74	116	80	14	12	12
Debt securities	32	84	241	404	282	38	38	38
Short-term debt	0	2	0	0	0	0	0	0
Long-term debt	0	67	222	381	272	27	28	36
Bonds and bills denominated in krónur[1]	0	2	12	22	11	11	10	2

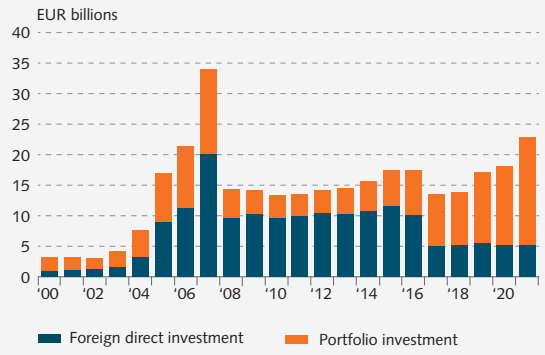
Source: Central Bank of Iceland.

7 Excluding special purpose entities (SPEs).

8 Excluding flows related to pharmaceutical companies, holding companies of failed financial institutions, and special-purpose entities.

Chart II-25

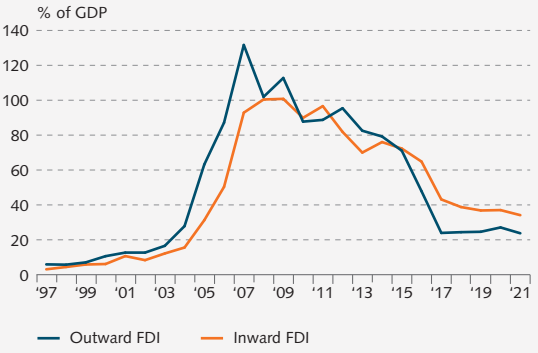
FDI and foreign portfolio assets[1]



1. Excluding SPEs from 2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-26

FDI assets and liabilities[1]



1. Excluding SPEs from 2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Household and corporate balance sheets

Iceland's private sector balance sheet has strengthened over the past decade, owing to robust GDP growth, rising asset prices, reduced debt, and financial restructuring. The private sector debt-to-GDP ratio is low compared to neighbouring countries at present, measuring around 167% at year-end 2021. The private sector's non-performing loan (NPL) ratio has hovered around 1.5-2.5% since year-end 2014, after having peaked at 20% in 2010, indicating an overall robustness of balance sheets and strong resilience.

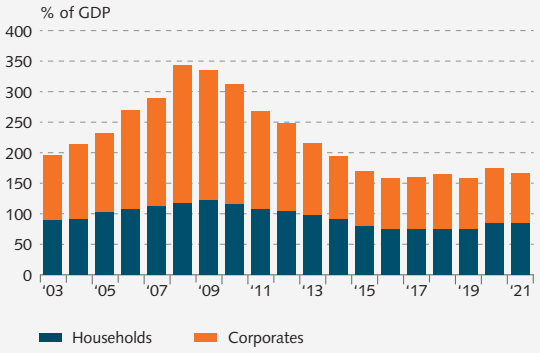
Household balance sheets

The ratio of household debt to GDP was 84% at the end of 2021, well below the 2009 peak of 125% (Chart 2.27). This dramatic change in household debt contrasts sharply with that in most of the other Nordic countries, where household debt levels have risen. Debt restructuring, write-offs due to Supreme Court decisions declaring exchange rate-linked loans illegal, and Government debt relief measures have been influential factors in reducing Iceland's household indebtedness. Furthermore, for some time households were more hesitant than before to take on debt, and many of them made extra payments on their outstanding loans. Since mid-2017, households have been permitted to channel their third-pillar pension savings payments directly to their mortgage loans, and first-time buyers have been able to allocate it savings tax-free towards a down payment on a new home. From 2017 to 2020, the household debt-to-GDP ratio remained relatively stable, after declining each quarter since 2009. It then jumped nearly 10 percentage points in 2020, partly due to the pandemic-induced drop in GDP, although households also used the opportunity to increase their debt levels while interest rates were at a historical low.

Overall, households' financial position has improved considerably in recent years. Supported by strong and nearly continuous GDP growth since 2011, employment

Chart II-27

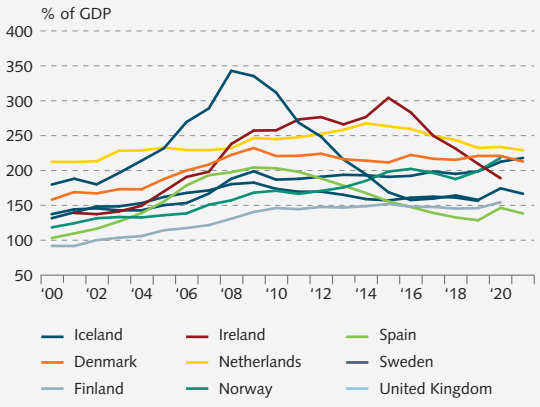
Private sector debt[1]



1. Debt owed to financial undertakings and market bonds issued. Excluding debt owed by holding companies.

Chart II-28

Private sector debt in selected European countries[1, 2]



1. Non-financial corporations, households and non-profit institutions serving households. 2. Loans and debt securities.
Sources: Eurostat, Statistics Iceland, Central Bank of Iceland.

growth has been robust, and real disposable income rose by an average of nearly 7.8% per year from 2011 to 2021. From 2014 to 2020, growth in disposable income outpaced growth in private consumption, resulting in an increase in household saving. Higher asset prices have also strengthened households' equity position. Households' net wealth relative to disposable income has therefore increased markedly. Excluding pension assets, households' net wealth amounted to 390% of disposable income at the end of 2020. The household debt-to-income ratio measured 162% at year-end 2020, an increase of 12 percentage points from 2017.

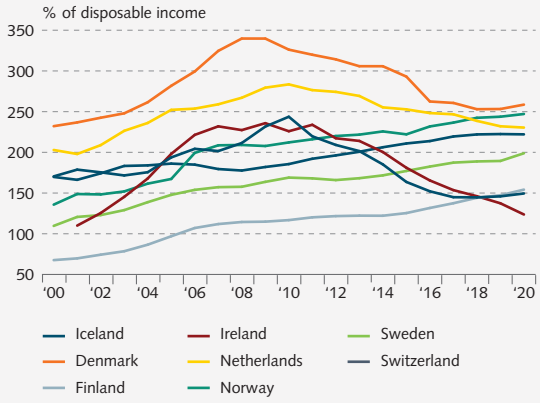
Corporate balance sheets

Corporate balance sheets are strong overall. Icelandic companies' equity ratio was a historically high 43% at year-end 2020. Higher corporate equity ratios are mainly the result of deleveraging and declining debt, although rising asset prices have played an increasing role since late 2014. Nevertheless, developments in equity ratios have differed from one sector to another in recent years. The tourism industry saw its equity ratio fall by 40 percentage points as a result of the Covid-19 pandemic, to only 14% by year-end 2020.

At year-end 2021, total corporate debt – i.e., loans from both domestic and foreign financial institutions and outstanding marketable bonds – totalled 83% of GDP. The ratio rose sharply in 2020, in the wake of the Covid-19 pandemic, owing to the sharp drop in GDP, but declined again as GDP growth rebounded in 2021. Around one-third of corporate debt is denominated in foreign currencies, and around 80% of the foreign-denominated debt stock is in euros. A vast majority of foreign-denominated debt is owed by companies operating in export sectors – mainly fisheries, tourism, and industry – whose income is mainly in foreign currencies; therefore, it does not represent foreign exchange risk. The proportion of foreign-denominated debt declined markedly from its 2008 peak of 72% during the years immediately following the financial crisis. In recent years, it has mostly fluctuated in line with exchange rate movements.

Chart II-29

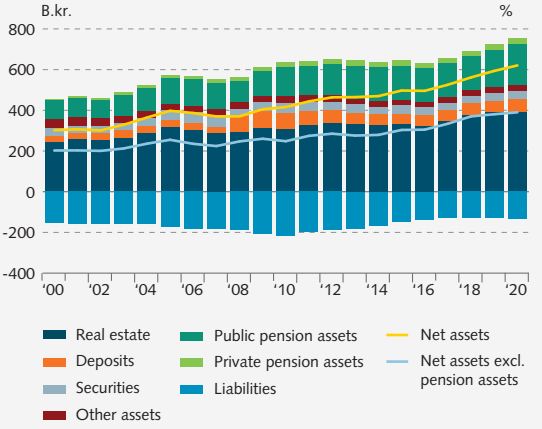
Household debt in selected European countries



Sources: OECD, Central Bank of Iceland.

Chart II-30

Household assets and liabilities[1]

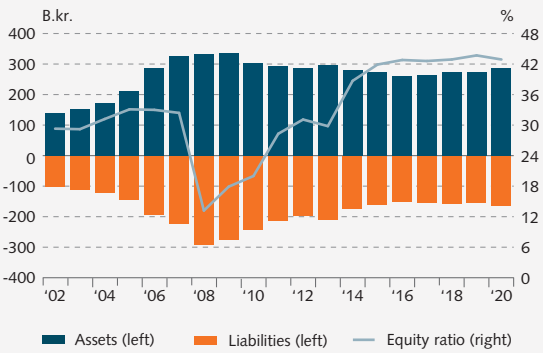


1. Pension fund assets are based on payouts after deduction of 30% income tax.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-31

Corporates assets, liabilities and equity ratio[1]



1. Commercial economy excluding pharmaceuticals, financial, and insurance companies (ISAT no 03-20, 20-63, 68-82, 95-96).

Sources: Statistics Iceland, Central Bank of Iceland.

Financial system

III

This chapter describes the Icelandic financial system. It covers the credit system, including deposit money banks (DMB), commercial banks' financial position, the Housing Financing Fund (HFF), and the pension funds, as well as Iceland's bond, equity, and foreign exchange markets.

Overview of the credit system

At year-end 2021, total assets in the credit system amounted to roughly four and half times Iceland's GDP.[1] Pension funds have the largest share, or about 44% of financial system assets. The combined assets of DMBs amounted to about 150% of GDP. The three largest banks represent 95% of the DMB sector and are classified as domestic systemically important banks (D-SIB) by the Central Bank's Financial Stability Committee.

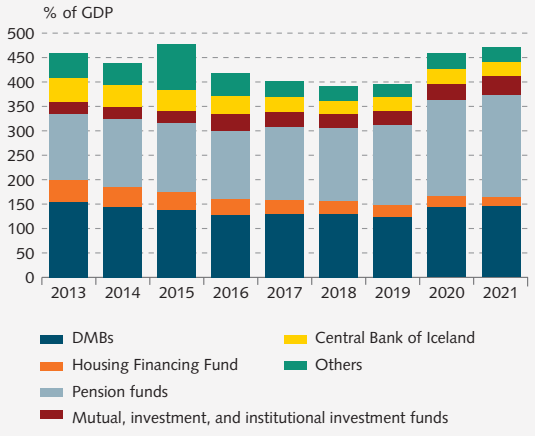
At the end of 2021, four commercial banks and four savings banks were operating in Iceland. There are no foreign banks operating in Iceland. The Icelandic State holds 98.2% of shares in the largest commercial bank, Landsbankinn hf., and 42.5% of shares in Íslandsbanki hf.[2] The third large commercial bank, Arion Bank hf., has been wholly owned by private entities since the Icelandic Government sold its 13% stake in the bank in February 2018. The three largest shareholders in Arion Bank are Iceland's three largest pension funds. The four savings banks are small compared to the commercial banks, with total assets amounting to less than 1% of total DMB assets. The activities of the commercial and savings banks are directed primarily towards serving the domestic economy.

1 The credit system consists of the banking system, pension funds, insurance companies, mutual funds, investment and Institutional investment funds, State loan funds, and other credit institutions.

2 At the beginning of 2021, Íslandsbanki was wholly owned by the Icelandic State. In summer 2021, the State sold 35% of its stake in Íslandsbank,i and in spring 2022 it sold an additional 22.5%.

Chart III-1

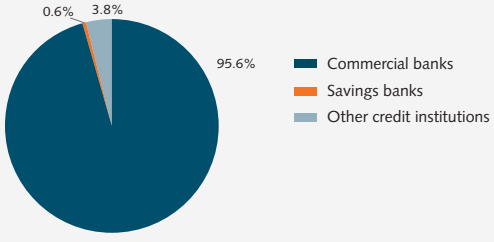
Financial system: Assets as % of GDP[1]



1. Parent companies.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-2

Credit institutions' total assets[1]



1. Parent companies. December 2021.
Source: Central Bank of Iceland.

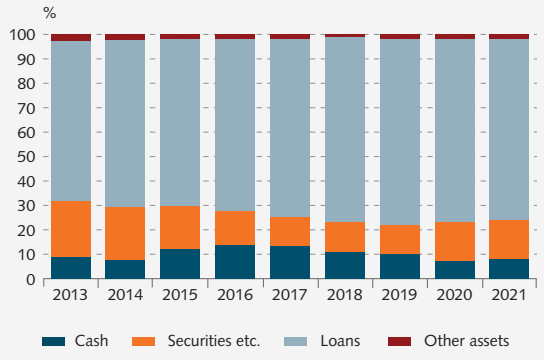
Commercial banks' financial position

In recent years, Iceland's D-SIBs have generated strong profits, and their capital position is robust. Until 2017, a significant portion of the banks' profit stemmed from temporary items such as write-ups and sales of holdings in companies and upward loan valuation adjustments, as the D-SIBs obtained part of their assets from the failed Icelandic cross-border banks at a discount in autumn 2008. The restructuring of the banks' asset portfolios was largely completed in 2017, and since then the banks have mostly relied on core operations to generate profits; i.e., net interest income and net fee and commission income.

The Icelandic banks were affected by the Covid-19 pandemic. The overall economic situation worsened in the wake of the pandemic, but the effects varied from one sector to another. The pandemic had little impact on some sectors – and even had a positive impact on some – while other sectors such as tourism and some parts of the service sector were hit hard. Households were generally well prepared to weather the storm following the pandemic.

Chart III-3

Commercial banks' assets[1]

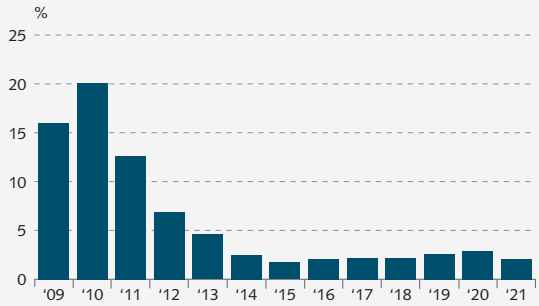


1. Parent companies.
Source: Central Bank of Iceland.

The banks supported businesses and households affected by the pandemic by offering, payment moratoria and loan freezes to all who requested them, and in some instances, borrowers had the option of restructuring or refinancing their debt. These loans are classified not as non-performing, but as forborne and performing. The ratio of non-performing loans therefore inched higher between 2019 and 2020. At year-end 2021, the ratio of non-performing loans was lower than before the pandemic. At that time, 13% of corporate loans and 2% of household loans were classified as forborne. The minimum probation period for forborne exposures is two years, and in order for a loan to no longer be classified as forborne, full payments must be made for twelve

Chart III-4

Default ratios[1]



1. Consolidated figures. Default ratios of the three largest commercial banks. Loans in default over 90 days or unlikely to pay (facility level or non-performing loans).
Source: Central Bank of Iceland.

months. A majority of customers with forborne loans have begun to make full or partial payments on them.

Some 75% of the commercial banks' total assets take the form of loans to customers. In 2020 and 2021, the D-SIBs' assets grew by 21%. The increase was driven mainly by increased mortgage lending to households, as mortgage interest rates were very favourable because of the Central Bank's low key interest rate. Demand for non-indexed mortgage loans has been especially strong. At year-end 2021, total D-SIB lending to households and businesses amounted to the equivalent of 23.7 billion euros (3,493 b.kr.), with 63% non-indexed, 23% indexed to the CPI, and around 14% foreign-denominated.[3]

The Basel III capital buffers have been incorporated into the Icelandic legal framework. The buffers are four: the systemic risk buffer (set at 3%), the buffer for other systemically important institutions (set at 2%), the countercyclical capital buffer (set at 2%), and the capital conservation buffer (set at 2.5%). The countercyclical capital buffer, which was set at 0% in March 2020, was raised to 2% of risk-weighted assets in September 2022. As of September 2022, capital buffers imposed on the D-SIBs total a combined 9.5% of risk-weighted assets.

At the end of 2021, the D-SIBs' combined capital adequacy ratio was 26.7%, an increase of 1.1 percentage points from the prior year. Their capital ratio adjusted for proposed dividend payments was 25.4%. The D-SIBs' dividend-adjusted Tier I capital ratio was 23.1%. The D-SIBs must meet the Central Bank's minimum capital requirement, which ranged between 17.8% and 18.9% as of year-end 2021. The D-SIBs' capital ratios were 5-8 percentage points above the required level, after adjusting for dividend payments planned for 2022.

3 Foreign-denominated loans granted to export sectors with revenues in foreign currencies. Household debt is not denominated in foreign currencies.

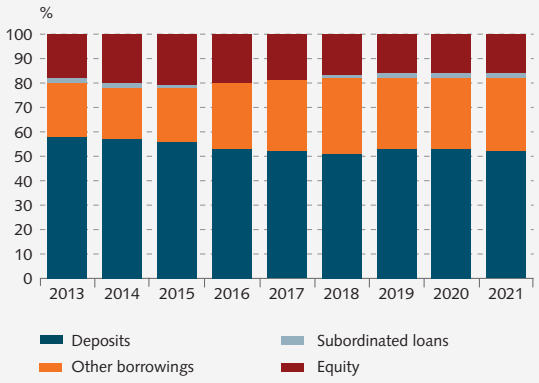
The D-SIBs' leverage ratio, a measure of equity relative to total non-risk-adjusted assets, was 13.8% at year-end 2021. Individual leverage ratios for the three banks ranged between 12.6% and 14.9%. The D-SIBs' leverage ratios are therefore well above the 3% statutory minimum and among the highest in Europe.

The majority of the D-SIBs' funding is in the form of deposits and marketable bonds. At year-end 2021, deposits comprised about half of their funding. Most of the deposits (96%) were held by Icelandic residents. The banks' market funding has increased in recent years, comprising 28% of total funding at year-end 2021. The banks issued foreign-denominated bonds for a total of 1.5 billion euros (223 b.kr.). In October 2021, Arion Bank issued Iceland's first foreign-denominated covered bond, in the amount of 305 million euros (45 b.kr.). The banks' ample foreign liquidity gives the D-SIBs the flexibility to retire all of their foreign-denominated year-2022 maturities without refinancing. As a result, their refinancing risk remains limited despite rising premia on their foreign issuance.

The Central Bank of Iceland sets rules on credit institutions' minimum liquid assets (liquidity coverage ratio, LCR). The LCR rules assume that banks must always have sufficient high-quality liquid assets to cover net outflows for the next 30 days under stressed conditions. The banks must fulfil requirements (100%) for all currencies combined and for all foreign currencies combined. The liquidity ratio in Icelandic krónur must be at least 50%. At year-end 2021, the D-SIBs' combined liquidity ratio in all currencies was 176%, well above the 100% minimum required under the Central Bank rules. At that time, the liquidity ratio in foreign currencies was 514%, whereas the ratio in Icelandic krónur was 132%. In 2020, the D-SIBs' liquidity ratios rose in response to measures implemented by the Central Bank, including measures relating to changes to reserve requirements. The banks paid no dividends in 2020, which had a positive effect on their liquidity. From mid-2020 onwards, their liquidity ratios began to fall alongside the surge in residential mortgage lending.

Chart III-5

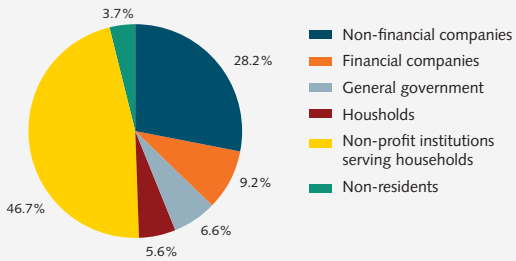
Commercial banks' funding[1]



1. Parent companies.
Source: Central Bank of Iceland.

Chart III-6

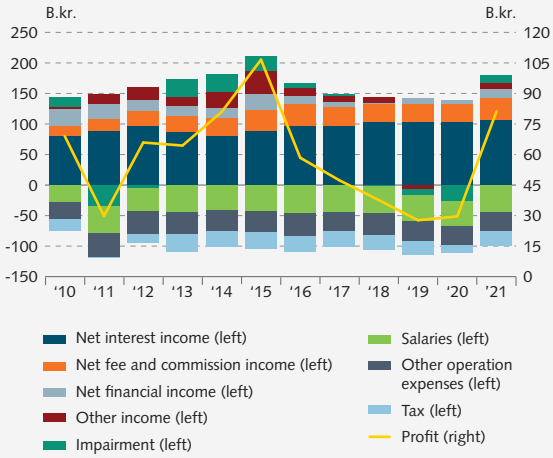
Deposit owners[1]



1. Commercial banks, parent companies. December 2021.
Source: Central Bank of Iceland.

Chart III-7

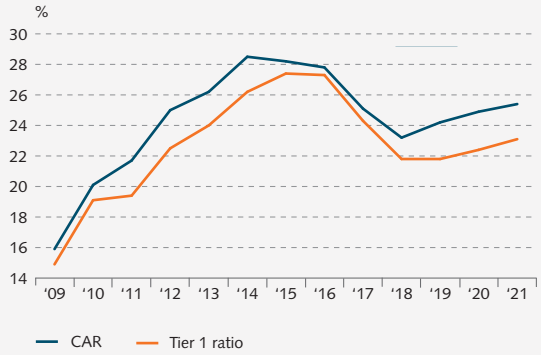
D-SIBs' operating income and expenses[1]



1. Domestic systemically important banks, consolidated figures.
Sources: Commercial banks' financial statements.

Chart III-8

Commercial banks' capital adequacy ratios[1]



1. Largest commercial banks, consolidated figures.
Sources: Commercial banks' annual reports.

The Central Bank also sets rules on credit institutions' minimum net stable funding ratios, which took effect on 28 June 2021. The rules introduced a 100% overall stable funding ratio, superseding the previous rules requiring that commercial banks maintain a 100% funding ratio in foreign currencies. The funding ratio is intended to ensure a minimum level of stable one-year funding, thereby restricting the degree to which commercial banks can rely on unstable short-term funding to finance long-term lending. All of Iceland's commercial banks met the funding requirements by an ample margin as of year-end 2021. The Central Bank of Iceland also sets rules on credit institutions' foreign exchange balance in order to limit foreign exchange risk by preventing credit institutions' foreign exchange balances from exceeding defined limits. The permissible open foreign exchange balance is 10% of the capital base for D-SIBs and 15% for other credit institutions. All of Iceland's commercial banks met the foreign exchange requirements by a sizeable margin as of year-end 2021.

The Housing Financing Fund

The Housing Financing Fund (HFF) was an independent Government institution that originally served primarily as a lending institution granting mortgage loans to individuals, municipalities, companies, and organisations in order to finance home purchases and construction projects. In 2016, the HHF's role was changed, and it became an independent Government institution responsible for implementing housing policies rather than operating as a loan fund. In 2019, its activities were changed once again. The roles, tasks, and duties of the Fund that belonged to the Housing Agency's operations of the Fund were merged with the Construction Authority to establish a new institution called the Housing and Construction Authority (HCA). The HFF itself was renamed IL Fund and its role modified again. The IL Fund now handles the tasks, rights, and obligations of the HFF that were not transferred to the HCA. Most of the assets and liabilities that belonged to the HFF now belong to the IL Fund. The Ministry of Finance and Economic Affairs is responsible for IL Fund operations. The IL Fund is no longer an active financial institution and will not issue new loans or issue additional market bonds.

Pension savings

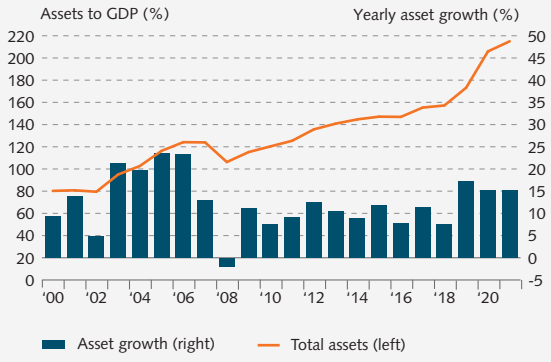
The Icelandic pension fund system consists of mandatory second-pillar occupational pension savings and voluntary third-pillar personal pension savings. The mandatory segment is provided by 21 autonomous pension funds. It consists of a defined benefit (DB) system for civil servants' B schemes, guaranteed by the employer, and a defined contribution system (DC) for private sector employees and civil servants' A schemes. The DC system is fully funded and consists of mutual insurance divisions where all risks are borne collectively by the members. About 85% of total pensions saving assets are under the mandatory segment.

The voluntary third-pillar pension savings system is provided by 13 autonomous pension funds, five domestic banks, and two foreign providers that offer pension insurance products. The pension funds are the largest providers, with about two-thirds of third-pillar savings, while the remaining third is held by the other providers. The voluntary third-pillar system is a pure DC system with individual accounts and without any guaranteed components, apart from the pension products offered by the two foreign providers.

The pension funds' activities are supervised by the Central Bank. Their investment policies are subject

Chart III-9

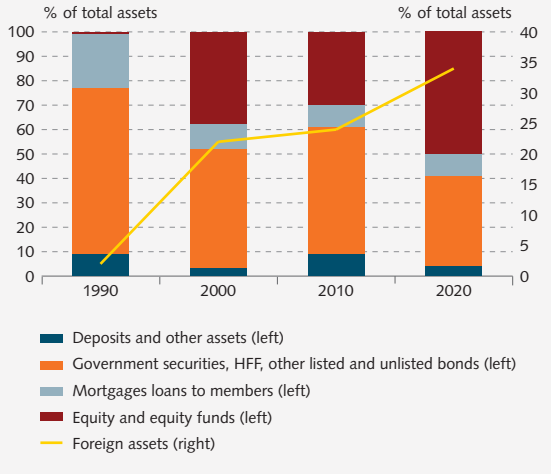
Size of the Icelandic pension system



Sources: Central Bank of Iceland.

Chart III-10

Icelandic pension fund asset composition



Sources: Central Bank of Iceland.

to investment limits defined in the Act on Mandatory Pension Insurance and on the Activities of Pension Funds, no. 129/1997. The Act set limits on currency risk, counterparty risk, and asset classes based on the principle of diversification. The Central Bank maintains a risk-based and forward-looking approach to supervision of pension funds, analyses the main risk factors in their operations, and assesses the potential implications for financial stability due to the relative size of pension savings.

In 2021, Iceland's total pension savings were equivalent to 219% of GDP, the highest in the OECD, surpassing both Denmark and the Netherlands. The Icelandic pension funds are dominant players in the Icelandic capital markets, holding a combined 50% of listed securities. As of year-end 2021, the majority of the mandatory pension funds' assets were domestic. The share of foreign assets has increased gradually in recent years, to nearly 40% of total assets by year-end 2021.

Pensions fund assets are allocated mainly to collective investment funds (UCITS), equities, and government bonds, which account for 27%, 20%, and 17%, respectively, of total assets. Furthermore, the mandatory pension funds participate in direct mortgage lending to households and businesses. About 8% of their assets are mortgage loans granted mainly to fund members.

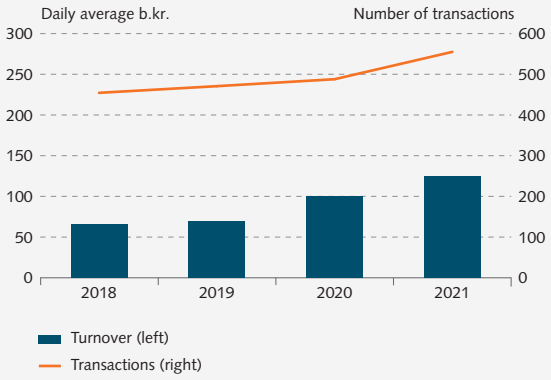
Payment intermediation

The Central Bank of Iceland is responsible for the operational soundness of systemically important payment systems. Furthermore, the Bank is responsible for oversight of systemically important financial market infrastructure, including the Nasdaq CSD SE securities settlement system; for supervision of individual payment service providers, including their infrastructure; and for central securities depositories. In carrying out this role, the Bank applies the Principles for Financial Market Infrastructures (PFMI) laid down by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO).

The interbank system in Iceland is divided into two components: a gross settlement component (RTGS) and a retail component. The RTGS component handles interbank foreign exchange market transactions and large-value payments of 10 m.kr. or more that are transferred between the Central Bank and deposit financial institutions. In 2021, an average of 555 payments totalling 125 b.kr. were settled in the RTGS component each banking day. The RTGS component also handles securities settlement and retail payment systems settlement. Payment in amounts of less than 10 m.kr. are routed through the

Chart III-11

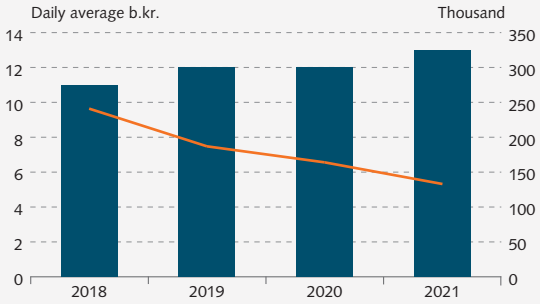
Real-time gross settlement system



Sources: Central Bank of Iceland.

Chart III-12

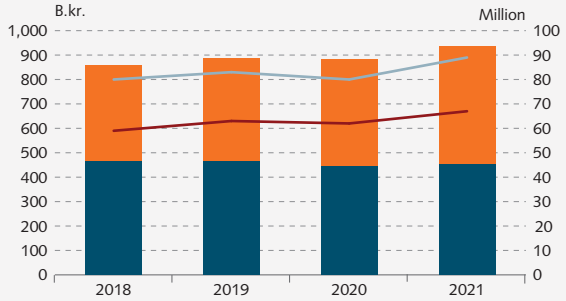
Retail netting



Sources: Central Bank of Iceland.

Chart III-13

Card payments[1]



1. Excluding online purchases.
Sources: Central Bank of Iceland.

retail component and settled in the RTGS twice a day. An average of roughly 133,000 transactions per day were routed through the retail component of the interbank system in 2021, with daily average turnover totalling 13 b.kr.

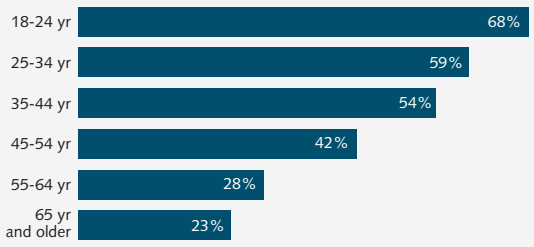
The systems use central bank money during the settlement process.

The Central Bank of Iceland has the exclusive right to issue banknotes and coin in Iceland. The currency is called the króna (pl. krónur). A total of five denominations of banknotes (10,000, 5,000, 2,000, 1,000, and 500 kr.) and five denominations of coins (100, 50, 10, 5, and 1 kr.) are valid as legal tender in Iceland. The value of banknotes and coin in circulation at year-end 2021 was 556 million euros (82 b.kr.), or around 2.5% of GDP.

Iceland is currently among the most digitised countries in the world. When Icelandic households buy goods and services, they use electronic payment solutions in 97% of cases.[4] Today, most of electronic payments are card-based (VISA and MasterCard).[5] Credit card use is much more widespread in Iceland than in the other Nordic countries. Nearly 50% of card payments in physical trade, in terms of both turnover and number of transactions, are made with credit cards. Younger people are more likely to use payment apps in smart devices; however, all age groups use them.

Chart III-14

Payment apps in smart devices



Source: Central Bank of Iceland.

Financial and foreign exchange markets

The Nasdaq Iceland stock exchange and the central securities depositories

Iceland currently has one authorised stock exchange, operated by Nasdaq Iceland hf., where public securities listing and securities trading are carried out. Nasdaq Iceland hf. is a part of the Nasdaq Group and is licensed to operate a regulated market as well as a multilateral trading facility (MTF), the First North Iceland market. Both issuer rules and trading rules are largely harmonised with the sister exchanges run by Nasdaq in the Nordic countries (Stockholm, Helsinki, and Copenhagen).

Iceland has two authorised central securities depositories, Nasdaq CSD and Verðbréfamiðstöð Íslands hf. (VBM). A central securities depository (CSD) is a registry, depository, and clearing house for securities in dematerialised (electronic) form. The main role of the CSD is to provide centralised registration and notary services for dematerialised securities in the Icelandic market and to maintain securities accounts at the top-tier level. The CSD is responsible for settling transactions with dematerialised securities. It also provides shareholder registry services to issuers, processes corporate actions, and provides information services. Settlement is carried out using central bank money.

Nasdaq CSD SE operates regional central securities depositories in the Baltic countries and Iceland, with offices in Estonia, Iceland, Latvia, and Lithuania. Nasdaq CSD Iceland merged with Nasdaq CSD SE in May 2020. Nasdaq CSD is also a national numbering agency (NNA), assigning international securities identification number (ISIN) codes to instruments issued in Iceland. Verðbréfamiðstöð Íslands hf. is a newly established CSD in Iceland. In November 2021, the first listed security was registered electronically at VBM.

Bond market

The Icelandic bond market consists of a primary market and a secondary market that is operated primarily on the Nasdaq Iceland exchange. Icelandic bond issues can be divided into three broad categories:

1. Nominal and inflation-indexed Treasury bonds. These are the largest bond series in the Icelandic market, amounting to 29% of market value at the end of June 2022 (6.8 billion euros, 949 b.kr).

2. Housing Financing Fund (HFF) bonds, which are inflation-indexed, interest-bearing bonds with an annuity format. Their market share was 22% at the end of June 2022, and their market value was 5.2 billion euros (725 b.kr.).

3. Bond issued by Government agencies, private corporations, or institutions such as banks. Their share of the market amounted to total 50% at the end of June 2022 (11.8 billion euros, 1.640 b.kr.).

4 Gallup survey on household payment behaviour, October 2020. The result indicate, households that shop on a weekly basis or more often, as most households do, .

5 Some payment solutions are cardless BNLP (buy-now-pay- later) solutions processed and cleared in the RB claim system, sometimes called the "payables pool".

Chart III-15

Yield on non-indexed bond indices

At month-end January 2006 - August 2022

Sources: Central Bank of Iceland.

Chart III-16

Yield on indexed bond indices

At month-end January 2006 - August 2022

Sources: Central Bank of Iceland.

The Icelandic bond market has several features that set it apart from bond markets in other countries. First, public entities are the largest issuers of listed bonds. By mid-2022, the market value of bonds issued by public entities or firms owned by them amounted to 62% of total issuance. Second, indexed issues are prominent in Iceland's domestic market (31%), as all HFF bonds are indexed to the CPI, although indexed bond issuance has diminished in recent years.

Table 2 Bond market - market value 30.6.2022

	Values in EUR millions	*Share%*
Treasury securities total	6,830	29
Treasury bills	619	
Treasury bonds	4,171	
Treasury bonds - CPI Indexed	2,040	
Housing Financing Fund	5,217	22
Bank bonds	4,496	19
Corporate bonds	3,400	14
Municipal bonds	2,174	9
Sustainable bonds	1,096	5
Foreign bonds	443	2
Loan institution bonds	93	0.4
First North Ice Fixd Income	67	0.3
Premium bonds	42	0.2
Total value	23,858	

Equity market

As of August 2022, a total of 22 companies were listed on the Nasdaq Iceland Main List and another seven companies on the Nasdaq First North market. About 80% of the companies listed on the Icelandic stock exchange belong to the financial services, industrial, and consumer defensive sectors. Iceland is currently classified as a secondary emerging market by FTSE Russell and a frontier market by MSCI.

The market capitalisation of Main List companies was 15.6 billion euros (2.211 b.kr.) as of end-August 2022, or approximately 68% of year-2021 GDP. Total equity market turnover with Main List shares amounted to 7.1 billion euros (1,060 b.kr.) in 2021.

Chart III-17

Equity market, OMXI10 Index

Daily data 2 January 2009 - 31 August 2022

Sources: Central Bank of Iceland.

Money market

The money market consists of the interbank loan market and a secondary market. Secondary market trading is concentrated largely in very short-term Treasury bonds, Treasury-guaranteed bonds, and Treasury bills. Treasury bill turnover in the secondary market totalled about 60.3 million euros (9 b.kr.) in 2021.

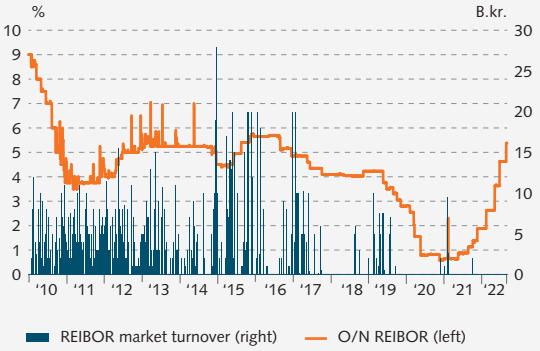
The Central Bank of Iceland oversees the interbank market for krónur, where trading consists of unsecured loans between market makers. Members must submit indicative bid and ask quotes on various maturities ranging from overnight to six months.[6] The vast majority of trading on the market is concentrated in a duration of one week or less. Once a day, the Central Bank fixes

6 Effective 1 July 2020, the Central Bank discontinued listing nine- and twelve-month interest rates in the interbank market for krónur.

Chart III-18

REIBOR interest rate (O/N) and REIBOR market turnover

Daily data 4 January 2010 - 31 August 2022

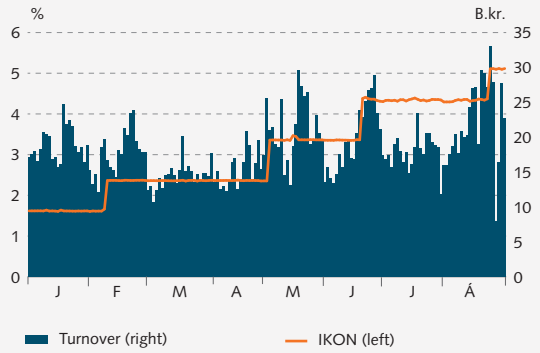


Sources: Central Bank of Iceland.

Chart III-19

REIBOR interest rate (O/N) and REIBOR market turnover

Daily data 3 January - 30 August 2022



Sources: Central Bank of Iceland.

REIBID and REIBOR rates for the market. There are four participants in the market: Arion Bank, Íslandsbanki, Landsbankinn, and Kvika banki. Market turnover totalled 134 million euros (20.7 b.kr.) in 2021.

In April 2022, the Central Bank started calculating and publishing a reference rate for Icelandic krónur, IKON (Icelandic króna overnight). IKON is calculated as the weighted average of interest rates on unsecured overnight deposits denominated in Icelandic krónur held by obliged entities. The interest rate is calculated from the agreements financial institutions make with their customers when they accept deposits at fixed rates for fixed commitment periods. IKON differs from the REIBOR rate in that the latter is based on bids rather than on completed transactions. Data for the IKON rate are submitted by the commercial banks, the same participants as in the REIBOR market. Average daily turnover for IKON through 31 August 2022 was 131.2 million euros (18.5 b.kr.).

Foreign exchange market

The exchange rate of the Icelandic króna is determined in the interbank foreign exchange market. In addition to the Central Bank of Iceland, three financial institutions are authorised to participate in the interbank foreign exchange market and are designated as market makers: Arion Bank, Íslandsbanki and Landsbankinn. Market makers are obliged to maintain active bid and ask quotes, where prices are quoted in krónur per euro and each bid submitted is in the amount of one million euros. The market is open from 09:15 hrs. to 16:00 hrs. on weekdays.

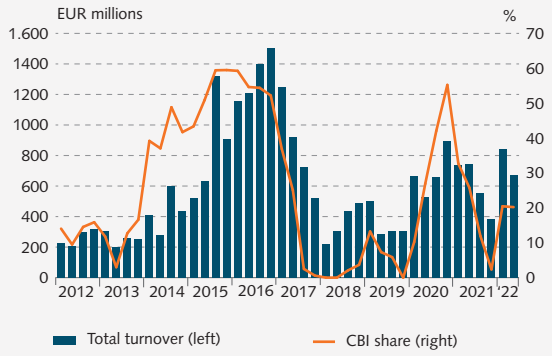
The Central Bank of Iceland is a participant in the interbank foreign exchange market. The Bank carries out a supervisory role and publishes the daily official exchange rate of the króna. The Central Bank is not a market maker and is not required to maintain active bid-ask quotes. However, the Bank may conduct transactions with market makers at any time during the market's hours of operation and intervenes in the interbank market by buying or selling krónur in exchange for euros to reduce short-term volatility.

Turnover in the foreign exchange market was 2,415 million euros (363.1 b.kr.) in 2021, and the Central Bank's share was 506 million euros (76.5 b.kr.), or 21%.

Chart III-20

Interbank foreign exchange market turnover and Central Bank share

Q1/2012 - Q2/2022



Sources: Central Bank of Iceland.

Public sector

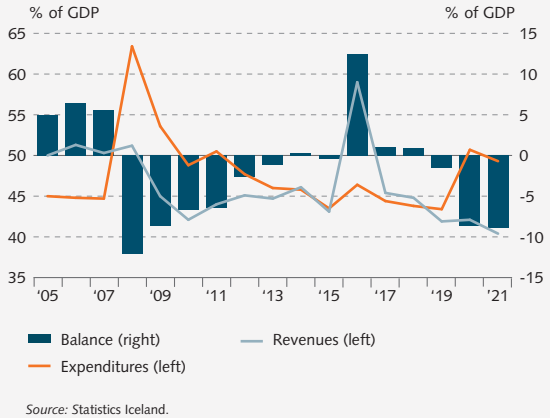
IV

This chapter describes the public sector in Iceland, central and local government finances, the structure of the tax system, and government balance sheets. Recent developments in Iceland's sovereign credit ratings are discussed as well.

General government finances and size of the government sector

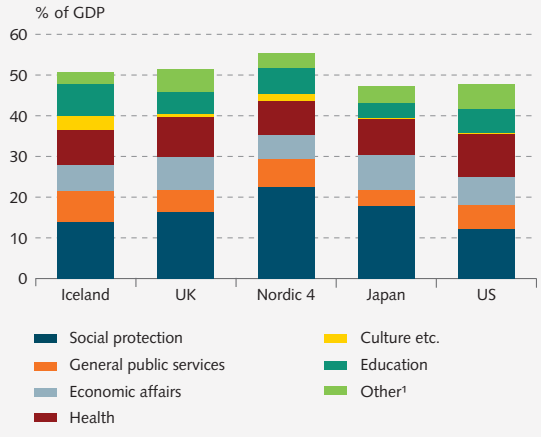
In 2021, Iceland's general government gross debt amounted to 75% of GDP as defined by the Maastricht criteria.[1] Gross general government debt amounted to 138% of GDP in 2011, but after declining steadily from 2012 through 2018, the debt ratio reached 66% in 2019, just prior to the pandemic. The pandemic and government countermeasures caused the debt ratio to rise (see Box 2.1). According to the government's most recent fiscal budget proposal, the debt-to-GDP ratio will come to halt in 2022.

Chart IV-1
General government finances[1]



Source: Statistics Iceland.

Chart IV-2
General government expenditures 2020



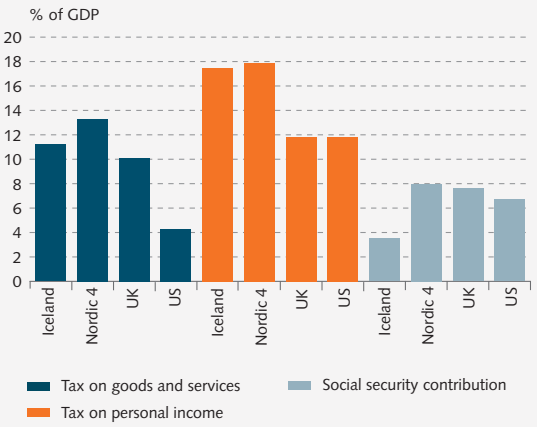
1. Public order and safety, defence, environment protection, and housing.
Source: OECD National accounts.

In 2021, Icelandic general government expenditure amounted to 49.4% of GDP (Chart 4.1). Several factors contributed to a relatively small government sector compared to the other Nordic countries: comparatively limited spending on social affairs, in part due to a relatively young population; historically low unemployment; and the historical absence of defence expenditure (Chart 4.2). Furthermore, well-funded private pension funds,

1 In 2020, Statistics Iceland revised the public sector accounts. Among other changes introduced with the revision, the Housing Financing Fund and the Student Loan Fund are now included in government debt figures. Year-2019 gross debt rose by 35% and financial assets rose by 45% as a result of the revision.

Chart IV-3

Importance of tax categories 2020



Sources: OECD, Central Bank of Iceland.

organised by occupation, accounted for 58% of first- and second-pillar pension benefits in 2021.

In 2010-2019, general government revenues averaged nearly 44% of GDP. Revenues declined in 2020 as a result of the pandemic, and in 2021 they measured 40.5% of GDP, the lowest ratio in more than two decades.

Income tax in Iceland is similar to the average in the other Nordic countries, but higher than in the UK and US (Chart 4.3). Taxes on goods and services in Iceland have been broadly similar to those in comparison countries, albeit considerably higher than in the US. Social security contributions in Iceland are lower than those in comparison countries.

Central government finances

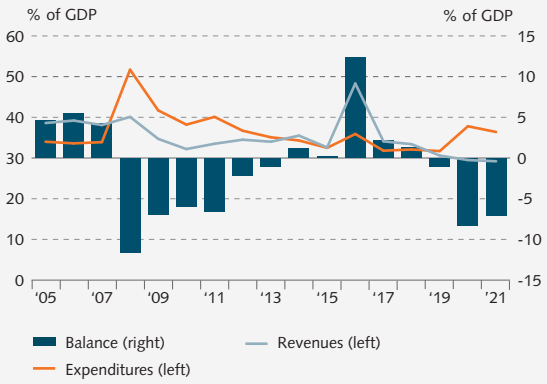
Since 2010, central government revenues have averaged just over 32% of GDP.[2] In 2021, they equalled 29.2% of GDP, following a significant decline resulting from the pandemic.

The composition of central government revenues in 2021 is shown in Chart 4.5. Direct taxes generate nearly 44% of total revenues, while indirect taxes constitute just under 39%. By design, Iceland's central government revenues are strongly cyclical for three main reasons. First, the state personal income tax, which accounts for some 21% of central government revenues, has a progressive predetermined bracket structure (see Box 4.1). This implies that greater-than-expected income growth translates into a higher-than-expected ratio of taxes to total income. Second, nearly 39% of central government revenues come from taxes targeting consumption of goods and services. These taxes fall most heavily on

2 Revenues adjusted for irregular and one-off items.

Chart IV-4

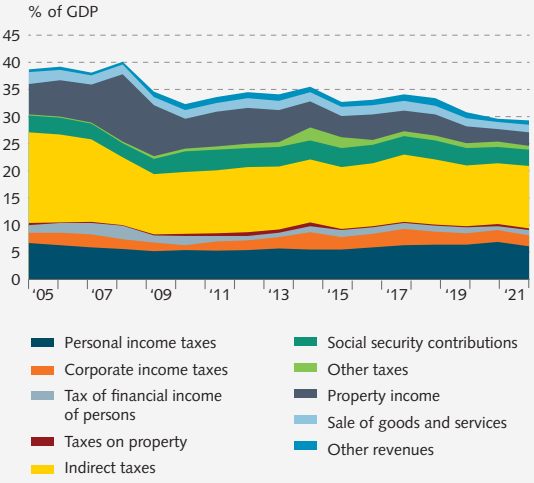
Central government finances



Source: Statistics Iceland.

Chart IV-5

Composition of central government revenues in 2005-2021[1]

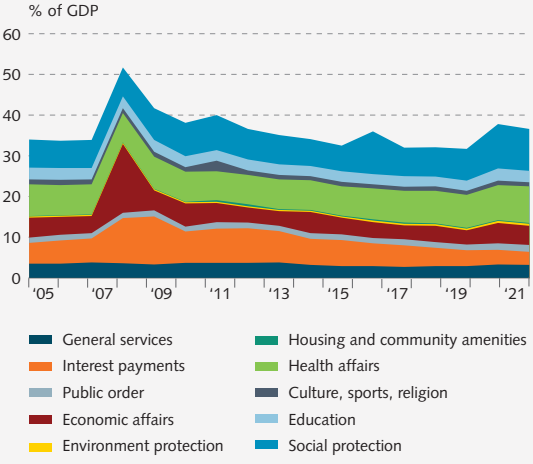


1. Excluding stability contribution from the failed banks' estates 2016 of an amount equal to 15.3% of GDP.

Source: Statistics Iceland.

Chart IV-6

Composition of central government expenditures 2005-2021



Source: Statistics Iceland.

durables, most of which are imported. Such consumption has proven highly sensitive to the business cycle, balance sheet effects, and the cyclical real exchange rate. Third, revenues from taxes on corporate profits, households' financial income, and certain financial transactions are by nature sensitive to the business cycle. Combined central government revenues from taxes on consumption equalled 11.1% of GDP in 2021, slightly below the average of 11.4% since 2010. The payroll tax, or social security contribution, amounted to 3% of GDP in 2021. The payroll tax rate was lowered incrementally from 2018, thus reducing the share from 3.5% of GDP in 2010-2019 to 3% from 2020 onwards.

The composition of central government expenditures in 2020 is shown in Chart 4.6. Health and social protection account for more than half of expenditures. This is a considerably larger share than in the previous decade, owing not least to an increase in social protection expenditures in response to the effects of the pandemic.

Central government interest expense accounted for around 19% of total expenditures in 2010-2019. In 2020, however, as domestic interest rates declined, the government's interest burden fell to just under 10% in 2020. With rising interest rates and accumulated deficit spending since the pandemic, this share is likely to increase again.

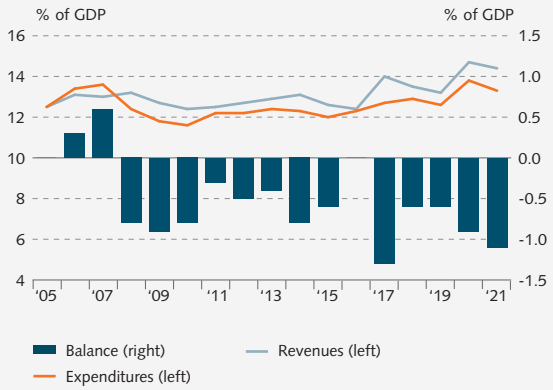
In December 2015, Parliament passed a new Act on Public Finances, which imposes stringent rules on operational performance and developments in the debt level (see Box 4.2). The medium-term fiscal framework is designed to address gaps in the previous legal framework from budget formulation to execution. Parliament authorised a temporary deviation from the fiscal rules in response to the pandemic. This allowed the government to support households and businesses to a larger extent during the economic downturn inflicted by the pandemic and related public health measures. Government finances are set to return to the framework laid down in the fiscal rules in 2026.

Local government finances

Local government expenditures amounted to 14.4% of GDP in 2021. This ratio has risen over the years as local governments have assumed increased responsibility for education and care of the disabled. Education, from preschool to age 16, accounts for 31.5% of expenditures, welfare expenditures account for about 22.5%, and culture and recreation 16.6%.

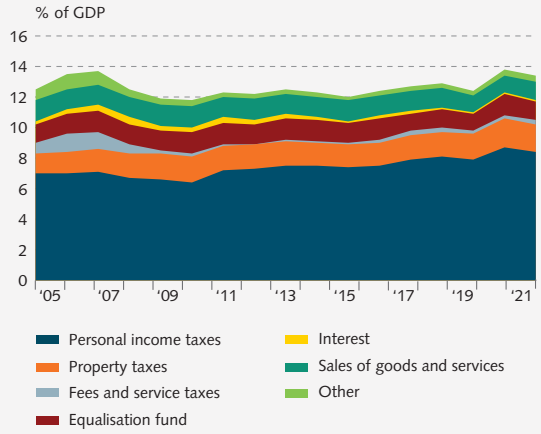
Local government revenues in 2021 amounted to 13.3% of GDP. Taxes account for nearly 80% of revenues, with municipal income taxes contributing 62.5%

Chart IV-7
Local government finances



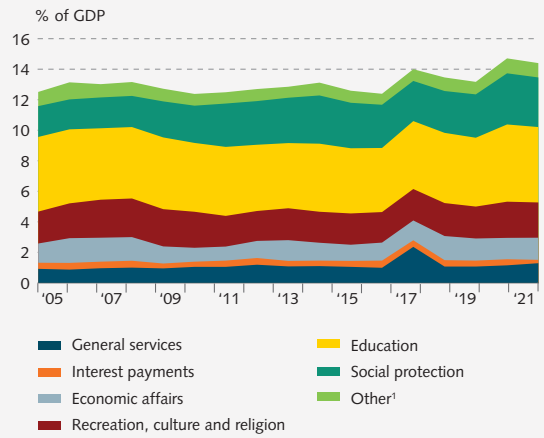
Source: Statistics Iceland.

Chart IV-8
Composition of local government revenues 2005-2021



Source: Statistics Iceland.

Chart IV-9
Composition of local government expenditures 2005-2021



1. Health, housing, environment, and public order.
Source: Statistics Iceland.

and property taxes 13.6%. Since 2010, the local government budget outcome has generated a deficit averaging 0.7% of GDP. In line with that trend, the deficit measured 1% of GDP in 2021.

The local government debt level was 7.3% of GDP in 2021, up from 5.8% of GDP in 2016.[3] Adding pension liabilities and short-term payable accounts raises the debt figure to just over 13.9% of GDP at the end of 2021.

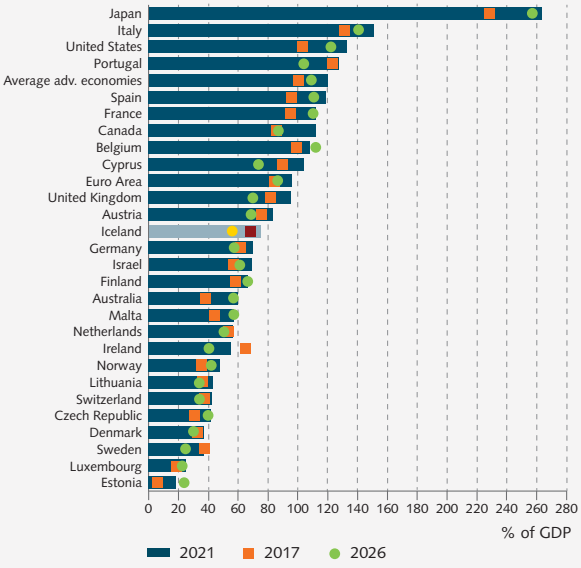
Parliament passed a new Local Government Act in September 2011 (see Box 4.2). Multi-year budgeting was introduced, as were two fiscal rules. The Act tightened budget procedures and financial oversight considerably.

Government balance sheets

Iceland's general government gross debt declined steadily in the aftermath of the 2008 financial crisis through 2019, when it amounted to 66% of GDP. The debt ratio increased to 75% of GDP in 2021, following significant deficit spending during the pandemic. This is below the debt ratio in the eurozone but above that in the other Nordic countries (Chart 4.14). According to a recent IMF forecast, by 2027 Iceland will again be in the lower half of advanced IMF countries in terms of general government debt.[4]

Chart IV-10

Gross general government debt in selected IMF countries



Source: IMF Fiscal Monitor April 2022.

The central government has by far the largest balance sheet, with assets and liabilities constituting just over 88% of the general government balance sheet, while the local government share is about 10½%. Social security accounts constitute only a marginal share of general government accounts in comparison with central and local government. As a result, general government financial assets and liabilities are largely those of the central and local governments.

Central government

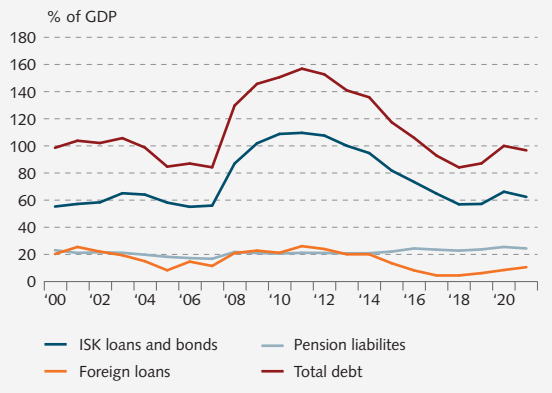
The fiscal position of the central government was strong prior to the financial crisis, as net financial assets turned marginally positive in 2007. Net financial assets turned negative by 27.3% of GDP in 2009 and then deteriorated further, bottoming out at -41.5% of GDP in 2012. The position improved in the following years, peaking at -10.5% in 2018. Since then, it has deteriorated somewhat and stood at -27.1% of GDP in 2021.

At the beginning of the 2010s, loans constituted the largest single asset class of the central government, owing mostly to the Housing Financing Fund and the Icelandic Student Loan Fund. Gradually, loans decreased as banks and pension funds took over the mortgage market, and by 2021, stocks and equity holdings were the largest asset class of the central government, at nearly 35% of GDP.

After a steady post-crisis decline from their peak of 157% of GDP in 2011, liabilities have increased from 84% of GDP in 2018 to 96.7% in 2021. Securities have been the largest single item on the liabilities side, accounting for up to 60% of total liabilities over the last decade. However, their share has declined somewhat recently, to 52,7% of GDP in 2021, or 54.5% of total liabilities.

Chart IV-11

Central goverment liabilities



Source: Statistics Iceland.

3 Debt as defined by the Maastricht criteria: total financial liabilities less insurance, technical reserves, and other accounts payable.

4 International Monetary Fund (2022). *Fiscal Monitor,* April 2022.

Fiscal deficits have primarily been financed in domestic financial markets. However, króna-denominated debt declined over the previous decade, from 104.8% of GDP in 2010 to around 57% in 2021. At year-end 2021, króna-denominated liabilities, including pension liabilities, amounted to 86.1% of GDP, down from the peak of over 130% of GDP in 2011. Overall, total central government liabilities amounted to 96.7% of GDP in 2021 (68% according to the Maastricht criteria), after peaking at 157% in 2011.

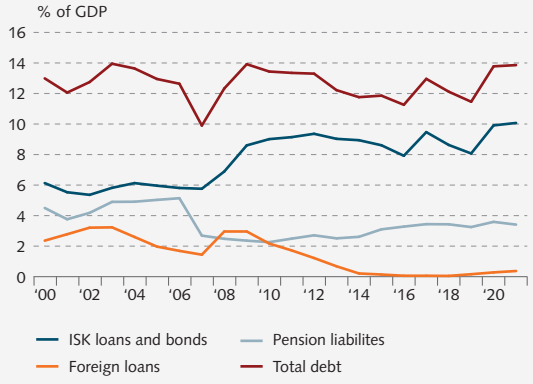
Local government

Between 2009 and 2019, local government gross debt was on a declining path, assisted by a new fiscal debt rule stipulating that debt may not exceed 150% of regular revenues (see Box 4.2). It had fallen to 5.2% of GDP by 2016 but then increased to 7.3% of GDP in 2021.

As is the case with the central government, local governments have financed their deficit spending primarily in the domestic credit market, with króna-denominated debt amounting to 7.2% of GDP in 2021, and foreign currency-denominated debt 0.4% of GDP in the same year.

Chart IV-12

Local government liabilities[1]



1. The Maastricht definition of gross government debt does not include pension liabilities and is more akin to loans and bonds.

Source: Statistics Iceland.

Local governments' financial assets have amounted to 5%-6.9% of GDP over the past decade, measuring 5.6% of GDP in 2021. There has been little change in the division between asset classes of local government in recent years.

Government holdings in the business sector

In 1997-2007, the central government pursued an extensive programme of privatisation, which included state owned banks. After the privatisation phase came to an end, the State's most important business holdings were in Landsvirkjun (the National Power Company), the Housing Financing Fund (HFF), and a few smaller financial institutions.

After October 2008, the State recapitalised the banking system by establishing new banks. The original plan was that the new banks would initially be State-owned, but according to agreements reached with the estates of the old banks, the estates took a significant equity stake in the new banks. Initially the State held 98% in Landsbankinn, 13% in Arion Bank, and 5% in Íslandsbanki, at a cost of 1.5 billion euros (196 b.kr.), or 12% of GDP. With the settlement of the Glitnir Bank estate through composition agreements based on stability conditions in late 2015, the State received a 95% stake in Íslandsbanki in addition to its previous 5%, making it the sole owner of the bank. In 2018, in accordance with a prior agreement, the 13% share in Arion Bank was sold, and in 2021-2022 the State sold 57.5% of the shares in Íslandsbanki. In addition, through the stability conditions, the State received small shareholdings in various companies that have now been sold or are in the process of being sold. By the end of Q2/2022, the State's largest holdings in the financial sector were a 98% share in Landsbanki and a 42.5% stake in Íslandsbanki.

Local government holdings are mainly in geothermal production of heat and electricity. Iceland's municipalities own almost all of the geothermal power companies, which supply heating to most homes in Iceland and, on an increasing scale, provide electricity to the aluminium industry. Several local governments also own operating companies for harbours.

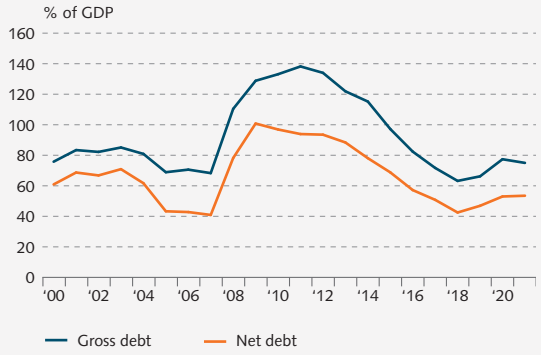
Government guarantees

State guarantees must be authorised explicitly in legislation and are generally confined to government enterprises and government-related institutions. Local governments, on the other hand, are prohibited by law from granting loan guarantees except to their own subsidiary institutions.

As of year-end 2021, the central government's outstanding guarantees amounted to 26% of GDP. Some 85% of this represents government backing in relation to IL Fund, an entity established when the Housing Financing Fund (HFF) discontinued operations. The IL Fund is responsible for the administration and processing of the HFF's assets and liabilities. Almost 7% of outstanding guarantees are due to loans to the Government Student Loan Fund (LÍN), and around 3.5% of are related to Landsvirkjun, the National Power Company. A further 3% of total guarantees stem from

supplemental and support loans to businesses and a revolving credit facility to Icelandair which was discontinued in early 2022, all due to pandemic-related measures introduced by the government.

Chart IV-13
General government debt[1]



1. Central Bank baseline forecast 2018-2020 from Monetary Bulletin 2018/2. Gross debt according to Maastricht criteria and net debt according to the definition in the Ac on Public Sector Finances.
Source: Statistics Iceland.

Treasury foreign debt

Under a special agreement with the Ministry of Finance and Economic Affairs, the Central Bank is responsible for the administration of both domestic and foreign borrowing for the Treasury. The Republic of Iceland has never failed to honour its financial obligations and has always paid when due the full amount of principal and interest on all domestic and foreign obligations.

In recent years, the Republic of Iceland has been a regular borrower in the international markets. New Treasury loans in foreign currencies have primarily been used to refinance outstanding market issues. However, the Treasury has also the possibility of issuing foreign bonds to finance its operations and investments.

At the end of July 2022, four foreign bond issues were outstanding, leaving the Treasury's foreign debt at 2,250 million euros (311.2 b.kr.).

Table 4.1 Republic of Iceland foreign bond issues[1]

Type	*Issue date*	*Maturity*	*Currency*	*Loan facility amount*	*Out standing amount*
Eurobond (MTN)	2017	2022	EUR	500	500
Eurobond (MTN)	2019	2024	EUR	500	500
Eurobond (MTN)	2020	2026	EUR	500	500
Eurobond (MTN)	2021	2028	EUR	750	750

1. Figures are as of 31 July 2022. Amounts in millions.
Source: Central Bank of Iceland.

Republic of Iceland credit ratings

The Republic of Iceland's credit ratings have been on an upward trajectory in recent years. Iceland is currently rated A2 by Moody's and A by S&P Global and Fitch Ratings.

Moody's Investors Service's long-term issuer and senior unsecured ratings for Iceland have been A2, with a stable outlook, since November 2019. In its most recent annual credit analysis in July 2022, Moody's stated that Iceland's credit strengths include the economy's flexibility, wealth, competitiveness, and favourable demographics, all of which support its long-term growth prospects and help it to absorb shocks. The country's track record of effective macroeconomic management since the crisis in 2008 and its carefully managed capital account liberalisation with minimal disruption demonstrated the strength of its institutions. Iceland's main credit weakness is the economy's small size and concentration in a limited number of sectors, which increases its vulnerability to sector-specific shocks. Over the longer term, further diversification will be key to reducing growth volatility. Moody's also noted that Iceland's rating would be upgraded if the government were able to rebuild its fiscal buffers more rapidly. A diversification push that leads to a less volatile economic performance would also be positive for the rating. Conversely, the rating would come under downward pressure if the government deviated significantly from its fiscal consolidation plan, which aims to stabilise public debt by the middle of the decade.

S&P Global Ratings has maintained A/A-1 long- and short-term sovereign credit ratings for Iceland, with a stable outlook, since March 2017. In its most recent publication, from May 2022, S&P affirmed these ratings, stating that the stable outlook indicates the expectation that Iceland's economy would continue to recover and remain relatively unaffected by the war in Ukraine. The agency believes fiscal deficits will continue to decrease over the next few years, stabilising the debt-to-GDP ratio net of liquid assets. At the same time, ample foreign reserves will enable the Central Bank to deal with external pressures or exchange rate volatility should they occur. According to S&P, the agency could raise the ratings if economic growth exceeds expectations, which would likely coincide with stronger export growth and greater export diversity, reducing external debt or mitigating the volatility in Iceland's terms of trade. The agency could lower the ratings if the effects of the war in Ukraine became more pronounced; for example, through second-round effects due to lower economic activity in Iceland's main trading partners in Europe or a shift in global travel preferences. The latter could also occur if the pandemic re-emerged, particularly in the form of new and more malignant variants.

Fitch Ratings' Long-Term Foreign-Currency Issuer Default Rating (IDR) for Iceland has been A since December 2017. Fitch announced its most recent rat-

Table 4.2 Republic of Iceland credit ratings

		Foreign currency		Domestic currenc		
	Current rating from	Long-term	Short-term	Long-term	Short-term	Outlook
Moody's	Nov. 2019	A2	P-1	A2	P-1	Stable
Standard & Poor's	March 2017	A	A-1	A	A-1	Stable
Fitch	March 2022	A	-	A	F1+	Stable

Source: Ministry of Finance and Economic Affairs

ing action for Iceland in March 2022, when it changed the outlook from negative back to stable. After having affirmed the rating in September 2022, Fitch stated that Iceland´s rating was driven by its very high income per capita and very strong governance and human development indicators, which are more similar to those of 'AAA' and 'AA' rated countries. A favourable demographic composition also supported growth potential. The rating was constrained by the high but declining public debt burden, the small size of the economy, and limited export diversification, which result in vulnerability to external shocks and balance of payments risks. Fitch also noted that a sustained economic recovery beyond 2022 and sharp and sustained decline in the government debt-to-GDP ratio were factors that could lead to a positive rating action. On the other hand, evidence that the Government's economic and fiscal strategy would lead to a resumption of an upward trajectory of the government debt-to-GDP ratio over time, as well as renewed economic weakness or an adverse shock, were factors that could prompt a negative rating action.

Box 4

The tax system

In 2021, the central government derived around 84% of its revenues (24,6% of GDP) from taxes and social security contributions, as compared with 78.8% (10.5% of GDP) for local government.

The personal income tax is levied jointly by the central and local governments. The local government tax, a flat percentage of total taxable income, varies slightly by municipality, averaging just below 14½% in 2022. The central government tax is progressive, with a rising marginal rate and a zero-tax bracket structured as a rebate on taxes due. The result is a three-bracket overall tax structure. The rates and thresholds are shown in Table 1.

In principle, taxes are levied on each individual, but couples may share the rebate (i.e., the zero bracket), and the higher-earning spouse may utilise up to half of the unused portion of the lower-earning spouse's 23.5% bracket.

The central government taxes individuals' financial income – dividends, rental income, interest, and capital gains – at a rate of 22%, with an exemption for interest income up to 2,130 euros per person per year (300,000 kr.) and an exemption for 50% of rental income earned by individuals.

The corporate income tax is currently 20% of profits. There is a payroll tax of 6.35% of the applicable wage bill. The payroll tax is earmarked for financing unemployment benefits, maternity/paternity leave, and other similar expenses. The payroll tax has ranged from 5.34% to 8.65% since 2008, varying in tandem with developments in unemployment.

Parliament has adopted three measures of taxation on financial enterprises: i) A tax based on the debt of financial enterprises, introduced for 2011 at 0.041%. In 2014, the rate was raised to 0.376% and the tax was extended to include financial institutions in winding-up proceedings, in order to finance the government's household debt relief programme. This tax was lowered to 0.145% in 2021; ii) An additional payroll tax on financial enterprises, introduced for 2012 at 5.45%, now 5.5%; iii) An additional 6% charge on profits in excess of 1 b.kr., also introduced for 2012. Taxation of property and financial transactions is in three main parts: i) Property taxes levied by local governments on the assessed value of real estate. In 2021, property taxes averaged 0.248% on residential property; 1.320% on schools, health care centres, and other like institutions; and 1.574% on commercial property; ii) A stamp tax collected by the central government, yielding around 0.2% of GDP. After a simplification in 2014, the stamp tax applies only to transfer of deeds. It is set at 0.8% of the value if the deed holder is an individual, but 1.6% for corporations and other legal entities; and iii) An estate tax with a main rate of 10% (0.1% of GDP).

The largest source of central government revenues is the value-added tax on domestic business, yielding 8.8% of GDP and nearly 30% of revenues in 2021. A rate of 24% is charged on most goods and services, while food, accommodation, road tolls, books, newspapers and media subscriptions, audio recordings, indoor heating, and selected services are taxed at 11%. Some categories of goods and services are exempt, including financial services, travel agencies, health services, childcare, education, cultural and athletic events and services, passenger transportation, postal services, the activi-

Table 1 Main features of the Icelandic tax system in 2022

	2022[1]	*Revenues 2021 % of GDP*
Central government personal income tax[2]		6.1%
First bracket/income between[3]	17%/0-31,550 euros (0-4.44 m.kr.)	
Second bracket/ income between	23.5%/ 31,550-88,565 euros (4.44-12.5 m.kr.)	
Third bracket/ income over	31.8%/ 88,565 euros (12.5 m.kr.)	
Personal tax rebate against combined income tax	4,590 euros (645 t.kr.)	
Local government personal income tax		8.4%
min/average/max[4]	12.44%/14.45%/14.52%	
Zero bracket for combined income tax[3]	14,600 euros / 2.05 m.kr.	
Tax on individuals' financial income[5]	22.0%	1.0%
Payroll taxes	6.35%	3.0%
Corporate income (profit) tax	20.0%	2.0%
Property taxes		2.1%
Residential property, average/max	0.248%6/0.625%	
Hospitals, schools and related, avg./max	1.32%	
Commercial property, average/max	1.574%6/1.650%	
Value-added tax		8.8%
General rate	24.0%	
Reduced rate	11.0%	

1. Based on average EURISK exchange rate year-to-date.
2. Couples are taxed individually, except that a) couples may share their rebates or double zero brackets; and b) a person may utilise up to half of their spouse's unused 23.5% bracket up to a maximum of 21,116 euros (3.58 m.kr.).
3. The zero bracket is due to the 645,000 kr. Treasury rebate against the combined income tax rate of 17% +14.45%.
4. Municipalities under financial duress may raise their rate by an extra 10%.
5. Interest income up to 943 euros (300,000 kr.) and 50% of rental income from residential housing is exempt.
6. Average from 2021.

Sources: Association of Local Authorities, Directorate of Internal Revenue, Parliament of Iceland website (www.althingi.is), Statistics Iceland.

ties of writers and composers, and the services of priests/ministers and funeral parlours.

There are central government excise taxes and customs duties on imports of motor vehicles and on fuel (earmarked in part for road construction), as well as an annual licence tax on vehicles. A general excise tax is levied on a range of goods at three rates – 15%, 20%, and 25% – while unit levies are charged on some goods. Alcoholic beverages and tobacco are also taxed. Customs duties range from 0% to 30% of the CIF value, although most imports from the EU, as well as Iceland's EFTA partners (Norway, Liechtenstein, and Switzerland), are exempt under the EEA Agreement. Higher duties apply to various agricultural products. Central government excise taxes (including those on motor vehicles and fuel), tariffs, and user taxes accounted for around 2.8% of GDP and 9.4% of central government revenues in 2021.

Box 5

Iceland's fiscal framework

The fiscal impact of the financial crisis and the extent of fiscal consolidation required thereafter helped to build the political consensus needed to implement reforms to the fiscal framework. Two acts of law have been passed over the past dozen years: the Local Government Act in September 2011 and the Act on Public Finances in December 2015.[1]

The Local Government Act

Local government reforms were quite extensive. First, two numerical fiscal rules were adopted so as to provide a long-term anchor and a medium-term fiscal path that is quantified in a required multi-year budget. Second, municipalities are subjected to a three-tiered approach to external financial monitoring based on the principle of earned autonomy. Third, there are sanctions, ranging from mild to severe, for violating the fiscal rules. Fourth, local governments are monitored by an independent external body, the Municipal Fiscal Oversight Committee (MFOC).

1 The IMF's Fiscal Affairs Department (FAD) played a key role in the process by providing numerous recommendations in the four reports prepared by technical advisory missions. The aim of the reports was to put Iceland's fiscal framework at the forefront of international budget practice.

The two numerical rules are a balanced budget rule and a debt ceiling rule, and both extend to Parts A and B[2] of the budget. The first rule prohibits municipalities from running operating deficits within a rolling period of three years. The second rule subjects municipalities to a maximum debt-to-revenue ratio of 150%. The definition of debt is broad and includes all liabilities and obligations.

The MFOC's task is to monitor local government finances, including accounting practices and budget proposals, and compare them to the criteria in the Local Government Act and any regulations deriving therefrom. The Committee subjects municipalities to three-tiered monitoring, which entails classifying the municipalities into one of three categories based on whether, and by how much, they are in breach of the rules. Both the autonomy and the degree of external monitoring to which a municipality is subjected vary, depending on its category. The MFOC has the authority to impose sanctions on municipalities that are in breach of the rules and to recommend to the Minister of Infrastructure that a municipality's fiscal powers be suspended and vested in a financial management board.

The Act on Public Finances

The Act on Public Finances represents a vast improvement over the previous legislation, as it addresses the gaps, loopholes, and inconsistencies in the old legal framework that weakened fiscal discipline. Many features of the former Financial Reporting Act were preserved, and a number of processes and best practice guidelines have been elevated to the statutory level.[3] The scope of the Act has been expanded to include all sections of central and local government budgets and all public corporations. Ministerial responsibilities were also expanded considerably.

The main objective of the legislation is to provide for sound macro-fiscal policy based on comprehensive medium-term budgeting and reporting. The medium-term fiscal framework (MTFF), the cornerstone of the current Act, is designed to address gaps in the old legal framework from budget formulation to execution. The objective is to set up a transparent and credible MTFF that serves the purpose of mapping out macroeconomic and fiscal policymaking. The Act establishes a procedural fiscal rule that maps out a five-year general government fiscal path with the following three fiscal rules:

1. The overall result over a five-year period must always be positive, and the annual deficit may not exceed 2.5% of GDP.
2. Total debt, excluding pension obligations and accounts payable, but including cash balances and deposits, may not exceed 30% of GDP.4
3. If the net debt ratio rises above 30%, the excess portion must decline by an average of at least 5% (1/20) per year in each three-year period.

Every new government is obligated to formulate and submit to Parliament, as a proposed parliamentary resolution, a fiscal strategy plan setting out the five-year fiscal path according to the procedural fiscal rule. Each year throughout the term of the five-year plan, the Minister of Finance and Economic Affairs shall present a fiscal plan or a medium-term fiscal strategy to Parliament.5 An independent fiscal council assesses whether the fiscal policy and fiscal plan are in line with the fundamental values and fiscal rules in the legislation.

When the fiscal budget is implemented, each minister must report to the government and the Parliamentary Budget Committee on the implementation of the budget. Fiscal reporting is an important part of progressive fiscal responsibility laws. The scope of reporting was increased significantly with the Act on Public Finances, and reports on budget outcome are moved forward so that the previous year's outcome is available well in advance of the fiscal plan.

2 Falling under Part A are activities operated directly through the Treasury or municipal account, while Part B includes the operations of State-owned companies.

3 The FAD's third report contained 46 very specific recommendations. Most of the recommendations were incorporated into the Act on Public Finances, some with variations.

4 This definition of debt is an approximation of the conventional definition of net debt, where all monetary assets are deducted from liabilities. Here, however, only cash and readily disposable monetary assets are deducted. This definition is used in part because the Treasury has taken account of loans taken, for example, to expand the Central Bank's international reserves. Those funds have not been used for operations and are available for repayment of the loans. This definition gives a clearer picture of how much debt must be paid down with cash from operations.

5 This shall be done at the spring legislative session in the form of a parliamentary resolution.

Monetary policy, financial stability, and prudential supervision

V

This chapter describes the Central Bank's framework for monetary policy, financial stability, and prudential supervision. It explains the objectives and the role of the Bank's policy committees and describes the main monetary, financial stability, and prudential policies, the instruments the Bank uses to attain its objectives, and the Bank's institutional structure.

Institutional architecture of monetary policy, financial stability, and financial supervision

The Act on the Central Bank of Iceland, which entered into force at the beginning of 2020, stipulates that the Bank shall promote price stability, financial stability, and sound and secure financial activities. The Bank shall also undertake such tasks as are consistent with its role as a central bank, such as maintaining international reserves and promoting a safe, effective financial system, including domestic and cross-border payment intermediation.

The Monetary Policy Committee, Financial Stability Committee, and Financial Supervision Committee operate in accordance with the provisions of the Central Bank Act, each taking policy decisions and other legally mandated decisions in its own field. The Governor and Deputy Governors of the Central Bank are members of the committees whose functions align with their respective duties, along with non-Bank members. The three-committee structure of the Central Bank fosters policy coordination and promotes effective policy implementation.

In 2020, the Central Bank was entrusted with powers of resolution with the establishment of a resolution authority within the Bank. Powers of resolution entail the authorisation to take decisions on resolution procedures and apply resolution measures in the case of credit institutions and investment firms that are failing or likely to fail.

Monetary policy

Monetary policy framework and objectives

With the approval of the Prime Minister, the Central Bank may declare a quantitative target for inflation. In a joint declaration issued by the Government and the Central Bank on 27 March 2001, the price stability goal was defined as an inflation rate of 2½%, measured in terms of the twelve-month rate of change in the consumer price index (CPI). The Act on the Central Bank of Iceland grants the Bank full independence in applying its monetary policy instruments so as to achieve the price stability objective.

If inflation deviates from the target by more than 1½ percentage points in either direction, the Central Bank shall bring it inside that range as quickly as possible. When such deviations occur, the Bank is obliged to submit a report to the Government, outlining the reasons for the deviation from target, the Bank's intended response, and the length of time it will take to bring inflation back to target, in the Bank's assessment.

Since the financial crisis in 2008, the Central Bank has used a wider range of monetary policy instruments than it did before the crisis (see Table 5.1). Active use of foreign exchange intervention supplements other conventional instruments in monetary policy implementation. The Central Bank conducts transactions in the foreign exchange market in order to mitigate volatility when it considers such intervention warranted and to improve price formation in the market.

The Monetary Policy Committee

The Monetary Policy Committee (MPC) takes decisions on the application of the Central Bank's monetary policy instruments. By law, these decisions must be based on the Bank's price stability objective and a thorough assessment of economic and monetary developments and prospects. The Committee therefore takes interest rate decisions in support of the Bank's monetary policy objectives. It also takes decisions on transactions with credit undertakings other than loans of last resort, decisions on minimum reserve requirements, guidance for foreign exchange market transactions, and securities transactions undertaken with the aim of achieving the Bank's price stability objectives.

The MPC comprises the Governor, who chairs the Committee, the Deputy Governor for Monetary Policy, the Deputy Governor for Financial Stability, and two non-Bank members with expertise in the field of economics and monetary policy who are appointed by the Prime Minister. The MPC is required to meet at least six times each calendar year.

After each MPC meeting, the Committee publishes a statement summarising its decisions and the premises upon which they are based. The minutes of MPC meetings, which are made public two weeks after the Committee's statement, give a fuller account of the decisions and the rationale underlying them. Furthermore, the MPC is required to submit a written report on its activities to Parliament twice a year.

Table 5.1 Monetary policy arrangements in Iceland since 1970

1970-1973	After the collapse of the Bretton Woods system, the Icelandic króna followed an adjustable peg to the US dollar.
1974-1983	Implementation of exchange rate policy became increasingly flexible and can be described as a managed float. The króna was first pegged to the US dollar and then to various baskets of trading partner countries' currencies.
1984-1989	Exchange rate policy became more restrictive, with increasing emphasis on exchange rate stability. In 1989, however, the króna was devalued ten times in small increments.
1990-1995	More emphasis was placed on exchange rate stability as the anchor of monetary policy. Until 1992, the currency peg was specified vis-à-vis a basket of 17 currencies, weighted according to their share in merchandise trade, with ±2¼% fluctuation bands. The basket was redefined in 1992, with the ECU given a weight of 76%, the US dollar 18%, and the Japanese yen 6%. The króna was devalued twice during this period, by 6% in November 1992 and by 7½% in June 1993. In September 1995, the fluctuation band was widened to ±6%, in response to the abolition of capital controls. The currency basket was also changed. The new basket contained 16 currencies, weighted by their share in Iceland's trade in goods and non-factor services.
1996-2000	Fluctuation of the króna within the bands increased as the foreign exchange market deepened and emphasis on price stability relative to exchange rate stability increased. Reflecting this, the exchange rate band was widened to ±9% in February 2000.
2001-2008	The exchange rate target was abolished in March 2001 and a formal 2½% inflation target adopted. The Central Bank was granted full independence in the application of its monetary policy instruments. The currency was allowed to move freely, with limited intervention in the foreign exchange market.
2008-	Following the financial crisis, and as a part of Iceland's IMF programme in 2008-2011, monetary policy emphasised exchange rate stability together with the inflation target as a key ingredient in re-establishing nominal stability and securing low and stable inflation. Active use of foreign exchange intervention in order to mitigate exchange rate volatility as it deems necessary to deepen the market or improve market efficacy has become an important part of the post-crisis monetary policy framework, dubbed "inflation targeting-plus", which also introduced the use of additional policy instruments such as capital flow management measures when needed. Decisions on the application of the Central Bank's monetary policy instruments are taken by the Monetary Policy Committee, which was established by law in 2009.

Monetary policy instruments

The Bank's principal monetary policy instrument is its interest rates on transactions with credit institutions. Other policy instruments include open market operations, decisions on minimum reserve requirements, foreign exchange market intervention, and transactions with Government securities to attain price stability objectives. Financial institutions subject to reserve requirements – commercial banks and savings banks – are eligible for access to Central Bank facilities. Icelandic branches of foreign financial institutions may also conduct transactions with the Central Bank. According to the Rules on Central Bank Facilities for Financial Undertakings, securities issued in Icelandic krónur by the Republic of Iceland are the primary instruments eligible as collateral for Central Bank facilities.

Financial institutions' regular transactions with the Central Bank can be divided into two categories: standing facilities and open market operations. Financial institutions may avail themselves of standing facilities at any time and on their own initiative. The facilities offered by the Central Bank are deposits and overnight loans against eligible collateral. The interest rate on overnight loans forms the ceiling of the Central Bank's interest rate corridor, while the current account deposit rate determines the floor.

The Central Bank's open market operations take place once a week. Since 2009, the Bank's counterparties have had abundant liquidity. From autumn 2009

through May 2014, the Bank offered 28-day certificates of deposit (CD) for sale; however, in May 2014 the Bank made modifications to its monetary policy conduct without changing the monetary stance. Instead of issuing CDs, the Bank offered two types of term deposits: seven-day term deposits and one-month term deposits issued at the beginning of each month. The objective of these changes was to enhance the effectiveness of liquidity management and to increase efficiency from the standpoint of the Bank's balance sheet. In order to increase liquidity in circulation and further strengthen monetary policy transmission, the Central Bank stopped offering one-month term deposits in May 2020.

The Central Bank's key interest rate – i.e., the rate that is most important in determining short-term market rates – may vary from time to time. As of this writing, the key rate is the rate on seven-day term deposits, owing to abundant financial system liquidity. The Central Bank offers overnight loans and opened a special liquidity window in January 2022 through which counterparties may take fourteen-day collateralised loans so as to preserve financial stability. Counterparties will be prohibited from taking loans if they simultaneously hold term deposits with the Bank. The Bank imposes minimum reserve requirements on entities subject to such requirements. These are divided into a fixed reserve requirement and an average maintenance requirement. Currently the fixed reserve requirement is set at 1% and, as of March 2020, the average reserve requirement is 0%.

In March 2020, just after the onset of the COVID-19 pandemic, the MPC announced that the Central Bank was prepared to begin direct purchases of Treasury bonds in the secondary market. In the Committee's opinion, the signal effects of the introduction of the programme and the limited bond purchases undertaken proved successful and prevented a rise in long-term Treasury yields when the pandemic struck, but the need for the measure proved less pronounced than was anticipated at the time. In August 2021, the MPC agreed that the Bank should stop submitting bids but would keep the tool at its disposal in case conditions warranted its use.

Financial stability

Policy framework for financial stability

In performing its role of promoting financial stability and a sound and efficient financial system, including domestic and cross-border payment systems, the Central Bank focuses on assessing risks facing systemically important financial institutions, identifying macro-financial imbalances, and securing safe and sound operation of payment and securities settlement systems. The Central Bank regularly analyses risks and threats to the stability of the Icelandic financial system in order to detect changes and vulnerabilities that could undermine financial stability. The Bank communicates its overall assessment to markets and decision-makers through the publication of its semi-annual *Financial Stability* report.

The Financial Stability Committee

The Financial Stability Committee takes decisions on the application of the Central Bank's financial stability instruments. The Committee's role is to assess developments and prospects for the financial system, systemic risk, and financial stability. It is also tasked with discussing and defining the actions deemed necessary at any given time in order to strengthen and preserve financial stability, and to this end, the Committee is required to direct comments to the appropriate Governmental authorities when warranted. In addition, the Committee is required to approve Governmental directives and take the decisions entrusted to it by law. It is also entrusted with deciding which supervised entities, infrastructure elements, and financial markets shall be considered systemically important and of such a nature that their activities could affect financial stability.

The Financial Stability Committee comprises the Governor, who chairs the Committee, the Deputy Governor for Financial Stability, the Deputy Governor for Monetary Policy, the Deputy Governor for Financial Supervision, and three non-Bank experts appointed by the Minister of Finance and Economic Affairs. The Committee is required to meet at least four times each year and to submit a written report on its activities to Parliament once a year. The Committee issues public statements after its regular meetings

Macroprudential policy

Macroprudential policy centres on safeguarding the stability of the financial system as a whole by limiting systemic risk and safeguarding financial sector resilience, thereby reducing the likelihood of endogenous financial shocks and mitigating the potential magnifying and propagating effect the financial sector can have on exogenous shocks. In order to achieve its macroprudential objectives, the Central Bank of Iceland is equipped with macroprudential instruments. These tools generally take the form of rules issued by the Central Bank, which can be directed either at financial institutions or at borrowers. For financial institutions, this includes rules on capital buffers, foreign exchange balance, liquidity coverage ratios, and net stable funding ratios. Borrower-based

measures include rules restricting loan-to-value ratios and loan-to-income or debt service-to-income ratios for consumer mortgages.

Decisions on the application of macroprudential tools are taken by the Financial Stability Committee. The Committee bases its decisions on an analysis of the position of the financial system, the financial markets, the economy as a whole, systemic risk, and resilience against potential shocks. The Central Bank also carries out macro-stress tests to assess resilience against adverse macroeconomic scenarios involving key risk factors.

Bank resolution framework

With the passage of the Act on Resolution of Credit Institutions and Investment Firms, no. 70/2020 (the Resolution Act), the Central Bank was entrusted with powers of resolution. This entails the authorisation to take decisions on resolution procedures and apply resolution measures in the case of credit institutions and investment firms that are failing or likely to fail; i.e., those that are unable to service their liabilities or are highly likely to be unable to do so.

Prudential regulation and supervision

Financial supervision and prudential framework

As a member of the European Economic Area (EEA), Iceland incorporates most of the EU financial services regulatory framework into national law. As Iceland's competent financial supervisory authority, the Central Bank, takes account of EU directives and regulations, as well as application and enforcement guidelines from the European financial supervisory authorities: the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), and the European Securities and Markets Authority (ESMA). Supervision of all prudential, business conduct, securities market, and anti-money laundering and terrorist financing measures in the Icelandic financial market is conducted by the Central Bank. To fulfil this role, the Bank carries out monitoring to ensure that the activities of regulated entities are in compliance with laws, regulations, rules, and company statutes governing such activities, and that they are consistent with sound and appropriate business practices.

Supervision is carried out in accordance with the Bank's risk-based approach, which defines the frequency with which key risk factors in financial entities' operations are examined. Each year the Central Bank publishes its *Financial Supervision* report, which explains how the Bank performed its supervisory duties during the previous year and provides information on key supervisory priorities for the coming year.

The Financial Supervision Committee

The Financial Supervision Committee (FSC) takes decisions entrusted to the Financial Supervisory Authority by law or Governmental directive. The Committee is authorised to entrust the Deputy Governor for Financial Supervision with taking non-major decisions.

The Financial Supervision Committee comprises the Deputy Governor for Financial Supervision, who chairs the Committee, the Deputy Governor for Financial Stability, and three non-Bank experts appointed by the Minister of Finance and Economic Affairs. When the Committee takes decisions on the adoption of rules of procedure and on the transfer of authority to the Deputy Governor for Financial Supervision, as well as decisions pertaining to systemically important financial institutions' capital, liquidity, and funding, the Governor of the Central Bank takes a seat on the Committee as its chair. The Financial Supervision Committee is required to submit a written report on its activities to Parliament once a year.

International reserves

One of the Central Bank of Iceland's legally mandated functions is to manage Iceland's international reserves. The Central Bank's international reserves enable it to achieve its goals and fulfil its duties under the Central Bank Act. The reserves mitigate the effects of external risks related to changes in access to foreign credit and fluctuations in capital flows to and from Iceland. In addition, they enable the Bank to help the Treasury meet its need for foreign currency and fulfil its foreign debt obligations. Adequate reserves also facilitate market confidence by ensuring that Iceland is able to service its foreign debt. Moreover, they can be used to support monetary policy and reduce excessive exchange rate volatility due to sizeable capital flows.

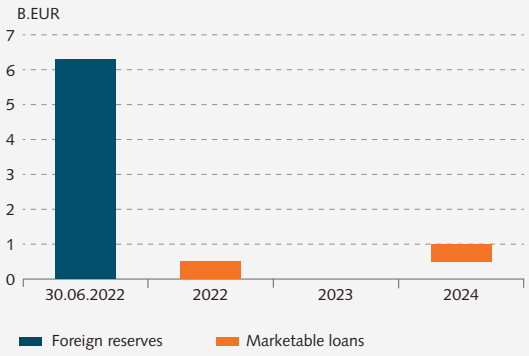
The size of the reserves is generally determined with reference to the scope of external trade, the monetary and exchange rate regime, regulatory provisions on capital movements and foreign exchange transactions, and Iceland's foreign liabilities. At any given time, the size of the reserves is also determined by the balance of payments outlook.

Over the past few years, the international reserves have remained relatively stable at around 6 billion euros, which is equivalent to 29% of GDP and close to 150% of the International Monetary Fund's (IMF) reserve

adequacy metric (RAM). The Central Bank intervenes in the foreign exchange market in order to mitigate short-term exchange rate volatility. During the COVID-19 pandemic in 2020 and 2021, the Bank also sold foreign currency to market makers on a regular basis to maintain liquidity and stability in the foreign exchange market. Weighing against outflows from the foreign reserves, the Republic of Iceland issued Eurobonds in 2020 and 2021. Furthermore, the IMF allocated special drawing rights (SDR) to member countries in 2021, resulting overall in small changes in the reserves. At the end of June 2022, the international reserves amounted to 6.3 billion euros.

Chart V-1

International reserves and repayment profile of Treasury foreign debt to 2024



Source: Central Bank of Iceland.

Box 6

Capital account liberalisation 2009-2021 and the new Foreign Exchange Act

In 2009, the year after the onset of the banking and financial crisis, Iceland's external liabilities soared to a record 970% of GDP, owing mainly to an extremely leveraged banking system. At that time, Iceland had been among the most heavily indebted countries in the world for some time. The large stock of domestic assets held by foreign investors meant that Iceland was faced with a balance of payments problem. As a result, it proved necessary to impose restrictions on movement of capital to and from Iceland in November 2008. These capital controls were based on the fundamental principle that movement of capital was prohibited unless explicitly authorised, whereas trade in goods and services was exempt from the controls unless explicitly prohibited. In the years thereafter, the authorities aimed to lift the capital controls as soon as possible. This took quite some time, however, and it proved necessary to tighten them several times. The capital controls were finally lifted in stages from 2015 onwards, culminating in a general liberalisation in March 2017. Even then, however, there remained some capital account restrictions pertaining to derivatives trading and so-called offshore krónur. Offshore krónur, which mainly consisted of highly liquid króna-denominated assets owned or held in custody by non-residents at the time the capital controls were imposed, were subject to the restrictions until March 2019, whereupon their owners were authorised to convert them to foreign currency.[1] In June 2021, with the passage of the new Foreign Exchange Act, no. 70/2021, the remaining capital controls were lifted.

Plans to lift the capital controls focused on resolving Iceland's balance of payments problem

The first capital account liberalisation strategy was introduced in August 2009, and the second one followed in March 2011. Both strategies aimed at resolving Iceland's balance of payments problem, which in the main was threefold. First of all, it entailed potential capital outflows due to offshore krónur, which equalled 35% of GDP at the end of 2009. Second, it involved potential outflows upon the settlement of the failed financial institutions' estates, as 40% of their assets were domestic, whereas 95% of claims against them were held by non-residents. The third part of the problem lay in resident entities' pent-up need to invest in foreign assets. The final capital account liberalisation strategy was presented in June 2015. It was based on the general approach taken by the International Monetary Fund (IMF) to capital account liberalisation and the fundamental objectives of maintaining sufficient foreign exchange reserves and minimising the risk of large capital outflows.

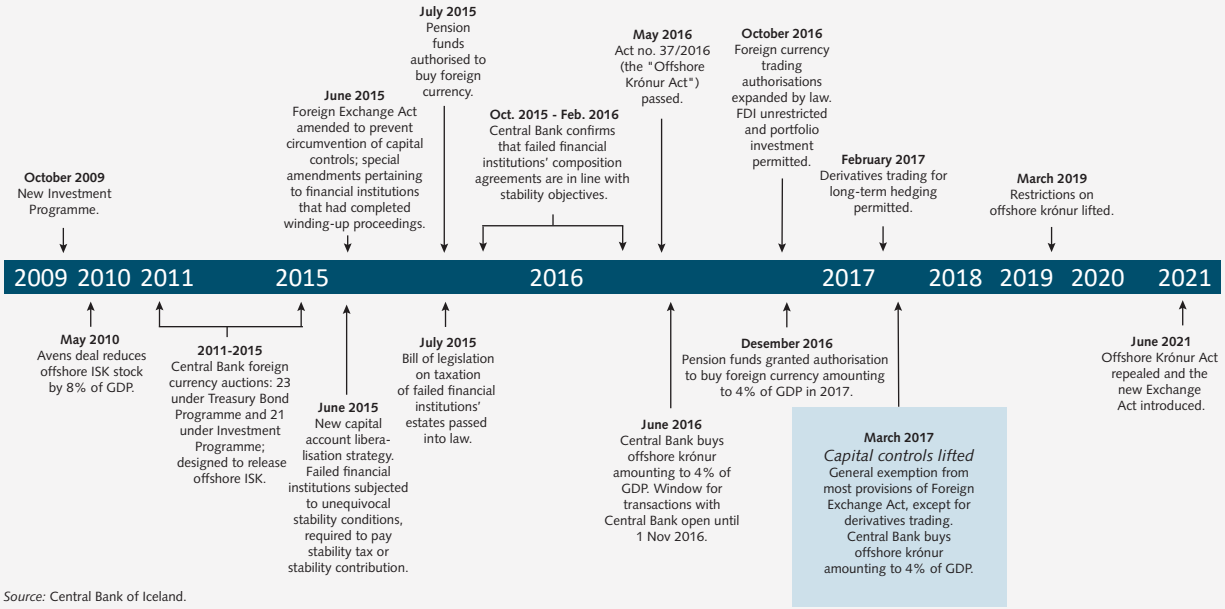
Stock of offshore krónur reduced to 14% of GDP in 2015 with auctions and targeted measures

The first step towards liberalisation was taken in October 2009 with the New Investment Programme. Under the Programme, investments undertaken on or after 1 November

1 A more detailed definition of offshore krónur can be found in Act no. 37/2016.

Chart 1

Liberalisation of capital controls



Source: Central Bank of Iceland.

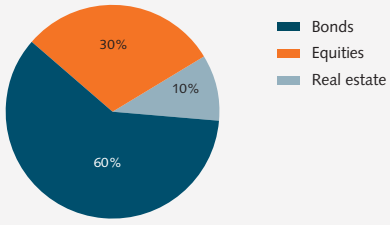
2009 using new inflows of foreign capital converted to Icelandic krónur were exempted from the capital controls.

In May 2010, the Central Bank finalised the so-called Avens deal, under which the Bank, acting on behalf of the Treasury, bought bonds from the Banque centrale du Luxembourg and then sold them on to domestic pension funds at a profit. This reduced the stock of offshore krónur by 8% of GDP.

The Bank began holding foreign currency auctions in May 2011. In these auctions, the Bank solicited bids for foreign currency and sold it directly to holders of offshore krónur, and simultaneously solicited bids from investors interested in buying króna-denominated Icelandic Treasury bonds in exchange for euros. This was called the Treasury Bond Programme. In February 2012, the first auction of offshore krónur was held under the New Investment Programme.

Chart 2

Composition of investments in auctions under Investment and Treasury Bond Programmes



Source: Central Bank of Iceland.

Capital inflows from auction participants had to satisfy certain requirements, mainly pertaining to the duration of the investment. The aim of the auctions was to thin out the stock of offshore krónur and attract long-term investment capital to Iceland. The majority of the capital that entered through the New Investment Programme was invested in bonds, and about 30% was invested in equities (Chart 2). Most of the funds were imported or exported via direct transactions with the Central Bank, so that currency flows in the interbank market for krónur do not reflect total currency flows over the period in question.[2] With the auctions and other measures, the stock of offshore krónur was reduced to 14% of GDP by the end of 2015.[3] The last auction under the Bank's Treasury Bond and Investment Programme was held in February 2015. By that time, capital inflows through the auctions totalled 262 b.kr., or 12% of year-2015 GDP, and the Central Bank bought 158 b.kr. With the passage of the Act on the Treatment of Króna-Denominated Assets Subject to Special Restrictions, no. 37/2016, in May 2016, owners of offshore krónur were separated out so as to facilitate the next steps in the liberalisation strategy. Owners of offshore krónur

2 The capital that entered via the Treasury Bond Programme was not routed through the interbank market for krónur, but half of the amount that entered via the Investment Programme was converted to krónur in the interbank market.

3 See, for example, the table summarising the main measures undertaken to resolve the balance of payments problem in the publication "Central Bank foreign currency auctions – Investment Programme and Treasury Bond Programme: The role of auctions in resolving Iceland's balance of payments problem" (in Icelandic), published on the Central Bank website in August 2019.

were authorised to invest in special Central Bank certificates of deposit (CBI2016) at 0.5% interest, or in Treasury bills. In June 2016, the Central Bank bought offshore krónur for the equivalent of 4% of GDP at an exchange rate 25% below the onshore rate, and from then until 1 November 2016, owners of offshore krónur were invited to conduct trades with the Bank at an even higher exchange rate.

Failed financial institutions' composition agreements confirmed at the end of 2015

The June 2015 capital account liberalisation strategy entailed that the failed financial institutions would be subjected to unequivocal stability conditions, on the basis of which they could choose from two options – a stability tax or a stability contribution – which would mitigate the adverse impact that distributions from the estates would have on Iceland's balance of payments. Special amendments were made to the Foreign Exchange Act in connection with the financial institutions that had concluded winding-up proceedings, and a bill of legislation on a stability tax was passed in July 2015. Thereafter, seven failed financial institutions applied for exemptions from the Foreign Exchange Act in connection with planned composition agreements with their creditors and the winding-up of their estates. The Central Bank determined that the composition proposals were in compliance with the Foreign Exchange Act, as well as satisfying the stability conditions. The composition agreements were approved by the District Court in December 2015, and the Central Bank granted exemptions from the Foreign Exchange Act shortly thereafter. With the composition agreements, the companies were declared insolvent and new holding companies were established on the basis of the old ones. The holding companies' role was to administer the assets to be liquidated. At the end of 2015 and early in 2016, an enormous amount of the failed financial institutions debts were cancelled, stability contributions were paid, and foreign liquid assets had been applied towards debts owed to their creditors. Iceland's external liabilities therefore declined from 560% of GDP in Q3/2015 to just over 190% of GDP in Q1/2016. The net international investment position improved markedly as well, from being negative by 330% of GDP to being negative by 3.9% of GDP at the end of Q1/2016. This concluded one of the most important chapters in the settlement of Iceland's 2008 financial crisis.

Major steps towards full liberalisation of capital controls on households and businesses taken in October 2016, and nearly all remaining controls lifted in March 2017.

Because of the importance of the pension funds to the Icelandic economy and in order to meet some of their pent-up demand prior to liberalisation, the funds were granted a special exemption from the Foreign Exchange Act in order to invest abroad, ahead of other domestic investors. From mid-2015 until the controls were lifted in March 2017, the pension funds bought foreign currency for 90 b.kr., or about 80% of the authorisation granted them.[4] In October 2016, the Foreign Exchange Act was amended so as to facilitate the liberalisation of controls on households and businesses. With the passage of those amendments, foreign direct investment was unrestricted and investments in foreign-denominated financial instruments authorised. Prepayment and retirement of loans was also permitted for the equivalent of 30 b.kr., purchases of up to one piece of foreign real estate per year were authorised, and various other restrictions were either lifted or eased. Furthermore, the 30 m.kr. maximum was raised to 100 m.kr. as of the beginning of 2017 and transfers of deposits were authorised up to that limit. When the Rules on Foreign Exchange took effect in March 2017, households, businesses, and pension funds were essentially unaffected by restrictions on movement of capital. From that time on, capital transfers for foreign exchange transactions, foreign investment, hedging, and lending transactions were permitted. In the main, the transactions that were still subject to restrictions are derivatives contracts for non-hedging purposes and foreign exchange transactions undertaken between residents and non-residents without the intermediation of a financial institution.

After liberalisation in March 2017, restrictions remained on offshore krónur but were largely lifted in March 2019

In March 2017, the Bank bought 112.4 b.kr. in offshore krónur at an exchange rate 15% below the onshore rate. At this point, the offshore stock had been reduced to 88 b.kr., or 3.5% of GDP. The restrictions on converting offshore krónur to foreign currency were lifted in March 2019. At that time the stock of offshore krónur totalled 80 b.kr., or just under 3% of GDP. When the new Foreign Exchange Act entered into force in 2021 following a comprehensive review of the previous Act, the last vestiges of the capital controls were removed with the repeal of provisions on offshore krónur. At the end of June 2021, the stock of offshore krónur totalled 1% of GDP.

4 At first, the authorisation for foreign currency purchases was granted for a few months at a time. By late 2016, Iceland's foreign currency position had improved markedly, and the likelihood of large-scale outflows following further liberalisation had diminished. The authorisation totalled 95 b.kr. for the period from mid-2015 through December 2016. The funds were granted increased scope for foreign investment with a 100 b.kr. authorisation for 2017. The funds' utilisation of the authorisation in 2017 is based on the first two months of the year, as the controls were lifted in March and the utilisation ratio assumes that the authorisation is spread equally over the entire year.

The new Foreign Exchange Act, no. 70/2021: A comprehensive review of the statutory framework for foreign exchange and full removal of capital account restrictions

With the passage of the new Foreign Exchange Act, no. 70/2021, the capital controls introduced in November 2008 were lifted in full. When the Act entered into force, the previous Foreign Exchange Act, no. 87/1992, was repealed, as were the Act on the Treatment of Króna-Denominated Assets Subject to Special Restrictions (also called the Offshore Króna Act), no. 37/2016, and various rules and regulations relating to the capital controls. This removed all remaining capital account restrictions pertaining to derivatives trading and offshore krónur. The Act did not make large-scale changes to the substantive rules that were in effect before its passage but was rather a simplification of the statutory framework for foreign exchange transactions. The fundamental principles were the same as before: foreign exchange transactions, cross-border movement of capital, and cross-border payments are unrestricted. Nevertheless, it is ensured that the Central Bank has at its disposal the measures needed to safeguard economic and financial stability if needed. These measures are of two types: on the one hand, preventative macroprudential policy instruments; and on the other, protective measures (controls) for use under extraordinary circumstances.

According to the Act, the macroprudential policy instruments are of three types. They are intended to prevent the build-up of risk that could jeopardise financial stability, and their application is intended to reduce the likelihood that it will be necessary to respond to severe disruptions to monetary and exchange rate stability by intervening with broad-based, costly measures such as capital controls. The first type of measure is the authorisation to impose special reserve requirements on inflows of foreign currency. The second type is the authorisation to adopt rules on credit undertakings' foreign currency-linked lending to borrowers that are unprotected against foreign exchange risk. The third measure is the authorisation to set rules imposing limitations on derivatives transactions where the Icelandic króna is used in a contract against foreign currency. Of the three instruments, only the one pertaining to derivative transactions is currently in effect, with the Rules on Derivatives Transactions, no. 765/2021. The Rules set limits on the total amount of such trading by domestic commercial banks in their derivatives books. These limits are intended specifically to prevent excessive speculation and position-taking in foreign exchange transactions that are generally considered conducive to undermining foreign exchange market stability in small economies.

The protective measures provided for under the Act entail authorising the Central Bank to set rules that could, among other things, restrict or halt specified categories of capital movements or cross-border payments for up to 60 days, as well as restricting foreign currency transactions and requiring the repatriation of foreign currency. This authorisation, which is also subject to ministerial approval, applies only in emergencies that entail a severe risk that financial stability will be jeopardised by unrestricted movement of capital, and when other measures cannot be taken.

The Act also contains provisions comparable to those in the previous law as regards intermediation in foreign exchange transactions and the obligation that certain parties submit notifications of foreign exchange transactions, cross-border movement of capital, and cross-border payments.

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