



# The Icelandic Economy

Current State, Recent Developments and Future Outlook

2018 edition



ICELAND CHAMBER  
OF COMMERCE

## **The Icelandic Economy**

Current State, Recent Developments and Future Outlook  
2018 edition

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### **About the Chamber**

The Iceland Chamber of Commerce (ICoC) is a non-governmental organization consisting of firms and individuals with the mission of improving the business environment in Iceland and increasing economic prosperity.



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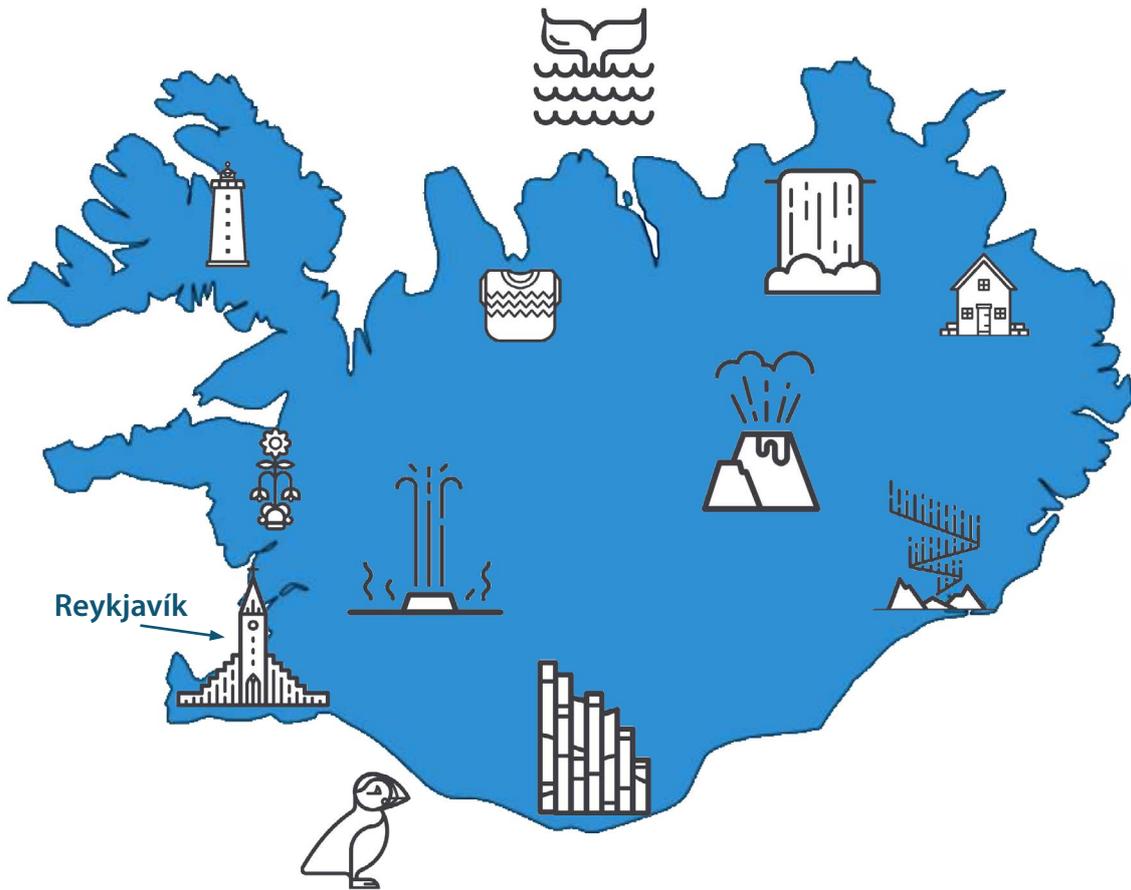
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# Iceland



## Did you know?

- The total land area is 103,000 km<sup>2</sup> and the population is 348,000
- Iceland's parliament, Althing (Alþingi) is the world's oldest legislative assembly, established in 930 AD
- Former president Vigdís Finnbogadóttir became the first democratically elected female head of state in 1980
- Iceland is a member of NATO but does not have any military forces
- Among European countries, Iceland had the lowest income inequality in 2016

## Key facts about the economy

- Iceland's Gross Domestic Product (GDP) per capita in 2017 was USD 52,000 (PPP)
- The currency is Icelandic Króna (ISK), USD 1= ISK 106 (1 August 2018)
- In 2017 unemployment was 2.8% and in June 2018 inflation was 2.6%
- Iceland's current account surplus in 2017 was 3.7% of GDP
- The main exports are tourism (42% of total in 2017), aluminium (17%) and seafood (16%)
- Government debt-to-GDP ratio in 2017 was 42%



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# Foreword

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This year, Iceland celebrates its centennial anniversary as a free and sovereign state. In 1918, Iceland was among the poorest states in Western Europe, with a GDP per capita equivalent to today's low-income countries. In 100 years it has increased by 1700%. As a result, today's Iceland is a high-income, matured and modern economy, which is covered in this report.

Iceland also commemorates another milestone this year, as 10 years have passed since we faced the deepest financial crisis the country has ever seen. The transformation of the economy over the past decade has obviously not been as dramatic as over the last century but the results are nevertheless impressive. Iceland is currently on track to its 8th consecutive year of strong economic growth, annual unemployment rate has remained below 3% for three years and Iceland is a net lender to the rest of the world.

In the aftermath of the financial crisis a lack of holistic overview of the Icelandic economy sparked off this report, now published for the 21st time. Now, The Iceland Chamber of Commerce (ICoC) publishes The Icelandic Economy report annually. Despite some structural changes to the report and a different focus each year, the aim has always been the same; to provide an objective overview of the current economic, business and political landscape in Iceland, recent events and developments, and future economic prospects.

There are three sections in this report. The first section primarily provides a broad overview of Iceland's current economic landscape. The second section gives an overview of the political landscape and then dives into more details of the main sectors of the economy as well the most recent developments. The categorisation used for the different sectors; financial, domestic, international and resource sector, is based on McKinsey & Company's report from 2012, "Charting a Growth Path for Iceland", whose publication was a guiding light in the restoration of the Icelandic economy after the financial crisis.

Lastly, the third section reflects on future scenarios, long-term growth prospects and the so-called four focus lenses, which ICoC will operate under in the coming years. In addition, outlook for infrastructure, a key ingredient for further prosperity, is covered.

Our hope is that this report will provide valuable insight into the Icelandic economy and the state of its current affairs.



**Ásta S. Fjeldsted**  
Managing Director  
Iceland Chamber of Commerce

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*Macroview in Þröng Iceland I*

# 1 Current landscape

## 1.1 Overview

Iceland's economy is an open high-income economy combining a free market economy with a welfare state which is sometimes referred to as the Nordic model. It is the smallest economy within the OECD, with last year's annual gross domestic production (GDP) of USD 24.6 billion (ISK 2,555 billion).<sup>1</sup> The size of the Icelandic economy is approximately 0.65% of the German economy and 0.12% of the United States economy.

Though the size of the Icelandic economy is comparatively small, with only around 348 thousand inhabitants, the aforementioned domestic

production places Iceland among the top ranked countries in GDP per capita, 52,000 USD (PPP) (Figure 1.1). Iceland, which in the first half of the 20th century was one of the least affluent countries in Western Europe, has over the last few decades consistently ranked among countries with the highest standard of living worldwide. Iceland GDP per capita rank fell in the aftermath of the financial crisis in 2008, but has climbed above its pre-crisis position ranking. In terms of GDP per capita, Iceland currently sits in 16th place globally.

The size of the Icelandic economy is approximately 0.65% of the German economy.

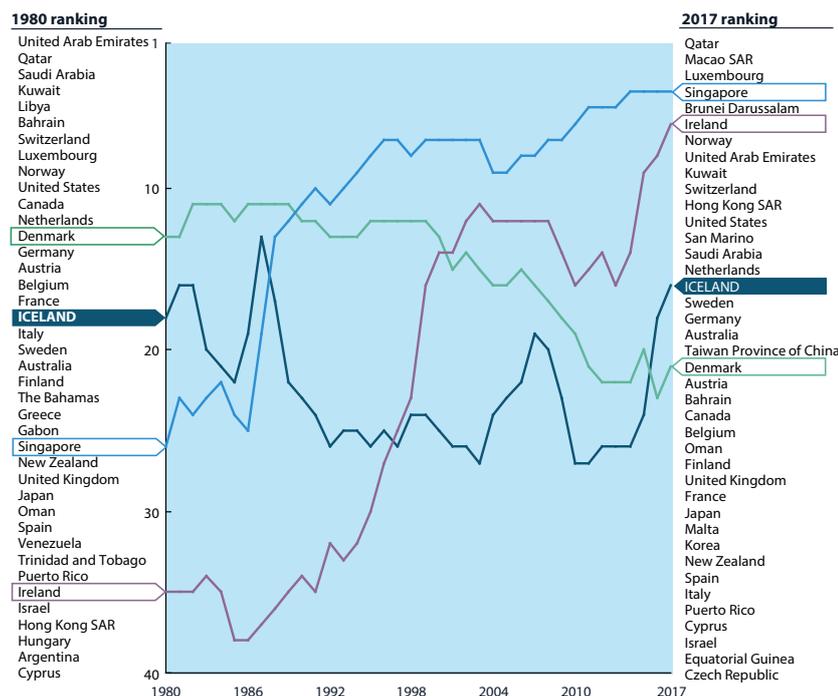
<sup>1</sup> Statistics Iceland, Central Bank of Iceland (USD 1 = ISK 103.77, average for the year 2017).

**Figure 1.1**

Iceland has a high standard of living and has recovered from the recession

### Country Rankings

GDP per capita, PPP adjusted<sup>1</sup>



In terms of GDP per capita Iceland currently sits in 16th place globally.

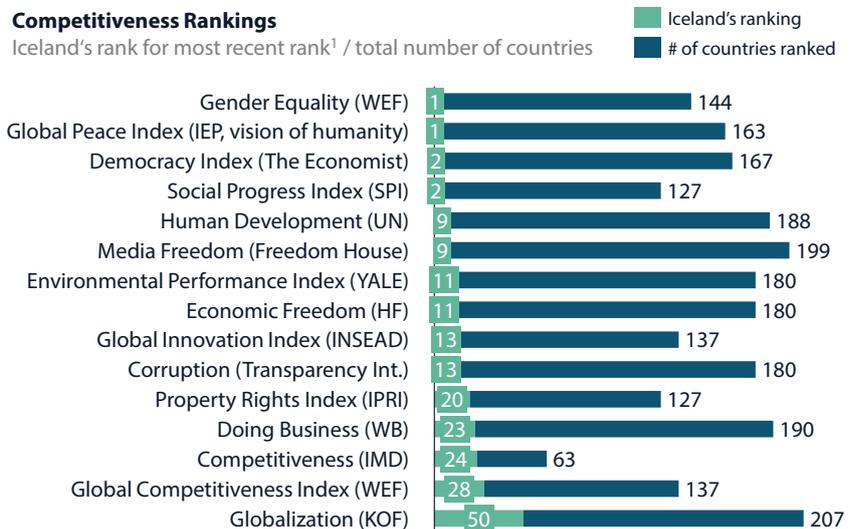
<sup>1</sup> Purchasing Power Parity

Sources: IMF World Economic Outlook; Iceland Chamber of Commerce

Iceland ranks number one in terms of gender equality and peace.

**Figure 1.2**

Iceland ranks highly in numerous competitive indices



<sup>1</sup> Sources obtained 18/6/2018.

Source: Respective websites

After a period of fast growth, the Central Bank of Iceland (CBI) predicts that the economy will continue to grow but at a slower pace.

Iceland's success in building a prosperous and globally competitive economy can be attributed to factors such as a strong institutional framework, skilled workforce, high degree of economic freedom, sound democracy and low levels of corruption. Various competitive indices reflect these qualities (Figure 1.2). Iceland ranks number one in terms of gender equality and peace. Female labour force participation is at 86%, which is significantly higher than elsewhere in Europe.<sup>2</sup> High labour force participation rate, the country's openness and the economy's flexibility are key strong-points of the Icelandic economy. For the peace index, Iceland has held its place as the most peaceful country in the world since 2008.

## 1.2 Domestic Economy

Small open economies are by nature often more volatile than larger economies. This is mainly caused by a lack of diversification and relatively large external influences.<sup>3</sup> This has caused significant business cycle fluctuations. Stronger macroeconomic foundations and improved economic

policy should contribute to a more stable business cycle.

### Strong Economic Growth

Leading up to the financial crisis in 2008, economic growth in Iceland was unparalleled among high income countries, averaging 6.5% per annum over a four year period. Conversely, during the two years following the financial crisis, the economy contracted more severely than in most other European economies (Figure 1.3).

Recently the Icelandic economy has experienced a robust economic growth, greater than neighbouring countries, as well as other high-income OECD countries (Figure 1.4). In fact, 2016 GDP growth in Iceland was highest among OECD countries and seventh highest globally.<sup>4</sup> Recently, the export sector, particularly the fast-growing tourist industry, has been the main growth driver (see tourism in chapter 2.4), along with strong contributions from business investment and private consumption. After a period of fast growth, the Central Bank of Iceland (CBI) predicts that the economy will continue to grow but at a slower pace. A large

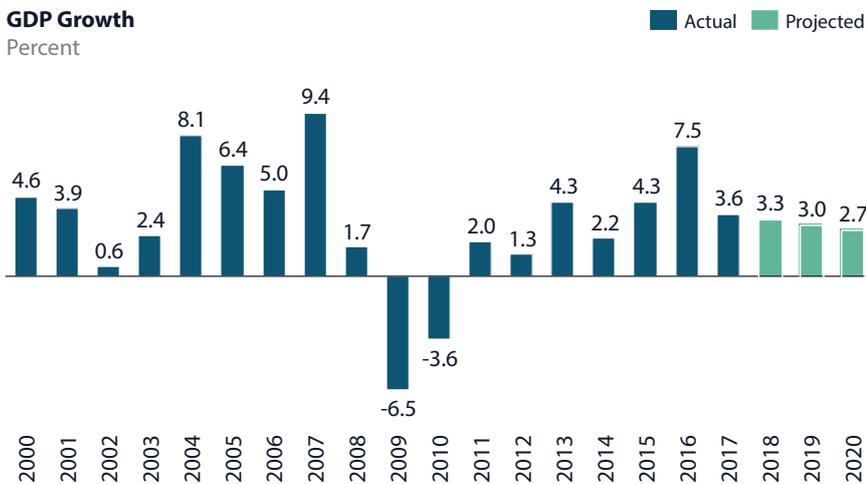
<sup>2</sup> World bank World Development Indicators (2018), female labour force participation rate.

<sup>3</sup> Pétursson, Breedon and Rose (2011): <http://faculty.haas.berkeley.edu/arose/BPR.pdf>

<sup>4</sup> International Monetary Fund, World Economic Outlook, April 2017.

**Figure 1.3**

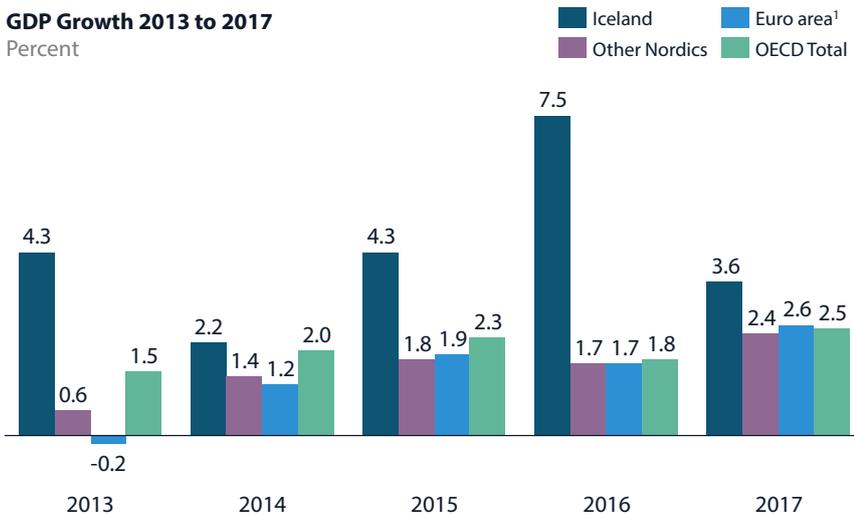
The economy has been experiencing robust growth. The current outlook is positive but achieving a soft landing will be a challenge



Sources: Statistics Iceland; Central Bank of Iceland (Monetary Bulletin 2017/2); Iceland Chamber of Commerce

**Figure 1.4**

Iceland's economy was one of the fastest growing in the world in 2016, but growth has since slowed



<sup>1</sup> The OECD time series used had 15 euro area countries: Austria, Belgium, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovak Republic, Slovenia and Spain.

Sources: OECD statistics; Iceland Chamber of Commerce; Statistics Iceland

Labour productivity increased by 3.5% on average in 2016 and 2017, which is high for high-income countries.

positive output gap and not as favourable external conditions have reduced growth from the peak of 2016. According to the CBI, GDP growth will continue to approach its long-term trend of 3%. The drivers being weaker growth in exports, private consumption and investment spending but offset by increased public sector activity.<sup>5</sup>

### Labour and Wages

The labour market continues to mature. The unemployment rate has gradually declined since the peak in 2010 and is now at pre-crisis levels (Figure 1.5). After the financial crisis, unemployment rate went from lowest measures of 2,3% in 2007 to 7.6% in 2010. Historically the structural unemployment rate has trended between 3.5-4%, and increased in the

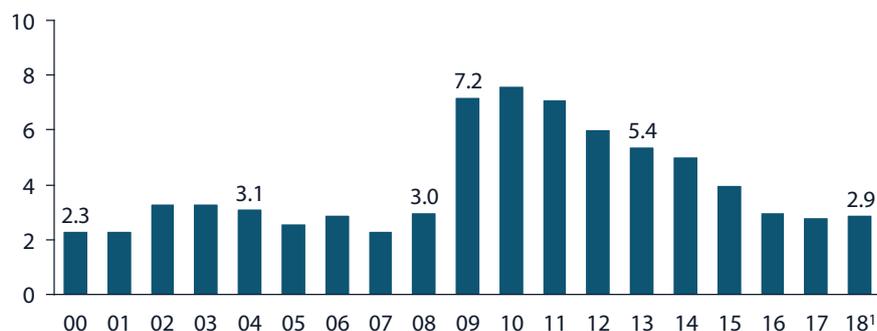
<sup>5</sup> Central Bank of Iceland, Monetary Bulletin (2018/2): [https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB\\_2018\\_2.pdf](https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB_2018_2.pdf)

**Figure 1.5**

Unemployment has gradually declined after a sharp rise in 2009 and is now near structural unemployment level

**Unemployment Rate**

Percent; yearly average



<sup>1</sup> First quarter.

Source: Statistics Iceland

years post-crisis.<sup>6</sup> Labour productivity increased by 3.5% on average in 2016 and 2017, which is high for high-income countries.

According to a 2017 study from the CBI, around 20% of Icelandic firms plan to recruit staff rather than downsize and 40% of firms consider themselves short-staffed.<sup>7</sup> That trend has somewhat reversed and the share of firms considering themselves short-staffed has been decreasing and is today 27%, which is still above historical average. With an economic slowdown and continued immigration, that trend could continue. The sector

currently in most need of staff is the construction industry.<sup>8</sup>

Wages have risen substantially in recent years following a number of collective wage agreements. Over 80% of the workforce is enrolled in labour unions, the highest portion globally in 2016.<sup>9</sup> Therefore, collective wage negotiations have a major impact on the economy.<sup>10</sup> Average nominal wage increased 11.4% in 2016 and 6.8% in 2017.<sup>11</sup> For comparison, average nominal wages increased 1.4% for the Nordic countries in 2017 (see more about the labour market in chapter 2.3).<sup>12</sup>

Wages have risen substantially in recent years following a number of collective wage agreements.

<sup>6</sup> OECD Economic Outlook No. 102, November 2017: <https://stats.oecd.org/Index.aspx?QueryId=61365>

<sup>7</sup> Central Bank of Iceland, Monetary Bulletin (2017/2): [www.cb.is/library/Skraarsafn--EN/Monetary-Bulletin/2017/May-2017/Monetary\\_Bulletin\\_2017\\_2.pdf](http://www.cb.is/library/Skraarsafn--EN/Monetary-Bulletin/2017/May-2017/Monetary_Bulletin_2017_2.pdf)

<sup>8</sup> Survey by Central Bank of Iceland and SA Confederation of Icelandic Enterprise, May 2018.

<sup>9</sup> OECD (2018), Trade union density in OECD countries.

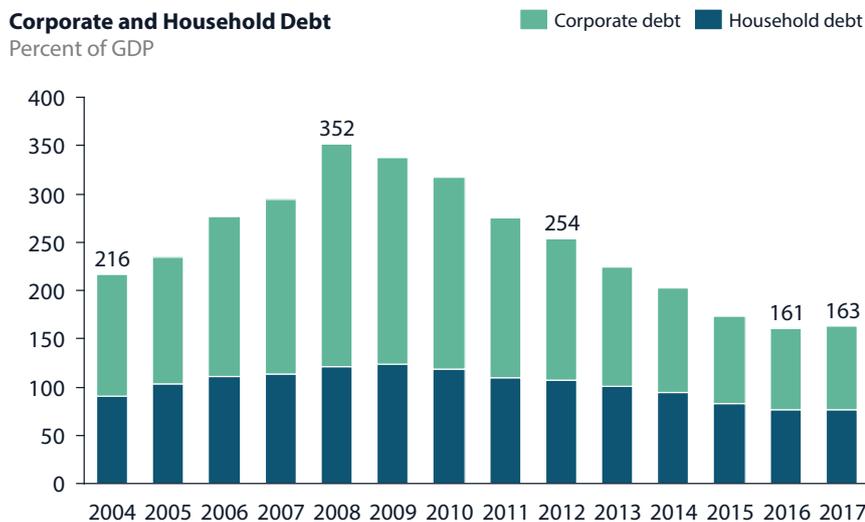
<sup>10</sup> SA-Business Iceland (2017).

<sup>11</sup> Statistics Iceland (2018), Wage index from 1989.

<sup>12</sup> OECD (2018), Average Annual Wages.

**Figure 1.6**

Private debt has declined significantly, especially corporate debt, and is now well below pre-crisis level. Debt ratios have slightly increased recently



Source: Central Bank of Iceland (Monetary Bulletin 2018/2)

Average nominal wage increased 11.4% in 2016 and 6.8% in 2017. In comparison, average nominal wages increased 1.4% for the Nordic countries in 2017.

**Debt Levels**

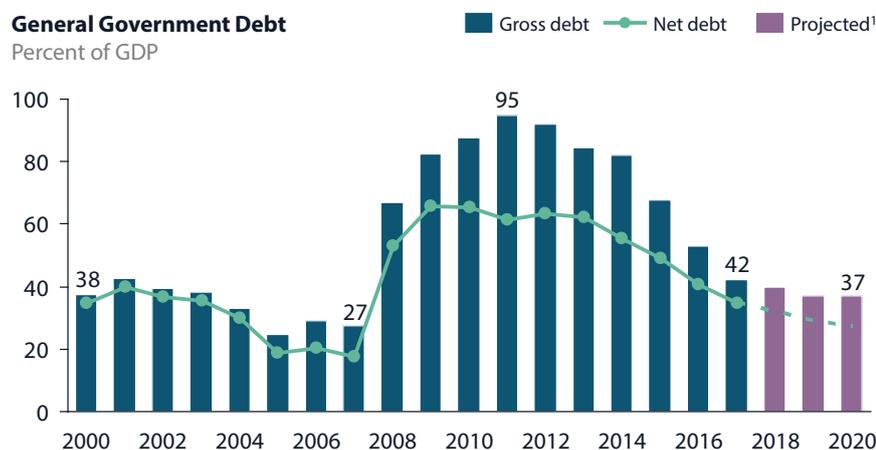
Alongside improved macroeconomic conditions, the Icelandic economy has been in a deleveraging phase. Following several consecutive years of credit expansion, culminating in the financial turmoil in Q3 2008, firms and households have been deleveraging. Debt ratios, especially corporate debt, have declined rapidly and are now at historically low levels. In 2017, private sector debt ratio rose on a year-to-year basis by two percentage points for the

first time since the crisis in 2008 (Figure 1.6). Corporate debt increased by 6.6% and Household debt increased by 4.9% over the same period.

Iceland’s public debt used to be low by international standards but surged in the aftermath of the financial crisis in 2008 (Figure 1.7). During the crisis, the government stepped in and recapitalised both the Central Bank and the large domestic banks. The IMF estimates that the cost of

**Figure 1.7**

Public debt has decreased significantly in recent years after having tripled in the years following the financial crisis



1 Predictions by the Central Bank of Iceland.

Source: Central Bank of Iceland (Economic Indicators 28 Mars 2018)

Debt ratios, especially corporate debt, have declined rapidly and are now at historically low levels.

In 2017 the budget surplus was down to 1.2% of GDP.

Today, government debt is approximately 42% of GDP which is a significant improvement from the peak of 2011 when it amounted to approximately 95% of GDP.

Currently, imported goods account for roughly 30% of the consumer price index (CPI).

this was at around 34% of GDP.<sup>13</sup> Additionally, tax revenues declined because of the economic contraction and welfare expenditures increased. All of this lead to a large budget deficit which persisted for a number of years following the crisis. As a result, some austerity measures were undertaken and public expenditures were reduced.

The government achieved a budget surplus in 2014 - the first time since the financial crisis. In 2016, the budget surplus amounted to 17% of GDP, a record result historically. However, this result is primarily due to one-off payments, so-called stability contributions, which represent a settlement from the failed banks estates' to fulfill the stability conditions (see 10 years since the financial crisis in chapter 2.2). In 2017 the budget surplus was down to 1.2% of GDP.

Today, government debt is approximately 42% of GDP, which is a significant improvement from the peak of 2011 when it amounted to approximately 95% of GDP. The government debt level in Iceland has thus fallen rapidly and is for example below that of Germany, Sweden and

Norway.<sup>14</sup> Furthermore, the CBI predicts the trend to continue in the next few years, given the current government's emphasis on further debt repayments and continued economic growth.

### Inflation and Currency

High inflation has long been a concern in Iceland. In March 2001, the CBI converted from an exchange rate targeting monetary policy and adopted an inflation-targeting policy with a 2.5% inflation target (see more in chapter 2.1). Since the adoption of the policy, inflation has exceeded this target, averaging 5%, but after 2014 inflation has been close to or below its target (Figure 1.8).

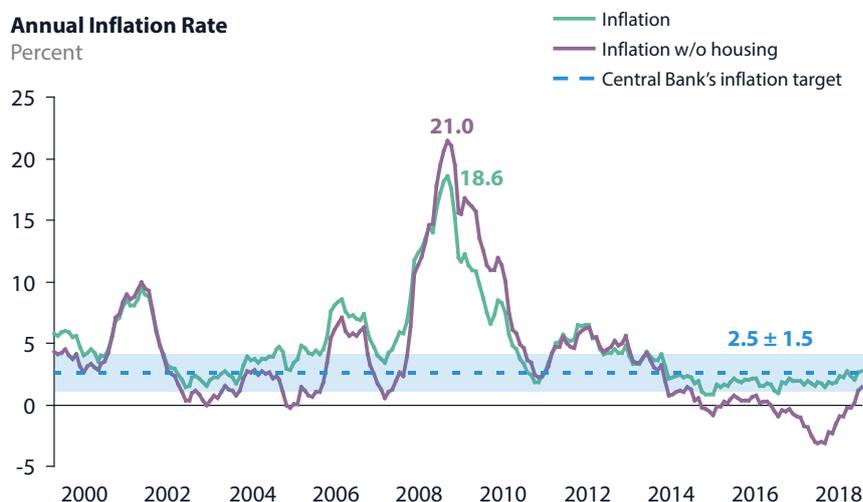
One of the characteristics of the Icelandic economy is the small and volatile currency, the Icelandic Króna, and the large impact of exchange rate fluctuations on inflation. Currently, imported goods account for roughly 30% of the consumer price index (CPI). Furthermore, the housing component, which includes housing prices, contributes 25% to the index. However, when housing is excluded, another trend emerges (see chapter 2.3 on housing).

13 Recoveries are however estimated at 43%, which highlights Iceland's successful economic recovery - International Monetary Fund (2016): <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Iceland-2016-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-43996>

14 International Monetary Fund (2018), World Economic Outlook.

**Figure 1.8**

Inflation as been near the Cental Bank's inflation target for over five years and had until March 2018 been below target for four years



Sources: Central Bank of Iceland; Statistics Iceland; Iceland Chamber of Commerce

In 2008 and the beginning of 2009, inflation skyrocketed. At that time the Icelandic Króna (here after Króna) had a major depreciation which led to rising prices of imported goods and services. During this period, the value of the Króna fell by 50%, resulting in inflation peaking at 18.6%. Since this spike, inflation has gradually declined and remained below the Central Bank's inflation target since early 2014.

After the significant nominal wage increases of recent years, the Central Bank along with market analysts expected inflation to take off. As a precaution, the Central Bank raised interest rates from 4.50% in June of 2015 to 5.75% in November the same year. However, thanks to a strengthening Króna, low global inflation etc., interest rates have been

lowered gradually and are now at 4.25% (Figure 1.9).

### 1.3 International Trade and Investment Position

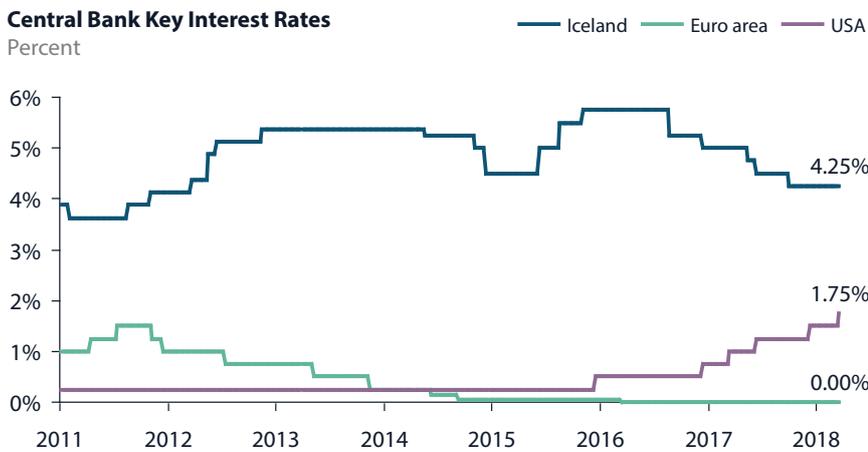
The small size of the domestic economy makes Iceland highly dependent on international trade. Since various goods and services are not produced domestically they need to be imported. To fund these imports, a strong export sector is required. Thus, international trade plays an important role when examining Iceland's economic performance.

#### Balance of Trade

Iceland's balance of trade has seen drastic changes this century. Historically, Iceland had a significant

**Figure 1.9**

Interest rates in Iceland are high compared to other developed economies



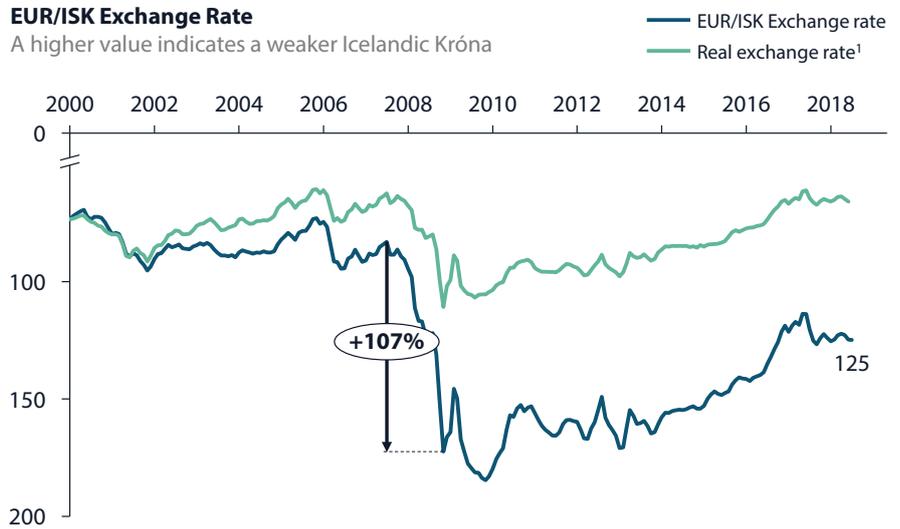
Sources: Central Bank of Iceland; Iceland Chamber of Commerce

Thanks to a strengthening Króna, low global inflation etc., interest rates have been lowered gradually and are now at 4.25%.

Historically, Iceland had a significant trade deficit with a corresponding current account deficit, which contributed to a build-up of record-high levels of external debt.

**Figure 1.10**

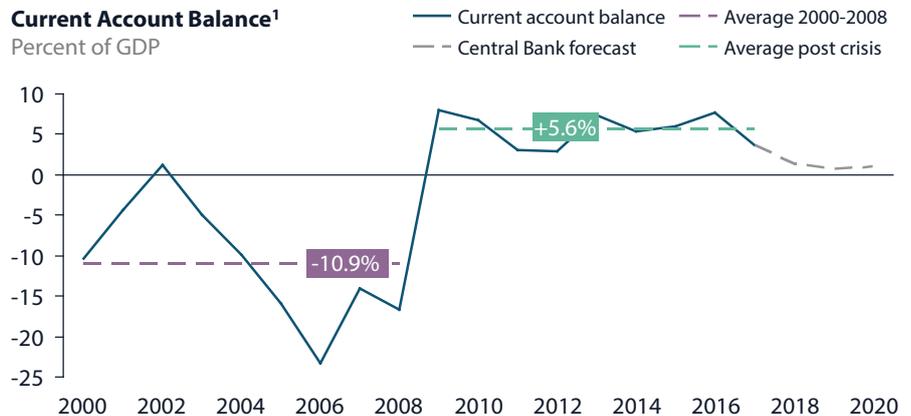
After years of high exchange rates the Króna depreciated dramatically during the financial crisis, but has now appreciated again



1 Inversed values, normalised at EURISK's initial value.  
Source: Central Bank of Iceland

**Figure 1.11**

The devaluation of the Króna balanced out a persistent current account deficit and Iceland has been running an underlying current account surplus since 2009



1 Underlying current account, excludes the effects of the failed banks' estates. The current account is a broader measure than trade balance and also takes into consideration factor income and financial transfers.  
Sources: Central Bank of Iceland; Iceland Chamber of Commerce

trade deficit with a corresponding current account deficit, which contributed to a build-up of record-high levels of external debt.<sup>15</sup> That has turned around over the last decade, with Iceland running a consistent current account surplus, largely due to a strong trade surplus.

This shift is largely explained by the Króna exchange rate (Figure 1.10). The Króna depreciated fast at the onset of the crisis in 2008 as investors pulled out of Iceland, reducing imports and boosting exports. Iceland's economic recovery, led by export growth (particularly in tourism, see chapter 2.4), helped the Króna to retain its

<sup>15</sup> Trade deficit is when imports of goods and services exceed exports.

value. Since late 2016, Iceland's real exchange rate has been back at similar levels as in the years before the financial crisis. The country is still running a trade surplus, instead of large deficits, highlighting stronger fundamentals.

In 2017, exports of goods and services amounted to around 47% of Iceland's GDP and the trade surplus was 4.1%.<sup>16</sup> The accumulated trade surplus in the past seven years following the financial crisis is equivalent to 49% of 2017 GDP, which is almost unprecedented in the country's economic history. This large trade surplus has contributed to a current account surplus, although not as significant as the trade surplus. The underlying current account surplus has averaged about 5.6% of GDP since the crisis (Figure 1.11).<sup>17</sup>

### Net International Investment

Iceland's historically negative net international investment position (NIIP) explains why the current account surplus has normally been smaller than the trade surplus.<sup>18</sup> Thus, a negative NIIP results in a net outward flow of

interest and dividends. Iceland's NIIP became progressively more negative in the last decade, reaching unsustainable levels before the 2008 crisis (Figure 1.12). After a restructuring of the banking system in the aftermath of the financial crisis and years of current account surplus, the position has now been reversed.

Today, the NIIP illustrates that Iceland's net external debt has not been as low in decades. Iceland has in fact gone from being a net borrower to a net lender to the rest of the world. The main driver of the improvement in 2015 and 2016 was a settlement made between the government and the failed banks' estates, the so-called stability contributions, which eliminated the balance of payment risk associated with the estates (see more on the stability conditions in chapter 2.2). The persistent current account surplus has additionally improved the NIIP by allowing larger repayments of foreign debt as well as debt write-offs which are associated with private sector bankruptcies. Since, the NIIP has remained relatively stable.

The accumulated trade surplus in the past seven years following the financial crisis is equivalent to 49% of 2017 GDP, which is almost unprecedented in the country's economic history.

Iceland has in fact gone from being a net borrower to a net lender to the rest of the world.

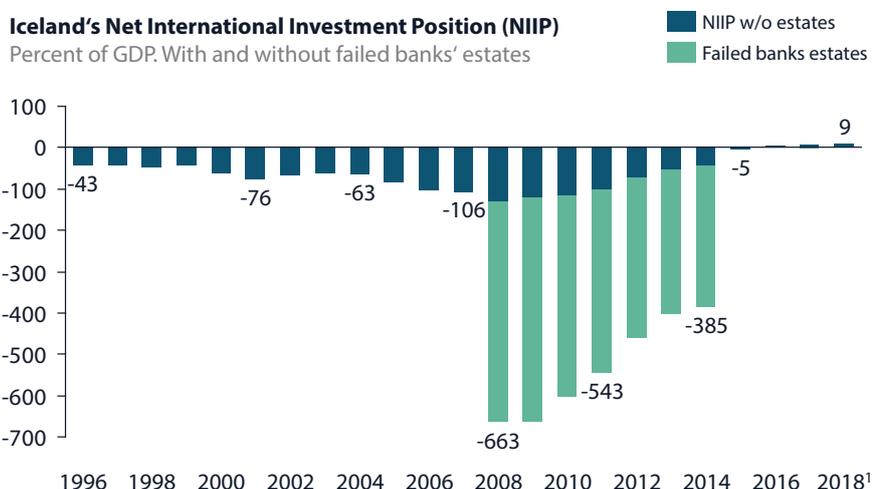
<sup>16</sup> Central Bank of Iceland, Economic Indicators, March 2018.

<sup>17</sup> Excludes the effects of the failed bank's estates.

<sup>18</sup> The NIIP measures assets owned by domestic entities abroad, minus domestic assets owned by foreign entities.

**Figure 1.12**

Iceland's net foreign position has experienced a remarkable turnaround after falling to negative 663% of GDP in 2008



<sup>1</sup> First quarter of 2018.

Source: Central Bank of Iceland; Iceland Chamber of Commerce

A key challenge for Iceland is to increase its exports and maintain a healthy current account to support an ongoing and sustainable growth.

### Export Foundations

A key challenge for Iceland is to increase its exports and maintain a healthy current account to support an ongoing and sustainable growth. Two decades ago the country was heavily dependent on fisheries with more than half of exports originating from the fishing industry (Figure 1.13). Since then, fish-related exports have remained relatively stable, as the industry is limited by the quantity it can harvest, to preserve the size and sustainability of the fishing stock.

In the past couple of decades, three additional export foundations have emerged: the aluminium industry, tourism and the international sector.

Around the new millennium, the international sector grew rapidly. The sector engages in international competition but is not reliant on natural resources (see chapter 2.5). Between 2005 and 2008, exports of aluminium took off following the construction of one new aluminium smelter and the expansion of another. Finally, in the last few years, Iceland has witnessed rapid growth in the tourism industry which now makes up two fifths of Iceland's total export (see chapter 2.4). Overall, Iceland's exports of goods and services have grown rapidly and become more diversified over the last two decades.

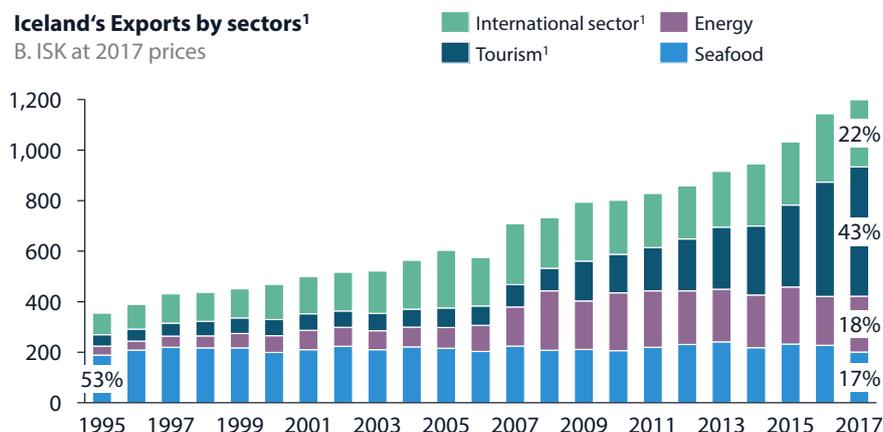
Overall, Iceland's exports of goods and services have grown rapidly and become more diversified over the last two decades.

**Figure 1.13**

Iceland has historically been dependent on fishing but three other export foundations have emerged. Today tourism is the largest export sector

#### Iceland's Exports by sectors<sup>1</sup>

B. ISK at 2017 prices



<sup>1</sup> All air transport is included in the tourism sector whereas 50% of passenger transport by air is usually included in the international sector. Agriculture and aquaculture, less than 2% of total, are not included.

Sources: Statistics Iceland; Iceland Chamber of Commerce

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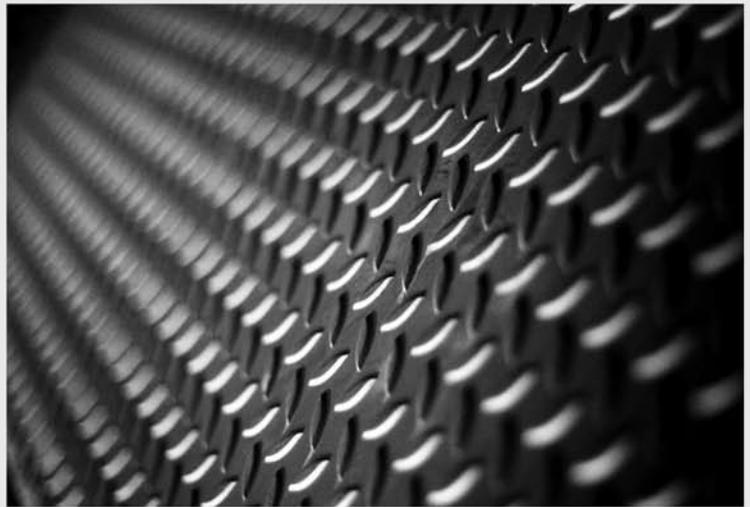
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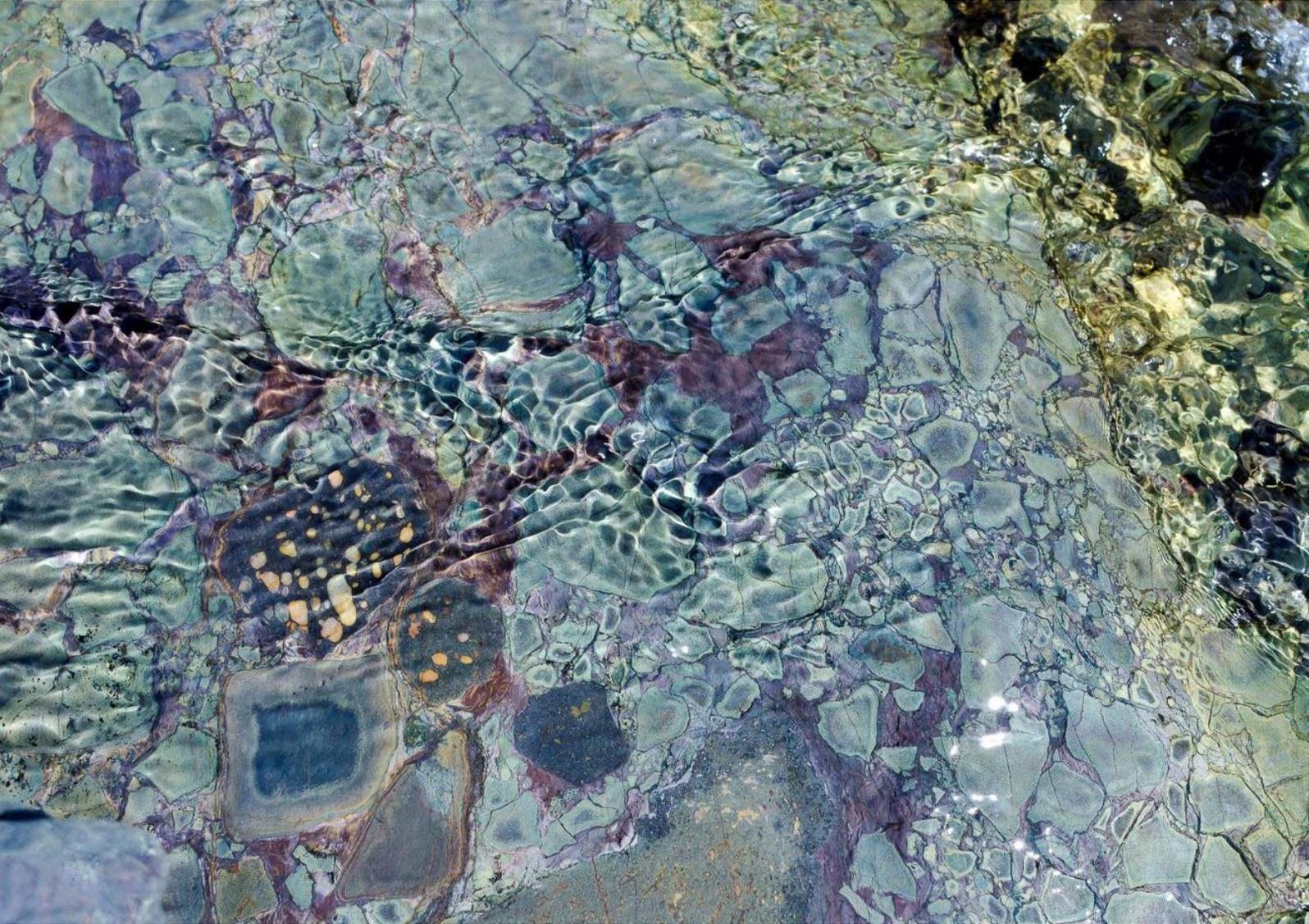
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*Macroview in Pröng Iceland II*

# 2 Recent developments

## 2.1 Political Landscape

On 30 November 2017, a new coalition government took office under the leadership of Prime Minister Katrín Jakobsdóttir. The coalition government consists of the three largest parliamentary parties in Iceland; the Left-Green movement, the Independence Party and the Progressive Party. Collectively, the three parties received 53% of the popular vote and 35 out of 63 parliamentary seats in a snap election which was called in the wake of a dissolution of the previous government, formed in January the same year.

Katrín Jakobsdóttir's government is therefore the fourth to hold power in the span of two years, underscoring the political instability of recent years. However, the newly formed

government is a grand coalition, in the sense that it is made up of political parties that span the full political spectrum from left to right. Its leaders have put emphasis on regaining political stability.

The government had widespread public support upon its formation with an approval rating of 74%. Since then, approval ratings have dwindled, as for previous governments, and stands at 54%.

### Government Agenda

The political agenda of the government sets out its priorities for the next four years. In addition to political stability, the government stresses social and economic stability as well as innovation, gender equality and environmental protection.

The government had widespread public support upon its formation with an approval rating of 74%. Since then, approval ratings have dwindled, as for previous governments, and stands at 54%.

**Figure 2.1**

A new government spanning the full political spectrum from left to right was formed in November 2017



Copyright: Mbl/Eggert Jóhannesson

In addition to political stability, the government stresses social and economic stability as well as innovation, gender equality and environmental protection.

Moreover, it has declared its intention of strengthening relations with labour market stakeholders ahead of a major bargaining round which will commence at the end of 2018 (see more about the labour market in chapter 2.3). Since the current government has only been in office for a few months, their political agenda has yet to be fully tested. However, the past months have provided some indication on previously mentioned focus and compromises on topics these different parties disagree on, such as tax policy.

In 2015, Iceland's parliament passed a law requiring the acting government

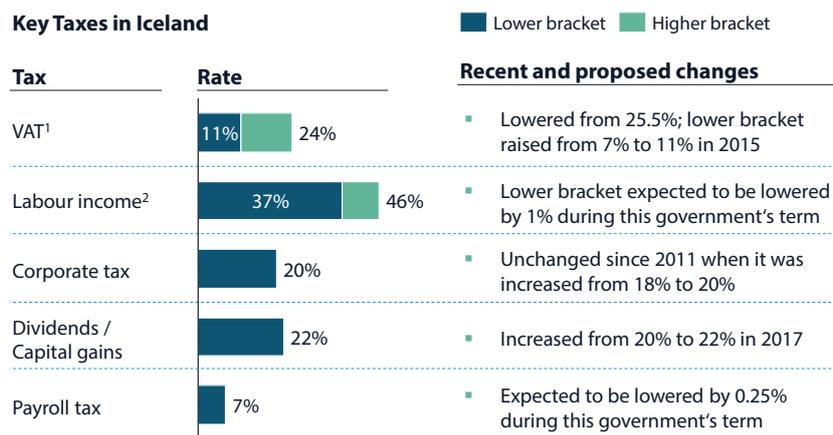
to set out a 5-year fiscal strategy plan every year, a rolling 5-year budget, so to speak. Every year, the fiscal plan is reassessed and updated before it gets proposed to parliament.

Parliament has approved a fiscal plan for 2019-2023, acting as a guideline for future spending and tax policy of the government. Continued economic growth and lower debt are expected to provide fiscal latitude for lower taxes as well as increased infrastructure investment and public services expenditures. However, central government public consumption is expected to remain

Central government public consumption is expected to remain constant, relative to GDP over the next five years, at around 11.2%.

**Figure 2.2**

The Icelandic tax system relies heavily on consumption and labour income



<sup>1</sup> Consumption taxes fall into two brackets, the lower being 11% which includes e.g. tourism related activities, media, books, and groceries; the higher 24% which is the general rate; some service is exempt from consumption taxes, such as health service, public transport and schools.

<sup>2</sup> Income taxes are divided between two brackets, the lower being 36.94% for the first ~895 thousand ISK of an individual's monthly income, and the higher being 46.24% for income above ~895 thousand ISK.

Sources: PwC; Directorate of Internal Revenue; Finance Ministry and Economic Affairs; Iceland Chamber of Commerce

constant, relative to GDP over the next five years, at around 11.2%.<sup>1</sup>

Amongst planned changes in the tax system are gradual lowering of the individual income lower bracket, by one percentage point, in stages over the next five years; to lower the payroll tax by at least 0.25 percentage points and a reduction of the special bank tax from 0.376% to 0.145%.<sup>2</sup> Moreover, the cap on R&D refunds is to be abolished in the beginning of 2019. Carbon tax on fossil fuel which was increased by 50% this year will further increase by 10% in 2019 and another 10% in 2020.

An overview of Iceland's main taxes can be seen in Figure 2.2.

Whilst the 5-year plan has been approved, the national budget proposal is not put forward until September of each year. Changes proposed in the 5-year plan are thus not fully implemented until the actual budget is set.

### A Forward Looking Government

Since its inception, the government has claimed that it seeks to formulate and build consensus on policy proposals with a longer time horizon

<sup>1</sup> Fiscal Plan 2019-2023 – Ministry of Finance and Economic Affairs

<sup>2</sup> The bank tax is levied on the total debt of banks above ISK 50 billion.

than previous governments' policies. In part, to foster political stability, but also to position the nation better to meet the challenges and opportunities of technological changes. In its first few months the government has therefore appointed a number of policy committees, tasked with forming policy proposals in a given field. Four major long-term agendas are in the works (Figure 2.3).

Additionally, the minister for foreign affairs has put forth 151 proposals for reforming the foreign service to face the challenges of an ever-changing world. A large share of the proposals have already been implemented and the Foreign Ministry estimates that 60% of

them have been carried out as of June 2018.<sup>3</sup>

### Municipalities

Municipalities in Iceland govern zoning and planning and provide a number of services. Those include kindergartens, primary education, waste management, public transportation, public housing and some healthcare as well as social services. The total number of municipalities is 72 and their expenditures are 13% of GDP, making them a large player in the Icelandic economy.

Municipal elections took place in May 2018 as they do every four years. In most of the larger municipalities the

<sup>3</sup> Icelandic Foreign Policy 2018: <https://www.stjornarradid.is/lisalib/getfile.aspx?itemid=3306f011-4ec8-11e8-9428-005056bc4d74>

**Figure 2.3**

The current government is aiming for a future oriented long-term policy

#### Four Major Long-term Agendas are in the Works

Forthcoming policy proposals

-  ■ Comprehensive innovation policy until 2030

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-  ■ Whitepaper on the future of the financial system

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-  ■ Education agenda until 2030

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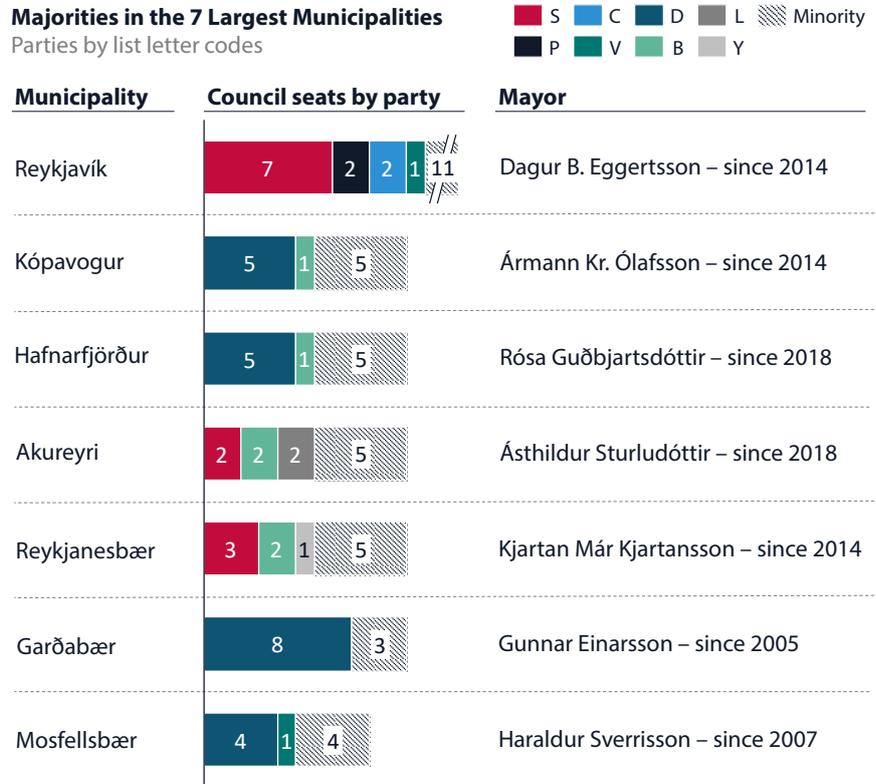
-  ■ Carbon-neutral Iceland by 2040

Sources: Iceland Chamber of Commerce, corresponding ministry websites

Since its inception, the government has claimed that it seeks to formulate and build consensus on policy proposals with a longer time horizon than previous governments' policies.

**Figure 2.4**

Most mayors in the largest municipalities have served longer than one term



1 S – Social Democratic Alliance, C – Reform Party, D – Independence Party, P – Pirate Party, V – Left Green Movement, B – Progressive Party, L – L-list, Y – Direct way.

Sources: Municipality websites

results signalled stability as a majority of the mayors held their posts (Figure 2.4). In the capital of Reykjavik the Reform Party joined the majority from the previous term to form a new majority under the leadership of Dagur B. Eggertsson which had served as mayor since 2014.

### European and International Relations

Iceland has been a member of the North Atlantic Treaty Organisation (NATO) since its founding in 1949, even though it has no military. It has also been a member of the European Free Trade Association (EFTA), since 1970, and entered the European Economic Agreement (EEA) in 1994. Furthermore, the country is a member of the Schengen area. In essence, Iceland's membership in these institutions can be seen as the cornerstones of Iceland's foreign policy, although it carries out

25 diplomatic missions in 21 countries of the world, including Russia, India and China.

Iceland is not a member of the European Union. The country did apply for member status in 2009 but the negotiations were halted in 2013 and unilaterally terminated by Iceland in 2015. The current government does not plan on resuming negotiations.

In recent years, trade and access to international markets have been given more weight in the government's foreign policy. In 2013, Iceland became the first European country to sign a free trade agreement with China. Over the years 2015-2017 tariffs were removed on essentially all goods, apart from agricultural products, to promote competitiveness and increased trade. Furthermore, Iceland has, through its EFTA membership, signed five free trade agreements in the last five years.

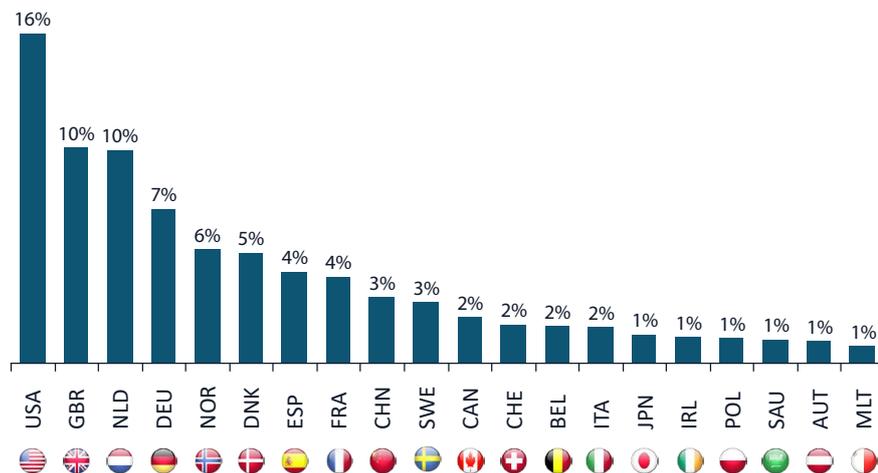
Over the years 2015-2017 tariffs were removed on essentially all goods, apart from agricultural products, to promote competitiveness and increased trade.

**Figure 2.5**

Iceland relies chiefly on American and European markets for external trade

**Iceland's Largest Trading Partners**

Percent of total trade in goods and services in 2016



Source: Statistics Iceland, Iceland Chamber of Commerce

As a small nation, Iceland is heavily dependent on international trade, and a rule based system for conducting it. Therefore, the recent tensions in international trade relations are worrisome. The direct impact of American tariffs on aluminium and steel is expected to be fairly limited as Iceland's aluminium smelters export almost entirely to Europe and are exempt from EU tariffs. The indirect impact of a global trade dispute could, however, adversely affect the country's trade outlook. To what extent, remains to be seen. As figure 2.5 illustrates, the United States is Iceland's single largest trading partner. Nonetheless, the European Union states combined, surpass the USA.

In June 2018, the government announced that consensus had been reached among western states that Iceland will replace the United States in the United Nations Human Rights Council. Consequently, it is expected that Iceland will be the sole country standing for the seat left vacant by the United States withdrawal from the council.

In 2019, Iceland will further assume presidency of the Arctic Council, which is the chief body for Arctic cooperation. Eight states are members of the Arctic council, and an additional 13 have observer status. Iceland is an important stakeholder in the Arctic and it's widely expected that issues regarding the Arctic will become more prominent as time passes, with opportunities such as new shipping routes opening to East-Asia.

**Monetary Policy - Reforms Ahead**

The Central Bank of Iceland's (CBI) principal objective since 2001 has been to promote price stability with a 2.5% inflation target. The success of achieving that target was limited until 2014 but since then inflation has on average been close to and below target (Figure 1.8). The inflation target regime has evolved over time and after 2008 the Central Bank moved to a broader monetary policy framework coined „inflation targeting-plus“ with more intervention in the foreign exchange market, macroprudential tools, controls on some capital inflows and other adjustments.<sup>4</sup>

In 2019, Iceland will further assume presidency of the Arctic Council, which is the chief body for Arctic cooperation.

The Central Bank of Iceland's (CBI) principal objective since 2001 has been to promote price stability with a 2.5% inflation target.

<sup>4</sup> See presentation on Monetary Policy in Iceland by CBI staff for more details

Some changes might be underway. In March 2017 a three-person panel was appointed to evaluate Iceland's monetary policy framework.

The panel recommended that the CBI should stick to current policy arrangement and not peg the Króna to another currency on the basis of keeping the CBI as a lender of last resort.

The monetary policy has often been a subject of rigorous debate in Iceland. Discussions surrounding the suitable interest rate for the economy, set by the Monetary Policy Committee, are common as interest rates have historically been high compared to other developed economies (Figure 1.9). Furthermore, the future of an independent floating currency has been a topic of debate. Options such as joining a monetary union (as was discussed during the EU application process in 2009) or linking the exchange rate by a currency board, have been discussed intensively in recent years. Iceland's current government intends to keep the Icelandic Króna as an independent floating currency.

Some changes might be underway. In March 2017 a three-person panel was appointed to evaluate Iceland's monetary policy framework. The aim was to identify a framework best suited to promote economic and financial stability in Iceland in the long run. The panel was to look at a framework for a monetary policy for an inflation-targeted, floating, independent currency and to address the question

whether pegging the exchange rate would be a preferable solution.

In June 2018, recommendations from the panel were published. The main recommendations are prioritising financial stability over price stability, ensuring the CBI's sole responsibility, excluding housing prices from the inflation targeted CPI and appointing two deputy governors, one who focuses on financial stability and the other on monetary policy. The panel recommended that the CBI should stick to current policy arrangement and not peg the Króna to another currency on the basis of keeping the CBI as a lender of last resort.

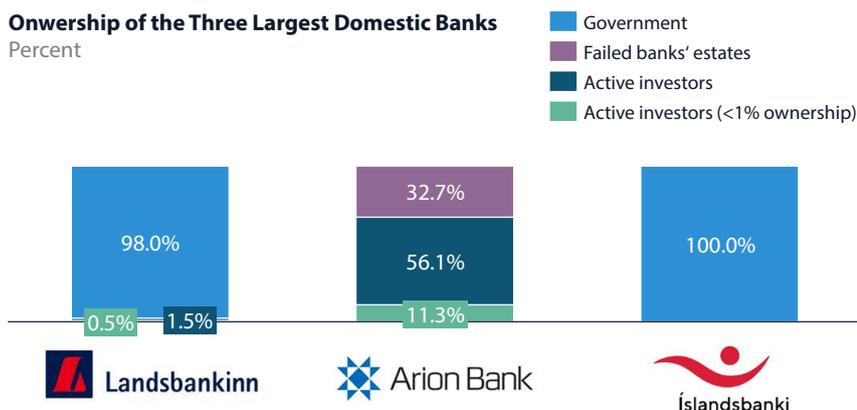
Amongst other recommendations was one to abolish the special reserve requirement (SRR, see chapter 2.2) and aim for a free flow of capital. For this, the CBI might need to extend its macroprudential instruments. Recently, the CBI's use of the SRR as a monetary tool has been a topic of local debate. One of the reasons the panel recommends a total abolishment of the instrument, is that the use of policy tools such as the SRR is generally only permitted "temporarily" under EEA membership.<sup>5</sup>

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<sup>5</sup> For further information about the evaluation of the panel:  
<https://www.government.is/news/article/?newsid=8a320626-68c4-11e8-942c-005056bc530c>

**Figure 2.6**

The majority of Iceland's "Big Three" banks are in governmental ownership



Sources: The banks' webpages; Iceland Chamber of Commerce

## 2.2 Financial Sector

The Icelandic financial system underwent major changes during and following the financial crisis of 2008. Below, an overview of the system is provided, as well as a description of the current developments in capital markets and in the availability of foreign credit.

### The Banking System

The Icelandic banking system consists mainly of three local universal banks: Íslandsbanki, Arion Bank and Landsbankinn, amounting to more than 95% of the system's total assets. Other banks are Kvika (primarily an investment bank), and small savings banks, as well as a few smaller financial institutions.

Most of the banking system is still owned by the government (Figure 2.6), as a result of the financial crisis (see text box on page 37). Íslandsbanki was, for instance, acquired by the government to fulfil the "stability conditions" of the failed bank estates in 2016.

Today, according to the Icelandic State Financial Investments (ISFI), which controls the state's holdings in Íslandsbanki and Landsbankinn, intentions are to decrease the government's stake. ISFI aims to sell all shares in Íslandsbanki and keep 34-40% of Landsbankinn's shares. Those sales are set to take place in the coming years when economic and financial circumstances are favourable. The same prerequisites were set for

the sale of the state's holdings in Arion Bank, which the government sold its 13% stake in, in February.<sup>6</sup>

Iceland's banking system has had a strong recovery, reflected for instance in rising credit ratings. In light of that, after long preparation, a 29% share in Arion Bank was sold last June in an IPO by foreign investors and Kaupthing, the failed bank's estate. Consequently Arion Bank went public, being the first major Icelandic bank to do so since the financial crisis. The bank was listed at both NASDAQ Iceland and NASDAQ Sweden stock exchanges.

### Capital Controls All but Abolished

Following the financial crisis of 2008, capital controls were introduced as a temporary measure to prevent continued dramatic outflow of capital. Such outflows could have resulted in a complete collapse of the Króna, severely destabilising the economy. The controls were a part of a program set out by the Icelandic government and the International Monetary Fund (IMF), aimed at restoring economic and financial stability in Iceland. Capital outflows for trade in goods and services and capital inflows were still permitted. Controls on capital outflows have now been lifted but some controls on capital inflows with a special reserve requirement (SRR) were put in place in 2016.

A capital account liberalisation strategy was presented in 2015, suggesting the easing of the capital controls in several steps. After several

The Icelandic banking system consists mainly of three local universal banks: Íslandsbanki, Arion Bank and Landsbankinn, amounting to more than 95% of the system's total assets.

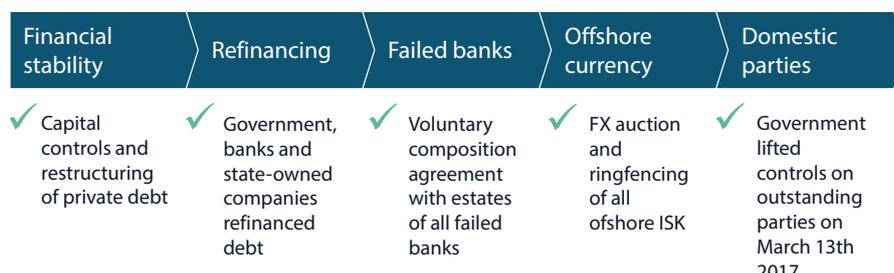
After several exemptions from the capital controls were made over the years, controls on individuals, firms and pension funds were successfully lifted in 2016 and 2017 with the last step taken in March 2017.

<sup>6</sup> Ministry of Finance and Economic Affairs (2017): [https://www.government.is/media/fjarmalaraduneyti-media/media/frettatengt2016/The-icelandic-state\\_s-ownership.pdf](https://www.government.is/media/fjarmalaraduneyti-media/media/frettatengt2016/The-icelandic-state_s-ownership.pdf)

**Figure 2.7**

The capital controls on domestic parties have been lifted after a long process

**Action Plan for Lifting Capital Controls since 2008**



Source: Iceland Chamber of Commerce

exemptions from the capital controls were made over the years, controls on individuals, firms and pension funds were successfully lifted in 2016 and 2017 with the last step taken in March 2017.<sup>7</sup> The aforementioned “stability contributions”, agreements with the creditors of the failed banks’

estates, were finalised in early 2016, reducing the balance of payments risk associated with payments to foreign creditors (Figure 2.7). However, one significant capital control measure remains since 2008, that is foreign currency derivatives trading for other purposes than hedging is not allowed.

<sup>7</sup> Ministry of Finance and Economic Affairs: <https://www.government.is/news/article/?newsid=64a07c97-fb8c-11e7-9423-005056bc4d74>

## 10 Years Since the Financial Crisis

After few years of extraordinary growth, the Icelandic banking system hit a wall in 2008, when all three of Iceland’s major commercial banks, Glitnir, Landsbankinn and Kaupthing, collapsed within the space of a week. The government feared a complete financial meltdown and had no way of rescuing the banks. The reason being that their combined balance sheets amounted to ISK 14 trillion in total, 11 times the GDP of the country at that time. The government’s solution was therefore to pass emergency legislation on October 6th 2008 that granted deposits priority over other claims. Furthermore, it allowed the Icelandic Financial Supervisory Authority to transfer domestic assets and liabilities from the distressed banks into new and functioning domestic banks. The government provided equity for Landsbankinn, the largest commercial bank, but ownership of the other two banks was mostly transferred to the failed banks’ estates following an agreement with the government.

### The So-Called “Stability Conditions” and “Stability Contributions”

In June 2015, the government introduced a solution to the failed bank’s estates, which would have risked economic and financial stability if exempted from capital controls, due to their size. The estates needed to contribute so called “stability contributions” by giving up assets in order to fulfil the “stability conditions”. The purpose of this settlement was to neutralize the balance of payments threat, that would arise when capital controls were lifted on the failed banks estates. This was also done to repay foreign creditors and in part to unwind legacy of the financial crisis from the new banks’ balance sheets.<sup>1</sup>

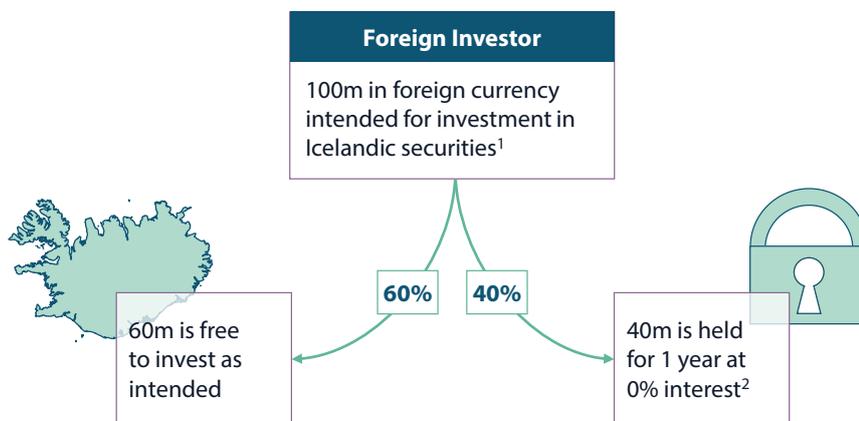
<sup>1</sup> For more details on the settlement see „Settlement of the failed bank estates“ in the IMF’s Iceland country report 2016:([www.imf.org/external/pubs/ft/scr/2016/cr16179.pdf](http://www.imf.org/external/pubs/ft/scr/2016/cr16179.pdf)). Also the Central Bank of Iceland’s 2015 memorandum on the „Settlement of the failed financial institutions on the basis of stability conditions: impact on the balance of payments and financial stability“: [www.cb.is/library/Skraarsafn---EN/Capital-control-liberalisation/AssessmentOfPreliminaryCompositionProposals.pdf](http://www.cb.is/library/Skraarsafn---EN/Capital-control-liberalisation/AssessmentOfPreliminaryCompositionProposals.pdf)

**Figure 2.8**

A new measurement was introduced in 2016 to reduce volatile capital inflows

**Iceland's Capital Flow Instrument, The Special Reserve Requirement (SRR)**

Illustrative



Since the reserve requirement is only effective a year from entry, it has diminishing effect on the average return for long-term investors.

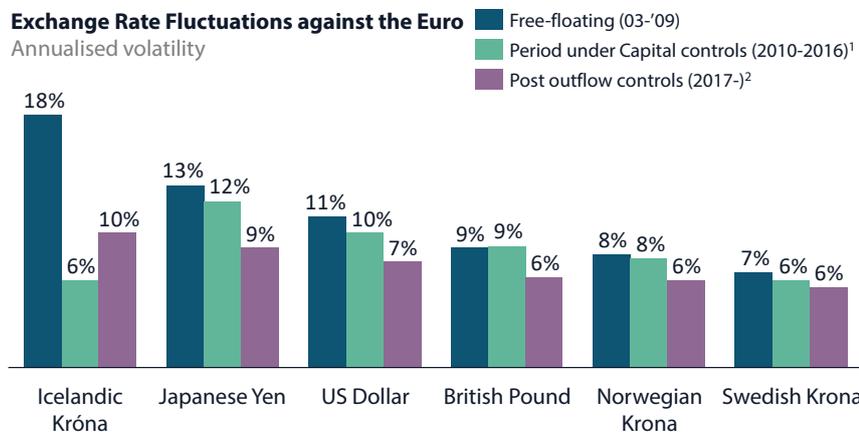
1 The new measurement's scope is new inflow of foreign currency that's in particular intended for new investment in electronically registered bonds and bills, and deposits, as well as new inflow related to loans taken for investment in such instruments. It also applies to imported foreign currency deposited into a domestic currency account with a deposit institution in Iceland if the interest rate is 3.00% or more.

2 The current reserve ratio and period is 40% of the invested amount and 1 year but the Central Bank can raise the ratio to up to 75% and the period up to 5 years; the capital is held on a capital flow account with the Central Bank of Iceland with the Icelandic króna as the settlement currency.

Source: Central Bank of Iceland; Alþingi; Iceland Chamber of Commerce

**Figure 2.9**

The Icelandic Króna has been one of the most volatile currencies in the developed world



1 From 1<sup>st</sup> of January 2010 till 13<sup>th</sup> of March 2017.

2 From 13<sup>th</sup> of March 2017 till 29<sup>th</sup> of June 2018.

Sources: Central Bank of Iceland; Iceland Chamber of Commerce

In 2015, the CBI announced plans for restrictions aimed for capital inflows from carry trade, as Iceland had higher interest rates than other countries. Those plans were implemented with a special reserve requirement (SRR) on foreign investment in certain deposits, bills and bonds (Figure 2.8). Since the reserve requirement is only effective a year from entry, it has diminishing effect on the average return for long-

term investors. The SRR has been highly disputed and many have questioned its effectiveness. Despite that, the SRR has remained unchanged for more than two years, the CBI has announced that the SRR will be lowered as soon as conditions warrant it.<sup>8</sup>

The capital controls introduced in 2008 had the desired effect on the Króna, which was to reduce fluctuations in the exchange rate and prevent

8 Governor's statement on the special reserve requirement (2018)

Over the past few years, investors' trust in Iceland has been rising. Since mid-2015, Iceland's credit rating has improved from BBB- to A.

The abolishment of capital controls, strong economic growth and the improved external position of the economy, have played a major role in increasing Iceland's credit rating since 2012.

further depreciation after the sharp devaluation in late 2008 (Figure 2.9). A more stable exchange rate allowed the private sector to rearrange financially; many corporations restructured financially and households reduced their debt levels. Since controls on capital were lifted, exchange rate fluctuations have not reached previous levels and the volatility difference is only marginal given the Króna's inherent susceptibility of capital flows.

### Access to Credit

Over the past few years, investors' trust in Iceland has been rising. Since mid-2015, Iceland's credit rating has improved from BBB- to A. The abolishment of capital controls, strong economic growth and the improved external position of the economy have played a major role in improving Iceland's credit rating since 2012 (Figure 2.10). According to foreign

credit rating agencies, the indicators driving this positive development have been an accumulation of wealth in the economy which has provided significant shock-absorption capacity, strong institutional focus on avoiding vulnerabilities that led to 2008 banking crisis and a well-funded pension system. Strong institutional framework, policy making effectiveness, low net general government debt of GDP and high per capita income levels are also a rationale for increasing credit rating.

The main challenges, however, facing the Icelandic economy are its vulnerability to external development because of lack of exports diversification, high volatility throughout the economic cycle and risk stemming from the domestic economy overheating (see more in chapter 1.2).

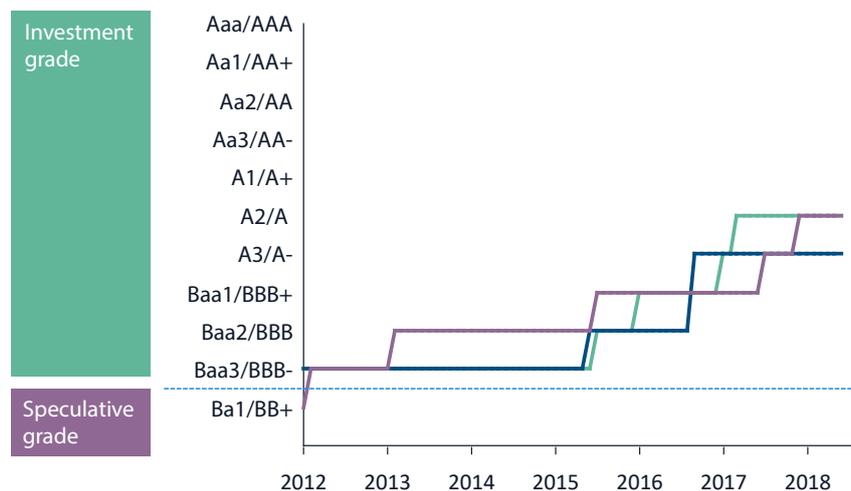
### Capital Markets

**Figure 2.10**

Iceland's credit rating has improved in recent years and the outlook is stable

#### Iceland's Credit Ratings

Sovereign debt, Moody's, Fitch and S&P rating



Sources: Central Bank of Iceland; Iceland Chamber of Commerce

Over the past few years, both the Icelandic stock exchange NASDAQ Iceland (ICEX) and the corporate bond market have been gradually gaining momentum. Since December 2011, more and more Icelandic firms have been listed on the stock exchange, most recent being Arion Bank which was listed in June 2018 and Heimavellir, a residential real estate company, in May 2018.

The number of firms listed at the Icelandic Stock Exchange are 24, 18 of whom are listed at OMX Iceland. The total market capitalisation of OMX Iceland and First North (a less strict listing for smaller firms), is now ISK 943 billion (37% of GDP 2017). The equity market yielded high returns until 2015

but have since been modest (Figure 2.11).

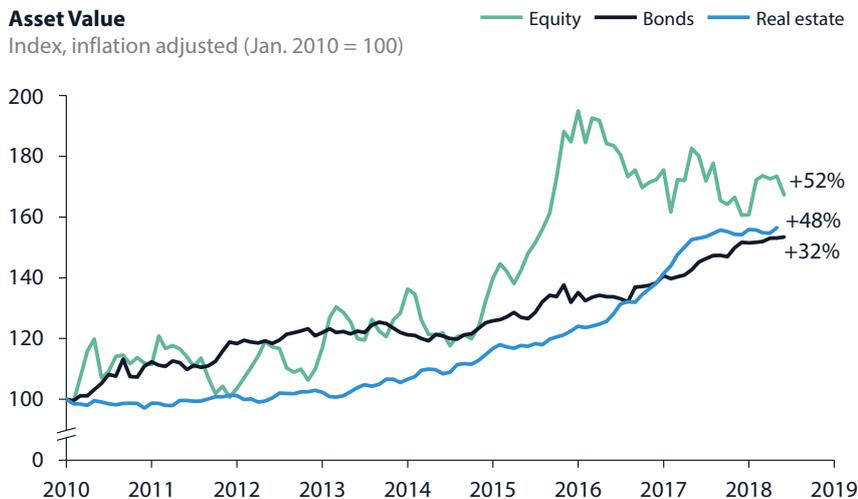
A small economy such as Iceland does neither encompass asset markets as deep as those typical of larger developed economies, nor as many asset classes. Ownership within the Icelandic stock market has been rather concentrated over the past few year with pension fund owning close to half of listed shares. In 2017, general public stock market investment decreased significantly after the crisis, and is currently only around 4%, compared to 11-17% in 2002-2007. Meanwhile, mutual funds' share of the market has increased from 4-6% pre-crisis to around 10% in 2017.

The number of firms listed at the Icelandic Stock Exchange are 24, 18 of whom are listed at OMX Iceland.

Ownership within the Icelandic stock market has been rather concentrated over the past few year with pension fund owning close to half of the market.

**Figure 2.11**

Domestic assets have appreciated significantly in the last few years but valuation of equities has stagnated since 2015



Sources: GAM Management; Registers Iceland; Statistics Iceland; Iceland Chamber of Commerce

Thus, investments are now increasingly directed towards the stock market.

Foreign investment in Icelandic asset markets has picked up, although at a slow pace. After the Central Bank introduced a new capital flow instrument (SRR, see more on page 38) in November 2015, meant to temper and affect the composition of capital inflows in domestic bond markets, there was a notable slowdown in bond investments coming from abroad (Figure 2.12). Thus, investments are now increasingly directed towards the

stock market. In early 2017 there were substantial capital inflows into unlisted equities, tied to the sale of the holding of Arion Bank to foreign investors.<sup>9</sup>

### Pension Funds

The Icelandic pension fund system is different from many other countries as it relies more on mandatory savings (making it fully-funded) rather than pay-as-you-go. The system is one of

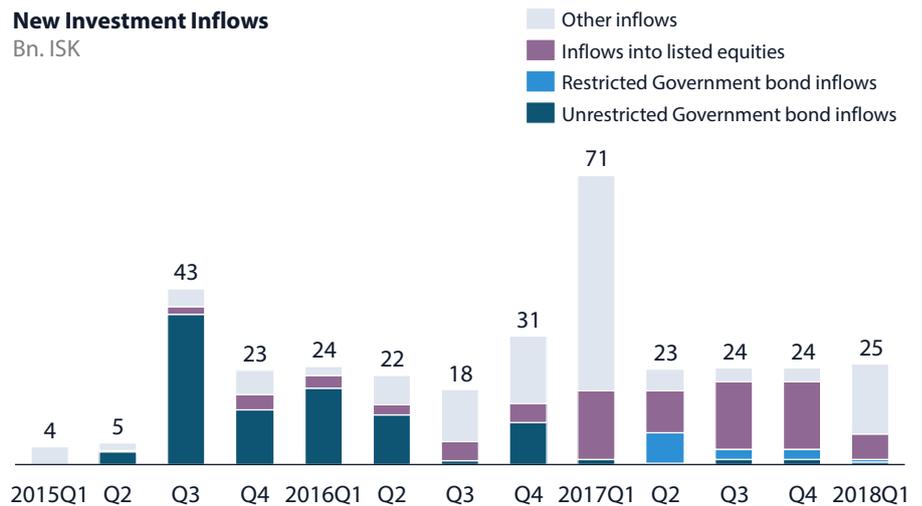
9 Financial Stability Report (2017/1)

**Figure 2.12**

Composition of capital inflows changed after the Central Bank implemented new restrictions<sup>1</sup> on inflows in June 2016

#### New Investment Inflows

Bn. ISK



<sup>1</sup> The restrictions are known as capital flow measures and are in rules no. 490/2016; the measures consists of a reserve requirement for new foreign currency inflows that are for investment in liquid Icelandic securities and into domestic deposits that carry 3.00% interest rates or higher.

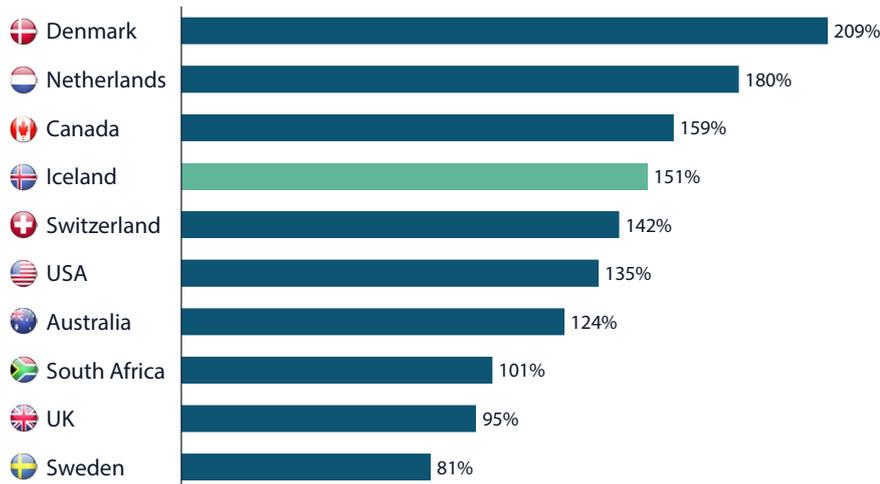
Sources: Central Bank of Iceland (Financial Stability 2017/1); Iceland Chamber of Commerce

**Figure 2.13**

The Icelandic pension fund system is relatively one of the largest in the world

**Private Pension Assets 2016**

% of GDP



Source: OECD Global Pension Statistics

the largest in the world relative to the economy (Figure 2.13). It is expected to continue growing over the next decades, partly because of Iceland's relatively young population.

The system consists of 25 funds where the three largest funds hold approximately half of all assets. The pension funds hold approximately half of all stocks registered at NASDAQ Iceland, across different sectors.<sup>10</sup> This development largely took place under the capital controls when all domestic savings were trapped in the local economy and therefore restricted to few investment options. After free capital outflows were allowed in March 2017, the pension funds were, again, able to diversify their portfolio abroad. The Central Bank estimates that the pension funds, as a single unit,

invested ISK 119 billion (5% of 2017 GDP) abroad in 2017.

Some have argued that 40-50% of total pension assets should be invested abroad but today this proportion is 25%, up from 20% in 2016.<sup>11</sup> Despite having few investment options while restricted to the local economy, the funds had good returns on investments. From 2010 - 2015 the Icelandic pension system had a real return of 5.7%, while over the same period the OECD average was 3.6%.<sup>12</sup> However, the average real return in 2016-2017 was 2.8%. Mandatory retirement payments increased in 2016 becoming the third highest to GDP in the world. Furthermore, pension funds are now active players in the housing loan market, a change from the years before the crisis (Figure 2.14). See more on the housing market in chapter 2.3.

The system is one of the largest in the world relative to the economy.

Some have argued that 40-50% of total pension assets should be invested abroad but today this proportion is 25%, up from 20% in 2016.

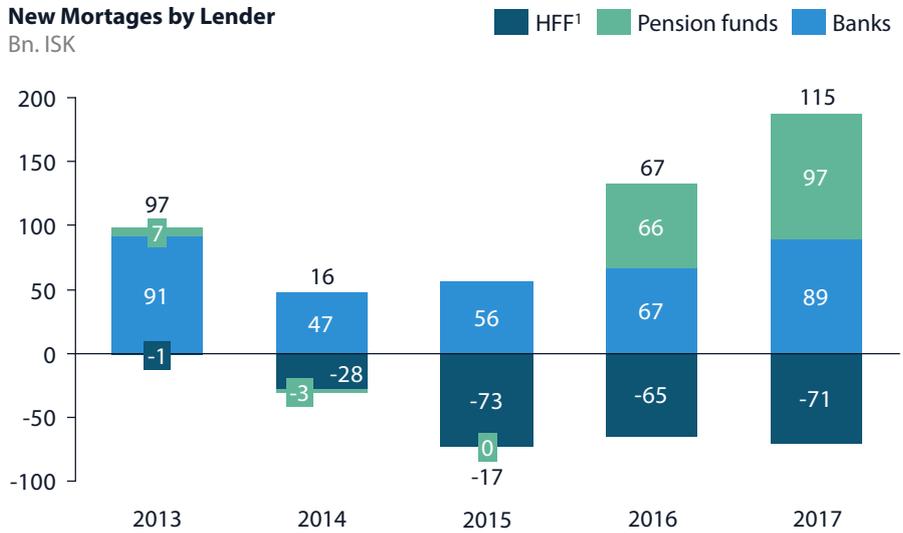
10 Á. D. Ólafsdóttir (2017), Serving the same masters while competing: Common ownership of listed companies in Iceland. Icelandic Review of Politics and Administration, 13(1), p.27-52: <http://www.irpa.is/article/view/a.2017.13.1.2/pdf>

11 Áhættudreifing eða einangrun (2014): <http://audfraedi.is/library/Skrar/A%CC%81h%C3%A6ttudreifing%20e%C3%B0a%20einangrun.pdf>

12 „Umsvif lífeyrissjóða í Íslensku efnahagslífi“, Institute of Economic Studies (Hagfræðistofnun), October 2017.

**Figure 2.14**

Pension funds have become a significant mortgage lender



<sup>1</sup> The Housing Financing Fund.

Sources: Central Bank of Iceland (Financial Stability 2017/1); Iceland Chamber of Commerce

Today's currency interventions purpose is solely to mitigate short-term volatility and there have been no interventions since November 2017.

### Central Bank FX Reserves

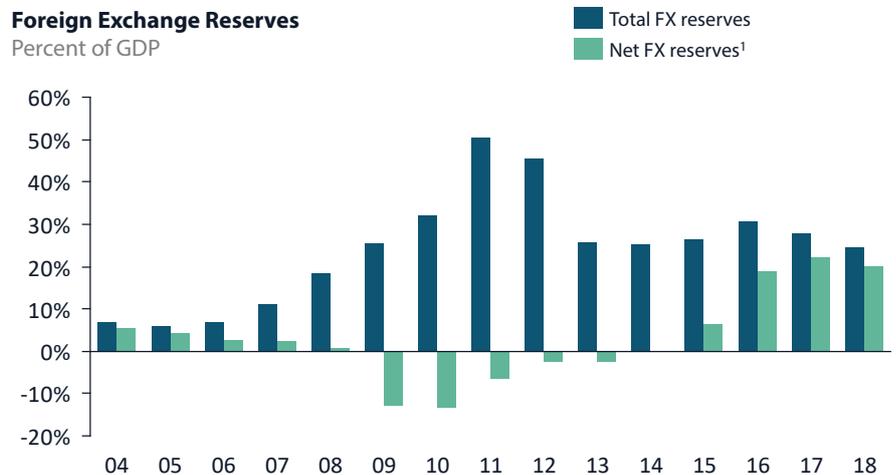
The Central Bank of Iceland's net foreign exchange reserves, or FX reserves financed in ISK, have grown rapidly in the past few years. This is primarily a result of the Bank's intervention policy, to purchase foreign currency to reduce fluctuations in currency markets and amass sufficient reserves so that capital controls could be lifted in early 2017. Despite

these interventions, the Króna has appreciated 21% since the beginning of 2014, largely because of foreign currency inflow from the tourism boom.

In late 2016, the Central Bank slowed down its interventions and then suspended its regular currency interventions in May 2017 because of the large net reserves (Figure 2.15). Today's currency interventions purpose is solely to mitigate short-

**Figure 2.15**

The Central Bank has bought large amounts of foreign currency in recent years, mostly to pay down foreign debt and thereby increasing net FX reserves



<sup>1</sup> FX reserves less Central Bank's foreign currency liabilities, i.e. FX reserves financed in ISK.

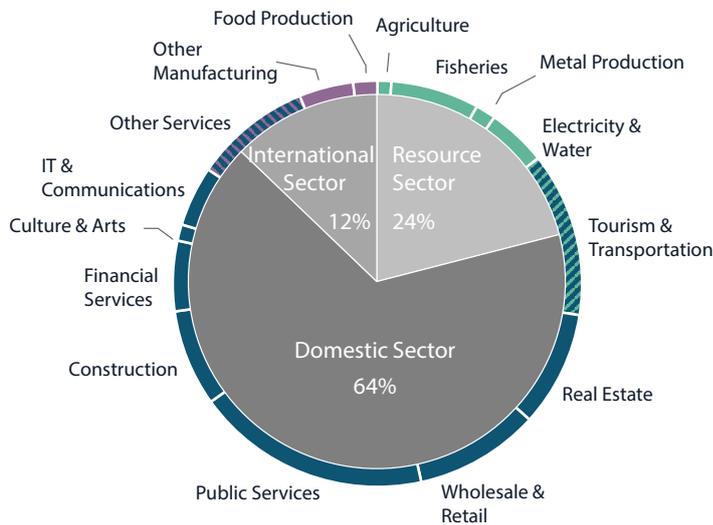
Sources: Central Bank of Iceland (Financial Stability 2018/1); Iceland Chamber of Commerce

**Figure 2.16**

The domestic sector accounts for about two thirds of the economy

**Composition of the Icelandic Economy**

Percent of GDP



Sources: Statistics Iceland; McKinsey & Company; Iceland Chamber of Commerce

term volatility and there have been no interventions since November 2017. The reserves are today sufficiently large in terms of reserve criteria, such as the International Monetary Fund's (IMF) reserve adequacy metric (RAM).<sup>13</sup> At the end of 2017, reserves to RAM ratio was 159%. The reserves covered 280% of short-term liabilities and could cover eight months of imports.

**2.3 Domestic Sector**

Iceland's domestic sector consists of sub-sectors that do not compete in global markets (i.e. everything except exports). These sub-sectors are wholesale & retail, real estate, construction, arts & entertainment, financial services, the domestic component of tourism & logistics, information & communication, business services and public services. The domestic sector as a whole, directly produces approximately two

thirds of the nation's GDP with public services contributing more than a third (Figure 2.16). The development of the domestic sector therefore plays a vital role in the economy's performance.

When high-income countries' labour productivity is compared, Iceland's ranking is average. For example, measured as GDP per hour, Iceland's productivity is similar to the G-7 average (Figure 2.17).<sup>14</sup> Recently, Statistics Iceland released new statistics showing fewer average working hours. These new numbers therefore indicate higher overall productivity than previously estimated.<sup>15</sup> The domestic sector's productivity has, however, lagged behind other sectors as McKinsey & Co report from 2012 highlighted (see chapter 3.1). Given the large share of the domestic sector in GDP, productivity improvements in that sector vastly improve the efficiency of the economy.

The domestic sector as a whole, directly produces approximately two thirds of the nation's GDP with public services contributing more than a third

Measured as GDP per hour, Iceland's productivity is similar to the G-7 average.

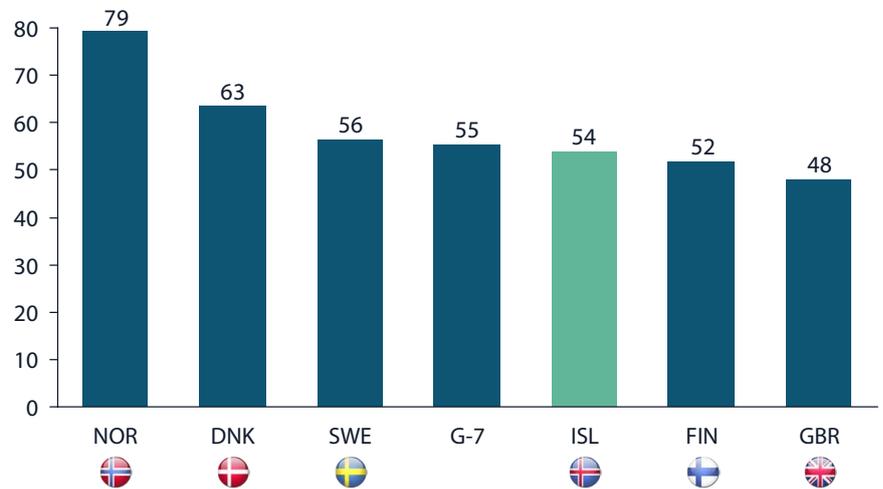
<sup>13</sup> This metric measures the desirable size of a foreign exchange reserves taking into account export, money holding, Foreign short-term liabilities and other foreign dept.  
<sup>14</sup> GDP per hour worked measures how efficiently hours worked are used in the production process. More inputs that impact the productivity of labour are economies of scale, capital, intermediate inputs and technical, organisation and efficiency change.  
<sup>15</sup> Monetary Bulletin (2018/2): [https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB182\\_Box\\_2.pdf](https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB182_Box_2.pdf)

**Figure 2.17**

Productivity has been increasing in Iceland, putting it above Finland and United Kingdom in terms of GDP per hour worked

**GDP per Hour Worked in 2016**

US dollars, constant prices 2010 (PPP)



Source: OECD

The aforementioned new statistics on productivity include comparison between sectors (Figure 2.18). The sectors where productivity has increased the most since 2008 are sectors affected by tourism and

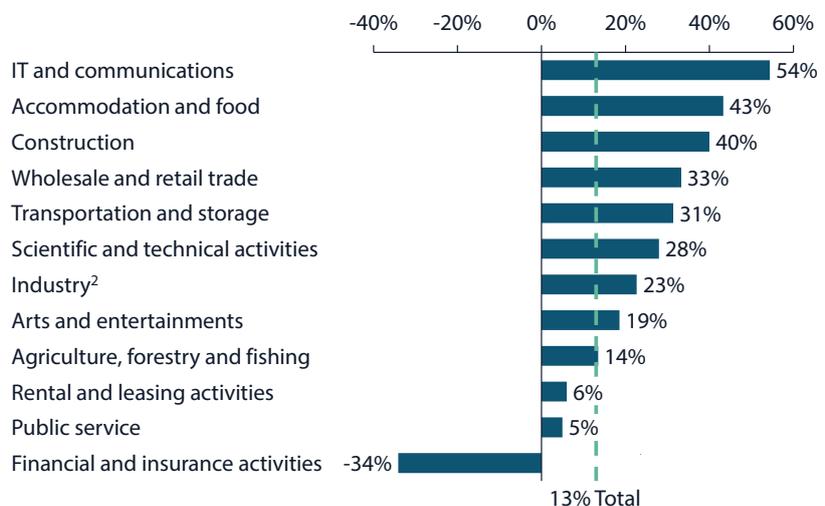
technological improvements. The sectors lagging behind are rental and leasing activities and the public sector. Opportunity for growth, and therefore increased productivity, is less in sectors where competition is scarce.

**Figure 2.18**

Productivity gains are different across sectors but are seemingly largest in sectors affected by tourism and technology

**Productivity Changes by Sectors<sup>1</sup>**

Cumulative percentage change from 2008 to 2017



<sup>1</sup> All sector definitions are according to NACE V.2.

<sup>2</sup> Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities.

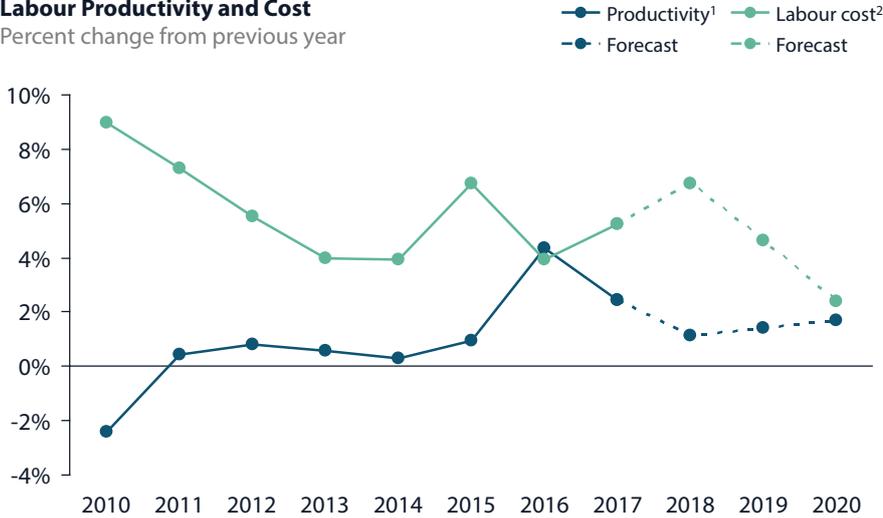
Source: Statistics Iceland

**Figure 2.19**

There has been a pickup in productivity, although same can be said of labour cost

**Labour Productivity and Cost**

Percent change from previous year



1 A different measure on productivity than in figure 2.17.  
 2 Labour cost per unit produced (Unit labour costs).

Source: Central Bank of Iceland

Productivity of financial and insurance actives has decreased significantly since 2008. This can be explained by the often-mentioned financial crisis in 2008.

Total labour productivity has increased significantly since 2015 (Figure 2.19). Productivity growth peaked at a 4.4% increase in GDP per hours worked in 2016, exceeding increases in labour cost. The Central Bank of Iceland currently forecasts an ongoing improvement of 1.1% modest productivity gains this year, rising to 1.7% in 2020.

These numbers may, however, be somewhat inflated due to a large influx of unregistered foreign labour in the economy. Additional labour may thus be contributing to GDP, whereas their working hours are not fully taken into account in productivity measurements.

**New Competition**

The landscape in Icelandic retail has changed considerably the last year or so (Figure 2.20). In May 2017 the “American membership only” warehouse club, Costco, opened a

Total labour productivity has increased significantly since 2015.

**Figure 2.20**

The Icelandic domestic sector is facing strong competition from various global forces on different fronts



Source: Iceland Chamber of Commerce

Costco's opening took the market in Iceland by storm. One month after the opening, more than 60,000 people were paying members, one in every four eligible Icelanders.

Purchasing power of wages for goods has increased almost 32% in the span of three years.

store in Iceland, their first in the Nordic countries. Also, Swedish clothing retailer H&M opened stores the same year. Costco's opening took the market in Iceland by storm. One month after the opening, more than 60,000 people were paying members, one in every four eligible Icelanders.

As a result, competition intensified in the retail market. Meanwhile, the country's largest gas station retailers announced plans to merge with the three largest supermarket retailers in the market. One merger has been approved by the Icelandic Competition Authority, while another has been called off and the third is still in consideration. Similar forces are influencing other retailers and sectors, as e-commerce and other cross border trade in good and services is growing rapidly.

Since 2015 the consumer price index (CPI) without housing costs has remained stable, while the wage index has increased by 33% over the same time-period. Purchasing power of wages for goods has, therefore, increased almost 32% in the span of three years (Figure 2.20). This rapid increase in purchasing power is caused by factors such as an appreciation

of the Króna, abolishment of various customs and tariffs on imported goods, lower retail prices due to increased competition in domestic markets and technology developments, and the latest labour union agreements.

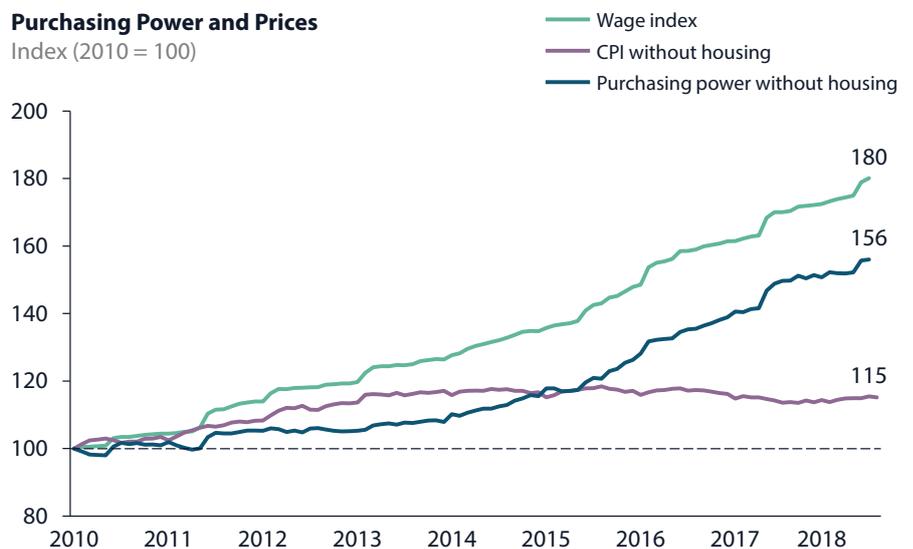
### Housing Market

Iceland's housing market recovered at a modest pace in the first half of this decade after a sharp decline following the financial crisis. The housing market effectively came to a halt in terms of prices, turnover and housing investment reaching an historical low (Figure 2.22). The market, however, gradually recovered, largely because of demand pressures – rising incomes, booming tourism (see chapter 2.4) and rising population. Furthermore, the CBI has cut rates by 1,5 pp since August 2016 and pension funds have actively been financing household mortgages, which has increased competition. These factors have increased demand fast, resulting in real estate and rent price increases.

These price surges that peaked in May 2017 when the year-on-year increases in Greater Reykjavik reached 24%. Since then the market has levelled off with the economy cooling down

**Figure 2.21**

Purchasing power has increased substantially because of low inflation and significant wage increases



Sources: Statistics Iceland; Iceland Chamber of Commerce

and more new housing units entering the market. In June the year-on-year increases had dropped to 5%. Price increases are still strong outside Greater Reykjavík (16% year-on-year).

Since January 2011 rent prices in Greater Reykjavík have increased by 82% and real estate prices have surged by 99% in nominal terms. Housing prices have in real terms reached an historical high and price-to-income has risen but that is largely explained by the long-run trend of declining real interest rates and stronger economic

fundamentals (Figure 2.22).<sup>16</sup> Thus, it seems unlikely that the prices are inflated by a large magnitude but some imbalances are apparent according to the Central Bank.<sup>17</sup> Furthermore, Icelandic households have deleveraged in recent years and household debt-to-gdp ratio was 77% in 2017, making them more resilient than in 2008 when the ratio was 120% (Figure 1.6).

Another reason for the booming housing market is that housing supply has lagged far behind housing demand. In the years leading up to

Furthermore, the CBI has cut rates by 1,5 pp since August 2016 and pension funds have actively been financing household mortgages, which has increased competition. These factors have increased demand fast, resulting in real estate and rent price increases.

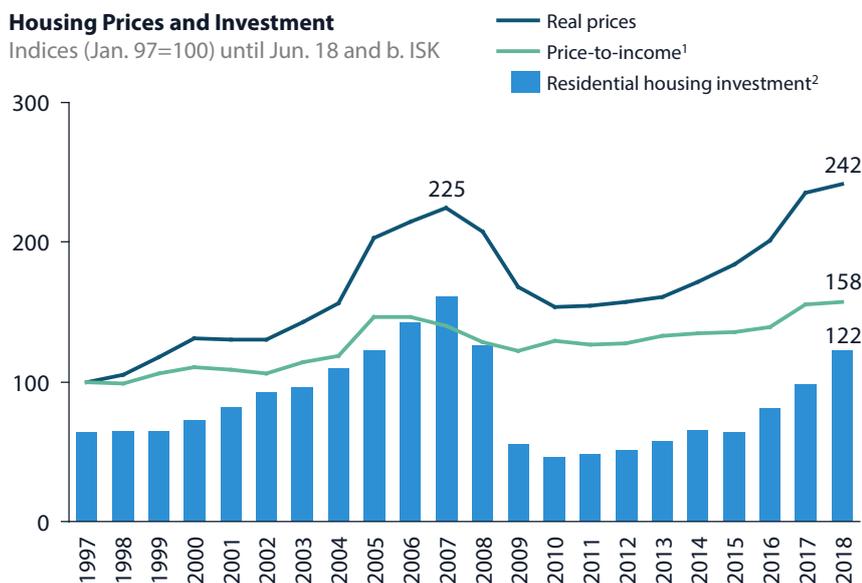
<sup>16</sup> See the Governor's keynote speech about declining interest rates at ICoC's annual meeting on monetary policy (2016)  
<sup>17</sup> Financial Stability (2018/1): <https://www.cb.is/publications/publication/2018/04/12/Financial-Stability-2018-1/>

**Figure 2.22**

Housing prices have increased rapidly in the last few years but since mid-2017 the market has slowed down as prices are high in a historical context

**Housing Prices and Investment**

Indices (Jan. 97=100) until Jun. 18 and b. ISK



<sup>1</sup> Housing prices/Disposable income per individual.  
<sup>2</sup> Billion ISK at 2017 prices, number for June 2018 is CBI's forecast for the whole year.  
 Sources: Statistics Iceland; Central Bank of Iceland; Registers Iceland; Iceland Chamber of Commerce

Housing prices have in real terms reached an historical high and price-to-income has risen but that is largely explained by the long-run trend of declining real interest rates and stronger economic fundamentals.

2011, the growth in new housing units and population were almost parallel. Since then, population growth has exceeded housing growth, peaking in 2017. At that time, the population grew at a record pace (3% overall, 4% for 20 years and older), mostly due to immigration. Meanwhile, the stock of housing grew by 1.2% (Figure

2.22). Also, demand pressures are accruing directly from tourism and a Central Bank working paper estimated that Airbnb rentals have effectively reduced the housing stock by more than 1%. Therefore, there is a pent-up demand which the Iceland Chamber of Commerce estimates to be around

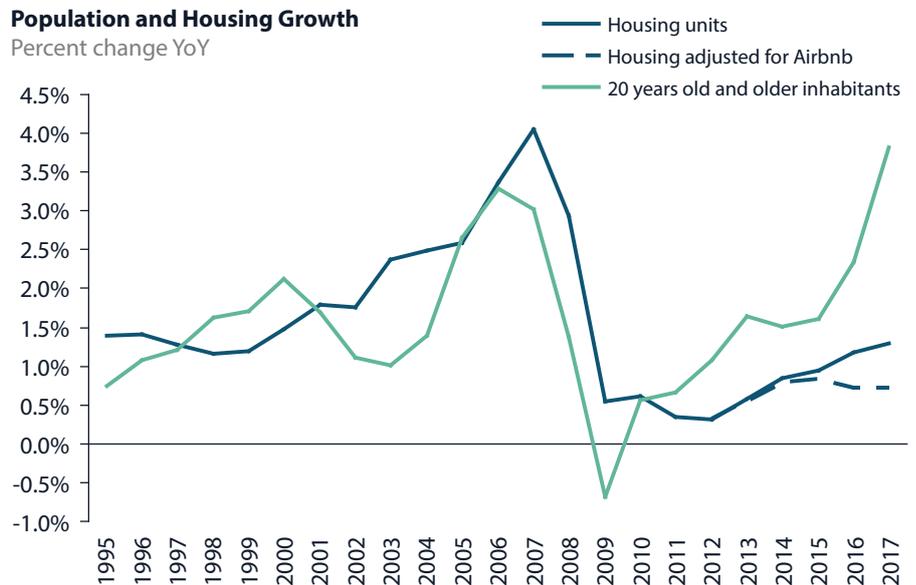
Therefore, there is a pent-up demand which the Iceland Chamber of Commerce estimates to be around 6,000 housing units, with a generous confidence interval.

The Federation of Icelandic Industries estimates that 45,000 more housing units need to be constructed until 2040, an increase of 33%.

After the financial crisis in 2008 unemployment rose to roughly 7.6% but has since gradually declined to 2.9% in the first quarter of 2018.

**Figure 2.23**

Historically, housing construction has kept up with population growth but in recent years the population growth has diverged from housing units.



Sources: Statistics Iceland; Registers Iceland, Central Bank of Iceland and Iceland Chamber of Commerce

6,000 housing units, with a generous confidence interval.

Fortunately, there is growing evidence of supply aligning closer with demand in the near future. With a slowdown of the economy and partly because of the housing shortage immigration is also expected to slow down. Besides, the construction industry is at full steam and only twice since 1983 have as many apartment constructions begun as in 2017. Thus, it appears that a more balanced housing market is only a matter of time, given that no major shocks occur. In the long run, continued population growth and changing demographics requires more housing investment. The Federation of Icelandic Industries estimates that 45,000 more housing units need to be constructed until 2040, an increase of 33%.

### Labour Market

The Icelandic labour market is highly unionised, with union density over

80%. The market is for the most part regulated by means of collective bargaining, with collective agreements covering approximately 88% of the workforce.<sup>18</sup>

Compared to other OECD economies, the structural unemployment rate in Iceland is fairly low at around 3.5-4.0%.<sup>19</sup> After the financial crisis in 2008 unemployment rose to roughly 7.6% but has since gradually declined to 2.9% in the first quarter of 2018 (Figure 1.5). This development has occurred despite of an influx of foreign workers which underscores the economic growth of the last few years (Figure 2.24).

### Major Bargaining Round Ahead

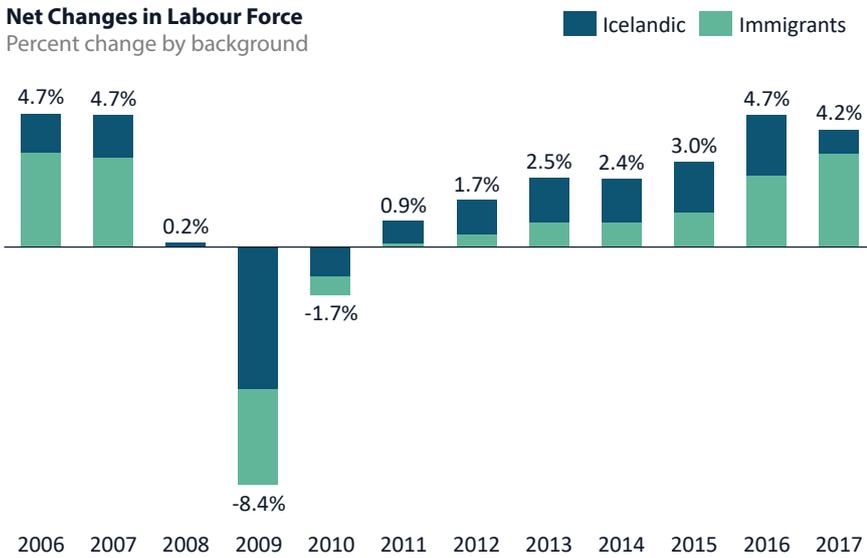
The Icelandic labour market has historically been a driver of instability insofar wage negotiations have resulted in high nominal wage increases, often in excess of productivity increases plus inflation target. This has resulted in higher levels

<sup>18</sup> The Icelandic Confederation of Labour: [www.asi.is/engpol/](http://www.asi.is/engpol/)

<sup>19</sup> OECD Economic Outlook No 102, November 2017: <https://stats.oecd.org/Index.aspx?QueryId=61365>

**Figure 2.24**

The economy is experiencing an influx of foreign labour once again



Sources: Statistics Iceland; Iceland Chamber of Commerce

of inflation, counteracting benefits to the workforce.

In order to set a new and sustainable path for increases in wages, the representatives of employees and employers in Iceland signed an agreement in early 2016 modelled after Nordic wage agreements structure. This agreement, which has been referred to as SALEK, stipulated that wage cost increases should not exceed

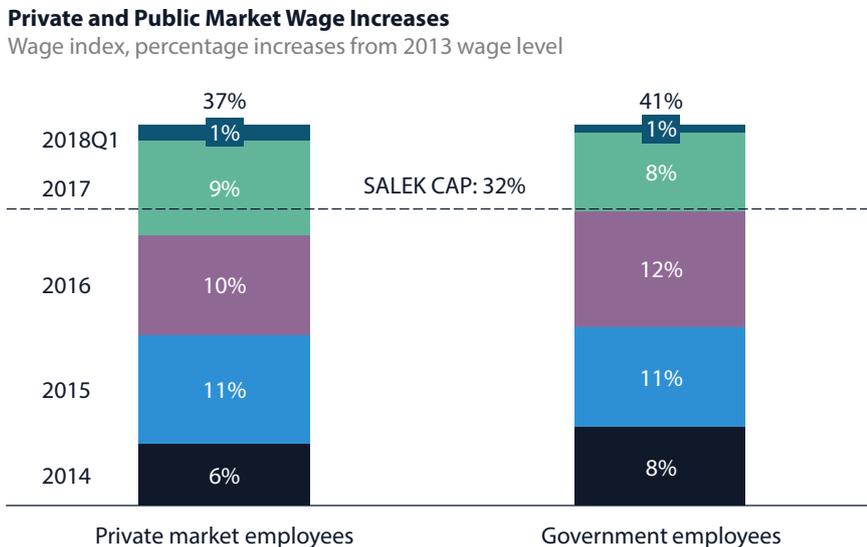
32% in the period of 2013-2018. The agreement has, however, been a matter of controversy among labour unions, and a number of labour union leaders, particularly those who operate in the private market, have criticised it heavily.

Furthermore, evidence is mounting up that the agreement has not held. The wage index has risen by 38% from Q4 2013 to Q1 2018 with government

The Icelandic labour market has historically been a driver of instability insofar wage negotiations have resulted in high nominal wage increases, often in excess of productivity increases plus inflation target.

**Figure 2.25**

Wage increases have exceeded the cap in the SALEK agreement with government employees experiencing higher wage increases



Sources: Statistics Iceland, Iceland Chamber of Commerce

The outcome of the upcoming bargaining round is one of the main short-term uncertainties regarding the Icelandic economy.

Iceland is endowed with abundant natural resources, which the country's rise from poverty since the early 20th century has been built on.

Around 91% of visitors mention the nature and 87% outdoor activities as the reason for their visit. Therefore, the tourism sector is classified as a resource sector.

employees experiencing higher wage increases than workers in the private market (Figure 2.25).

Consequently, tensions are mounting ahead of a major bargaining round, which is expected to take place in the last months of 2018 and the beginning of 2019. Further turbulence has been added in the labour market by the decisions of the Official Remuneration Council, which determines the wages of senior public employees. In total, there are 240 collective agreements up for renegotiations in the next twelve months. The outcome of the upcoming bargaining round is one of the main short-term uncertainties regarding the Icelandic economy.

## 2.4 The Resource Sector

Iceland is endowed with abundant natural resources, which the country's rise from poverty since the early 20th century has been built on. Industries around those resources, or the resource sector, contributes to 71% of Iceland's total exports. The resource sector is divided into three main sectors:

Tourism, which is by far the largest, seafood industry and energy intensive industries, which are furthermore divided into smaller sub-sectors.

### Tourism

Iceland's unique and largely unspoiled nature is the key reason for the success of tourism in recent decades. Around 91% of visitors mention the nature and 87% outdoor activities as the reason for their visit.<sup>20</sup> Therefore, the tourism sector is classified as a resource sector.

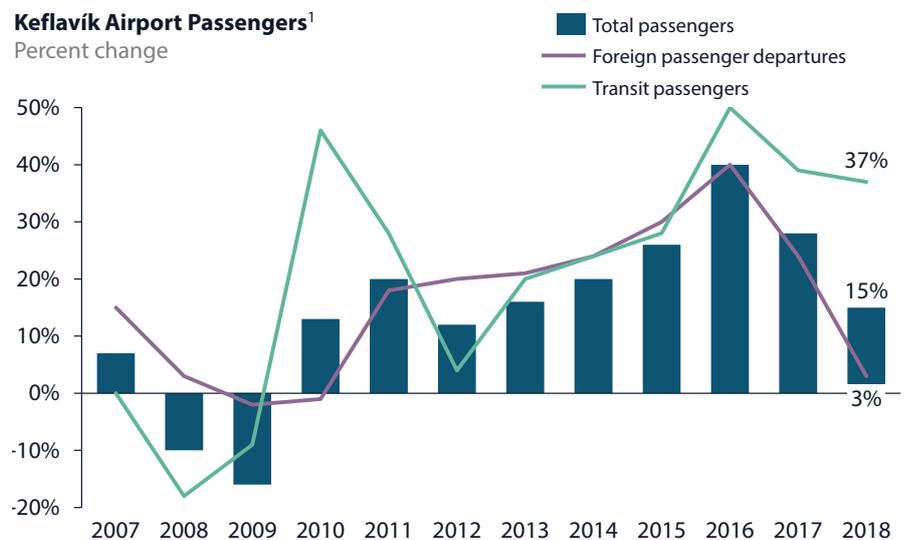
A large part of the tourism sector, air transport, is also a part of the international sector. Iceland's two largest airlines, Icelandair and WOW air base their business model on transatlantic flights with Keflavik airport (KEF) as a hub. Consequently, 52% of Icelandair's passengers in 2017 were on a transit and for WOW air the percentage is similar.<sup>21</sup> Growth in transit at KEF has been faster than the total number of passengers in recent years (Figure 2.26). Furthermore, the airlines have expanded their networks on both sides of the Atlantic. Over

20 Iceland Tourist Board's border survey (2017).

21 Icelandair Group 2017 Annual Report.

**Figure 2.26**

99% of incoming tourist go through Keflavik airport which has seen an extraordinary growth, particularly in transit passengers last 3 years

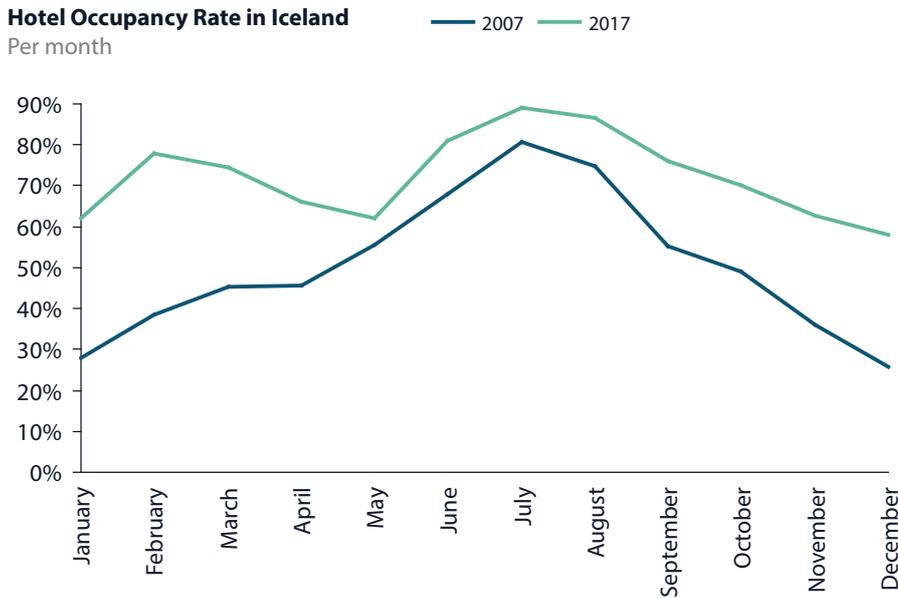


1 ISAVIA forecast for 2018.

Sources: Statistics Iceland; Registers Iceland, Central Bank of Iceland; Iceland Chamber of Commerce

**Figure 2.27**

Despite a 110% increase in no. of hotel rooms since 2007, occupancy rates have increased, particularly during winter.



Source: Statistics Iceland

99% of tourist arrivals are through KEF and the local airlines carry 75% of the passengers.<sup>22</sup> The local airlines' business model, the so called "hub-and-spoke", is therefore a key to the rise in tourism.

The boom in Iceland's tourism in recent years is arguably the single most important factor in Iceland's recovery. The annual number of visitors has grown by a factor of five since 2010 – from 459 thousand to 2.2 million. Few countries are as reliant on tourism and travel services. To illustrate, tourists outnumber locals by a factor of six. Also, tourism receipts in Iceland are six times higher per capita than in Spain.<sup>23</sup>

The rise of tourism has also led to more efficient use of resources since the industry has grown faster in other seasons than the summer. That is clearly illustrated in hotel utilisation rates (Figure 2.27) which have jumped in the winter months since 2010.

A double-digit growth rate in tourism can't last forever. Over the past year or so, there has been rising evidence that the boom in tourism is slowing down significantly. This is highlighted by Isavia's, a national airport operator,

forecast of only 2.6% increase in number of tourists arrivals, excluding transit passengers, compared to 24% increase in 2017 and 40% in 2016. The slowdown in tourism is in many ways welcome after years of double digit growth. As mentioned earlier, the labour market is tight and there is a housing shortage (see chapter 2.3). In light of that, slower tourism growth can moderate the labour market and prevent a further housing shortage. Furthermore, the number of visitors is in some places having negative environmental impact which calls for investment in broad tourism infrastructure.

There are several reasons for this dip in growth. An important reason is capacity constraints such as lack of accommodation, as seen in the exponential growth of Airbnb accommodation over the past 3-4 years and the fact that Reykjavík has some of the highest hotel occupancy rates in Europe. Other factors such as a slowdown in growth of international flights to Iceland has also had effect. An IMF working paper predicts that tourism in small islands is more susceptible to direct flights than other determining factors.<sup>24</sup>

Growth in transit at KEF has been faster than the total number of passengers in recent years.

The annual number of visitors has grown by a factor of five since 2010 – from 459 thousand to 2.2 million.

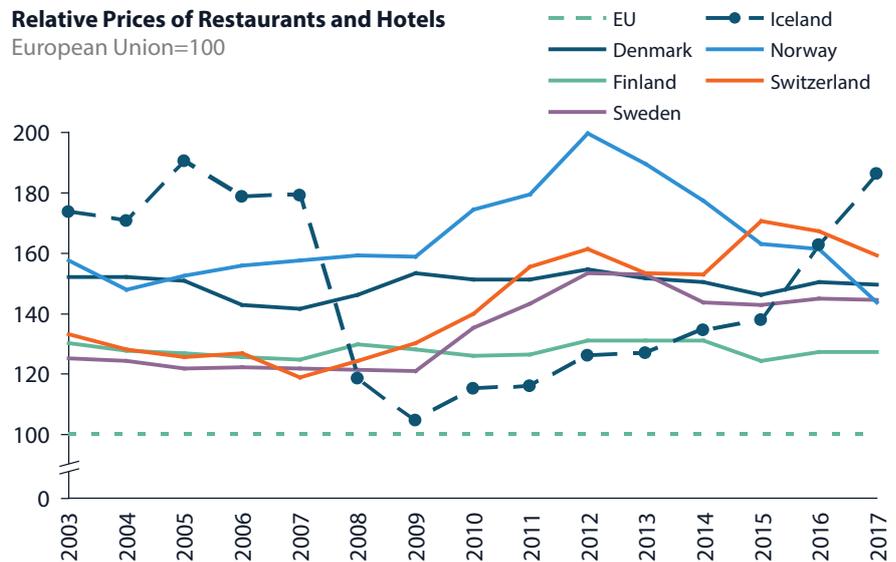
22 Landsbankinn Economic Research: <https://umraedan.landsbankinn.is/umraedan/samfelagid/ferdathjonusta-2017/greiningar/ferdathjonusta-er-undirstoduatvinnugrein-a-islandi/>

23 Arion Bank Research (2017): <https://www.arionbanki.is/english/markets/research/research-more/2017/09/18/Tourism-in-Iceland-Here-to-stay/>

24 Culiuc, A. (2014). IMF Working Paper: Determinants of International Tourism: <https://www.imf.org/external/pubs/ft/wp/2014/wp1482.pdf>

**Figure 2.28**

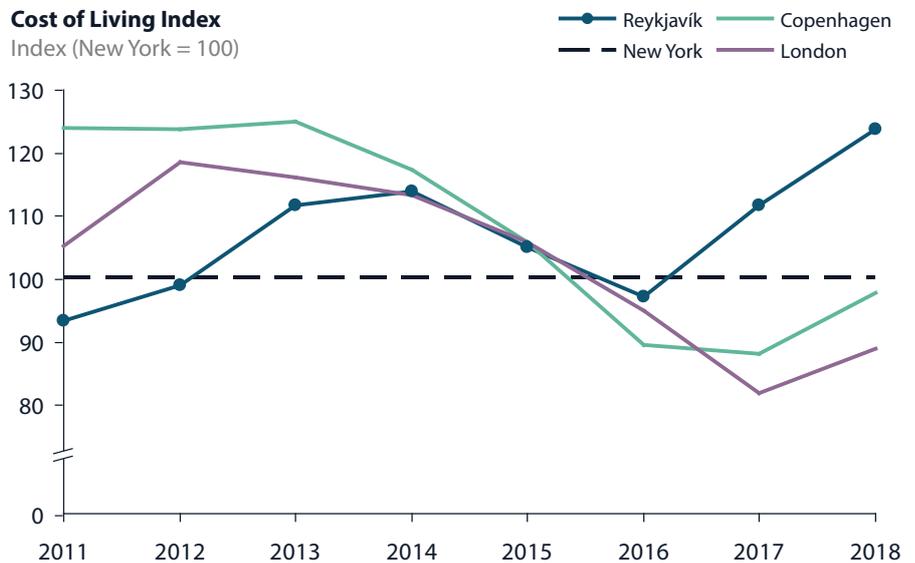
The demand for tourism services and the appreciation of the Króna have again made Iceland as one of the most expensive destinations.



Sources: Eurostat; Central bank of Iceland; Iceland Chamber of Commerce

**Figure 2.29**

Reykjavík has become one of the most expensive cities in the world to live in



Sources: Numbeo; Landsbankinn; Iceland Chamber of Commerce

Price increases in tourism related services and a 24% appreciation of the Króna in the last five years are putting a lid on the growth.

The next few months and years will set the tone for how Iceland's largest export will fare in a new landscape.

Finally, price increases in tourism related services and a 24% appreciation of the Króna in the last five years are putting a lid on the growth.<sup>25</sup> Iceland is now among the most expensive destinations in the world (Figures 2.28 and 2.29), reflecting the market forces of supply and demand at play. This has halted the tourism boom and created

challenges for the tourism sector. The next few months and years will set the tone for how Iceland's largest export will fare in a new landscape. It is also an opportunity to set the foundations for a moderate growth with focus on productivity, rather than capacity increases.

<sup>25</sup> Trade weighted index, 12 July 2013 to 13, July 2018.

## Energy Intensive Industries

Iceland is located on the Mid-Atlantic Ridge between two tectonic plates, placing the country in an excellent position to harness geothermal power. Iceland also has large highlands, glaciers and precipitation. As a result, Iceland produces renewable energy at a low cost where 73% of electricity was produced from hydropower, while geothermal power accounted for 27%.<sup>26</sup> Not only does this make Iceland the biggest per capita renewable energy producer in the world but also the largest per capita total energy producer (Figure 2.30).<sup>27</sup>

Energy intensive industries consume 77% of all electricity in Iceland and provide over 18% of total exports.<sup>28,29</sup> Aluminium is thereof by far the largest product and Iceland's three aluminium smelters consume 68% of Iceland's electricity. Other energy intensive consumers include the second largest ferrosilicon plant in the world, run by

Elkem Iceland, two new silicon plants (one currently in operation), as well as data centres.

## Aluminium

Three large aluminium plants are situated in Iceland and they account for 17% of Iceland's total exports in 2017 and 1.5% of global aluminium production. The largest plant is Alcoa Fjarðaál, located in Reyðarfjörður in East Iceland. It began its production in 2007 and has a capacity of 350,000 tons a year. Norðurál, a part of Century Aluminium, is based in Grundartangi port in the west of Iceland. Its plant capacity is 300,000 tons a year. The third aluminium plant, ISAL, is located in Straumsvík in Hafnarfjörður. It is a part of Rio Tinto and the oldest of the three, opening in 1969. Today, ISAL has production capacity of over 200,000 tons a year.

The most significant recent development is that in 2017 Rio Tinto

Iceland is located on the Mid-Atlantic Ridge between two tectonic plates, placing the country in an excellent position to harness geothermal power.

Energy intensive industries consume 77% of all electricity in Iceland and provide over 18% of total exports. Aluminium is thereof by far the largest product and Iceland's three aluminium smelters consume 68% of Iceland's electricity.

26 Orkustofnun (2018), Data Repository OS-2018-T006-01: <https://orkustofnun.is/gogn/Talnaefni/OS-2018-T006-01.pdf>

27 Askja Energy (2018), an Independent Icelandic and Northern Energy Portal: <https://askjaenergy.com/iceland-introduction/iceland-energy-sector/>

28 Or heavy industries as defined by National Energy Authority, Orkustofnun Data Repository OS-2017-T015-01: <https://orkustofnun.is/gogn/Talnaefni/OS-2017-T015-01.pdf>

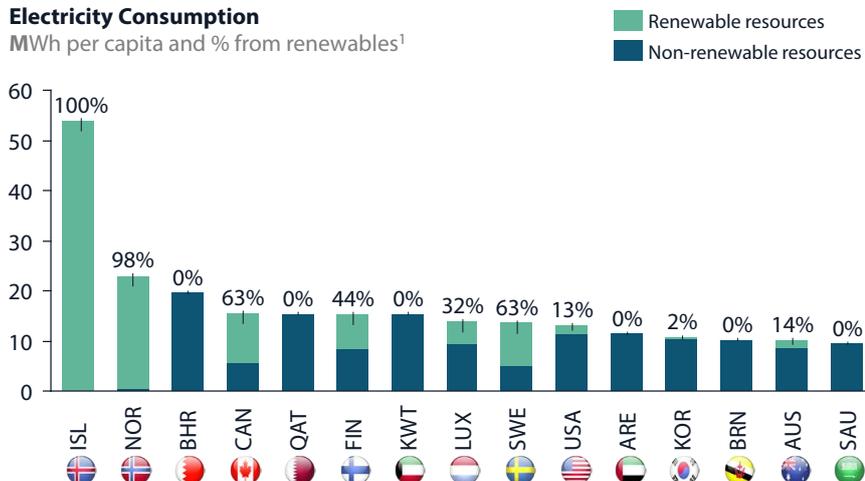
29 Data centres, which can be defined as an energy intensive industry, are not included due to lack of data.

**Figure 2.30**

Iceland is the largest producer of renewable power per capita in the world. All electricity is produced with geothermal power and hydropower.

## Electricity Consumption

MWh per capita and % from renewables<sup>1</sup>



<sup>1</sup> World Bank only publishes distribution of electricity by output, not consumption, so the distribution between renewables and non-renewables might be slightly inaccurate.

Sources: World Bank; Iceland Chamber of Commerce

Silicon plants have been some of the largest investments in Iceland in recent years.

put ISAL for sale. In February this year a binding offer was made for the plant by Norsk Hydro, a Norwegian aluminium company, but at the time of this publication, the deal had not been finalised.<sup>30</sup> Another important factor in the industry is a surge in aluminium prices which have climbed by 24% since the beginning of 2016.<sup>31</sup>

### Silicon Industry

Silicon plants have been some of the largest investments in Iceland in recent years. A ferrosilicon plant opened in 1979, but recently, two silicon plants have been built and there are proposals to build one more, as well as a solar silicon plant.

In November 2016 United Silicon in Helguvík, near Keflavík airport, started production but soon technical problems occurred. The Environmental Agency of Iceland received several complaints from the surrounding area and had to shut the plant down indefinitely in September 2017. Soon it became apparent that the plant

needed large improvements and the company went bankrupt. Arion Bank, as the largest creditor, took over the facilities in February 2018 and intends to sell the plant so it can be up and running again.

The other silicon plant, PCC Bakki Silicon near Húsavík, commenced production in April this year. The plant has experienced some difficulties, although smaller and different problems from what United Silicon was facing. Its annual production will be 33,000 tons of metallurgical grade silicon.

Also, two other projects are in development. Firstly Thorsil intends to build a silicon plant next to the United Silicon plant in Helguvík. Nonetheless, little advances have been made over the past few months and construction hasn't started. Secondly, Silicor Materials intended to build a processed solar silicon plant at Grundartangi but those plans seem to have fallen through, for the time being at least.

<sup>30</sup> See press release:

<https://www.hydro.com/en/press-room/Archive/2018/hydro-bids-to-acquire-icelandic-aluminium-plant-isal/>

<sup>31</sup> London Metal Exchange's Aluminium spot prices, until 13 July 2018.

## Data Centre Industry

The data centre industry is a rapidly growing industry in Iceland, largely due to the recent boom in cryptocurrencies such as Bitcoin. Multiple data centres have been constructed in recent years and industry stakeholders expect a staggering 300% growth this year, predominantly due to growth of crypto currency processing. Data centres consumed less than 2% of Iceland's electricity but by KPMG's estimate they will consume 8% by 2020.<sup>32</sup>

Iceland's cold temperate climate, low electricity prices and renewable energy production has made it an attractive location for such operations (Figure 2.31). Yet some challenges are ahead, for instance a foreseeable lack of electricity and that Iceland only has three submarine cables.

## Seafood Industry

Fisheries, and the whole seafood industry, has long been the backbone of the Icelandic economy. Before 2006, seafood accounted for over half of goods exports. Since, the economy has diversified so in 2017 seafood was

the source of 16% of Iceland's export revenues.

The Icelandic fisheries management is based on "individual transferable quotas" (ITQ or simply "a quota system"). It was established in the 1980s and 90s after years of instability and overfishing in important species such as cod. The system's main objective is to protect and ensure sustainable fisheries while maximizing the economic value of the scarce resource. Fishing quotas can be bought and sold in the market, with the ITQ system making it easier for companies to plan and invest with a long-term view. The system has for long been controversial but apparently the controversy over the merits of the ITQ system has decreased in recent years. Today, the debate is mostly focused on fishing fees which have increased a great deal as a percentage of net revenues over the last decade.

The Icelandic fishing industry is internationally renowned for its adherence to a sustainable fisheries policy, resulting in a strong fish stock. The Icelandic cod population has not been larger since systematic measurements began in 1985, a

The data centre industry is a rapidly growing industry in Iceland, largely due to the recent boom in cryptocurrencies such as Bitcoin.

Fisheries, and the whole seafood industry, has long been the backbone of the Icelandic economy.

The system's main objective is to protect and ensure sustainable fisheries while maximizing the economic value of the scarce resource.

<sup>32</sup> KPMG (2018), The Icelandic Data Industry:

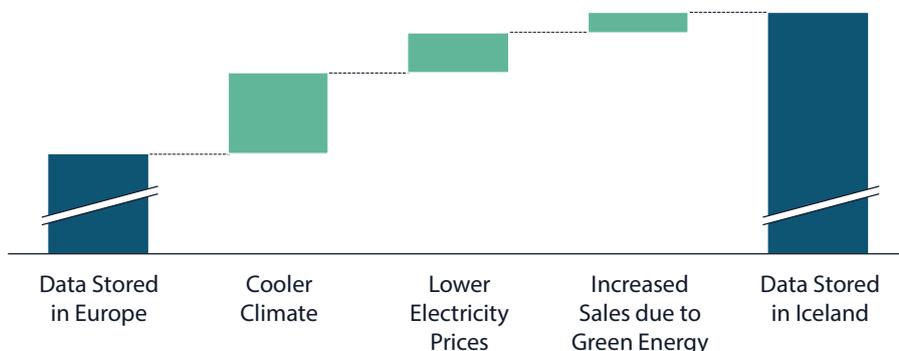
[http://www.si.is/media/\\_eplica-uppsetning/The-Icelandic-Data-Center-Industry-FINAL.pdf](http://www.si.is/media/_eplica-uppsetning/The-Icelandic-Data-Center-Industry-FINAL.pdf)

**Figure 2.31**

Favorable climate in addition to affordable and renewable energy makes Iceland an attractive location for data centers

### Potential Increase in Profitability by Storing Data in Iceland

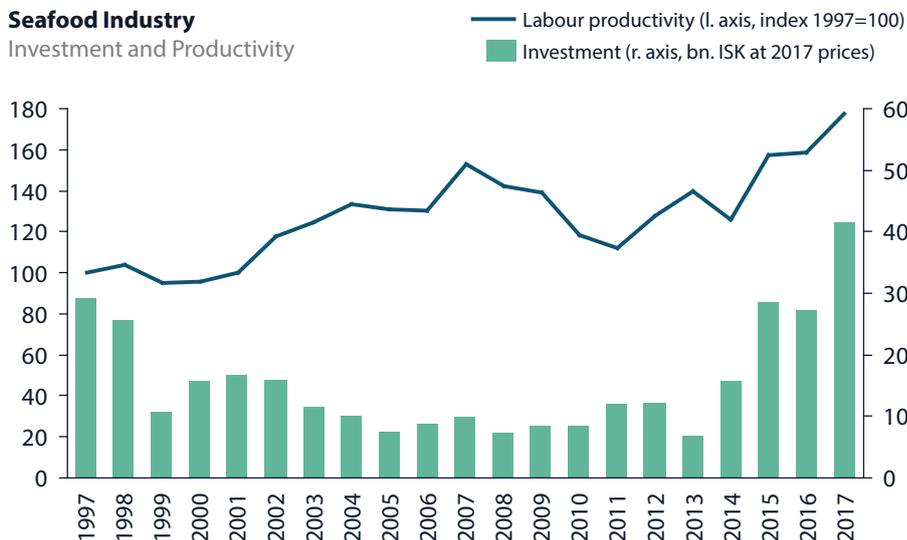
Profits; Illustrative



Source: Iceland Chamber of Commerce

**Figure 2.32**

Iceland's seafood industry has seen productivity gains amidst erratic business environment. The sector's investments are at a record level.



Sources: Statistics Iceland; Iceland Chamber of Commerce.

Recently the fishing fleet and other equipment have largely been renewed so investments in the seafood industry climbed to a record high in 2017.

Labour productivity has increased rapidly over the years and technological advances in the industry have had a spillover effect into other sectors.

particularly positive news since cod exports are 43% of total seafood exports.<sup>33</sup> Furthermore, other key commercial fish species are also in a healthy state.

The seafood industry itself also seems well prepared for the future. Labour productivity has increased rapidly over the years and technological advances in the industry have had a spillover effect into other sectors.<sup>34</sup> Since 1997, the average productivity growth has been approximately 3%, compared to 2% for the whole economy. Recently the fishing fleet and other equipment have largely

been renewed so investments in the seafood industry climbed to a record high in 2017 (Figure 2.32). These new investments had an equity ratio of 55%. It is expected that investments will decrease slightly this year.<sup>35</sup>

As illustrated in volatile labour productivity in the seafood industry has been susceptible to shocks of fish stocks, in markets and of the Icelandic economy. After years of weak Króna and good profits, the industry's business environment has been shifting. The appreciation of the Króna from 2015 to 2017 has proved challenging for the industry, wage

33 Iceland Magazine: <http://icelandreview.com/news/2018/01/03/cod-numbers-reach-historic-high>

34 Marel, one of Iceland's largest companies with a market cap of 2,4 billion USD, started by designing scales for the seafood industry. There are more examples, which is reflected in that is estimated that industry's

35 Central Bank of Iceland, Monetary Bulletin (2018/2).

### Agriculture

As in most societies, agriculture was historically the most important source of livelihood and despite the harsh environment, Iceland is no exception. Today, however, agriculture is a relatively small part of the economy (1% of GDP and 0.5% of exports) and remains protected and subsidised by the government. The sector mostly revolves around livestock (sheep, cattle, poultry and pigs) but also crops, for instance, grown in geothermal heated greenhouses. Recently, efforts have been made to increase exports of agricultural products such as "skyr" and lamb meat.

increases have also been challenging (see chapter 1.2 on the labour market) as well as rising oil prices. Challenges in important markets such as Russia (sanctions), United Kingdom (depreciated GBP following Brexit) and Nigeria (depreciating NGN following an economic downturn) have also had negative effects. Meanwhile, exports to China, France and USA have increased. Overall, the industry is well equipped to take on current challenges after de-leveraging in recent years. Some consolidation is expected, as seen in the recent 34% acquisition of HB Grandi hf., one of Iceland's largest seafood companies, by Brim hf.

### Aquaculture

Fish farming, or aquaculture, has been expanding rapidly in recent years, although it is still very small compared to the catch of wild fish stock. In 2017 around 15,000 tons of farmed fish was exported, an 174% increase in only two years, providing over 1% of total export revenues. Arctic char has for long been the main species but the growth in recent years has been driven by salmon farming which in 2017 accounted for

59% of aquaculture production. There are plans of continued expansion in coming years in both the Westfjords and the Eastfjords, but opposition regarding negative environmental impact might alter the process.

### 2.5. International Sector

Traditionally, Iceland has depended on utilisation of its natural resources for development and growth. However, the need and benefits of a strong international sector were highlighted in a report by McKinsey & Co. on the Icelandic Economy in 2012.<sup>36</sup> The international sector consists of businesses that produce tradable goods and services that are independent of natural resources and compete in an international environment. That is, they export knowledge, and rely on intellectual property and technology.

In the years preceding the 2008 financial crisis, growth had been driven by a negative trade balance and ensuing build-up of external debt. This resulted in a sharper and a deeper recession than otherwise,

The international sector consists of businesses that produce tradable goods and services that are independent of natural resources and compete in an international environment. That is, they export knowledge, and rely on intellectual property and technology.

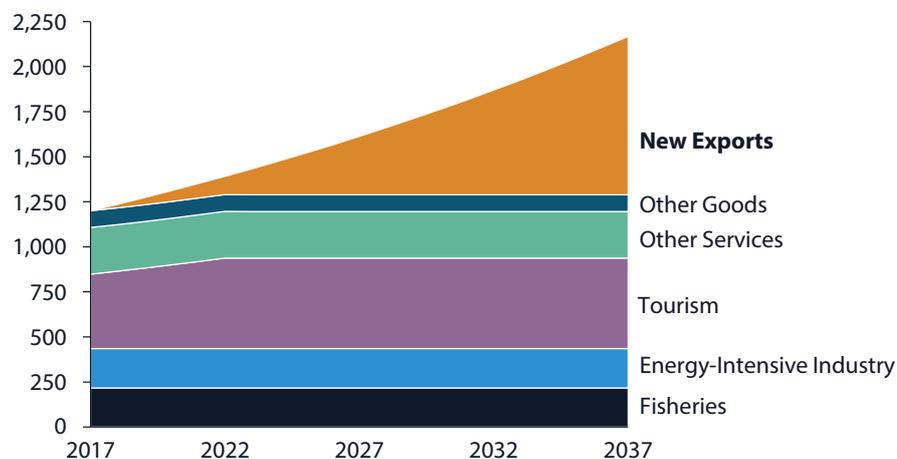
<sup>36</sup> Charting a Growth Path for Iceland McKinsey & Company (2012): <https://www.forsaetisraduneyti.is/media/forsaetisraduneyti-media/media/Skyrslur/charting-a-growth-path-for-iceland-2012.pdf>

**Figure 2.33**

New exports in knowledge based goods and services are needed to support a balanced long-term growth trajectory<sup>1</sup>

#### Export Requirements Along a 3% Economic Growth Path

Bn. ISK; Illustrative<sup>2</sup>



<sup>1</sup> McKinsey assumed a goal of 4% growth p.a. but the Chamber believes a 3% growth rate is more realistic over the long run. Tourism exports are assumed to grow at a 4% rate until 2022.

<sup>2</sup> Real ISK.

Source: McKinsey & Company (Charting a Growth Path for Iceland), Iceland Chamber of Commerce, Statistics Iceland,

The growth potential of the international sector is essentially limitless whereas the resource sector is bound by natural constraints.

but nevertheless provided a lesson of aiming for export growth, at least equal to the growth of the economy (Figure 2.33). With that condition satisfied, exports will support a balance in international trade and ensure a sustainable growth path.

### The Need for Diversification and New Exports

If exports are to match headline growth of 3%, another challenge presents itself. Exports must nearly double in the next 20 years, as the McKinsey & Co. report noted.<sup>37</sup> This policy objective has since been referred to as “the 1000 billion challenge”.

The Chamber believes that most of these new exports need to come from the international sector. Firstly, the growth potential of the international sector is essentially limitless whereas the resource sector is bound by natural constraints.

Secondly, a fast-growing international sector can unlock productivity gains and transmit them to the domestic services sector. As was highlighted

in the McKinsey & Co. report, Iceland appears to have historically lagged behind other Nordic countries in terms of productivity, which Icelanders have compensated for by working more hours than their peers. However, Statistics Iceland recently released new statistics that indicate higher overall productivity than previously estimated (see chapter 2.3).

Notwithstanding, increased productivity in the domestic sector can enable a shift of resources, particularly labour, to the international sector which can further drive export growth. It thereby creates a virtuous cycle of continuous export and productivity growth. Finally, a strong international sector has the added benefits of increased diversification of exports which in turn further increases the stability of balance of payments and the economy as a whole. The government seems to share this view, at least in part, as it emphasised innovation and entrepreneurship in its political agenda and has begun forming a comprehensive policy on the matter, which is due in May 2019.

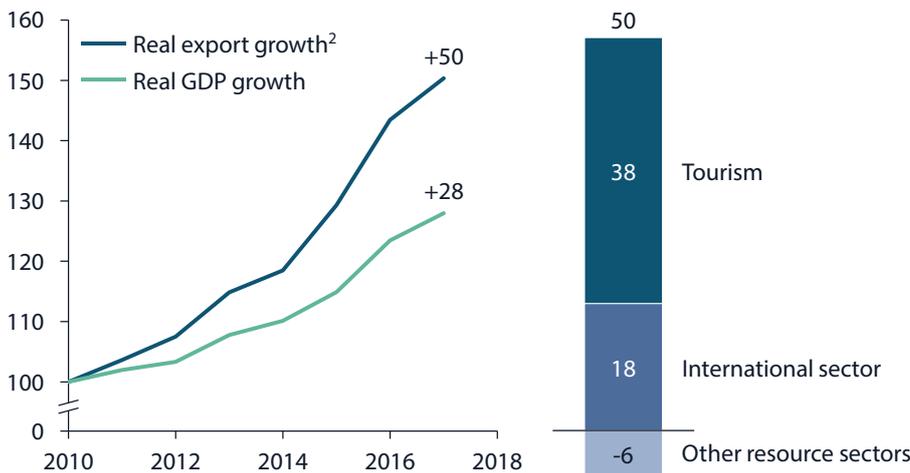
<sup>37</sup> The McKinsey & Co. report presumed a target growth of 4% p.a. but the chamber believes that a 3% growth rate is more realistic in the long run. The implication is that the 1,000 billion challenge has a longer time horizon.

**Figure 2.34**

Export growth has exceeded headline growth in real terms

**Real GDP & Export growth, Real Export Growth by Sector<sup>1</sup>**

Chain linked volume, inflation adjusted (2010 = 100)



<sup>1</sup> International sector is defined as total exports net of seafood, agriculture, tourism, aluminum, silicon and 50% of air transportation.

<sup>2</sup> Chain linked volume.

Source: Iceland Chamber of Commerce, Statistics Iceland, Central Bank of Iceland

**Robust Export Growth Despite a Strong Króna**

Despite considerable real appreciation of the Króna, total exports from the international sector have so far grown by 49% in nominal terms since 2010, which amounts to an average 5.1% annual growth. Export growth in the international sector has, however, been overshadowed by exceptional export growth in the tourism industry that amounts to a yearly average of 19.9% since 2010. Overall nominal export growth has been 4.8%, on average, in the same period. In real terms

export growth has exceeded headline growth (Figure 2.34). Analysts and policy makers, however, believe export growth to slow down considerably in the next few years. For instance, the Central Bank projects an average export growth of 3% in 2018-2020.

**Shifting to a Knowledge Based Economy**

In recent years tourism has grown at an exceptional pace. Nevertheless the international sector has held on to its share of resources in proportion to GDP. By some measurements

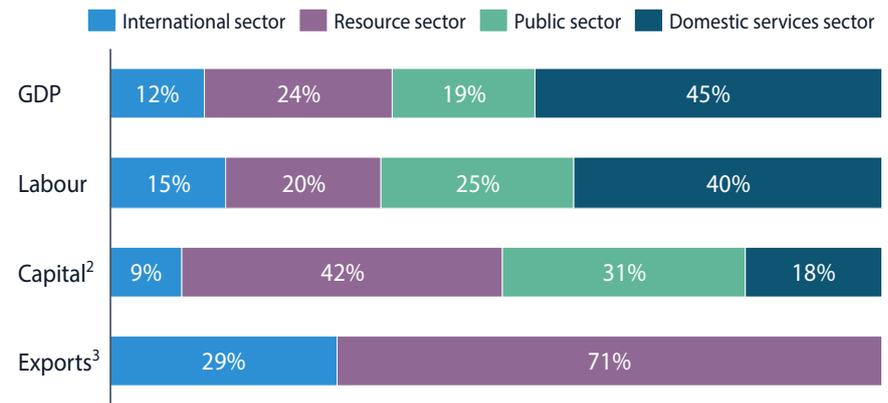
Despite considerable real appreciation of the Króna, total exports from the international sector have so far grown by 49% in nominal terms since 2010.

**Figure 2.35**

The international sector is holding on to its share of the economy despite the tourism boom

**GDP, Labour, Capital and Exports by Sector<sup>1</sup>**

Percentage of total, 2017



1 i) International sector: NACE REV 2: CA, C; 50% of M, S; 40% of J; 20% of N ii) Resource sector: NACE REV 2: A, B, CA, CH, D, E; 60% of H, I; 20% of R. iii) Public sector, NACE REV 2: O, P, Q. iv) Domestic services sector, NACE REV 2: F, G, K, L; 80% of R; 60% of J; 50% of M, S; 40% of H, I; 20% of N.

2 Capital stock does not include residential capital or unclassified activities.

3 Resource sector exports defined as fisheries, aquaculture, tourism, aluminum, silicon and 50% of air transportation, International sector accounts for everything else.

Source: Iceland Chamber of Commerce, Statistics Iceland

Lifting the capital controls, which was accomplished in 2017, was therefore essential to the international sector.

The cap on tax breaks for research and development was recently raised, from ISK 100 million to ISK 300 million, and the government has pledged to remove the cap altogether by 2019.

resources have actually been shifting incrementally towards the International sector (Figure 2.35).

There are yet concerns that resources are not shifting fast enough over to the international sector. McKinsey & Co. estimated that 13,000 jobs could be moved from the domestic services sector to the international sector, if productivity reached similar levels as seen in Scandinavia. The extraordinary growth in the tourism industry has, however, greatly increased labour demand in the resource and domestic services sector resulting in a very tight labour market (see chapter 1.2).

The global nature of companies operating in the international sector further poses the risk that they will relocate their operations abroad if the domestic operating environment is not globally competitive. Lifting the capital controls, which was accomplished in 2017, was therefore essential to the international sector.

A number of incentives have been introduced in the last few years to support the international sector. Tax breaks and expedited work visa arrangements for foreign specialists have been introduced, although companies operating in the sector note that the process is still very cumbersome, especially in regard to non-EEA nationals.<sup>38</sup> The cap on tax breaks for research and development was recently raised, from ISK 100 million to ISK 300 million, and the government has pledged to remove the cap altogether by 2019.<sup>39</sup> Additionally, tax breaks up to 50% are now available in relation to individual investments in start-up companies, given certain conditions.

As some of these examples suggest, progress has been made in terms of improving the operating environment of companies in the international sector. Still, much remains to be done, underscored by the fact that Iceland's digital and overall competitiveness

38 A new Act on Foreigners took force on 1st January 2017.

39 Article 10(1) of Act No 152/2009 on support for innovation companies: [https://www.government.is/media/fjarmalaraduneyti-media/media/log-reglur/Act\\_No\\_152\\_2009.pdf](https://www.government.is/media/fjarmalaraduneyti-media/media/log-reglur/Act_No_152_2009.pdf)

ranks lower than the other Nordic countries.

One principal pillar for improved competitiveness is access to highly skilled labour. In that regard, the number of university graduates has tripled since 2000. Yet, evidence suggests that Icelanders hold proportionally few “STEM” degrees compared to the other Nordic countries.<sup>40</sup> The universities and technical colleges have thus become more aware of the importance of increasing the number of technically trained individuals.

The chamber believes that reforms are needed in the educational system.

Partly due to the changing nature of jobs worldwide – most of which are being created in the knowledge based sector – that not only require technical and science training but also a creative mind. It’s therefore a positive sign that the Minister of Education has announced her intention of forming a long-term comprehensive educational policy with a 2030 horizon. Notwithstanding, educational reforms alone are insufficient to ensure an adequate talent pool, further measures to attract highly skilled foreign workers are needed going forward in light of Iceland’s small population.

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<sup>40</sup> Iceland Chamber of Commerce – The biggest economic issue: Opportunities in education:  
[http://vi.is/%C3%BAtg%C3%A1fa/sk%C3%BDrslur/Staersta\\_efnahagsmalid.pdf](http://vi.is/%C3%BAtg%C3%A1fa/sk%C3%BDrslur/Staersta_efnahagsmalid.pdf)

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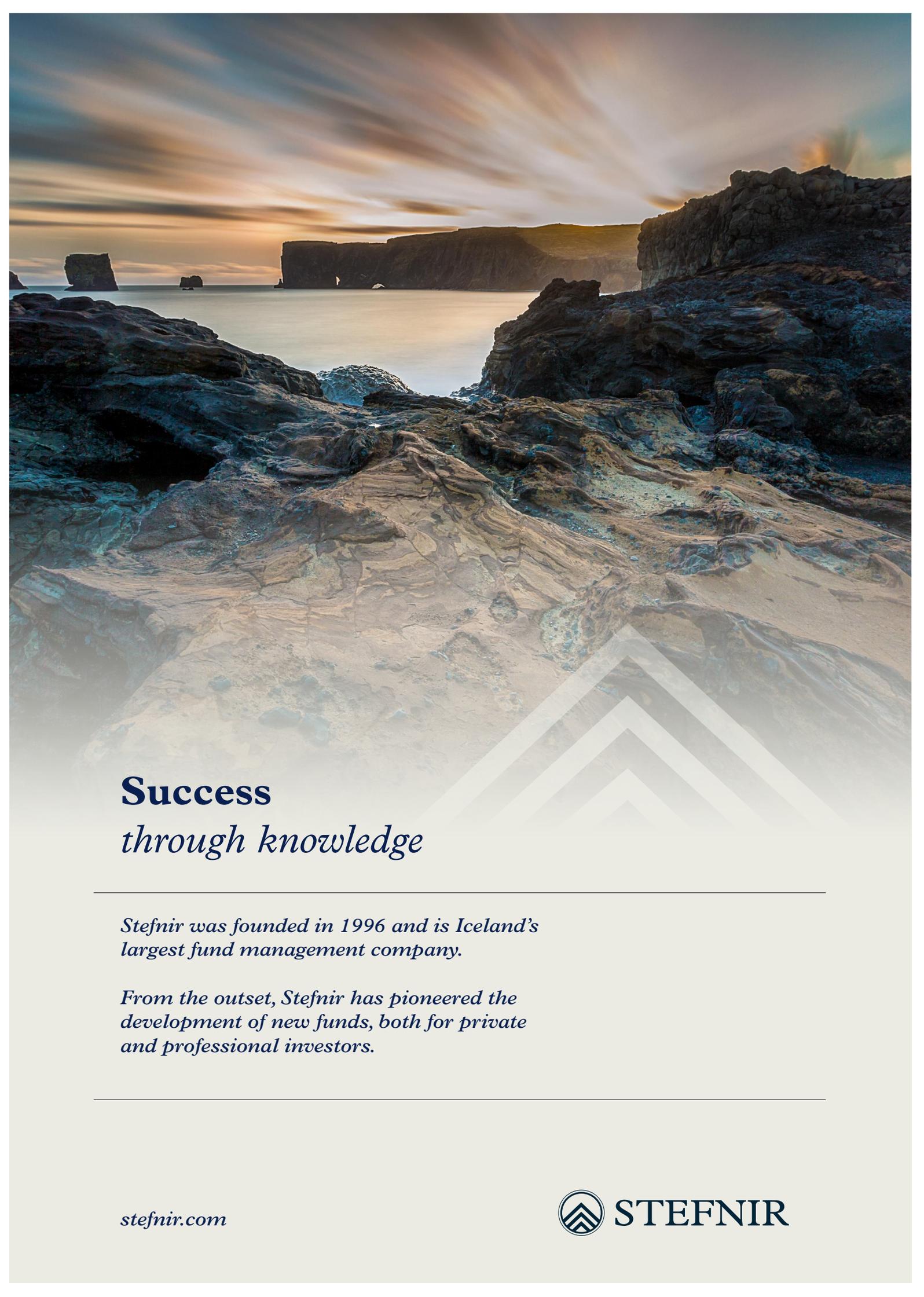
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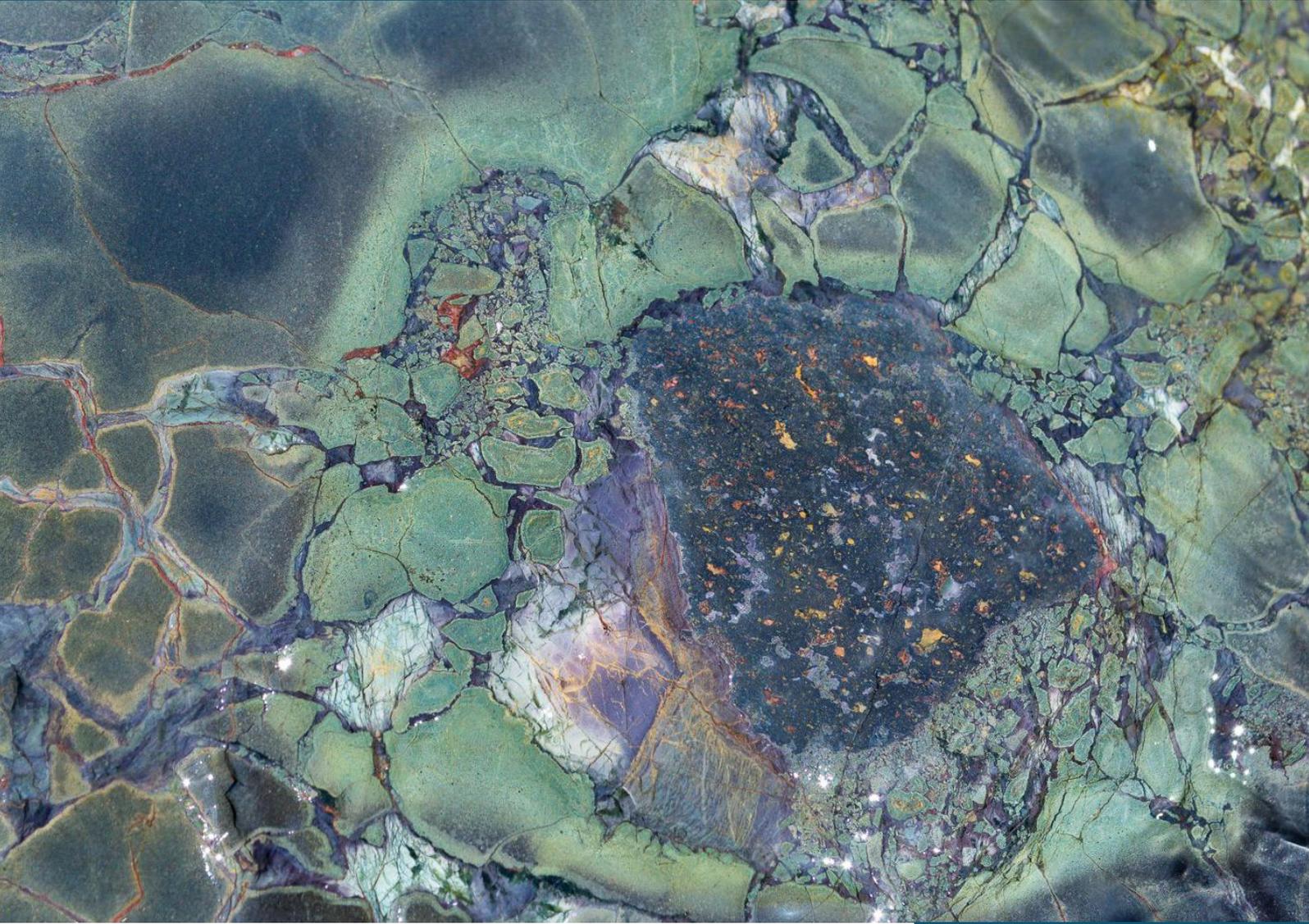


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# 3 Future Prospects

Iceland has economically recovered from the financial crisis. Growth has been robust recently and the short-term outlook is decent despite evidence of a slower growth. The external imbalance of the economy, arising from a persistent trade deficit and significant foreign debt obligations, has been erased as exports have increased and settlements with foreign creditors have been finalised (see chapter 2.2, Capital Controls). The economy is therefore, more resilient than before.

## 3.1 Economic Growth

In 2012, the global management consulting firm McKinsey & Co. published a report titled "Charting a Growth Path for Iceland", where Iceland's long-term growth prospects and key challenges were assessed.<sup>1</sup> The

report has had a significant impact on public debate in Iceland and provided insights to the future prospects of the Icelandic economy. One of the key messages of the McKinsey & Co. report concerns the composition of Iceland's production and low productivity compared to neighbouring countries. Therefore, it is good news that productivity has increased and Iceland's labour productivity has now surpassed Finland. Regardless, productivity gains are an ever-important goal to ensure long-term sustainable economic growth.

There has been some scepticism around the recent increase in productivity, which by official estimates peaked at 4.4% in 2016. Statistics Iceland is working on more accurate measures of productivity and the initial results that indicate a slower

Iceland has economically recovered from the financial crisis. Growth has been robust recently and the short-term outlook is decent despite evidence of a slower growth.

<sup>1</sup> McKinsey report (2012), Charting a Growth Path for Iceland: [www.stjornarradid.is/media/forsaetisraduneyti-media/media/Skyrslur/charting-a-growth-path-for-iceland-2012.pdf](http://www.stjornarradid.is/media/forsaetisraduneyti-media/media/Skyrslur/charting-a-growth-path-for-iceland-2012.pdf)

**Figure 3.1**

A slide from The Iceland Growth Forum's presentation on 37 reform proposals to support a long-term sustainable growth trajectory

**"Let's look outside... And see the big picture"**



Growth is determined by how prepared the country is to face the number of disruptive trends that are now shaping the global economy.

Source: Iceland Growth Forum presentation

It is good news that productivity has increased and Iceland's labour productivity has now surpassed Finland. Regardless, productivity gains are an ever-important goal to ensure long-term sustainable economic growth.

Improvements could also be made through public sector reform, as public employees account for up to a fifth of employed individuals in the economy.

productivity growth, or a 1.4% average growth from 2008-2017. That is rapid by high-income countries' recent standards and 0.6 pp higher than in OECD states. Furthermore, according to the Central Bank, evidence suggests that working hours have been overestimated and that productivity is thus underestimated.<sup>2</sup> That would somewhat alter the conclusions of McKinsey & Co's report, but not the need for productivity growth.

Increased competition domestically and market openness on a global scale would help improve domestic productivity. In this regard, market participants are closely examining the effects of the recent entry of foreign companies on the retail market (see chapter 2.3). Improvements could also be made through public sector reform, as public employees account for up to a fifth of employed individuals in the economy.

Although exports have grown over the past few years, as discussed in previous chapters (see chapters 1.3 and 2.5), this is largely due to increase in tourism – a resource based sector. Given the limited nature of resource based sectors, the importance of the international sector needs to be emphasised as a sustainable source of export revenue (see chapter 2.4).

Following the publication of the McKinsey & Co. report, the so-called *Iceland Growth Forum* was established (Figure 3.1) to develop further its policy recommendations. The forum's aim was also to increase alignment and facilitate cooperation between key stakeholders in the economy; political party leaders, CEOs from a broad range of significant Icelandic companies, academia and labour organisations. Additionally, the Forum established a secretariat which created proposals for public policy reform.

Many of the proposals put forth in the Forum have already been implemented, with the aim of supporting Iceland's long-term growth prospects. The Iceland Chamber of Commerce has been an avid supporter of the Iceland Growth Forum and suggestions set

out in the McKinsey report. Over the past few years the work of the Chamber has focused specifically on the four sectors discussed in the report; public, domestic services, resource and international sector. Although the underlying focus will remain on the challenges associated with the sectors, the Chamber has recently sought to shift its focus more outward, acknowledging the global disruptive trends that undeniably shape economies around the world. Iceland's economy is no exception there. The same applies for the Growth Forum, which the Prime Minister has announced to revive in order to prepare Iceland for the "Fourth Industrial revolution".

### 3.2 Disruptive Trends Shaping the Economy

Like the rest of the world, Iceland is greatly affected by global disruptive trends. The business sector is keen on seeking to align strategies with government forces, since technology is transforming industries at an unprecedented pace. Iceland has set sail to master these trends and support a prosperous and sustainable future. The Chamber's goal is therefore to capture these trends by operating under four focus lenses (Figure 3.2).

The four lenses are Regeneration, Digitisation, Environmental Sustainability and Global Connections. All of these topics tie into current challenges in Iceland, and provide the Chamber with additional perspective through which to analyse policies for further improvement across the four sectors.

Digitisation and how the Icelandic society will embrace technological changes could help drive productivity and service improvements across sectors. This lens is currently in focus by the Chamber and was theme of the most recent ICoC's Business Forum. Regeneration or human capital development ties into educational matters which are of great relevance in regards to the international sector and growth of the knowledge economy in Iceland. All generations will have to

<sup>2</sup> Central Bank of Iceland, Monetary Bulletin (2018/2): [https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB182\\_Box\\_2.pdf](https://www.cb.is/library/Skraarsafn---EN/Monetary-Bulletin/2018/May-2018/MB182_Box_2.pdf)

**Figure 3.2**

To capture the disruptive trends that are shaping the global economy, the Chamber will operate under four focus lenses

**The Four Focus Lenses of Disruptive Trends**

Lenses	Examples		
 <p>Digitisation</p>	<ul style="list-style-type: none"> <li>Embrace technological changes to drive productivity improvements across sectors</li> </ul>	<ul style="list-style-type: none"> <li>Improve services and achieve cost efficiency through digitization</li> </ul>	<ul style="list-style-type: none"> <li>Use big data insights to connect with customers and transform operations</li> </ul>
 <p>Regeneration</p>	<ul style="list-style-type: none"> <li>Support and grow knowledge driven export sectors of the Icelandic economy</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring that all generation's talents match the need of the society</li> </ul>	<ul style="list-style-type: none"> <li>Welcome the world's talents and early stage entrepreneurs</li> </ul>
 <p>Environmental Sustainability</p>	<ul style="list-style-type: none"> <li>Maximize value creation in Iceland's resource sectors</li> </ul>	<ul style="list-style-type: none"> <li>Protect nature with focus on productivity and sustainability</li> </ul>	<ul style="list-style-type: none"> <li>Focus on origin, purity and quality of Icelandic products for global marketing</li> </ul>
 <p>Global Connections</p>	<ul style="list-style-type: none"> <li>Boost global position of Iceland as the country to base and do business in</li> </ul>	<ul style="list-style-type: none"> <li>Improve the business environment through tax and regulatory reform</li> </ul>	<ul style="list-style-type: none"> <li>Focus on new business development, M&amp;A and alliance building</li> </ul>

Source: Iceland Chamber of Commerce

reinvent themselves to meet the needs of the future economy. Environmental Sustainability is of great relevance for a natural resource rich economy such as Iceland, where origin, purity and quality plays a key role in global branding and sale. Finally, Global Connections is the undercurrent within all these themes, as shorter pathways of information, capital, production and increased flexibility of labour will change the way markets operate.

There is a great reason to be optimistic about the future of the Icelandic economy, if policymakers, business leaders and the general public are willing to embrace the upcoming changes. The Chamber will continue to cooperate broadly with its members, policy makers, academia and other stakeholders to support a sustainable growth of the Icelandic economy.

**3.3 Potential Infrastructure Projects**

Debate and discussion over specific, as well as overall, infrastructure projects, have been prominent in recent years. The reasons could be mainly twofold. Firstly, efficient and reliant infrastructure is key for increased productivity and future prosperity. Secondly, investment was limited in the years after the financial crisis and Iceland is in a healthy status to catch up after de-leveraging. A recent report by the Federation of Icelandic Industries suggests that ISK 372 billion (15% of GDP) investment is needed in maintenance of infrastructure.<sup>3</sup>

Following is a short list of potential infrastructure projects that have been a significant topic of debate in recent years and could have a large impact.<sup>4</sup>

There is a great reason to be optimistic about the future of the Icelandic economy, if policymakers, business leaders and the general public are willing to embrace the upcoming changes.

Debate and discussion over specific, as well as overall, infrastructure projects, have been prominent in recent years.

<sup>3</sup> <http://www.si.is/starfsemi/innvidir-a-islandi-astand-og-framtidarhorfur/>

<sup>4</sup> Some of these projects, and more, are found in GAMMA Capital Management's report on infrastructure in Iceland: [https://www.gamma.is/media/skjol/GAMMA--Innvidir\\_x28.pdf](https://www.gamma.is/media/skjol/GAMMA--Innvidir_x28.pdf)

ISAVIA is projecting an increase from 10 million passengers this year to 24 million in 2040.

The list is neither complete nor ranked in any way. Profitability and viability are furthermore debated in many cases, often on the grounds of environmental concerns.

### Keflavik Airport Expansion

The boom in tourism and air traffic to and from the country has been followed up with significant investment at Keflavik airport such as a 30% expansion of the terminal since 2010. The expansion is, however, modest in light of 400% growth in number passengers. Furthermore, ISAVIA is projecting an increase from 10 million passengers this year to 24 million in 2040, which is close to Brussels Airport number of passengers today.<sup>5</sup> This calls for continued investment in the coming years and decades. Also, an airport express train to downtown Reykjavik is being considered by private investors.

### A New Domestic and International Airport

A new airport between Reykjavik and Keflavik Airport in Hvasahraun, has also been considered in recent years. Initially to replace Reykjavik's domestic airport in central Reykjavik, but recently it has also been considered as a new international airport. A government task force that released its findings this year concluded that the potential airport should be further investigated. An airport in Hvasahraun would be closer to Greater Reykjavik, where 2/3 of the population lives, than Keflavik and would open up valuable land for development in central Reykjavik. However, it is a large investment and many questions remain unanswered.<sup>6</sup>

### Roads

The Icelandic road system was perhaps the largest casualty of too little investment following the financial

5 ISAVIA's forecast: <https://www.isavia.is/fyrirtaekid/fjolmidlateg/frettir/storframkvaemdir-a-keflavikurflugvelli-og-skiptifarhegum-fjoglar>

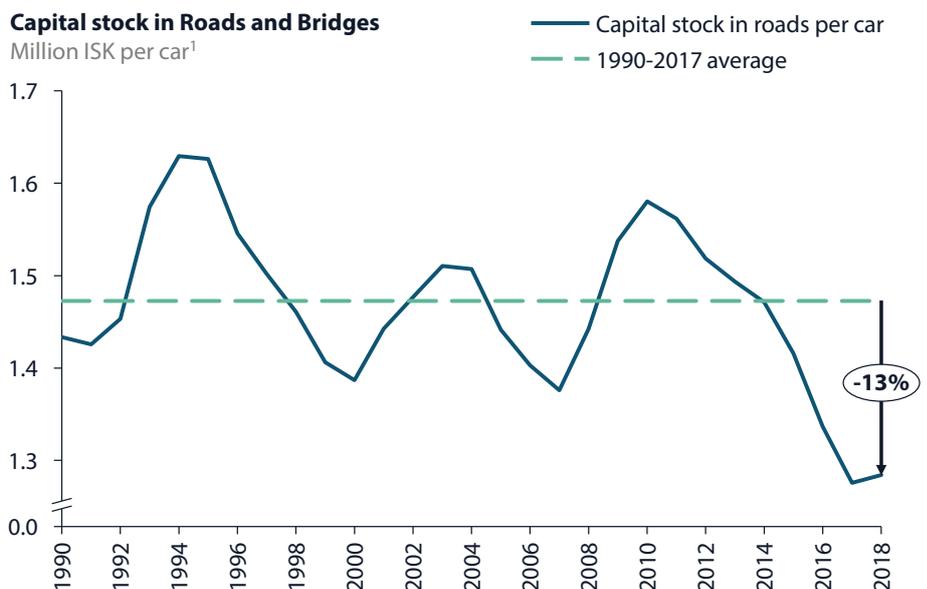
6 Icelandair estimates the first phase would cost up to ISK 200 billion: <https://www.stjornarradid.is/lisalib/getfile.aspx?itemid=cc40ae48-0c39-11e8-9426-005056bc530c>

**Figure 3.3**

Lack of investment on top of number of traffic increasing by half in less than a decade indicates that investment in roads in bridges needs to pick-up

### Capital stock in Roads and Bridges

Million ISK per car<sup>1</sup>



<sup>1</sup> ICoC projection for 2018 based on Althingi's budget. Number of cars growth projected the same as GDP growth in 2017-18

Sources: Statistics Iceland; Althingi; Iceland Chamber of Commerce

crisis. Meanwhile, traffic on the Ring Road has increased by 47% since 2011. It is therefore estimated that there is a substantial lack of maintenance but also new roads, bridges and tunnels. If the capital stock in roads in bridges per vehicle is anything to go by, there is a need for investment of ISK 50 billion to maintain the long run average (Figure 3.3). At the same time the government, the owner of almost all road infrastructure, is constrained by fiscal responsibility and other priorities. That could give ground for Public-Private Partnership (PPP) projects, which so far have been uncommon in Iceland.

### Reykjavík City Line

In the recent local government election, one topic of debate was the proposed “Borgarlína” or Reykjavík City Line in Greater Reykjavík. The Reykjavík City Line is a planned Bus rapid transit system, which has a cost estimate of ISK 70 billion. The current majority of Reykjavík’s City Council has proposed to carry out those plans and other

local government in Greater Reykjavík are generally on board. Timing of construction and financing, however, have not been set in stone.

### Wind Power

In recent years the option of wind power, has been tested with promising results. The National Power Company of Iceland (Landsvirkjun), has plans of 200 MW Wind Farm near Búrfell Power Station but no timeline has been set yet.<sup>7</sup> Other companies and private investors have also recently shown interest in constructing wind farms.<sup>8</sup>

### Interconnector to the UK

The possibility of constructing an electrical interconnector between Iceland and United Kingdom has been explored in recent years (Figure 3.4). Such an interconnector could be a source of new export revenues for the Icelandic economy and could strengthen electricity supply security of the two respective countries. The interconnector would be over 1000

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7 Information from Landsvirkjun on The Búrfell Wind Farm: <https://burfellwindfarm.landsvirkjun.com>

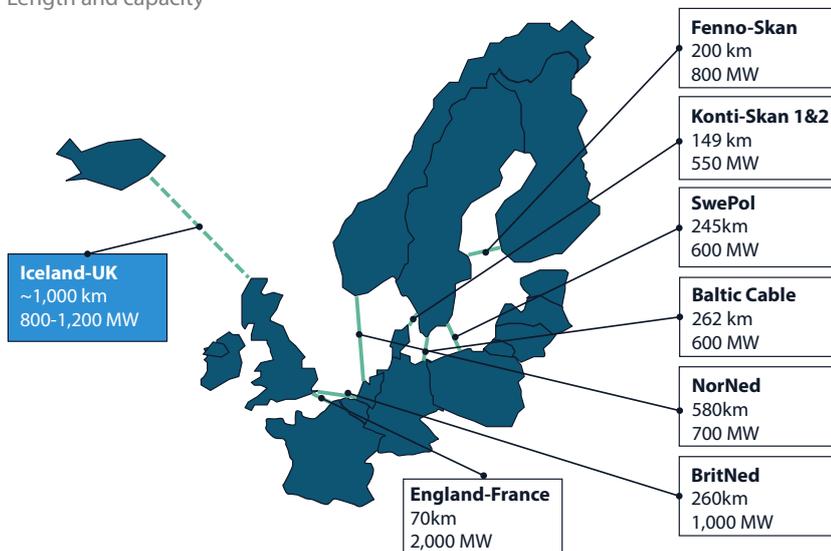
8 For instance, Storm Orka ehf. Is proposing a 130 MW wind farm in West Iceland: [https://www.mbl.is/frettir/innlent/2018/02/03/vegferd\\_til\\_virkjunar\\_vindorku/](https://www.mbl.is/frettir/innlent/2018/02/03/vegferd_til_virkjunar_vindorku/)

**Figure 3.4**

A proposed interconnector from Iceland to the UK would be one of the longest in Europe and requires a significant investment

### Interconnectors in Northern Europe

Length and capacity



Sources: Kvikabanki; GAM Management; Iceland Chamber of Commerce

While Iceland's electricity production is in a healthy state, the transmission system ("the grid") is lagging behind in terms of investment and maintenance.

km long, and between 800 and 1200 MW.<sup>9</sup> A report from 2016 estimated the total cost at ISK 800 billion, or about a third of Iceland's 2016 GDP.<sup>10</sup> The interconnector is currently not on the government's agenda and the project has hardly progressed for a while now. Landsvirkjun, the national power company and producer of 71% of Iceland's electricity has, however, announced that the company is still keen on the project.<sup>11</sup>

### Electricity Transmission System

While Iceland's electricity production is in a healthy state, the transmission system ("the grid") is lagging

behind in terms of investment and maintenance. In the aforementioned report on Icelandic infrastructure the transmission system is one of the key weaknesses, as connections between some regions are not sufficient.<sup>12</sup> Therefore, electricity supply security is a concern and hinders optimal operation of power stations. The report estimates that an ISK 70 billion investment is needed in the transmission system. Nevertheless, the outlook is good and Landsnet, operator of the grid, has increased investments in recent years and plans to invest ISK 50-65 billion in the grid until 2027.<sup>13</sup>

9 Information from Landsvirkjun: <https://www.landsvirkjun.com/researchdevelopment/research/submarinecablotoeurope/>

10 Information from Kvika: <https://en.kvika.is/ice-link-report>

11 Visir.is, an online newspaper: <http://www.visir.is/g/2018180229216>

12 The Federation of Icelandic Industries, (2018): <http://www.si.is/starfsemi/innvidir-a-islandi-astand-og-framtidarhorfur/>

13 Landsnet (2018): <https://www.landsnet.is/library/Skjol/Um-okkur-/utgafa-og-samskipti/Skyrslur/KerfisaAetlun/2018-2027/Kerfis%C3%A1%C3%A6tlun%20Landsnets%202018-2027%20-%20Umhverfissk%C3%BDrsla%2002.pdf>



*Macroview of a moulin in Breiðamerkurjökull glacier*

# About the Iceland Chamber of Commerce

The Chamber strives for positive changes to the laws, regulations and other influencing factors concerning the business community.

The Counsel assists members with matters such as: the import and export of goods, employee/employer relations and specific laws or regulations concerning or impacting the business environment of its members.

The Iceland Chamber of Commerce (ICoC) is a non-governmental organization based on voluntary participation of companies and individuals with the mission of improving the operating environment of business in Iceland and to enhance economic prosperity. The Chamber has been diligent in its mission, celebrating its centennial anniversary last year.

## Operations of the Chamber

### Safeguarding of Interests

As an organisation of the business community, the Chamber works in the interests of everyone conducting business. The Chamber is a powerful tool for the business community in its work towards improvements to the business environment and overall enhanced productivity.

### A Representative Towards the Authorities

The Chamber strives for positive changes to the laws, regulations and other influencing factors concerning the business community. The Chamber reviews all major legislative bills that concern the business community. Comments are made in collaboration with members, and are presented to the relevant parliamentary committees.

### Annual Business Forum

The Chamber's Annual Business Forum is the largest and most attended event in the Icelandic business community. The Forum is attended by members of the Chamber, politicians and government officials, as well as others interested in Iceland's business community. The Chamber issues a report in connection with the Forum that outlines ways to improve the Icelandic business environment.

### Corporate Governance

The Chamber has taken the initiative in publishing guidelines for corporate governance, in collaboration with the Confederation of Icelandic Employers and Nasdaq OMX Iceland. The guidelines were first issued in 2004, and have since been updated and published several times. The fifth edition of the guidelines was issued in June 2015 and is available online here: [www.corporategovernance.is](http://www.corporategovernance.is)

### Communication of Information

Since 2008, the Chamber has regularly published an overview of the Icelandic economy. The report is published in English, and aimed to provide a factual description of events following the financial crisis. Over the years the report has evolved in to a summary of the current economic, business, and political landscape in Iceland. The Chamber has also taken on the role of communicating the key messages of the report to foreign parties interested in Iceland's business and economic environment.

### Legal Counsel and Arbitration

The Chamber's General Counsel supervises various projects for members, free of charge. The Counsel assists members with matters such as: the import and export of goods, employee/employer relations and specific laws or regulations concerning or impacting the business environment of its members.

The Chamber operates an independent arbitration institute, called the Nordic Arbitration Centre. Its purpose is to provide companies and individuals with alternative means to the judiciary to resolve commercial disputes in a secure and timely manner. The arbitration process and the Arbitral Tribunal final awards are strictly confidential.



### A Backbone for Business Education

The ICoc is an active advocate of technological and business education. Globalization, as well as the openness of the Icelandic economy has resulted in increased demand for educated individuals in Icelandic companies. To meet this demand, the ICoc owns and operates the following educational institutions:

#### The Commercial College of Iceland

*The Commercial College of Iceland* is a three year secondary school for students 16 years or older who have completed Icelandic elementary school, grades 1-10. The College has over one thousand students. Its main stated objectives are to promote the competitiveness of Icelandic business, both domestically as well internationally, by providing and furthering education in general, and business education at the secondary and lower tertiary level.



#### Reykjavik University

*Reykjavik University* is an international university located in Reykjavik, the capital of Iceland. Reykjavik University (RU) is Iceland's largest private university having about 3,000 students. The university's stated focus is on research, excellence in teaching, entrepreneurship, law, technological development, and co-operation with the business community. The university's stated objective is to educate students to become leaders in business, technology, and society.



### Joining the Iceland Chamber of Commerce

Membership of the Chamber provides companies an opportunity to influence its strategy and to promote their interests in a robust forum. The issues that the Chamber deals with on a daily basis relate both to the business community as a whole, as well as to specific interests of individual member companies. More information on joining the Iceland Chamber of Commerce may be found on its webpage: [www.chamber.is](http://www.chamber.is).

### Iceland Chamber of Commerce Bilateral Chambers

The ICoc operates 13 bilateral Chambers, both directly and in collaboration with others. An important role of the bilateral chambers is strengthening the relationship with other similar organisations in their respective countries. They also cooperate in several ways with embassies and consulates on promoting Icelandic businesses abroad.





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