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This Survey *is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.*

The Economic situation and policies of Iceland were reviewed by the Committee on 29 May 2017. The draft was revised in the light of the discussion and given final approval as the agreed report of the whole Committee on 8 June 2017.

The Secretariat's draft report was prepared for the Committee by Douglas Sutherland and Urban Sila under the supervision of Patrick Lenain. Damien Azzopardi provided the statistical research assistance, and Brigitte Beyeler provided the administrative support. The Survey *also benefited from contributions by Julien Daubanes, Alain Dupeyras and Jane Stacey.*

The previous Survey *of Iceland was issued in September 2015.*

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BASIC STATISTICS OF ICELAND, 2015 or latest year available

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE

Population (thousand)	329		Population density per km^2	3.3	(37.0)
Under 15 (%)	20.3	(18.1)	Life expectancy (years)	82.9	(80.5)
Over 65 (%)	13.7	(16.2)	Men	81.3	(77.8)
Foreign-born (%)	11.5		Women	84.5	(83.1)
Latest 5-year average growth (%)	0.7	(0.6)	Latest general election	October 2016	

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	16.8		Primary sector	6.3	(2.5)
In current prices (billion ISK)	2,214.0		Industry including construction	22.7	(27.0)
Latest 5-year average real growth (%)	2.7	(1.9)	Services	71.0	(70.6)
Per capita (000 USD PPP)	47.7	(40.8)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure	42.9	(40.9)	Gross financial debt	73.0	(112.2)
Revenue	42.0	(38.0)	Net financial debt**	50.3	(72.7)

EXTERNAL ACCOUNTS

Exchange rate ISK per USD	131.90		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	140.34		Manufactured goods	43.1	
In per cent of GDP			Food and live animals	42.7	
Exports of goods and services	53.7	(28.6)	Machinery and transport equipment	4.2	
Imports of goods and services	46.2	(28.3)	Main imports (% of total merchandise imports)		
Current account balance	5.47	(0.16)	Machinery and transport equipment	35.1	
Net international investment position	-5.7		Mineral fuels, lubricants and related materials	12.5	
			Crude materials, inedible, except fuels	11.7	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate for 15-64 year-olds (%)	84.7	(66.3)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	4.2	(7.0)
Men	87.1	(74.1)	Youth (age 15-24, %)	8.7	(14.0)
Women	82.3	(58.5)	Long-term unemployed (1 year and over, %)	0.6	(2.2)
Participation rate for 15-64 year-olds (%)	87.9	(71.3)	Tertiary educational attainment 25-64 year-olds (%)	38.8	(35.0)
Average hours worked per year	1 880	(1766)	Gross domestic expenditure on R&D (% of GDP)	2.2	(2.4)

ENVIRONMENT

Total primary energy supply per capita (toe)	17.5	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes)	6.3	(9.4)
Renewables (%)	88.5	(9.6)	Water abstractions per capita (m^3)	558	(819)
Fine particulate matter concentration ($PM_{2.5}$, µg/m^3)	7.2	(14.0)	Municipal waste per capita (kilogrammes)	537	(516)

SOCIETY

Income inequality (Gini coefficient)	0.244	(0.308)	Education outcomes (PISA score, 2015)		
Relative poverty rate (%)	4.6	(11.2)	Reading	482	(493)
Ratio of incomes of the top 10% vs. Bottom 10%	5.0	(9.6)	Mathematics	488	(490)
Public and private spending (% of GDP)			Science	473	(493)
Health care, current expenditure	8.8	(8.9)	Share of women in parliament (%)	41.3	(28.3)
Pensions	6.3	(9.1)	Net official development assistance (% of GNI)	0.24	(0.39)
Education (primary, secondary, post sec. non tertiary)	4.6	(3.6)			

Better life index: *www.oecdbetterlifeindex.org*

* Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

** Net public debt (according to the Act on Public Sector Finances definition) is defined as gross financial liabilities less unfunded pension liabilities and other accounts payable, as well as the value of currency and deposits.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union, and Central Bank of Iceland.

Iceland at a glance

- *Macroeconomic indicators*
- *Fiscal indicators*
- *Well-being indicators*
- *Inequality and gender equality indicators*
- *Green growth indicators*

Macroeconomic indicators

Annual % change, volume (2005 prices)

	2011	2012	2013	2014	2015	2016
Gross domestic product (GDP)	**2.0**	**1.2**	**4.1**	**1.9**	**4.1**	**7.2**
Private consumption	2.5	2.0	1.0	2.9	4.3	6.9
Government consumption	-0.1	-1.8	1.0	1.7	1.0	1.5
Gross fixed capital formation	11.6	5.3	-0.1	16.0	17.8	22.7
Housing	5.4	6.9	8.0	14.8	-3.1	33.7
Final domestic demand	3.1	1.4	0.9	4.8	6.0	8.7
Stockbuilding[1]	-0.3	-0.2	0.6	-0.9	-0.9	-0.6
Total domestic demand	2.8	1.2	1.5	4.0	5.1	8.1
Exports of goods and services	3.4	3.6	6.7	3.2	9.2	11.1
Imports of goods and services	6.8	4.6	0.0	9.8	13.5	14.7
Net exports[1]	-1.1	-0.2	3.8	-2.9	-1.5	-0.8
Other indicators (growth rates, unless specified)						
Potential GDP	1.4	1.4	1.5	1.7	2.0	2.4
Output gap[2]	-5.9	-6.1	-3.7	-3.4	-1.4	3.2
Employment	0.3	1.1	3.1	2.5	3.4	3.8
Unemployment rate	6.9	5.9	5.4	4.9	4.0	3.0
GDP deflator	3.0	3.3	2.2	4.1	6.0	2.0
Consumer price index	4.0	5.2	3.9	2.0	1.6	1.7
Core consumer prices	2.6	4.6	4.1	2.7	2.1	2.2
Current account balance[2]	-5.3	-4.0	6.0	4.0	5.5	8.0
General government fiscal balance[2]	-5.6	-3.7	-1.8	-0.1	-0.8	17.2
Underlying general government fiscal balance[2]	-1.3	0.4	0.1	3.3	1.3	-0.3
Underlying government primary fiscal balance[2]	1.3	3.5	3.5	6.8	5.1	3.2
General government gross debt[2]	97.5	95.3	87.2	79.9	73.0	62.3
General government net debt[2,3]	61.6	63.8	62.0	55.7	50.3	42.6
Three-month money market rate, average	4.3	5.5	6.2	6.1	5.9	6.3
Ten-year government bond yield, average	6.0	6.2	5.8	6.4	6.3	5.6

1. Contribution to changes in real GDP.
2. As a percentage of GDP or potential GDP.
3. Net public debt (according to the Act on Public Sector Finances definition) is defined as gross financial liabilities less unfunded pension liabilities and other accounts payable, as well as the value of currency and deposits.

Source: OECD (2016), *OECD Economic Outlook Database*; *OECD Analytical Database*; and Central Bank of Iceland.

Fiscal indicators

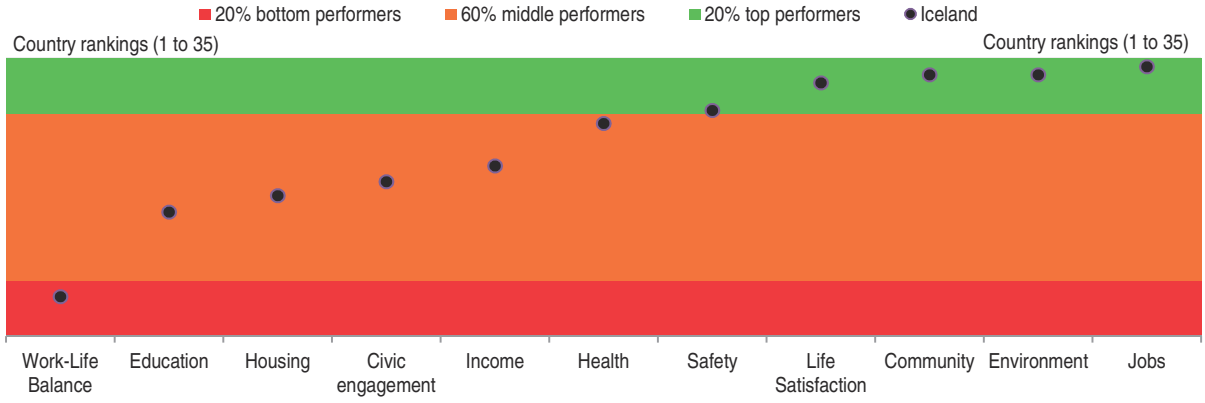
% of GDP or potential GDP, unless otherwise indicated

	2010	2011	2012	2013	2014	2015	2016
Receipts							
Current taxes on income and wealth	15.7	16.7	17.1	17.8	19.1	17.8	18.4
Corporate direct taxes	2.6	2.8	2.9	3.0	4.3	3.5	3.4
Household direct taxes	13.1	13.9	14.3	14.8	14.8	14.3	15.0
Taxes on production and imports	13.6	13.7	14.3	14.1	15.7	15.1	14.2
Social security contributions	3.9	3.9	3.6	3.7	3.7	3.6	3.6
Property income	2.5	2.0	2.7	2.7	3.1	1.9	2.8
Other current receipts	3.7	3.6	3.8	3.6	3.5	3.5	19.2
Current receipts	39.4	40.0	41.5	41.9	45.1	41.9	58.3
Capital taxes and transfers receipts	0.2	0.1	0.1	0.2	0.1	0.2	0.2
Total receipts	39.6	40.1	41.7	42.1	45.2	42.0	58.4
Outlays							
Final consumption expenditure	24.6	24.7	24.5	24.3	24.2	23.6	23.1
Social security benefits	7.5	8.1	7.6	7.1	7.0	6.4	6.2
Property income paid	4.8	4.1	4.7	4.6	4.7	4.6	4.2
Current expenditures	43.5	43.3	43.3	42.2	41.9	40.4	39.0
Gross fixed capital formation	3.4	2.7	2.7	2.9	3.1	2.9	2.8
Capital transfers and payments	4.5	1.8	1.5	0.9	2.3	1.4	1.1
Consumption of fixed capital	2.1	2.1	2.1	2.0	2.0	1.8	1.7
Total expenditures	49.3	45.7	45.4	43.9	45.3	42.9	41.2
Net lending							
Net primary balance	-7.0	-2.9	-0.4	1.6	3.6	2.9	20.6
General government net lending (Billion ISK)	-158.2	-95.0	-66.5	-34.8	-1.2	-18.5	416.8
General government net lending (% of GDP)	-9.8	-5.6	-3.7	-1.8	-0.1	-0.8	17.2
Cyclically adjusted variables							
Cyclically adjusted net lending	-5.6	-1.9	0.0	0.4	2.1	0.0	15.9
Underlying net lending	-2.4	-1.3	0.4	0.2	3.3	1.3	-0.3
Cyclically adjusted primary balance	-3.0	0.6	3.1	3.7	5.6	3.8	19.4
Underlying primary balance	0.2	1.3	3.5	3.5	6.8	5.1	3.2
Cyclically adjusted current disbursements	40.2	40.3	40.2	40.4	40.2	39.7	40.5
Cyclically adjusted current disbursements, excluding interest	35.7	36.4	35.8	35.9	35.6	35.2	36.2
Cyclically adjusted current receipts	39.9	40.6	42.1	42.3	45.4	42.0	58.5
Debt							
Gross debt	90.8	97.5	95.3	87.2	79.9	73.0	62.3
Net debt*	66.2	61.6	63.8	62.0	55.7	50.3	42.6
Memorandum items							
Output gap, whole economy	-6.4	-5.9	-6.1	-3.7	-3.4	-1.4	3.2

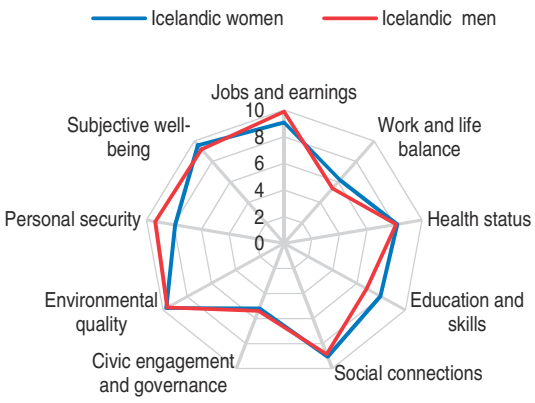
* Net public debt (according to the Act on Public Sector Finances definition) is defined as gross financial liabilities less unfunded pension liabilities and other accounts payable, as well as the value of currency and deposits.

Well-being indicators

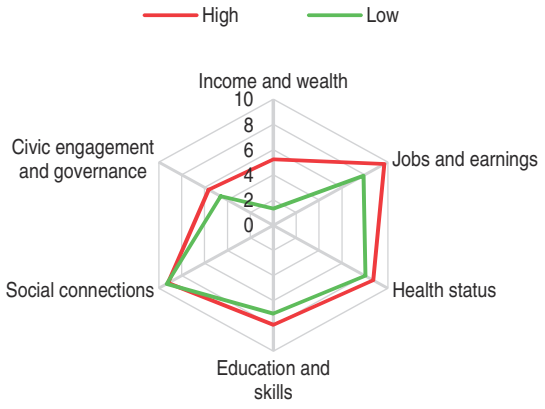
A. Indicators of well-being in Iceland



B. Iceland well-being of men and women



C. Iceland well-being inequalities



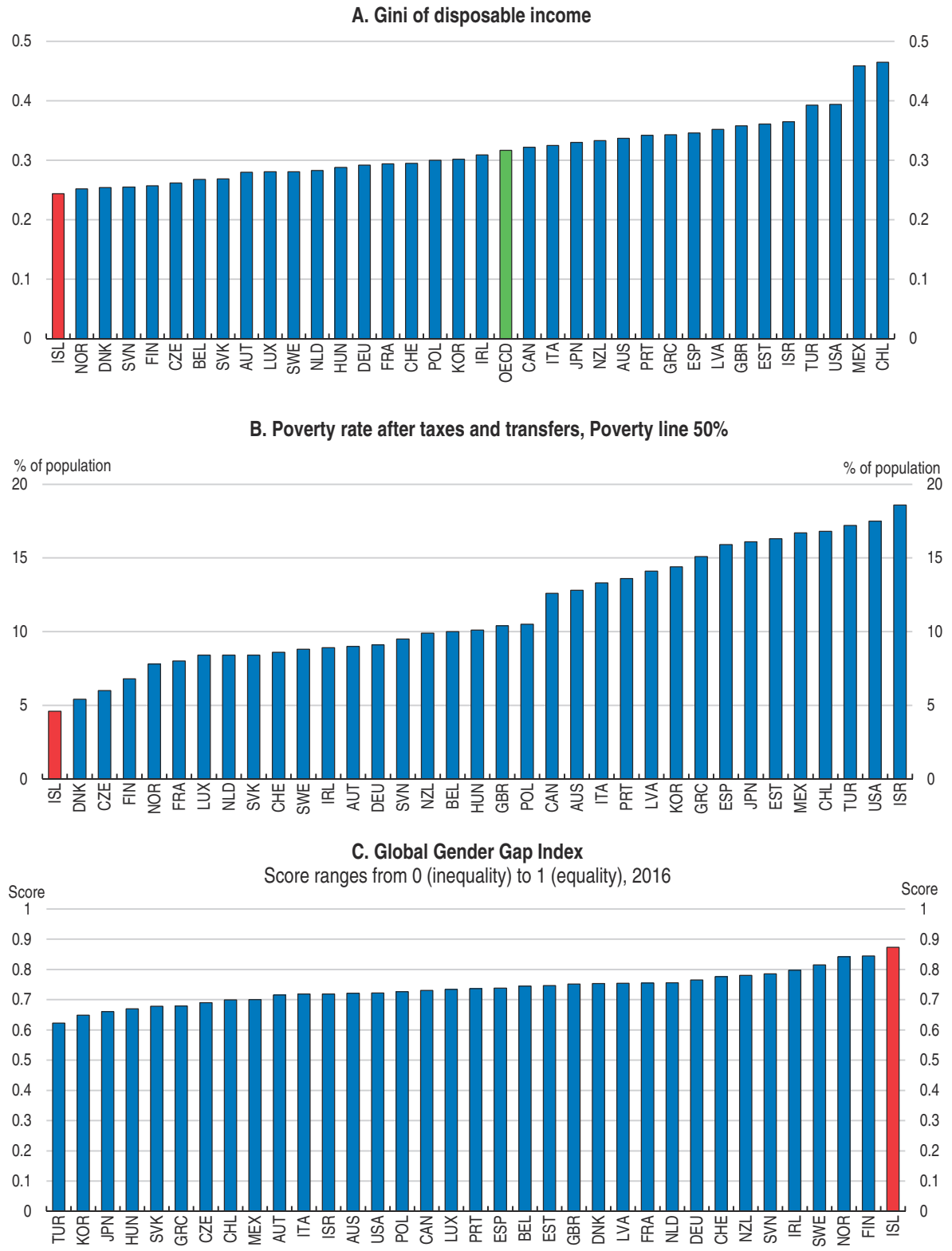
D. Iceland well-being sub-indicators selected rankings

	Sub-indicator	Rank	Measure	Iceland	OECD average
In the OECD top 5	Dwellings without basic facilities	1	% of the population living in a dwelling without indoor flushing toilet	0	2.1
	Employment rate	1	% of the working-age population (aged 15-64)	82	66
	Labour market insecurity	1	% of previous earnings associated with unemployment	0.7	6.3
	Water quality	1	% of satisfaction with water quality	97	81
	Quality of support network	2	% of positive responders to perceived social network support	96	88
	Years in education	2	Years	19.6	17.5
	Air pollution	3	Average PM2.5 particles concentration in µg/m³	7	14
	Life satisfaction	3	Average score	7.5	6.5
	Homicide rate	3	Age-standardised rate per 100 000 population	0.3	4.1
	Personal earnings	4	US dollars at current PPPs	56 789	40 974
	Long-term unemployment rate	5	% of the labour force	0.67	2.58
In the OECD bottom 10	Educational attainment	28	% of adults holding at least an upper secondary degree	73	76
	Student skills	28	Average score	484	497
	Housing expenditure	29	% of the household gross adjusted disposable income	24	21
	Employees working very long hours	29	% of dependent employees working 50 hours or more	13.79	13.02
	Time devoted to leisure and personal care	31	Hours	14.13	14.91

Source: OECD Better Life Index 2016.

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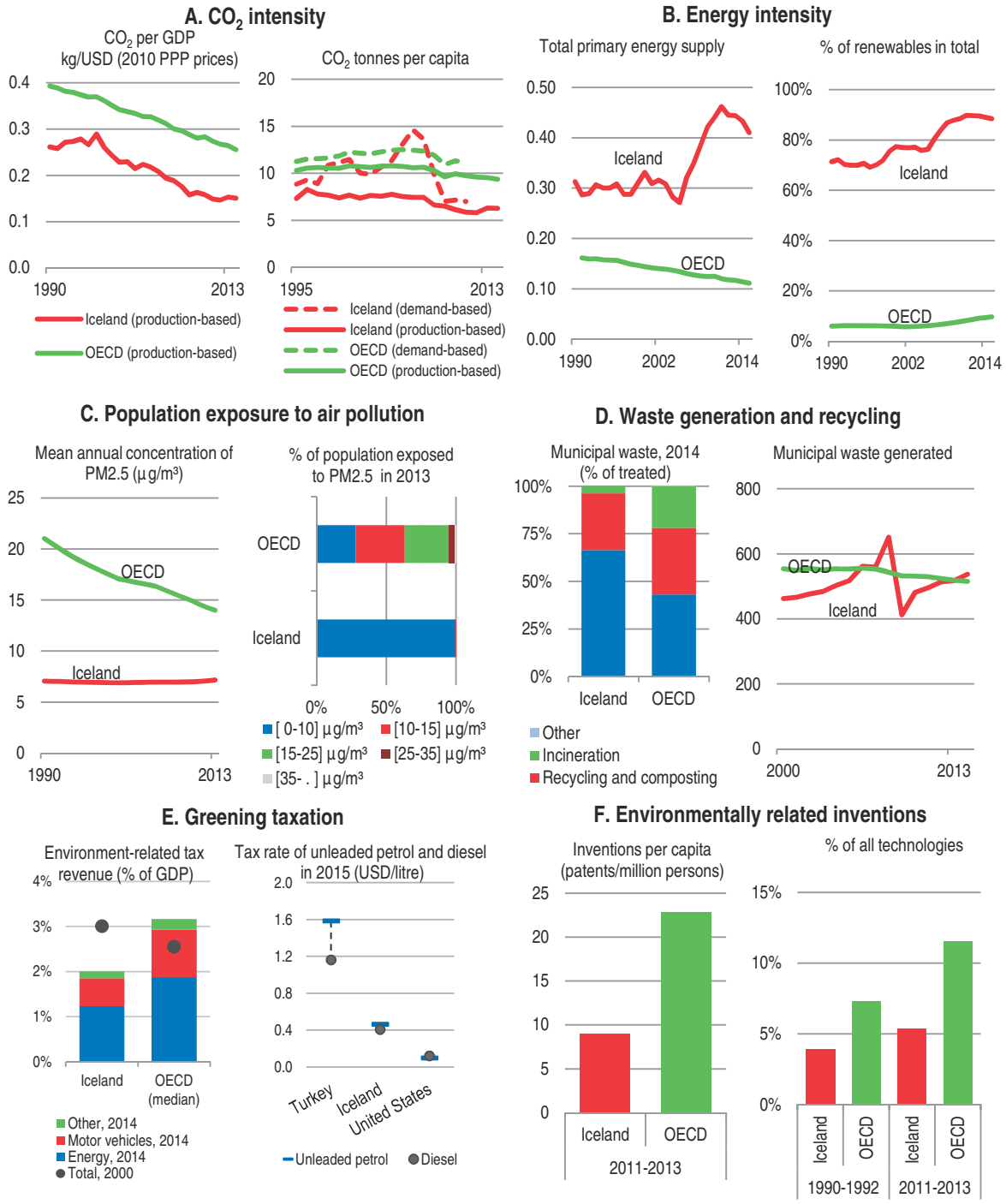
Inequality and gender equality indicators



Source: OECD Income Distribution Database; and the Global Gender Gap Report 2016 Dataset © 2016 World Economic Forum.

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Green growth indicators



Source: OECD (2016), *OECD Environment Statistics Database* (Green Growth Indicators, Patents: Technology Development, Municipal Waste); *OECD National Accounts Database*; IEA (2016), IEA World Energy Statistics and Balances Database; IEA Energy Prices and Taxes Database; OECD calculations based on data from M. Brauer et al. (2016), "Ambient Air Pollution Exposure Estimation for the Global Burden of Disease 2013", Environmental Science & Technology, Vol. 50(1), pp. 7.

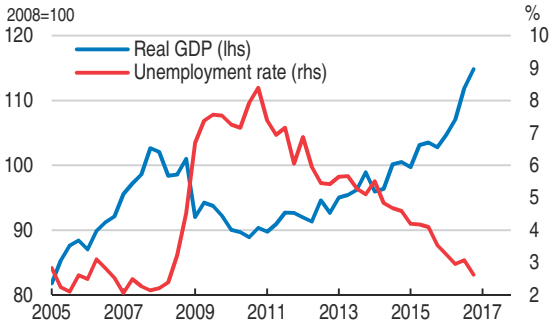
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Executive summary

- *Preserving macroeconomic stability*
- *Making tourism sustainable and inclusive*
- *Effective and inclusive labour relations*

Preserving macroeconomic stability

Iceland has made a remarkable turnaround from the crisis



StatLink http://dx.doi.org/10.1787/888933530110

Iceland is currently the OECD's fastest growing economy. It has made a remarkable turnaround from the crisis, helped by staggering growth of tourism, prudent economic policies and a favourable external environment. Imbalances have been corrected and, after 8 years, capital controls have essentially been lifted. Iceland has an egalitarian society with strong trade unions, very low inequality and high gender balance. Nevertheless, as a very small open economy Iceland is prone to boom and bust cycles. Currently, domestic demand is strong and wages and asset prices are rising. Fiscal policy has been easing despite strong growth. Inflationary pressures have built up. Favourable external environment has helped monetary policy achieve low inflation, while it faced constraints during the ongoing capital account liberalisation.

Making tourism sustainable and inclusive

Tourism is booming

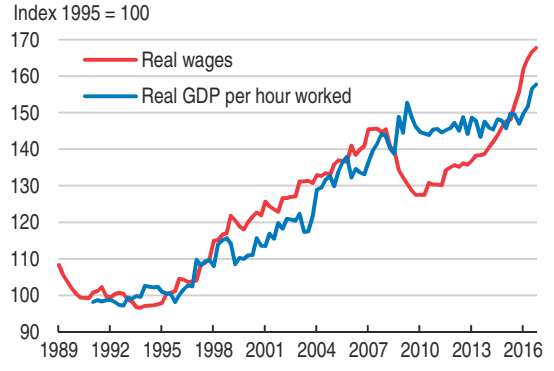


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Tourism is booming in Iceland. The spectacular growth in tourist numbers has provided new jobs, boosted tax revenues and attracted currency inflows. As the country is adapting to having a much larger tourism sector, it is also experiencing some growing pains with social pressures emerging. Notably, affordability has become an issue in the housing market as supply catches up with demand. The sheer numbers of tourists are putting pressure on the environment and infrastructure is often insufficient. Growing tourist numbers have also contributed to strengthening króna, creating difficulties for other internationally-exposed sectors.

Effective and inclusive labour relations

Steep wage increases have exceeded productivity growth



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Iceland has high living standards, low poverty, high inclusiveness and one of the most sustainable pension systems. It is the most highly unionised OECD country. In the past, successful social pacts have protected the lowest paid workers during crises, and on occasion helped fight inflation. Nevertheless, recent disruptive strikes and high wage awards have intensified inflationary pressures and threaten international competiveness, particularly in times of slowing productivity. Fostering trust among the social partners and increasing wage co-ordination would make collective bargaining more effective and help sustain the benefits of the system for future generations.

POLICY CHALLENGES	KEY RECOMMENDATIONS
Preserving macroeconomic stability	
Overheating and inflationary pressures pose risks to the outlook.	Monetary policy should be ready to tighten, should inflation expectations increase once again. Smooth excess short-term exchange rate volatility. Use macro-prudential tools in accordance with international agreements to manage potentially destabilising short-term capital flows. To reduce the risk of overheating, which would trigger further monetary policy tightening, fiscal policy should be contractionary.
Building buffers is important in a volatile economy prone to substantial shocks.	A sovereign wealth fund should be established and built up over time. Funds should be invested abroad and draw down limited to counteracting substantial shocks.
Making tourism sustainable and inclusive	
Steep growth of tourism has been much faster than anticipated. Tourism is putting pressure on society, nature and infrastructure.	Establish an inter-ministerial tourism strategy focused on making tourism environmentally, socially and economically sustainable. This should include non-government stakeholders. Remove current tax subsidies for tourism-related activities, by taxing them at the standard VAT rate and broadening the base to excluded services. Limit the number of visitors to fragile sites. Introduce user fees to manage congestion and pressure on the environment. Subject infrastructure investment to cost-benefit analysis, including consideration of social and environmental impacts. Ensure transport and tourism policy are consistent. Improve the economic analysis of tourism activity, with better data and research.
Tourism jobs can be low-skilled and low-paying which may hinder the development of a high value tourism sector.	Use vocational and on-the-job training to build skills in the tourism workforce.
Effective and inclusive labour relations	
Wage negotiations can result in unsustainable wage increases. Co-ordination of wage bargaining is low.	To nurture trust all parties need to participate actively in the Macroeconomic Council. Establish a tripartite technical committee to provide reliable and impartial information to wage negotiators. Wage negotiations should begin with an agreement on “wage guidelines” for the negotiation round. State mediator (and arbitration bodies) should also base their proposals on these guidelines. Increase the powers of state mediator, including the power to delay industrial action for a limited period in agreement with the social partners, in an effort to achieve a negotiated agreement.

Assessment and recommendations

- *Economic growth is strong but challenges remain*
- *Monetary policy: taming inflation in roaring times*
- *Exiting exchange controls*
- *Fiscal policy should be contractionary*
- *A tax system conducive to inclusive and green growth*
- *Reforms to improve the business environment*
- *Making the best of the tourism boom*
- *Iceland's labour market*

Iceland is the OECD's smallest economy and, currently, the fastest growing. A boom in financial services and construction led to a deep financial crisis in 2008. However, Iceland has made a remarkable turnaround, helped by spectacular growth of tourism, prudent economic policies and a favourable external environment. In 2011, the country successfully completed its IMF-supported adjustment programme and capital controls, imposed after the crisis, have now essentially been lifted. Today, living standards are higher than before the crisis.

As a very small open economy relying on natural resources, Iceland is prone to boom and bust cycles, but it protects individuals from this volatility with universal health care, free education, and well-designed social benefits. The poverty rate is the lowest in the OECD and life expectancy is among the highest in the world. The labour market is flexible, with historically little unemployment, while strong trade unions have contributed to ensuring that growth has been widely shared. Women are able to realise their potential better than elsewhere, making Iceland a top performer in terms of gender balance. The combination of very high employment and late retirement put the comprehensive Icelandic pension system in a very good position.

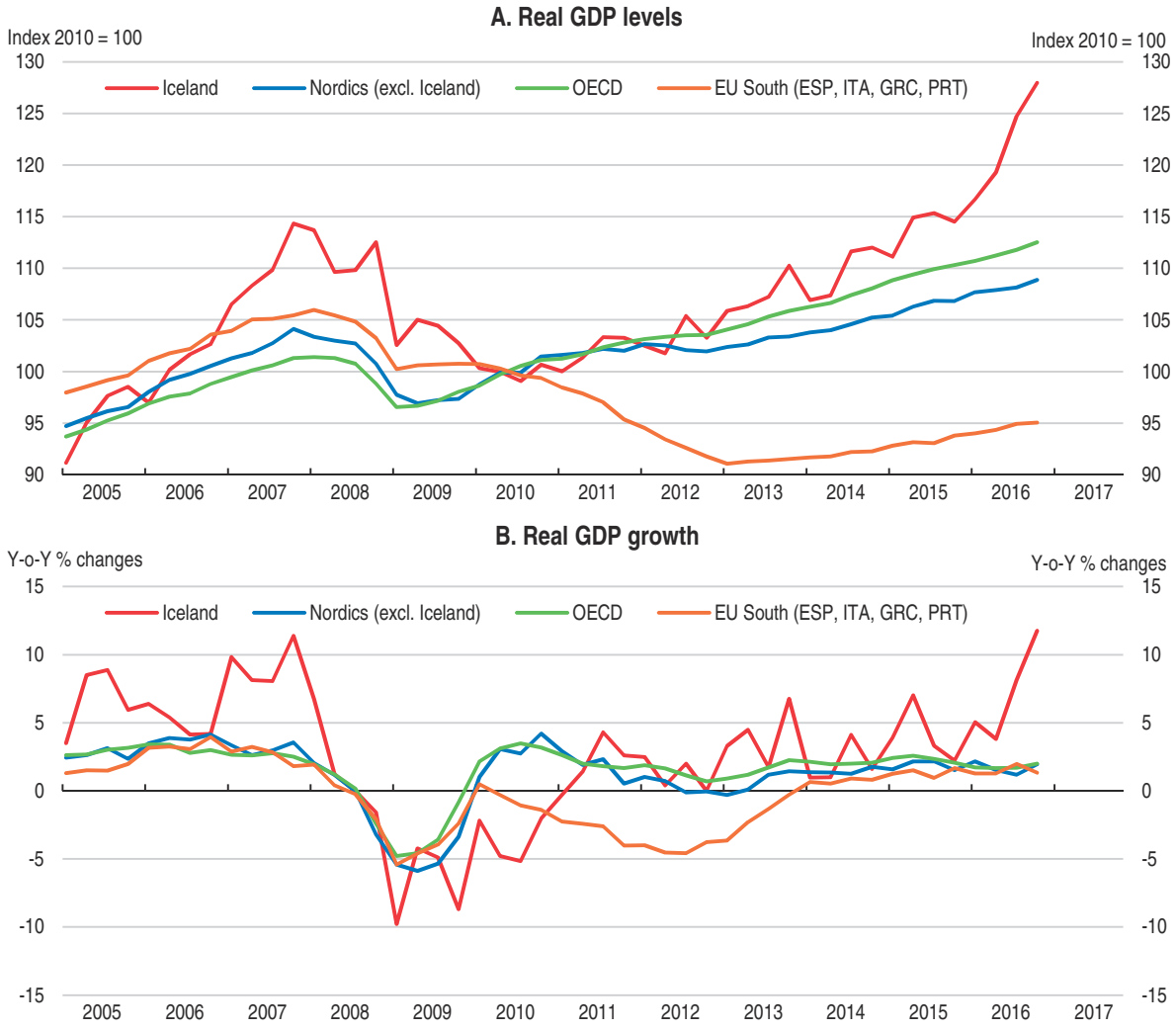
Historically, Iceland's prosperity has been built on the sustainable use of its abundant natural resources. The comprehensive fisheries management system based on individual transferable quotas ensures that fish stocks are not over-exploited. The system is science-based and relies heavily on marine research. Iceland is at the forefront in the use of renewable energy resources, relying on its geothermal and hydroelectric energy. More than 90% of homes are heated by geothermal energy (Central Bank of Iceland, 2016a). Today, Iceland's wilderness and unique natural environment are increasingly recognised as an important economic asset and a big pull for tourism, but also a natural heritage needing conservation.

Economic growth is strong but challenges remain

The economy is booming (Figure 1). GDP growth accelerated to 7.2% in 2016, supported by strong private demand, surging investment, booming tourism and expansionary fiscal policy. Household income continues to benefit from employment growth and steep wage increases (Figure 2). The unemployment rate has fallen (2.6% in 2016 Q4) to pre-crisis levels and in-migration is rising again to fill vacancies. Tourism is boosting investment. Inflation has stood below 2% for most of 2016, contained by strong króna appreciation and improvements in the terms of trade, despite a positive output gap and the threat of a wage-price spiral developing. The economic boom is also reflected in rising housing and asset prices. High growth will continue in 2017 (Table 1), supported by strong investment and private consumption. Over time, however, growth will moderate as investment will slow and the positive impact of the terms of trade will dissipate.

Considerable progress has been made in reducing imbalances (Figure 3). Iceland is running a current account surplus, and the net investment position has turned positive for

Figure 1. **Growth after the crisis has been strong**



Source: OECD Analytical Database.

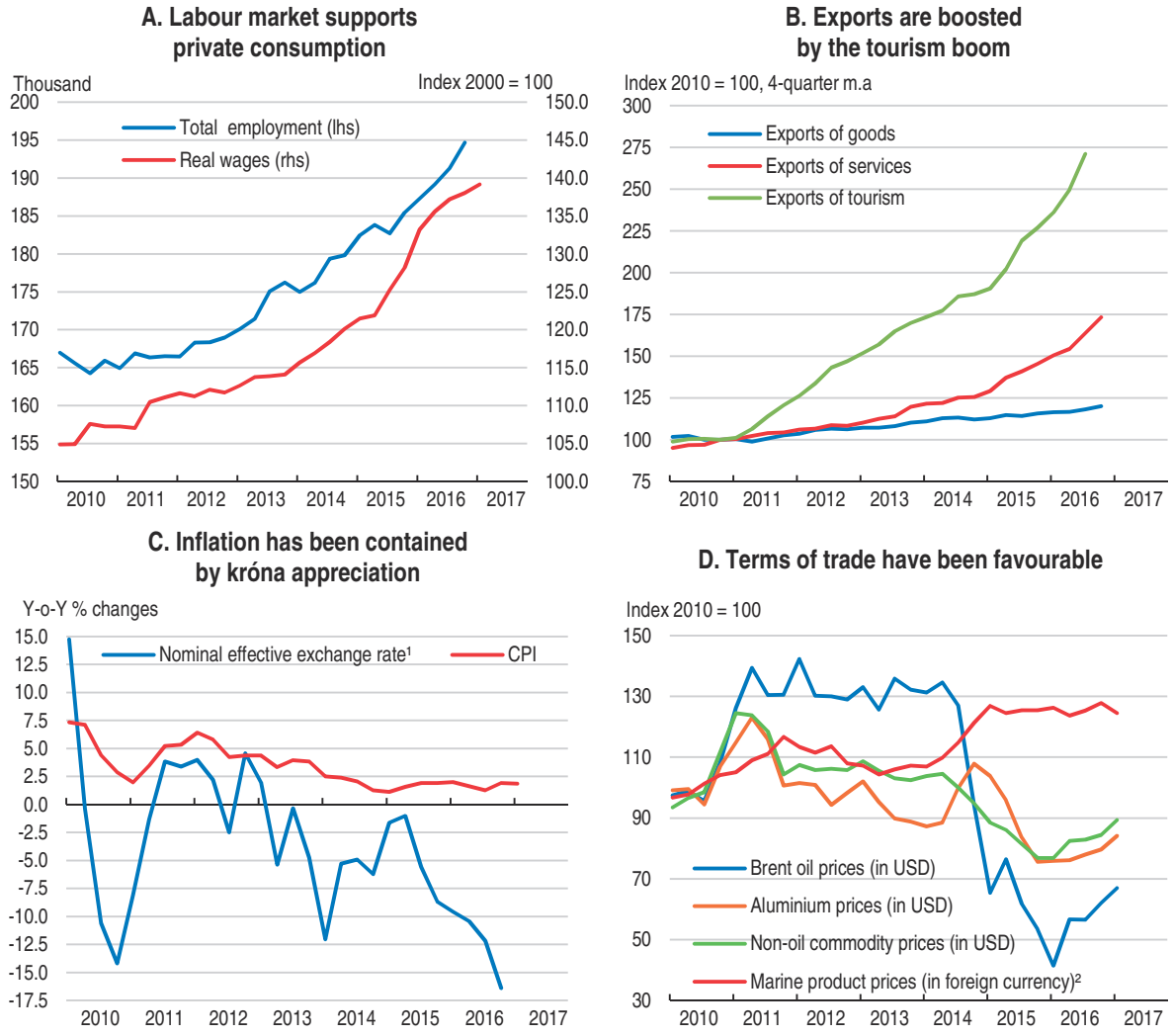
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the first time. The central bank has built up significant foreign exchange reserves. Public and private sector debts have been greatly reduced. Strong growth and deleveraging have helped companies to improve their balance sheets. Debt restructuring, write-offs and debt relief measures have reduced indebtedness of households, while growing disposable incomes and rising asset prices improved their equity position. Current growth is supported by rising profits and incomes, rather than leverage.

In this favourable environment, the government reached an agreement with creditors of the failed banks' estates and most of the holders of "off-shore króna", thus reducing the risk of unmanageable capital outflows undermining macroeconomic stability. Capital controls, which were introduced after the crisis, have now essentially been removed.

Iceland nevertheless faces numerous policy challenges. Due to its small size, openness, limited production base and relatively high reliance on natural resources, Iceland has a volatile economy that has been prone to boom and bust dynamics (Central Bank of Iceland, 2010; OECD, 2015a). Overheating and accelerating inflation are the biggest risks to the

Figure 2. **Macroeconomic developments**



1. A decrease denotes an appreciation.
2. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic króna by the trade-weighted exchange rate index. Foreign currency prices of aluminium products are calculated by dividing aluminium prices in Icelandic króna by the exchange rate of the USD.

Source: *OECD Analytical Database*; Statistics Iceland; Central Bank of Iceland Monetary Bulletin 2017/1; and Thomson Reuters.

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outlook. Tourism has been growing at breakneck speed, putting the housing market, infrastructure and the environment under pressure. The massive inflows of tourists were far in excess of projections, leaving policymakers trying to keep up with events. In addition, a strong króna, while acting as an automatic stabiliser, poses challenges for many businesses. High tensions among the social partners could trigger further wage increases and disruptive strikes, damaging growth and stability.

The authorities are confronting the challenges and have introduced a number of reforms in recent years, including those recommended in previous *Economic Surveys* (Tables 3-6 on past OECD recommendations). The centre-right coalition formed in January 2017 has also set out a reform agenda. It plans to reduce public debt further, partly with the

Table 1. **Demand, output and prices projections**

	2016	2017	2018
	Percentage changes, volume (2005 prices)		
GDP at market prices	7.2	5.3	2.6
Private consumption	6.9	5.4	3.4
Government consumption	1.5	1.0	1.1
Gross fixed capital formation	22.7	9.2	1.1
Final domestic demand	8.7	5.2	2.3
Stockbuilding[1]	-0.6	0.0	0.0
Total domestic demand	8.1	5.2	2.3
Exports of goods and services	11.1	6.3	3.5
Imports of goods and services	14.7	5.8	2.6
Net exports[1]	-0.8	0.6	0.6
Memorandum items			
GDP deflator	2.0	1.9	3.2
Consumer price index	1.7	2.4	3.5
Private consumption deflator	0.7	0.9	3.1
Unemployment rate	3.0	2.8	3.0
General government net lending[2]	17.2	0.9	1.5
Underlying primary balance[2]	3.2	0.7	1.2
General government gross debt[2,3]	62.3	61.0	59.3
Current account balance[2]	8.0	5.2	5.6
Output gap,[2] whole economy	3.2	6.0	6.1

1. Contributions to changes in real GDP.
2. As a percentage of GDP or potential GDP.
3. Includes unfunded liabilities of government employee pension plans, which amounted to about 25% of GDP in 2012.

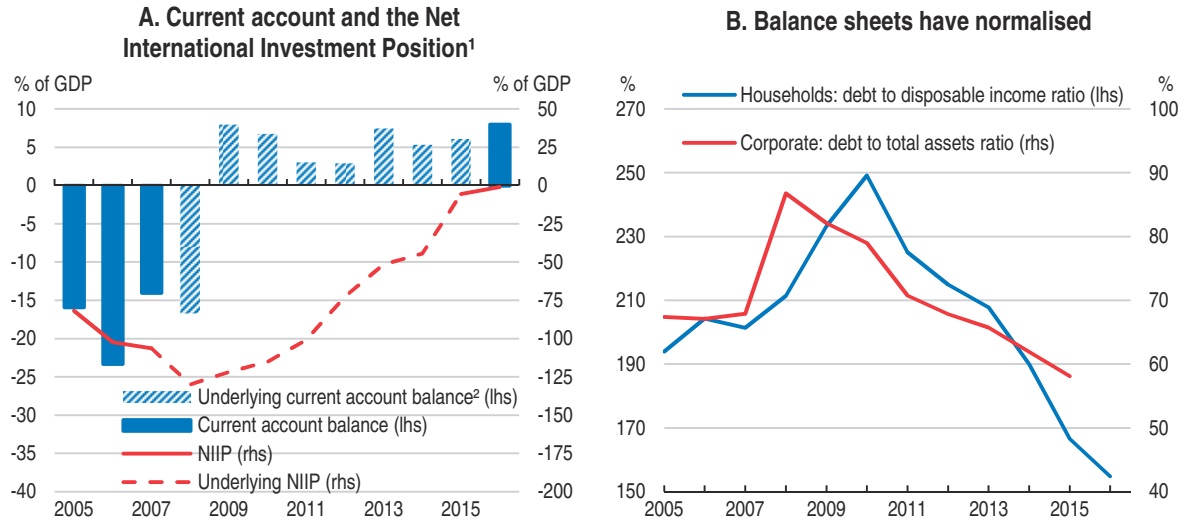
Source: OECD Economic Outlook 101 Database.

help of privatising banks. The government is proposing to introduce a sovereign wealth fund. It also plans to enhance tax enforcement and combat tax avoidance. The new government will make efforts to damp exchange rate fluctuations and review the framework for monetary policy.

In spite of very fast growth, rising wages and improved balance sheets there are popular demands to keep interest rates low and prevent the exchange rate from rising. Needed investment in infrastructure, due to past fiscal restraint and stresses from tourism, also raise demands for higher spending. Moreover, trade unions have threatened to trigger wage renegotiations earlier than anticipated. These pressures, if they were to get out of hand, could derail growth. By contrast, sound macroeconomic policies, financial supervision, and structural reforms would underpin continued strong growth by preventing the return of unsustainable imbalances and another boom-bust cycle. Against this background this report focuses on:

- Macroeconomic policy framework to ensure resilient and stable growth. Fiscal policy and monetary policy should prevent overheating. Building fiscal, liquidity and capital buffers and prudent management of capital flows can ensure a soft landing in case of an unexpected crisis.
- Policies to reap gains from sustainable and inclusive growth of tourism. An inter-ministerial committee should implement a comprehensive tourism strategy, taking into account the effects on the environment and social pressures, to maximise the benefits of tourism for Iceland.

Figure 3. **Major imbalances have been corrected**



1. The Net International Investment Position (NIIP) is the stock of external assets minus the stock of external liabilities. In other words it is the value of foreign assets owned by private and public sector of a country minus the value of domestic assets owned by foreigners. Based on underlying position from 2008 through end-2015; i.e. adjusted for the effects of settling the failed banks' estates and assuming equal distribution of assets to general creditors. At the end of 2015, the estates of the failed financial institutions reached composition agreements entailing the write-off of a large portion of their debt. As a result, there is no difference any more between the NIIP and the underlying NIIP.
2. The underlying current account balance excludes both the effects of the failed financial institutions in 2008-15 and the effects of pharmaceutical company Actavis in 2009-12 on the primary income balance. Adjustments have also been made for financial intermediation services indirectly measured (FISIM).

Source: OECD Analytical database; Central Bank of Iceland.

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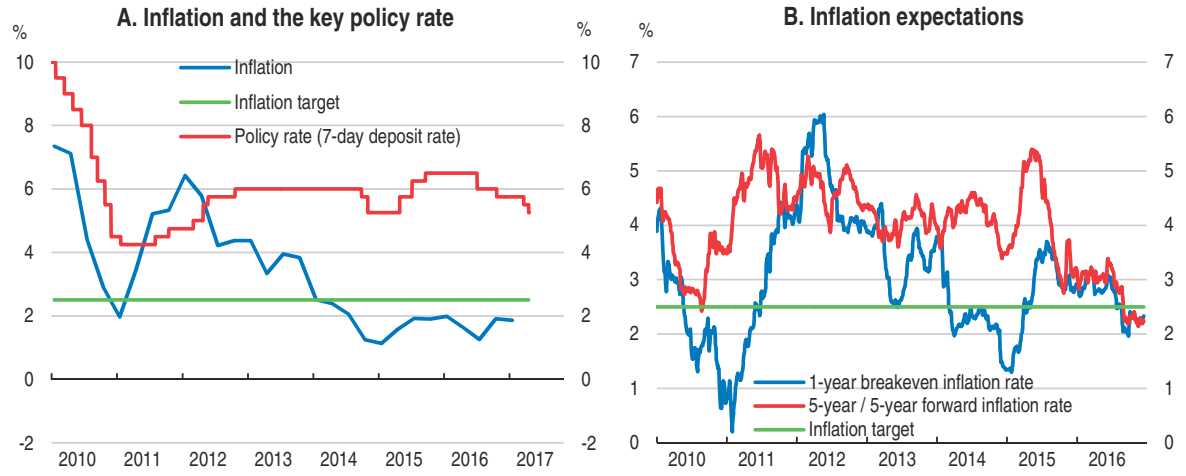
- Reform of collective bargaining and other structural reforms to ensure effective functioning of markets. More trust among the social partners and better wage co-ordination can ensure that benefits of growth are shared widely without disruptive strikes and risks to growth and stability.

Monetary policy: taming inflation in roaring times

Inflation has fallen below its target of 2.5% for the past three years, largely due to króna appreciation, low inflation abroad, and rising terms of trade (export prices have risen more than import prices). At the same time, inflation expectations have fallen sharply (Figure 4). Despite accelerating growth, these developments have allowed the central bank to reduce interest rates four times since the beginning of 2016 (by 125 basis points cumulatively). The exchange rate has been appreciating, reflecting the strong current account and increased foreign direct investment. Arguably, exchange rate developments now more closely reflect changes in the equilibrium exchange rate (Central Bank of Iceland, 2017a and 2016b). The central bank projects further króna appreciation.

But these favourable dynamics could quickly turn if tourism were to drop off, if prices of exports were to fall, if there were a major volcanic eruption or if capital outflows picked up (Table 2). Even with no dramatic change, the impact from the favourable external situation will dissipate over time, putting upward pressure on prices. High inflationary pressures have also developed domestically (Figure 5) due to rising domestic demand (including from expansionary fiscal policy), rising housing prices, a tight labour market and rising wages amidst slowing productivity. Following the crisis, house price rises have been consistent

Figure 4. **Inflation and inflation expectations have been low**



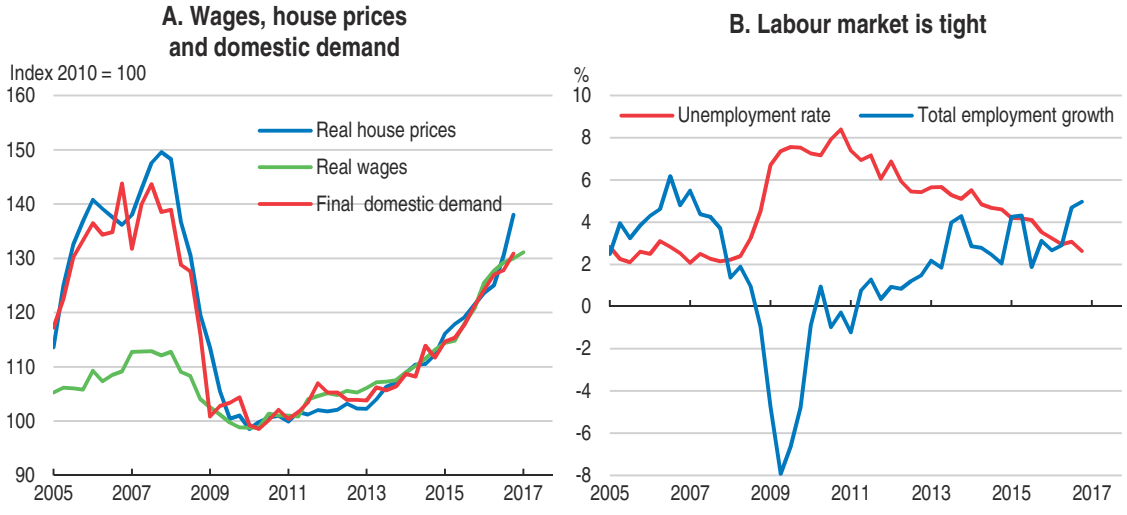
Note: Breakeven inflation rates are calculated from yield spreads between nominal and index-linked Government and Government-backed bonds (5-day moving averages). Daily data.
Source: *OECD Analytical Database*, and Central Bank of Iceland.

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Table 2. **Vulnerabilities that could lead to major changes in the outlook**

Vulnerability	Possible outcome
Large terms of trade shock (rises in oil prices, drop in aluminium or fish prices)	Favourable terms of trade have boosted the Icelandic economy and helped inflation stay low. A large negative shock would undermine some of the improvement in the current account balance.
Global weakness	A slowdown in global growth would weaken the demand for Icelandic products. Moreover, lower income abroad could stall the flow of tourists to Iceland that is becoming an increasingly expensive destination.
Financial market turbulence	International financial markets may become more volatile and risk premia could jump. Interest rates are already high in Iceland. These could undermine the progress made in fiscal policy, and affect external position of Iceland.
Natural disaster	Iceland has been periodically affected by volcanic eruptions. Severe eruptions can have damaging impacts on economic activity. However, Iceland has a system of disaster insurance which would mitigate the economic impact.

Figure 5. **Domestic inflationary pressures have built up**



Source: *OECD Economic Outlook 101 Database* and Statistics Iceland.

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with income developments, but have been accelerating recently. In this context, tightening micro-prudential policies should be considered to ensure that asset price inflation does not gather additional steam. Although inflation expectations have fallen and there is evidence that they have become more firmly anchored (Central Bank of Iceland, 2017b), Iceland has a history of volatile inflation expectations (OECD, 2015a). If inflation expectations were to become unanchored that would raise the risk of a wage-price spiral developing.

Prudent monetary policy has helped steer the economy through the post-crisis overhang, current tourism boom and the capital account liberalisation, with difficult trade-offs and external pressures. The current monetary policy framework is "inflation targeting plus", which targets low and stable inflation over the medium term, with a floating exchange rate and foreign exchange interventions only to damp excessive exchange rate fluctuations. The Central Bank over recent years has amassed significant foreign exchange reserves. Maintaining them is expensive and this contributed to the central bank recording a loss in 2016.

The more traditional monetary policy tools have been complemented with new macro-prudential tools and capital flow management measures. Due to Iceland's small size, such measures are key to safeguard stability, as foreign exchange interventions can at most only smooth erratic and transitory fluctuations (Central Bank of Iceland, 2010; OECD, 2015a). Preserving the credibility of monetary policy would keep inflation expectations anchored over time, which in turn would reduce high exchange-rate pass-through into inflation and the threat of wage-price spiral (OECD, 2015a). The central bank should continue with a prudent monetary stance and stand ready to raise interest rates should inflation expectations increase once again.

There is again pressure in Iceland to rethink and perhaps reform the framework for monetary policy. Pegging the Iceland króna to the euro or another currency is also debated, with the aim to ensure exchange rate stability and reduce uncertainty (see Box 1). A Committee of Ministers will consult with the parliamentary parties and work closely with the Central Bank of Iceland, the social partners and external specialists, who have been tasked with reviewing the framework. Such debate is welcome, as achieving price and financial stability is challenging in Iceland. However, discussion should be careful to avoid undermining the credibility and independence of the central bank and the achievements of lower inflation and inflation expectations.

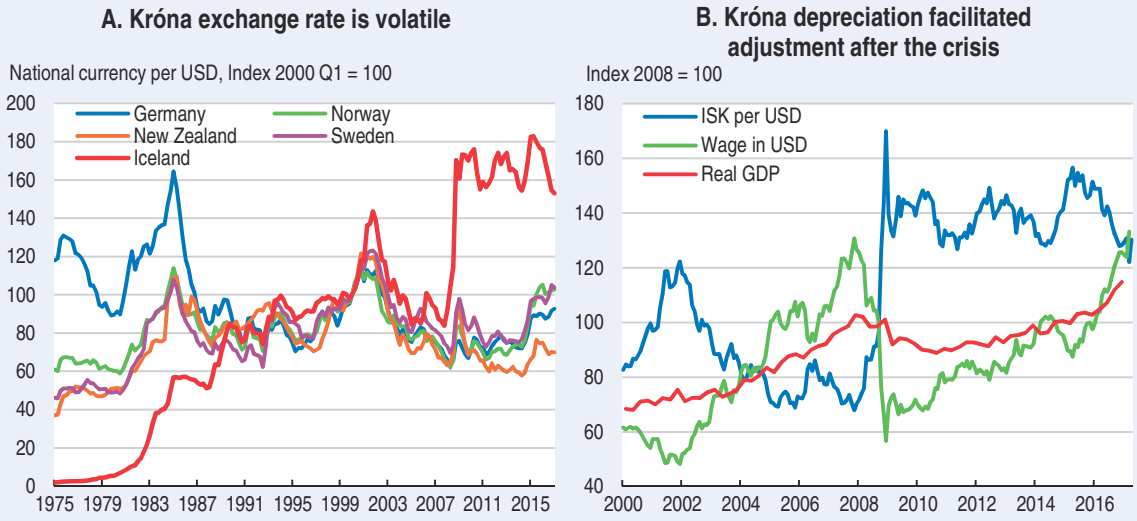
Box 1. **Costs and benefits of pegging the króna**

As with any small and open economy, Iceland experiences considerable exchange rate volatility (Figure 6, Panel A). At the same time, a floating exchange rate insulates the economy from external shocks and can facilitate economic adjustment, as was the case during the last crisis (Figure 6, Panel B). Iceland has recovered better than many euro area countries (Figure 1), although this was importantly helped also by the introduction of capital controls. In recent times, the boom in tourism has resulted in the strengthening of the króna. Moreover, Iceland's relatively high interest rates have again increased the risk of disruptive short-term capital inflows in search of yield amid a low interest rate environment elsewhere. In light of these developments, the authorities have commissioned an evaluation of different currency regimes in a bid to preserve long-term economic and financial stability. Iceland needs to weigh carefully the relative costs and benefits of changing its exchange rate (and monetary policy) regime.

No other advanced economy has such a small floating currency (without capital controls). In Iceland, the small size of the economy with its limited production base and strong degree of exchange-rate pass-through

Box 1. **Costs and benefits of pegging the króna** *(cont.)*

Figure 6. **Icelandic exchange rate**



Source: OECD Analytical Database; and Thomson Reuters.

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imply greater volatility in economic activity and inflation (OECD, 2009 and 2015a; Central Bank of Iceland, 2010). Evidence suggests that the free movement of capital, flexible exchange rates and monetary autonomy may not be able to coexist simultaneously (Rey, 2013). A shift from the current floating exchange rate regime to a fixed exchange rate can thus provide greater currency predictability. Fixed exchange rate regimes can also work as anchors to contain domestic inflation pressures and promote price stability (Obstfeld & Rogoff, 1995). In addition, a fixed exchange rate can lessen the costs of foreign exchange transactions and enable firms to benefit from economies of scale and specialisation without concerns of volatility and variation in relative prices (Egebo & Englander, 1993). The Faeroe Islands and Greenland for instance both use the Danish króna, and hence are pegged to the euro. However, while they are geographically close to Iceland and are natural resource based economies, they are much smaller and have very different policy settings.

Pegging the currency, on the other hand, gives rise to a number of challenges. Iceland had a currency peg in the past, but as for many small economies, the peg became unworkable over time in the face of rising pressures from capital market liberalisation and increasing sophistication of financial markets (OECD, 2015a):

- Given the recent removal of almost all capital controls, a fixed exchange rate would impose constraints on other policy instruments and result in the loss of monetary autonomy as interest rates would be obliged to mirror those of the pegged currency. The inability to use monetary policy would create greater need for active counter-cyclical fiscal policy in pursuit of macroeconomic stability. In Iceland, however, fiscal policy did not always adequately counter overheating of the economy (OECD, 2010 and 2015a).
- A peg could make the nation more vulnerable to speculative attacks, which in turn could trigger the need to reintroduce capital controls as a measure of protection (Funke, 1996).
- A currency peg would reduce the capacity to cope with adverse external shocks and would not prevent real exchange rate movements. Economic adjustment would have to occur via domestic wage and price adjustments, which can be both slower and more painful, with larger short-term social costs. While the labour market in Iceland tends to be flexible in terms of employment and working hours, recurrent tense labour relations demonstrate potential limitations in this line of adjustment.

Box 1. **Costs and benefits of pegging the króna** *(cont.)*

- Identifying a currency to peg against (and determining the appropriate exchange rate) is a challenge given Iceland's resource-based trade composition and high exposure to idiosyncratic shocks. Export destinations and import providers are not the same, thus no obvious currency peg exists to achieve the economically desirable effect.
- The expected predictability of a fixed bilateral exchange rate would not remove the significant component of uncertainty against other currencies that are also pertinent to the domestic economy.
- If Iceland pegged its currency unilaterally it would lack the support of another monetary authority (such as enjoyed by Denmark in its ERM2 arrangement with the ECB), and it would be practically impossible to withstand a speculative attack on the currency. Joining a larger monetary union as a part of a bilateral agreement however, brings with it an institutional framework and support. Renewed political will to join the European Union would hence change the picture as it would eventually lead to membership of the eurozone. In this case, Iceland would benefit from the credibility of euro-area monetary policy, which could be a stabilising influence and may lower interest rate premia (OECD, 2010).

In view of the above, maintaining the existing exchange rate arrangement appears to be the most viable option available to Iceland at the current time.

Exiting exchange controls

Since the last Economic Survey the authorities have made considerable progress in dismantling capital controls and developing a new regulatory architecture governing capital flows. The authorities adopted a three step approach to removing capital controls that first dealt with the estates of the failed banks, then addressed offshore króna and finally relaxed restrictions for households and businesses.

Gradually removing capital control restrictions

Bank estates and offshore króna

Capital controls were introduced in 2008 following the collapse of Iceland's three largest commercial banks (see also Box 2). In response to a proposal by the authorities, the estates of the failed banks in late 2015 made "Stability Contributions" worth around 16% of GDP in order to be exempted from the capital controls (Baldursson et al., 2016; OECD, 2015a). The government now owns two of the commercial banks. When conditions become amenable, the government should pursue privatisation as stated in the new government's economic programme. However, this should be approached cautiously. The authorities should target strategic investors to ensure that sound ownership and management emerges and to minimise the threat of government bailout in the future.

Box 2. **Banks have re-emerged from the crisis**

In the 2008 crisis the three major Icelandic banks collapsed. Like many financial institutions, they were highly leveraged and relied excessively on wholesale funding. Due to their sheer size, bailout was impossible, and the government carved out domestic deposits and loan portfolios from the banks to salvage the domestic banking system. To protect financial stability and stem capital outflows, the Icelandic authorities also introduced capital controls.

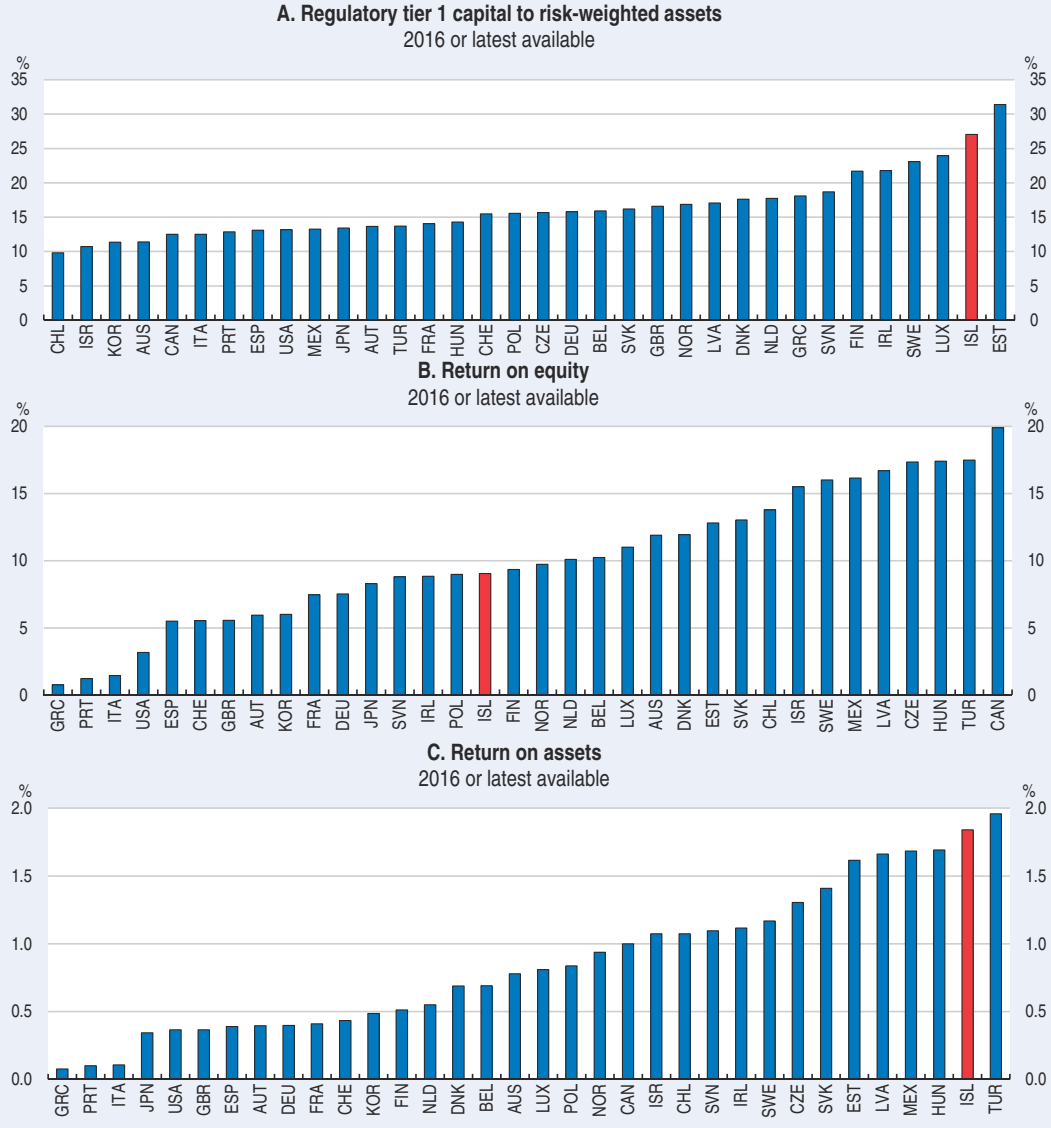
In 2011 the authorities elaborated a liberalisation plan to lift the controls gradually, while aiming to neutralise the threat of destabilising outflows. Key measures were introduced in 2015 that encouraged the estates of the failed banks to negotiate composition agreements amongst the creditors. The measures were

Box 2. **Banks have re-emerged from the crisis** *(cont.)*

conceived in a way that would avoid threatening the balance of payments or financial stability from the unwinding of the insolvent institutions (OECD, 2015a). Creditors subsequently successfully reached agreements amongst themselves, paving the way for lifting most of the remaining capital controls.

The direct public outlays for carving out the domestic assets from the failed estates, re-capitalising the financial system, and fulfilling asset guarantees such as domestic deposit insurance amounted to about 45% of GDP (Laeven and Valencia, 2012). However, the net costs will be lower as a result of the stability contributions, the recovery of prices of the failed banks' assets and the ultimate re-privatisation of the banks, in line with government plans. Domestic banks have since built substantial buffers and they now show solid business performance (Figure 7). Capital ratios (capital as a percentage of assets weighted by risk) have been

Figure 7. **Banks have re-emerged from the crisis**



Note: Iceland refers to the three largest deposit money banks.
Source: Central Bank of Iceland; and IMF Financial Soundness Indicators.

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Box 2. **Banks have re-emerged from the crisis** *(cont.)*

rising, and the combined capital ratio of domestic systemically important banks stood close to 28% at year-end 2016 (Central Bank of Iceland, 2017c), well above the regulatory minimum and very high in international comparison. The three major banks have posted robust profits and solid returns on assets and on equity. The liquidity position (liquid assets in comparison to liquid liabilities) of banks is also strong.

Significant progress has been made to re-orient the domestic financial system toward a more resilient capital structure and the reliance on wholesale markets has faded. Due to cyclical conditions, capital requirements have been tightened further by the financial supervisory authority. Similarly, the regulatory minimum for the liquidity ratio was raised, from 90% to 100% on 1 January 2017. Based on its stress tests published in the Financial Stability Report, the Central Bank of Iceland considers that the banks are well equipped to face potential shocks, such as sizable capital outflow, economic contraction among Iceland's trading partners, further króna appreciation, and a steep drop in the number of tourists (Central Bank of Iceland, 2016c).

The second major issue in removing capital controls lay with offshore króna, which were carry trade inflows trapped in Iceland when capital controls were introduced. The offshore króna initially accounted for around 40% of GDP in 2008. A series of currency auctions and agreements with offshore króna holders has gradually whittled the amount of offshore króna to around 4% of GDP in March 2017, which have been transferred to special accounts with restrictions, neutralising the threat of disorderly currency outflows stemming from these assets.

Households and pension funds

In October 2016, parliament passed a bill permitting all current account transfers and raising or revoking limits on other types of transactions, such as the purchase of foreign exchange or investing in real estate. New changes to the capital controls came into effect at the beginning of 2017, expanding the ability of households and businesses to transfer deposits and securities to and from Iceland, to trade in securities overseas and to withdraw foreign currency, and then in March 2017 the majority of restrictions were removed.

Pension funds were also affected as the capital controls reduced their ability to diversify portfolios internationally. Pension funds have gradually been granted greater scope to invest abroad, reducing exposure to idiosyncratic risk, and easing some of the pressure for exchange rate appreciation. The pension funds have benefited from the booming domestic market and exchange rate appreciation, leaving the share of foreign assets in their portfolios roughly unchanged at around one-quarter and far below a target range of 30% to 40%.

Pension funds are important shareholders accounting for half of all shares in listed companies, which the competition authorities fear may distort corporate governance. Against this background, pension funds should continue rebalancing their portfolios internationally. With the lifting of capital controls, risk-based supervision should act to reduce geographical concentration in their investment portfolios.

Dealing with a resumption of capital flows

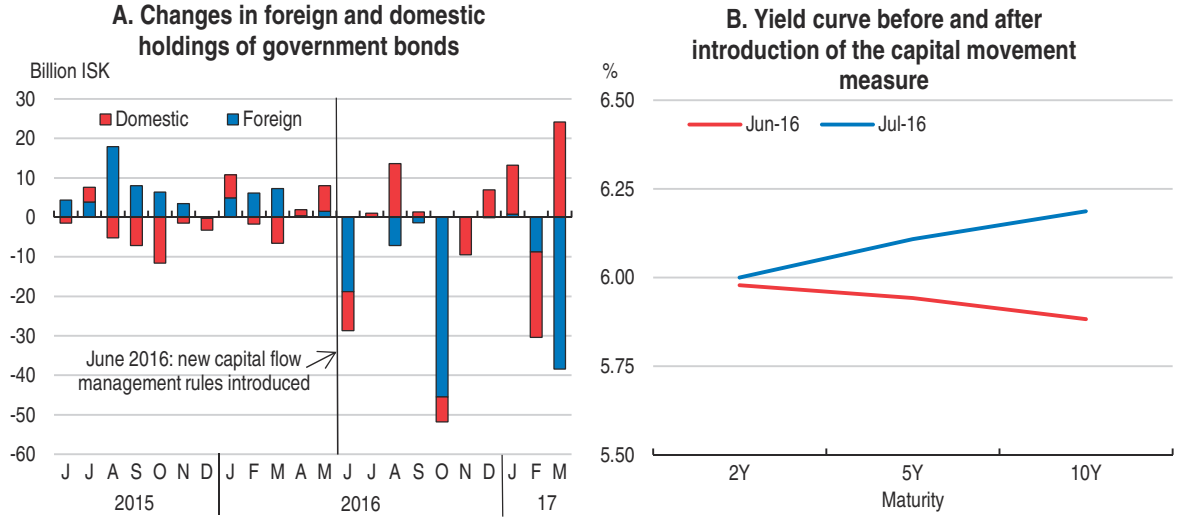
The government's plan to relax capital controls has been successful. Considerable progress has been made in dismantling controls in the framework of the OECD's Code of Liberalisation of Capital Movements, from which Iceland received a derogation in March 2011.

At present, only a handful of restrictions remain in place, introduced to protect Iceland from short-term capital inflows that seek to profit from the large interest rate differential with the rest of the world. However, with the lifting of capital controls, the resumption of free-flowing capital movements once again exposes Iceland to the vagaries of international capital markets. Unpredictable foreign currency flows and a re-emergence of the carry trade – now that growth and interest rate differentials have opened up – could potentially destabilise the domestic financial market and undermine progress in cementing greater monetary policy credibility. To counter this, the authorities created a new regulatory architecture to govern capital flows and introduced new means to deal with potentially destabilising capital flows.

The most important innovation has been the Financial Stability Council, which brings together the Finance Minister, the Central Bank governor and the Financial Supervisory Authority director general to consider financial stability and macro-prudential policy. The Systemic Rick Council, which supports the Financial Stability Council, decided at its meeting in January 2016 to require banks and systemically important financial undertakings to hold capital for systemic risk. The financial supervisory authority has required counter-cyclical buffers in accordance with recommendations from the Financial Stability Council. These actions are improving the resilience of the financial sector to possible shocks.

Large capital inflows through 2015 into early 2016 put pressure on the government bond market. To help insulate the economy from volatile currency flows, the Central Bank of Iceland introduced a new capital flow management measure in June 2016. It works by requiring special reserve requirements for investments in certain types of securities with a pre-determined holding period (currently set at 40% for one year). After introducing the new tool, the currency inflows stopped, the yield curve again sloped upwards (Figure 8) and foreign holdings of government bonds dropped after the 2016 bond reached maturity in October. Other currency flows, such as direct investments, were not affected.

Figure 8. **The new capital flow management measure had a sharp effect on the bond market**



Note: The yield curve traces the interest rate paid on bonds of different maturities. In normal times, the curve is upward sloping reflecting expectations of growth and inflation. A downward sloping yield curve can indicate expectations of a recession or disinflation. In other cases, the yield curve can be influenced by international capital flows taking advantage of higher returns offered in some markets.
Source: National Debt Management Agency, Iceland (NDMA); and Thomson Reuters.

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A new policy proposal is to create a sovereign wealth fund composed of revenues from natural resources (energy-intensive industry). The government is expecting to receive a much higher stream of payments from the main electricity-generating company for some time. While plans remain preliminary, such a fund could build up buffers for very large shocks, such as major volcanic eruptions destroying infrastructure, and the realisation of sizable contingent liabilities. Establishing such a fund and investing overseas, along the lines of sovereign wealth funds created by countries with substantial natural resource rents, such as Norway, would help diversify risks, act as a counterweight to capital inflows, offset Dutch disease pressures, and help fiscal policy from becoming too expansionary in the short term. The fund would need careful design so that assets are only invested abroad and draw down limited to counteracting a substantial shock.

Fiscal policy should be contractionary

The budgetary situation has improved significantly since the crisis. Fiscal tightening reduced public debt and consequently interest payments, and public debt is on a steep downward trajectory (Figure 9). In 2016, the government received one-off receipts from the failed banks of around 16% of GDP which is being used to pay down debt. These developments have created some fiscal space to address spending priorities that have emerged after several years of restraint (IMF, 2016 and 2015). Fiscal policy was expansionary in 2015 and 2016. The budget for 2017 is also expansionary, with higher spending on social benefits, health care and investment (Figure 9).

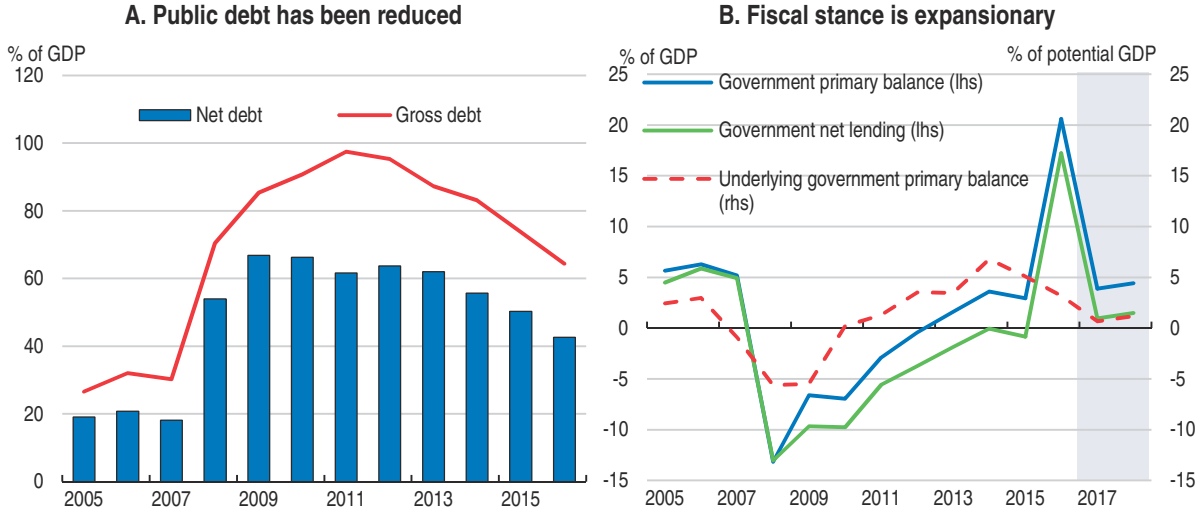
Table 3. **Past OECD recommendations on monetary policy and financial stability**

Main recent OECD recommendations	Actions taken
Monetary policy needs to raise interest rates to ensure that a wage-price spiral does not develop, as already stated by the Monetary Policy Committee. The focus should remain on low and stable inflation over the medium term, while allowing the exchange rate to float apart from limited interventions to smooth erratic fluctuations.	Monetary policy has remained at an appropriate stance. Inflation has fallen below target. The new government proposed to examine means to reduce exchange rate fluctuations.
Progress is needed in lifting Iceland's capital controls and the current plan is a welcome step in this direction. Maintaining a robust macroeconomic stability framework will help avoid a disorderly outcome.	Significant progress has been made in lifting capital controls. Restrictions remain on Offshore króna accounts and on transactions that may give rise to the carry trade, such as unhedged derivatives trading.
Strengthen the macro-prudential policy framework, incorporating tools to address large swings in capital flows unrelated to fundamentals, while respecting international commitments.	A new macroprudential tool was launched in June 2016
To protect the economy from unavoidable shocks and reinforce confidence, buffers should be built up including ample fiscal space, foreign exchange reserves and bank capital and liquidity.	Progress has been made in building up buffers. The plans of the new government to reduce debt further will also create greater fiscal space. The new government is considering establishing a sovereign wealth fund.
Establish an explicit mandate for maintaining financial stability that clearly defines responsibility and gives supervisors the statutory authority and instruments to carry out their responsibilities.	The mandate has been established and the authorities are developing necessary instruments.

However, high growth and rising inflationary pressures call for a more prudent fiscal stance. Even though Iceland has succeeded in greatly reducing public debt, this is no time for complacency. Moreover, as capital controls have been lifted, monetary policy reaction to the fiscal loosening could induce strong capital inflows. To reduce the risk of overheating, which would trigger further monetary policy tightening, fiscal policy should be more contractionary. Spending growth should be brought under firmer control and tax cuts should be avoided. Improved spending efficiency could be pursued to mitigate the effects of lower spending growth.

Figure 9. **The fiscal position has greatly improved but has become expansionary recently**

General government



Note: Net public debt (according to the Act on Public Sector Finances definition) is defined as gross financial liabilities less unfunded pension liabilities and other accounts payable, as well as the value of currency and deposits.

Source: *OECD Economic Outlook 101 Database*; and Ministry of Finance.

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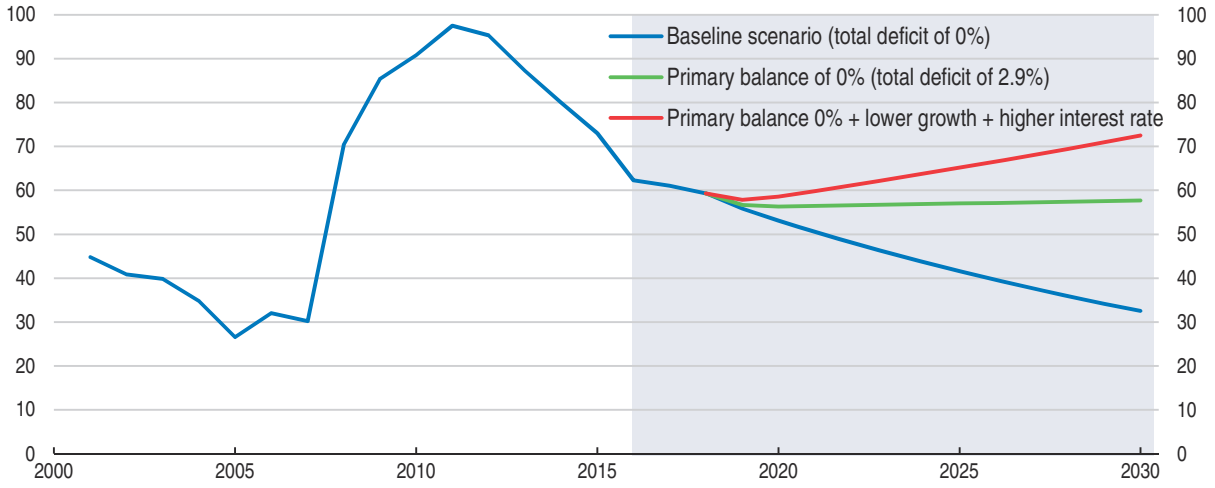
At the end of January, the government presented to parliament the 5-year fiscal policy statement, in accordance with the new Act on Public Finances (the "Organic Budget Law") (see also Table 4). The new fiscal framework introduces discipline for longer-term sustainability while recognising the need for counter-cyclical stabilisation. Fiscal rules limit the annual deficit to 2.5% of GDP and require the cumulative balance over a 5-year period to be positive. The rules establish a public (net) debt target of 30% of GDP (for the purpose, public debt is defined as gross financial liabilities less unfunded pension liabilities and other accounts payable, as well as the value of currency and deposits). When debt is above the target, the government must reduce the part in excess of the target by 5% per year on average for each three-year period. That said, as net debt is currently close to 40% and fiscal revenues and GDP are rising, the fiscal rules do not effectively prevent expansionary fiscal policy.

An independent fiscal council has also been created, as stipulated by the new law. The role of the Council is to form an opinion whether fiscal policy and the fiscal strategy adhere to the fiscal rules and the following five principles: sustainability, prudence, stability, predictability and transparency. The authorities are required to provide the Council with any information and data necessary to carry out its tasks. Assessing progress of fiscal policy against the fiscal rules, and evaluating the policy stance and longer-term fiscal sustainability are areas where the fiscal council is currently developing its role. The authorities should ensure that the fiscal council has adequate resources and is independent enough to perform its role according to the law.

Iceland's fiscal policy and framework are currently on track to achieve sustainability and lower debt, but relaxing fiscal policy risks reverting to unsustainable trends. Simulations of fiscal scenarios can shed light on the consequences (Figure 10); they are based on macroeconomic assumptions for growth and interest rates, and evaluate the path of gross debt. Keeping the budget balanced (in line with the Organic Budget Law) would steadily reduce gross debt towards 30% of GDP in 2030. If fiscal policy reverts to past performance by

Figure 10. **Relaxing fiscal policy risks reverting to unsustainable trends**

General government debt, per cent of GDP[1]



1. The projections are based on the Economic Outlook No. 101 until 2018. From then on, long-term GDP growth is assumed to stand at 2.5% and inflation at target (2.5%). Implicit interest rate on public debt is assumed to be 5%. The baseline scenario assumes adherence to the Organic Budget Law and assumes a deficit of 0% in the long run. The second scenario assumes instead the primary balance of 0% (which results in a total deficit of 2.9% in the long run). The third scenario adds on top of this 1 percentage point lower GDP growth and 1 percentage point higher interest rate on debt.

Source: OECD Economic Outlook 101 Database and OECD calculations.

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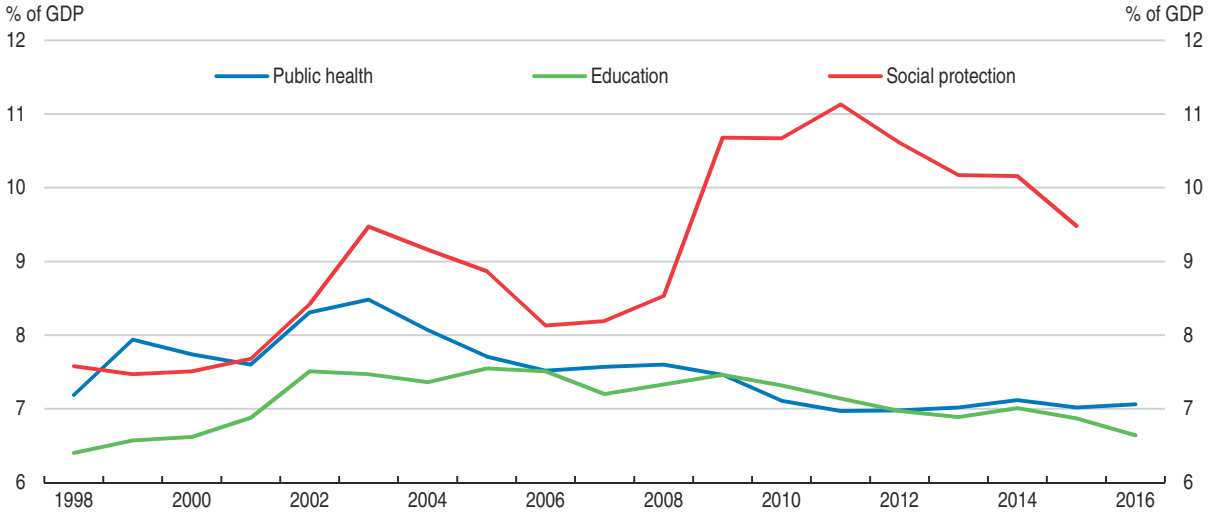
running a rough primary balance (equivalent to a 2.9% deficit in the long run), gross debt would stabilise at close to 60% of GDP. If at the same time economic outcomes worsen, with a lower growth and higher interest rate, gross debt will start rising again.

Iceland faces a number of fiscal challenges in the future. It is not immune to demographic pressure increasing health and pension related expenditures, even though spending on these items is low in international comparison. Taking advantage of one-off fiscal revenues, the government injected funds of 4.8% of GDP into the part of public pension funds switching them from unfunded- to funded-based, to become harmonised with the private sector funds. Furthermore, in Iceland large contingent liabilities in the form of state guarantees remain even though they have had fallen from 75% of GDP in 2012 to slightly above 40% at the end of 2016 (Central Bank of Iceland, 2017d), see Box 3.

Improving public spending efficiency can contribute to making better use of resources. Spending on social protection jumped around the crisis and has only gradually descended to pre-crisis levels (Figure 11). As expected, payments on unemployment benefits increased substantially during the crisis and have subsequently dropped back to pre-crisis norms, reflecting the healthy recovery of the labour market. The remaining increase in social protection spending largely reflects an increase in spending on old age pensions and growing spending on disability. Since the early 1990s, disability rolls have more than doubled reaching almost 9% of the working-age population (Figure 12). In part, this reflects population ageing, as incidence tends to increase with age. Nonetheless, in 2015, one-sixth of people in pre-retirement cohorts received a disability benefit, suggesting that disability is being used as a pathway into early retirement. Against this background, conducting spending reviews to identify opportunities to ensure greater spending efficiency would free resources for other spending priorities.

Figure 11. **Spending on social protection jumped after the crisis**

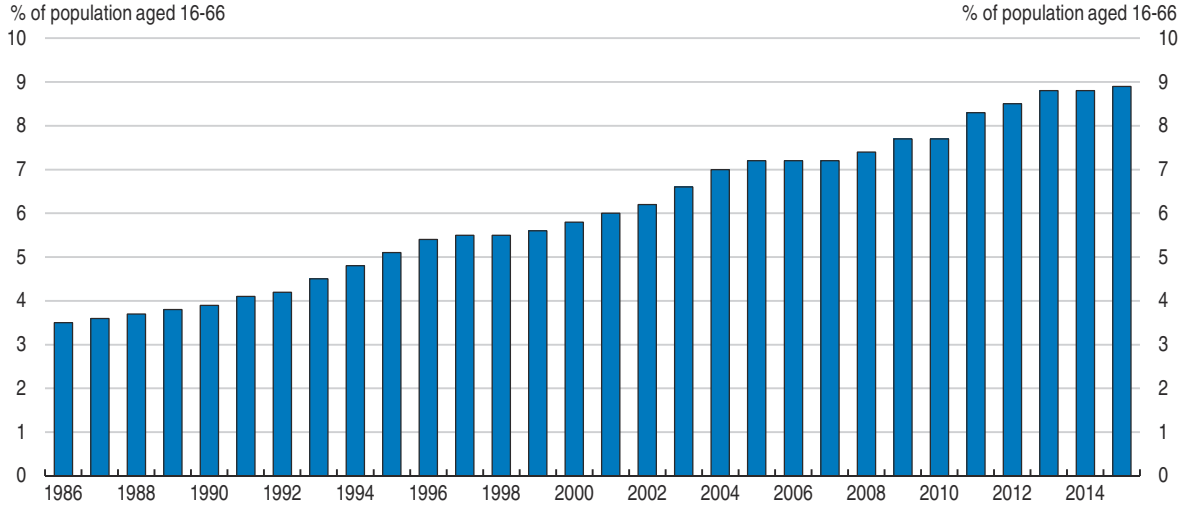
Public spending as % of GDP



Source: Statistics Iceland.

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Figure 12. **Disability rolls continue to rise**



Note: Invalidity and rehabilitation pensioners and invalidity allowance recipients.
Source: Social Insurance Administration (Tryggingastofnun).

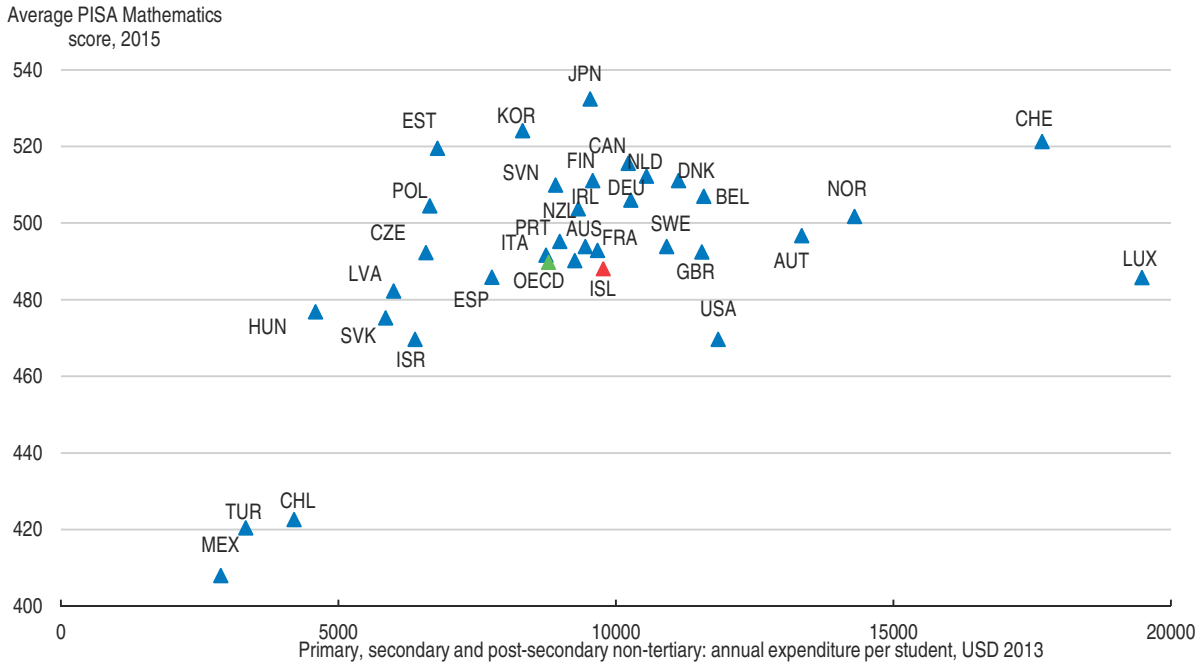
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The authorities have made progress in restraining spending growth in health and education. However, there is scope to improve educational performance. As measured by PISA, many other countries spend similar amounts but student performance is closer to the frontier (Figure 13). Indeed performance in the PISA tests has been slipping over time. Iceland does perform well in ensuring equity in performance for both gender and social background, but performs relatively poorly in terms of immigrant students. Iceland has successfully reduced alcohol and drug abuse among students by introducing community-based interventions when risk-factors were observed (Sigfusdottir, et al., 2009). The authorities should build on this targeted approach to improve student performance, while

continuing to shorten the time students typically need to finish schooling (amongst the longest in the OECD) and improving literacy.

A major change in government policy affects the housing market. Government housing policy is being rebalanced, as recommended in past *OECD Economic Surveys*, with less provided by mortgage support and more from direct provision of housing for low-income households. This more targeted approach increases public spending efficiency at a time when low-income households are facing considerable difficulties in finding affordable housing.

Figure 13. **Spending efficiency in education appears comparatively low**



Source: OECD, Education at a glance 2016: Educational finance indicators.

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Box 3. **State guarantees**

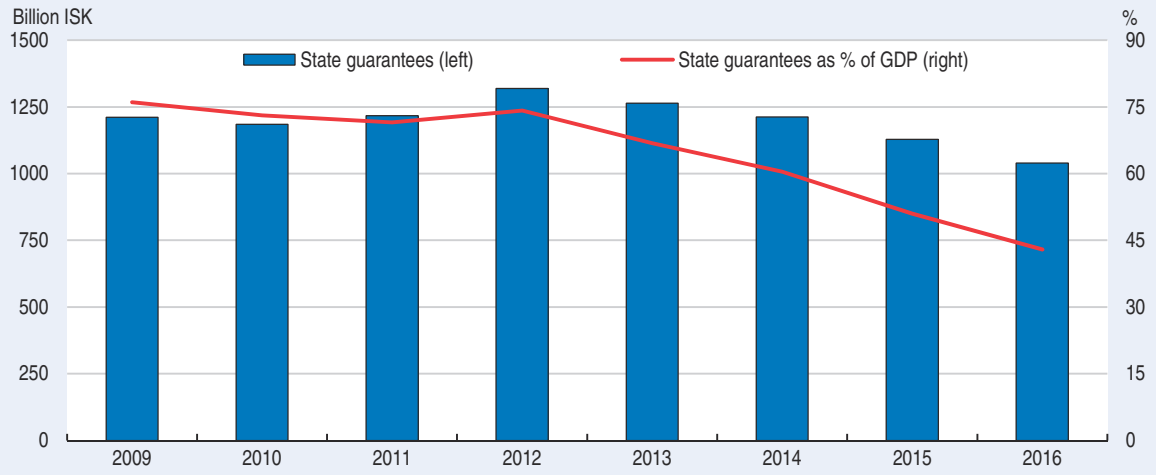
Iceland has sizable contingent liabilities in the form of state guarantees. Nevertheless, progress has been made, as state guarantees fell from above 75% of GDP (1.2 trillion krónas) in 2012 to slightly above 40% (1 trillion krónas) at the end of 2016 (Central Bank of Iceland, 2017d), Figure 14.

The largest part of the state guarantee – 820 billion krónas or 35% of GDP in 2016 – goes to the Housing Financing Fund (HFF). Bonds issued by HFF, backed by a state guarantee, are used to issue mortgage loans. Nevertheless, after some financial struggle and recurrent recapitalisations, it has been decided that HFF would be wound down, as also recommended in past Economic Surveys. No HFF bonds have been issued since January 2012.

State guarantees are in place also for the largest energy company, National Power Company (Landsvirkjun, 195 billion krónas or 9% of GDP). As around one third of revenues are directly linked to the aluminium price, the company (and indirectly the government) is therefore exposed to commodity price risks or the failure of a contract with an aluminium plant. However, over time Landsvirkjun has renegotiated contracts and expanded its customer base leading to its credit rating being raised and non-guaranteed debt is now classified as investment grade. No further state guarantee to such industrial development should be undertaken as has been the case also with Landsvirkjun.

Box 3. **State guarantees** *(cont.)*

Figure 14. **State guarantees**



Source: National Debt Management Agency, Iceland (NDMA).

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State guarantees are, among others, also in place for the Regional Development Fund, Farice (Telecommunications service provider), National Broadcasting Service, Nordic Investment Bank, Iceland State Electricity and ISAVIA (airport operator).

Table 4. **Past OECD recommendations on fiscal sustainability**

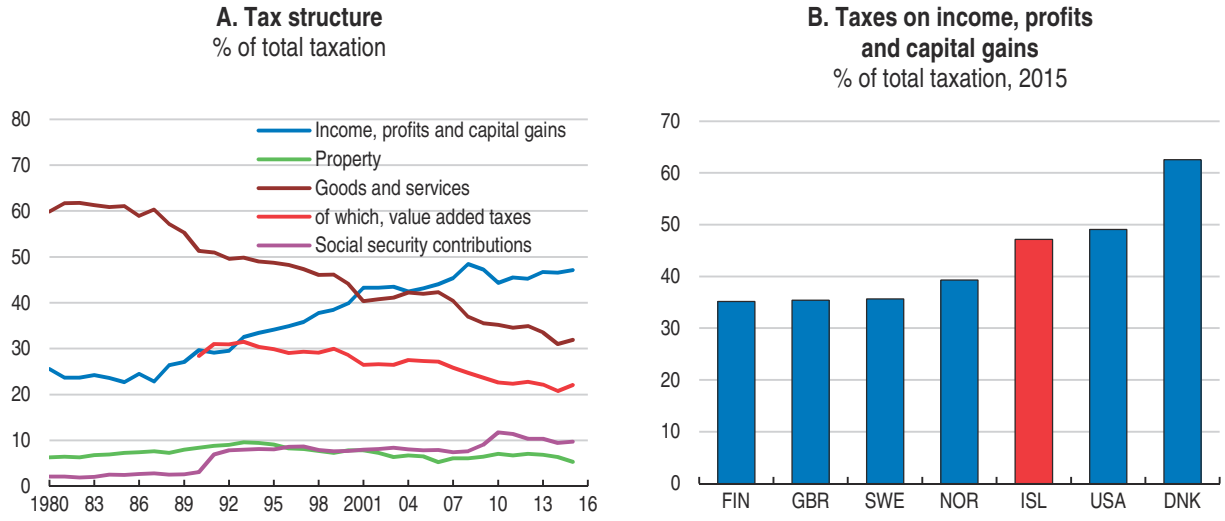
Recommendations	Actions taken
Pass and implement the Organic Budget Law, including enacting the balanced budget rules and establishing an independent Fiscal Council to assess progress towards sustainability.	Achieved.
Use windfall gains and one-off revenues to pay down debt, including any proceeds from lifting the capital controls.	The government's plans incorporate proposals to pay down debt. Receipts from stability contribution from the failed banks' estates in 2016 will be used to repay debt.
Avoid accumulating further contingent liabilities, including by closing the Housing Financing Fund (HFF).	Reforms introduced in mid-2016 limited the ability of HFF to authorize new loans. Reforms to public pensions significantly reduced the implicit guarantee to cover for the unfunded part of public pension scheme. The new government's plan also includes privatising the banks.
Further shift tax revenue from income taxes to VAT, while preserving equity.	In 2015, the standard and reduced rate structure was changed from 25.5%/7% to 24%/11%. In 2016, many tourist services previously exempt became taxable at 11%.
Undertake strategic spending reviews to seek potential efficiency gains and reorient expenditure towards government priorities.	No action taken.
To reduce costs and increase returns to education, reduce the duration of primary- and secondary education.	Partially achieved. The authorities acted to reduce the length of schooling, shortening upper-secondary school by one year.
Strengthen gate-keeping in health care to reduce specialist consultations, guide patients to more appropriate care and reduce examinations using expensive diagnostic equipment. As this would raise GP workloads, increase funding for GPs.	In May new regulations on patient payment and on referrals for children entered into force. According to the regulations children that seek health care services from specialists after being referred from primary health care do not have to pay fees. Those who seek this service without a referral pay a fee.

A tax system conducive to inclusive and green growth

Progress has been made to reduce distortions in the tax system, which will help underpin fiscal policy while reducing the costs of taxation on the economy. The structure of taxation remains too reliant on income taxes, but reforms to consumption taxes will increase their relative importance in the overall tax structure.

Personal income taxation alone accounts for over one-third of total revenue (while social security contributions are low by international comparison). The share of income taxes in total taxation over recent decades has increased (Figure 15). By contrast, in many other OECD countries the structure of taxation has been shifting away from income towards consumption and other taxes, which OECD analysis suggests is less harmful for growth (Arnold, 2008). In 2016 and 2017, personal income taxation was adjusted with the elimination of the middle tax band and a modest reduction of the bottom band from 22.86% to 22.50% while the top band remained at 31.08%. Tax rates on labour income are above the OECD average and reducing these and corporate income tax rates may offer some scope to mitigate the effect of a higher equilibrium exchange rate on internationally-exposed sectors. Future reforms should consider adjusting the tax mix by reducing reliance on income taxes.

Figure 15. **Income taxes account for an increasingly large share of tax revenue**

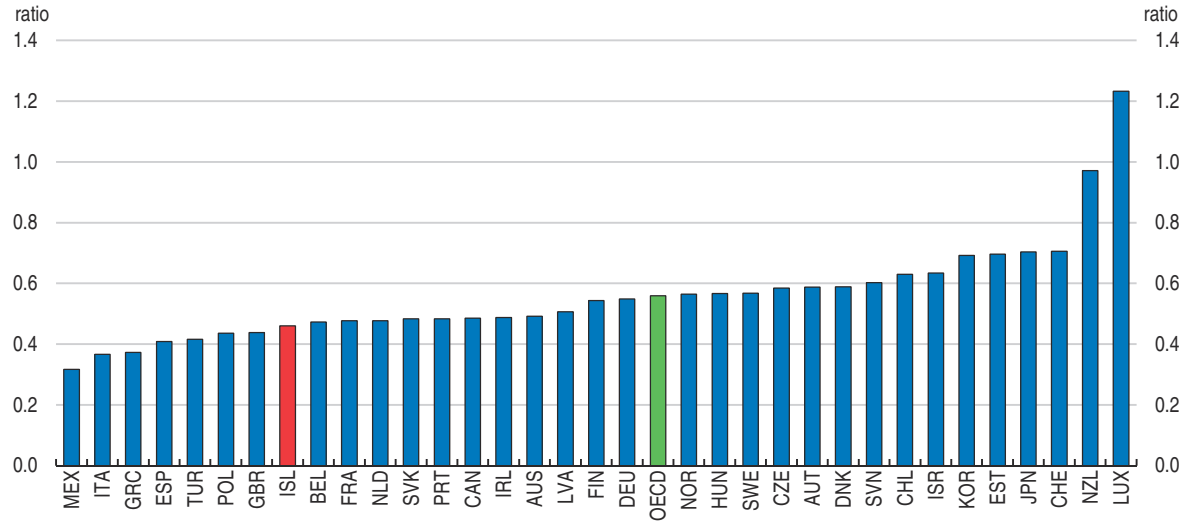


Source: OECD Revenue Statistics.

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Consumption taxes have fallen as a share of revenue and the efficiency of the value-added tax as measured by the VAT Revenue Ratio, which gives an indication of the impact of exemptions and reduced rates as well as tax compliance, has been amongst the lowest in the OECD (Figure 16). Evidence suggests that the redistributive effect of exemptions and the reduced rate has not been large in Iceland (Escolano *et* al., 2010; Matheson and Swistak, 2015), as they applied to restaurant meals, hotel stays, and many other types of tourism activities (e.g. snowmobiling, whale watching) which represent a small share of the consumption basket of low-income households. In 2015 and 2016, reforms were introduced to broaden the tax base and reduce the difference between the standard and reduced rates and in 2017 the government announced further reforms to apply the standard rate for most tourism services and reduce the standard rate from 24% to 22.5%. Further narrowing the difference between the standard and reduced rates is welcome.

Figure 16. **VAT revenue is low as a share of the tax base, 2014**[1]



1. The VAT revenue ratio (VRR) is defined as the ratio between the actual value-added tax (VAT) revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption with perfect compliance and enforcement. This ratio gives an indication of the efficiency and the broadness of the tax base of the VAT regime in a country compared to a standard norm. It is estimated by the following formula: VRR = VAT revenue/([consumption – VAT revenue] x standard VAT rate). VAT rates used are standard rates applicable as at 1 January. The fact that public consumption is VAT-exempt under EU rules places an upper bound on the attainable VRR, especially in countries with a large public sector. The OECD aggregate is an unweighted average of data shown. Data for Canada cover federal VAT only.

Source: Consumption Tax Trends 2016, VAT/GST and excise rates, trends and policy issues, Table 3.A3.1.

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There is also scope to shift revenue sources towards user fees, by introducing them in areas where congestion and environmental damage occur. In some cases this is already done through levying parking charges for the main tourist attractions, but wider application can be considered in areas where the damage is not being taken into account in decision making (in which case the user fee would be closer to a tax). In other cases, particularly where organised tourism is a dominant player, adopting a concession model would potentially lower the administration costs. At present, revenues raised directly from tourist activities include a tax on accommodation rental (but not the number of people). This tax has been levied since 2012, with the rate of just 100 króna per night (€0.9). In 2017, the tax rate is rising to 300 króna.

The share of environmentally-related taxes is about one percentage point of GDP below the OECD average, though this excludes a levy on the fishing industry (See Panel E in Green Growth Indicators in the Iceland at a Glance section). The effective rate of taxation on carbon dioxide emissions is the same for most sectors, with an average price of €13.5 per tonne levied for these sectors (OECD, 2016c; OECD, 2015c). In the transport sector, which is the largest source of carbon dioxide emissions (accounting for around 40% of the total), the tax rate is €166 per tonne. On the other hand, in industry and agriculture (but not fisheries) many emissions are not taxed at all due to exemptions, accounting for around 30% of total carbon dioxide emissions in Iceland. In line with current government intentions to move towards a greener economy, the scope of the tax should be expanded to the extent possible, even though other countries, notably New Zealand, have found it difficult to use taxes to reduce agricultural pollution. The new government has proposed to double the carbon tax from January 2018 and to consider further changes to green taxation (Table 5).

Table 5. **Past OECD recommendations on green growth**

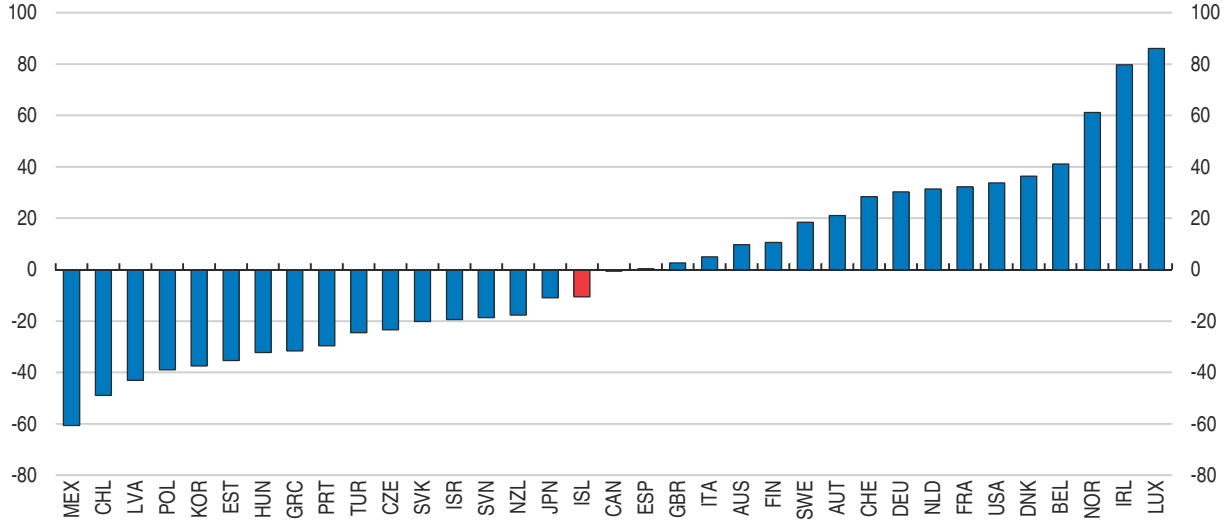
Main recent OECD recommendations	Actions taken
Broaden the base for the carbon tax and raise its rate to increase cost-effective abatement of GHG emissions.	Partially achieved. A carbon tax was introduced in 2010 and levied on liquid fossil fuels. The base has not been broadened beyond liquid fuels to other carbon–based fuels (except liquefied petroleum gas). Rates have not been raised although they have been adjusted for inflation. However, current plans are to double rates and consider further reforms.
Develop exported electricity capacity (notably through energy-intensive industries) if long-run marginal costs (including the return on capital) are fully covered. If there are resource rents, tax them.	No action taken.

Reforms to improve the business environment

Labour productivity is low compared to other Nordic countries and living standards are raised by high labour force participation and work effort (Figure 17). In part, the small size of the economy limits the scope for exploiting economies of scale and as a result most Icelandic firms are small by international comparison. As a consequence, Icelandic firms can show up in standard measures as being relatively inefficient. In addition, as many other OECD countries, Iceland has recently experienced a significant slowdown in productivity growth (Figure 18). Although there has been a jump in productivity in most recent quarters, Central Bank of Iceland (2017b) argues that this may be an overestimation, stemming from underestimated immigrant labour. The current tourism boom, while assisting in the impressive economic turnaround, has put upward pressure on the króna, which combined with wage increases over and above productivity growth has hurt competitiveness (Figure 19).

Figure 17. **Labour productivity is low compared to peers**[1]

GDP per hour worked, % gap to OECD average, 2015



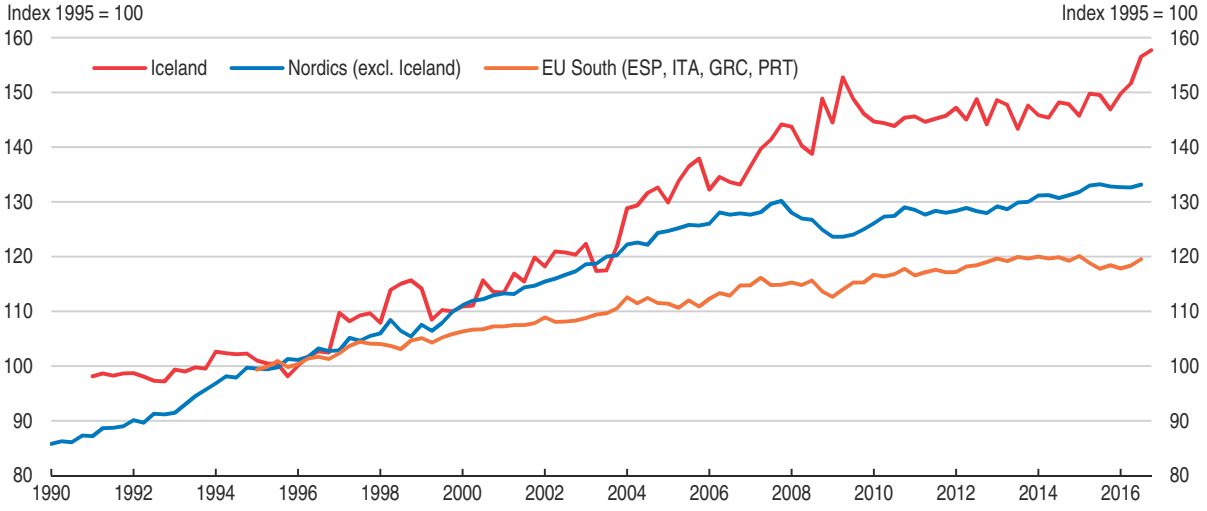
Source: OECD Productivity Database.

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A healthy business sector not only increases the resilience to shocks, but also underpins long-term prospects by supporting productivity growth. Furthermore, in combination with labour market institutions that help share the gains from productivity growth widely, promoting a healthy business environment and productivity also supports inclusiveness.

Figure 18. **Productivity growth has slowed**[1]

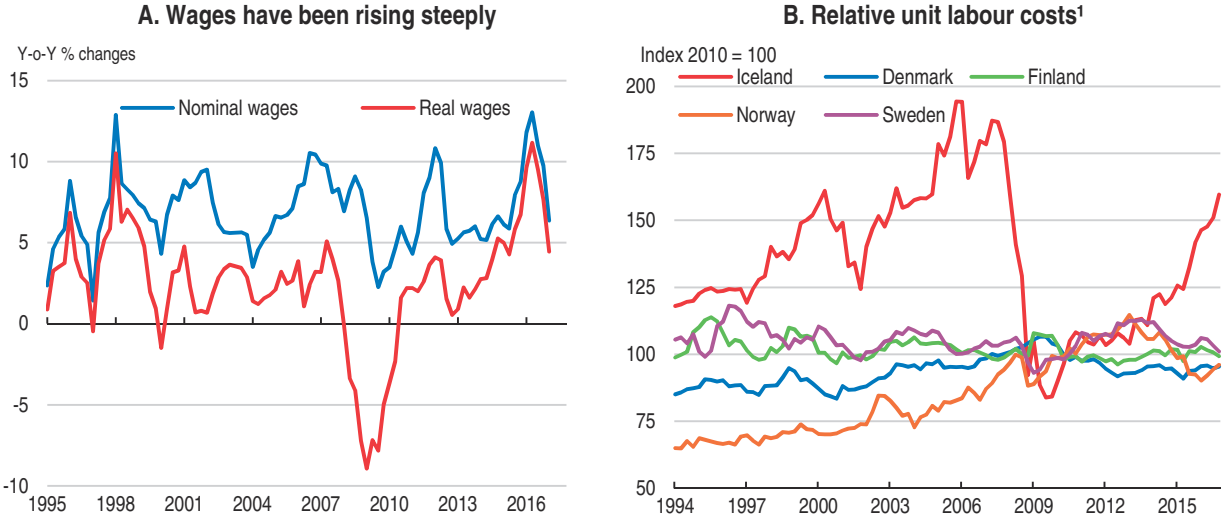
Real GDP per hour worked



Source: Central Bank of Iceland: Quarterly Macroeconomic Model database (seasonally adjusted); and *OECD Analytical Database*.

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Figure 19. **Competitiveness has been eroded**



1. Labour costs adjusted for productivity and exchange rates in comparison with the country's trading partners. A rise in the indices represents deterioration in that country's competitiveness.

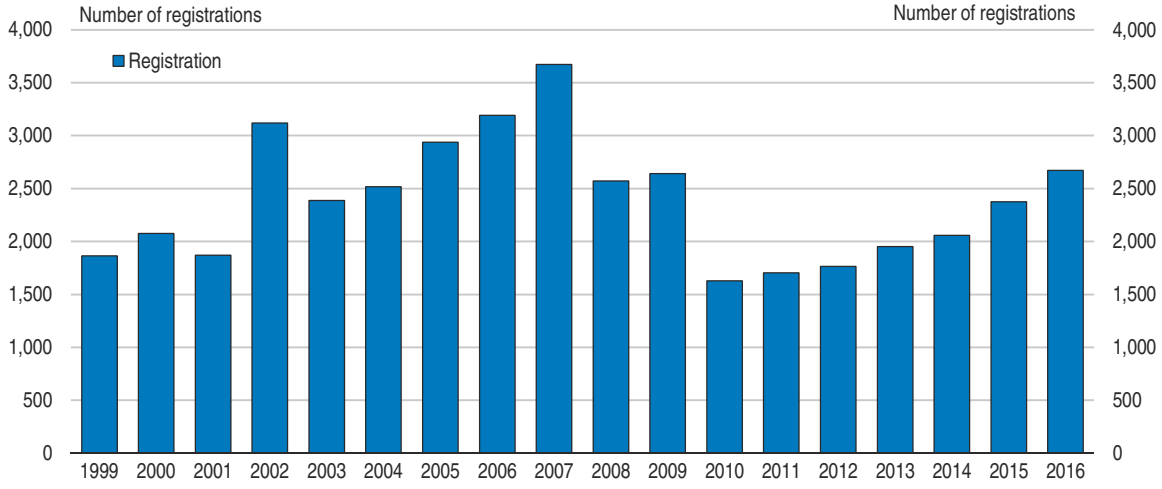
Source: Statistics Iceland; and *OECD Analytical Database*.

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The government has continued to push forward on the recommendations of the Growth Forum (which brings together politicians, business and union leaders and academics), OECD Economic Surveys and Going for Growth. For example, the government has addressed overly long secondary education, it somewhat reduced (comparatively high levels of) agricultural support, and the competition authority has investigated the fossil fuel market, identifying areas of possible competition concern. Continuing to pursue the productivity agenda as advocated in the previous *Economic Survey* would ensure that possible avenues to boost productivity are exploited.

New firm creation has gradually picked up after the crisis (Figure 20). Around two-fifths of the new registrations in 2016 were in construction, real estate and finance, reflecting the booming real estate market. The government has continued to provide resources to venture capital funds in order to support different clusters, such as technology, that may offer future sources of productivity growth. However, start-ups in a very small economy face problems in scaling up their activities, which tends to be an important source of productivity growth (Adalet McGowan et al., 2015). More recently, exchange rate appreciation and the impact of collective bargaining agreements have further dented their prospects.

Figure 20. **Firm creation is picking up again**



Source: Statistics Iceland.

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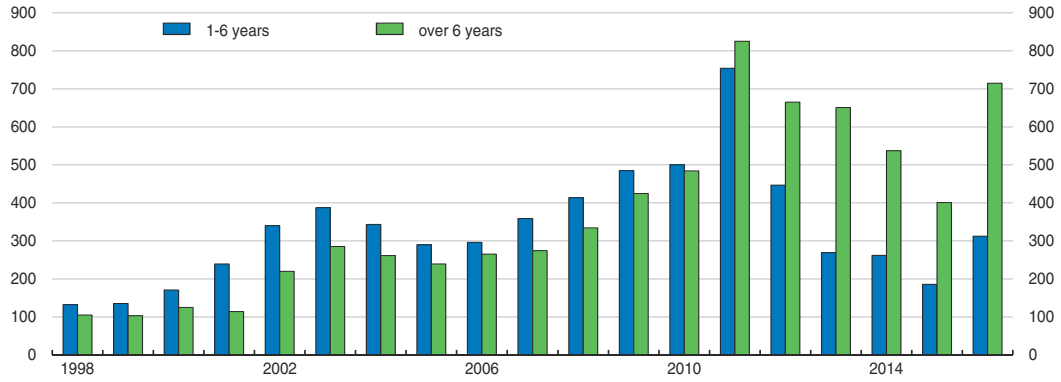
Insolvencies increased in 2016, partly because a backlog of cases was cleared (Figure 21). Since the crisis the firms undergoing insolvency are predominately more established firms (older than 6 years old), whereas in the past firm failure was more common amongst younger firms. The insolvencies are largely concentrated in wholesale and retail trade. Recent OECD research suggests that barriers to orderly insolvency procedures can hinder productivity growth by locking resources in weak firms and damping the effect of competition (Adalet McGowan et al., 2017). In general, Iceland compares favourably with other OECD countries in the speed of bankruptcy procedures. In this light, policy should continue to ensure that non-viable firms are not sustained.

Robust competition can also support a healthy business environment that is conducive to productivity growth. As noted in the last *Economic Survey*, competition in services is weak, often due to artificial barriers to entry. The Icelandic Competition Authority has continued to counter abuse of dominant positions and collusions, which are particular problems for very small economies where it is common for a single firm or handful of firms to dominate the market. The authorities are considering using the OECD's Competition Assessment Toolkit to undertake a review of existing laws and regulations as recommended in the previous survey (Table 6).

A number of barriers to competition remain. The OECD's measure of trade restrictiveness in services has been above the OECD average, in part because of the capital controls (Figure 22). However, progress in lifting capital controls will not have a large impact. For example, lifting

Figure 21. **Firm insolvency has risen**

Number of young and more established firms going through insolvency proceedings



Source: Statistics Iceland.

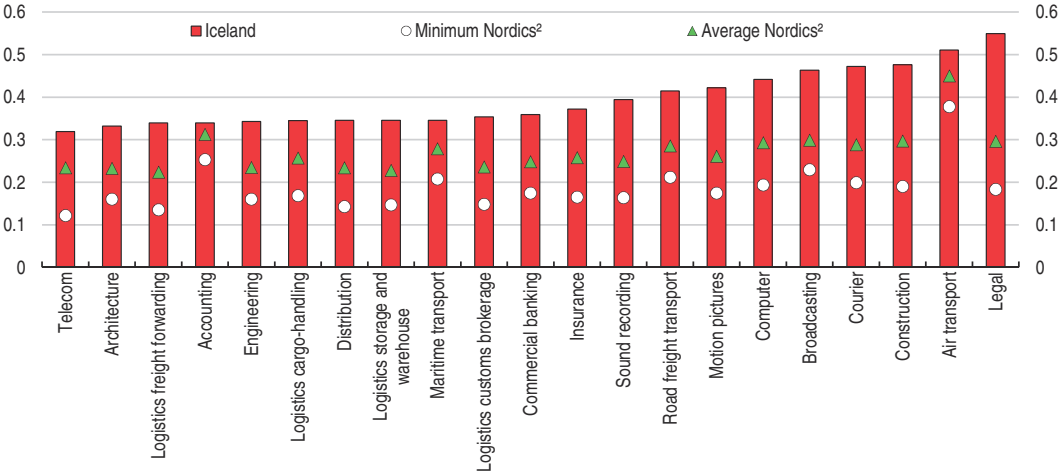
StatLink http://dx.doi.org/10.1787/888933530547

Table 6. **Past OECD recommendations on productivity growth**

Main recent OECD recommendations	Actions taken
Adopt an ongoing productivity agenda, including following up on the priorities identified by the recent growth forum.	The Icelandic authorities have been active in international productivity fora.
Lower barriers to entry including by removing legal barriers to entry in particular sectors	The Growth Forum has followed up by discussing barriers to entry.
Support innovation, including by encouraging links with universities. Ease funding access, notably with public investment funds that can finance firm expansion. Evaluate support measures.	A bill was passed in May 2016 supporting innovation. Measures included new tax incentives to individuals investing in growing innovative companies. The existing R&D tax support was also increased.
Toughen competition policy implementation to ensure that abuse of dominant position or cartel/tacit collusion does not stifle competition. Use the OECD's Competition Assessment Toolkit to refine law and enforcement.	Consultation is on-going with the OECD.

Figure 22. **Service trade restrictiveness index (STRI)**

The indices take values between zero (the least restrictive) and one (the most restrictive)[1]



1. The index includes regulatory transparency, barriers to competition, other discriminatory measures, restrictions on movement of people and restrictions on foreign entry. The STRI methodology takes into account different market and trade cost structures across sectors to ensure that they reflect the relative restrictiveness of each sector. Nevertheless, the indices may not be perfectly comparable across sectors. The indicators are for 2016.
2. Nordics include Denmark, Finland, Iceland, Norway and Sweden.

Source: OECD Services Trade Restrictiveness Index (STRI).

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capital controls would reduce the indicator for commercial banking from 0.36 to 0.35. Other general restrictions include the requirement that half of the board and the CEO of corporations are resident in Iceland or European Economic Area (EEA) member countries, and access to public procurement is limited. Specific restrictions are fairly onerous for auditing, which favours locally-licensed auditors, and in the air transport sector where limits exist on foreign equity participation. In addition, landing and take-off slots are allocated based on historical rights and commercial exchange of slots is not allowed. Slot allocation at Keflavik airport has been a concern for the competition authorities.

Making the best of the tourism boom

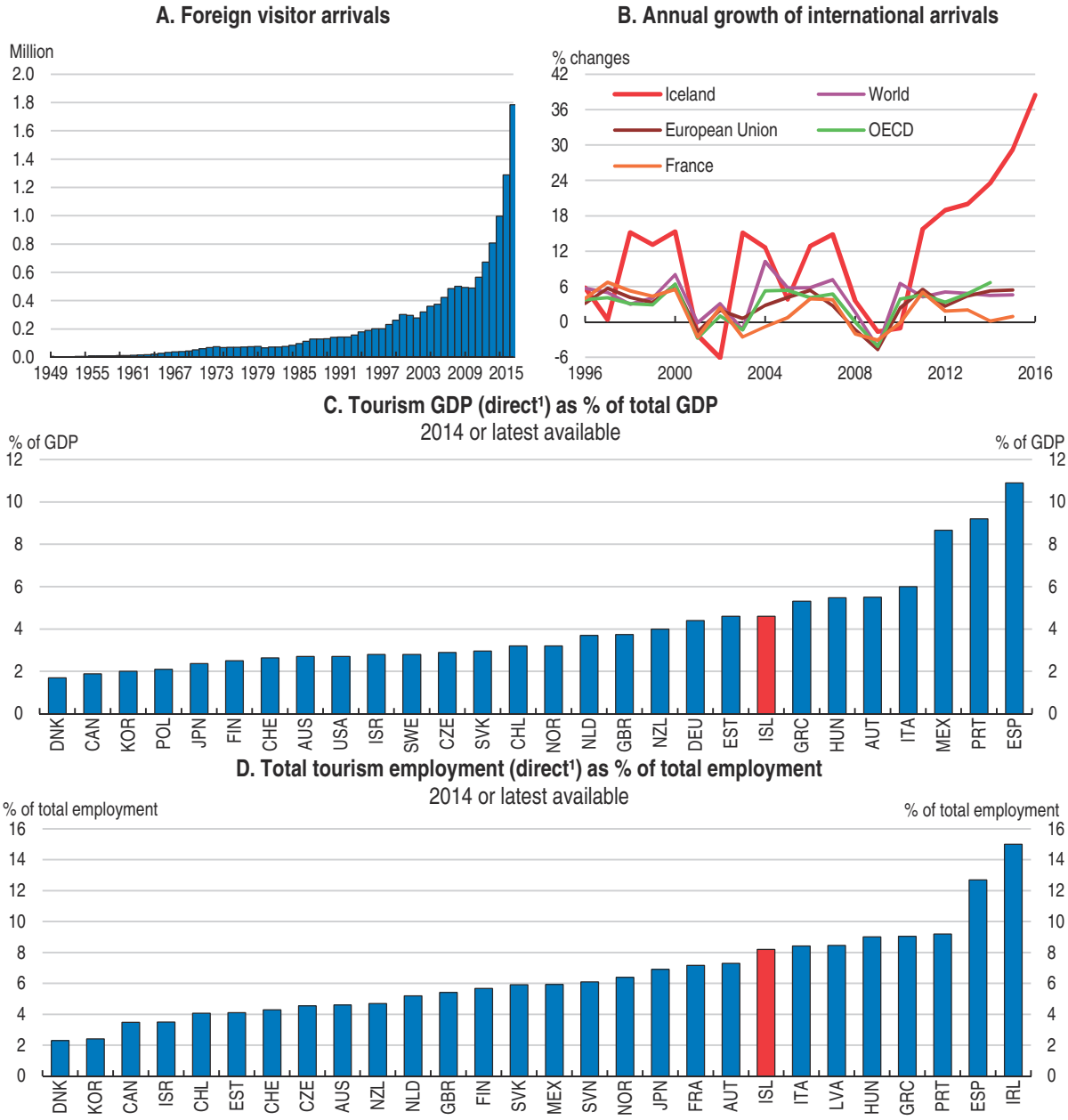
Iceland is experiencing a tourism boom, with tourist numbers growing annually on average by more than 20% since 2010. The number of foreign visitors quadrupled between 2010 and 2016, reaching 1.8 million. The surge in tourist numbers has boosted the economy, helping to unwind some of the impacts of the financial crisis. New jobs have been created, foreign currency earnings have risen – easing financing constraints on the balance of payments – while the boost to tax revenues has contributed to improved public finances. While tourism brings many benefits, there are also downsides. The pace of growth has caught the authorities by surprise. A clear strategy needs to be developed to foster good co-ordination amongst the different actors and to maximise the benefits for Iceland (OECD, 2014).

Output in tourism related sectors has increased particularly fast in recent years (Figure 23). This in large part has been facilitated by the expansion of the international airport at Keflavik, its development as a hub for transatlantic routes and growing competition between air carriers. Tourism has risen from being a small part of economic activity to becoming the major export earner. Tourism-related services are now estimated to account for around two fifths of goods and services exports. This growth has helped maintain the positive trade balance and current account surplus that emerged in 2009. Demand for labour has risen substantially as a result of increased tourism. Well over 4 000 (or around one fifth of new jobs) have been created in the tourism-related sectors since 2010, with additional indirect impact on employment elsewhere in the economy. The rapid expansion of the tourism sector has contributed to an upswing in in-migration as migrant workers come to fill, often relatively low-skilled, jobs in the tourism sector. The full impact on GDP and employment is difficult to assess as data from tourism satellite accounts is only available with a considerable delay. Improving the quality and timeliness of tourism-related data would provide the basis for improved economic analysis of the sector and assist policymakers.

Government revenues are also being boosted by tourism. Since 2010, turnover in tourism-orientated sectors rose significantly and reforms to the VAT will lead to increased revenue from the sector. The reforms introduced since 2015 broaden the tax base and narrow the difference between the standard and reduced rates and reduce some of the tax preferences offered to tourism services (such as accommodation, restaurants, snowmobiling and whale watching). New proposals made in early 2017 will raise the tax rate on most tourism activities to the standard rate, while lowering the standard rate from 24% to 22.5%. There are a small number of tourism-related services that continue to lie outside the VAT base (including salmon fishing and taxis) and which the authorities should bring into line with other tourism-related services.

Since the tourism boom began gathering pace, the króna has appreciated by around 40%, significantly offsetting the large deprecation that accompanied the financial crisis. Foreign

Figure 23. **Tourism is rapidly becoming one of the pillars of the economy**



1. Tourism GDP corresponds to the part of GDP generated by all industries in response to internal tourism consumption. Tourism direct GDP is generated by industries directly in contact with visitors, while indirect tourism GDP is generated by industries supplying inputs to industries directly in contact with the visitors.

Source: Iceland Tourism Board; *OECD Key tourism indicators Database*; and World Bank WDI database.

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currency inflows from tourism account for a large share of the upward pressure in the exchange rate. In part the appreciation will choke off some of the break-neck growth in tourist numbers in coming years. At the same time, internationally-exposed sectors of the economy are finding the operating environment much more difficult due both to the króna appreciation and to the impacts of the wage agreements. With resources shifting to tourism these developments are threatening to undermine the efforts of the authorities to support

innovation and develop new technology-driven sectors. To maintain competitiveness, policy needs to continue supporting productivity-enhancing innovation, including in the tourism sector as this has become an important pillar of the economy. Against this background, maintaining high skill levels is crucial, both in developing a productive tourism sector and in building resilience to shocks that can hit a resource-based economy. Vocational and on-the-job training can help individuals develop skills, particularly for workers drawn into employment before completing high school. Expanding apprenticeship-like schemes to tourism would help to raise skill levels, which will help develop a higher value tourism sector and improve opportunities for individuals who leave school with limited skills (Musset and Valle, 2013).

Preserving the attraction of nature

The pristine state of nature in Iceland is a major attraction for tourists, but the development of tourism has put nature under additional pressure. Some (often popular) sites have suffered environmental degradation. The soil is largely volcanic and particularly susceptible to erosion, while plant life is also vulnerable. Preserving the attraction of nature requires careful land use planning to avoid significant loss of wilderness. The loss of these locations will likely be irreversible, particularly in areas where anthropogenic impacts can persist for hundreds of years. Some tourists also appreciate low numbers of other tourists. However, as numbers mount and more explore outside the capital region, the relative attraction of the wilderness areas begins to diminish. Survey evidence already suggests that almost one-third of visitors feel that tourist numbers exceed desired levels in some parts of the Central Highlands.

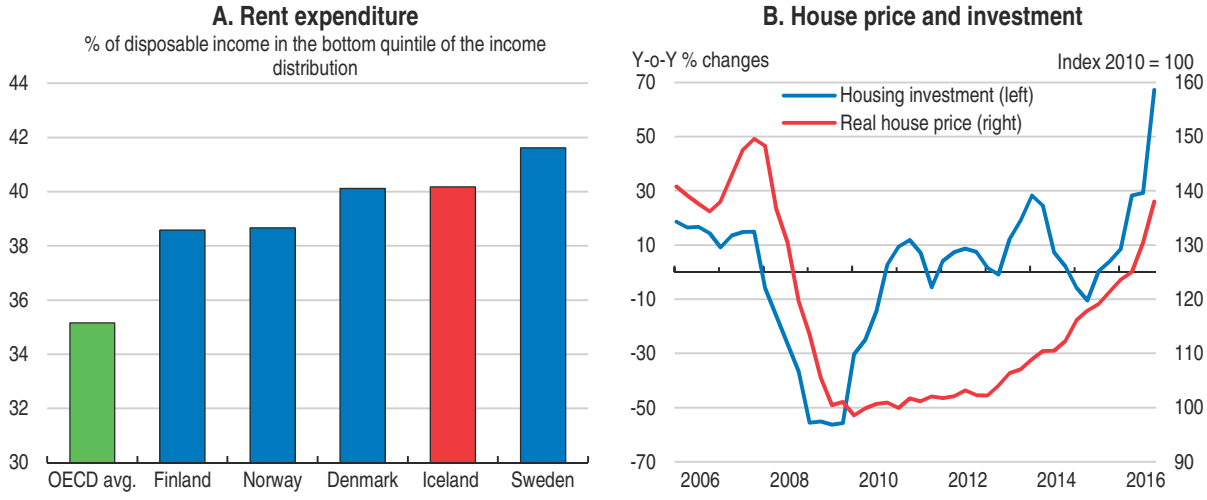
The attraction of wilderness creates trade-offs between the need to provide necessary infrastructure to enable tourism and the need to preserve wilderness and ensure relative solitude. Other countries control the human footprint by setting quotas and pricing access to particular areas. However, these schemes can be costly to administer and enforce and conflict with the Icelandic principle of right to roam. Nonetheless, user fees to manage congestion and harmful impacts on the environment should be introduced in areas under greatest pressure. Current approaches, such as relying on parking charges, may be a suitable option at some sites and using concession models where organised tours are creating externalities offer an alternative approach. Better managing the distribution of tourists around the country may also help, but care should be taken to ensure that this does not lead to widespread development eating into remaining areas of wilderness. The plan of promoting point-to-point international travel outside Keflavik would help ease congestion, but this approach has met with limited success in other countries, such as Mexico. Developing domestic air travel from Keflavik may be an alternative to examine in a cost-benefit analysis.

Enhancing short-term flexibility while minimising externalities

Over time, tourist accommodation in private houses has been growing, partly as sufficient hotel rooms have not been available. The demand for accommodation combined with new technologies has spurred the development of the sharing (so-called "gig") economy in Iceland, notably through Airbnb rentals. The flexibility of the short-term rental market can reduce the need to invest in hotel accommodation, which may become a liability if projected tourist numbers fail to materialise. After the crisis, investment in tourism accommodation and housing was weak. As a result supply has lagged behind the growth in demand driven by

tourism, immigration and the fast economic recovery in general. At present, the under-supply of housing and tourist accommodation and the growth of the short-term rental market have made housing less affordable, particularly in the centre of the capital. Even before the most recent house price increases, the cost burden for low-income households in private rentals was amongst the highest in the OECD although on par with other Nordics (Figure 24). While real house prices have risen further, greater supply will ease these pressures over time and residential investment has been picking up more recently (Figure 24).

Figure 24. **House prices have risen and affordability can be a challenge**



Source: OECD Affordable Housing Database and *OECD Analytical database*.

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In line with the current approach, housing policy needs to be better targeted than it has been in the past, supporting greater supply of housing units for vulnerable groups, who may otherwise face obstacles in finding suitable jobs elsewhere, and become marginalised. The spread of the short-term rental market to meet tourist demand has changed the character of residential housing and led to complaints from the hotel sector about ensuring a level playing field between hotels and these new short-term rentals. In response, the authorities from the beginning of 2017 have introduced limits on the short-term rental market, in part to protect residents in apartment blocks.

One particular concern that has arisen with the gig economy has been whether individuals renting their apartments have been declaring income and paying the occupancy tax. Airbnb automatically collects occupancy taxes and VAT in some countries or cities sending them directly to the tax authorities, which minimises the differences between hotels and the rental sector, where unreported income is a concern (though by its nature very hard to quantify). New rules on renting in Iceland are intended to remove untoward advantage and level the playing field in business taxes and health and safety requirements for owners who are actively involved in the short-term rental market. The limits being placed on short-term rental accommodation, such as limits on the number of days an apartment can be rented during a year, should be reconsidered or recalibrated if they choke off competition from this segment of the market.

The policy challenges facing the Icelandic authorities lie in how to maximise the benefits from the current interest in tourism while preserving the natural attractions that are

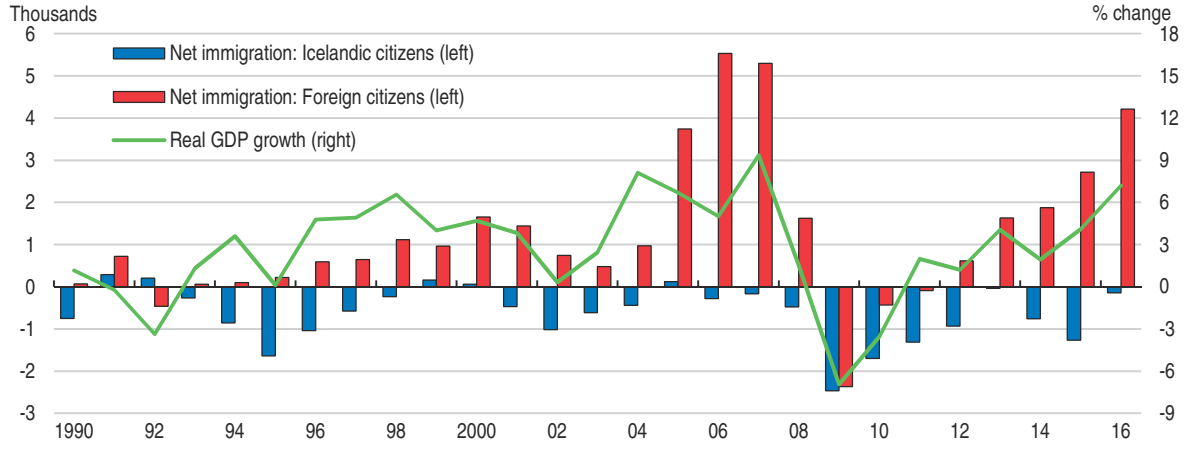
largely responsible for tourist arrivals and ensuring that the gains are shared across the population, including future generations. A task force was established in 2015, bringing together the Ministers responsible for tourism, finance, interior and environment, and charged with implementing a Road Map, which prioritises several policy areas. Working with local authorities and industries, the Task Force seeks to improve skills and quality in the tourism sector as well as study the consequences of tourism on nature conservation. As tourism affects so many different parts of the economy and public policy, establishing an inter-ministerial tourism strategy would help ensure that tourism is environmentally, socially and economically sustainable. Given the importance of the sector to the economy, co-ordination should also include non-government stakeholders. An inter-ministerial group, building on the current Ministerial co-ordination committee headed by the Prime Minister's Office, would help implementation of tourism policy.

Effective use of the inter-ministerial group could be supplemented by forging agreement on a long-term strategy for tourism that co-ordinates planning and management across Iceland and ensures the consistency of planning with transport policy. This would establish a framework to make the growth of nature-based tourism sustainable in terms of environmental and social impact, while maximising the economic gains. The framework should aspire to learn from the successful management of the fishing sector, avoiding the boom and bust of the banking sector, and ensuring that natural rents are better captured and distributed among the Icelandic population than has been the case for metallurgy.

Iceland's labour market

The Icelandic labour market is quite flexible. The strictness of Iceland's employment protection is very low, companies can easily adjust their labour force, and labour-market needs are fulfilled by large variation in employment and migration flows (Figure 25). Iceland has also traditionally maintained high labour force participation (the percent of the working age population available for work, Figure 26), including in population groups facing employment difficulties in other OECD countries such as young workers, older workers, and women (Box 4). Together with long working hours, this has contributed to high living standards.

Figure 25. **Migration flows are heavily influenced by the economic cycle**



Source: Statistics Iceland; and *OECD Analytical Database*.

StatLink http://dx.doi.org/10.1787/888933530623

Figure 26. **Labour force participation is high**



Source: OECD Labour Force Statistics.

StatLink http://dx.doi.org/10.1787/888933530642

Box 4. **Reducing gender gaps in the labour market**

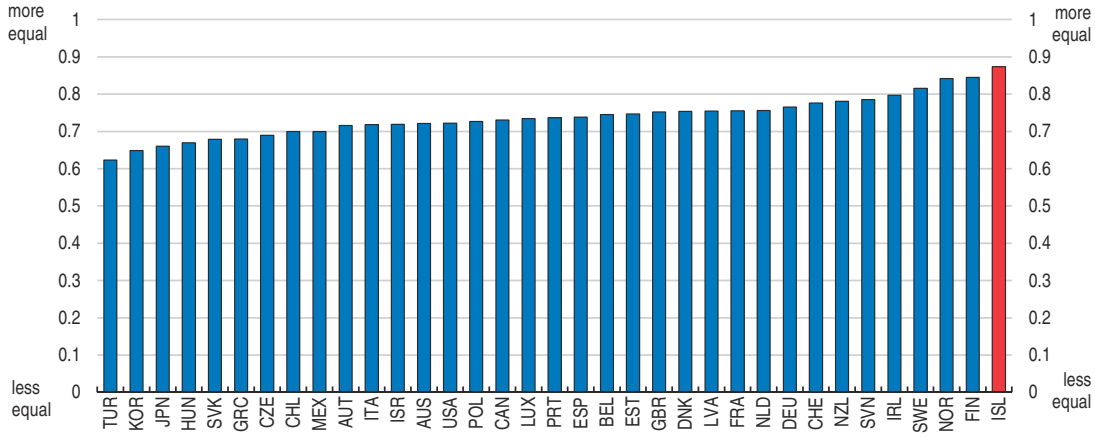
Participation of women in the labour market is the highest among the OECD countries (as seen in Figure 26), and women continue to work until late in their lives. On the Global Gender Gap Index, Iceland ranks first (Figure 27; World Economic forum, 2016). It is the top performer on political empowerment and educational attainment and in the top ten on economic participation and opportunity. Iceland also has a high number of women among legislators, senior officials and managers. Snævarr (2015) finds that the "unexplained" gender wage gap (after controlling for other factors) was about 5.1% in 2011-13 and has been decreasing over time. It lies above Sweden, but is lower than in Denmark and Norway.

Iceland was the first Nordic country to enshrine in law (in 1975) the equal status and equal rights of men and women. For publicly owned companies and public limited liability companies with at least 50 employees, boards of more than three members must be composed of at least 40% of each gender. Moreover, companies with 25 or more employees are required to disclose the gender composition of the employed and those in management positions. Despite a low gender gap the authorities are determined to reduce it further. The government wants to make it compulsory for all companies with 25 employees or more to develop a certification scheme for gender pay equality, with the aim that all jobs of equal value are paid the same. The obligation imposes implementation costs for the enterprises, such as auditing requirements. In this light, rolling out the scheme gradually, first for bigger firms and then for smaller ones, as proposed by the government, and monitoring the impact will allow the policy to be modified to avoid excessive burdens.

Towards effective and inclusive labour relations

Iceland is one the most highly unionised countries in the world (Figure 28), bucking the trends elsewhere in the OECD (OECD, 2017 and 2004; Hayter et al., 2015; Visser, 2016), and

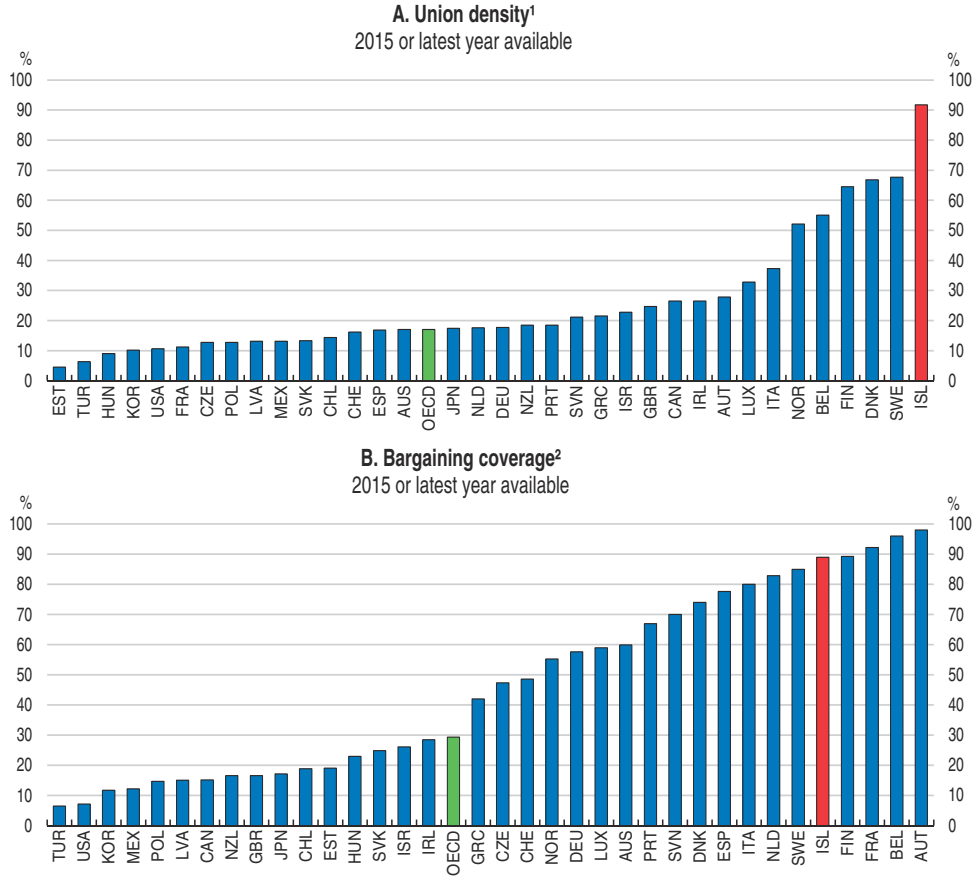
Figure 27. **The Gender Gap Index**



Note: The Global Gender Gap Index measures the relative gaps between women and men across four key areas: health, education, economy and politics.
Source: The Global Gender Gap Report 2016 Dataset © 2016 World Economic Forum.

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Figure 28. **Union density in Iceland is the highest in the OECD**



1. Union density rate: net union membership as a proportion of wage earners in employment.
2. Adjusted bargaining coverage rate: proportion of all wage earners with right to bargaining.

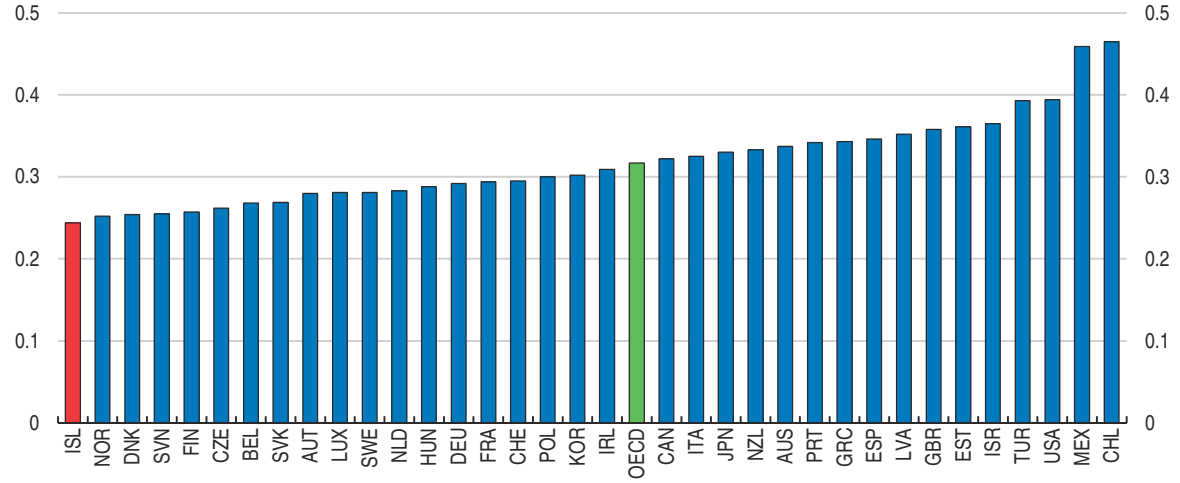
Source: J. Visser, ICTWSS Database version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2016 completed with the OECD Policy Questionnaires.

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collective bargaining plays a key role in wage formation. The strong presence of trade unions has contributed to promoting income equality and increasing inclusiveness (Figure 29). This system has had many successes and social partners have co-operated, particularly during times of crisis. For example, in the early 1990s the social partners together with the government contributed to bringing down inflation, and a social pact played an important role in minimising the impact of the financial crisis by protecting the lowest paid workers (Pétursson, 2002; Ólafsdóttir and Ólafsson, 2014). Moreover, the labour market partners have joint custodianship of many welfare payments, including the mandatory occupational pension system.

Figure 29. **Inequality is the lowest in Iceland**

Gini of disposable income, 2014 or latest year available



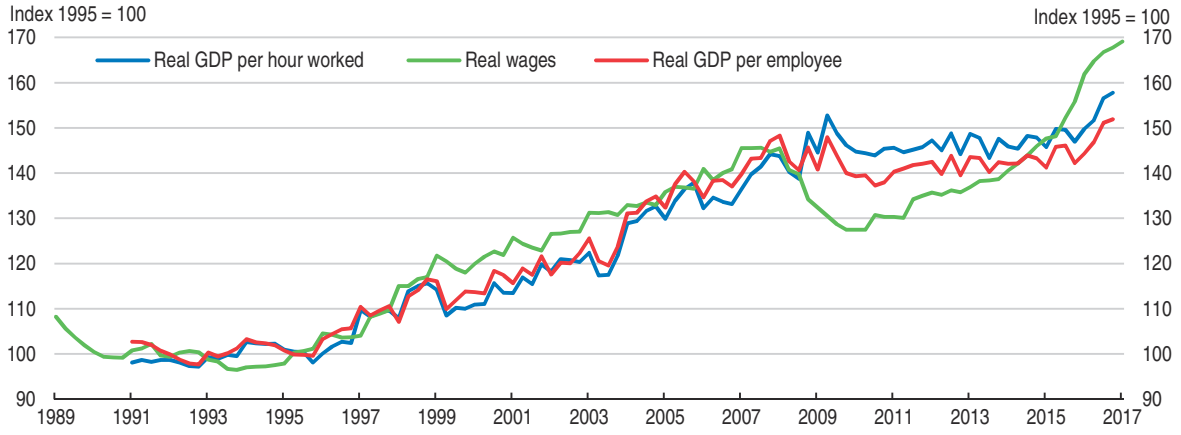
Source: OECD Income Distribution Database.

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Yet, the Icelandic bargaining model has been less successful in times of boom. Trade unions have often approached collective rounds fragmented, without taking into account wider consequences of their demands. In the private sector, employees negotiate additional individual wage awards at annual meetings with their supervisors, contributing to wage drift, but this does not happen to the same extent in the public sector. Thus, unions in the public sector often negotiate with "the need to correct wage developments of past years". Nevertheless, large catch-up demands by some unions trigger high wage demands by others, unleashing leap-frogging of wage demands (SALEK, 2016; Holden, 2016; OECD, 2015a). This has led to recurrent breakdowns in wage negotiations, disruptive strikes and high wage awards, which undermine competitiveness and create inflationary pressures. In addition, the government is frequently required to grant tax concessions or social transfers to facilitate a final settlement between the social partners.

In 2015, wage bargaining conflicts exploded resulting in negotiated nominal wage awards – which set the minimum for all workers covered by the agreement – of more than 20% over three years. Coupled with a booming economy and wage drift, wages have been rising steeply. The size of the awards reflected the need for some wages to catch up after a period of restraint, but they have risen over and above the catch-up levels, especially in light of productivity growth slowing recently (Figure 30). Along with the strengthening króna, this has eroded external competitiveness.

Figure 30. **Wage awards have exceeded productivity growth**



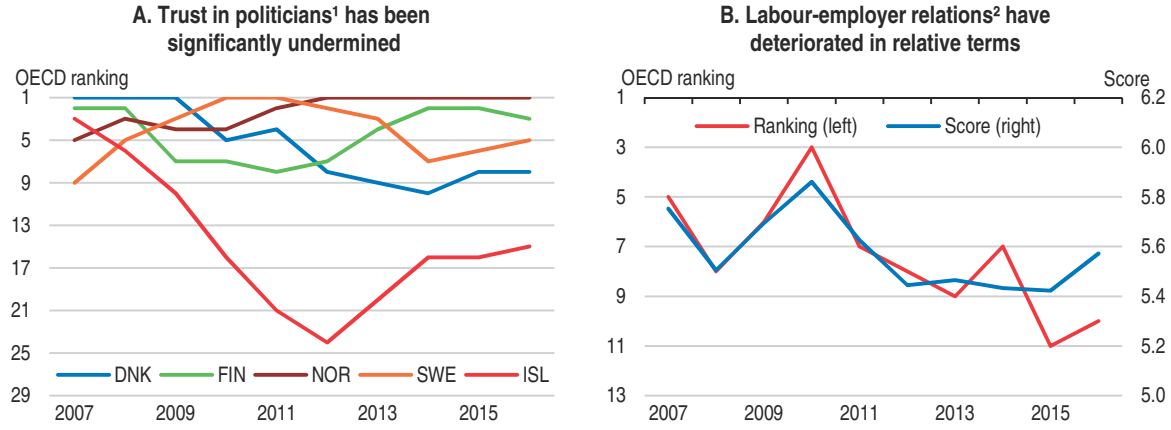
Source: OECD Analytical Database; Statistics Iceland; and Central Bank of Iceland: Quarterly Macroeconomic Model database (seasonally adjusted).
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The confederation of employers in the private sector, government (including municipalities) and major confederations of workers have recently entered a so-called SALEK agreement to improve wage formation and co-ordination (based on Nordic examples). As part of this framework it was also agreed to harmonise public sector pensions with the private sector. Nevertheless, some public sector unions are unhappy, including a teachers' union that considered suing the government. Against this backdrop, further implementation of the SALEK agreement has been put on hold.

Iceland has had a challenging decade during which trust has been undermined. Based on a survey from the Global Competitiveness Report on trust in politicians, Iceland dropped from a top performing OECD country in 2007 to the bottom third in 2012 (Figure 31), and it is still ranked far below its previous standing and below other Nordic countries. There has also been a falling trend in Iceland's ranking in the quality of labour-employer relations (Figure 31). While Iceland remains among the top 1/3 of the OECD, it ranked better in the years right after the crisis. This is consistent with the past tendency for labour relations to sour particularly in times of economic boom. Nevertheless, while interesting, such data should be interpreted with caution, as they are based on limited surveys of business executives, and hence they cover only one side of labour relations.

Negotiations often break down because parties differ in their view of the economy or even in their understanding of what was agreed in the past. Regular and active contact among the social partners to exchange views on issues of collective bargaining as well as issues of welfare policy and social reform can help build trust and develop mutual respect (ILO, 2015). The setting up of a macroeconomic council was a step in this direction. However, labour unions have so far refused to join the council. Another means to foster greater trust is to forge a common understanding of the economic situation. Such information should be perceived as impartial, providing an accurate reflection of sectoral trends that can be used as a reference point in negotiations. For instance, in Norway the "Technical calculation committee for wage settlements" brings together labour market partners, government and Statistics Norway; it submits two main reports, before and after the wage negotiations (Holden, 2016; Andersen et al., 2015). In Japan a tripartite non-profit organization, the Japan Productivity Centre (JPC), provides labour productivity statistics that are used by the social partners in negotiations (ILO, 2015).

Figure 31. **Trust has been undermined**



1. Business executives responding to the question: "in your country, how do you rate the ethical standards of politicians? [1 = extremely low; 7 = extremely high]".
2. Business executives responding to the question: "in your country, how do you characterize labour-employer relations? [1 = generally confrontational; 7 = generally co-operative]".

Source: World Economic Forum. The Global Competitiveness Index dataset 2007-2016.

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Establishing a "technical committee" that brings together the social partners, Statistics Iceland, and other relevant institutions could build the basis of understanding between partners. This technical committee would regularly provide impartial, relevant and reliable statistical information for collective bargaining, in particular before major negotiating rounds. Moreover, the committee could identify gaps in available data and request improvements. Wage statistics currently cover only a subset of companies and are not representative for all sectors or types of employees.

Better wage co-ordination

Labour unions in Iceland are often very small. A large number of agreements need to be reached (almost 200), sometimes covering very few workers. This creates the potential for co-ordination failure. The situation is exacerbated as unions are often organised along occupational lines, because labour demand is less elastic for workers within one occupation (Holden, 2016).

In Norway, Denmark and Sweden the co-ordination across sectors is based on the pattern-setting agreements negotiated in the manufacturing export industries. In Belgium, pay increases take into account wage forecasts in neighbouring countries – Germany, France and the Netherlands – so that competitiveness is maintained. Government has the power to intervene to ensure that wages do not grow excessively (Fulton, 2015). In the Netherlands, the main union confederations issue an annual recommendation on maximum wage increases, depending on past developments in inflation and productivity (Visser, 2016).

Iceland shares many institutional similarities with other Nordic countries, but due to its small size and the volatile nature of the economy it can be challenging to implement the pattern-setting model based on one sector. Instead, at the beginning of a negotiation round, peak organisations could issue "wage guidelines" for the round. In this, they should take on board the relevant statistical information provided by the technical committee. For the wage guidelines to enjoy high trust and broad buy-in form labour market participants, the

guidelines could come from a tripartite forum, or just involving SA-Business Iceland (the largest confederation of employers) and ASÍ (the largest confederation of trade unions).

A strong role of the state mediator is needed to underpin a system based on "wage guidelines". In other Nordic countries mediating institutions are strong and play important role in providing largely uniform outcomes (Andersen et al., 2015, 2014a and 2014b). The state mediator should be seen as a promotor and protector of the wage guidelines and when issuing conciliation proposals, they should be in line with the wage guidelines. This should likewise be the case for any potential industrial arbitration body. The Swedish National Mediation Office is explicitly tasked by law to "ensure sound wage developments" (Ibsen, 2013) and in Norway both the National Mediator and compulsory arbitration, when convened, follow the main framework given by the trend-setting industries agreement (Andersen et al., 2015).

Compared to other Nordic countries the Icelandic state mediator is relatively weak. The mediator should have powers to postpone industrial action for a limited period, in agreement with the social partners, when the mediation process is progressing towards a negotiated solution, as in Norway, Sweden and Denmark. Sometimes, the date for industrial action is already set, but discussions among the two sides and the mediator are ongoing. If the state mediator judges that there is progress towards a negotiated solution, he/she could propose to postpone industrial action. This can help by "cooling down" the parties. Besides, by delaying industrial action in one sector, another sector could reach an agreement first, potentially affecting the outcome in the sector where industrial action is postponed (Holden, 2016). It can also encourage the parties to be better prepared and try harder to reach an agreement. The Danish mediation institution has strong powers that could serve as a good example for Iceland, where there is a large number of very small unions. In Denmark, if mediation fails, the bargaining area where agreement has not been reached is "linked" with areas with agreements. All involved unions then vote together on the settlement, making it harder for small unions to overturn the agreement (Ibsen, 2013 and 2015; Andersen et al., 2015).

The future of work and collective bargaining

The nature of work and careers is changing dramatically. New technologies have polarized jobs by reducing demand for routine and manual tasks and increasing demand towards low- and high-skilled tasks. New technologies help match workers to tasks, but the growth of the gig economy (e.g. Airbnb) presents challenges in how best to integrate these workers into tax and social security systems, as they are often engaged in different forms of non-standard employment: self-employed, part-time or temporary work. It also raises questions about wages and labour rights. Regulation and policy measures such as statutory working hours, minimum wages, unemployment insurance, taxes and benefits are still modelled on the notion of a traditional and unique employer-employee relationship.

Around one-third of workers in Iceland are in non-standard employment, close to the OECD average (OECD, 2015b). In many OECD countries, these workers tend not to be covered by collective agreements, have fewer rights to social protection, receive less training, often have weaker career progression, and face greater insecurity (OECD, 2016a and 2015b). In Iceland, however, the rights agreed during collective bargaining are automatically extended to all workers, including temporary agency workers. Only the self-employed are excluded, but they are, by law, still covered by unemployment insurance and the occupational pension system (SALEK, 2016). This has protected workers from many of the negative consequences of job polarisation and changes in work organisation seen elsewhere.

Recent technological change has shifted skill demand predominantly towards high-level skills. Moreover, information and communication technologies (ICT) skills will not be enough in the future. Other complementary skills, such as problem-solving, literacy and numeracy skills, interpersonal skills and ability to work flexibly will also be very much needed. Workers need to be prepared to constantly evolve their skills and to change jobs over their working life (OECD, 2016b). The social partners should be actively thinking about these issues. The education system should equip workers with adequate ICT and other problem-solving skills. At the same time, through the existing education funds managed jointly by the unions and employers, the labour market partners should ensure that life-long learning teaches relevant skills to those who most need them, and in particular to the low-skilled.

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Thematic chapters

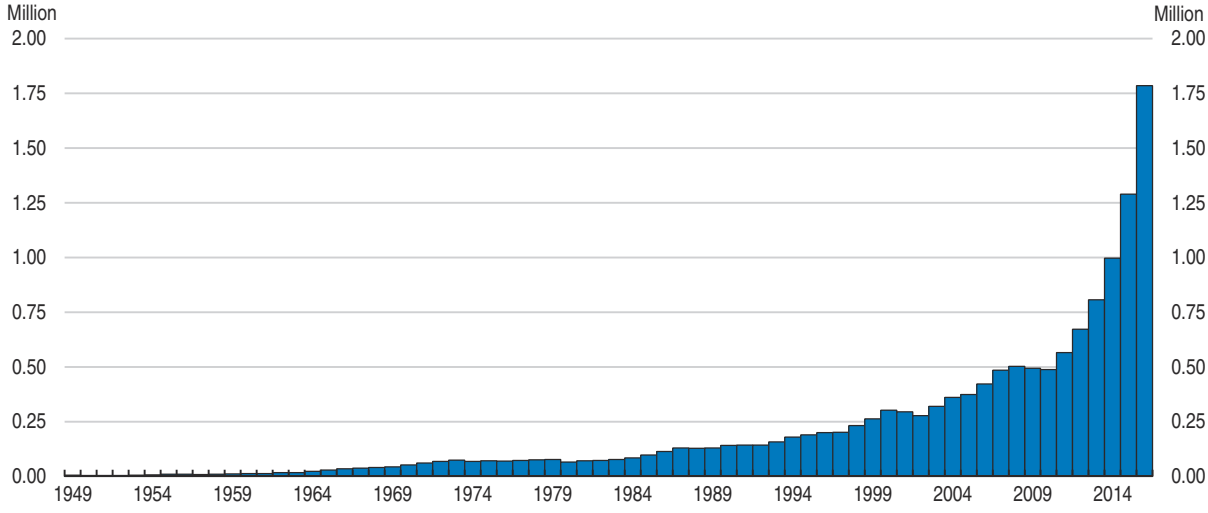
Chapter 1

Sustaining nature-based tourism in Iceland

Iceland has been experiencing a tourism boom. The number of tourists visiting annually has quadrupled since 2010 and shows continued strength. The tourism sector is now the major export earner and is also creating new jobs and supporting new businesses. The government budget has also benefitted from high tax revenues. The surge in tourism supported growth after the crisis and the sector has become a major pillar of the economy. But, the breakneck growth of tourism has created a number of challenges. Growing pains have emerged as accommodation supply has lagged in the wake of unexpectedly large number of tourists, contributing to pressure on the local housing market. The environment, particularly in some popular sites, has also come under pressure. The government has reacted to these environmental and social impacts and has worked with the industry to agree on a path forward. Sustaining a nature-based tourism for Iceland will require more co-ordinated policy across government and a long-term strategic plan that builds on Iceland's strengths. Protecting the unique environmental attractions of Iceland – while mitigating adverse social impacts – will lay the basis for the healthy development of a new important sector.

Iceland is experiencing a tourism boom, with international tourist numbers growing annually by above 30% in recent years. Tourist numbers have quadrupled between 2010 and 2016 and the tourist season has become longer, particularly in the south west of the country (Figure 1.1). The surge in tourism has boosted the economy and helped to unwind some of the impacts of the financial crisis. New jobs have been created and foreign currency earnings have risen – easing financing constraints on the balance of payments – while the boost to tax revenues has contributed to improved public finances. The emergence of a new major sector of the economy is welcome and greater diversity will help insulate the economy from idiosyncratic shocks to which it is prone. Tourism creates new opportunities for businesses and employment as it continues to benefit from growing interest in nature-based tourism.

Figure 1.1. **International tourist numbers have risen dramatically**



Source: Icelandic Tourist Board.

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The rapid growth in tourism nevertheless came as a surprise and has created a number of growing pains. The capacity of the country to cope with the numbers now arriving is being stretched and public policy, infrastructure and business are beginning to catch up. Notably, investment in accommodation and infrastructure has fallen behind demand, creating a number of social and environmental strains which will eventually dissipate as investment comes on stream. Pubic services – such as health, emergency and policing – are under strain from increased number of users, and economic and tax policy have not fully adjusted to the changed structure of the economy.

The government has reacted by creating a task force, bringing together the Ministers responsible for tourism, finance, interior and environment, and charged with implementing a Road Map, which prioritises several policy areas. Working with local authorities and industries, the task force seeks to improve skills and quality in the tourism sector as well as

study the consequences of tourism on nature conservation. This provides a basis to manage the development of tourism more effectively.

The chapter considers recent developments in tourist arrivals and the impact on the economy before considering the interactions with environmental and social policy objectives. The last section addresses policy making and the choices the Icelandic authorities face in developing the sector for the future. The central challenge is to maximise long-term benefits derived from Iceland's unique natural environment while preserving these attractions and ensuring that the gains are shared across the population and with future generations. Iceland's attraction is largely the unspoilt character of its nature. Ensuring sustainability will therefore be important in preserving Iceland as an attractive nature-based tourist destination. The policy framework should build on the success of the fishing sector, targeting greater returns for Iceland than the development of the metallurgy sector and avoiding the boom and bust of the banking sector.

Iceland's tourism boom

Tourism has been growing rapidly internationally, rising on average by around 4% annually since the mid-1990s (Figure 1.2). In Iceland, tourist numbers were already growing somewhat faster on average than global growth (almost 7%) before the late 2000s. However, after 2010, the numbers of international visitors began to grow at substantially faster rates, averaging around 25% annually. In 2016, around 1.8 million international visitors arrived, four times more than in 2010. The beginning of the tourism boom, partly reflecting increasing appetite to visit more remote locations, was accompanied by Iceland making the headlines internationally with the 2008 financial market crash, the eruption of Eyjafjallajokull volcano in 2010 and the launch of the "Inspired by Iceland" campaign (PKF, 2013). Heightened awareness combined with the sharp depreciation of the króna in 2008, a fall in energy prices that lowered airline ticket prices and the entry of low-cost carriers to the market helped make Iceland an increasingly attractive tourism destination. The main international airport at Keflavik provided an important gateway with sufficient capacity to allow tourism to flourish.

Figure 1.2. **Tourism has taken off since 2010**

Annual growth rate of international arrivals



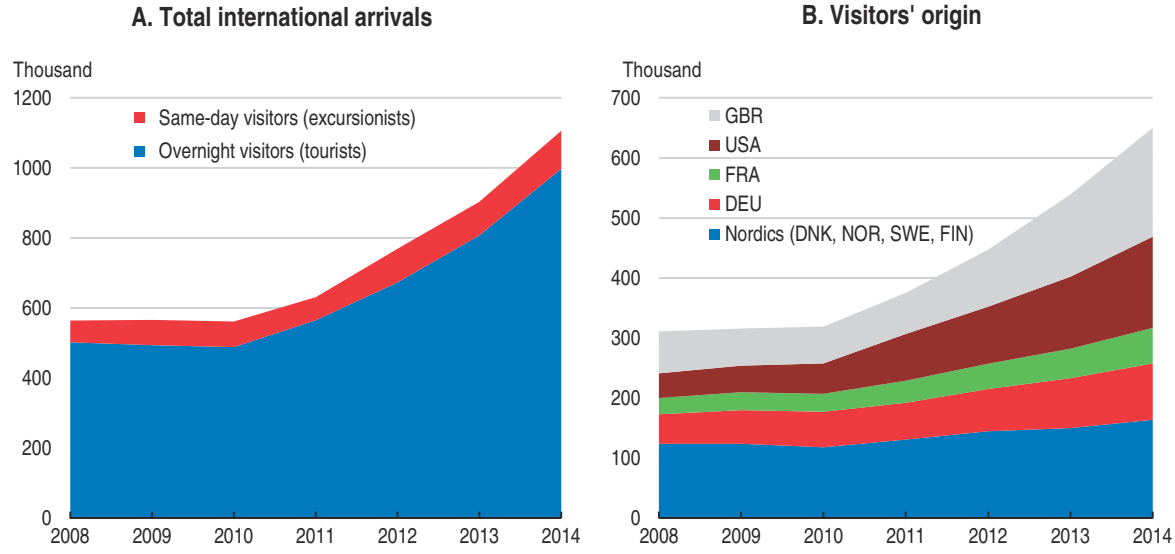
Source: Icelandic Tourism Board; and World Bank WDI database.

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Tourist arrivals and demand

Almost all international travellers arrive by air, with comparatively small numbers arriving by sea (less than 10%). The overwhelming majority of international visitors (that is those who leave the airport terminal and are not transit passengers as well as passengers on the ferry line) stay overnight (Figure 1.3). Airlines also offer the opportunity for long-haul passengers – transferring flights in Keflavik airport – to visit nearby attractions without staying overnight. The number of daily excursionists has also risen, but not as fast as of all visitors, and now accounts for around 10% of total arrivals. In the past the majority of tourists came from Nordic countries, which is partly related to proximity and cultural and historical linkages. More recently, North American and the United Kingdom have become important origin markets, while tourism from continental Europe and more recently China has been increasing too.

Figure 1.3. **International visitors are becoming more diversified and mainly stay overnight**



Note: International visitors are only those who leave the airport and excludes purely transit passengers.
Source: OECD Tourism Statistics.

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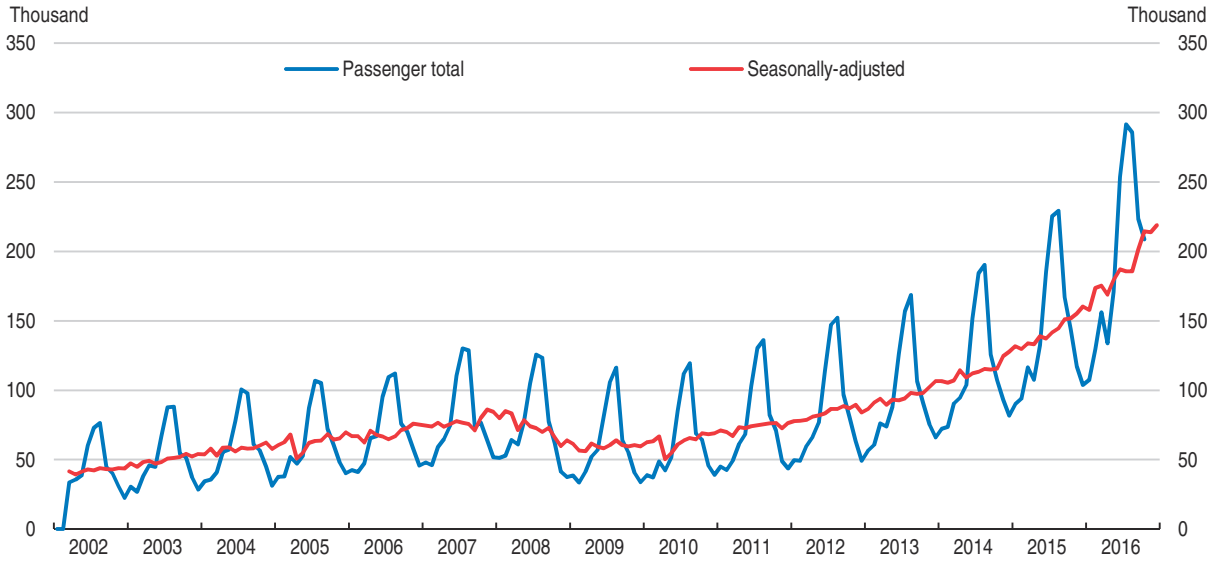
The development of tourism in Iceland builds on past success of offering competitive flights between North America and Europe. During the 1980s and 1990s, flying via Iceland offered a cheap option to cross the Atlantic. Even as deregulation of the transatlantic market began to affect the long-haul airline market, Iceland retained a relatively strong position. In 1998, the national carrier, Icelandair, introduced a hub-and-spoke strategy based on Keflavik international airport. Subsequently a number of other airlines have started flying to Iceland, including the low cost companies WOW, EasyJet, Norwegian and Air Berlin, which have contributed to making Iceland a more affordable destination. As a result of this development, Keflavik airport – the main airport close to the capital – dominates international travel (accounting for 95% of arrivals) with much smaller numbers arriving at the regional airports at Reykjavik, Akureyri and Eglisstadir.

The importance of the Keflavik hub to international travel combined with the large geographical size of Iceland and relative remoteness of many areas determines that most visitors remain in the South West of the country, particularly during the winter when road

travel becomes more difficult. Around two thirds of tourists remain in the South or Capital regions, near the location of some major tourist attractions, including the Golden Circle.

Visitor numbers are highly seasonal, with most tourists arriving during the summer months (Figure 1.4). During the summer the pattern of tourism is somewhat more evenly spread across Iceland. Efforts to lengthen the tourist season have met with some success in recent years, with a rise in the numbers visiting during the winter months outpacing the growth during the summer. Visitors from the United Kingdom, in particular, tend to visit during the winter, whereas a decade before they predominantly came in the summer. According to survey evidence, around two-fifths of respondents during the winter noted that cheap airfares were an important attraction, whereas this was noted only by one fifth of respondents during the summer months. This may suggest that the winter segment of the market is more price sensitive.

Figure 1.4. **International travel at Keflavik is highly seasonal**



Note: Number of departures from Keflavik airport by month.
Source: Isavia.

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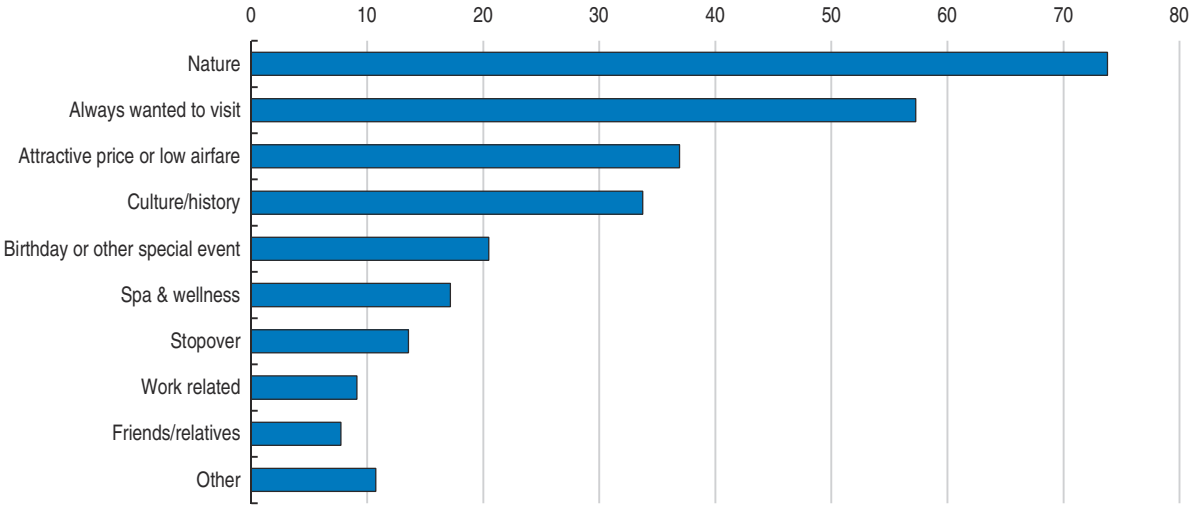
Tourism is highly dependent on nature

Most international visitors come for the purpose of tourism, with travel for meetings and conferences (which are classified as tourism in official statistics) a relatively small share of the market. The pristine state of nature is one of the main attractions (Figure 1.5). Indeed, around 80% of international visitors are drawn by natural attractions, such as geyser, or the promise of untouched or unspoilt areas of landscape and wilderness. For example, the area of the Central Highlands is one of the largest wilderness areas in Europe and is visited by around one-third of international tourists during the summer. Other important factors drawing tourists include Icelandic culture and history. Relatively low cost air travel to and from Iceland and the opportunity to take a stopover are also important factors.

The majority of tourists travel independently rather than as part of package tours (which accounts for around one-fifth of visitors). However, over two-fifths of visitors take guided sight-seeing tours once in Iceland. In the summer months, car rentals are an

Figure 1.5. **Most visitors come to experience nature**

% of respondents noting different reasons for visiting Iceland



Source: Icelandic Tourist Board Ferdamalastofa (2016a).

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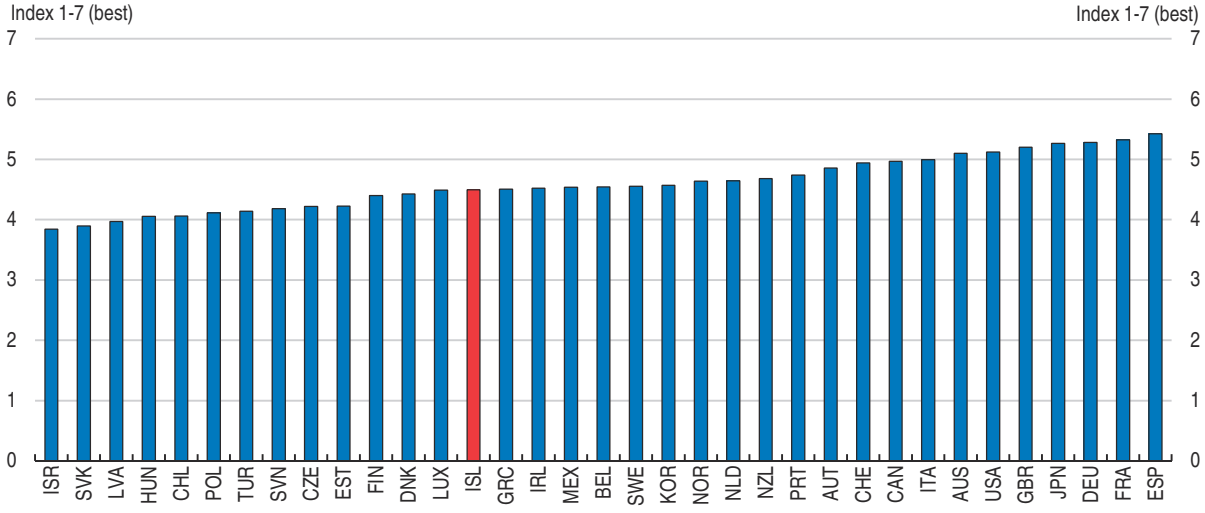
important means for travelling around the country. By contrast, in the winter, when road conditions are more dangerous, buses (mainly private coaches) are relatively more important, although car rentals during the winter months are becoming more common.

In terms of measures of the sustainable development of the tourism sector, Iceland performs well. According to the World Economic Forum's Travel & Tourism Competitiveness index, in the overall index Iceland ranks 25 out of 141 countries (Figure 1.6). The relatively good ranking is driven by strong performance along a number of dimensions including human resources and the labour market, international openness, the prioritisation of travel and tourism and to a lesser extent environmental sustainability. A low ranking for ground infrastructure is in some ways misleading as it is distorted by the large land mass and very low population density, while an average ranking for natural and cultural resources reflects the unique biota with a very limited number of known species. The one area where performance is unambiguously weak is price competitiveness, where Iceland ranks in 132h place (World Economic Forum, 2017).

Iceland also performs well on another set of rankings that are important for businesses wanting to ensure responsible business conduct in the meetings, incentives, conventions and exhibitions (MICE) market. According to the Global Destination Sustainability Index, Reykjavik ranked second of the 35 cities from 16 countries covered for 2015. This ranking takes into account city-wide environmental and social performance as well as the specific sustainability practices of the Icelandic firms working in the sector. Of the various factors feeding into the index, the sustainability practices of some of the suppliers (hotels and restaurants) are likely to have dragged the overall score down, suggesting some scope to boost attractiveness in this relatively under-developed segment of the tourism market in Iceland by working with suppliers to improve their sustainability performance. Nonetheless, this ranking suggests that Reykjavik has boosted its performance in recent years. Reykjavik's rankings in an earlier Scandinavian Destination Sustainability Index were somewhat weaker.

Figure 1.6. **Iceland is a reasonably competitive tourism destination**

Travel and tourism competitiveness index, 2017



Note: The Travel and Tourism Competitiveness Index measures "the set of factors and policies that enable the sustainable development of the travel and tourism sector, which in turn, contributes to the development and competitiveness of a country".
Source: World Economic Forum Report.

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The impact on the economy

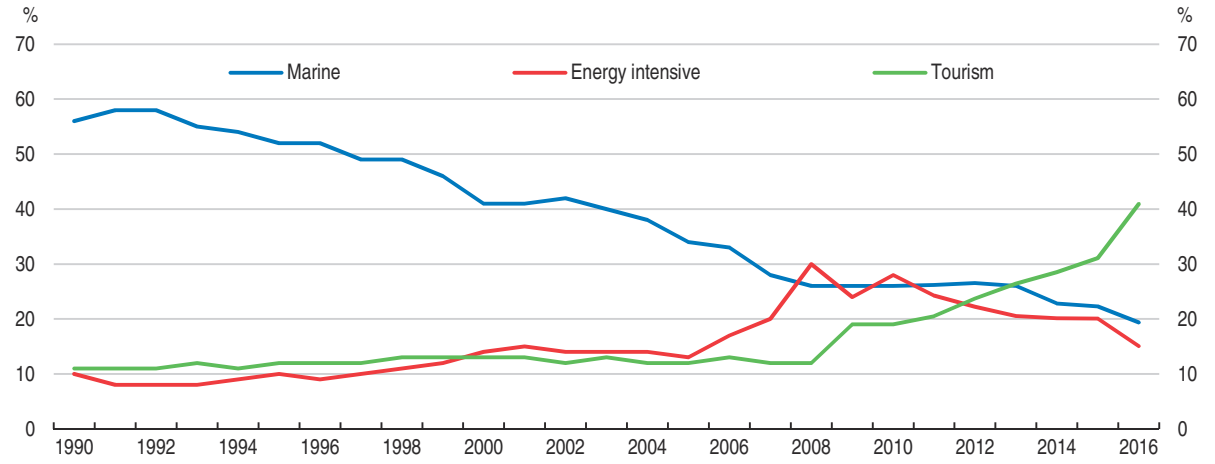
The growth of tourism has boosted the economy substantially. Tourism has risen from being a small part of economic activity to becoming the major export earner and increasingly important source of employment. The sector's growth has spurred new firm creation. Furthermore, tourism receipts alleviated financing constraints on the balance of payments and boosted government revenues, helping to improve the budgetary position following the crisis.

Export of services has increased significantly with the boom in tourism, rising fourfold between 2010 and 2016. By contrast goods exports increased by just 20% over the same period. Tourism-related services are now estimated to be the largest Icelandic export category accounting for around two fifths of total exports of goods and services in 2016 (Figure 1.7). Tourism contributed to the boost in tradables as a share of total output following the crisis and helped maintain the positive trade balance and current account surplus that emerged in 2009. This surplus together with the settlement of the failed banks estates in 2016 has switched Iceland's net international investment position from a large negative after the crisis (-150% of GDP) to a small positive more recently. On the other hand, higher tourism receipts created pressure for the króna to appreciate. Since the tourism boom began gathering pace in 2010, trade-weighted exchange rate has appreciated by around 40%, significantly offsetting the large deprecation that accompanied the financial crisis (Figure 1.8). Overall, with tourism growth expected to continue the Central Bank projects continued króna appreciation by around 2% in 2017 (Central Bank of Iceland, 2017).

The rapid growth of tourism services (such as travel, accommodation, meals and tour guides) in exports also translates into an increasing share in GDP (measured by the direct impact). The full impact on GDP and employment is difficult to assess as data from tourism satellite accounts is only available with a considerable delay. Before the most recent surge in tourist numbers, tourism's share in GDP was below more established tourism destinations,

Figure 1.7. **Tourism is now a major export earner**

Share of goods and services exports, %

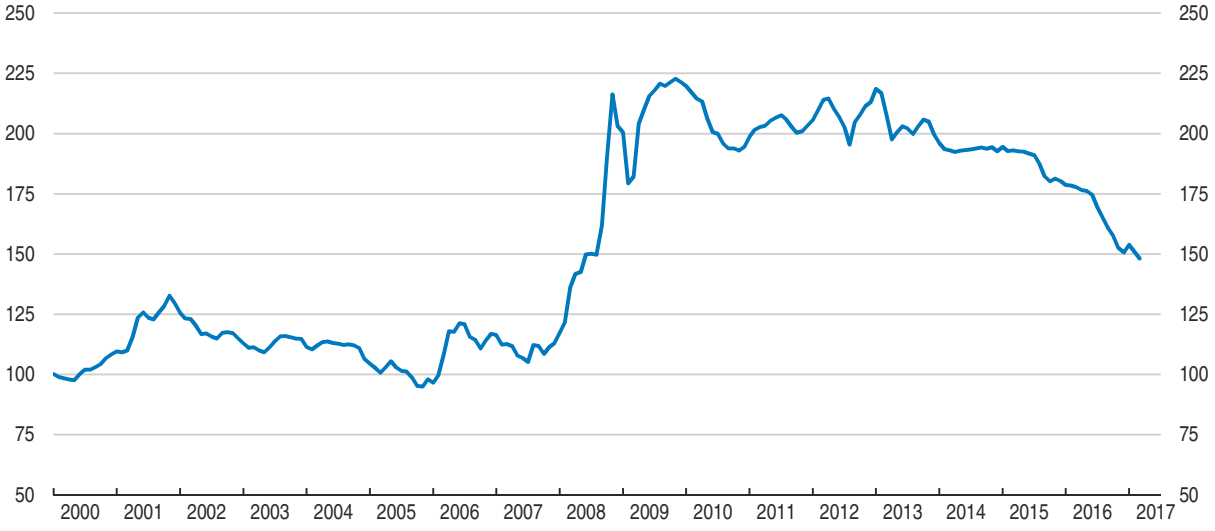


Source: Statistics Iceland.

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Figure 1.8. **The króna has appreciated strongly since 2013**

Broad trade index



Source: Central Bank of Iceland.

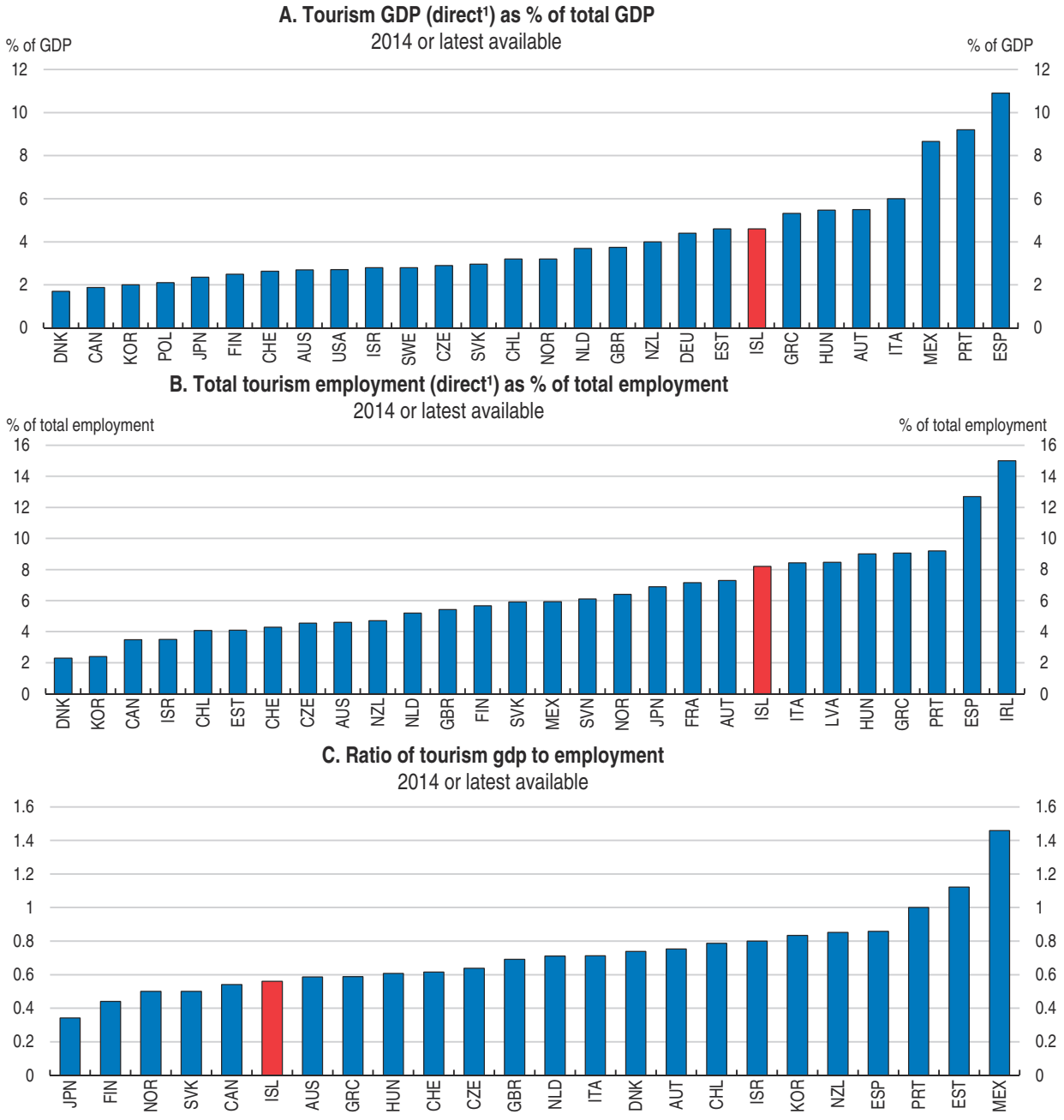
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but substantially above other Nordic countries (Figure 1.9). Estimates of the indirect and induced effects of tourism on the economy suggest that this sector could potentially underpin a much larger share of activity (as much as 30%), though these estimates are subject to considerable uncertainty (WTTC, 2016).

Employment and business sector dynamism

The rapid pace of tourism development has boosted employment in the tourism sector, with direct employment accounting for just over 8% in 2014. The larger weight of tourism in employment than in value added suggests that labour productivity remains low relative to the economy-wide average (Figure 1.9). Measuring productivity in the tourism

Figure 1.9. **Tourism represents a sizeable share of GDP and employment**



1. Tourism GDP corresponds to the part of GDP generated by all industries in response to internal tourism consumption. Tourism direct GDP is generated by industries directly in contact with visitors, while indirect tourism GDP is generated by industries supplying inputs to industries directly in contact with the visitors.

Source: OECD Key tourism indicators Database.

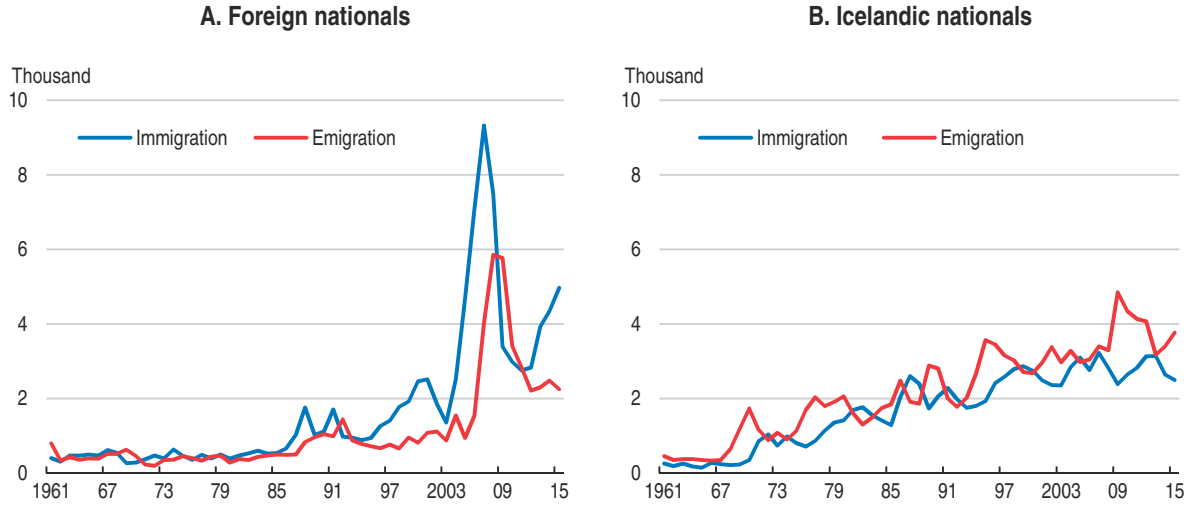
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sector is difficult, partly because tourism cuts across so many different parts of the economy. While some estimates of labour productivity suggest that productivity is weaker than in fishing and metallurgy, the evidence does not suggest it is significantly out of line with tourism sectors in the Nordic economies (McKinsey, 2012). Nonetheless, tourism has

become an important pillar of the economy and generates a substantial resource rent that benefits the economy.

A second characteristic of employment growth is the rising share of migrant workers in the labour force, partly reflecting the labour intensive nature of tourism services as well as construction. Immigration is nothing new for Iceland, particularly when the economy is booming (Figure 1.10). Strong inflows and then outflows were observed around the financial boom and immigration is again rising strongly. The new wave of immigration has raised the share of foreign citizens to 8% of the population in 2016, which now surpasses the previous peak reached in 2009. Despite past experience with strong migration flows, the new inflow is raising concerns about the number of foreign workers the country can absorb, the impact on housing and provision of other services, and their lack of local knowledge. In some cases, such fears likely represent growing pains while migrant workers become better integrated. Temporary workers in other major tourist destinations are often more likely to suffer from job insecurity and poorer or irregular working conditions. In Iceland's context, the collective bargaining agreements ensure that the same negotiated wages and conditions are enjoyed by all workers and as the tourism season lengthens employers have stronger incentives to offer attractive conditions to retain potentially foot-loose workers. However, for more task-based activities (such as on construction sites and some services such as minibus rentals) there are rising concerns that the number of unregistered workers is growing.

Figure 1.10. **Immigration is rising strongly, though many continue to leave**



Source: Statistics Iceland.

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New business creation

The growth of the tourism sector is providing a spur to business formation. The number of registered enterprises and organisations has grown by almost one quarter since the crisis (Figure 1.11). The growth includes an additional 300 hotels, and over 1 000 new enterprises in the real estate and rental market. In addition, over 800 enterprises have entered the travel agency and tour operator sector. One of the current strengths is the large number of small businesses offering a very wide range of activities. Furthermore, the expansion of the sector has had indirect effects on other sectors and through this channel has supported construction activity with the building of new hotels and other tourist related infrastructure,

Figure 1.11. **Employment and firm creation in tourism services is growing robustly**



Source: OECD Key tourism indicators Database, Statistics Iceland.

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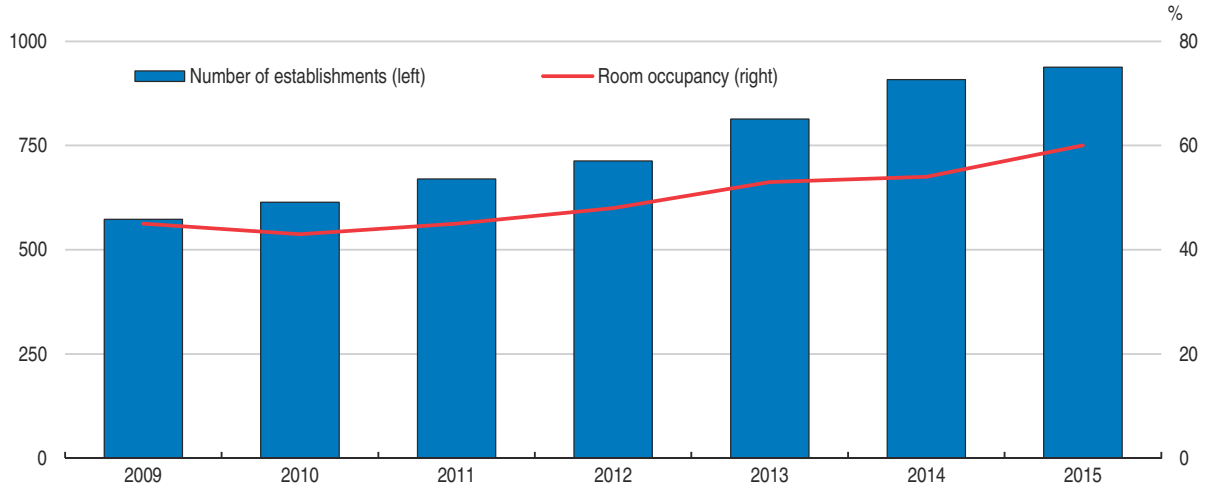
although with some lag. Employment in the construction sector was severely ravaged by the crisis, but has picked up as construction activity has rebounded. A further knock-on effect of the growth in tourism has been the opportunity to make use of airline cargo capacity to export goods, notably fresh fish, to new markets. For example, according to US Department of Transportation statistics, freight carried by airlines from Iceland to the United States almost doubled in weight between 2009 and 2015 with Icelandair accounting for the overwhelming majority of this freight (90%) and specialised cargo companies largely accounting for the rest.

Since the boom of tourism started, the number of nights spent in hotels has more than doubled. While the total number of overnight stays has increased, the average length of stay has not increased much and remains around 7 nights (in 2016). Due to the highly seasonal pattern of visits, average occupancy rates in 2015 were around 65%, but in the summer months they rise to around 90%. In the capital region and a somewhat lesser extent in the South – where most hotels are located – occupancy rates remains elevated throughout the year. Since 2010, over 9 000 rooms have been added and the number of hotels and guesthouses have risen by around two-thirds (Ferdamalastofa, 2016a). Ongoing hotel construction is adding more capacity, but not enough to counter the ongoing rise in room occupancy rates (Figure 1.12). By the end of 2015 there were almost 400 hotels and guesthouses with over 13 000 rooms. Even though capacity has been added, demand for accommodation has been rising very strongly and private rentals – such as Airbnb – have been meeting a growing share of the demand. As such, while the total number of nights more than doubled between 2008 and 2014, private rentals grew tenfold and now account for over 10% of total overnight stays.

Iceland is becoming a more expensive destination

In the aftermath of the financial crisis and large króna depreciation, the cost of visiting Iceland became cheap in comparison with competing destinations, such as other Nordic countries and areas basing their appeal on nature, such as Alaska, Canada and New Zealand. However, more recently the strong inflows of foreign currency have put upward pressure on

Figure 1.12. **New accommodation is being added, but occupancy rates keep rising**

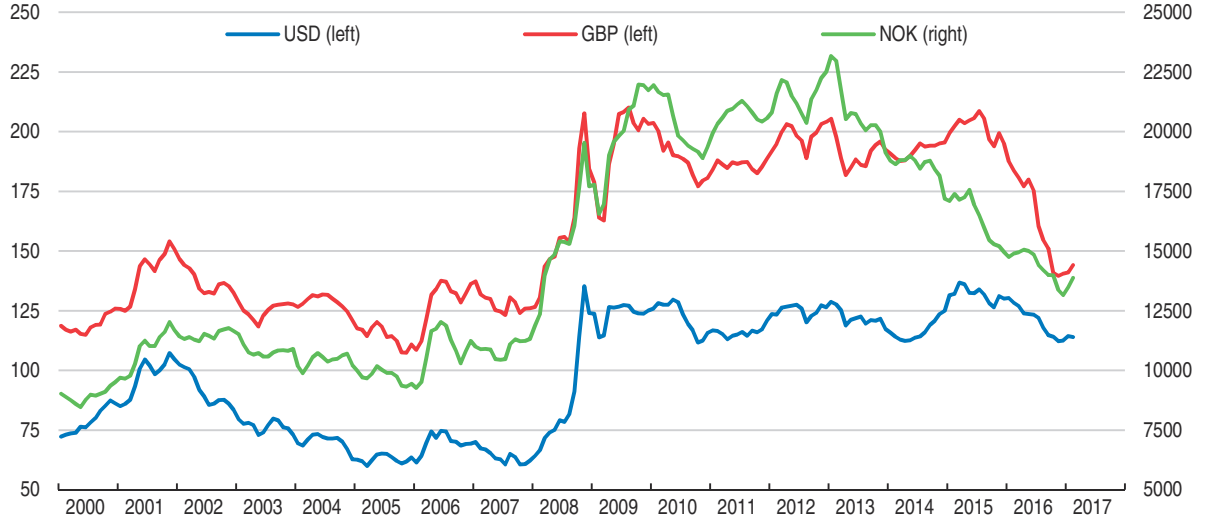


Source: Statistics Iceland.

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the exchange rate. Indeed, since the start of the tourist boom in 2010 the effective exchange rate has appreciated by 40%. Bilateral exchange rate movements have made Iceland a much more expensive destination for some markets, notably Norway and the United Kingdom (Figure 1.13). In the short-term the exchange rate appreciation will have a limited effect on some tourism prices due to multi-year pricing agreements with tourist agencies and tour operators. For more exposed businesses, however, an inability to adjust prices due to long-term agreements denominated in foreign currencies will eat into profits. Over time prices will adjust, particularly if the sector begins to price in króna rather than foreign currency, making Iceland less competitive with other destinations. Prices for some tourism services are already rising at breakneck speed. For example, the price index for hotel accommodation was rising by an annual rate of 20% in early 2017. While Iceland is a very attractive tourist

Figure 1.13. **The exchange rate has begun to appreciate, unwinding some of the depreciation after the crisis**



Source: Central Bank of Iceland.

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destination, it is expensive and the appreciation and rising prices will impact tourist spending and numbers (Box 1.1).

Rising costs and exchange rate appreciation are also giving rise to fears of Dutch disease, which for the tourism sector is sometimes dubbed "beach disease" (Holzner, 2011). As the tourism sector booms and draws in more resources this demand puts upward pressure on domestic wages and prices. However, the internationally-exposed sectors (In Iceland, fisheries, metallurgy and some technology firms) face prices set on international markets. These sectors have been affected by the effects of króna appreciation and strong wage increases as a result of the wage bargaining rounds.

Box 1.1. **Tourism booms, slowdowns and risks of reversal**

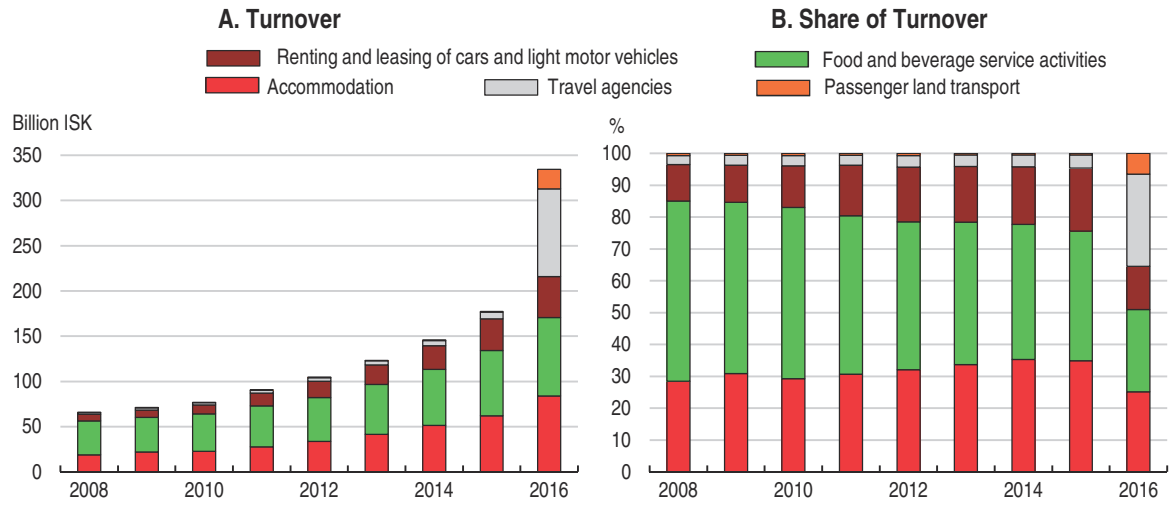
The growth of international visitors to Iceland is unlikely to be sustained at recent rates. While a slowing is to be expected, Iceland's tourism boom is arguably reasonably balanced and less susceptible to idiosyncratic shocks in the origin countries of tourists. Iceland benefits from being an important destination for both short and long-haul travel. In addition, visitors are drawn from a relatively well diversified range of countries, making tourist flows less sensitive to developments in individual markets. For example, while tourists from the Nordic countries accounted for 22% of all tourists in 2008, the share dropped to 15% in 2014 despite the numbers not declining, principally due to greater numbers of tourists arriving from North America and the United Kingdom. Furthermore, the recent growth in tourist numbers reflects growing interest in wilderness environments, which has also boosted tourism in similar markets (such as New Zealand and wilderness areas in other countries near the Arctic Circle). Thus, Iceland's tourist are a mix of travellers taking the opportunity of taking a layover and those more interested in visiting wilderness areas and participating in nature-based activities, such as whale-watching.

There have been a few episodes of past run ups in international tourist numbers in other OECD countries. Tourist numbers have been growing on average globally for a number of years, but countries have experienced quite different dynamics. Some destinations where tourism has been a relatively small sector of the economy have also enjoyed spectacular growth, such as Japan. Strong growth has also been seen in Portugal, the Slovak Republic and Spain, where some of the tourism flows appear to have been diverted from other destinations. Many traditional tourist destinations have witnessed little growth in numbers and some suffered in the wake of the global financial crisis. In extreme cases, tourism has slumped, such as in Turkey in the wake of terrorist attacks and heightened geopolitical tensions, while Finland initially suffered due to the economic slump in Russia affecting its principle origin market. Thus, while projections for global tourism see continued steady growth in tourist numbers of between 2.5 to 4% annually to 2030 (WTO, 2011), country specific factors can be capricious.

The impact on public finances

The growth of tourist numbers has provided a boost to fiscal revenues, although the exact extent of the contribution is difficult to gauge (related to the difficulties in splitting out tourism from non-tourism activity). Nonetheless, turnover showing up in VAT receipts in tourist-related sectors has been rising strongly (Figure 1.14, Panel A). Furthermore, estimates of net receipts have moved into surplus in recent years (in 2016, net VAT receipts were estimated to be 2.7 billion króna). Revenues from tourism have been boosted by reforms introduced since 2015, which broadened the tax base by removing exemptions and

Figure 1.14. **VAT base broadening has had visible impacts**



Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933531003

raised the reduced rate from 7% to 11%, while lowering the standard rate for VAT from 25.5% to 24%. The reduced rate applies for most tourism related goods and services. The base broadening had an immediate effect in 2016, with the share of turnover from travel agencies and tour operators jumping from almost nothing beforehand to account for one-quarter of total taxable turnover (Figure 1.14, Panel B). Passenger land transport, mainly private coaches, also increased and now accounts for around about 6% of turnover. Due to the increase in the reduced rate, revenue from hotel and other accommodation rose in 2015 relative to 2014 without any discernible impact on tourist numbers.

The government has made a proposal to go further in reducing remaining advantages enjoyed by the tourism sector. With the exception of restaurants, the VAT rate applied to most tourism services will be changed to the standard rate. As part of the proposed reforms, the standard rate will then be reduced further from 24% to 22.5%. There are a small number of tourism-related services that continue to lie outside the VAT base (including salmon fishing and taxis) and which the authorities should bring into line with other tourism-related services.

Another tourist-related revenue source is the occupancy tax, which was introduced in 2012. The rate has been only 100 króna per unit per night (where the unit refers to the transaction and can cover a single room or a house, rather than per person, which is the usual tax base in many cities). Accommodation taxes levied in other European countries (often at the city level) are often around €2 per person per night (226 króna) and in some cities can rise much higher, such as Rome where the hotel tax can reach €7 per person per night (or around 800 króna). In this context, the authorities should go ahead with their intended raising of the occupancy tax to 300 króna and consider changing the basis from per unit to per person. Other revenue sources from tourism are relatively small. Few user fees are applied with port fees for cruise liners being an important exception for some municipalities.

On the spending side, direct budgetary outlays have been relatively modest. In 2015, spending supported the Icelandic Tourist Board (357 million króna), promotion and marketing activities (452 million króna) and other services (243 million króna). Other spending included

the Tourist Site Protection Fund (177 million króna), which is partially funded from the tax on overnight stays (158 million króna). Maintenance and investment in infrastructure at tourist destination accounted for an additional 848 million króna. In total these sums accounted for a small share of government spending. However, indirect spending has been mounting with increasing tourist numbers. For example, the health sector has witnessed strong increases in tourism-related service use. Similarly, the police and rescue services have had to respond to ensure the safety of tourists in an often hostile natural environment.

Tourism-related spending can create particular difficulties for the municipal governments as local revenue sources are not sufficient to meet rising spending pressures. Local governments are responsible for local infrastructure, planning and environment. At present, the mismatch between revenue and spending pressures can be substantial in some of the most heavily visited areas. But pressure on local public finances can also emerge in less visited areas where infrastructure upgrades are most pressing. Municipalities can be very small and rely largely on income taxes, which limits how much revenue is available, which is particularly a potential problem when the municipality contains a major tourist attraction.

At present, the municipal governments raise relatively little revenue directly from tourism activities. The occupancy tax (while expanding the base to a per capita basis) would provide one revenue source that could be shared with the municipalities. Moreover, this source of revenue for the municipality would provide some incentive to develop tourist destinations around Iceland. However, support from the central budget is likely needed in the day-trip destinations where public services are demanded but few tourists stay overnight. Introducing user fees, particularly where congestion and environmental damage are problems would provide another revenue source. Recent changes to the law to allow parking fees to be levied outside urban areas provide additional revenues to match increased municipal expenditures.

Fiscal rules introduced in 2011 introduced caps on municipalities' debt levels (up to 150% of regular income). This has contributed to some spending restraint on needed investments as the municipalities have been reducing debt levels to ensure compliance with the new rules. As progress has been made in reducing debt loads, some of the backlog is beginning to be addressed, although this may come at an inappropriate point in the economic cycle. The central government and the municipalities need to co-ordinate investment plans to make sure that they are not destabilising to the economy.

Ensuring tourism is sustainable and inclusive

Tourism interacts with a number of other policy objectives. Most notably, tourism affects the very environment most tourists come to experience. The impact of tourism is also felt through aspects of the economic development it encourages, requiring specific skills and infrastructure, putting pressure on access of housing and affecting productivity. In some cases, these impacts are likely to be temporary arising from the growing pains of a rapidly developing sector. In many ways, developing the appropriate policy framework will benefit both the tourism sector and allow Iceland to maximise the gains for the population while protecting the assets upon which tourism is built.

Developing nature-based tourism while managing the effects on the environment

The surge in tourism has put the environment under renewed pressure. Soil in Iceland is largely volcanic and particularly susceptible to erosion while vegetation is also vulnerable.

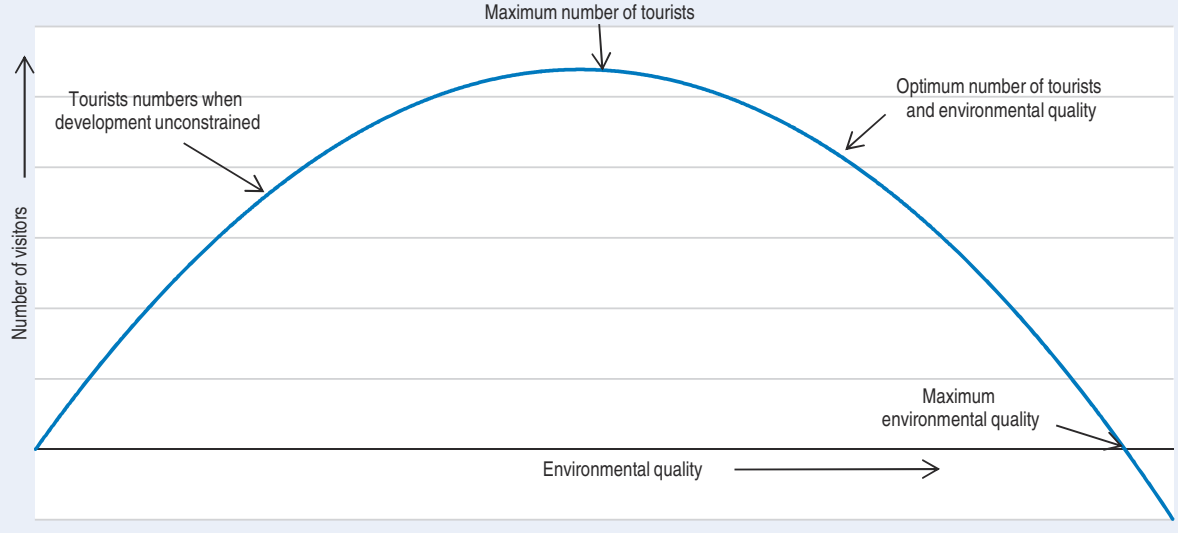
As tourism has surged more recently some popular sites have suffered environmental degradation. At present, these concerns largely relate to tourist flows at a number of popular sites in the south and southwest of the country, notably along the Golden Circle route. A second factor affecting the landscape is that the lack of tree cover makes manmade structures hard to conceal. Estimates of the surface area of pristine nature without proximity of manmade structures are around one-third of Iceland, mainly around the ice floes (Olafsdottir and Runnstrom, 2011). Preserving the attraction of nature, while maximising the benefit for Iceland and experience for tourists, requires policy to avoid significant loss of wilderness, including by controlling tourist numbers (Box 1.2). Environmental damage in some spots will likely be irreversible, particularly in areas where anthropogenic impacts can persist for hundreds of years (a factor behind a ban introduced on off-road driving throughout Iceland).

Box 1.2. **Tourist numbers and the environment**

Maximising the benefits from tourism needs to consider the impact of tourists on the environment and the capacity of the environment to regenerate on the one hand and the willingness to pay of the tourist, on the other, which is dependent on the state of the environment and the number of other tourists.

New work exploring this issue is presented in Daubanes (2017). This work shows that the relationship between tourist numbers and how quickly the environment can recover can be described by the blue line in Figure 1.15. The impact of visitors on the environment is stable along the blue curve (more visitors would lead to the environment being damaged by more than it can recover). If the environment is already badly damaged it can only regenerate slowly and thus only a few visitors are possible. The rate at which nature can regenerate rises as the damage becomes smaller and slows again when the quality of the environment is very high (e.g. the marginal areas are those where conditions are harsher and more susceptible to damage so to maintain that quality only a small number of tourists is permissible). If left untouched, environmental quality would end up at the point of *maximum environmental quality*.

Figure 1.15. **Maximising the number of tourists is not the best strategy**



Source: Daubanes et al., 2017 (forthcoming).

StatLink http://dx.doi.org/10.1787/888933531022

Box 1.2. **Tourist numbers and the environment** *(cont.)*

As the number of tourists increases their willingness to pay falls and the cost of accommodating the tourists (e.g. providing infrastructure) rises. In this case, when maximising the benefits net of the costs, environmental quality (optimum in the figure) will be greater than the case of the maximum sustainable number of tourists (at the peak of the blue curve) and below *max*. The maximum economic benefit is experienced when tourist numbers are below the maximum number of tourists that could be sustainably accommodated. This will also lead to a state with a higher environmental quality.

When the development of tourism is unconstrained, the sustainability of tourism and environmental quality are not taken into consideration. This leads to lower environmental quality, which will ultimately reduce the number of tourists that can be sustainable and lower willingness to pay, which reduces the economic benefits of tourism. Unconstrained development could ultimately result in a depleted environment that is no longer capable of sustaining large numbers of tourists. The research shows that market instruments can correct this outcome and in some other cases limiting the numbers of tourists may be beneficial.

A number of existing policies serve to mitigate pressure on the environment. During the 1990s, the value of preserving unspoilt natural areas gained traction leading to the Nature Conservation Act of 1999, which established 31 protected areas, including national parks and nature reserves. These protected areas account for around 20% of the total land. Also in 1999, the Ministry of the Environment and the Planning Agency established a Regional Plan for the Central Highlands – one of the main attractions for nature-based tourism. The plan aimed to ensure the use of natural resources in a sustainable manner, restricting building to the periphery as much as possible and mapping and protecting the areas with the greatest interest for conservation (Gunnarsson and Gunnarsson, 2002). Policy at this time also introduced the need for planning and licensing for all buildings (Saethorsdottir and Saarinen, 2016).

In some wilderness areas, tourists appreciate the low number of other tourists. As tourism continue to grow and larger numbers explore outside the capital region, the relative attraction of the wilderness can begin to diminish. Survey evidence already suggests that tourist numbers in some areas of the Central Highlands exceed desired levels and around 30% of visitors would advise other travellers to avoid these areas (Saethorsdottir and Saarinen, 2016). Visitor satisfaction surveys also indicate that the density of tourists at popular sites is starting to have a negative impact on the visitor experience, with over 50% of respondents in some cases saying there were too many other visitors (Ferdamalastofa, 2016b). However, Iceland is a large island with very low population density outside the capital region and with abundant natural attractions, which suggests that better management of tourism flows would allow the country to host many more tourists without bumping into real constraints. In this context, the challenge in maximising the benefits from tourism is to provide the necessary infrastructure to enable tourism while protecting nature, preserving wilderness and providing relative solitude.

Providing information to tourists on expected numbers in different locations may help to disperse tourists across wilderness areas, allowing those that prefer relative isolation to find suitable locations. Such an approach requires efforts to identify which locations hold the greatest appeal to different target groups and developing them (or not) accordingly (Saethorsdottir, 2010). Armed with this information the tourism authorities and industry can develop "touring routes" to spread visitors more widely. In a number of other countries, these routes are based on geographically dispersed concept of "destination", often structured

around a story. For example, Norway's National Tourist Routes and Ireland's Wild Atlantic Way are based on this approach while also seeking to make better use of existing infrastructure. In the case of New Zealand, developing cycling routes to support new touring routes promotes sustainable transport.

Initial efforts to protect the environment and manage congestion have encountered some difficulties. Attempts to introduce pricing at one popular site failed to gain traction. In part this was due to the fee appearing excessive. In addition, restricting access is controversial in Iceland due to the tradition of "right to roam". Nevertheless, protecting the environment in the areas under greatest pressure and preserving the attraction of the most popular sites remains a concern. Norway where a similar "right to roam" tradition exists is also grappling with how best to protect the environment and is contemplating where limits on the right to roam may be required. Against this background, stresses on the environment need to be monitored and policy adapted to preserve areas of wilderness and meet tourist expectations, or risk losing Iceland's unique attractiveness.

Other countries have attempted to limit the human footprint through a number of schemes. In some cases, numbers can be managed by setting quotas and pricing access to enter particular areas. For example, the Great Barrier Reef Marine Park in Australia adopted an integrated zone management approach, taking into account a range of activities including tourism. Tour operators require permits and granting longer permits to accredited tour operators can better ensure the quality of the visitor's experience. One focus of the Australian approach was to improve sustainability through better governance and spatial planning (OECD, 2014). The charge on visitors varies according to the type of tourism and is collected by the tour company organising the visit. The park authorities use this information to monitor usage and this helps the authorities better manage sustainability and provide for tourist preferences. In the United States, the national parks may charge entry fees and in some cases set limits on the numbers staying overnight. Tourism at the Grand Canyon in the United States relies on a number of approaches covering commercial and non-commercial tourism. The intention is to maximise the visitor experience, which requires imposing quotas in some areas. For example, access to the river itself for non-commercial users is based on a lottery (which replaced a 20 year long waiting list). When plants are at their most fragile, visitors are not allowed in certain areas (IUCN, 2014).

Concessions for commercial operators could serve as a viable alternative to entrance or user fees at some sites. A licensed-based approach for concessions could incorporate criteria prioritising operators with sustainable business practices and be linked to the domestic VAKINN Quality and Environmental certification scheme (Box 1.3). A further advantage of a concession scheme would be the ability to incorporate dynamic pricing and time or parking slot management to maximise benefits, building on the model successfully introduced by the popular Blue Lagoon site. Concession schemes have been used with some success elsewhere, such as the United States National Park Service. A downside of concession approach is that independent visitors would fall outside this system. Indirect approaches including parking fees, which are already in place at some sites, would ensure these visitors fall into a complementary scheme.

However, these user management and concession schemes can be costly to administer and enforce. The current approaches adopted in Iceland such as relying on parking charges may be a suitable approach in some sites. Lifting the restrictions on parking charges outside urban areas would help spread its applicability. In other countries, such as Norway, making

Box 1.3. **Environmental certification**

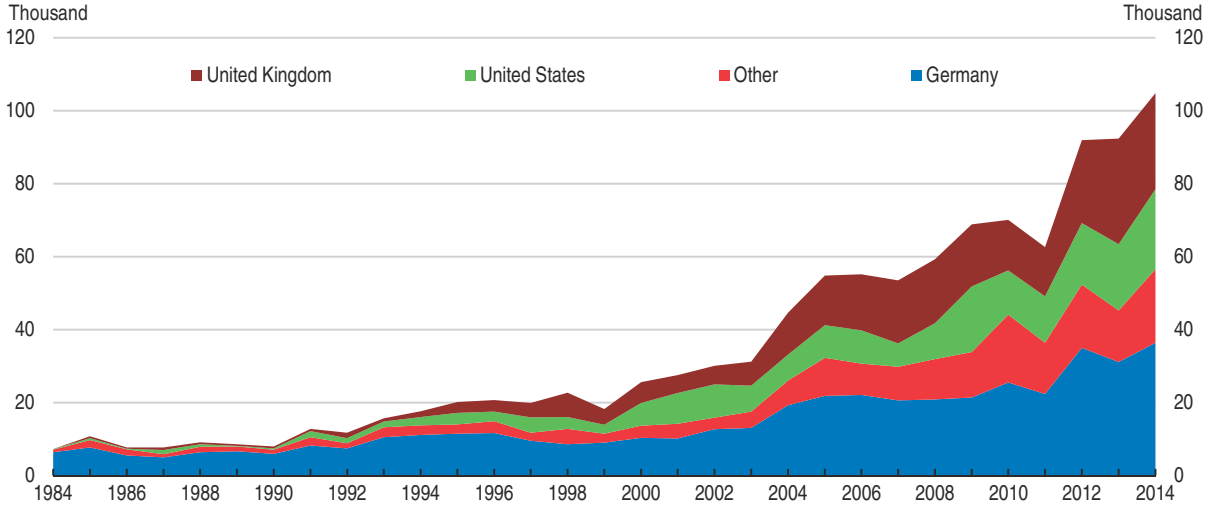
As the tourism sector has developed and new firms have entered the market, government policy has shifted to address tourist safety and professional standards by firms in the sector. As part of this approach, the VAKINN scheme launched in 2011, represents the official quality and environmental system. Participation in the VAKINN scheme is voluntary and industry participation has grown over time. One aspect of eco-certification is the presence of several international schemes which may have relatively little effect on tourist choices (Karlsson and Dolnicar, 2016). With the introduction of a new scheme, efforts are needed to communicate effectively and encourage wider dissemination of good practice in the tourist sector. This can have an important advantage to the business market as ensuring sustainability is potentially important in attracting companies that need to comply with corporate social responsibilities and require supply-chain sustainability. Linking concession terms to certification is one means to encourage greater participation and improve quality standards in the industry.

use of service fees at popular destinations could also be used in parallel while still respecting the "right to roam" principle by not imposing access fees.

A particularly acute form of congestion can arise with cruise ships. Arrivals of international cruise ship passengers can create congestion as well as other negative externalities. Due to the large size of modern cruise ships, overcrowding can develop at certain landing spots, especially in small Icelandic fishing towns. This can occur both at dockside when berths are unavailable as well as at landside when cruise tourists visit local attractions *en masse* and put pressure on publically-provided services. This is becoming a mounting issue in Iceland with strongly rising number of cruise line passengers (Figure 1.16). Options to address this include administratively staggering the landing times for cruise ships, investing in infrastructure to relieve the chokepoints and introducing user fees or taxes. For example, Alaska and Greenland impose per capita taxes on tourists whilst in other

Figure 1.16. **Arrivals of cruise line passengers is rising**

By nationality



Source: Statistics Iceland.

StatLink http://dx.doi.org/10.1787/888933531041

areas such as Svalbard environmental fees are levied to protect the environment (PFK, 2013). The municipalities currently set landing fees and competition between them for the cruise ship custom can result in negative externalities not being adequately considered. Establishing a concession model for access and use of Icelandic nature could also provide a framework to negotiate with the cruise ship companies.

Harnessing the benefits of tourism in regional development

The tourism sector can play a role in revitalising regional economies and support new small and medium sized enterprises, as well as encourage stewardship of the environment. While most tourism activity is concentrated around the capital region and the south, during the summer months tourists spread more evenly across the country and the aim is to develop the regional markets further. A similar effort is required to address the geographical bunching as the authorities have been pursuing to reduce the highly seasonal nature of tourism. However, implementing national tourism policies at the local level can be challenging, and municipalities lack the capacity and resources (human and financial) needed to provide the services and infrastructure required by tourists, and effectively manage tourism development at the destination level. Small municipalities in heavily visited areas face particular pressures. Municipalities need to be able to capture some of the economic value of tourism, such as receiving some of the occupancy tax, and maximise tourism's regional and local development potential, in line with a national vision for tourism in Iceland.

Destination management plans, which are already being developed in some places, can add to the policy tools for maximising the benefits from tourism while managing its environmental and social impacts. Such plans are a well-established tool to support tourism development, based on available tourism assets and taking into account local needs and characteristics. They provide a framework to guide and co-ordinate the actions of public and private actors to develop the critical mass of amenities and services needed to capture the economic value of tourism. They can also help promote local ownership and encourage a more integrated and balanced approach to tourism development, particularly when developed in co-ordination with the overall strategy for tourism. These plans should be developed in areas where tourism is most heavily concentrated and the impacts are greatest. Destination management organisations commonly play a central role in developing and implementing the destination management plan. Manpower and capacity is an issue for many regional tourism organisations in Iceland. Given Iceland's size, it may make more sense to integrate responsibility for destination management into existing regional development structures.

The regional development agency, Byggdastofnun, has supported tourism development, though largely independently from the Icelandic Tourist Board, which indirectly supports local marketing initiatives. Municipalities have developed hotels and other facilities independently, though co-operative organisations helped promote them internationally (Baum, 1999). Local government remains an important player in tourism, retaining responsibility for planning and operating many tourist attractions. The local authorities are also represented on the Tourist Site Protection Fund, which supports local government projects. Local authorities in combination with the Icelandic Regional Development Institute can undertake development projects in the tourism sector. However, tensions remain in determining funding for tourist-related infrastructure.

One interesting approach that may help develop tourism attractions around Iceland would draw on France's experience with destination contracts (OECD, 2016a). These

contracts bring together public and private stakeholders with the aim of developing new tourist destinations (for example, the Louvre-Lens initiative) or ensuring the sustainability of existing destinations (as at Mont Saint Michel). Norway has introduced sustainable destination standards as a means to champion sustainability. This approach builds on a suite of indicators to assess whether tourist destinations have in place policies that are forward looking and that preserve the character and nature of the destination.

An alternative or complementary approach of defining areas to promote sustainable development has been used in a number of countries. For example, sustainable tourism development zones link tourism and land use planning and promote sustainable tourism development in a number of OECD countries (such as Chile and Mexico). Sustainable tourism development zones are clearly defined geographic areas with natural or cultural features which constitute a tourism attraction. Through the use of zoning and regulation of the activities permitted within these areas, this tool aims to promote a more integrated and balanced approach to tourism development, including controlling the environmental impact of tourism growth. These zones can be a useful instrument to co-ordinate public and private actions to develop tourism in these areas, but they also require effective and stable management over the long term.

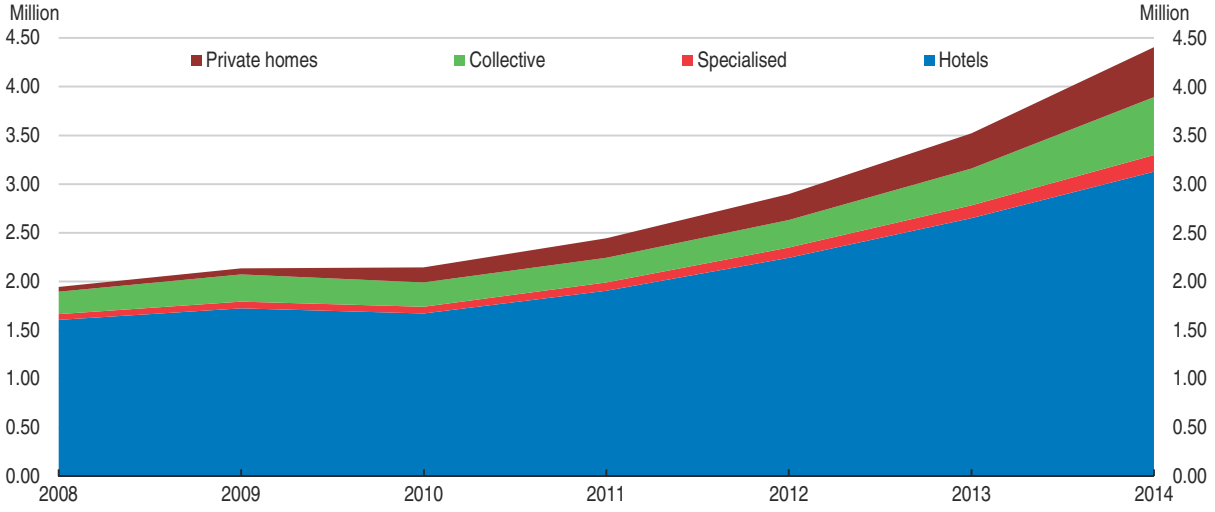
Finally, smart specialisation may also offer a new approach. The Sustainable Arctic Tourism in Lapland, Finland is based on this model. The programme aims to develop tourism in close alignment with other sectors in the region and is based on a value chain approach. It has also involved the creation of a Tourism Safety and Security Network to develop safety plans (OECD, 2015).

Mitigating the social impacts of tourism

While tourism brings many benefits there are also concerns about some adverse social impacts. While the local population is still very supportive of tourism, survey evidence suggests it is weakening and residents in some areas are beginning to complain about tourist numbers and in some cases about migrant workers unable to speak Icelandic. Tourism is also putting a burden on health services, particularly from cruise ships, which can have many elderly passengers on board who need health interventions when they dock at various ports around the country. At present, reimbursement from insurers overseas has been partial due to difficulties in tracing some patients once they leave the country. In this context, the health authorities should strengthen systems to ensure that medical costs are reimbursed. In these areas, the authorities should consider whether payment systems can be improved, as currently reimbursement for treatment that would be expected from the agreements between countries or from insurance companies is limited. Additional demands are placed on policing and other emergency services in ensuring safety. Given the rising pressure on the rescue services, the authorities may also consider charging for their services in certain areas, as is done for mountain rescue in many alpine ski resorts.

Over time, accommodation in private houses has been growing strongly, though it still accounts for a relatively small share of total overnight stays (Figure 1.17). In Reykjavik alone, a similar number of beds are estimated to be available in shared accommodation as in traditional tourism accommodation (hotels, guesthouses etc.). In part, short-term rentals blossomed through companies like Airbnb as hotel room capacity has not kept pace with demand. The flexibility of the short-term rental markets can mitigate the need to invest in hotel accommodation that may become a liability if projected tourist numbers fail to materialise, offers different tourism experiences and makes accommodation more

Figure 1.17. **Private accommodation accounts for a rising share of overnight stays**



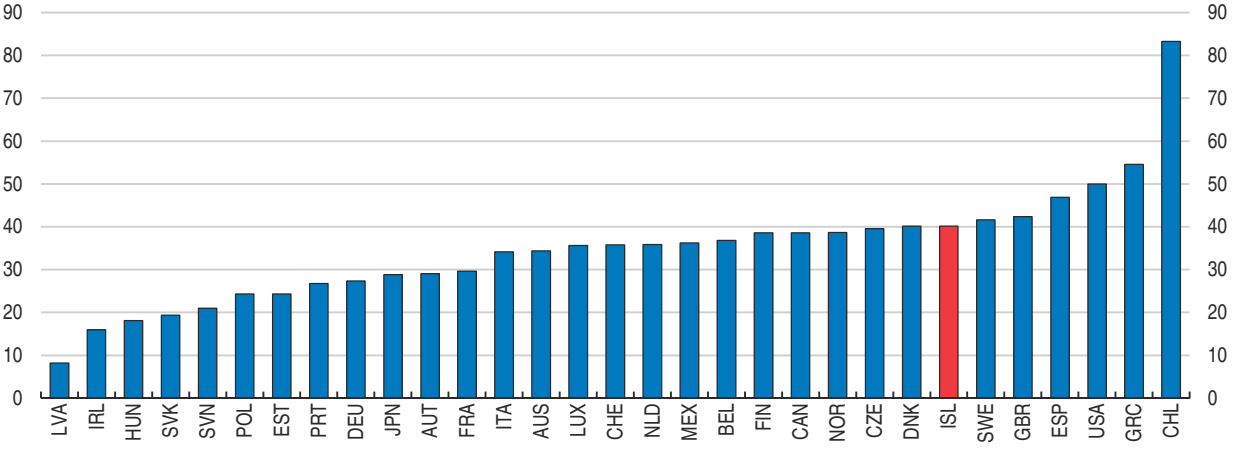
Source: OECD Tourism Statistics.

StatLink http://dx.doi.org/10.1787/888933531060

affordable for visitors. Unfortunately, the combination of an under-supply of housing and tourist accommodation, booming house prices and rising demand from tourists and migrants is putting upward pressure on rents for long-term rentals, making housing less affordable for the young and other low-income households. In 2014, before the latest surge in house prices, low-income households were spending sizeable shares of income for renting a private apartment in comparison with the norm in the OECD but largely in line with other Nordics (Figure 1.18).

Figure 1.18. **Rents are high**

% of disposable income in the bottom quintile of the income distribution, 2014 or latest year available



Source: *OECD Affordable Housing Database.*

StatLink http://dx.doi.org/10.1787/888933531079

The spread of the short-term rental market to meet tourist demand has changed the character of residential housing, particularly in the centre of Reykjavik. For example, some apartment blocks have switched from being residential to being given over largely to short-term holiday rentals. Many cities around the world are grappling with these issues (Box 1.4).

Box 1.4. **Private short-term rentals and the sharing economy**

Shared accommodation, most notably through companies like Airbnb, is helping to relieve capacity constraints for a growing tourism market around the world as well as offering different visitor experiences compared to traditional tourism accommodation. Policy makers around the world are still working out how to harness the undoubted benefits from these new forms of activity. The growth of the gig economy presents challenges in how best to integrate it into existing tax and benefit systems and ensure a level playing field with other businesses without destroying the flexibility these new services offer.

In some cases, when owners make extensive use of accommodation rentals, the authorities are moving towards imposing similar standards as for the formal sector. For example, Paris requires than anyone renting out their own home for more than 4 weeks, or a property where they do no reside, must apply for a change of use and register it as a commercial property. Paris has an enforcement office that works to ensure compliance, but enforcement remains a challenge. In Dublin, a housing shortage and a shortage of hotel rooms at a time of record numbers of visitors has put upward pressure on rents. In response, the Minister for Housing created a working group to study these issues, following a ruling that offering accommodation on platforms such as Airbnb constituted a change of use and requires planning permission. Even more draconian measures are being contemplated in some cities for both hotels and private short-term rental to prevent "over tourism", as is the case in Barcelona.

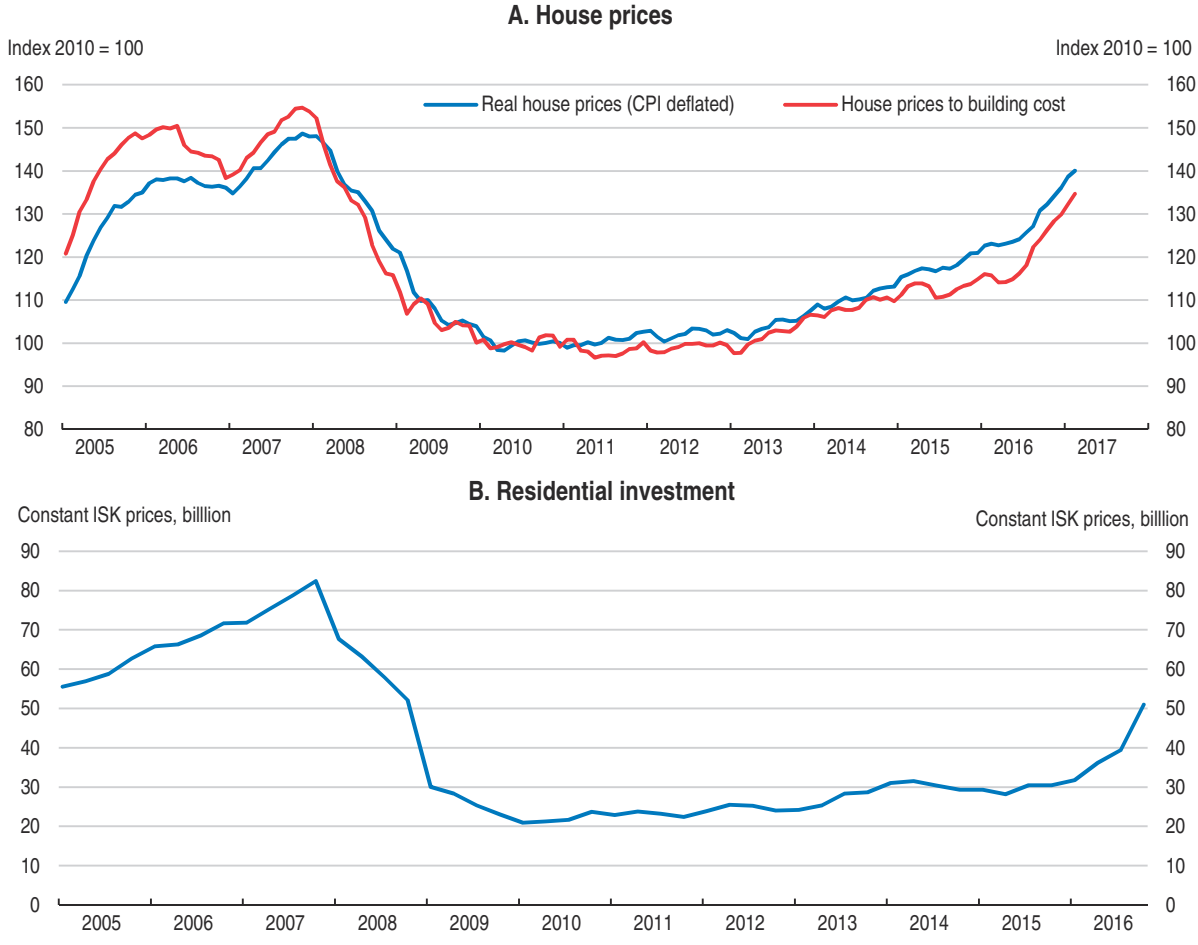
In terms of levelling the playing field, Airbnb automatically collects occupancy taxes in some cities (such as Amsterdam and San Francisco) and remits these amounts directly to the tax authorities and provides information on tax compliance and statements to help providers file their income tax return (e.g. Amsterdam, Paris). Notwithstanding this co-operation, the development of the sharing economy creates considerable difficulties for both national accountants and tax authorities in measuring economic activity.

National authorities are beginning to clarify how these new activities fit into existing frameworks (OECD, 2016a). This is needed as in some cases 'new hotels' use these platforms to circumnavigate existing regulatory frameworks. In other cases, individuals renting their property occasionally may not be aware of their obligations. A fairly common approach is to establish a threshold in the extent of the activity, but monitoring compliance and enforcement remains challenging. The growth of these activities is an opportunity to review the overall regulatory framework for tourism (which can be heavy).

Given these developments and complaints from hotels about unfair competition, the authorities introduced in 2017 a limit for Airbnb rentals for an individual renting up to 2 flats and up to 90 days per year. For rentals within these limits, the owner needs to register with the authorities. For rentals of more flats and for a longer period, the owner also needs to apply for a permit. Registrations at the beginning of 2017 have been minimal. Noncompliance risks a fine of up to 1 million króna, with enforcement the responsibility of the District Commissioner. Given that services like Airbnb are filling a gap in the market and offer flexibility, the authorities should monitor the impact of these new requirements and be ready to modify them if they choke of the competition short-term rentals create. Complaints that the playing field is not level due to tax avoidance in the sector can be countered by the tax authorities working with companies such as Airbnb so that the platforms collect and submit occupancy and other taxes directly to the tax authorities, as occurs in other countries.

In part, the current pressure on housing reflects limited investment in housing following the construction crash during the crisis. Dedicated tourism accommodation and residential housing has not kept pace with demand. The economic recovery raising demand for accommodation and housing and increased immigration related to this has created additional pressure (Figure 1.19). As house prices are now rising strongly, residential investment is again picking up to meet the demand. In the meantime, services like Airbnb are responding to a gap in the market, as tourism growth is outstripping the construction of new accommodation infrastructure. The government's housing sector policy through mortgage support broke down during the crisis and is now being replaced by better targeted support for low-income households. In the wage bargaining round of 2015 the government committed to provide affordable new housing units. Laws introduced in 2016 ramped up the supply of new housing to 400 units in 2016 and reformed support through transparent housing benefits. These reforms are a welcome development in better addressing the housing needs of low-income households. Over time, as these policies begin to have an effect some of the current pressure will abate.

Figure 1.19. **House prices are picking up and residential investment is beginning to respond**



Source: Statistics Iceland, *OECD Analytical Database*.

StatLink http://dx.doi.org/10.1787/888933531098

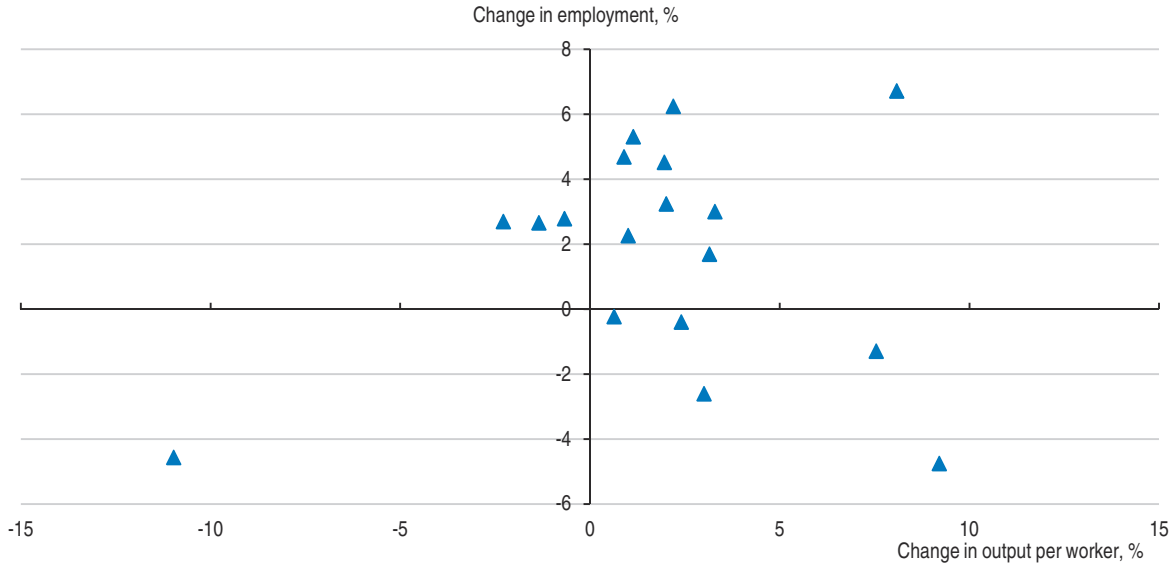
Boosting productivity

A perennial challenge for Iceland has been relatively low labour productivity growth. The average annual increase in labour productivity (GDP per hour worked) for the total economy has averaged 0.4% between 2008 and 2015, which is among the lowest for the OECD countries. This occurs despite relatively high and rising labour quality as measured by the share of labour force having completed upper-secondary and tertiary education. Against this backdrop, the development of tourism creates challenges with the recent boom shifting resources towards what is often regarded as a low productivity growth sector.

At present, the evidence of tourism inducing Dutch disease concerns are still inconclusive although anecdotal evidence of the difficulties facing the internationally-exposed sectors suggests it may become a more pressing concern. The broad sectors where employment has been growing more strongly between 2010 and 2015 are not necessarily the sectors experiencing the largest gains in output per worker (Figure 1.20). In part, this reflects the economy eliminating slack on the labour market. Employment growth in sectors likely linked to tourism (such as hotels and restaurants) seems to have relatively high labour productivity growth but these flows may still drag down economy-wide productivity due to differences in productivity levels across sectors.

Figure 1.20. **Employment growth is not strongly linked to gains in output per worker**

In sectors between 2010-15

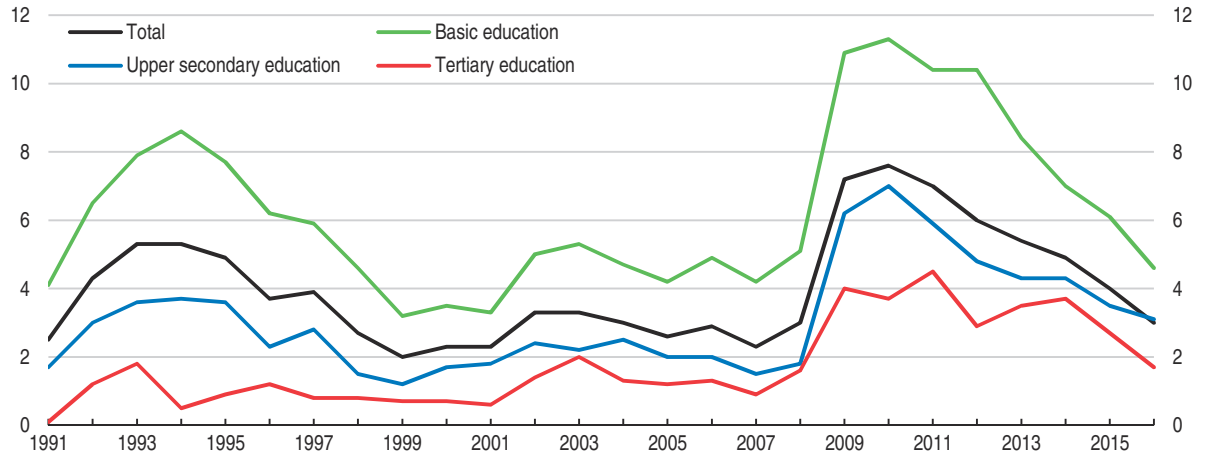


Source: Statistics Iceland.

StatLink http://dx.doi.org/10.1787/888933531117

While tourism creates opportunities for highly skilled people (such as pilots, chefs, managers and various specialist services) it also creates demand for low-skilled and often relatively low-paying jobs, such as hotel and restaurant workers, and drivers. Mismatch can emerge as tourism may not create the types of jobs that some workers want, especially the high skilled. Following the financial crisis and as tourist services began growing rapidly, the stickiness of unemployment amongst people with tertiary-level education suggests that they were initially left on the side-lines (Figure 1.21). In addition, the draw from tourism can potentially accentuate the problem of poor high school completion, which has been a

Figure 1.21. **Unemployment rates for people with tertiary education have been slower in coming down**



Source: Statistics Iceland.

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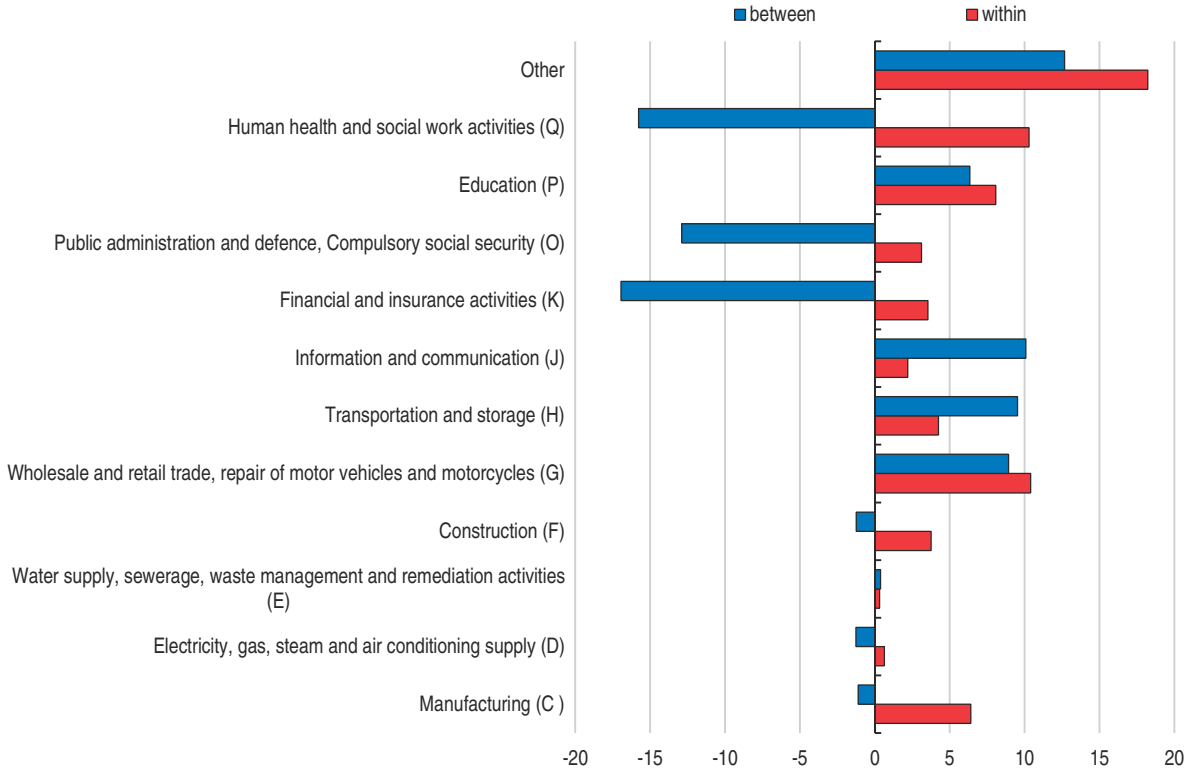
problem during past employment booms. More students are working than around the time of the crisis, but do not appear to be dropping out of education. Partly, this may reflect greater scope for part-time employment in the sector than was the case during previous booms. Recent reforms in upper secondary education aimed at improving timely completion of studies also appear to be paying dividends in keeping pupils in school, though the evidence remains preliminary.

At present, the available evidence suggests the expansion of tourism is modestly supporting wage growth. On average, wage developments have largely reflected economy-wide developments while compositional shifts in employment have had little effect on aggregate wages (Figure 1.22).The negative compositional impacts largely reflects developments of employment growing in lower-paid public sector and employment declining in higher-paid financial services. Large pay rises in trade and the residual "other" sector, which will include many tourism services, have on average boosted wage growth as has the flow of people into these sectors even though average wages in these sectors is only slightly above the economy-wide average.

Tourism need not be a low-skilled occupation and Iceland can benefit by re-orientating the development to emphasise skill acquisition. Building on nature-based tourism creates demand for qualified workers with specific skills. In addition, many of the skills required in tourism, particularly soft skills, can be transferable. The government and the tourism industry have identified skills as an issue, but there appears to be little evidence on skills gaps. To this end, identifying skills and training needs would provide the necessary information base to inform decision making on how to raise the skills of the workforce. In this context, enhancing vocational and on-the-job training would help workers gain stronger skills and facilitate future labour market mobility in the face of shifts in demand. In some cases, boosting specific tourism-related skills could start at quite early ages. Under the secondary education system in Iceland, municipal authorities have significant flexibility to orient the curriculum, suggesting potential to inject Tourism Awareness and other specific programmes in areas where tourism is an important part of the economy, or to respond to specific local skills needs.

Figure 1.22. **Reallocation on average has had little impact on wage gains**

Shift-share analysis between 2010 and 2015



Note: the within-sector effect measures the impact of wage growth within each sector on total wage growth, assuming that labour shares are unchanged. The between-sector (shift effect) measures the impact on total economy wages assuming that the level of wages in each sector is unchanged.

Source: OECD Annual Labour Force Survey, Statistics Iceland.

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One specific area where training could be boosted is in ensuring workers in the tourism sector help tourists remain safe. Iceland has a unique natural environment and tourists unused to the conditions are often unaware of the risks they can run, particularly during the winter months. This has contributed to a number of deaths over recent years. More extreme events, such as glacial floods – of which tourists appear to be largely unaware – could lead to considerable loss of life (Bird et al., 2010). In this light, existing training in some sectors (e.g. tourism services and nature management) may need to be strengthened to ensure that tourists understand the risks and how they can be mitigated.

Harnessing a dynamic business sector

A dynamic competitive business sector will support productivity growth and help offset Dutch disease type pressures. The Icelandic government has been working to simplify the legislative framework for businesses in the tourism sector. To harness the full extent of business creation, the government should review the number of licences and permits required and simplify regulations as well as the administrative burden on establishing a business. For example, the inspection regime for new businesses can be onerous. While overall, the regulatory environment in Iceland is comparatively business friendly, a number of barriers to entry can thwart new business creation. The OECD measure of product market

regulation suggests that further progress can be made in reviewing the legal barriers to entry in air transport and airports and seaports.

When confronting concerns about productivity growth, keeping momentum in pursuing a productivity enhancing agenda, such as initiated by the Growth Forum – a group which brings together politicians, social partners and academics – acquires some importance. The government has been working to implement recommendations prepared by the Growth Forum mainly by targeting improving efficiency in the public sector. As this programme develops it would be advisable to develop thinking on how best to support private sector productivity growth opportunities. In some cases, public policies that help the tourism sector integrate with the global tourism market effectively may be helpful, as small firms often lack the resources to overcome information barriers.

As discussed in the previous *Economic Survey* (OECD, 2015), ensuring robust competition can be challenging in a small economy, but progress in removing unwarranted regulatory and administrative barriers to entry can encourage more entry to the benefit of consumers. To an extent, the development of more competition emerging between airlines has spurred tourist development. Earlier complaints that the low-cost carrier Wow Air could not obtain slots at Keflavik airport to compete in the market for international transfers with Icelandair was a concern, with the slot-allocation mechanism in place being recognised as detrimental to competition as early as 2008. The situation today with many more carriers entering the market has increased competition in the sector, driven down prices and created new travel opportunities. The slot-allocation mechanism remains in place, however, and affects the OECD's Services Trade Restrictiveness Index. In this light, reviewing how slots are allocated and traded is warranted.

Competition policy can play a role in supporting productivity growth, notwithstanding the challenges of promoting competition in a very small open economy. In Iceland, competition in domestic services can be weak, often through artificial barriers to entry, allowing some companies to earn large rents. In this connection, as with new forms of economic activity in the sharing or gig economy, competition policy may need to support the entry of new firms into the market. In particular, temptation to shore up existing firms, which are currently suffering from the appreciation of the króna, should be resisted. Such measures can dissipate competitive pressures and the need to keep moving towards the productivity frontier. Effective competition policy can potentially spur productivity by promoting reallocation of resources and creating conditions conducive to new entry and innovation. Indeed, OECD work suggests that policies hindering market exit can impact negatively on productivity (Adalet McGowan et al., 2017). Against this background, the competition authorities should consider using the OECD's Competition Assessment Toolkit to ensure that policy objectives are being achieved without undermining competitive pressures.

The policy framework has been evolving

The government has been very successful in promoting Iceland as a tourist destination, with the Ministry of Foreign Affairs responsible for promoting tourism internationally. *Promote Iceland* and its *Inspired by Iceland* campaign – both public-private partnerships which have been supported by the Ministry for Tourism, Innovation and Industry – have been successful in putting Iceland on the tourism map. The rest of the policy framework is still developing and when in place will grant the government greater ability to manage its further development, including using advertising more strategically to cement the tourism branding

Iceland wants to pursue. At present, tourism lacks the robust institutional structures which exist in other sectors, notably the fishing sector. A stronger institutional framework at national and sub-national level is required to manage the development of tourism and ensure a coherent approach to different policy dimensions (land use, housing, labour, education and especially transport). Furthermore, the very information needed to inform decisions is sometimes lacking (Box 1.5). Progress on these fronts will help guarantee that Iceland can optimise the value generated by the sector. An *OECD Tourism Policy Review of Iceland* would offer guidance in making progress on these issues.

Box 1.5. **Statistics and research to support decision making**

A strong evidence base is essential to guide policy development. Statistics Iceland produces Tourism Satellite Account to the national accounts, but these data are not very timely. In a rapidly evolving environment more up-to-date information is needed. In addition, the tourism satellite accounts do not incorporate the environmental dimension and other externalities of tourism development, which policymakers need to take into account. As mentioned above, even established statistics face difficulties in capturing the new sharing economy. Iceland is introducing a new Border Survey which will help address some data gaps and be available more quickly. The use of credit card data (such as in New Zealand) and other real-time data sources can also provide partial snapshots of developments to complement the information on retail spending that Iceland already uses.

The development of a few well targeted sustainable tourism indicators will be important for Iceland to measure, monitor and manage tourism flows. A number of countries have been active in developing such statistics to enhance the sustainability and inclusiveness of tourism. Slovenia has recently piloted sustainability indicators to support its positioning as a 'green' destination, while the new EU Tourism Indicators System creates a toolkit for sustainable destination management. Finland has developed a system for measuring and reporting the socio-economic benefits of recreation and tourism in protected areas (OECD, 2016b).

Beefing up the scientific advice, including establishing carrying capacity of the most sensitive natural environment has been advocated for some time (Gunnarsson and Gunnarsson, 2002). At the moment there is little co-ordinated research. Supporting research would build the evidence base to support decision making and help ensure Iceland maximises the benefits of tourism.

In 2011, the Icelandic government developed "Iceland Tourism Strategy 2011-2020". The strategy drew on the OECD's Green Growth Strategy and a parliamentary initiative to strengthen the Green Economy in Iceland. Green considerations are thus at the heart of the national strategy. Around 50 actions were identified by the parliamentary group spanning the introduction of sustainable development in regional development plans to developing methods to green Icelandic businesses. Building on these considerations, the strategy aimed to: maintain Iceland's unique nature with focused and strong emphasis on strengthening destination; improve the quality, professionalism and environmental consciousness of the tourism industry; promote increased profitability and respect for the industry; extend the tourist season; reduce seasonal fluctuations, and; promote better distribution of tourists around the country.

The governance of tourism remains spread across a number of bodies (OECD, 2016a). From 2012, the responsibility for tourism has mainly rested with the Ministry of Industry

and Innovation, with the Icelandic Tourism Board responsible for implementation. The main tasks include:

- Licensing and administration, including issuing licences, registration and monitoring
- Environmental affairs, including implementing a tourism strategy, co-ordinating environmental and educational affairs, disseminating information, collaborating internationally and supporting local and regional development,
- Quality, including implementing the quality and environmental assurance scheme (VAKINN), and collecting data on tourism.

The initial approach to developing tourism was superseded by events, with tourist numbers far outpacing expectations. In reaction, the Ministry of Industries and Innovation in 2015 launched a *Road Map for Tourism*. A number of weaknesses in the previous policy framework were identified, including uncertainty about responsibilities and the organisation of the sector, a complex legal framework and poor data. The Road Map aims to address these weaknesses and support sustainable development. One of the main thrusts of work until 2020 will be co-ordinating management of tourism. Other targets include ensuring positive visitor experiences, improving data reliability and comparability, promoting nature conservation, improving skills and quality, increasing profitability and distributing tourists around the country more. The Roadmap is a step in the right direction, but needs to be more strategic in its approach, prioritising actions, setting clear targets, and outlining an action plan to achieve these goals. It also needs to be supported at the highest level, with sufficient resources to support implementation.

The experiences of other countries could help in setting more strategic goals. One innovation in Ireland's *Growing Tourism to 2025* has been a shift from setting visitor targets to prioritising revenue, while protecting natural and cultural assets (Department of Transport, Tourism and Sport, 2015). New Zealand has moved towards promoting itself as an adventure tourism destination. A Green Growth Advisory Committee also recommended moving towards high value tourism in a greener market segment (OECD, 2015). Costa Rica has long positioned itself as an eco-tourism destination and has taken proactive measures to protect its environment while promoting environmentally-friendly forms of tourism. It also promotes adventure and beach tourism, and is looking to further diversify this offer without undermining its environmental reputation. These examples may provide a useful framework for Iceland to build on in the further elaboration of its own tourism policy objectives.

The main concrete step to implement the Road Map in Iceland was the creation of a Tourism Task Force, which brings together the Minister for Industries and Innovation (who chairs the Task Force), the Minister of Finance, the Minister of Environment and Natural Resources, the Minister of the Interior and representatives from the Icelandic Travel Industry Association and the Icelandic Association of Local Authorities. As such, the Task Force brings together the major players involved and can provide the basis to overcome fragmentation in decision making. However, its ability to influence policy and its financing is limited. For example, the Taskforce has proposed a tourism education and training programme, with funding limited thus far to a one-year preparatory period. Furthermore, the Taskforce, which is due to wind down in 2020, does not provide a sufficient framework for inter-ministerial co-ordination, which could be more formalised.

Approaches adopted by other countries to strengthen tourism policy include establishing an inter-ministerial committee or working group. This could be a permanent body addressing priority issues, as is the case in Mexico, the United Kingdom and the

United States. The experience of the Tourism Cabinet in Mexico shows how such inter-ministerial groups can provide strategic focus, as well as the benefit from prioritising core areas (OECD, 2017). In other countries, such as New Zealand, the inter-ministerial group is brought together as needed on an issue-by-issue basis. As tourism's impact cuts across different policy domains a whole-of-government approach helps build coherence and policy consistency (OECD, 2015). Lack of co-ordination has contributed to some of the problems experienced during the breakneck pace of tourism growth. In this context, when the different actors are brought together policymaking can exploit the linkages as well as manage the externalities across the economy and different policy objectives (OECD, 2015).

An inter-ministerial group focussing on tourism – such as the current co-ordination group chaired by the Prime Minister's office – would have the necessary power to address the most urgent need for investment at congested and heavily visited sites and to fund basic infrastructure development to protect the environment. Investment is also needed in the wider infrastructure network, particularly roads. In many cases the investment needs are understood and the amounts relatively small. However, the current framework for determining investment has faced difficulties. At present, funding is available from the Tourism Site Protection Fund, which is partly financed by the occupancy tax. However, the criteria governing this scheme have limited its use, in particular the requirement for applicants (landowners, municipalities) to provide 20% of project costs upfront. The Fund also does not seek to manage or direct tourist flows, or to optimise investment as part of a co-ordinated approach to infrastructure development. A new infrastructure plan for nature and tourism sites, looking at a 12 year time horizon with shorter 3 year rolling investment plans, may go some way in addressing this. However, funding has not yet been allocated to the plan and it remains to be seen how it will function alongside the Tourism Site Protection Fund.

Ensuring consistency in tourism and transport policy

The consistency of transport and tourism policy appears weak. Transport is not addressed in the Roadmap, though partly mitigating this lacuna, the Interior Ministry – which is responsible for transport – does sit on the board of the Taskforce. This gap represents an area for improvement as coherent transport and tourism policies can help manage visitor flows. Transport can play an important role in shaping a more sustainable approach to tourism development in Iceland.

Expanded air access and traffic through Keflavik has been a key facilitator of tourism growth in recent years, delivering higher volumes of visitors. The expansion of passenger transport operations through Keflavik airport has taken place with little discussion with tourism policy makers, and apparently in the absence of a national aviation plan, despite the importance of the airport as a connectivity hub for the economy as a whole. In contrast, in cities like Copenhagen, a strategic approach to route development has been based on a national aviation plan, which may target identified routes. In the case of Iceland, an expansion plan increasing capacity at Keflavik airport has been developed by the state-owned company that operates the airport. The impact on tourism flows needs to be considered in the government's decision on this plan, and should be informed by an assessment of the likely impact the increase in capacity will have on flows into the country. Even without further expansion, the current facility still has capacity outside of the peak times demanded by the airlines.

Decision making should also rely more heavily on cost-benefit analysis than has been the case hitherto. Major infrastructure decisions in particular need to be based on sound

and wide-ranging analysis. The development of the air transport infrastructure and Keflavik airport in particular should take into account not only the economic effects but also the environmental and social impacts of different development options.

Of total arrivals, at present one half are transfer passengers, spending only a little time at Keflavik before flying on to another destination. The development of a hub-and-spoke strategy has been successful and allowed the number of connecting airports to increase to around 80 today from under 50 in 2009. The number of carriers has increased from 7 to 25. The airport operator, Isavia, along with tourist service companies have promoted flights during off peak hours and the low (winter) season with some success. Notably visitors from some countries, such as the United Kingdom, now arrive more frequently in the winter months, whereas they previously visited primarily during the summer months.

Some money is being invested to promote international airports in other parts of the country, in part to relieve the tourist pressure on the regions closest to Keflavik airport. A route development fund provides subsidies to promote direct access and encourage airlines to offer direct international flights to other airports in the country. The fund has generated little interest from airlines (only 1 grant so far), indicating that such routes may not be commercially interesting (although several international charter flights do operate to Akureyri). The experience from other countries, such as Mexico, that have attempted to develop international point-to-point airline routes has not always been successful (OECD, 2017).

Marketing support is one strategy to stimulate a higher and sustainable level of demand on a route than may not be commercially viable or interesting. Other strategies such as providing financial incentives to carriers have shown more problematic results, with airlines often suspending services once funding has ended. At a minimum, a policy to stimulate growth in air transport connectivity should: have clear and transparent guidelines, be open and accessible to all carriers, demonstrate measurable results to show value for taxpayer money, aim to develop the long term tourism market rather than simply provide funds for immediate route start-up, and be structured in a way that reduces public contributions over time as the service becomes financially viable.

Encouraging direct flights will likely be difficult and a hub and spoke arrangement may work better, particularly if large numbers of the passengers passing through Keflavik also want to stopover. The government currently subsidises the operation of the regional airports (they cover only a share of operating costs). In this light, both as owner of the airport operator and route subsidiser the government can direct the development of the domestic airline market. However that configuration would put Reykjavik airport under pressure as there is political support to maintain an airport servicing domestic flights in the centre of the capital, including for regional access to medical treatment. On the other hand, Reykjavik airport occupies a significant space near the centre of the city, which the city authorities could develop thereby easing pressure on the Reykjavik housing market. In this light, cost-benefit analysis of the different options for developing the airport sector, taking into account the environmental and social benefits and externalities, would help better inform decision making.

The growing number of tourists also creates challenges for the transport infrastructure within the country. The transport system plays an important role in how a destination physically develops, and significantly influences visitor mobility. The transport network also influences the potential to connect visitors with other parts of the country and open

up new destinations. From a tourist's perspective, the current bus system connecting visitors with hotels in downtown Reykjavik is efficient and works well, in the absence of a competitive taxi service. However, this model serves to automatically funnel all visitors through Reykjavik, with the exception of those joining organised tours on arrival, or renting a car. The road infrastructure along the Golden Circle is also under pressure.

Finally, the development of the main airport at Keflavik has a strong local impact. In 2015, investment picked up considerably (almost doubling) in line with development plans to 2040. While the new investment will allow the share of transit passengers to increase as a share of all passengers, increased capacity will possibly further intensify tourism's pressure on surrounding regions. On the other hand, airport and airline-related jobs already account for an important share of total employment, at around 3% in 2016. In the coming years as the airport is set to expand, job creation will continue at a steady clip.

Setting the path forward

The natural environment presents a key asset on which to develop a unique nature-based tourism sector. The pristine natural environment, specific biodiversity and the gradual increase in recognised World Heritage Sites coupled with the extensive use of geothermal energy burnishes its green credentials. However, to achieve its full potential, Iceland needs to protect these natural assets and develop policies ensuring sustainable and inclusive tourism. One approach could be to model management of the sector on the fisheries sector, where scientific advice from the Marine Research Institute has provided an invaluable guide to ensuring the preservation of fish stocks. The difference between maximum yield and maximum sustainable yield can serve as a useful benchmark for tourism policy.

In setting the path forward, important decisions are needed regarding the most appropriate model of tourism development for Iceland. Current growth rates in tourist numbers are neither sustainable nor desirable in the longer term and the focus needs to concentrate on total social value. This requires policymakers and industry participants to consider where Iceland would like to be positioned in the global tourism market, the type of tourism they country wants to develop, and how best to manage this process and maximise the return from Iceland's natural wealth while also protecting it for current and future generations. This will necessarily involve some consideration of the number of visitors the country can sustainably absorb from both an environmental and social perspective and the associated infrastructure requirements. Given these choices appropriate governance arrangements and policies to achieve these goals will need to be established.

Recommendations

Main recommendations

- Establish an inter-ministerial tourism strategy focused on making tourism environmentally, socially and economically sustainable. This should include non-government stakeholders.
- Remove current tax subsidies for tourism-related activities, by taxing them at the standard VAT rate and broadening the base to excluded services.
- Limit the number of visitors to fragile sites.
- Introduce user fees to manage congestion and pressure on the environment.
- Subject infrastructure investment to cost-benefit analysis, including consideration of social and environmental impacts.

Recommendations *(cont.)*

- Ensure transport and tourism policy are consistent.
- Improve the economic analysis of tourism activity, with better data and research.
- Use vocational and on-the-job training to build skills in the tourism workforce.

Other recommendations

- Elaborate a long-term strategic plan for tourism with intermediate steps.
- Preserve areas of natural wilderness, limiting man-made structures and keeping numbers to carrying capacity.
- Improve communication with tourists about country specific natural risks and what to do in case of extreme events.
- Conduct an OECD Tourism Policy Review of Iceland.
- Review regulatory barriers to entry and exit in key sectors, using the OECD Competition Assessment Toolkit.

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Chapter 2

Labour market and collective bargaining in Iceland: Sharing the spoils without spoiling the shares

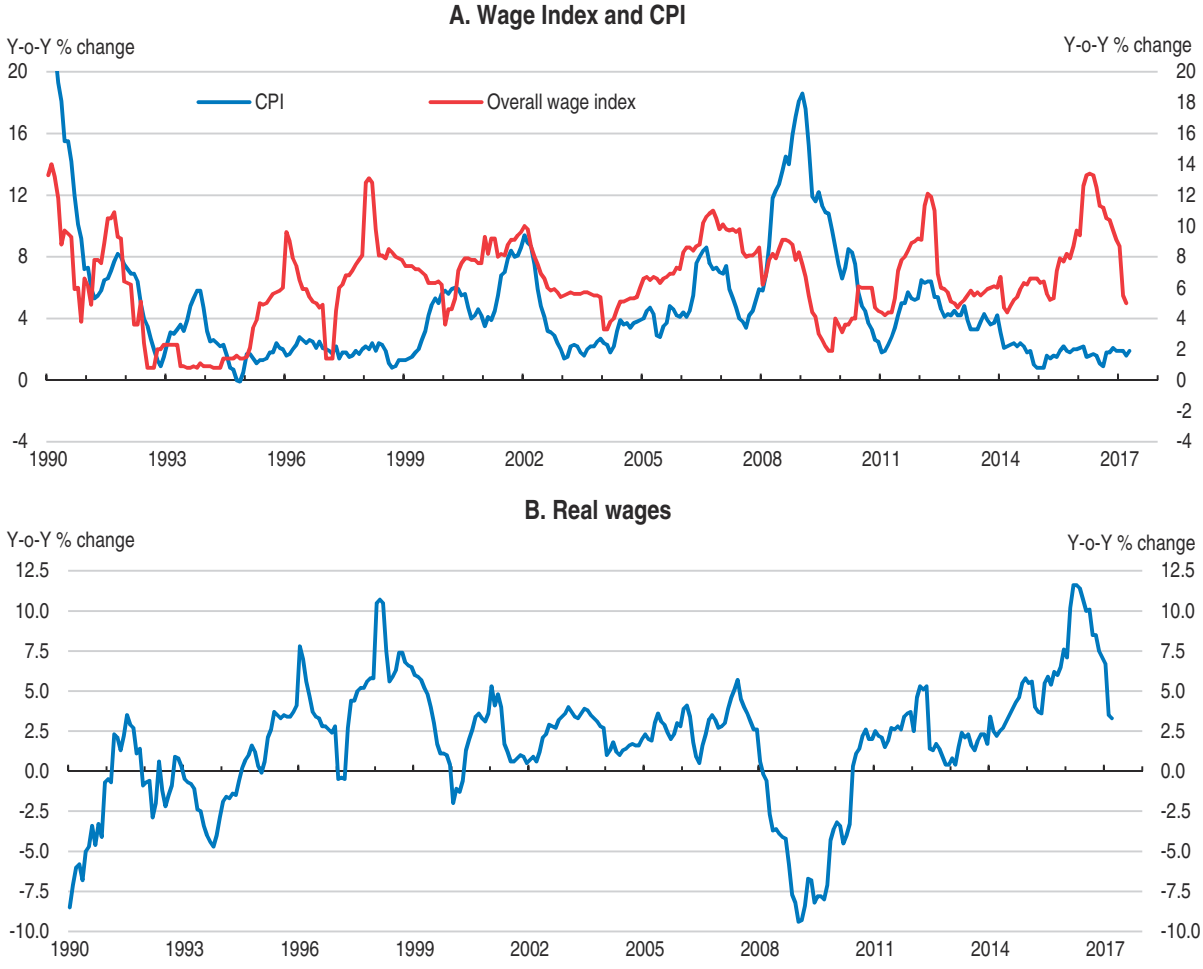
Iceland has high living standards, low poverty, high inclusiveness and one of the most sustainable pension systems. It is the most highly unionised country in the OECD and, in the past, successful social pacts have protected the lowest paid workers during crises, and on occasion helped fight inflation. Nevertheless, Iceland experiences recurrent bursts of social tensions and labour unrest that often result in large wage awards, particularly in times of economic boom. Iceland is prone to accentuated economic cycles, and the pro-cyclical nature of collective bargaining aggravates these harmful dynamics.

Social partners often have disagreements over what has been agreed in the past and they can have differing views on the state of the economy. Trust among the social partners has been undermined and wage co-ordination is low. There is a large number of unions, many of them very small, and wage demands are often not consistent with macroeconomic stability. Labour unrest frequently originates in the public sector as wages lag behind the private sector.

Fostering trust and increasing wage co-ordination would make collective bargaining more effective and help sustain the benefits of the system for future generations. A technical committee should be established to provide reliable and impartial information to wage negotiators. Wage negotiations could start with "wage guidelines" issued by the major labour and employer confederations. State mediator should have greater powers in order to improve wage co-ordination and support the "wage guidelines".

Iceland suffers from recurrent bursts of social tensions and labour unrest. These often result in large wage awards that are inconsistent with macroeconomic stability. As seen in Figure 2.1, episodes of high wage growth have occurred regularly over the last thirty years, often in the environment of low inflation. Recently, Iceland has again experienced a period of elevated tensions and industrial disputes. In 2015, despite sluggish productivity growth and inflation below the central bank's target of 2.5%, wage bargaining conflicts erupted resulting in negotiated nominal wage awards – which set the minimum for all workers covered by the agreement – of more than 20% over three years. As often before, the government facilitated the wage agreements by introducing fiscal measures, including tax cuts, at an estimated net cost of 0.5% of GDP. Wages have been rising steeply and together with króna appreciation, this has caused external competitiveness to plummet.

Figure 2.1. **There have been recurrent episodes of high wage awards**



Source: Statistics Iceland; and OECD Consumer Prices (MEI) dataset.

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After 2015, tensions in the labour market have continued. Recent hikes in wages of elected officials and the fact that government has not provided sufficient funds for social housing, as agreed in the previous negotiation round, left many trade unions angry. Fishermen were on a disruptive strike from mid-December 2016 to mid-February 2017, resulting in a temporary loss of international market share for the fishing industry. In 2015, government, municipalities and major confederations of employers and workers entered an agreement (SALEK) to improve wage formation and co-ordination, based on Nordic examples. But there have been disagreements and further implementation of the agreement is – for now – put on hold.

Iceland is the most highly unionised country in the OECD and wage bargaining is a cornerstone of the economy. The system has had many successes in promoting income equality, inclusiveness and reducing poverty. Iceland has the lowest poverty rate among the OECD countries. Over the years the social partners have taken on joint custodianship of certain parts of welfare policy, embodying one of the key pillars of the Icelandic labour market. This includes a fully-funded occupational pension system, sickness funds, rehabilitation funds for long-term ill or injured workers, and funds for continuous education of lower-skilled workers and life-long learning. At the same time, the Icelandic labour market model has been successful in maintaining a flexible labour market with high labour market participation and low unemployment.

In the past, social partners enjoyed good policy co-operation, in particular at times of crisis. Trade unions and employer organisations in co-operation with the government entered the National Pact of 1990, a social pact fighting inflation, and successfully called for wage restraint in the face of a long history of high inflation and instability (Pétursson, 2002). The social pact also played an important role during the financial crisis. Unions and employers, again working with the government, focused on various policy measures to combat the crisis and to protect the lowest paid workers. While average wages lost significant value, wages of the lowest paid were maintained or even increased in real value (Ólafsdóttir and Ólafsson, 2014).

Paradoxically, however, the Icelandic bargaining model has been less successful in times of economic boom. During such periods the trade unions often approach collective rounds fragmented and with little regard for wider consequences of their demands. Unions negotiate with "the need to correct wage development of past years", particularly in the public sector. In turn, wage demands by one union get translated into high wage demands by others, unleashing leap-frogging of wage demands, where wage settlements have a strong tendency to exceed the wage outcome of previous settlements as each union tries to get their members the largest award (SALEK, 2016; Holden, 2016).

The situation is exacerbated due to a high number of unions (about 200), some of them very small, often organised along occupational lines (Holden, 2016; SALEK, 2016). A very large number of agreements need to be reached and there is a high potential for co-ordination failure. As the unemployment rate is normally low in Iceland, in times of boom the scarcity of labour supply may foster strong wage demands in some sectors. The Central bank of Iceland (2016) estimates that real wages in Iceland are much more responsive to the unemployment gap compared to other countries, consistent with the notion that wage demands are more extreme in good times, when unemployment is low, while more conciliatory in bad times. Excessively high wage growth results in the loss of competitiveness

and pressure on inflation. Eventually, the central bank has to react to the build-up of inflationary pressure, resulting in appreciation of the krona and slowing of the economy.

Iceland is a small open economy with a limited production base and exposed to terms-of-trade shocks, making it prone to boom and bust cycles. In addition, fiscal policy and monetary policy have often failed to act in a firm counter-cyclical manner (OECD, 2015a). High wage pressures in good times work pro-cyclically and contribute to the overheating of the economy, thereby adding to these harmful dynamics. Growing imbalances may eventually even lead to another bust. It is therefore in everyone's interest that the structural weaknesses of collective bargaining are corrected. This would ensure that benefits of growth are shared widely without disruptive strikes and risks to growth and stability.

This chapter first describes the main features of the Icelandic labour market. It discusses unionisation and the main characteristics of collective bargaining. It also analyses the recent large wage awards and their impact on competitiveness. The following section analyses the institutional framework of Icelandic wage negotiations and offers some policy recommendations. The section considers ways to rebuild trust and facilitate a shared understanding of the economy, to improve wage co-ordination, and to strengthen the state mediator. In the final section, the chapter discusses digitalisation and changes in the organisation of work and their possible impact on collective bargaining.

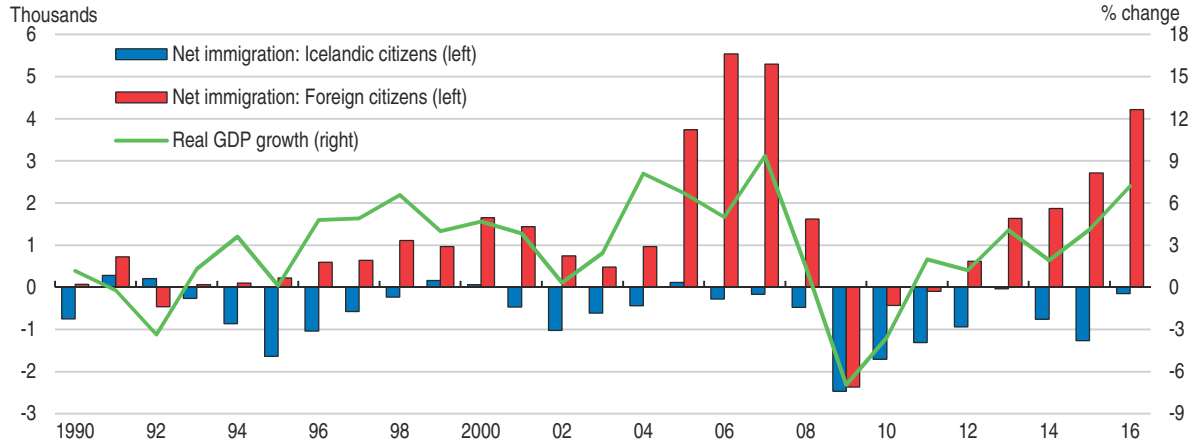
Collective bargaining and the labour market

The Icelandic labour market is flexible but labour productivity is low

The Icelandic labour market is quite flexible, with substantial labour mobility, flexible hours and wages, and variable participation (Central bank of Iceland, 2016; Ólafsdóttir and Ólafsson, 2014; Ólafsdóttir, 2010). The strictness of Iceland's employment protection is low. Rules for hiring and firing are lenient. Companies can easily adjust to changed demand by expanding or reducing staffing levels or by raising or lowering the number of hours worked. Furthermore, the number of part-time and full-time employed varies with the business cycle. Similarly to other Nordic countries, but unlike many European countries, Icelandic law stipulates only a few rights concerning the labour market. Instead, the protection of employees is set through collective agreements. There are no specific laws on the minimum wage, but as collective agreements determine minimum standards, negotiated wages under the contract effectively serve as minimum wages.

The labour market is flexible also in terms of significant seasonal variation in employment and migration across borders (OECD, 2015a). The flow of migrants is heavily affected by the business cycle (Figure 2.2). Migration of foreign nationals has increased especially after Iceland opened its labour market to other European countries upon joining the EEA (European Economic Area). Icelanders particularly emigrate from Iceland in times of recession, while foreigners flow in when economy is strong. Generally, Icelandic nationals out-migrate primarily to the other Nordic countries (Ólafsdóttir and Ólafsson, 2014). While immigrants often in-migrate to work in the booming low-skill jobs – recently in tourism and construction – many Icelanders who out-migrate are highly skilled (OECD, 2015a). Such high labour mobility can also have implications for wage negotiations. For instance, mobile Icelandic workers, such as doctors and nurses, can easily find jobs in other Nordic countries and leave the country when they perceive wages in Iceland are too low.

Figure 2.2. **Migration flows are heavily influenced by the economic cycle**



Source: Statistics Iceland; and *OECD Analytical Database*.

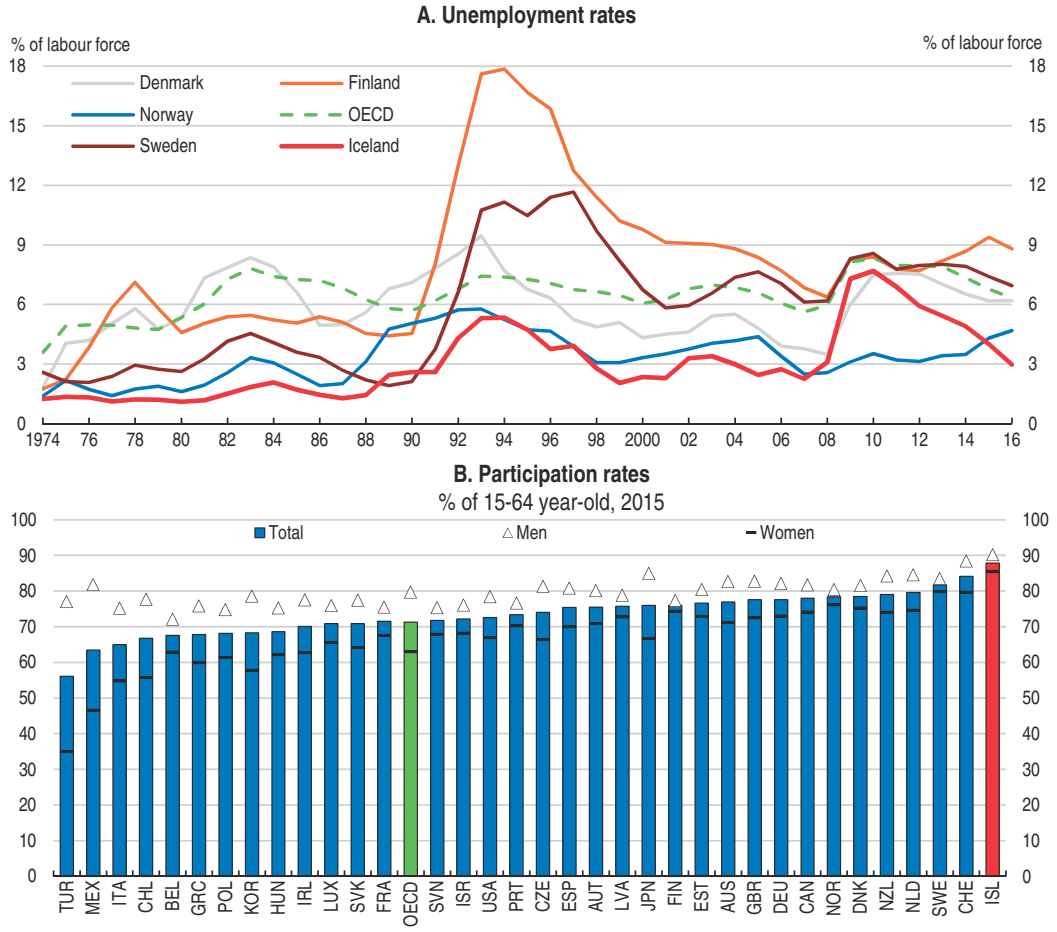
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Labour market flexibility has contributed to a low unemployment rate. On average, over the 1974-2008 period, the unemployment rate stood at about 2.5%, well below the OECD average of 6.3% (Figure 2.3, Panel A). Only during the recent financial crisis did the unemployment rate rise above 8%, but it has since dropped below 3%. In addition, the incidence of long-term unemployment is very low. Only 16% of the unemployed had been unemployed for more than a year in 2015, below the OECD average of 34%. Furthermore, the percentage of the labour force unemployed for a year or longer is about 0.6%, more than three times lower than the OECD average.

The labour force participation rate of the working age population is 88%, the highest among OECD countries (Figure 2.3, Panel B). The participation rate is high across all age groups, but particularly high for older workers (54+) and young workers (15-24) – which in fact is partly problematic, as Iceland faces a problem of high school dropout. Icelandic workers also work relatively long hours compared to other western and Nordic economies, and retire very late. The average effective age of labour-market exit for men is 69.4, and for women 68 years, about 5 years above the OECD average for both (Figure 2.8, Panel A; OECD, 2015b).

Living standards are high, but mostly on the account of work effort, as labour productivity is relatively low (Figure 2.4). GDP per capita in Iceland is about 13% above the OECD average (measured in PPP), the employment rate 19 percentage points, and working hours of employed persons 6.5% above the OECD average. By contrast, labour productivity (GDP per hour) is 11% below the OECD average, making Iceland the only Nordic country with productivity below the OECD average. Furthermore, the growth of labour productivity has also been slow. In the 2008-2015 period the average annual increase in labour productivity for the total economy was a mere 0.4%, among the lowest for OECD countries. Slow productivity growth is not commensurate with the large wage awards that have been agreed in wage negotiations. In addition, reducing the amount of work and raising productivity could improve the work-life balance of Icelandic workers. According to the OECD Well-being indicators (OECD, 2015c), Iceland ranks in the bottom fifth of OECD countries on the high share of employees working very long hours and on how little time workers devote to leisure and personal care.

Figure 2.3. **Unemployment rate has been low and labour force participation is high**

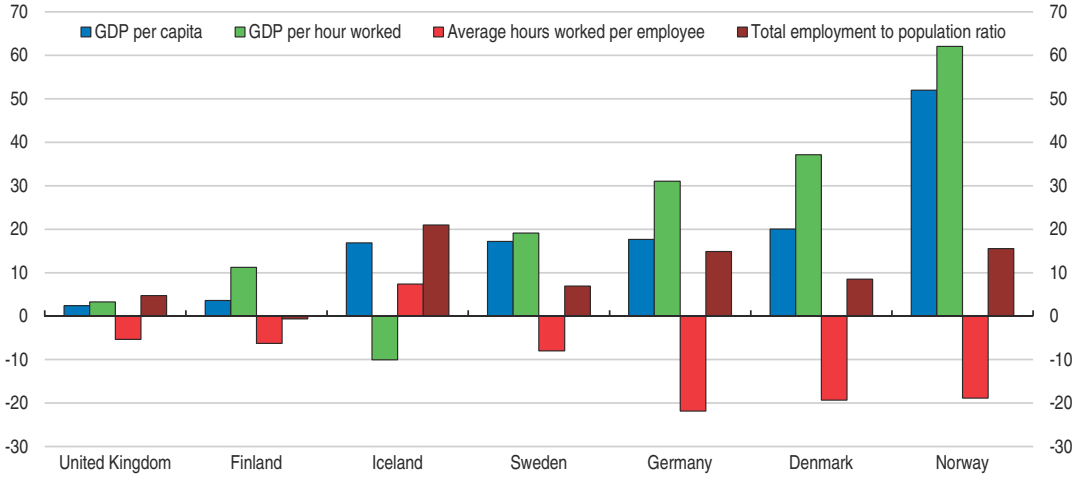


Source: OECD Analytical Database; and Labour Force Statistics.

StatLink http://dx.doi.org/10.1787/888933531193

Figure 2.4. **GDP per capita is high due to work effort, while productivity is low**

% gap relative to OECD average, 2015



Source: OECD Productivity Database.

StatLink http://dx.doi.org/10.1787/888933531212

Iceland is very highly unionised

The degree of organisation of both unions and employers is high in Iceland; the unionisation density in Iceland is in fact the highest in the OECD (Figure 2.5, Panel A.). This is even more striking given the general steady decline in unionisation in OECD countries since the 1970s (Figure 2.5, Panel B). The push towards more collective bargaining at the enterprise level, the decline of manufacturing and shift towards services, the declining role of the public sector and the spread of flexible contracts have all been identified as the main causes behind this trend (OECD, 2004 and 2017a; Hayter et al., 2015; Visser, 2016).

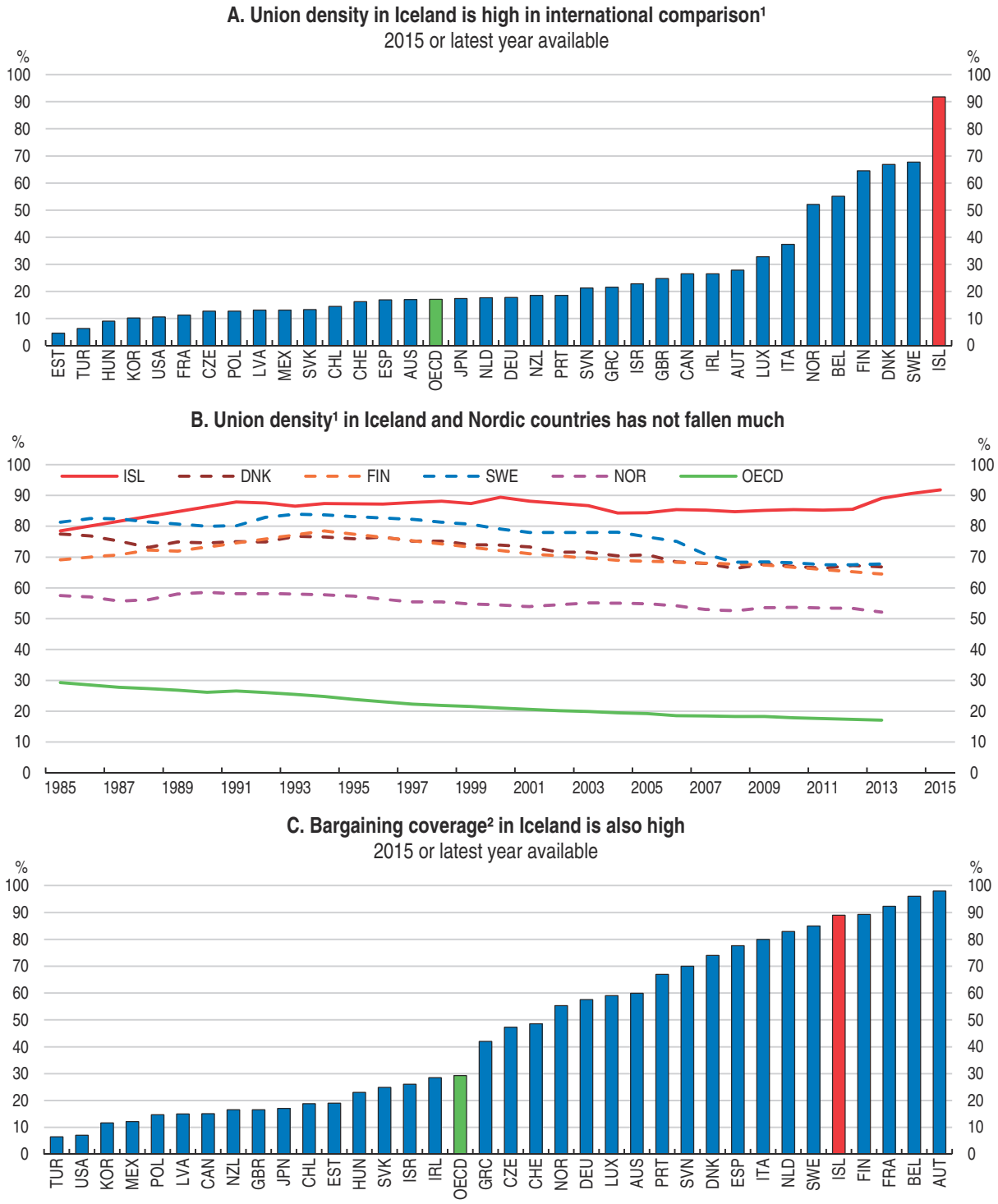
Despite the trend decline in unionisation elsewhere, Iceland – and other Nordic countries – maintained high levels of union membership and collective bargaining coverage (Figure 2.5, Panel C). Institutional factors and regulation play an important role in this. For example, one crucial institutional determinant of union membership is the existence of the system where unemployment benefits and potentially other welfare payments are administered by union-affiliated institutions (the so-called Ghent system). In Iceland, a large share of welfare payments is administered through funds under the custodianship of the social partners. These include a fully-funded mandatory occupational pension system (see Box 2.1), sickness funds, rehabilitation funds for long-term ill or injured workers, and funds for continuous education of lower-skilled workers and life-long learning (Ólafsdóttir and Ólafsson, 2014).

An important determinant that affects bargaining coverage is the practice of administrative extension of collective agreements (OECD, 2004), or equivalent measures to that effect. In Iceland the law stipulates the automatic extension of the rights bargained for in the labour market into universal rights for everybody, and terms in collective contracts set the minimum. The Act on Working Terms and Pension Rights Insurance (55/1980) stipulates that "Wages, and other working terms agreed between the social partners shall be considered minimum terms, independent of sex, nationality or term of appointment, for all wage earners in the relevant occupation within the area covered by the collective agreement. Contracts made between individual wage earners and employers on poorer working terms than those specified in the general collective agreement shall be void." It is immaterial whether a worker is a member of one of the organisations involved in the relevant wage agreement or not and the rights of foreign labour are therefore the same as for locals (SALEK, 2016; Ólafsdóttir and Ólafsson, 2014).

The total employment in Iceland consists of about 180 000 workers. According to SALEK (2016) there are about 200 different unions, of which 111 belong to four large federations of unions: The Icelandic Federation of Labour (ASÍ), The Federation of State and Municipal Employees (BSRB), the Association of Academics (BHM) and the Icelandic Teacher's Union (KÍ). Each of these federations represents several trade unions. Approximately 5 000 employees belong to unions that are not members of any federation and 21 000 self-employed who are not members of any union. The trade union landscape is quite scattered and a relatively low number of employees are on average represented by each collective agreement.

ASÍ is the largest federation, representing approximately 93 000 workers in 51 different unions. It consists of mostly private sector unions and includes trade unions of general workers, office and retail workers, seamen, construction and industrial workers, electrical workers and various other professions. The other major federations, BSRB, BHM and KÍ represent 22 000, 11 000 and 10 000 members, respectively, with 25, 27 and 8 unions in each. BSRB covers unions of workers in the fields of customs, police, fire service, health care, and

Figure 2.5. **Union density in Iceland is the highest in the OECD**



1. Union density rate: net union membership as a proportion of wage earners in employment.
2. Adjusted bargaining coverage rate: proportion of all wage earners with right to bargaining.

Source: J. Visser, ICTWSS Database version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2016 completed with the OECD Policy Questionnaires.

StatLink http://dx.doi.org/10.1787/888933531231

Box 2.1. **The Icelandic pension system**

Iceland has a three-pillar pension system (Ólafsdóttir and Ólafsson, 2014; SALEK, 2016; Central bank of Iceland, 2016; OECD, 2015b), which are:

- **First pillar:** A public pay-as-you-go universal social security system that secures a minimum pension for everyone. The legal basis dates from 1946. It is tax funded and based on a defined-benefit scheme. It uses flat rate benefits with a high degree of incomes-testing. It has a universal coverage, with rights based on the period of residence in the country. The Social Security pension has three components: basic pension, pension supplement and household supplement.
- **Second pillar:** A funded Occupational Pension System (OPS) with defined contributions, introduced as a result of collective bargaining between unions and employers' federations in 1969. Participation in the OPS is compulsory, becoming mandatory for employees in 1974, and for all employed persons (including the self-employed) from 1980. Nowadays the overall contribution is 12.5% of total earnings (4% from employees and the rest from employers in the private market, while the central government pays 11.5% and the municipalities 12%). The system promises 56% of average career earnings as a minimum, despite being a defined-contribution scheme. The yearly accrual rate is 1.4% for each year of service. The earnings base is average lifetime salary for each year of membership. After pensioners start receiving their pension, the amount they get is indexed to the cost of living. Contributions are exempt from taxation when paid in, but fully taxed when taken out as earnings. The OPS funds are managed by the unions and employers' organisations and are supervised by the Financial Supervisory Authority.

  Until recently, the public sector pension funds were different in that they were based on defined benefits and were partially funded with a state guarantee. The social partners agreed that the two systems – private and public – would be harmonised in order to make it easier to move freely between jobs. The private sector employer's contribution will thus rise from current 12.5% to 15.5% as of 01 July 2018, to be in line with the public sector. New legislation has been passed to switch a large part of the public pension system to defined benefit, with pension eligibility age increased from 65 to 67, as in the private sector. The state however guarantees unchanged rights of those who are already living on pension income and of pensioners and fund members who turned 60 years old before the effective date of the new agreement (1 June 2017). To cover gaps and to ensure that the system is funded, the government facilitated the change with a one-time injection worth 4.8% of GDP. A major part of the implicit state guarantee for pension liabilities has thus been removed.
- **Third pillar:** Individual Pension Accounts, legislated in 1997, are voluntary accounts based on defined contributions. Individuals can pay contributions up to 4% of wages exempt from income tax (when paid in) and have the right to 2% additional contribution from employers with the first 2%. Hence, altogether 6% are exempt from direct taxation when paid in. These are managed by occupational funds, banks or private investment funds and supervised by the Financial Supervisory Authority.

The system is redistributive to a degree and succeeds well in alleviating poverty amongst the elderly. Iceland has one of the lowest income poverty rates among older people in the OECD, 2.8% compared to the OECD average of 14.7% for people aged over 75 (OECD, 2015b). A great majority of old age pensioners receive some pension from Social Security, but only a small minority (less than 5%) have to rely solely on the minimum guarantee (Ólafsdóttir and Ólafsson, 2014).

The second pillar aims at replacing the income distribution in the labour market proportionally, without any upper limit, and has been gradually increasing in importance. The individual pension accounts (the third pillar) have an incomplete coverage, as they are voluntary. Nonetheless, about 60% of wage earners are contributing, which is high by international standards. The 40% who do not contribute are disproportionally low-income earners and single parents. The importance of the third pillar has declined in recent years, partly due to losses during the financial crash, and partly due to the fact that the government (as one of the crisis measures) opened up the pillar (for those under the age of 60) for early access to pension savings up to a prescribed sum.

Box 2.1. **The Icelandic pension system** *(cont.)*

The first two pillars are the main building blocks of the Icelandic pension system. Together, they result in the net pension replacement rate of between 75% and 90% of individual earnings, depending on income (OECD, 2015b). Currently, the Occupational Pension Funds (OPFs) pay out about 65% of all old age pensions and the Social Security System 35%. Since the Social Security pillar uses means testing to a high degree, the amounts paid to pensioners from Social Security will decrease as occupational pensions increase with growing maturity of the occupational funds. When the occupational pensions system becomes fully mature in 2025-30, the proportion paid by the occupational pension funds is estimated to approach 90%.

The OPFs are fully funded. If they show a deficit, they need to either increase contributions or cut pension payments or both. The benefits paid by the OPFs funds without an employer guarantee will ultimately depend on their net returns and will therefore vary from one fund to another. However, the investment risk is borne collectively by the members of each fund, and there are no individual accounts, as in pure defined-contribution plans (Central bank of Iceland, 2016).

On the whole, the Icelandic pension system is in a good position, making ageing less of a problem than in many other OECD countries. Moreover, Iceland has a younger population compared to other European countries. It also has a very high labour force participation rate and a high average age of exit from the labour market. Both, ample job opportunities and absence of a special early retirement scheme have contributed to the late take up of pensions. Together with the three-pillar structure of the system this has meant that public pension expenditures have been a relatively low burden on the public budget, 2.1% of GDP, compared to the OECD average of 7.9% (OECD, 2015b). The size of the assets of the OPFs is the second largest in the OECD, approaching 150% of GDP (Central bank of Iceland, 2016; OECD, 2015b).

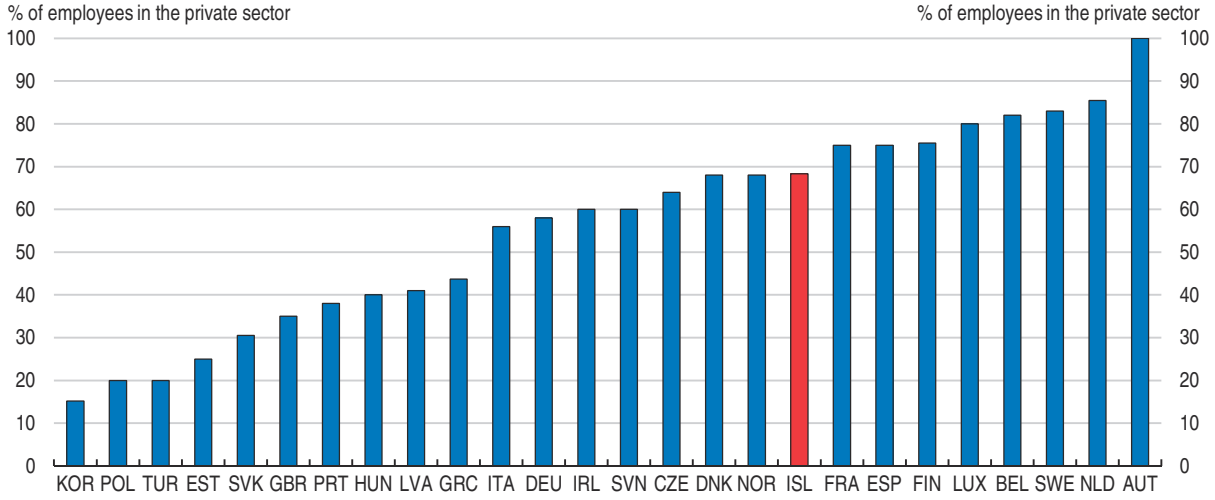
pre-school care. Each member-union of the BHM represents workers of particular profession such as psychologists, lawyers, architects and musicians. The (KÍ) is a joint organisation for all teachers, head teachers, deputy head teachers, and student counsellors, in preschools, primary schools, secondary schools, upper secondary schools and music schools.

The employers' organisation density is also relatively high (Figure 2.6). On the employer side there is SA-Business Iceland, a service organisation for Icelandic businesses that negotiates collective agreements with unions on wages and working conditions on behalf of its members. SA with its 6 member associations represents about 2 000 businesses in Iceland, accounting for 70% of all salaried employees. Important players on the employer side are also the state (12% of salaried employees), represented by the Minister of Finance and Economic Affairs, the municipalities and the city of Reykjavik (14% of salaried employees), and the Icelandic Federation of Trade, representing primarily SMEs.

The bargaining rights reside in individual unions. The unions from the private sector can give the mandate to negotiate to their respective federations or share it with other unions, but these can be withdrawn at any time before the signing of a collective agreement. Employers in the private sector, on the other hand, transfer their mandate to negotiate to their federation of employers upon becoming a member. Duration of collective agreements is either agreed by the parties, or – according to law – for one year, and, if not renegotiated after a year, automatically extended for one more year.

Collective agreements are negotiated at various levels – national, regional, cross-sectoral, firm level, plant level, or by profession/occupation, reflecting the scattered nature of unions and differing scope of different unions, and also reflecting the fact that some unions give mandates for part of negotiations to federations. Employees in a firm can be covered by various agreements at the same time. However, generally there is no strict hierarchy among

Figure 2.6. **Employers' organisation density**



Source: J. Visser, ICTWSS Data base. version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2016 except figures for the Czech Republic, Finland, the Netherlands, Norway and Sweden which have been provided by National Authorities and OECD estimates based on the European Company Survey for Iceland.

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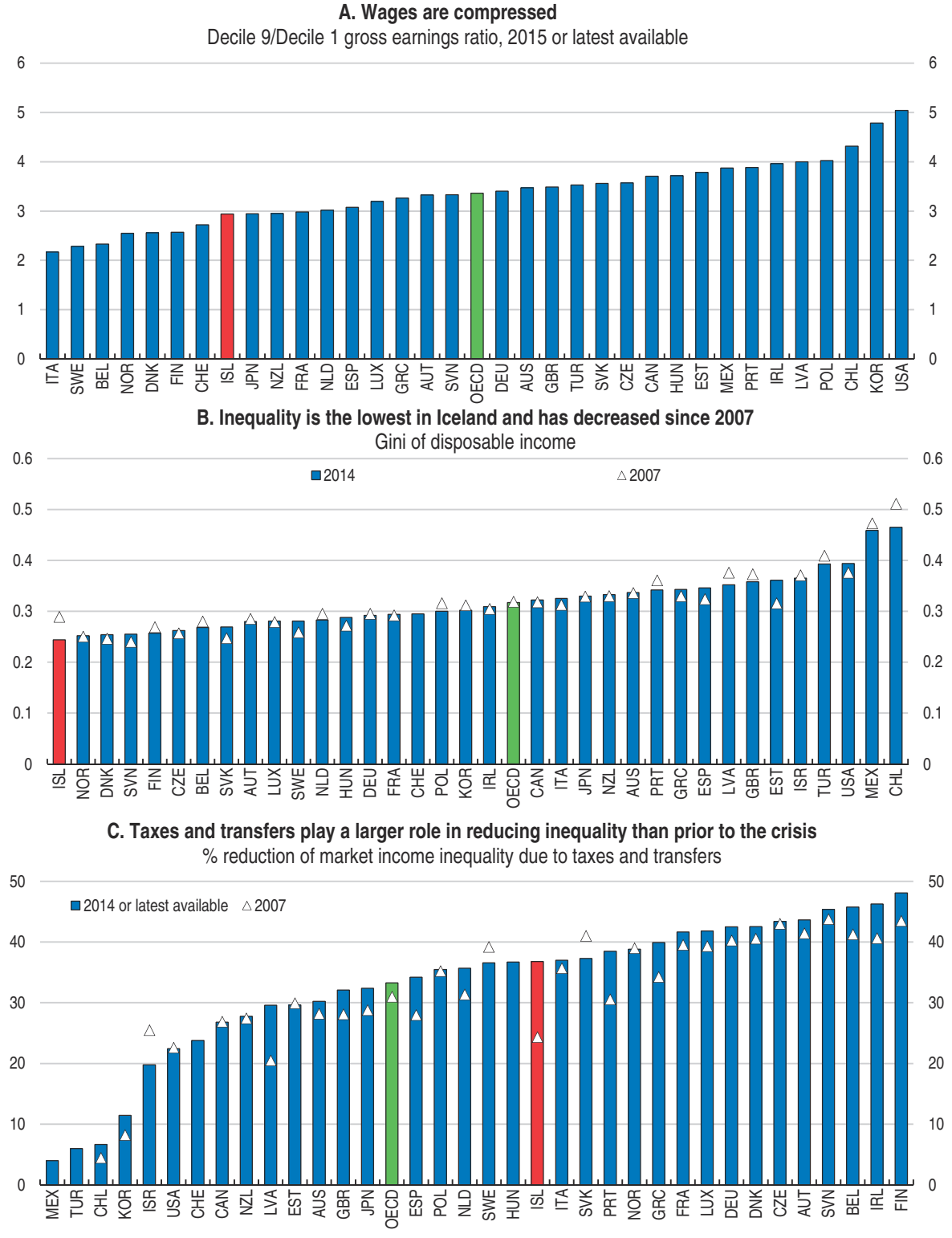
the various levels of collective agreements. Labour law does not stipulate that terms of higher-level agreements should necessarily prevail over the lower-level agreements. This depends on the negotiating parties. In practice, the favourability principle is usually upheld and the terms in lower-level agreements can only be better for workers than in higher-level agreements, but there can be deviations when negotiating parties agree (OECD, 2017a; SALEK, 2016).

Inequality and poverty are low

The wage formation system and trade unions have played an important role in promoting income equality, reducing poverty and increasing inclusiveness on the labour market (Box 2.2). Wage distribution is already compressed, and tax and benefits have a further equalising effect, resulting in Iceland currently being the OECD country with the lowest inequality in disposable income (Figure 2.7, Panels A and B). Iceland also has the lowest share of people in relative poverty (with income below 1/2 of the median disposable income). Moreover, inequality has been significantly reduced since 2007. This can be mostly attributed to a contraction of financial earnings during the crisis, but the policy of redistribution through taxes and benefits has also had an important impact (Figure 2.7, Panel C). The government raised the marginal income tax rate on higher incomes and on net wealth at the same time that benefit levels to the lower income groups were raised (Ólafsdóttir and Ólafsson, 2014).

Iceland has very high job security. The OECD Job Quality database includes the indicator of job security that measures how likely a worker is to lose her job, how long she is likely to remain unemployed and how much financial assistance she can expect from government (OECD 2016a and 2015c). Workers facing a high risk of job loss are more vulnerable, especially in countries with smaller social safety nets. In Iceland, workers face an expected 0.7% loss of earnings if they become unemployed, much lower than the OECD average of 6.3% and the lowest in the OECD.

Figure 2.7. **Inequality is the lowest in Iceland and has decreased since 2007**



Source: *OECD Income Distribution Database*; and OECD Employment and Labour Market Statistics.

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Box 2.2. **Reducing gender gaps in the labour market**

Participation of women in the labour market is the highest among the OECD countries (Figure 2.3, Panel B), and women exit the labour market very late (Figure 2.8, Panel A). On the Global Gender Gap Index, Iceland takes the top spot (Figure 2.8, Panel B; World Economic Forum, 2016). It is the top performer on political empowerment and educational attainment and in the top ten for economic participation and opportunity, due to high number of women among legislators, senior officials and managers. Based on the wage equality survey (from the World Economic Forum, Executive Opinion Survey) that asks, "In your country, for similar work, to what extent are wages for women equal to those of men," Iceland ranks third among the OECD countries. Snævarr (2015) finds that the "unexplained" gender wage gap (after controlling for other covariates) was about 5.1% in the 2011-13 period and has been decreasing over time. The unexplained wage gap is higher than in Sweden, but lower than in Denmark and Norway.

Equal status and equal rights of men and women were legally established already in 1975, Iceland being the first Nordic country to do so. By law, for publicly-owned companies and public limited companies with at least 50 employees, boards of more than three members must have a membership of at least 40% of each gender. Moreover, companies with 25 or more employees are required to disclose the number of men and women employed as well as the number of men and women in management positions.

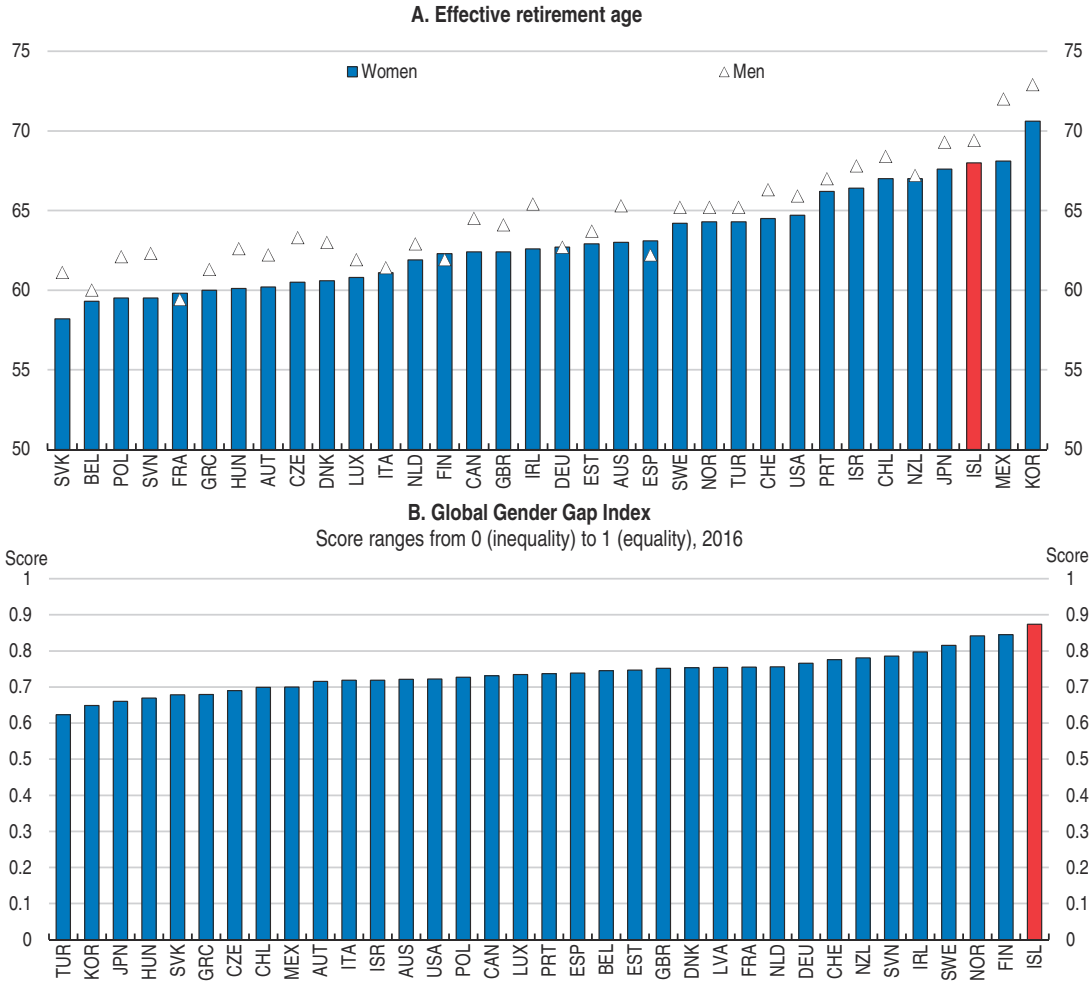
Despite a low gender gap the authorities are determined to reduce it further. The government has proposed a law whereby it will be compulsory for all companies with 25 employees or more to develop a certification scheme for gender pay equality, with the aim that all jobs of equal value are paid the same. The obligation nevertheless imposes implementation costs for the enterprises, such as auditing requirements. In this light, rolling out the scheme gradually, first for bigger firms and then for smaller ones, as proposed by the government, and monitoring the impact will allow the policy to be modified to avoid excessive burdens.

Large wage awards from recent disruptive negotiations have eroded competitiveness

At times, collective bargaining in Iceland can be disruptive and negotiations do not always take the wider economic picture into account. This has not always been the case. For instance, a social pact to fight inflation was implemented in 1990 between unions, employers and the government. The social partners, the general public and policymakers recognised that the previous policy of devaluations of the exchange rate was destabilising, resulting in high inflation, erratic economic growth and volatile real household income. Amid the liberalisation of the domestic financial and labour markets and the shift of monetary policy focus from high employment towards price stability, the social partners agreed to lower nominal wage increases, while the authorities committed to lowering the inflation rate (Pétursson, 2002; Ólafsdóttir and Ólafsson, 2014). As can be seen in Figure 2.9, the early 1990s represent a turning point for inflation in Iceland. Similarly, during the latest financial crisis, employers, unions and the government agreed on the Stability Pact of 2009, which successfully curbed wage increases. Negotiation focused more on policy measures to combat the crisis and to protect the income of the most vulnerable (Ólafsdóttir and Ólafsson, 2014).

On the other hand, there have been recurrent bursts of social tensions and labour unrest, particularly during periods of high economic growth, as has been the case recently. Often, the size of wage demands is not based on an evaluation of what is consistent with

Figure 2.8. **Effective retirement age of women and the gender gap**

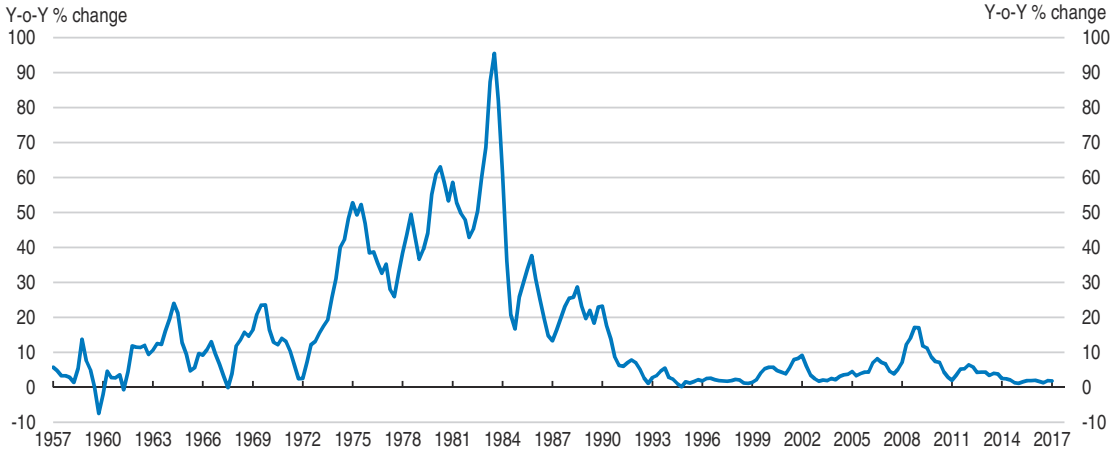


Source: OECD Pension at glance 2015; and The Global Gender Gap Report 2016 Dataset © 2016 World Economic Forum.

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Figure 2.9. **A pact between social partners helped fight inflation in the early 1990s**

Annual inflation rate (CPI)



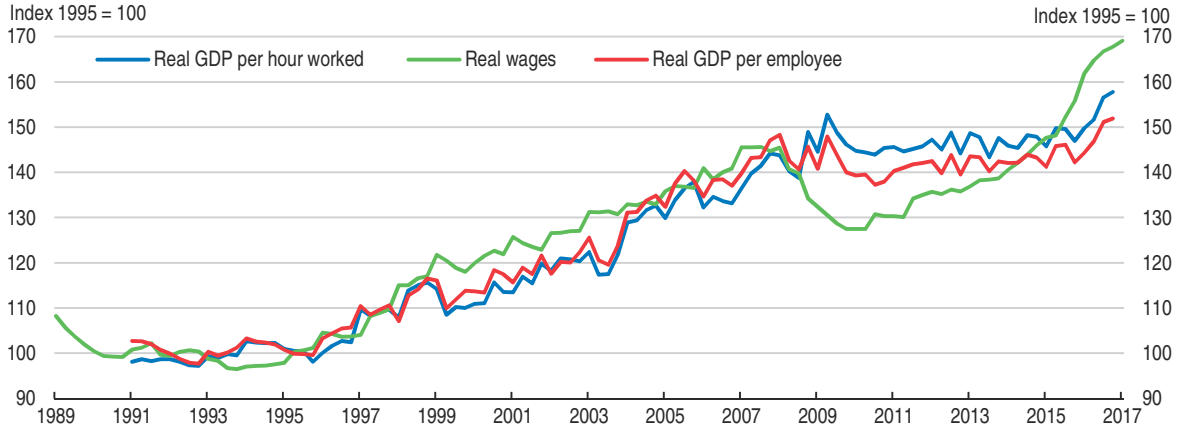
Source: OECD Analytical Database.

StatLink http://dx.doi.org/10.1787/888933531307

macroeconomic stability, but on wages of other groups. If settlements for some workers have already been made, those awards tend to set a floor for subsequent wage demands. In the private sector, the centralised contracts typically negotiate a minimum increase for everyone's wages. On top of this increase, sector and firm-level negotiations take into account specific local conditions offering top-ups. Finally, employees are entitled to meet once a year with their supervisor and negotiate possible changes in employment terms, often resulting in additional wage awards, contributing to wage drift over the settlement period. In the public sector, negotiations usually follow the private sector, with the award typically based on the negotiated wage increase. Top-ups to the base are less common in the public sector and there is little wage drift. However, when relative wages vis-à-vis the private sector get out of line, parity in public sector wages is often restored through the (threat of) industrial action.

In the 2015 bargaining round, doctors and teachers obtained three-year wage awards of around 25-30%, which led to demands by other unions for 50% pay increases. Employers, on the other hand, were offering annual increases of 3% (OECD, 2015a). A bitter wage bargaining dispute erupted resulting in nominal wage awards of more than 20% on average for the whole economy over three years. Wages have risen steeply (Figure 2.10). A favourable external environment has effectively helped inflation to remain low, but there is significant underlying pressure and a wage price spiral could easily develop. As seen in Figure 2.10, the large awards partly reflected the need for wages to catch up with past gains in productivity, but real wages have risen over and above the catch-up levels, especially as productivity growth has slowed recently. Although there has been a jump in productivity in most recent quarters, Central Bank of Iceland (2017) argues that this may be an overestimation, stemming from underestimated immigrant labour. Wages rising faster than productivity has hurt external competitiveness of Iceland. Unit labour costs (ULC) are on the rise (Figure 2.11, Panel A); in the last 5 years the growth of the Icelandic ULCs has been on average about 3 percentage point faster than in the other Nordic economies. The real effective exchange rate has also appreciated very steeply (Figure 2.11, Panel B).

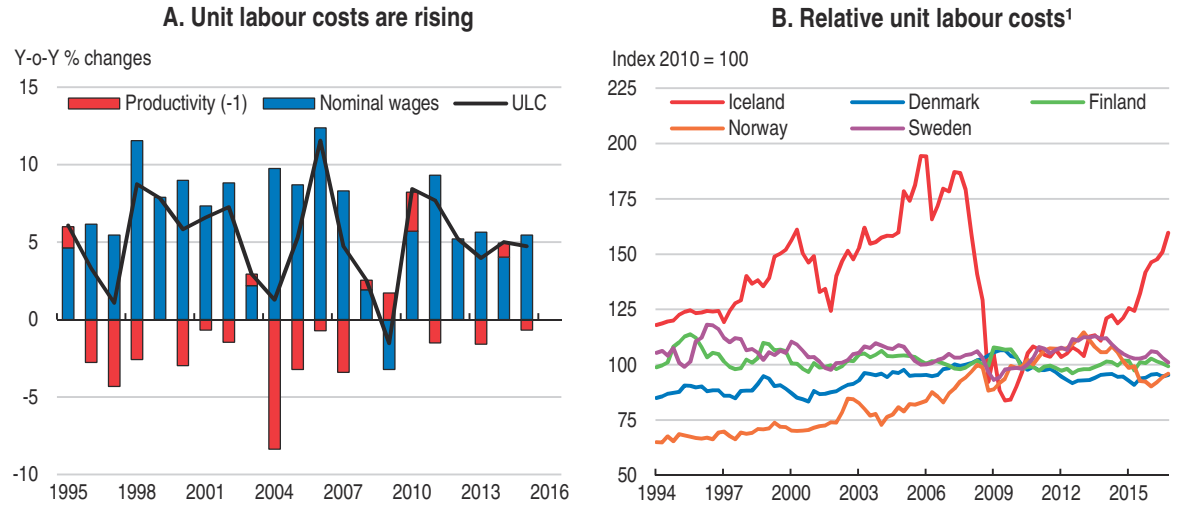
Figure 2.10. **Wage awards have exceeded productivity growth**



Source: OECD Analytical Database; Statistics Iceland; and Central Bank of Iceland: Quarterly Macroeconomic Model database (seasonally adjusted).

StatLink http://dx.doi.org/10.1787/888933530718

Figure 2.11. **Competitiveness has been eroded**



Source: OECD Analytical Database.

StatLink http://dx.doi.org/10.1787/888933530509

Towards effective and inclusive labour relations

The major challenges of the Icelandic collective wage bargaining are as follows. There is a large number of unions, many of them very small, making wage co-ordination difficult. Wage demands are often not consistent with macroeconomic stability. Wage tensions frequently originate in the public sector that does not benefit from wage drift. As Iceland has been through a challenging period economically and politically, trust has been undermined. Social partners often have difficulties agreeing even on facts, such as the state of the economy, or actual wage growth. In the following sections we discuss the challenges in more detail and propose some solutions.

The SALEK agreement

The social partners have made efforts at improving the collective wage bargaining system. The confederation of employers in the private sector, government (including municipalities) and major confederations of workers entered the so-called SALEK agreement to improve wage formation and co-ordination in the Icelandic labour market, based on Nordic examples. On the side of employees the following federations took part: ASÍ (Icelandic Federation of Labour), BHM (Association of Academics), BSRB (Federation of state and municipal employees), KÍ (Teachers Union), together covering about 70% of the Icelandic labour market. On the side of employers: SA (Business Iceland), Icelandic Association of Local Authorities and the Ministry of Finance and Economic Affairs (representing the state/public sector in negotiations). Many notable federations and unions remained outside including The Icelandic Nurses Association, Federation of Icelandic Medical Doctors, Seamen's Union and the Confederation of Icelandic Bank and Finance Employees (SALEK, 2016). The SALEK group commissioned Professor Steinar Holden to write a report and propose workable solutions for the collective bargaining system in Iceland. The report (Holden, 2016) provides valuable source of information and many ideas put forward in this chapter build on his analysis.

The SALEK agreement included the formulation of a common wage policy with a purpose to end the leapfrogging of wage demands. It was agreed that the scope for wage

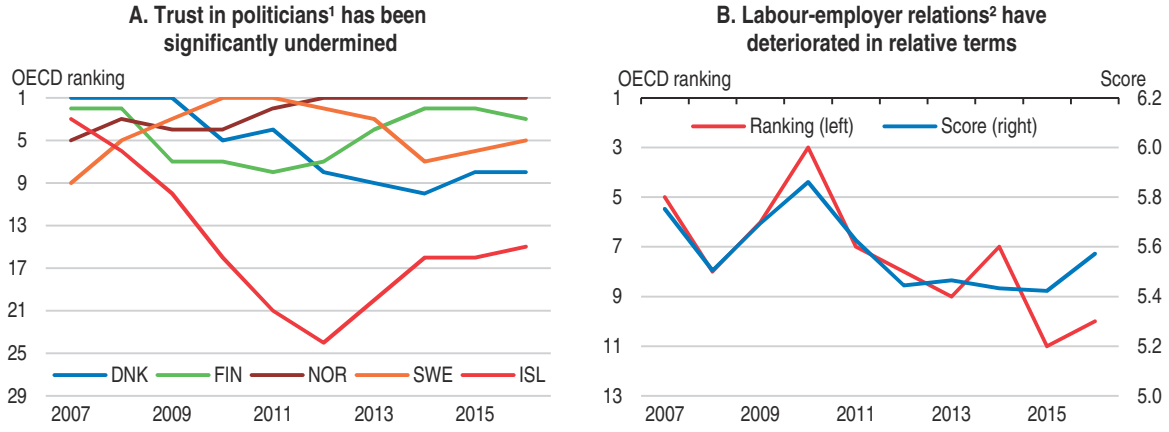
increases would take into account external competitiveness. Companies and sectors that either export or compete with imports would thereby set the frame for wage increases. According to the agreement, a macroeconomic council for the labour market would be created and would, together with the social partners, include representatives from the Central Bank and the Government. Alignment of pension rights in the private and public sectors was also part of the SALEK agreement. Finally, it was agreed that public employees would be guaranteed a share of the wage drift in the private sector.

However, due to recent tensions and disagreements all this has been put on hold and the SALEK group has postponed its co-operation for an undefined period of time. Dissatisfaction of public sector unions with the harmonisation of pensions in the public and private sectors made them unwilling to co-operate. Taking advantage of one-off fiscal revenues, the government injected funds of 4.8% of GDP into the part of public pension funds to facilitate the change. Despite this, some public sector unions are unhappy and the teachers' union threatened to sue the government. Furthermore, while the Macroeconomic Council has formally been established, no representative from the employee organisations took part, citing a lack of emphasis on matters regarding social stability and welfare as a reason for this. Currently there is not much optimism among the involved parties that the implementation of the SALEK agreement could move forward any time soon.

Fostering trust and encouraging informed negotiations

Iceland has had a challenging decade during which trust has been undermined. Based on a survey from the Global Competitiveness Report on trust in politicians, Iceland dropped from being a top performing OECD country in 2007 to the bottom third in 2012 (Figure 2.12). Trust has partly recovered since, but Iceland is now ranked far below its previous standing and below other Nordic countries. There has also been a trend decline in Iceland's ranking in the quality of labour-employer relations (Figure 2.12), although it is still among the top 1/3 of the OECD. Consistent with the past tendency for labour relations to sour particularly in times of economic boom, Iceland ranked better in the years right after the crisis than more

Figure 2.12. **Trust has been undermined**



1. Business executives responding to the question: 'in your country, how do you rate the ethical standards of politicians? [1 = extremely low; 7 = extremely high]'.
2. Business executives responding to the question: 'in your country, how do you characterize labour-employer relations? [1 = generally confrontational; 7 = generally co-operative]'.

Source: World Economic Forum. The Global Competitiveness Index dataset 2007-2016.

StatLink http://dx.doi.org/10.1787/888933530737

recently. Nevertheless, while interesting, such data should be interpreted with caution, as they are based on limited surveys of business executives, and hence they cover only one side of labour relations.

Recent tensions and tense labour relations also suggest weakened levels of trust. Negotiations often break down because parties differ in their understanding of what exactly has been agreed in the past, and actions by the counterparty are perceived as unilateral and hostile. Leapfrogging of wage demands also arguably stems from low trust, as wage gains of one group are automatically perceived by other groups as unfair and excessive, and not perhaps as justified catch-up gains due to lower growth in wages from preceding periods. Moreover, the social partners spend a lot of time during negotiation rounds debating and disagreeing on the state of the economy.

One of the principles of the ILO on the right to collective bargaining states that collective bargaining must be free and voluntary, so that collective agreements are generated by the parties themselves – not imposed on them (ILO, 2015). To achieve this, negotiations must be conducted in good faith, and a certain level of trust among negotiating parties is required. At the same time, when effective, collective bargaining can itself help build trust and mutual respect between employers, workers and their organizations, and contribute to stable and productive labour relations. Weak and ineffective collective bargaining institutions, on the other hand, may lead to a rise in labour disputes, with economic and social costs (ILO, 2015). Some of the features of collective bargaining systems themselves can help promote more co-operative relations. While fragmented social partners are likely to increase the level of strife, promoting co-operation between social partners can have a positive effect on the quality of labour relations (OECD, 2017a).

As discussed above, Iceland is very highly unionised and has a history of successful co-operation and common institutions on the labour market, from the successful tripartite pacts to fight inflation and to endure the crisis, to the joint administering of the many welfare payments by the social partners. Recent co-operation through the SALEK agreement and the setting up of the Macroeconomic Council also demonstrate the willingness to increase and nurture trust. But these recent attempts have failed. In this context, it is important to strengthen common labour market institutions and encourage constructive, meaningful and informed negotiations.

Collective bargaining is part of a broader institutional framework that offers many opportunities for social dialogue between representative organisations. In different countries, these include national tripartite institutions on economic and social policy, tripartite minimum wage setting institutions, the collective bargaining process itself, and workplace committees that enhance workplace co-operation (ILO, 2015). Regular and active contact among the social partners and exchange of views can build trust and develop mutual respect. In a highly unionised country, such as Iceland, with a long history of highly organised employers and unions, it is misplaced to talk about the non-active role of social partners or the lack of their mutual engagement. Yet, a regular tripartite platform that gives opportunity for constructive debate and consultations among the social partners – on issues of collective bargaining as well as more broadly on issues of welfare policy and social reform – would be beneficial. The setting up of the Macroeconomic Council in this light was a step in the right direction.

It is furthermore important that different parties acquire a common understanding of the economic situation, on which to base their demands and eventually reach agreement.

The Norwegian system of bargaining and incomes policies includes an informal tripartite committee (Contact Committee) headed by the prime minister, where the government and the social partners discuss the economic basis for the wage formation prior to the actual wage setting. The trade union and employer confederations, several ministries, together with Statistics Norway, further participate in the "Technical calculation committee for wage settlements". The committee publishes detailed wage figures, including wage drift for the main bargaining areas, as well as developments in labour costs among Norway's most important trading partners. It submits two main reports every year, before and after the wage negotiations, ensuring that the wage setters agree on facts concerning wage levels and wage growth, as well as international competitiveness and the factor shares. The calculation committee also agrees on the economic outlook and a forecast for consumer price inflation (Holden, 2016; Andersen et al., 2015).

Impartial institutions to facilitate well-informed negotiations exist in other countries. The Japan Productivity Centre (JPC) is a tripartite non-profit organization with a board made up of members of organised labour, private enterprises and academic experts. One key part of the work of the JPC is to provide labour productivity statistics. These are trusted by trade unions and employers as providing an accurate reflection of sectoral trends and are used as a reference point by trade unions and management in wage negotiations (ILO, 2015). In Uruguay, before each bargaining round the Ministry of the Economy presents information on economic and labour market performance to the Tripartite High-Level Council (ILO, 2015). This includes information on the international context, select economic indicators in neighbouring countries, and general economic and sectoral developments. It also proposes wage guidelines. The Tripartite High-Level Council then discusses general economic trends, the (voluntary) wage guidelines and adjustments to the national minimum wage (subsequently determined by government).

In addition to the active Macroeconomic Council, Iceland should establish a "technical committee". The committee could comprise of representatives from Statistics Iceland, and other relevant experts and institutions, as well as the social partners. This technical committee would be responsible for regularly providing reliable and relevant statistical information related to the labour market and collective bargaining, in particular before major negotiating rounds. Moreover, the committee could identify gaps in available data and request improvements. The committee could further take a stance on economic projections and perform analysis on impacts of wage demands on economic sectors and the economy. To be effective, the committee should enjoy high trust by the negotiating parties and be seen as impartial. This is to ensure that the bargaining parties agree on important numbers and facts, so that they can conduct negotiations in an informed way.

Employment and wage statistics in Iceland need improvement. Statistics Iceland bases wage data on a survey of a limited number of firms, and for certain sectors there are long lags before up-to-date data is available. More resources could be put into collecting and managing labour market data. In addition, as in many other countries, improvement in coverage and quality could be attained by linking it to income tax data. Norway, for instance, introduced a new system, where data on wages and jobs is submitted each month directly by employers through a common electronic platform. The coverage is comprehensive and the single harmonised database is used for tax, social security, statistics and other purposes (Snorrason, 2017).

More wage co-ordination

Labour unions in Iceland are small and scattered. A very large number of agreements need to be reached so there is a high potential for co-ordination failure. The total number of collective agreements in Iceland stands at 192 (SALEK, 2016). Given the number of employees, this amounts to 1 000 employees on average being covered by one agreement, compared to 2 000 in Denmark, 5 000 in Norway or 7 000 in Sweden. Unions are often organised along occupational lines, which strengthens their position in the wage negotiations, because labour demand is usually less elastic for workers within one occupation (Holden, 2016). The small size of the unions takes away incentives to take into account wider economic consequences of their demands. Wage demands are often based either on the wish to correct perceived unfairly low wages from the past, or on recent wage gains of other groups. While confederations are generally in favour of greater co-ordination and moderation in wage demands, they do not have effective control over their member unions.

A more co-ordinated structure of wage setting is needed. The degree of co-ordination in many other countries, notably other Nordic countries, is higher. In Denmark and Sweden the co-ordination across sectors is based on the pattern-setting agreements negotiated in the manufacturing export industries. The peak associations ensure co-ordination but are not directly involved in the bargaining processes. In both countries, mediating institutions are strong and have an important role. In Norway, the peak associations often bargain directly with one another. The manufacturing export industry sets the pattern, and the mediating institutions play an important role in providing largely uniform outcomes. In Finland, on the other hand, where tripartite incomes policy has persisted, the peak associations and the government set guidelines for wage increases to be followed by the bargaining parties at the branch level. Here again, the basis is the manufacturing export industry (Andersen et al., 2015; Andersen et al., 2014a and 2014b).

Pattern-setting wage co-ordination has also been present in Germany (Visser, 2016). A high degree of employer organisation and strong unions, especially in manufacturing, combined with pattern bargaining allowed Germany in the 1970s and 1980s to have a high degree of wage bargaining co-ordination. The union IG Metall leads and other industries in practice settle wage increases within 1 percent of the engineering agreement. IG Metall is very powerful and acts as trend-setter also in other domains outside wage increases, such as having negotiated for the "shorter working hours" schedule and a car wrecking subsidy scheme during the crisis. In the Netherlands, the main union confederations since 1993 have issued an annual recommendation on maximum wage increases, depending on past developments in inflation and productivity, and in any given year actual wage increases have stayed below this maximum (Visser, 2016).

Another way of setting wages is by state guided co-ordination, via indexation, wage freezes or wage floors or ceilings. In Belgium, wages are indexed to increases in costs of living, but there is a ceiling for wage growth that needs to be respected by the social partners. The ceiling takes into account forecasts of wage trends in Belgium's neighbours – Germany, France and the Netherlands – in order to maintain competitiveness. The national-level negotiations take place in the context of an official technical report which sets out the forecast of wage trends in these countries and the government has the power to intervene if negotiating parties cannot agree on a figure within these limits (OECD, 2017a and 2017b; Fulton, 2015). The system, however, has allowed for rapid wage increases, both because of a tendency to overestimate growth of wages in neighbouring countries, and because inflation

in Belgium has been relatively high. The system is currently under review to better safeguard competitiveness (OECD, 2017b).

In the examples above a lot of co-ordination takes place informally within employer and worker confederations which ensures that wage developments do not get out of hand. When there is trust in the system, co-ordination can work better. In Iceland, too, higher co-ordination within (and also between) main labour confederations could help ensure that unions are on the same page about desirable wage demands. Likewise, higher co-ordination and discipline among employers could guarantee that there is not too much unco-ordinated wage drift between rounds that can result in large shifts in relative wages.

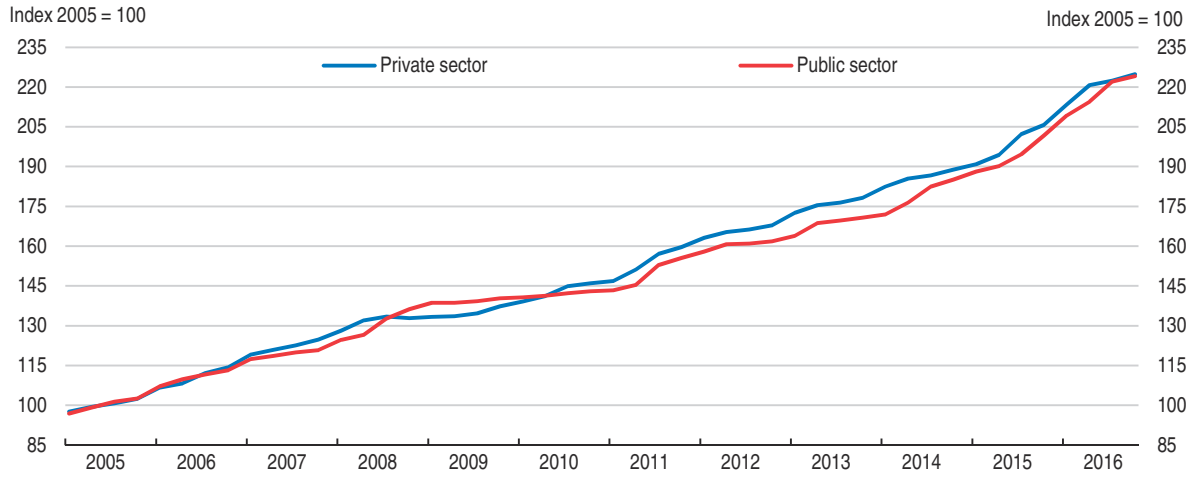
Icelandic social partners within the framework of the SALEK agreement have been inclined to follow the Nordic example of wage co-ordination based on pattern-setting sectors, in particular that of Norway. There are many advantages of this system. First, the rest of the economy follows the wage norm negotiated in a sector exposed to foreign competition, most often manufacturing. Competitiveness concerns are hence taken into account. Second, the wage norm is an outcome of negotiations rather than a unilateral rule, so the norm is more likely to receive a wider buy-in from the social partners. Lastly, Iceland and other Nordic countries share many cultural and institutional similarities, so the Nordic systems are a natural choice of benchmark.

However, finding an appropriate pattern-setting sector for Iceland is a challenge. Based on the Norwegian model, Holden (2016) and SALEK (2016) discuss criteria that such a sector would need to fulfil. The sector should a) be competitive, reflecting the general competitive position of the country; b) be stable, where product prices and production should not fluctuate too much; c) not be based on natural resources and thus exposed to volatile commodity prices; d) have reasonably powerful negotiating organisations with some influence in the rest of the economy; and e) be credible for the general economic context of Iceland. Five candidate sectors of importance for the Icelandic economy are discussed: fisheries, fish processing, power-intensive industries, tourism and other manufacturing (excluding food processing and power intensives). But considering the above criteria, only "other manufacturing" emerges as a tentatively acceptable option. The volatile nature of the Icelandic economy reduces the attractiveness of the system whereby wage norms are based on developments in one particular sector. Moreover, trade unions are organised along occupational lines rather than sectors, further reducing the relevance of such a model.

A more realistic solution for Iceland could be that at the beginning of a negotiation round union and employers' peak organisations issue "wage guidelines" for the negotiating round. The wage guidelines should ideally enjoy broad buy-in from labour market participants. They could come from the SALEK group, or another tripartite forum, or just involving SA-Business Iceland and ASÍ. The advantage of the proposed approach is that the wage norm still comes from the social partners, but it takes on board wider economic context, as it is agreed between major confederations that include members from many parts of the economy. The wage guidelines should also be based on the information received from the technical committee, taking into account external competitiveness, labour productivity, cost of living and economic prospects etc.

Wage setting and wage co-ordination could also be strengthened by introducing a rule for linking public sector wages to private sector developments. There is a lot of social tension in the public sector, and it partly derives from the fact that public sector wages generally lag behind the private sector (Figure 2.13). Employees are entitled to negotiate with their

Figure 2.13. **Wages in the public sector often lag behind the private sector**



Note: From 2016 and onwards the quarterly wage index for the private sector is based on NACE Rev. 2.0. Earlier results are based on NACE Rev. 1.1. and fewer economic activities.
Source: Statistics Iceland.

StatLink http://dx.doi.org/10.1787/888933531326

supervisors once a year, which, in the private sector, often results in additional wage drift, but not in the public sector. It is more difficult for a public sector employee to benefit from the general rise in wages in the economy. Over time, tension develops, and by means of disorderly wage negotiations and strikes, public sector workers eventually manage to obtain large catch-up wage awards. Adalsteinsson (2017) estimates that while public sector workers represent about 20% of employment, they have accounted for 48% of workdays lost due to strikes over the last 37 years. While such strikes can be very disruptive, the large wage adjustments often trigger large wage demands also in other parts of the economy, adding fuel to the fire.

In Denmark, partial indexation of public sector wages to the private sector limits how far relative wages get out of line. Regulation stipulates that if public sector wage increases differ from those in the private sector, 80 per cent of that difference will be adjusted positively or 100 per cent of the difference will be adjusted negatively, depending on the case. This ensures that wage developments in the two sectors are parallel (Andersen et al., 2015). Setting up a rule for linking public sector wages to private ones in Iceland has been agreed also in the SALEK agreement. As the public sector is a big source of industrial disputes in Iceland, this would be a beneficial device for Iceland.

More powers to the state mediator

The lack of wage co-ordination in Iceland and the fragmented structure of trade unions call for a stronger state mediation institution. As wage guidelines will be a result of an agreement between major union and employer confederations, compliance will be partly ensured by co-ordination within confederations. When this breaks down, however, the state mediator should be seen as a promotor and protector of the wage guidelines and when issuing conciliation proposals, they should be in line with the wage guidelines. State mediators in other Nordic countries with their powers and mandates successfully facilitate wage moderation. In fact, it was precisely due to fragmented trade union structure in Denmark and Norway that over years prompted the two countries to enhance the powers of

state mediators (Elvander, 2002). Importantly, sticking to the agreed wage guidelines must be upheld also by the industrial arbitration bodies. In this way, negotiating parties will know from the start – prior to and during negotiations – that they can turn to the mediator office, where they will eventually be presented with a proposal close to the wage guidelines. This knowledge in itself can deter some unions from making unreasonable demands or employers from making unreasonable offers.

Compared to the countries with pattern-setting systems, the Icelandic State Conciliation and Mediation Officer (SCMO) is relatively weak. Its role is defined by the Act on Trade Unions and Industrial disputes, No. 80/1938. According to the act, ten weeks before a valid collective agreement comes up for review, the parties have to jointly draw up a schedule of negotiations and send it to the SCMO. If they fail to do so, SCMO issues a negotiation schedule. However, in practice, these schedules are not respected (SALEK, 2016). The parties may request mediation from the SCMO, request assistance or refer the dispute to the SCMO. In the latter case, the Officer takes over and directs the negotiations. The SCMO is obliged to take over negotiations if a strike or a lockout has been notified.

If attempts at conciliation prove fruitless, the SCMO may submit a compromise proposal to resolve the industrial dispute. The SCMO is required to consult the involved negotiating committees before submitting a compromise proposal, but is not bound by their opinion. In practice, however, a compromise proposal is not formally put for voting without prior consent of the parties to the dispute (SALEK, 2016). A compromise proposal is rejected in a ballot if more than half the votes cast are against it and if the votes against it amount to more than one quarter of the votes according to the voting roll or members' register. Generally, once a collective agreement has been signed the parties waive their right to strike and lockout (peace clause). Cases concerning violations of a collective agreement or disagreements relating to the interpretation of a collective agreement should be resolved by referring the case to the Labour Court, and not by strike.

The Swedish National Mediation Office is explicitly tasked by law to "ensure sound wage developments", by bringing wages in line with the pattern-setting manufacturing agreements (Ibsen, 2013). The mediator in essence never presents a settlement proposal that exceeds the manufacturing pattern. That said, legislation largely has a voluntary basis, and the mediator can hardly take coercive action. The strength comes rather from a common dedication to the system and the mutual trust that has emerged between the autonomous social partners and the impartial mediator. The National Mediator in Norway follows the main framework given by the pattern-setting industries agreement in its proposals. Furthermore, when industrial action is ended by compulsory arbitration, the National Wage Board is also normally guided by the pattern-setting industries agreement, to discourage breakaways (Andersen et al., 2015). The mediation institutions in both countries have powers to postpone industrial action, unlike in Iceland (Holden, 2016).

The Danish mediation institution has quite strong powers. It can postpone a notified industrial action two times for up to 14 days. In Denmark all agreements expire at the same time. The major employer (DA) and worker (LO) confederations then negotiate the wage norm, to be followed by bargaining areas. In case of mediation, mediators propose settlements conforming to the wage norm of manufacturing. If the mediation fails, the bargaining area is transferred to a concatenation – procedure of linking all bargaining areas into one (concatenated) decision that joins areas with agreements to those without agreements. In this way, one deciding vote centralises decision-making according to

majority rule, potentially overturning rejections in specific areas. Unions hold a nation-wide ballot. Rejection of a proposal requires a majority, but if less than 40 percent of eligible voters participate, then at least 25 per cent of eligible voters are required to vote "no" in order to reject the proposal. In practice, the mediation proposal is based on the final negotiations between LO and DA in which the mediator is involved and the proposal will only be submitted if none of the parties objects. The proposal is normally in line with what manufacturing has received (Ibsen, 2013 and 2015; Andersen et al., 2015).

The Icelandic state mediator should be given powers to postpone industrial action for a limited period, in agreement with the social partners. Sometimes, the date for industrial action is already set, but discussions among the two sides and the mediator are ongoing. If the state mediator judges that the discussions are going in the right direction, he/she could propose to postpone industrial action for a limited period to ensure that negotiations are not unnecessarily derailed by it. Postponing industrial action can also help by "cooling down" the parties, and by delaying industrial action in one sector, another sector could reach an agreement first, potentially affecting the outcome in the sector where industrial action is postponed (Holden, 2016). It can also encourage the parties to be better prepared and try harder to reach an agreement.

Due to a large number of small unions and to reduce possibilities for defection, Iceland could also benefit from a procedure akin to the linking procedure in Denmark. When mediation fails, unions that have not reached agreements can be joined together with unions in relevant branches or areas that have reached agreements and be treated as one entity in the ballot. A qualified majority should then be required to reject the mediator's proposal. Figure 2.14 gives an overview of the proposed framework for wage bargaining in Iceland.

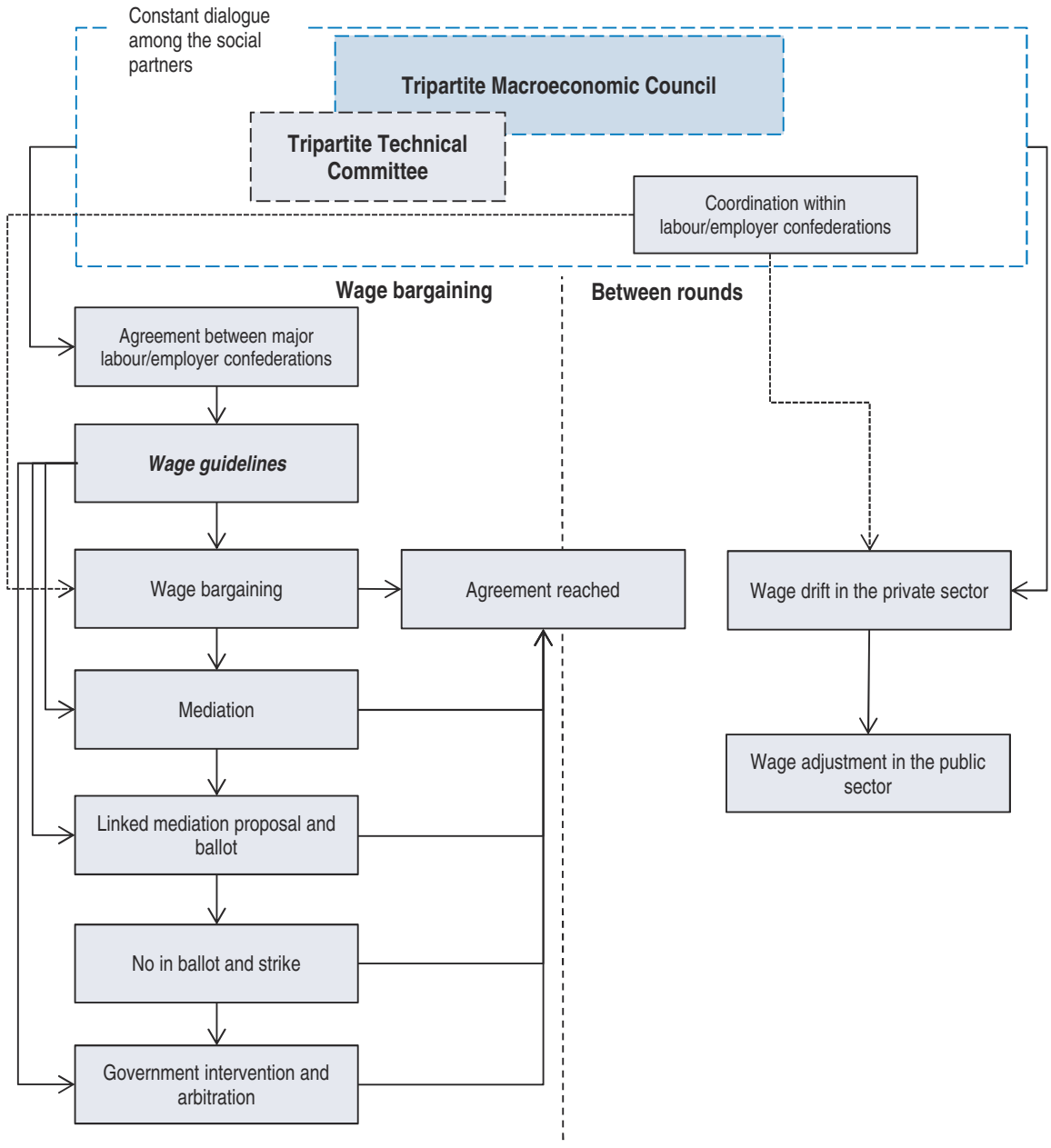
Collective bargaining and the future of work

Demographic shifts, globalisation and new technologies are changing the nature of work and careers, globally. Digitalisation is seen as a key influence on the future of work over the next decades. It is reducing demand for routine and manual tasks while increasing demand for low- and high-skilled tasks, resulting in job polarisation. Estimates show that on average across countries, 9% of jobs are at high risk of being almost fully automated, while for another 25% of jobs, mostly low-skilled, at least 50% of the tasks will change significantly because of automation (Arntz et al., 2016; OECD, 2016b).

Digitalisation has opened the ground for new forms of work organisation. The technological trend has led to the flourishing of the "gig-", "on-demand-", "sharing-" or, the "platform economy" (AirBnB, Uber, Lyft, Blabla Car, Nubelo, Amazon Mechanical Turk, Task Rabbit, YoupiJob, Frizbiz, etc.). The emergence of job polarisation is closely matched by developments in non-standard employment, and independent work in particular. The decline in middle-skill employment goes hand in hand with a decrease of standard work contracts; and workers taking on low *and* high-skill jobs are increasingly likely to be self-employed, part-timers or temporary workers.

New technologies may bring efficiency in matching workers to jobs and tasks, but they also raise questions about wages, labour rights and access to social protection for the workers involved. Workers in the "platform economy" are more likely to have multiple jobs and income sources, therefore the role and meaning of traditional labour market institutions are being challenged. Regulation and policy measures such as statutory working hours, minimum wages, unemployment insurance, taxes and benefits are still modelled on the notion of a

Figure 2.14. **Proposed institutional framework of wage bargaining in Iceland**



Source: OECD analysis; partly based on Figure 1 in Ibsen (2013).

traditional and unique employer-employee relationship. In addition, as independent work becomes more common, an increasing number of workers may not be covered by collective agreements. Relative to standard wage and salary employment, workers in non-standard jobs tend to have fewer rights to social protection, receive less training, often have weaker career progression, and face greater insecurity (OECD, 2016b and 2015d).

The labour market in Iceland has so far effectively protected workers from many of the negative consequences of job polarisation and changes in work organisation. Amid other pressures on the labour market over the last decades – increased international competition, opening of labour markets to foreigners, higher threats to reallocate production abroad –

Iceland and other Nordic countries have managed to preserve the major features of their collective bargaining systems, without jeopardising employment growth or welfare. Unionisation rates and collective bargaining coverage remain high, there is high job security and inequality is low. Industrial relations systems have been robust and flexible enough to face up to the growing challenges.

In Iceland, by law, the rights bargained for in the labour market are automatically extended to everybody – to all wage earners, including temporary contracts, temporary work agency workers and interns. The only group excluded are the self-employed, but by law they are still covered by unemployment insurance and are included in the occupational pension system (SALEK, 2016).

The share of non-standard employment in Iceland – temporary, part-time workers and self-employed – in total employment is about 30%, close to the OECD average (OECD, 2015d). In the last two decades, the incidence of non-standard employment in Iceland has actually decreased, but mostly on the account of reduced part-time work. Furthermore, in Iceland, a larger share of temporary workers gets a full-time permanent job over time than in other OECD countries. Non-standard work can therefore be a "stepping stone" to more stable employment (OECD, 2015d). But as part-time work in Iceland is predominantly done by women, and linked to family and childcare decisions, it is difficult to interpret how much of the change in non-standard employment is driven by technological change. Labour force participation of women in Iceland is high. Moreover, labour market is flexible in Iceland, and part-time/full-time transitions are heavily influenced by the economic cycle (Central Bank of Iceland, 2016).

Nevertheless, the social partners should keep in mind that the world of work is changing and they should be ready to start adjusting now in order to sustain the benefits of the system for the future. Apart from discussions on teleworking, labour market negotiations in Iceland do not seem to systematically touch on other aspects of the digitalisation challenge. Thinking is geared largely towards the traditional (9-5) worker in a recognised sector, rather than non-standard worker in the "platform economy". There are also no new forms of trade unions emerging, such as freelance associations.

In several European countries and in the United States platform-based workers are organising in unions, and trying to engage in collective bargaining (OECD, 2017a). To list some examples, in the United States, for instance, the Freelancers Union promotes the interests of independent workers, including platform-based workers, and currently has more than 250 000 members – although it cannot engage in collective bargaining. There are also cases where traditional unions try to improve coverage of non-standard workers. In Germany, the largest metalworkers' union (IG Metall) has been behind the creation of FairCrowdWork Watch, a platform dedicated to improving digital workers' working conditions. Similarly, ver.di, the United Services Union, is providing legal and support services for crowd-workers. In Italy, the Confederazione Generale Italiana del Lavoro has since 1998 established a specific branch to represent non-standard workers.

Finally, recent technological change has shifted skill demand predominantly towards high-level skills. However, information and communication technologies (ICT) skills will not be enough alone in the future. Other complementary skills, such as problem-solving, literacy and numeracy skills, interpersonal skills and ability to work flexibly will also be very much needed. Workers need to be prepared to evolve constantly their skills and to change jobs over their working life (OECD, 2016c). The social partners should be actively thinking about these

issues. The education system should equip workers with adequate ICT and other problem-solving skills. At the same time, through the existing education funds managed jointly by the unions and employers, the social partners should ensure that life-long learning teaches relevant skills to those who most need them, and in particular to the low-skilled. Training could also be better incentivised by offering time-off for training during working time.

Recommendations on collective bargaining

Key recommendations

- To nurture trust all parties need to participate actively in the Macroeconomic Council.
- Establish a tripartite technical committee to provide reliable and impartial information to wage negotiators.
- Wage negotiations should begin with an agreement on "wage guidelines" for the negotiation round. State mediator (and arbitration bodies) should also base their proposals on these guidelines.
- Increase powers of the state mediator, including the power to delay industrial action for a limited period, in agreement with the social partners, in an effort to achieve a negotiated agreement.

Further recommendations

- Raise co-ordination within confederations – both employer and labour – to increase adherence to the wage guidelines and to reduce unco-ordinated wage drift.
- Prevent the public sector from developing large pay gaps to the private sector. Introduce partial indexation of public sector wages to the private sector.
- Introduce a linking procedure, whereby unions without agreements can be joined with unions in the same branch where agreements have been reached and be treated as one entity in the ballot. Qualified majority should be required to reject the proposal.

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