Monetary Bulletin 2018/1[1]

The outlook is for output growth among Iceland's trading partners to exceed the forecast in the November *Monetary Bulletin*. In spite of this, growth in exports from Iceland has eased from the H2/2016 peak. To some extent, this reflects the rise in the real exchange rate and the adjustment of the tourism sector to a sustainable growth path after the boom of the past several years. The slowdown in export growth in H2/2017 is also due to a sharp contraction in exports of intellectual property and trade-related services in the pharmaceuticals industry, as well as the impact of the early-2017 fishermen's strike on marine product exports.

Because export growth has eased, GDP growth has retreated from its 2016 peak. According to preliminary figures from Statistics Iceland, GDP growth measured 4.3% in the first three quarters of 2017. It is estimated at 3.4% for the year as a whole, slightly below the November forecast, owing primarily to the more rapid decline in export growth. The outlook for 2018 is similar, with GDP growth projected at 3.2%, marginally below the November forecast. As in November, GDP growth is expected to ease slowly towards its long-term trend rate over the next two years. In spite of weaker GDP growth in 2017 and 2018, domestic demand growth has been stronger than previously anticipated, at an estimated 7% in 2017 and a projected 4.4% this year. This stronger demand growth is due primarily to more rapid investment growth and greater fiscal easing than previously forecast.

As expected, the reduction in total hours worked and in the labour participation rate measured in Statistics Iceland's Q3/2017 labour force survey (LFS) reversed in Q4, as job creation remains strong according to pay-as-you-earn (PAYE) records and labour importation is likewise robust. This large-scale importation of labour offsets rapid demand growth and has caused the output gap to narrow from its late-2016 peak.

Inflation measured 1.8% in Q4/2017 and rose to 2.4% in January 2018. It has therefore risen since mid-2017, as has underlying inflation. Inflation expectations appear broadly consistent with the target, however. Inflation is close to target and is expected to remain there throughout the forecast horizon. For much of this year it will be higher than was forecast in November, but from end-2018 onwards it will be somewhat lower. This is mainly because the output gap is projected to be smaller than was assumed in November, owing to weaker output growth in 2017 and 2018 and the prospect of more rapid growth in the working-age population.

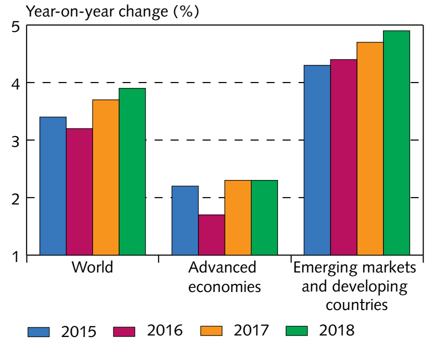
1. The analysis appearing here is based in large part on the Bank's assessment of economic developments, published in November 2017 in *Monetary Bulletin* 2017/4, and on the updated forecast presented here. It is based on data available in early February.

The global economy and terms of trade

- Global GDP growth is estimated at 3.4% in Q3/2017, more than had generally been expected. Trading partner growth also exceeded forecasts, at an estimated 2.5% in Q3. It outperformed forecasts in nearly all trading partner countries, but particularly in the euro area, Norway, and Japan. In the US, GDP growth picked up over the course of 2017 and is at its strongest in two years. Growth measured 2.8% in the euro area, the strongest in more than six years. In the UK, it measured 1.7% in Q3, after rising slightly from the previous quarter, and revised figures from earlier quarters showed stronger growth than previously estimated.
- Since the publication of the November *Monetary Bulletin*, key indicators for the euro area have turned out more favourable than market agents had expected. Leading indicators suggest that output growth in the region will hold broadly steady at the recent pace, which is an improvement over the slowdown expected in November. At the same time, consumer and corporate sentiment is improving even further. Indicators for the US have also exceeded expectations, suggesting that growth will continue at the current pace in coming quarters. This is due in particular to improved prospects for the housing and labour markets, although there are signs of increased investment as well, not least because of the corporate income tax reduction taking effect at the beginning of this year. The International Monetary Fund (IMF) estimates that the tax cuts will add more than 1% to GDP when the effects peak.
- Trading partners' GDP growth is projected to average 2.3% this year, some 0.3 percentage points above the November forecast. The brighter outlook for 2018 is due mainly to improved growth prospects for the eurozone and the US. The GDP growth outlook for 2019 is also stronger for both regions, whereas for 2020 it is broadly unchanged from the Bank's November forecast. The forecast for trading partners' imports changes accordingly.
- Despite the prospect of increased GDP growth and rising fuel prices, the inflation outlook for Iceland's trading partners is virtually unchanged since November. In most trading partner economies, underlying inflation remains below target. It is lowest in Japan, Switzerland and the eurozone, where it has been about 1% for the past four months, as opposed to 1.8% in the US and 2.5% in the UK.
- In the US, increased GDP growth in the past year has brought the economy close to full employment. The US Federal Reserve has therefore continued to raise interest rates and scale down its bond holdings. Market agents expect faster monetary tightening because of the recent tax cuts and the improved GDP growth outlook. Central banks in several other advanced economies have begun raising interest rates as well, including the Bank of England and the Bank of Canada. The European Central Bank

Chart 1

Global real GDP growth 2015-2018[1]

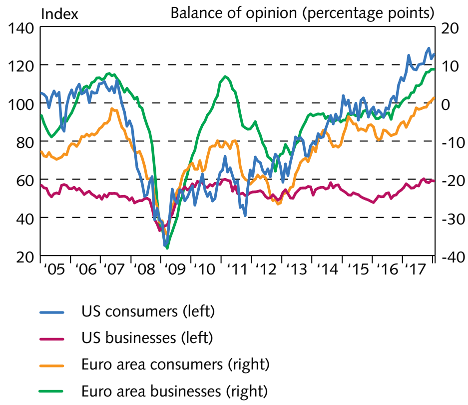


1. International Monetary Fund forecast from Q4/2017.
Source: International Monetary Fund.

Chart 2

Economic sentiment in the euro area and the US[1]

January 2005 - January 2018

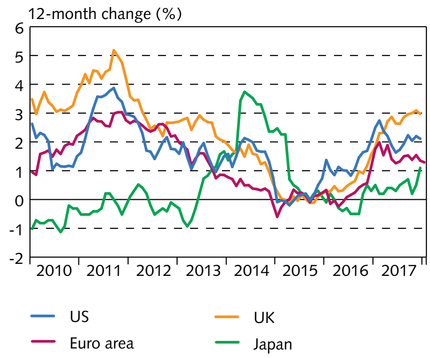


1. European Commission survey for the euro area but ISM (PMI) and The Conference Board for the US.
Source: Thomson Reuters.

Chart 3

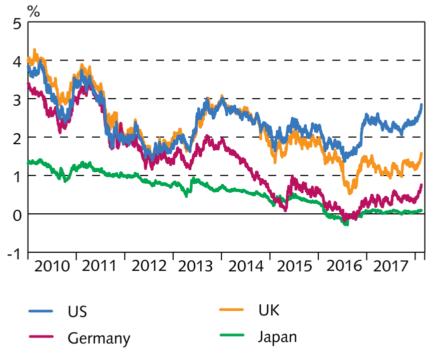
Inflation in selected industrialised countries

January 2010 - January 2018



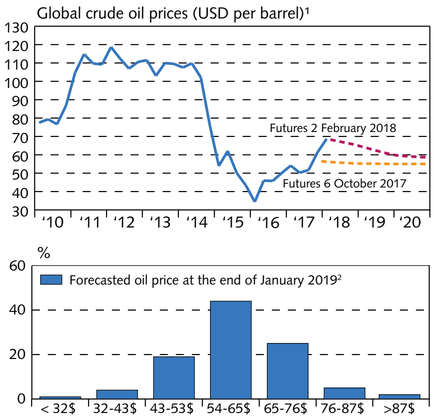
Source: Thomson Reuters.

Chart 4
10-year government bond yields in selected industrialised countries
1 January 2010 - 2 February 2018



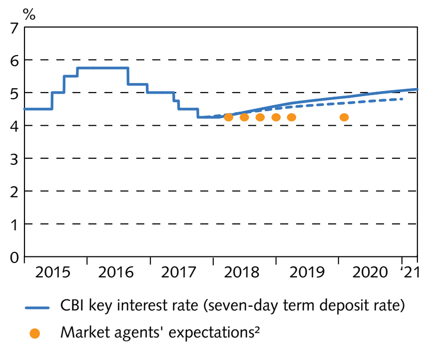
Source: Thomson Reuters.

Chart 5
Oil prices
Q1/2010 - Q4/2020



1. Brent crude, price per barrel in USD. 2. Survey by Consensus Forecasts where 100 market analysts are asked to project the USD price per barrel of Brent crude as of end-January 2019.
Sources: Bloomberg, Consensus Forecasts.

Chart 6
Central Bank of Iceland key interest rate and expected developments[1]
Daily data 1 January 2015 - 31 March 2021



1. The Central Bank's key interest rate and Treasury bond yields were used to estimate the yield curve. Broken lines show forward market interest rates prior to MB 2017/4. 2. Estimated from the median response in the Central Bank's survey of market agents' expectations concerning the collateralised lending rate. The survey was carried out during the period 29-31 January 2018.
Source: Central Bank of Iceland.

(ECB) has announced, however, that it will keep rates unchanged for the present. The ECB also intends to increase its bond holdings through September and perhaps beyond, if need be.

- Long-term interest rates in the US have risen in the recent term and are now at their highest since 2014. In spite of the increased interest rate differential between the US and the euro area, the euro has continued to appreciate against the dollar, to its strongest in three years.

- Global oil prices have risen virtually unimpeded since the summer and are now at 68 US dollars per barrel, nearly 25% above the January 2017 average. The OPEC countries' decision to cut oil production is considered the main driver of the rise in prices, although the improved global economic outlook has also had an impact. The price of oil has risen somewhat more than was forecast in November, but futures prices suggest that it will subside again as the forecast horizon progresses. The improved global economic outlook is also reflected in a larger-than-expected rise in aluminium prices.

- Preliminary figures indicate that marine product prices weakened more last year than was forecast in November, falling by 1%. The outlook is for a roughly 2% increase in 2018 and the years to follow, as prospects for the Icelandic marine products market are generally good and catch quotas for cod and haddock in the Barents Sea will be smaller this year than in 2017. In spite of less favourable developments in marine product prices, terms of trade improved more in 2017 than previously assumed. They are expected to remain unchanged this year, as higher aluminium and marine product prices will offset the higher price of imported fuel. Because of the more favourable outlook for marine product prices in 2018, terms of trade will improve more than was forecast in November.

- In terms of relative consumer prices, the real exchange rate rose by nearly 12% year-on-year in 2017, to about 21% above the 25-year average by December, and is expected to rise slightly more this year. In terms of relative unit labour costs, it is expected to rise by just under 5%, although it is currently about 27% above its historical average.

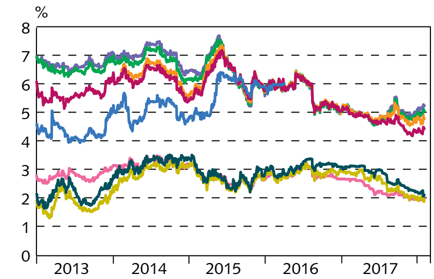
Monetary policy and domestic financial markets

- The Central Bank of Iceland Monetary Policy Committee (MPC) decided to hold the Bank's interest rates unchanged at its November and December meetings. Prior to the publication of this *Monetary Bulletin*, the Bank's key interest rate – the rate on seven-day term deposits – was 4.25%, down from 5.75% in August 2016. The Bank's real rate has fallen since the November *Monetary Bulletin*. In terms of the average of various measures of inflation and one-year inflation expectations, it has fallen by

0.2 percentage points, to 1.6%, and in terms of current twelve-month inflation it has fallen by 0.5 percentage points, to 1.8%. Commercial banks' and pension funds' deposit and lending rates have developed broadly in line with Central Bank rates.

- According to the Bank's market expectations survey, carried out in late January, respondents expect the Bank's key rate to be held unchanged at 4.25% for the next two years. The forward yield curve is slightly upward-sloping, however.
- Nominal Treasury bond yields have risen by 0.1-0.4 percentage points since just before the November *Monetary Bulletin*. Yields on longer bonds have risen most, and the yield slope has therefore increased. Yields on indexed Treasury and Housing Financing Fund (HFF) bonds fell by 0.1-0.3 percentage points over the same period. The ten-year breakeven inflation rate in the bond market has therefore risen. This may reflect expectations of rising inflation but could also be due to an increase in the inflation risk premium and the term premium on nominal bonds, which indicators suggest has been unusually low in the recent past.
- Capital inflows into new investments in the domestic bond market have eased to 4 b.kr. in Q4/2017, 2.4 b.kr. of which was used to buy Treasury bonds and 1.6 b.kr. deposited to special reserve accounts. Inflows into listed equities have increased, however, to 15.4 b.kr. in Q4 and 48 b.kr. for the year as a whole, considerably more than in 2016.
- Measures of risk premia on the Treasury's foreign obligations declined in December after Fitch Ratings upgraded Iceland's sovereign credit rating to A and the Treasury issued a new eurobond in December. They are now 0.1-0.5 percentage points lower than just before the publication of the November *Monetary Bulletin*.
- The króna has depreciated by just under 2% in trade-weighted terms since just before the November *Monetary Bulletin*. Exchange rate volatility increased in H1/2017, owing to the liberalisation of the capital controls and differing expectations about the exchange rate early in the year. Volatility subsided again in the autumn, and the króna has been relatively stable since October.
- The Central Bank significantly scaled down its foreign exchange market activity in 2017 and has not intervened in the interbank market since the last *Monetary Bulletin*. The Bank bought about 76.7 b.kr. in foreign currency from market makers in the foreign exchange market in 2017 and sold about 6.4 b.kr. Its net purchases therefore amounted to 70.3 b.kr., considerably below the 2016 total of 386.2 b.kr. As a result, the Bank's share of total market activity fell from 55% to 20%, and total market turnover fell by 42% between years.
- The outlook is for the króna to be weaker in Q1/2018 than was forecast in November. The baseline forecast is based on the technical assumption that the króna will appreciate slightly this year and throughout the forecast horizon. The exchange rate

Chart 7
Nominal and indexed bond yields
Daily data 2 January 2013 - 2 February 2018

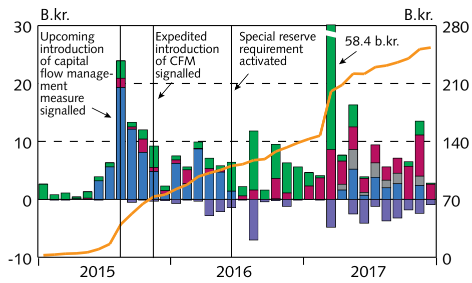


Nominal Treasury bond maturing in:
2016 2019 2020 2025 2031

Indexed Treasury or HFF bond maturing in:
2021 2024 2044

Source: Central Bank of Iceland.

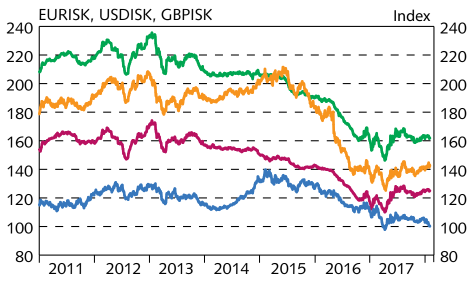
Chart 8
Capital flows due to registered new investments[1]
January 2015 - December 2017



Capital inflows into Government bonds (left)
Capital inflows into listed shares (left)
Other capital inflows (left)[2]
Capital inflows into special reserve accounts (left)
Capital outflows (left)
Cumulative net capital flows (right)

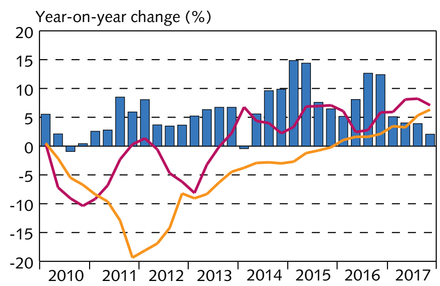
1. Investment commencing after 31 October 2009 and based on new inflows of foreign currency that is converted to domestic currency at a financial instititution in Iceland. For further information, see the Foreign Exchange Act, no. 87/1992. 2. Other inflows in March 2017 derive almost entirely from non-residents' acquisition of a holding in a domestic commercial bank.
Source: Central Bank of Iceland.

Chart 9
Exchange rate of foreign currencies against the króna
Daily data 3 January 2011 - 2 February 2018



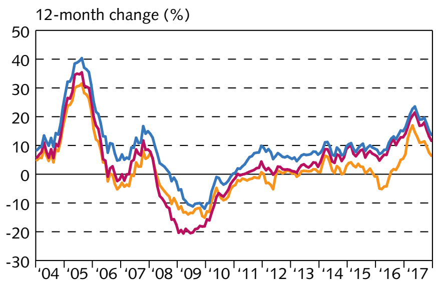
Source: Central Bank of Iceland.

Chart 10
Money holdings, lending, and nominal demand
Q1/2010 - Q4/2017



1. Q4/2017 GDP is from the MB 2018/1 baseline forecast. 2. Excluding deposits owned by failed financial institutions. 3. Loans to resident entities, excluding the Treasury, deposit institutions and failed financial institutions. Adjusted for reclassification and for the Government's debt relief measures.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 11
Capital area house prices
January 2004 - December 2017



Sources: Registers Iceland, Statistics Iceland.

path in the current baseline forecast is somewhat lower than was assumed in November, however.

- M3 adjusted for the deposits of the failed financial institutions grew by 7.1% year-on-year in Q4/2017, below the growth rate in Q2 and Q3 but well above estimated nominal GDP growth. Household deposits are still increasing rapidly, while growth in financial sector deposits has eased.

- Growth in lending to domestic borrowers has picked up. The stock of credit system loans grew by 6.3% year-on-year in nominal terms in Q4/2017, after adjusting for the Government's debt reduction measures. Corporate lending grew by 9% in nominal terms in Q4, while household lending grew by 5.3%, about the same as in Q3.

- Capital area nominal house prices rose by 13.7% year-on-year in December and rent prices by nearly 12%. House price inflation has slowed markedly from the May 2017 peak of 24%. The mismatch that developed between house prices and the macroeconomic fundamentals that generally determine them has narrowed again. At the same time, the number of flats advertised for sale in greater Reykjavík rose sharply, the number of purchase agreements fell, and the average time-to-sale grew longer.

- Share prices fell in the final months of 2017 but turned around at the beginning of this year, and most have risen year-to-date. The OMXI8 index is now 2.6% higher than before the publication of the last *Monetary Bulletin*.

- Household and corporate debt increased by 1½% in nominal terms in Q3/2017 and has remained virtually unchanged relative to GDP since year-end 2016. Non-performing loan (NPL) ratios for households are still declining, but corporate NPL ratios have fluctuated between 8% and 9% for the last year and a half. Corporate insolvencies also declined in number in 2017.

- Private sector financial conditions are largely as they were in November, after a marked improvement in the quarters before then.

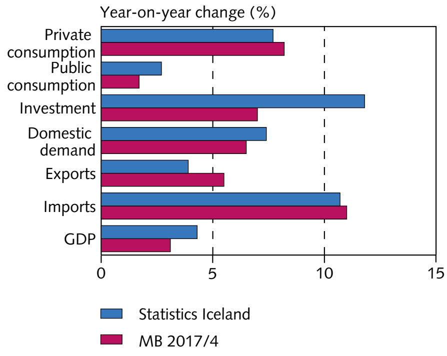
Demand and GDP growth

- According to preliminary figures from Statistics Iceland, GDP growth measured 3.1% in Q3/2017 and 4.3% for the first nine months of the year. It was a full 1 percentage point stronger than was assumed in the November forecast, owing mainly to stronger-than-projected investment and inventory accumulation. Domestic demand growth was therefore considerably stronger than forecast, at 7.4%, albeit offset by weaker export growth.

- Private consumption growth slowed somewhat in Q3 in comparison with H1/2017, measuring 6.7% year-on-year during the quarter and 7.7% in the first nine months of the year. The increase in Q3 was smaller than was forecast in November, but growth in household demand was brisk nonetheless. It is estimated to have been broadly unchanged between Q3 and Q4. Private consumption growth is estimated to have measured 7.5% in 2017 and is forecast to be roughly the same this year as in H2/2017, at 6.4%. It is expected to ease starting in 2019 but remain broadly in line with growth in real disposable income over the forecast horizon as a whole.

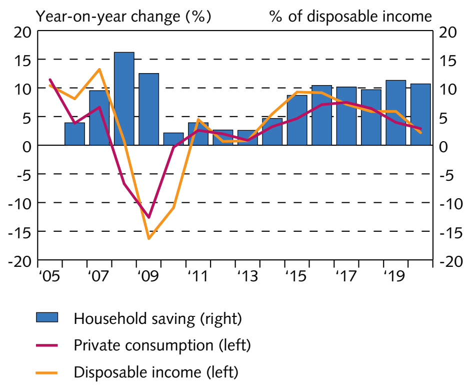
- Investment grew by 19.4% in Q3/2017, and growth in all key subcomponents outpaced the November forecast. Business investment grew by nearly 10% and residential investment by 48%. Over the first nine months of the year, investment grew by nearly 12%, almost 5 percentage points more than was forecast in November. This played a part in the stronger-than-expected GDP growth for the period. Investment is estimated to have grown by 9% last year, mostly due to a surge in residential investment, and is forecast to grow by 3.8% this year. This year's growth is due to residential investment and general business investment, whereas investment in energy-intensive industry and in ships and aircraft is expected to contract. Increased investment in aircraft means that investment will grow somewhat faster in 2018 and 2019 than was forecast in November but more slowly in 2020. Excluding aircraft, developments in investment are now projected to be well in line with the November forecast. If the forecast materialises, the investment-to-GDP ratio will remain around 22% for the entire forecast horizon.
- The National Budget for 2018 was passed with a surplus of 1.2% of GDP. This is 0.3 percentage points less than was assumed in the November forecast, which was based on the 2018 fiscal budget proposal presented by the previous Government last September and the fiscal plan approved by Parliament in spring 2017. Because economic developments were more favourable than had been forecast, cyclical revenues increased upon the revision of the revenue projections. In spite of this, the outcome will deteriorate because of discretionary spending measures. Total expenditures increased by 17 b.kr. between the first budget proposal and the National Budget passed by Parliament, and the discretionary spending measures include a 4 b.kr. increase in public consumption and a 3 b.kr. increase in investment. This is in addition to strong spending growth in 2017, with public consumption increasing by 2.7% year-on-year in the first three quarters and public investment by nearly a third, according to national accounts figures. Based on the statements made by the current Government and newly published budgets for the country's largest municipalities, expenditure growth is now expected to be stronger than previously forecast.
- The new Government's fiscal strategy for the upcoming five years was presented in December. Even though it is assumed that the Treasury will be operated at a surplus over the period, the fiscal strategy entails significant fiscal easing relative to the previous Government's strategy. In the last *Monetary Bulletin*, it was estimated, based on the then-current fiscal strategy, that the fiscal

Chart 12
National accounts for Q1-Q3/2017



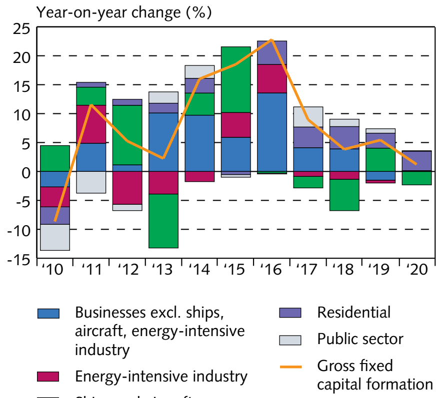
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 13
Private consumption, real disposable income, and household saving 2005-2020[1]



1. There is some uncertainty about Statistics Iceland's figures on households' actual income levels, as disposable income accounts are not based on consolidated income accounts and balance sheets. The saving ratio is calculated based on the Central Bank's disposable income estimates, as Statistics Iceland figures are rescaled to reflect households' estimated expenses over a long period. Central Bank baseline forecast 2017-2020.
Sources: Statistics Iceland, Central Bank of Iceland.

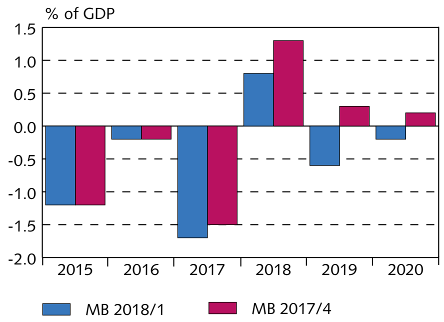
Chart 14
Gross fixed capital formation and contribution of main components 2010-2020[1]



1. Central Bank baseline forecast 2017-2020.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 15

Change in central government cyclically adjusted primary balance 2015-2020[1]

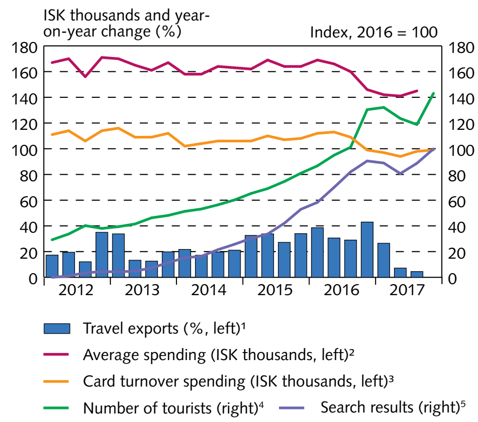


1. Primary balance is adjusted for one-off revenues and expenditures (e.g., dividends and accelerated write-downs of indexed mortgage loans). Central Bank baseline forecast 2017-2020.
Sources: Ministry of Finance and Economic Affairs, Statistics Iceland, Central Bank of Iceland.

Chart 16

Indicators of tourism sector activity

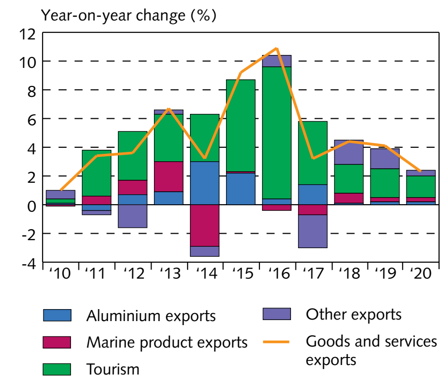
Q1/2012 - Q4/2017



1. Year-on-year change in travel exports, at constant prices. 2. Seasonally adjusted average spending per tourist in Iceland, according to services exports data. 3. Seasonally adjusted payment card turnover spending per tourist (excluding international airfares and public levies). 4. Seasonally adjusted passenger departures via Keflavík Airport. 5. A principal component model combining the frequency of six different Google search strings relating to travel to Iceland (seasonally adjusted).
Sources: Centre for Retail Studies, Google Trends, Isavia, Statistics Iceland, Central Bank of Iceland.

Chart 17

Exports and contribution of subcomponents 2010-2020[1]



1. Aluminium exports as defined in the national accounts. Tourism is the sum of "travel" and "passenger transport by air". Central Bank baseline forecast 2017-2020.
Sources: Statistics Iceland, Central Bank of Iceland.

stance would tighten in coming years, mostly in 2018 (by 1.3% of GDP) and then by an additional 0.5% in 2019-2020. The 2018 National Budget entails less fiscal tightening than previously assumed, or 0.8% of GDP. Furthermore, the fiscal stance will ease in 2019 and 2020 instead of tightening slightly, as was provided for in the fiscal plan presented last autumn. The main reason for the change is that plans to increase value-added tax (VAT) on tourism have been abandoned while plans to lower the upper VAT bracket apparently remain in place. Over the period 2017-2020, the fiscal stance will be more accommodative than was assumed in the November *Monetary Bulletin*, by a total of 2% of GDP.

- Preliminary figures from Statistics Iceland indicate that services exports contracted by 0.1% in Q3/2017 despite healthy growth in tourism exports. This is due to an unexpected 35% contraction in other exported services, owing to a contraction in exports of intellectual property and business services of pharmaceuticals firms. In Q4, payment card turnover per foreign tourist in Iceland rose slightly year-on-year in krónur terms, after having contracted for four quarters in a row. This is stronger growth than was assumed in the Bank's November forecast, but the increase in foreign tourists was smaller than previously projected during the quarter. The number of internet searches for flights and accommodation in Iceland is at an all-time high, however, which is well in line with other indicators implying continued robust growth in tourism. Growth in goods exports was also weaker than expected, owing mainly to a larger-than-anticipated contraction in marine product exports and a smaller increase in aluminium exports. Owing to this, plus reduced growth in services exports, total exports are now estimated to have grown by 3.2% in 2017, nearly 3 percentage points below the November forecast.

- The outlook is for growth in marine product exports to pick up this year relative to the November forecast, as unutilised fishing quotas at the year-end were significantly larger than in recent years and were transferred between fishing seasons. This is offset by weaker growth in services exports. Growth in total exports is forecast to rise by 4.4% this year and then ease in the two years thereafter, in part because of a slowdown in tourism growth.

- Combined goods and services imports are estimated to have increased by 11% in 2017, which is less growth than in the previous year and slightly below the November forecast. A partial cause is the contraction in imported business services among pharmaceuticals companies. In addition, Icelanders' overseas travel slowed more than expected. It is still assumed that import growth will be strong this year, albeit somewhat less so than in the past two years. Imports are expected to grow by 6.3% in 2019 and 1.7% in 2020. Excluding ships and aircraft, however, import growth is estimated at 3-4% in each of the two years.

- The trade surplus is estimated to have shrunk from 6.3% of GDP in 2016 to 3.7% in 2017, whereas the November forecast assumed a 2017 surplus of 4.2%. The turnaround is due mainly to reduced exports in the fishing and pharmaceuticals industries. Another result of pharmaceuticals companies' reduced activity in Iceland is that their external assets and liabilities as listed in Iceland's international investment position declined by nearly 15% of GDP in Q3/2017. Revenues and expenses from foreign direct investment therefore decline significantly, and the balance on primary income is expected to be slightly more negative. The balance on primary and secondary income showed a deficit in Q3/2017, for the second quarter in a row. This trend is expected to continue. The estimate of last year's current account balance has changed from the November forecast, and the surplus is now estimated at 3.5% of GDP, as opposed to the 4% projected in November. It is expected to narrow further this year, to roughly 2% of GDP, and then remain broadly unchanged in the two years thereafter.

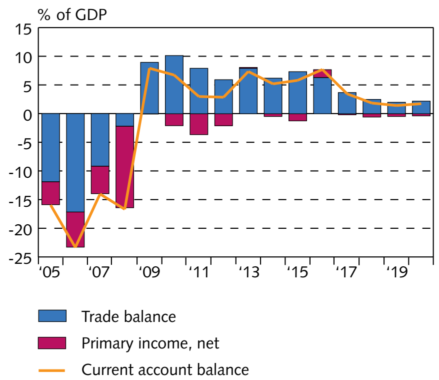
- Year-2017 GDP growth is estimated at 3.4%. The main driver of growth was robust domestic demand, private consumption in particular, offset by the strongly negative contribution from net trade. GDP growth is expected to remain around this level in 2018, at 3.2%, as a more favourable contribution from net trade will counterbalance reduced growth in private consumption and investment. It is forecast to subside to 3% in 2019 and 2.7% in 2020. Growth in domestic demand is now forecast to be somewhat stronger in 2017 and 2018 than was forecast in November, owing to increased investment and public consumption, although output growth will be weaker in both years because of more sluggish export growth. In 2019, domestic demand is projected to exceed the November forecast; therefore, the outlook is for stronger GDP growth as well. GDP growth for 2020 has also been revised marginally upwards, owing to a more favourable contribution from net trade.

Labour market and factor utilisation

- According to the Statistics Iceland labour force survey (LFS), year-on-year job growth measured 1.4% in Q4/2017 and the average work week grew shorter by 0.6%. Total hours worked therefore increased by 0.8%, compared to a 1.4% contraction recorded by the LFS in Q3. As is discussed in *Monetary Bulletin* 2017/4, the Q3 contraction in total hours probably reflects how poorly the LFS captures growth in Iceland's foreign labour force. This is supported by an increase in the number of jobs according to pay-as-you-earn (PAYE) records, which indicate a 4.3% increase in the number of employed persons in Q3, whereas the LFS indicated no change. PAYE records also show a much larger increase in the number of employed in October than the LFS does, which could indicate that the LFS still underestimates employment growth.

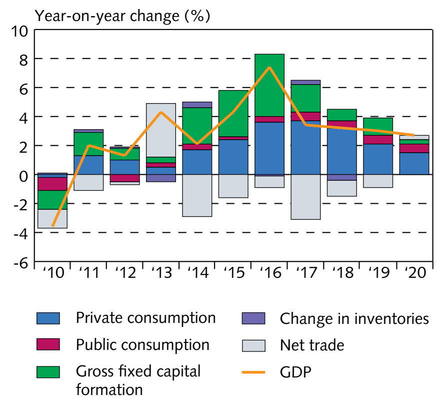
- The seasonally adjusted labour participation rate rose by nearly 1 percentage point between quarters in Q4/2017, after a marked contraction in the previous quarter. As is discussed in *Monetary Bulletin* 2017/4, this is probably due to a sampling error in the

Chart 18
Current account balance 2005-2020[1]



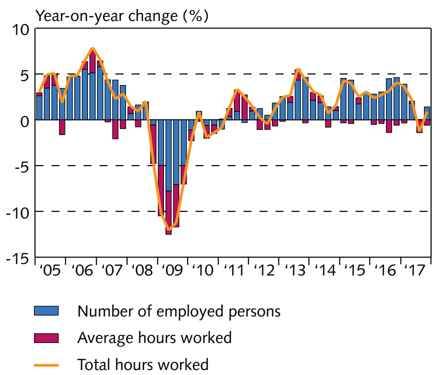
1. Including secondary income. Current account balance excludes the effect of the failed financial institutions (2008-2015) and the pharmaceuticals company Actavis (2009-2012) on primary income. Also adjusted for the failed financial institutions' financial intermediation services indirectly measured (FISIM). Central Bank baseline forecast 2017-2020.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 19
GDP growth and contribution of underlying components 2010-2020[1]



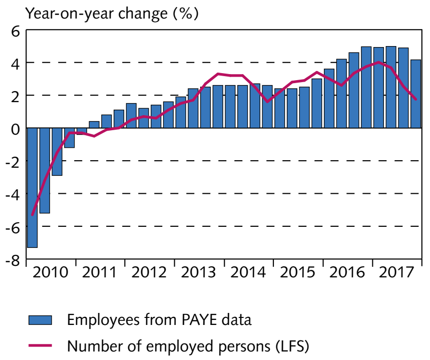
1. Central Bank baseline forecast 2017-2020.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 20
Employment and hours worked[1]
Q1/2005 - Q4/2017



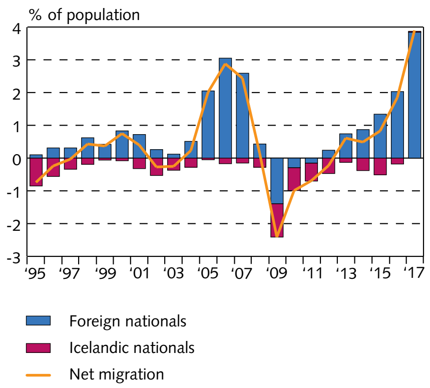
1. Quarterly averages of monthly figures.
Source: Statistics Iceland.

Chart 21
Various measures of the number of employed persons[1]
Q1/2010 - Q4/2017



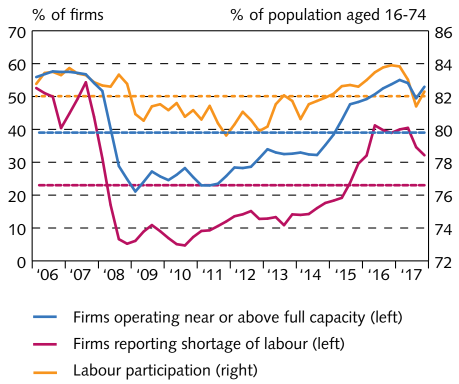
1. Four-quarter moving average. The Q4/2017 figure for PAYE data is based on the October value.
Source: Statistics Iceland.

Chart 22
Net migration 1995-2017[1]



1. Net migration of persons aged 20-59 relative to total population of the same age at the beginning of the year.
Source: Statistics Iceland.

Chart 23
Capacity utilisation and labour participation[1]
Q1/2006 - Q4/2017



1. Indicators of factor utilisation are from the Gallup Sentiment Survey conducted among Iceland's 400 largest companies, and labour participation data are from Statistics Iceland's Labour Force Survey. All data are seasonally adjusted. Broken lines show period averages.
Sources: Gallup, Statistics Iceland, Central Bank of Iceland.

survey. Although the employment rate rose as well, the increase was less than the increase in the participation rate, and unemployment therefore rose from 2.6% to 3% between quarters.

- Labour importation remains strong. The number of foreign nationals aged 20-59 net of emigrants rose by 0.6% of the population in Q4/2017 and by 3.8% in 2017 as a whole, the largest single-year increase ever measured. Employees of employment agencies and foreign services firms declined in number by nearly 500 between end-Q3 and end-Q4 but increased significantly over the year as a whole. This group accounted for 1% of the labour force as of year-end 2017, an increase of 57% between years. The number of issued work permits increased year-on-year by 15% in 2017 and about a third in 2016.

- According to Gallup's winter survey of Iceland's 400 largest firms, job growth is expected to continue in H1/2018. The number of firms interested in adding on staff in the next six months exceeded the number planning redundancies by over 15 percentage points, slightly less than in the autumn survey. The outlook is for demand to be strongest in transport, transit, tourism, and specialised services, while the survey indicates a possible downturn in the number of fishing industry employees.

- After adjusting for seasonality, just under a third of participants in the winter survey considered themselves short-staffed, which is about the same as in the autumn survey but down from about 40% in the winter 2016 survey.

- Even though a smaller number of firms consider themselves understaffed, a larger number report that they would have difficulty responding to an unexpected surge in demand. After adjusting for seasonality, 53% of respondents consider their firms to be operating at or above capacity (nearly 14 percentage points above the historical average), as compared with 49% in the previous survey. Firms that sell goods abroad appear to report more difficulty responding to increased demand than do those selling only in the domestic market.

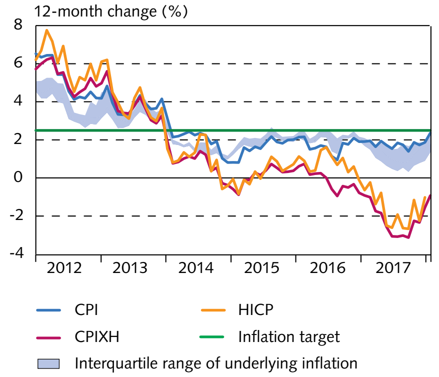
- Growth in total hours worked is forecast to measure 2.3% this year and then taper off in the next two years. This is a slightly larger increase than was forecast in November; nevertheless, the employment rate is expected to be lower throughout the forecast horizon, owing to a faster rise in the working-age population. This accords with Statistics Iceland's new population forecast, although it does not assume that population growth will be as strong as in that forecast. Unemployment is projected to average 2.8% this year and, as in the Bank's previous forecasts, to rise as the forecast horizon progresses. Because of slower GDP growth in 2017 and 2018 and more rapid gowth in working-age population, the output gap will be somewhat narrower than was projected in November. As before, it is assumed to have peaked in 2016 and is expected to close by the end of the forecast horizon.

Inflation

- Inflation measured 1.8% in Q4/2017, just below the November forecast of 1.9%. During the quarter, it was driven mainly by rising food and beverages prices, which were offset partially by a reduction in owner-occupied housing costs. This is a departure from the recent past, when house prices were the main driver of inflation. Inflation measured 1.8% in 2017 as a whole, the fourth year in a row with average inflation of 2% or less.
- The CPI declined by 0.09% month-on-month in January, and twelve-month inflation measured 2.4%. Inflation has therefore risen since the publication of the last *Monetary Bulletin*. Seasonal sales pushed the CPI downwards in January, as usual, but were offset by rising house prices and annual price list increases. As before, inflation excluding housing was lower than headline inflation, with the CPI excluding housing falling by 0.9% in the previous twelve months. In December 2017, the HICP had fallen by 1% year-on-year.
- Underlying inflation has risen since the last *Monetary Bulletin*. Twelve-month inflation in terms of core index 3 excluding tax effects measured 2.6% in January, up from 2.1% in October 2017.[2] Statistical measures suggest that underlying inflation lies between 1⅓% and 2⅓% and has risen by half a percentage point, on average, since October.
- The difference between the CPI components that have been the main determinants of inflation in the recent term – housing on the upside and imported goods on the downside – has narrowed. The rise in house prices has lost pace in the past few months, and the difference between inflation including and excluding housing has grown smaller. The twelve-month rise in the housing component of the CPI measured just under 12% in January, down from nearly 15% in October. The contribution of the housing component to annual inflation is now smaller than it was a year ago, after peaking in July 2017.
- Imported goods prices have risen since the November *Monetary Bulletin*, as the króna has depreciated by nearly 2% since November and global oil prices have risen recently. Imported goods and services prices rose by an estimated 3.7% year-on-year in Q4/2017, the first year-on-year increase since Q3/2013. The price of imported goods in the CPI fell by 3.2% between years in January, as opposed to a decline of over 5% in October. The same is true of domestic goods prices, which have risen by almost 1% in the past twelve months, after falling by an average of 0.6% in 2017. The decline in producer prices of goods sold domestically has lost pace as well. Therefore, by these criteria, domestic inflationary pressures have increased somewhat.

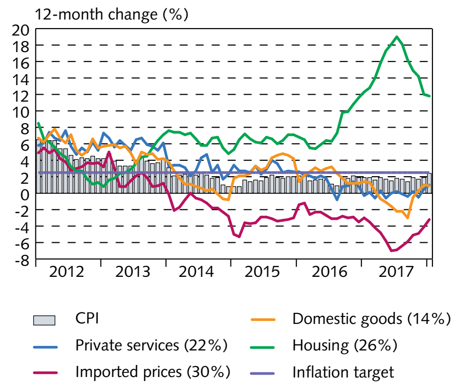
2. Core index 3 excluding tax effects excludes the effects of indirect taxes, volatile food items, petrol, public services, and real mortgage interest expense.

Chart 24
Headline and underlying inflation[1]
January 2012 - January 2018



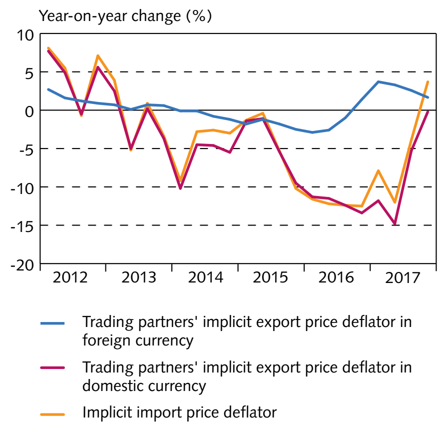
1. Underlying inflation measured using core indices (indices excluding the effects of indirect taxes, volatile food items, petrol, public services, and owner-equivalent rent) and statistical measures (weighted median, trimmed mean, and a dynamic factor model).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 25
Imported and domestic inflation[1]
January 2012 - January 2018



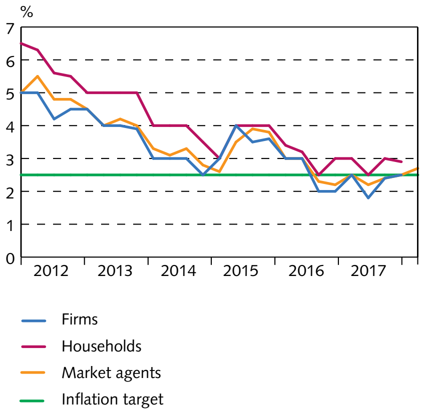
1. Imported inflation is estimated using imported food and beverages and the price of new motor vehicles and spare parts, petrol, and other imported goods. The figures in parentheses show the current weight of these items in the CPI.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 26
Import prices and international export prices[1]
Q1/2012 - Q4/2017



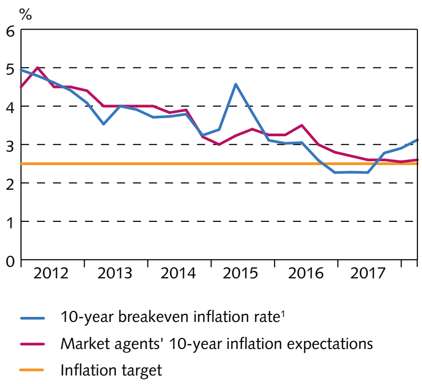
1. Central Bank baseline forecast Q4/2017.
Sources: Statistics Iceland, Thomson Reuters, Central Bank of Iceland.

Chart 27
Inflation expectations 1 year ahead
Q1/2012 - Q1/2018



Sources: Gallup, Central Bank of Iceland.

Chart 28
Long-term inflation expectations
Q1/2012 - Q1/2018



1. The value for Q1/2018 is the Q1 average to date.
Source: Central Bank of Iceland.

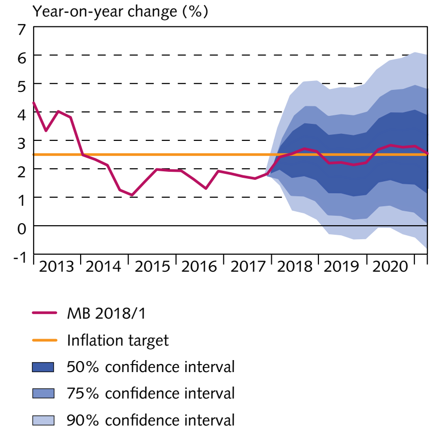
- It is assumed that the wage settlements to be negotiated in the near future will be accommodated within the framework agreement among the social partners and will not trigger a review of private sector wage agreements in February. The assumptions concerning the wage negotiations set for the end of 2018 have not changed, but wage drift has been somewhat stronger than was projected in the last forecast.
- Wages and related expenses are expected to rise by 6.5% this year, about the same as in 2017. This figure includes sizeable contractual pay hikes, wage drift, and a rise in wage-related expenses due to an increase in private sector employers' pension contribution. Labour productivity is estimated to have grown somewhat more slowly in 2017 than was projected in November, and the forecast for this year has also been revised downwards. As a result, unit labour costs are forecast to rise more than previously assumed, or by 4.3% in 2017 and 5.5% in 2018. As in the November forecast, the rise in unit labour costs will slow down in the next two years, to just under 3% by 2020.
- According to the Gallup survey carried out at the end of 2017, households' one-year inflation expectations were broadly unchanged from the autumn survey, at just under 3%. Corporate inflation expectations were also virtually unchanged between surveys, measuring 2.5%. Both households and corporate executives expected inflation to measure 3% in two years' time. According to the Central Bank's latest survey, market agents' inflation expectations one and two years ahead have risen slightly since November, to 2.6-2.7%.
- The breakeven inflation rate in the bond market has risen in the recent term. The ten-year breakeven rate has been 3.1% in Q1/2018 to date, after averaging 2.9% in Q4/2017 and 2.3% in Q1/2017. As has been discussed previously, the increase could reflect a rise in the risk premium, although it is not impossible that long-term inflation expectations have inched upwards. Market agents' long-term inflation expectations appear broadly unchanged, however, according to the Bank's survey. In the most recent survey, respondents indicated that they expect inflation to measure 2.6%, on average, in the next five and ten years.
- The outlook is for H1/2018 inflation to exceed the November forecast. It is now projected at 2.4% in Q1, some 0.4 percentage points above the last forecast, owing to higher-than-expected headline inflation in January. On the other hand, it is expected to be somewhat lower from end-2018 into H2/2019, mainly because the output gap is expected to be smaller over the forecast horizon. The forecast is based on the assumption that the upper VAT bracket will be lowered at the beginning of 2019, which will cause measured inflation to subside again, to 2.2% that year.[3]

3. Initially, the reduction in the upper VAT bracket was to be implemented concurrent with an increase in VAT on tourism. The newly passed National Budget omits the VAT increase on tourism but does not mention the reduction in the upper bracket. As a result, it is assumed here that this reduction in VAT will be implemented, although it is possible that it, too, will have been shelved by the time the new Government presents its fiscal plan this spring.

Inflation excluding indirect tax effects is projected to hover close to the target, with the appreciation of the króna offsetting the demand pressures still remaining in the economy. Headline inflation will rise again when the effects of tax cuts drop out of twelve-month figures, to an average of about 2.8% in 2020.

- The inflation outlook is subject to numerous uncertainties, and changes in important assumptions about domestic and global economic developments could cause inflation to diverge from the path presented here. The uncertainties in the forecast are by and large the same as those discussed in the November *Monetary Bulletin*, and their relative weights are broadly unchanged. There is a 50% probability that inflation will be in the 1-3¼% range in one year and in the 1-4% range by the end of the forecast horizon.

Chart 29
Inflation forecast and confidence intervals
Q1/2013 - Q1/2021



Sources: Statistics Iceland, Central Bank of Iceland.