

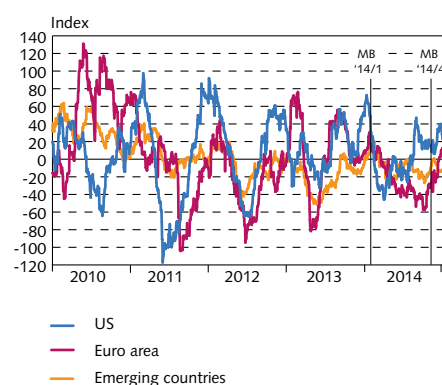
## Changed inflation outlook due to steep drop in oil prices<sup>1</sup>

The global economy has been shaped by turbulence recently. Oil prices have fallen by about half, and major currencies have been unusually volatile. Even though the decline in oil prices is generally conducive to GDP growth, the global GDP growth outlook has somewhat deteriorated since the forecast published in the November Monetary Bulletin, and uncertainty levels have risen. The global inflation outlook has also changed radically, and there are concerns that the fall in oil prices will spread to inflation expectations and wage formation in many advanced economies. There is also a significant impact on the external conditions of the Icelandic economy, with terms of trade improving markedly. As a result, the outlook is for a larger current account surplus than was assumed in November. According to preliminary figures from Statistics Iceland, GDP growth was somewhat weaker in the first three quarters of 2014 than was forecast in November. Indicators suggest that these figures will be revised upwards. In spite of this, GDP growth for the year as a whole is expected to be weaker than previously estimated, or 2% instead of 2.9%. However, the forecast for GDP growth in 2015 has been revised upwards since November, from 3½% to 4¼%, due to several factors: positive base effects from weaker output growth in 2014, the marked improvement in terms of trade, and prospects of strong growth in tourism and marine product exports. Nonetheless, the outlook for the next two years is broadly unchanged: GDP growth is forecast to ease as the demand-side effects of the Government's debt relief package taper off and energy-intensive investment subsidies. Growth is projected at approximately 2¾% per year in 2016 and 2017. As was forecast in November, the recovery of the labour market firmed up somewhat in Q4, after a relatively weak third quarter. The slack in the economy therefore continues to narrow and will probably disappear very soon, if it has not already done so. Inflation subsided to target early in 2014 and has declined still further in the wake of falling oil prices. It measured 0.8% in January, the lowest in two decades. The inflation outlook has therefore changed significantly since November. Inflation is now forecast to remain below 1% until the latter half of 2015 and below 2% into 2016. As always, the inflation outlook is uncertain, and upcoming wage negotiations cast a shadow on it. Large wage increases could erode the inflation outlook and cause a setback in the economic recovery if they cut into labour demand.

### The global economy and terms of trade

- The economic indicators for the euro area that have been published since the November *Monetary Bulletin* have been broadly in line with market expectations. GDP increased marginally between Q2 and Q3/2014 – for the sixth quarter in a row – and annual GDP growth measured 0.8%. The recovery in the US and the UK has gained momentum, with both countries recording 2.6% annual GDP growth in Q3. Growth slowed in Japan, however, for the second consecutive quarter, and indicators for emerging economies imply weaker-than-expected growth there. In China the economy has slowed down as investment growth has eased, and in Russia, trade embargoes and falling oil prices have made their mark on GDP growth. It is thought that Q4 GDP growth was somewhat in excess of the November forecast in the US but somewhat weaker in most of Iceland's other trading partners. Year-2014 GDP growth is therefore estimated at an average of 1.7% for Iceland's main trading partners, as opposed to the November forecast of 1.8%.

Chart 1  
Economic surprise index<sup>1</sup>  
Daily data 1 January 2010 - 30 January 2015

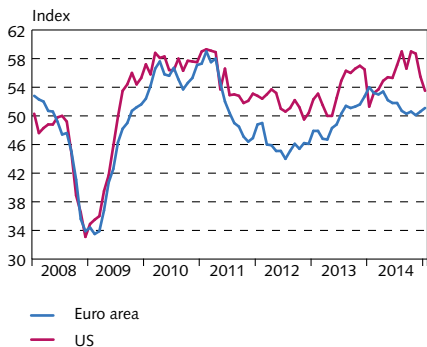


1. When the index is lower than 0, the indicators are more negative than expected; when the index is higher than 0, the indicators are more positive than expected. The index does not imply that the indicators are positive or negative.

Source: Macrobond.

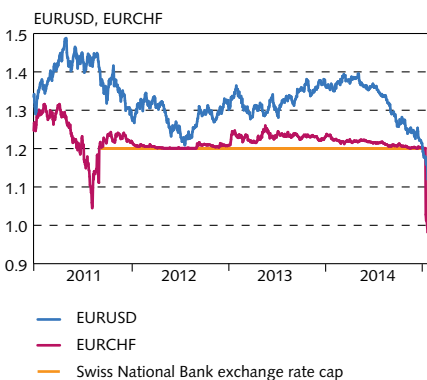
1. The analysis in this *Monetary Bulletin* is based in large part on the Bank's assessment of economic developments as published in *Monetary Bulletin* 2014/4 in November 2014, and on the updated forecast presented here. It is based on data available in early February.

Chart 2  
Leading indicators of GDP growth<sup>1</sup>  
January 2008 - January 2015



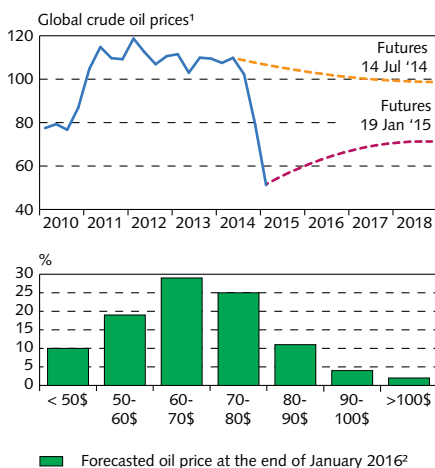
1. In the US and the euro area, the seasonally adjusted Manufacturing Purchasing Managers' Index (PMI) is published monthly. An index value above 50 indicates month-on-month growth, and a value below 50 indicates a contraction.  
Sources: Bloomberg, Macrobond.

Chart 3  
Exchange rate of the euro against the US dollar and Swiss franc  
1 January 2011 - 30 January 2015



Source: Macrobond.

Chart 4  
Oil prices 2010-2018



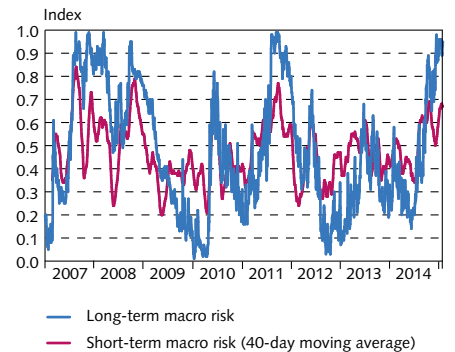
1. Brent crude, price per barrel in USD. 2. Responses from 100 market analysts to a Consensus Forecasts survey asking them to project the USD price per barrel of Brent crude as of end-January 2016.  
Sources: Bloomberg, Consensus Forecasts.

- The exchange rates of major currencies have been unusually volatile in the recent term. The US dollar appreciated markedly against other currencies in H2/2014, as economic developments in the US and other industrialised countries began to diverge. Since May 2014, the dollar has appreciated by about a fourth against the euro, its strongest in a decade, and in mid-January 2015, the Swiss National Bank's announcement that it would not take action to prevent the exchange rate of the euro from falling below 1.2 francs caused quite a stir. The franc appreciated by some 20% against the euro in a few days following the announcement.
- Oil prices have fallen by 35% since end-November and by more than half since last summer – about the same annual decline as in early 2009, in the wake of the global financial crisis. In part, the decline reflects weaker demand growth, which in turn is due to a weaker global economic recovery; however, most of it can be attributed to the increased supply of oil resulting from increased production in the US and the OPEC countries' decision to maintain unchanged production levels for the present. The decline is much larger than was assumed in the last *Monetary Bulletin*, and most market analysts expect the current trend to continue, with prices rebounding slightly and settling at around 60-70 US dollars per barrel at the beginning of 2016. Oil futures indicate that the barrel will be priced at just over 70 US dollars at year-end 2018, which is down about a fourth from the level indicated by futures prices in the spring.
- This steep drop in oil prices translates to a substantial improvement in terms of trade for oil-importing countries, but at the same time it erodes terms of trade for oil exporters. Although the overall impact on the global economy is unclear, it will probably be positive, as lower oil prices increase households' purchasing power and reduce firms' input costs. The International Monetary Fund (IMF) estimates that global GDP growth could turn out as much as 0.7-0.8 percentage points stronger in 2015 and 2016 as a result; however, the effects differ from one country to another, depending on the weight of oil products in each country's imports and the amount of commodities it exports, which could fall in price in the wake of the drop in oil prices. The decline in oil prices will also have a strong impact on inflation, in the IMF's estimation, lowering it by as much as a percentage point this year.
- The abrupt drop in oil prices and the appreciation of the US dollar have also caused some unrest in the global financial markets, and uncertainty has escalated as well. Financial conditions have worsened in countries that export oil and oil products, particularly those with substantial foreign debt and sizeable current account deficits. As a result, risk premia on many emerging countries have risen, interest rate spreads vis-à-vis developed countries have widened, and emerging countries' share prices and currency exchange rates have fallen. In many developed countries, however, long-term interest rates have continued to fall, hitting record

lows in Germany, Spain, Italy, and Japan. Nominal rates on five-year government bonds are now negative in Switzerland, Japan, and Germany.

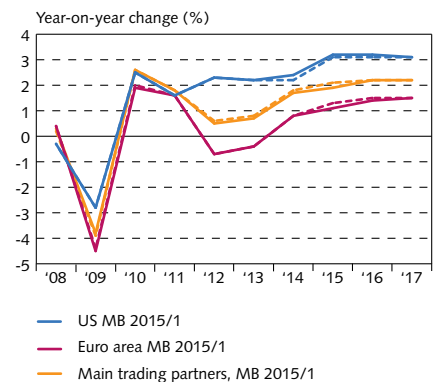
- In spite of the positive impact of oil price reductions on the global economy, the global output growth outlook has weakened since November, owing mainly to sluggish demand in industrialised countries (particularly in the eurozone), a more pessimistic assessment of potential output in major industrialised countries apart from the US, and a poorer outlook among oil and commodity exporters. In its January 2015 forecast, the IMF projects global output growth at 3.5% in 2015 and 3.7% in 2016, which for both years is a reduction of 0.3 percentage points from its October forecast. The 2015 output growth outlook for Iceland's main trading partners has deteriorated as well, to 1.9% instead of the 2.1% forecast in the November *Monetary Bulletin*. The outlook for the next two years is broadly in line with the November forecast, however, with increased optimism about GDP growth in the US offsetting the weaker outlook for other trading partners. Weaker output growth among trading partners will also be reflected in more sluggish growth in demand in Iceland's main export markets. Trading partners' imports are estimated to have grown about 1 percentage point less in 2014 than was projected in November, and the outlook for 2015 is weaker as well.
- The global inflation outlook has changed markedly because of the recent plunge in oil prices. In the euro area, deflation has set in since December, and in January, prices fell 0.6% year-on-year. Inflation has also fallen rapidly in the US, where it measured 0.8% in December. In the UK it has fallen to its lowest in over a decade, measuring 0.5% in December. Underlying inflation has declined as well, in part due to second-round effects from falling oil prices, and now measures only 0.7% in the euro area and about 1½% in the UK and the US. Among Iceland's trading partners, inflation averaged 0.9% in Q4, its lowest since 2009. It is expected to remain below 1% in coming quarters but to measure 1.2% at the end of the year, and to remain below 2% until year-end 2017.
- In developed countries, central banks' responses to the fall in oil prices will be determined largely by whether the decline affects long-term inflation expectations and whether there is the risk that it will spill over to wage formation and trigger a drop in wages, which would exacerbate the risk of persistent below-target inflation or even deflation. In the euro area, long-term inflation expectations have fallen recently and are now somewhat below the European Central Bank's (ECB) inflation target. On 22 January 2015, the ECB announced plans to embark on a large-scale bond purchase programme, under which it would buy corporate and government bonds from eurozone countries with the aim of stimulating the economy and bringing inflation up to target. The bank is expected to keep interest rates unchanged at zero for the next few years. On the other hand, market participants expect the

Chart 5  
Macro Risk Index<sup>1</sup>  
Daily data 1 January 2007 - 30 January 2015



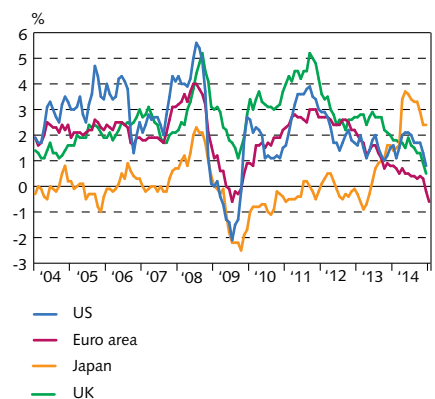
1. Zero means low risk aversion and one high risk aversion. The Citi Index on risk aversion in global financial markets measured by emerging market sovereign spreads, US TED spread, US and European corporate CDS spreads and implied FX, equity and swap rate volatility.  
Source: Macrobond.

Chart 6  
Global output growth 2008-2017<sup>1</sup>



1. Central Bank baseline forecast 2014-2017. Broken lines show forecast from MB 2014/4.  
Sources: IMF, Macrobond, Statistics Iceland, Central Bank of Iceland.

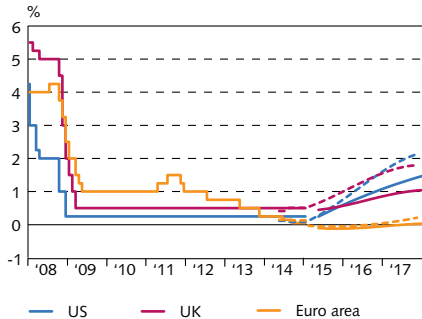
Chart 7  
Inflation in selected industrialised countries  
January 2004 - January 2015



Source: Macrobond.

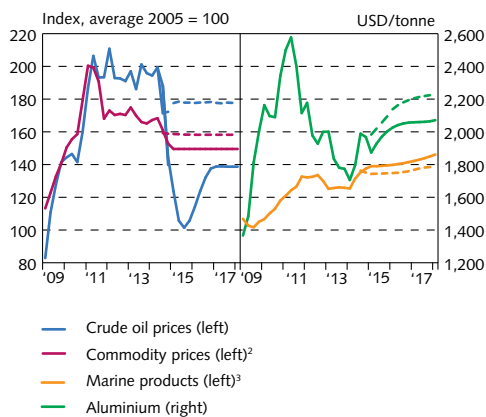
Chart 8  
Policy rates and forward rates in the US, UK and euro area<sup>1</sup>

Daily data 1 January 2008 - 30 January 2015, quarterly data Q4/2014 - Q1/2018



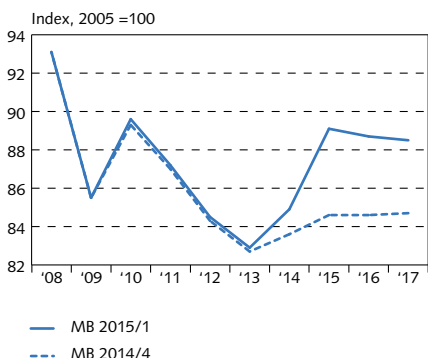
1. Forward rates are based on 6-month overnight index swaps (OIS). Lines show forward rates from 30 January 2015 but broken lines from 30 October 2014.  
Sources: Bloomberg, Macrobond.

Chart 9  
Prices of marine exports, aluminium, oil, and commodities<sup>1</sup>  
Q1/2009 - Q1/2018



1. Central Bank baseline forecast Q4/2014 - Q1/2018. Broken lines show forecast from MB 2014/4. 2. Non-oil commodity prices in USD. 3. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the export-weighted trade basket.  
Sources: Bloomberg, London Metal Exchange, Nymex, Statistics Iceland, Central Bank of Iceland.

Chart 10  
Terms of trade for goods and services  
2008-2017<sup>1</sup>



1. Central Bank baseline forecast 2014-2017.  
Sources: Statistics Iceland, Central Bank of Iceland.

US Federal Reserve Bank to begin raising rates in mid-2015 and the Bank of England to follow suit later in the year.

- Weak demand stemming from the poorer global output growth outlook has also surfaced in falling commodity prices. Although various types of metals, including aluminium and copper, dropped sharply in price in December, commodity prices have not fallen nearly as much as oil prices. Aluminium futures and market agents' forecasts indicate that aluminium prices will recover somewhat over the course of the year, rising to about 4% above 2014 prices. Other commodity prices (apart from oil) are expected to decline by some 8% this year, however. This is a slightly smaller decline than in the IMF's January forecast and notably smaller than in the Organisation for Economic Co-operation and Development's (OECD) November forecast. In spite of the prospect of declining food prices, information from major exporters suggests that marine product prices will rise about 3% this year, on the heels of a more than 5% increase in 2014.
- Iceland's terms of trade have changed markedly in the past year. They had improved by 4.9% year-on-year in Q3/2014, whereas the November forecast assumed an improvement of 2.2%. Several factors are behind the improvement – favourable export prices (marine products in particular) and reduced import prices chief among them – but the marked appreciation of the US dollar against other currencies makes an impact as well, as the dollar weighs heavier in Iceland's exports than in its imports. Furthermore, the outlook for terms of trade in 2015 has improved markedly since November, owing primarily to the recent fall in oil prices. Terms of trade are forecast to improve by nearly 5% this year, some 3½ percentage points more than previously projected. They will probably deteriorate slightly beginning in 2016, however, as oil prices are expected to begin rising again at that time.
- In terms of relative consumer prices, the real exchange rate rose by an average of 6.9% in 2014. It has risen by about 20% from its 2009 trough but remains some 10% below its thirty-year average. The increase in 2014 is due primarily to a nearly 6% nominal appreciation of the króna, supplemented by inflation, which was about 1 percentage point higher in Iceland than in its main trading partners.

## Monetary policy and domestic financial markets

- The Central Bank's Monetary Policy Committee (MPC) decided to lower the bank's interest rates by 0.25 percentage points in November and by another 0.5 percentage points in December. Prior to the publication of this *Monetary Bulletin*, the Bank's key policy rate – the rate on seven-day term deposits – was 4.5%. Because financial institutions have abundant liquidity with the Central Bank at present, this is the interest rate that has the greatest effect on short-term market rates and therefore the monetary

stance. Other Central Bank interest rates have also been lowered by 0.75 percentage points since the beginning of November.

- In spite of the reduction in nominal Central Bank interest rates, the Bank's real rate has risen by nearly ½ a percentage point in terms of twelve-month inflation since the November *Monetary Bulletin*, to 3.7%, and by 1½ percentage points since February 2014. In terms of the average of various measures of inflation and inflation expectations, the Bank's real rate is broadly unchanged since November, or just under 2½%. By this measure, it is now about ½ a percentage point higher than at the beginning of February 2014.
- According to the Central Bank survey of market participants' expectations, carried out in late January, respondents project that the Bank's nominal interest rates will be cut by 0.25 percentage points in Q1/2015 and then raised again by 0.25 percentage points in Q4/2015, bringing them to 4.5%. They project the Bank's key policy rate at 4.75% in two years' time. This is 1 percentage point below their expectations according to the survey from late October 2014. Analysis of the yield curve indicates, however, that market agents expect interest rates to remain unchanged in H1/2015 and then rise by 0.25 percentage points in H2 and another 0.25 percentage points in the first half of 2016, bringing the key rate to 5%.
- In the main, overnight rates in the interbank market for krónur have kept pace with the Bank's nominal interest rates and have remained below the centre of the interest rate corridor. Market turnover rose considerably towards the end of 2014, after very limited activity in the first ten months of the year. Furthermore, interest rates in Treasury bill auctions have fallen in line with nominal Central Bank rates since the November *Monetary Bulletin* and have been nearly ½ a percentage point below the floor of the interest rate corridor in the recent term.
- Yields on nominal Treasury bonds have fallen by as much as 0.7 percentage points since the beginning of November, in tandem with the decline in nominal Central Bank rates and twelve-month inflation. Real yields on Treasury bonds have risen since November, however, in line with the Bank's real rate. Yields on indexed Housing Financing Fund (HFF) and Treasury bonds are broadly unchanged, however.
- The reduction in nominal Central Bank rates appears to have been transmitted effectively to commercial banks' nominal mortgage lending rates. The lowest listed nominal mortgage rates offered by the three large commercial banks have fallen by 0.5-0.75 percentage points since November. Their real rates have risen, however, as have indexed mortgage rates, which had been inching downwards in the preceding three years even though other real market rates had risen in line with the increase in the Central Bank's real rate.

Chart 11  
Central Bank of Iceland interest rates and short-term market rates  
Daily data 3 January 2011 - 30 January 2015

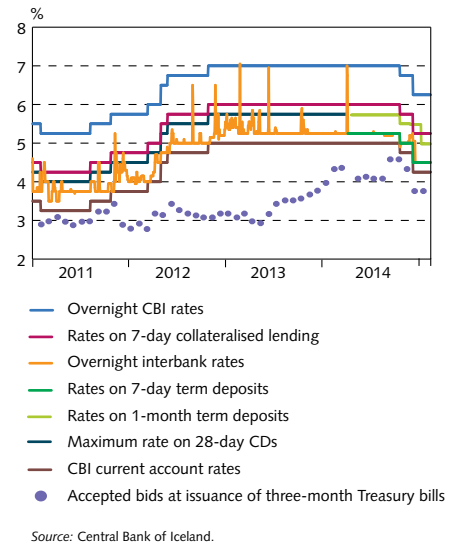
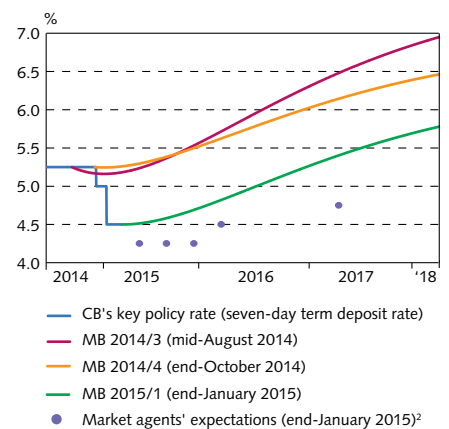
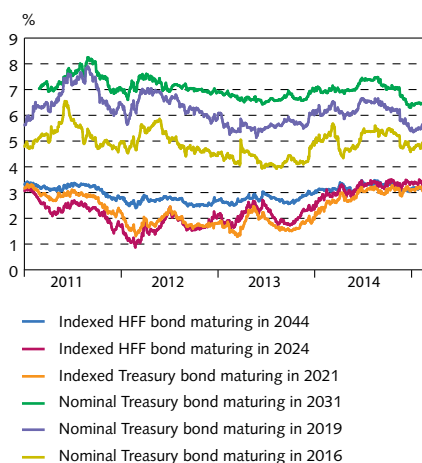


Chart 12  
Central Bank of Iceland key policy rate, forward market interest rates, and market agents' expectations concerning CB's policy rate<sup>1</sup>  
Daily data 21 May 2014 - 31 March 2018



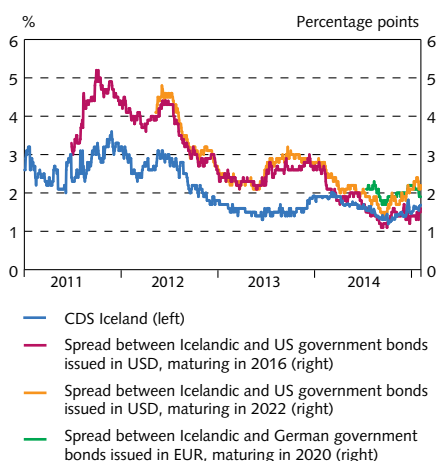
1. Interbank interest rates and Treasury bonds were used to estimate the yield curve. 2. Estimated from the median response in the Central Bank's survey of market agents' expectations of the collateralised lending rate. The survey was carried out during the period 29-30 January 2015.  
Source: Central Bank of Iceland.

Chart 13  
Nominal and indexed bond yields  
Daily data 3 January 2011 - 30 January 2015



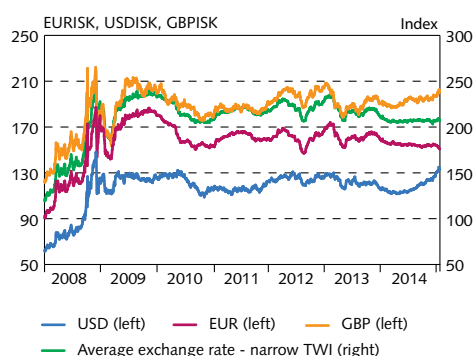
Source: Central Bank of Iceland.

Chart 14  
Risk premia on the Icelandic Treasury  
Daily data 3 January 2011 - 30 January 2015



Source: Bloomberg.

Chart 15  
Exchange rates of foreign currencies  
against the króna  
Daily data 3 January 2008 - 30 January 2015



Source: Central Bank of Iceland.

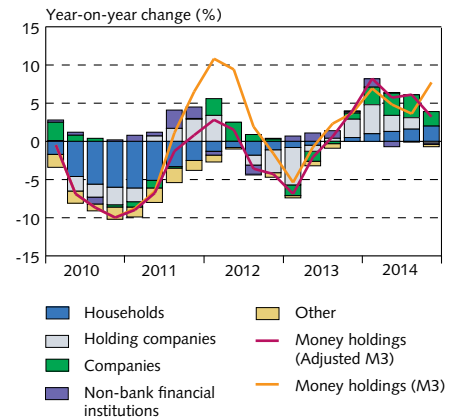
- Risk premia on the Treasury's foreign obligations have risen since the November *Monetary Bulletin*, in line with increased uncertainty and unrest in the global financial markets. The five-year CDS spread on Treasury obligations has risen by 0.3 percentage points, to almost 1.7% just before this publication went to press. The interest rate spread on the Treasury's foreign-denominated bonds has widened by as much as 0.5 percentage points against US Treasury bonds but narrowed by 0.1 percentage point against German bonds. It ranges from 1.6-2.2 percentage points but is some 0.6-1 percentage point less than in February 2014. International rating agency Fitch Ratings' January decision to change the outlook on Iceland's sovereign credit ratings from stable to positive should lead to a reduction in interest rate premia on Treasury debt.
- The exchange rate of the króna has held relatively stable since November, both in trade-weighted terms and against the euro, as it did throughout 2014. It is now broadly unchanged in trade-weighted terms but about 1½% higher against the euro. On the other hand, the króna has fallen by almost 8½% against the US dollar, which has appreciated somewhat against most other currencies. Improving terms of trade and rising tourism-generated foreign exchange inflows have supported the króna, even though the Central Bank has continued to lean against the appreciation of the króna by buying foreign currency. The Bank's net foreign currency purchases totalled about 26 b.kr. in Q4/2014 and nearly 111.5 b.kr. for the year as a whole, or about 5½% of estimated GDP for the year.
- The average price of foreign currency as measured by the trade-weighted exchange rate index (TWI) was just under 207 points in Q4/2014, which is broadly in line with the Bank's November forecast. As before, the Bank's baseline forecast is based on the assumption that throughout the forecast horizon, the TWI will remain broadly stable at the level prevailing when the forecast was prepared. If this materialises, the exchange rate of the króna will be about ½% lower over the forecast horizon than in the Bank's November forecast.
- Broad money (M3) was up nearly 8% year-on-year in Q4/2014, mainly because the operating licence held by the winding-up board of one of the failed financial institutions was revoked in October and the company redefined as a domestic holding company, prompting a reclassification of deposits. Adjusted M3 – that is, excluding deposits held by the winding-up boards of the failed financial institutions and by special-purpose entities owned by commercial banks – has grown by just over 3% over the same period, owing to an increase in household and corporate deposits. Central Bank base money was up 2½% year-on-year in Q4/2014, and by about 1½% including certificates of deposit issued by the Bank and term deposits owned by financial institutions.

- Net new loans from deposit money banks (DMB) to domestic borrowers – that is, new loans net of prepaid loans – totalled just over 57 b.kr. in Q4 and about 170 b.kr. for 2014 as a whole, slightly more than in 2013. Net new corporate loans increased, but new lending to holding companies and non-bank financial companies was limited. Although net new DMB lending to households also grew year-on-year, it was offset by substantial prepayments of HFF loans, so that on the whole, net new household lending contracted considerably between 2013 and 2014.
- Capital area house prices rose by over 10% year-on-year in the first half of 2014 but then eased in the second half, bringing the increase for the year as a whole down to 8.4% in nominal terms and 6.1% in real terms. This was in line with the major determinants of house prices: the number of registered residential purchase agreements rose by nearly 8% year-on-year, rent rose by 8%, and nominal wages were up nearly 6%.
- Share prices rose somewhat in the last two months of 2014, and turnover increased as well. The OMXI8 index rose by 10.5% during this two-month period and by just over 4% for the year as a whole. While the Central Bank's policy rate cuts probably contributed to price increases, it is possible that the weaker-than-expected figures in the most recent national accounts mitigated the rise somewhat. The OMXI8 has risen by almost 5½% so far in 2015.
- Private sector financial conditions are broadly unchanged since November. Private sector debt as a share of GDP changed little between Q2 and Q3/2014 but had declined by 15 percentage points of GDP from year-end 2013. Asset prices have risen overall, which increases net household and corporate wealth, and nominal interest rates have declined, as is mentioned above.

## The domestic real economy

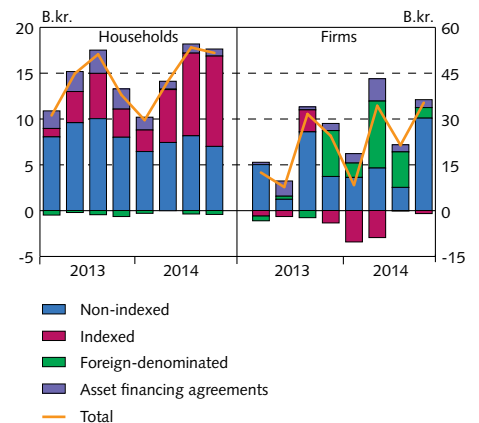
- In December 2014, Statistics Iceland published preliminary national accounts figures for Q3/2014, together with revised figures for the first half of the year. According to Statistics Iceland's figures, GDP contracted by 0.2% year-on-year in Q3. For the first three quarters of the year, annual GDP growth measured only 0.5%, whereas domestic demand was up 3% and consumption and investment were up 3.9%. The contribution from net trade to GDP growth was negative by 2.2 percentage points of GDP during the period, and the contribution from inventory changes was negative by nearly 1 percentage point.
- The Bank's November forecast provided for 1.5% growth in the first three quarters of the year, which is about 1 percentage point more than is indicated by the Statistics Iceland figures. In particular, private consumption was weaker than forecast, although investment also grew less strongly than anticipated. Statistics

Chart 16  
Components of money holdings -  
Adjusted M3<sup>1</sup>  
Q1/2010 - Q4/2014



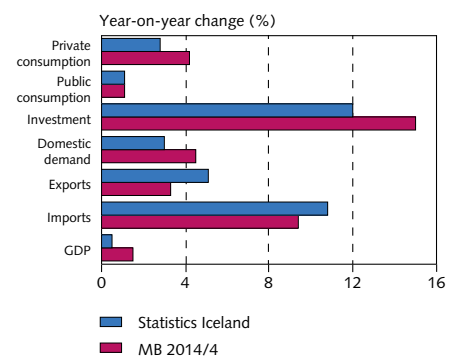
1. Adjusted for deposits held by failed banks' winding-up committees and special purpose entities owned by commercial banks.  
Source: Central Bank of Iceland.

Chart 17  
Net new lending from DMBs to households  
and firms<sup>1</sup>  
Q1/2013 - Q4/2014



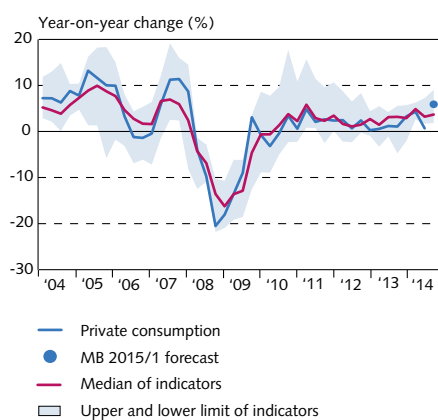
1. New loans net of prepayments. Excluding holding companies.  
Source: Central Bank of Iceland.

Chart 18  
National accounts for Q1-Q3/2014  
and Central Bank estimate



Sources: Statistics Iceland, Central Bank of Iceland.

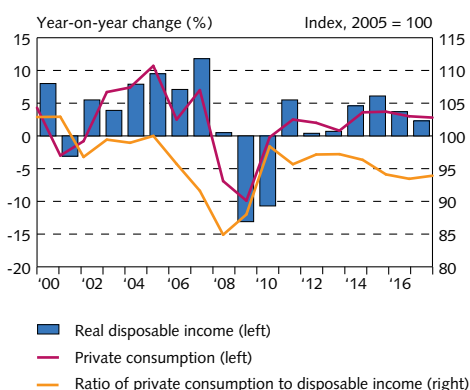
Chart 19  
Indicators of private consumption<sup>1</sup>  
Q1/2004 - Q4/2014



1. Upper and lower limit of eight indicators of private consumption. Indicators are payment card turnover, groceries turnover, share prices, housing prices, consumer goods imports, new motor vehicle registrations, wages, and unemployment. The indicators are rescaled so that their average and standard deviation are the same as those for private consumption.

Sources: Centre for Retail Studies, Statistics Iceland, Central Bank of Iceland.

Chart 20  
Private consumption and real disposable income 2000-2017<sup>1</sup>



1. Central Bank baseline forecast 2014-2017.  
Sources: Statistics Iceland, Central Bank of Iceland.

Iceland's preliminary estimate of private consumption growth was 0.7% year-on-year for the quarter, which appear at odds with leading indicators such as payment card turnover and consumer goods imports, which generally provide a relatively reliable indication of developments in private consumption. The same is true of residential investment, which grew by a surprising 4.5% according to Statistics Iceland figures, in contradiction of leading indicators and information from construction market contacts. These deviations explain a large portion of the error in the GDP growth forecast for the period. Offsetting this, however, were developments in net trade, which were somewhat more favourable than previously forecast.

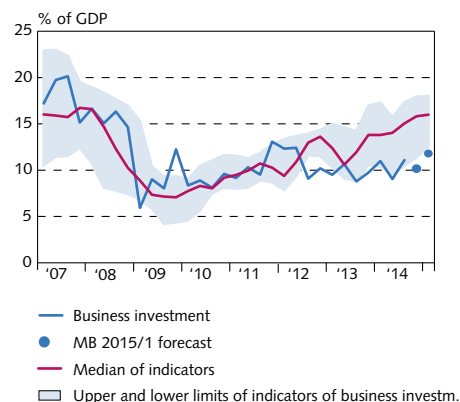
- According to Statistics Iceland's preliminary figures, private consumption grew 2.8% year-on-year in the first three quarters of 2014. Indicators of developments in private consumption in Q4 suggest that growth accelerated during the quarter and that the growth rate for the year was about 3½%, which is considerably stronger than in 2013 but about ½ a percentage point below the November forecast. Although the outlook is for somewhat slower growth in 2015 as well, private consumption will nonetheless be robust, driven by rising real disposable income, improved household equity, and the Government's debt relief measures.<sup>2</sup> It will lose pace somewhat in 2016, however, and grow by approximately 3% per year in the following two years, which is in line with the Bank's November forecast.
- According to preliminary figures from Statistics Iceland, public consumption growth in the first three quarters of 2014 was in line with the Bank's November forecast. The newly approved National Budget indicates, however, that public consumption growth will be somewhat stronger in 2015 than was forecast in November. The outlook is also for stronger investment by the central government, while the largest municipalities are planning reduced investment expenditure. For the forecast horizon, it is assumed that public investment relative to GDP will remain close to the current level.
- According to the National Budget for 2015, Treasury revenues will be about 10 b.kr. more than was assumed when the initial budget proposal was prepared, and the entire amount will be used to offset increased expenditures. The overall surplus is estimated at 3.6 b.kr. and the primary surplus at 67.9 b.kr. The projected overall surplus is about ½ b.kr. less than was originally assumed, and the primary surplus is about 2.2 b.kr. less. The fiscal stance has therefore eased slightly since the publication of the last *Monetary Bulletin*.

2. In November, the authorities announced a change in the implementation of the debt relief package, which will enable more rapid reduction of household debt than before. As a result, households' collateral capacity will increase sooner than was provided for in the original debt relief plan. Because of this, the impact of the measures on private consumption could also prove more front-loaded for those households that are unable to smooth their consumption spending over time. However, this change in implementation is not expected to cause a material change in the Bank's assessment as published in Appendix 2 of *Monetary Bulletin* 2014/1.



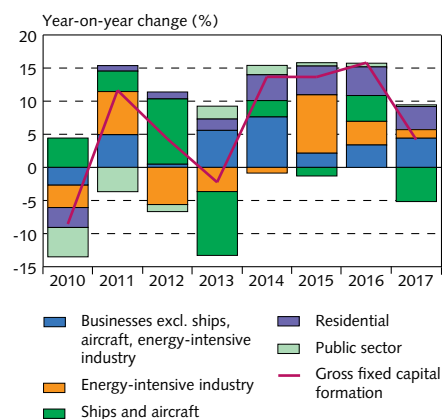
- Investment grew nearly 23% year-on-year in Q3/2014, due mainly to a 34% increase in business investment. This is a somewhat slower rate of growth than was assumed in the Bank's November forecast, owing mainly to reduced investment in ships, aircraft, and energy-intensive industry. Total investment grew 12% in the first nine months of the year, whereas the November forecast assumed 15%. The estimate for the year as a whole has therefore been revised downwards, from the nearly 18% forecast in November to just under 14%.
- Although investment in the energy-intensive sector is projected to be somewhat weaker than was forecast in November, partly due to changed international market conditions, the outlook for investment in 2015 and the following two years is broadly unchanged. As is mentioned above, investment is projected to grow by just under 14% this year. This is owing to the offsetting effects of reduced investment in the energy-intensive sector and an increase in general business investment. As in November, growth is expected to accelerate in 2016 as energy-intensive investment picks up, and then ease again in 2017. If the forecast materialises, the investment-to-GDP ratio will be about 19½% by 2017, or roughly 1 percentage point less than was forecast in November and about 2 percentage points below the thirty-year average.
- Goods and services exports are expected to increase this year by more than 5%, a considerably stronger growth rate than was forecast in November. There are signs that exports of miscellaneous industrial goods will be stronger than was assumed in November, and information from tourism operators indicates that the number of tourists visiting Iceland will continue to rise, whereas the November forecast provided for a marginal slowdown. Furthermore, the outlook is for stronger marine product exports this year, due to an increased capelin quota and favourable base effects, as last year's contraction proved to be larger than was estimated in November. As in November, export growth is expected to slow down in the next two years, in line with demand growth in trading partner countries.
- In spite of relatively robust export growth in 2014, the contribution of net trade to GDP growth was negative. The outlook is for a continuation of this trend for the majority of the forecast horizon, in spite of strong growth in exports this year. Imports grew strongly in 2014 – imports of consumer goods and transport equipment in particular. This, too, is expected to continue, in line with strong growth in domestic demand and the steady stream of tourists visiting Iceland.
- The negative contribution from net trade gradually erodes the trade surplus. On the other hand, terms of trade have improved considerably. This improvement in terms of trade is the main reason for the increased surplus on goods and services trade, from about 7% of GDP in 2014 to 8½% in 2015, which is around 3

Chart 21  
Indicators of business investment<sup>1</sup>  
Q1/2007 - Q1/2015



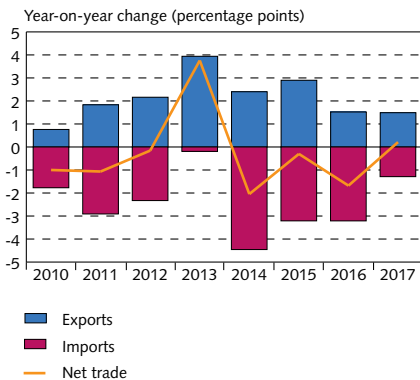
1. Upper and lower limits of five indicators of business investment. The indicators are imports of investment goods at constant prices and responses to four questions from the Capacent Gallup survey of Iceland's 400 largest companies. The questions centre on executives' assessment of (a) the economic outlook six months ahead, (b) how they expect demand for their goods or services to develop in the next six months, (c) whether they expect their company's investment to increase year-on-year in the current year, and (d) whether they expect their margins to increase year-on-year. In assessing the range, all variables are rescaled so that their average and standard deviation are the same as those for business investment. The shaded area shows a two-quarter moving average of investment indicators, with a two-quarter time lag.  
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland.

Chart 22  
Gross fixed capital formation and contribution of its main components 2010-2017<sup>1</sup>



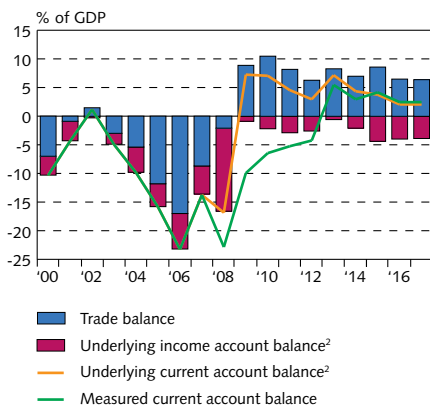
1. Central Bank baseline forecast 2014-2017.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 23  
Contribution of net trade to GDP growth 2010-2017<sup>1</sup>



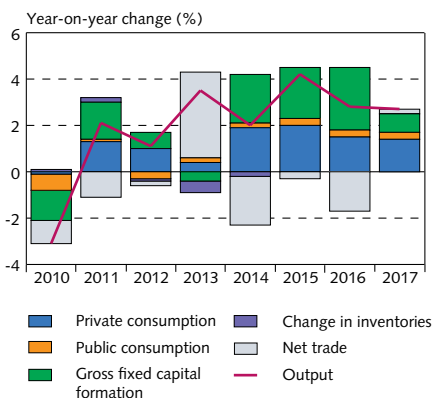
1. Central Bank baseline forecast 2014-2017.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 24  
Current account balance 2000-2017<sup>1</sup>



1. Secondary income is included in the balance on income. Central Bank baseline forecast 2014 - 2017. 2. Excluding the calculated income and expenses of DMBs in winding-up proceedings but including the estimated effects of the settlement of their estates, and excluding the effects of pharmaceuticals company Actavis on the balance on income until 2012. Also adjusted for the failed DMBs' financial intermediation services indirectly measured (FISIM).  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 25  
GDP growth and contribution of underlying components 2010-2017<sup>1</sup>



1. Central Bank baseline forecast 2014-2017.  
Sources: Statistics Iceland, Central Bank of Iceland.

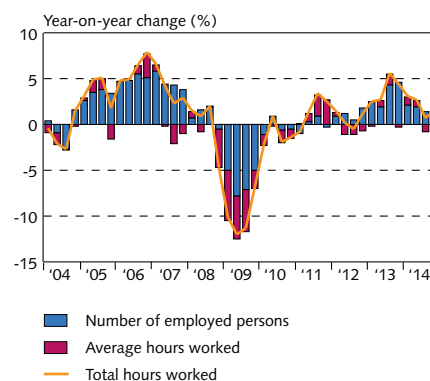
percentage points more than was forecast in November. As a result of these favourable developments in goods and services trade, the outlook is for an underlying current account surplus throughout the forecast horizon. The surplus is projected at 2% of GDP in 2017, some 2 percentage points more than was forecast in November.

- As is stated above, GDP growth measured 0.5% in the first three quarters of 2014, or about 1 percentage point below the November forecast. The GDP growth estimate for the year has therefore been revised downwards, from the 2.9% provided for in the November forecast to 2%. On the other hand, it is not impossible that this will prove to be an excessively low estimate when more complete information is available. Indicators of strong private consumption have already been mentioned. In addition, information from construction companies suggests more construction activity than is revealed by Statistics Iceland's preliminary figures, and strong consumer goods imports could indicate that the increase in domestic retail inventories has been underestimated.
- GDP growth for this year is projected at 4¼% instead of the 3½% assumed in the November forecast. In addition to base effects stemming from weak GDP growth in 2014, the deviation is due primarily to the outlook for greater-than-expected strength in tourism and marine product exports and the positive effects of the substantial improvement in terms of trade, which is due mainly to the aforementioned drop in oil prices. Nonetheless, the outlook for the next two years is broadly unchanged: GDP growth is forecast to lose momentum as the demand-side effects of the Government's debt relief package taper off and energy-intensive investment growth eases. GDP growth is forecast at 2¾% per year for both years. As before, GDP growth will be driven mainly by domestic demand – particularly private sector demand, which is forecast to grow by over 4% per year, on average. If this forecast materialises, output growth will average roughly 3% per year over the forecast horizon, slightly above the thirty-year average and well above the forecasted average for Iceland's main trading partners.
- According to the Statistics Iceland labour force survey (LFS), total hours worked increased by 1.5% year-on-year in Q4/2014, in line with the Bank's November forecast. This is a somewhat larger increase than in the previous quarter (0.6%), which lends support to the assessment in the last *Monetary Bulletin*; i.e., that the weak growth recorded in Q3 was not a sign of a turnaround in the labour market. The rise in total hours worked in Q4 is due in large part to an increase in the number of employed (1%) and a slight increase in average hours worked (0.4%). All other measures of labour supply and demand pulled in the same direction.
- According to the LFS, seasonally adjusted unemployment in Q4 was in line with the Bank's November forecast, measuring 4.8%.

It was virtually unchanged between quarters but declined by 0.4 percentage points year-on-year.

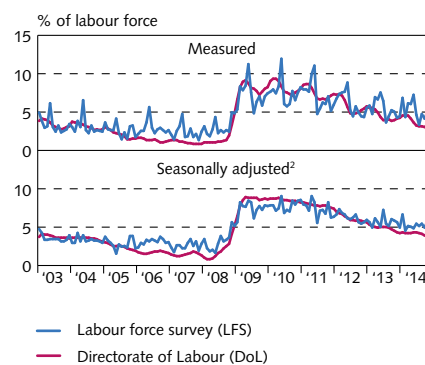
- The Capacent Gallup survey carried out in November and December among Iceland's 400 largest firms indicates that labour demand could still grow more in the first half of 2015. According to the survey, firms considering adding on staff exceeded those planning redundancies by about 15 percentage points, which is similar to the findings from the surveys conducted in the first half of 2014.
- In spite of a significant rise in the number of employed in the past two years, the share of companies that consider themselves understaffed has remained relatively stable at around 15%, although it has risen somewhat from the post-crisis trough. Employers appear to be able to import labour when they cannot find Icelandic workers. Net migration was positive in Q4/2014, due entirely to an increase in foreign nationals.
- The outlook for labour demand is broadly unchanged since November. The slack in the labour market is still expected to disappear this year. The employment rate is projected to rise by approximately ½ a percentage point during the forecast horizon, and as in November, it is assumed that unemployment will continue to taper off, falling to around 4% by 2017.
- The wage index has developed in line with the Bank's November forecast. In Q4, it rose by 1.4% between quarters and by 6.6% year-on-year. Real wages have risen by 5.3% over the same period, well in excess of productivity growth, which was flat in 2014, according to the latest Statistics Iceland data. This could change upon revision of national accounts figures, however.
- Wage increases were considerably larger in 2014 than contracting parties assumed when wage settlements were finalised in December 2013. By December 2014, the wage index had risen by 6.6% since the first wage settlements were concluded twelve months previously, but the contracting parties had assumed that it would rise by 4% over that period. Wage increases have varied, depending on occupation, sector, and the scope of the agreements concerned; furthermore, in some instances, negotiated pay rises have been well in excess of the pay rise generally agreed during last year's settlement. To some extent, this includes some worker groups that had lagged behind in wage rises. If upcoming pay increases are in line with recent demands, wage pressures from the labour market will be considerably stronger than is provided for in the Bank's baseline forecast and well above the level consistent with the inflation target. In addition, hefty pay increases could cause a setback in the economic recovery if they lead to a contraction in labour demand.
- Because of the significant uncertainty about the outcome of the wage negotiations currently underway, this forecast assumes that

Chart 26  
Changes in employment and hours worked  
Q1/2004 - Q4/2014



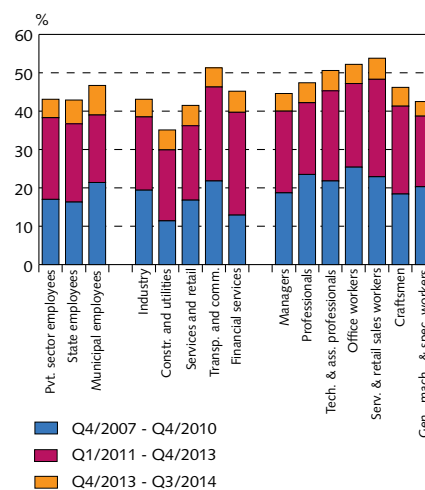
Source: Statistics Iceland.

Chart 27  
Unemployment<sup>1</sup>  
January 2003 - December 2014



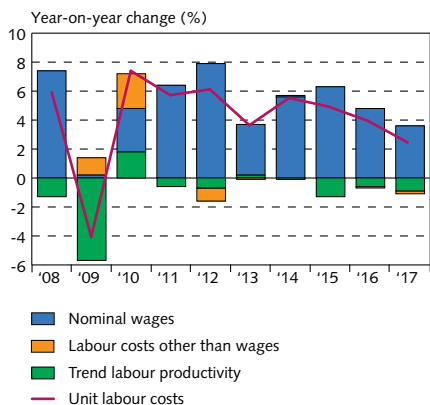
1. Monthly data. 2. Seasonally adjusted by the Central Bank.  
 Sources: Statistics Iceland, Central Bank of Iceland.

Chart 28  
Rise in wage index, by group, during term of wage settlements concluded in 2008, 2011, and 2013



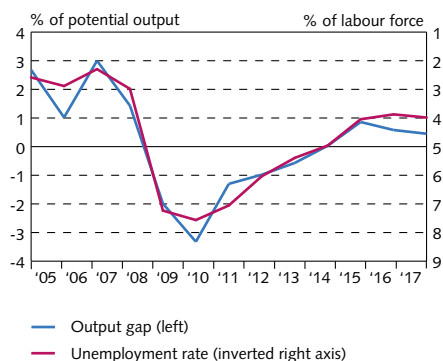
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 29  
Unit labour costs and contributions of underlying components 2008-2017<sup>1</sup>



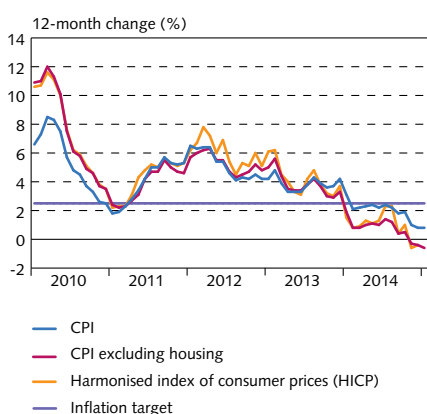
1. Labour productivity growth is shown as a negative contribution to an increase in unit labour costs. Central Bank baseline forecast 2014-2017. Sources: Statistics Iceland, Central Bank of Iceland.

Chart 30  
Output gap and unemployment 2005-2017<sup>1</sup>



1. Central Bank baseline forecast 2014-2017. Sources: Statistics Iceland, Central Bank of Iceland.

Chart 31  
Various measures of inflation  
January 2010 - January 2015



Sources: Statistics Iceland, Central Bank of Iceland.

pay rises throughout the forecast horizon will be similar to those assumed in the November forecast, which provided for a front-loaded three-year agreement involving an average nominal pay increase of approximately 5% per year. Adjustments have been made for the settlements finalised since then. On the other hand, productivity growth is projected to be weaker in 2014-2017 than was assumed in the November forecast. As a result, the outlook is for unit labour costs to rise more during the period than was estimated in November, or by 4.3% instead of the previously projected 4%. This is nearly 2 percentage points more per year than is consistent with the inflation target in the long run.

- The margin of spare capacity in the economy is estimated to have been somewhat greater in 2014 than was forecast in November. As in that forecast, it is projected to continue to narrow and gradually disappear, whereupon a positive output gap will develop, peaking at nearly 1% of potential output in late 2015 and then subsiding again as energy-intensive investment activity slows down. Output is forecast to be close to capacity in 2017, and the slack in the labour market is expected to develop accordingly.

## Inflation

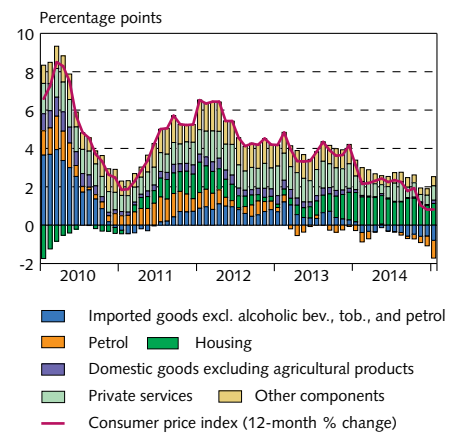
- Inflation has subsided markedly in recent months and has been at or below the Bank's inflation target since early 2014. In Q4/2014, it measured 1.3%, some 0.4 percentage points below the November forecast. The deviation is due largely to the fact that global oil prices fell much more than expected, although general inflationary pressures have also been less pronounced. The decline in petrol prices had the greatest impact on the consumer price index (CPI) during the quarter, although increases in housing and general services prices pulled in the opposite direction. Twelve-month inflation measured 0.8% in December and therefore fell below the lower deviation threshold of the inflation target for the first time.<sup>3</sup> Inflation averaged 2% in 2014, down from 3.9% in 2013.
- The CPI declined by 0.7% month-on-month in January, after rising by 0.3% in December. The fall in January was driven mainly by winter sales, the massive drop in petrol prices, and the cancellation of general excise taxes. Food and beverage prices rose by 2.6% month-on-month, however, owing to the increase in the lower value-added tax rate. Public services and house prices also rose somewhat. Twelve-month inflation measured 0.8% in January, down from 1.9% just before the last *Monetary Bulletin* was published. It is now at its lowest point since year-end 1994. At present, inflation is due largely to the rise in house prices, as CPI inflation excluding the housing component has been negative by 0.6% over the past twelve months. Declining imported goods and services prices have reduced inflation significantly in the

3. This triggered the submittal of a report to the Government, which can be found in Appendix 2.

recent term. In January, the twelve-month decline measured 5%, owing to low global inflation, strong direct and indirect effects from the drop in oil prices, and a slight appreciation of the króna.

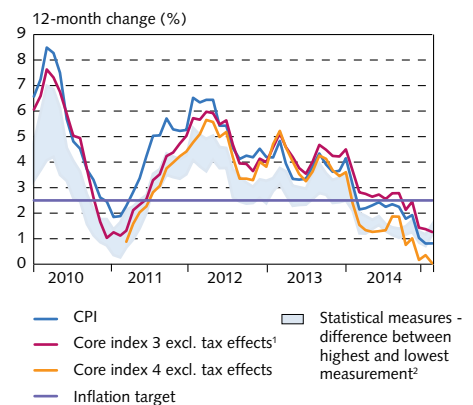
- Underlying inflation also appears to have tapered off since the last *Monetary Bulletin*. Core index 3 (which excludes the effects of indirect taxes, volatile food items, petrol, public services, and real mortgage interest expense) declined by 1.1% in January, and underlying annual inflation by that measure was 1.3%, as opposed to 2.5% just before publication of the last *Monetary Bulletin*. According to core index 4, which also excludes the market price of housing, twelve-month inflation measured 0% in January, as opposed to 1% at the time the November forecast was prepared. Statistical measures of underlying inflation suggest that it lay in the 1.2-1.6% range in January – up slightly from December. The recent slowing of measured inflation therefore appears to be rather broadly based, and underlying inflation is low as well.
- Inflation expectations have fallen by all measures since the last *Monetary Bulletin* and are at or close to the Bank's inflation target according to most criteria. In a recent survey, executives indicated that they expected inflation to measure 2.5% in the next twelve months. This is a decline of ½ a percentage point since the September 2014 survey. Market participants expect inflation to measure 2.6% in one year; this is a slight decline since October 2014, when the last market expectations survey was carried out. Household expectations have not fallen as rapidly in the recent past, however. Households project inflation at 3.5% one year ahead, among the lowest results ever recorded in the household inflation expectations survey. Indicators also imply that long-term inflation expectations have fallen in recent months. The five- and ten-year breakeven inflation rate in the bond market measures 3.2-3.4% and has declined by around 0.8 percentage points since the last *Monetary Bulletin*. This is probably consistent with inflation expectations at or near target, considering that the breakeven rate also includes a risk premium due to uncertainty in the inflation outlook. Market agents expect inflation to average 3% in the next ten years, which is slightly lower than in October.
- The inflation outlook has changed radically since the last *Monetary Bulletin*. Inflation is now expected to measure 0.5% in Q1/2015, as opposed to 2% in the Bank's last forecast. The deviation is due in particular to a lower initial position, as inflation has turned out below expectations in recent months, which is due primarily to the direct and indirect effects of the drop in global oil prices. The outlook is for inflation to remain below the Bank's inflation target until very late next year. According to the forecast, it will measure 0.7% this year and 2.3% in 2016. As a result, it will probably be below the November forecast for most of the forecast horizon. This implies, in addition to a lower initial position, that the output gap will be smaller this year and into 2016 than according to the November forecast, and that global inflation will be lower as well.

Chart 32  
Components of CPI inflation  
Contribution to inflation January 2010 - January 2015



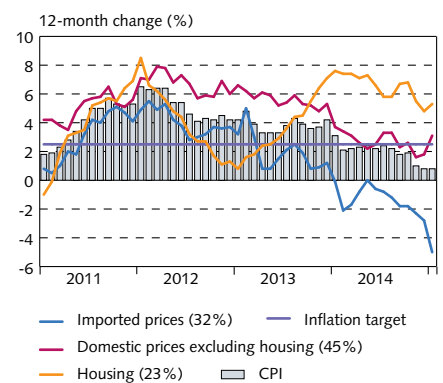
Source: Statistics Iceland.

Chart 33  
Various measures of underlying inflation  
January 2010 - January 2015



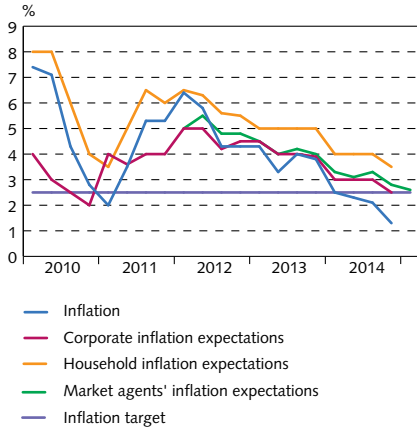
1. Core index 3 is the CPI excluding prices of agricultural products, petrol, public services, and the cost of real mortgage interest. Core index 4 excl. the market price of housing as well. 2. Underlying inflation is measured as the weighted median and as the trimmed mean, excluding 5%, 10%, 15%, 20% and 25% of components with the largest price changes.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 34  
Imported and domestic inflation<sup>1</sup>  
January 2011 - January 2015



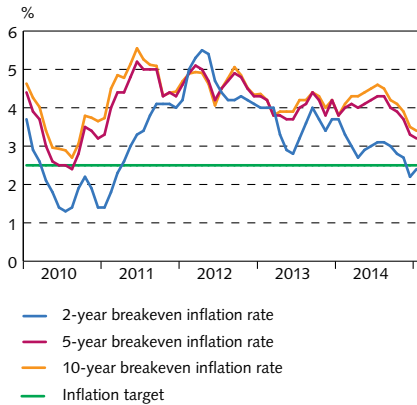
1. Imported inflation is estimated using imported food and beverages and the price of new motor vehicles and spare parts, petrol, and other imported goods. Domestic inflation is estimated using the price of domestic goods and the price of private and public services. The figures in parentheses show the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

Chart 35  
Inflation and inflation expectations  
one year ahead  
Q1/2010 - Q1/2015



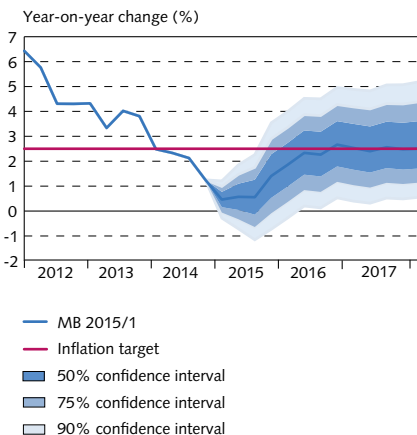
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland.

Chart 36  
Breakeven inflation<sup>1</sup>  
January 2010 - January 2015



1. Breakeven inflation rate based on nominal and indexed yield curves (monthly averages).  
Source: Central Bank of Iceland.

Chart 37  
Inflation forecast and confidence intervals  
Q1/2012 - Q1/2018

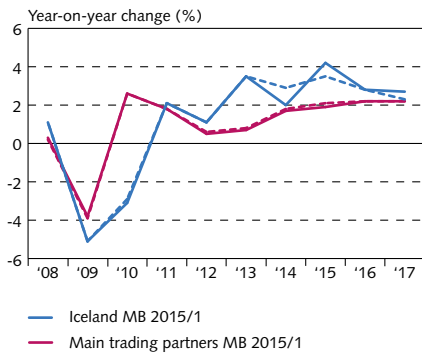


Sources: Statistics Iceland, Central Bank of Iceland.

Furthermore, it appears likely that the recent drop in oil prices will not reverse in full and that oil prices will therefore be lower throughout the forecast horizon than was projected in November.

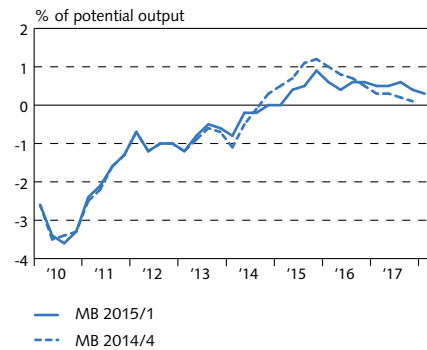
- A number of assumptions in the forecast are subject to considerable uncertainty. Chief among them is the result of the upcoming wage settlements, as pay increases could turn out larger than is assumed in the baseline forecast. If negotiated pay rises are larger than is consistent with the inflation target plus productivity growth, inflationary pressures will be more pronounced than is assumed in the baseline scenario. As before, there is considerable uncertainty about exchange rate developments during the forecast horizon, owing to uncertainty about the effects of capital account liberalisation and the settlement of the failed banks' estates. Inflation expectations have fallen in the recent term and are close to target by most measures. As yet, however, there is no indication of how firmly long-term inflation expectations are anchored; therefore, it is uncertain whether they would remain close to target if inflation should rise again. If not, it could prove difficult to bring inflation back under control.
- But inflation could also turn out lower than is assumed in the forecast if domestic demand growth is overestimated; for example, if the global economic recovery proves weaker than expected. In addition, oil and commodity prices could decline further and global inflation could prove lower than is currently projected.
- To illustrate the uncertainties in the baseline forecast, Chart 37 shows a probability distribution for the inflation forecast; that is, the range in which there is considered to be a 50%-90% probability that inflation will lie over the next three years (the methodology is described in Appendix 3 in *Monetary Bulletin* 2005/1). In the November forecast, the risk profile was tilted to the downside for the short term, and this has proven to be the case. For this reason, the probability distribution of the current forecast is considered more or less symmetrical for the short term, although for the long term it is tilted to the upside, as it was in November. There is a roughly 50% probability that inflation will be in the 1-2¾% range in one year and in the 1¾-3½% range by the end of the forecast horizon.

Chart 38  
GDP growth in Iceland and trading partners  
2008-2017<sup>1</sup>



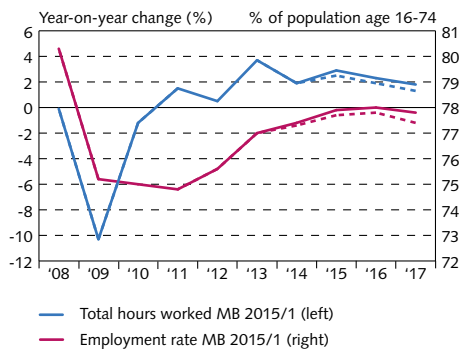
1. Central Bank baseline forecast 2014-2017. Broken lines show forecast from MB 2014/4.  
Sources: Macrobond, Statistics Iceland, Central Bank of Iceland.

Chart 39  
Output gap<sup>1</sup>  
Q1/2010 - Q1/2018



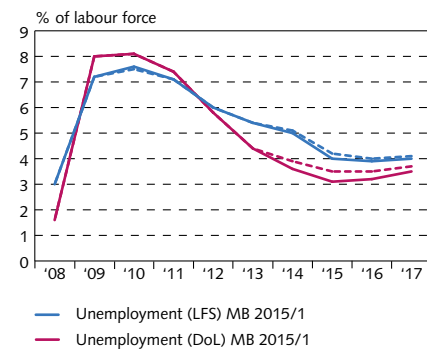
1. Central Bank baseline forecast Q4/2014 - Q1/2018.  
Source: Central Bank of Iceland.

Chart 40  
Total hours worked and employment rate  
2008-2017<sup>1</sup>



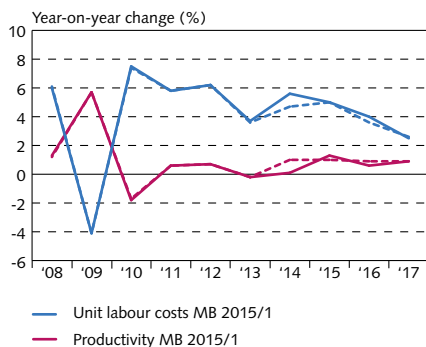
1. Central Bank baseline forecast 2014-2017. Broken lines show forecast from MB 2014/4.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 41  
Unemployment 2008-2017<sup>1</sup>



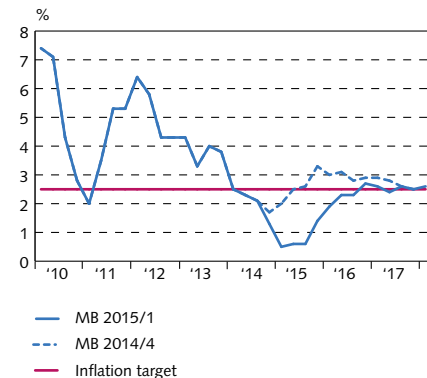
1. Central Bank baseline forecast 2014-2017. Broken lines show forecast from MB 2014/4.  
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

Chart 42  
Unit labour costs and productivity 2008-2017<sup>1</sup>



1. Productivity measured as the ratio of GDP to total hours worked. Central Bank baseline forecast 2014-2017. Broken lines show forecast from MB 2014/4.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 43  
Inflation<sup>1</sup>  
Q1/2010 - Q1/2018



1. Central Bank baseline forecast Q1/2015 - Q1/2018.  
Sources: Statistics Iceland, Central Bank of Iceland.