MONETARY BULLETIN

2014•2

Contents

The objective of the Central Bank of Iceland's monetary policy is to contribute to general economic well-being in Iceland. The Central Bank does so by promoting price stability, which is its main objective. In the joint declaration made by the Government of Iceland and Central Bank of Iceland on 27 March 2001, this is defined as aiming at an average rate of inflation, measured as the 12-month increase in the CPI, of as close to 2½% as possible.

Professional analysis and transparency are prerequisites for credible monetary policy. In publishing *Monetary Bulletin* four times a year, the Central Bank aims to fulfil these principles.

Monetary Bulletin includes a detailed analysis of economic developments and prospects, on which the Monetary Policy Committee's interest rate decisions are based. It also represents a vehicle for the Bank's accountability towards Government authorities and the public.

The framework of monetary policy and its implementation and instruments are described in the chapter entitled "Monetary policy and instruments", on pp. 75-78 of this edition of *Monetary Bulletin*.

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Icelandic letters:

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

Symbols:

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

Statement of the Monetary Policy Committee 21 May 2014

The Monetary Policy Committee (MPC) of the Central Bank of Iceland has decided to keep the Bank's interest rates unchanged.

According to the Bank's new macroeconomic forecast, GDP growth will measure 3.7% this year, about 1 percentage point more than according to the previous forecast. Even stronger growth is projected for next year. Furthermore, the labour market continues to recover. Robust output growth will cause the slack in the economy to disappear earlier than previously forecast, and a positive output gap will develop, peaking in 2016. It is cause for concern that national saving is projected to diminish markedly and the current account surplus to turn into a deficit towards the end of the forecast horizon.

Inflation has been close to target in recent months and is expected to remain there until next year, when it is forecast to rise as a positive output gap emerges. Short-term inflation expectations have declined in the recent term, in line with falling inflation, although long-term inflation expectations are still somewhat above target.

The Bank's forecast assumes that the results of the wage agreements concluded late in 2013 will apply to most of the labour market and that similar agreements will be made for a longer term early next year. There is still some unrest in the labour market, however, which causes uncertainty about wage developments.

Because of the decline in inflation and inflation expectations, the Bank's real rate has risen markedly year-to-date. As a result, the slack in the monetary stance has probably disappeared. The level of the Bank's neutral real rate is uncertain, but increased growth in domestic demand in the near term will probably require further increases in the Bank's real interest rate, other things being equal. The more other measures, including restrictive fiscal policy, pull in the same direction as monetary policy, the less need there will be for a tighter monetary stance. This would also encourage increased national saving and lead to a more favourable current account balance.

Monetary policy has been successful in the recent term. Inflation has subsided to target, and the slack in the economy is vanishing. Volatility of inflation and output has also diminished. However, long-term inflation expectations are still somewhat above target, generating some uncertainty about the durability of this success. Whether a change in the Bank's nominal interest rates is warranted in the near future will depend on the future path of inflation and inflation expectations.

Output growth accelerates and spare capacity gives way to a positive output gap

The global economic recovery has progressed in line with the forecast in the February Monetary Bulletin. *The outlook for exports and terms of trade has improved, and the steady deterioration of terms of trade since 2010 is likely to come to a halt this year. GDP growth measured 3.3% in 2013, the highest among developed countries. The post-crisis output loss has therefore been recovered to a large degree. Output growth is expected to strengthen still further this year, measuring 3.7%, a full percentage point more than was forecast in February. The improved outlook is due primarily to indications of greatly increased underlying growth in investment. According to the Bank's forecast, GDP growth will continue to gain pace next year, rising to 3.9%, and then ease back to 2.7% in 2016 as domestic demand growth softens. GDP growth will therefore average 3.4% per year over the forecast horizon, compared to the average of 2.7% over the last thirty years and an average growth rate of 2.2% projected for Iceland's main trading partners over the forecast horizon. The labour market continues to recover, with declining unemployment, an increase in total hours worked, and a rising employment rate. The slack in the economy has therefore diminished rapidly and is expected to be fully absorbed at mid-year. Robust growth of domestic demand is projected to lead to a positive output gap, which is expected to peak in mid-2016. Inflation was in line with the Bank's 2.5% inflation target in Q1/2014 and is expected to remain at target throughout this year. The inflation outlook has improved slightly since the publication of the February forecast, due primarily to a stronger króna and smaller rises in unit labour costs in the recent term. As in February, however, inflation is expected to begin rising again next year, measuring 3-3½% in the latter half of the forecast horizon, whereupon it will begin to fall back towards the target in response to a tighter monetary stance. If the forecast materialises, inflation will nonetheless be somewhat above target at the end of the forecast horizon, although the target is within the 50% confidence band of the forecast.*

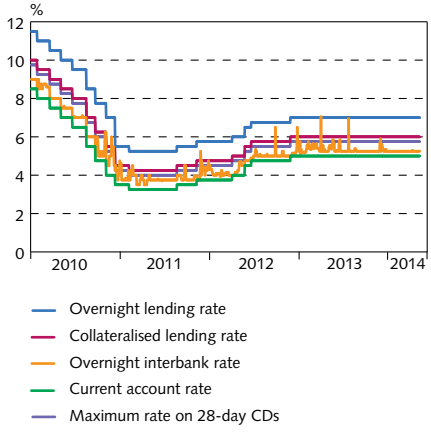
I Economic outlook and key uncertainties

Monetary policy

Nominal Central Bank rates remain unchanged ...

The Central Bank of Iceland Monetary Policy Committee (MPC) has held the Bank's nominal interest rates unchanged since raising them by 0.25 percentage points in November 2012. Therefore, prior to the publication of this *Monetary Bulletin*, the current account rate was 5%, the maximum rate on 28-day certificates of deposit (CDs) 5.75%, the seven-day collateralised lending rate 6%, and the overnight lending rate 7%. Because financial system liquidity is relatively abundant, demand for Central Bank liquidity facilities is limited, and the Bank's effective policy rate lies close to its current account rate. In terms of the simple average of the Bank's current account rate and the maximum rate on 28-day CDs, the effective policy rate was 5.4% just before this *Monetary Bulletin* went to press, whereas overnight interbank rates were 5.25% at the same time (Chart I-1). Market agents appear to expect the Bank's rates to remain unchanged well into next year and then rise slightly.

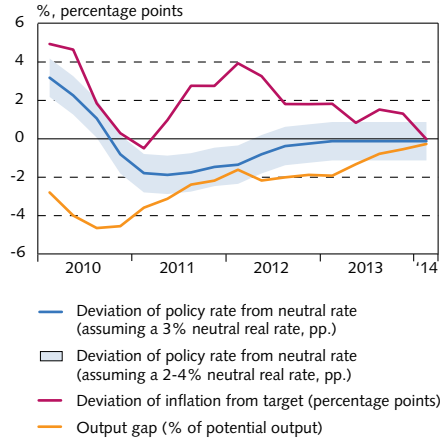
Chart I-1
Central Bank of Iceland interest rates and short-term market interest rates
Daily data 1 January 2010 - 16 May 2014



Source: Central Bank of Iceland.

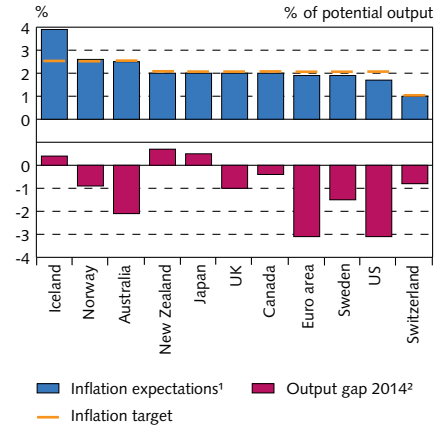
1. The analysis presented in this *Monetary Bulletin* is based on data available in mid-May.

Chart I-2
Effective Central Bank of Iceland interest rate, inflation and output gap[1]
Q1/2010 - Q1/2014



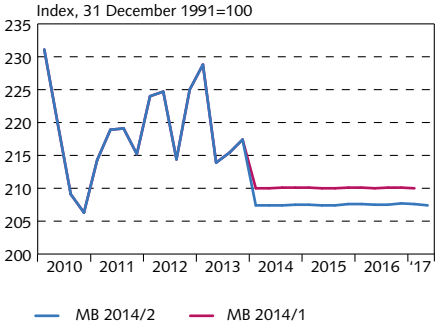
1. Average of CBI current account rate and maximum rate on 28-day CDs.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-3
Long-term inflation expectations and output gap in selected industrialised countries



1. Long-term (5-10 yr) inflation expectations based on surveys of market agents and professional forecasters (except for Australia, the UK, Japan, New Zealand, and Switzerland, which are based on the IMF forecast five years ahead). 2. For countries other than Iceland, the output gap is based on OECD estimates.
Sources: Consensus Forecasts, IMF, Macrobond, central bank websites, Central Bank of Iceland.

Chart I-4
Trade-weighted exchange rate index – comparison with MB 2014/1



Source: Central Bank of Iceland.

... but the real Central Bank rate has risen

Even though the Central Bank's nominal interest rates have been unchanged for a year and a half, its real rate has inched upwards as inflation has subsided to target and the margin of spare capacity in the economy has narrowed (Chart I-2). The Bank's effective real rate is now about 3% in terms of the current inflation level and 2.3% in terms of the average of various measures of inflation and short-term inflation expectations. It has risen by just under a percentage point in the past year, and real market rates have developed in a like manner. The Bank's real rate is now somewhat above that of other central banks in industrialised countries. This is primarily because long-term inflation expectations are not yet firmly enough anchored, even though inflation has subsided to target in the recent term. Conditions in Iceland are therefore different from those in industrialised countries whose long-term inflation expectations are stable at their respective inflation targets. As Chart I-3 shows, there is considerably more spare capacity in many of those countries, and deflationary risks remain in some of them. As a result, Iceland has needed a higher nominal rate and a tighter monetary stance (see also Box I-1 in *Monetary Bulletin* 2013/2). Interest rate developments and private sector financial conditions are discussed in greater detail in Section III.

Króna over 5% stronger year-on-year

Exchange rate volatility has diminished markedly since the Central Bank stepped up its foreign exchange market intervention in May 2013. The króna has appreciated year-to-date. Just before this *Monetary Bulletin* was published, it was around 1% stronger in trade-weighted terms than it was just before the February *Monetary Bulletin* just over 5% stronger than it was a year ago. While the appreciation reflects a number of factors, the sizeable trade surplus in 2013 and reduced foreign debt service in Q1/2014 as compared with Q1/2013 or H2/2013 are presumably the most important among them.

The exchange rate was a full 1% higher in Q1 than was assumed in the Bank's February forecast. As was the case then, the Bank's baseline forecast is based on the technical assumption that throughout the forecast horizon, the trade-weighted exchange rate index (TWI) will remain broadly stable at the level prevailing when the forecast was prepared. The forecast is therefore based on the assumption that the TWI will be just above 207 points for the remainder of the forecast horizon (Chart I-4). As is discussed in greater detail below, this assumption is highly uncertain, as this exchange rate is higher than has been assumed in Central Bank forecasts for quite a while. Further discussion of developments in the exchange rate and the foreign exchange market can be found in Sections II and III.

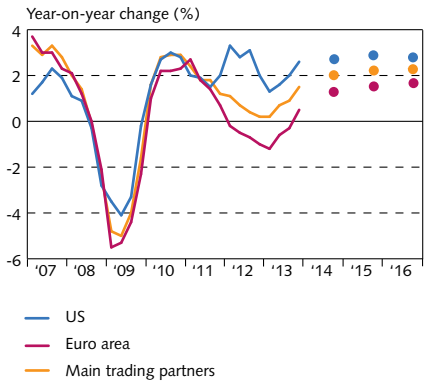
Highlights of the Central Bank's baseline forecast

Global economic recovery advances slowly ...

In line with the February forecast, the economic recovery in Iceland's main trading partner countries has gained momentum since mid-

2013. It is driven increasingly by GDP growth in developed countries, although the strength of the recovery differs from one country to another and the outlook for the euro area remains weak. The GDP growth outlook for Iceland's trading partners is broadly unchanged from the February forecast. Growth is projected to average 2% this year and just over 2% per year in 2015 and 2016, and domestic demand is expected to take over gradually from exports as the main driver of growth (Chart I-5). Some uncertainty about the global economic situation remains, although it has diminished, as is discussed further later in this section. Further discussion of the global economy can be found in Section II.

Chart I-5
Global output growth[1]



1. Dots indicate Consensus Forecasts and Global Insight projections for 2014-2016.
Sources: Consensus Forecasts, Macrobond, OECD, Central Bank of Iceland.

... and the outlook for terms of trade and exports has improved

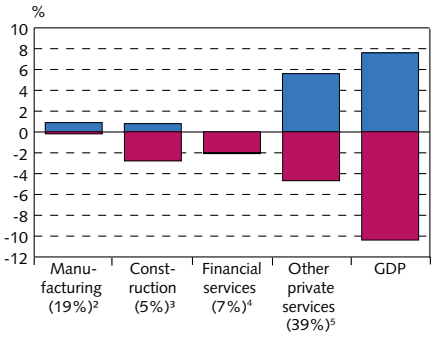
As of 2013, terms of trade had deteriorated by a total of 17% since 2007. They are forecast to improve slightly year-on-year this year after continuous erosion since 2010. The outlook for the next two years has also improved, primarily because of a brighter outlook for export prices, marine product prices in particular. The total improvement is projected at nearly 1% over the forecast horizon, as opposed to a 2% deterioration according to the February forecast.

Because of robust services exports, year-2013 export growth was nearly a percentage point stronger than according to the February forecast, and the outlook for 2014 is similarly positive for the same reason. This improvement outweighs the poorer outlook for goods exports, which is attributable to a more pronounced decline in marine product exports. The outlook for exports has also improved for 2015 and 2016. Export growth is now projected to average 2.7% per year during the forecast horizon, as opposed to just under 2% in the February forecast, and the trade surplus will increase accordingly. Further discussion of exports and external conditions can be found in Section II, and the external balance is discussed in Section VII.

Output growth measured 3.3% in 2013, outpacing other developed countries ...

According to figures from Statistics Iceland, output growth measured 3.3% in 2013, about 0.3 percentage points more than in the Bank's February forecast. The deviation is due to a more positive contribution from net trade, which in turn is due to stronger growth in services exports. GDP has therefore gained nearly 11% since hitting its post-crisis trough in Q1/2010 but is still almost 3% below its pre-crisis peak.[2] As Chart I-6 shows, the recovery has been driven primarily by increased production in the services sector, although other sectors (apart from financial services) have also begun to contribute.[3]

Chart I-6
Individual sectors' share in economic contraction and recovery[1]

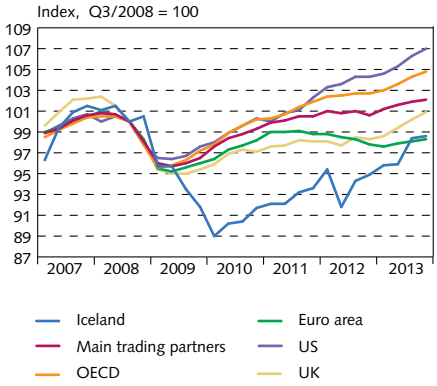


1. Each sector's contraction and recovery, weighted with its share in gross factor income during the relevant period (2013 share in parentheses). 2. Manufacturing, mining, utilities, and waste handling. 3. Building and construction. 4. Financial and insurance activities. 5. Wholesale, retail, transportation and storage, hotels and restaurants, IT and communications, real estate, and miscellaneous specialised services.
Source: Statistics Iceland.

2. This refers to seasonally adjusted figures based on Central Bank estimates. As is discussed in Box IV-1 in *Monetary Bulletin* 2012/4, Statistics Iceland's method for seasonal adjustment does not appear suitable for interpreting intrayear economic developments; therefore, the Central Bank chooses to use other methods.

3. Chart I-6 shows the accumulated contraction in GDP and the improvement between yearly averages. By this measure, the post-crisis contraction was 10½% and the recovery since 2010 just under 8%. According to seasonally adjusted quarterly data, however, the contraction measures just over 12% and the recovery just under 11%, as is stated in the main text.

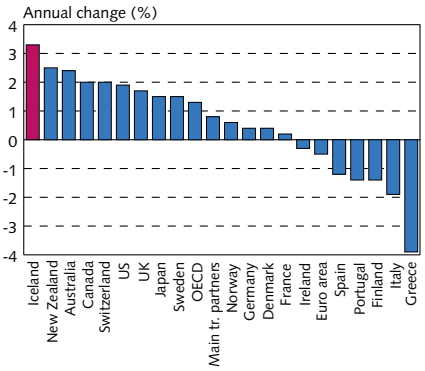
Chart I-7
Post-crisis developments in GDP[1]
Q1/2007 - Q4/2013



1. Seasonally adjusted data for Iceland are from the Central Bank of Iceland.

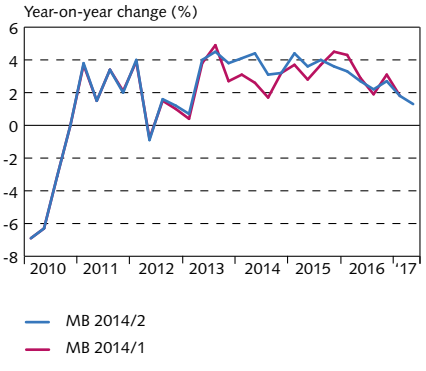
Sources: Macrobond, OECD, Central Bank of Iceland.

Chart I-8
GDP growth in selected OECD countries 2013



Sources: OECD, Statistics Iceland.

Chart I-9
GDP growth – comparison with MB 2014/1



Sources: Statistics Iceland, Central Bank of Iceland.

Iceland's post-crisis economic contraction was steeper than the average among developed countries.[4] Since the turnaround, however, its recovery has been stronger than the average among its main trading partners and other OECD countries (Chart I-7), and its year-2013 GDP growth was the strongest among developed countries (Chart I-8).

... and appears set to gain further momentum this year

GDP growth was notably strong in the latter half of 2013, averaging 4.1%. A similar rate of growth is expected in the first half of this year. The pace is expected to ease slightly in the second half of 2014, with GDP growth for the year projected at 3.7%, driven by strong growth in private consumption and business investment. As in other developed countries, output growth is expected to be driven increasingly by domestic demand.

The output growth outlook for 2014 as a whole has therefore improved markedly from the February forecast of 2.6% (Chart I-9). The improvement is due primarily to the expectation that investment will grow much more rapidly than previously anticipated, in line with numerous indications of firms' investment plans.

Average GDP growth during the forecast horizon to exceed the thirty-years average

The output growth outlook for the upcoming two years is broadly unchanged from the February forecast. Growth is projected at 3.9% next year, owing to the combined effect of strong growth in private consumption and investment. As in February, the pace is assumed to ease somewhat in 2016, as domestic demand growth softens. Domestic output growth is expected to be weaker in 2016 than was forecast in February, or 2.7% as opposed to 3%.

If this forecast materialises, output growth will average 3.4% per year during the forecast horizon, ½ a percentage point more than was forecast in February forecast and well above the thirty-year average of 2.7%. The average for Iceland's trading partners is projected at 2.2% (Chart I-5). Further discussion of private and public sector demand and output growth developments and prospects can be found in Sections IV and V.

Labour market recovery continues

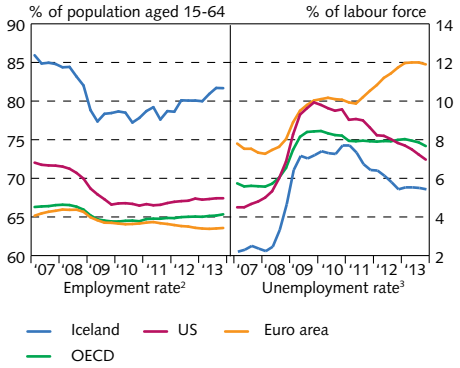
Registered seasonally adjusted unemployment measured 3.8% in Q1/2014, after declining nearly 1 percentage point year-on-year and 4½ percentage points from its mid-2009 peak. Unemployment according to the Statistics Iceland labour market survey was higher, or 5.2%. It was broadly unchanged year-on-year and nearly 3 percentage points below its peak. The number of jobs continued to grow in excess of the working-age population, and the employment rate rose therefore. Average hours worked also increased slightly in Q1; hence,

4. This is unsurprising in view of the imbalances that had developed during the prelude to the crisis. It is important to bear in mind that Iceland sustained both a systemic banking crisis and a severe currency crisis. Research suggests that contractions following a twin banking and currency crisis are, on average, up to three times deeper and about twice as long as those following a conventional banking crisis (see, for example, Box I-2 in *Monetary Bulletin* 2012/4).

total hours worked rose year-on-year by 3%, slightly more than was forecast in February. Furthermore, the labour participation rate continued to rise, the number of persons outside the labour market to decline, and long-term unemployment to fall. The recovery of the domestic labour market has been stronger than the OECD average (Chart I-10).

Indicators imply that there is still some slack in the labour market. It is expected to disappear in the near future, but the exact timing is difficult to pin down. Unemployment is projected to keep tapering off, falling to 3.3% by Q4/2014 and 3.2% by 2016 (Chart I-11). In line with an improved GDP growth outlook, total hours worked will also rise somewhat faster than was forecast in February.

Chart I-10
Employment rate and unemployment[1]
Q1/2007 - Q4/2013

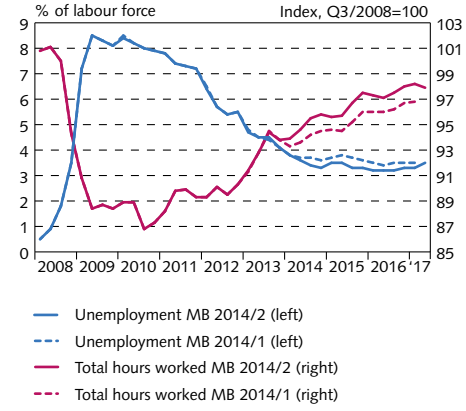


1. Seasonally adjusted figures. 2. Number of employed persons as a share of the population aged 15-64. 3. Number of unemployed persons as a share of the labour force (harmonised OECD measure).
Source: OECD.

Wage costs rose less in 2012-2013 than previously estimated, but the outlook remains broadly unchanged since February

Even though new data from Statistics Iceland indicate that the rise in unit labour costs over the past two years was smaller than previous figures had suggested, the wage share has continued to rise and is close to its historical average. Wage agreements have been concluded with the majority of the labour market since the February forecast was published. Even though negotiated pay rises have been broadly consistent with the private sector agreement concluded in December, the wage increases taking effect this year and next year are somewhat larger than was assumed in the last forecast. This is offset by more rapid growth in underlying productivity. Unit labour costs are therefore expected to develop broadly in line with the February forecast, rising by an average of just under 3% per year over the forecast horizon (Chart I-12). Further discussion of the labour market can be found in Section VI.

Chart I-11
Unemployment and total hours worked – comparison with MB 2014/1

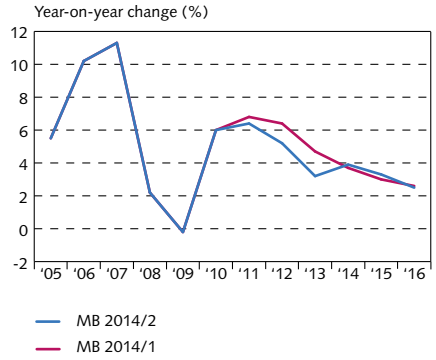


1. Registered unemployment and total hours worked are seasonally adjusted figures from the Central Bank of Iceland.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

Spare capacity expected to disappear at mid-year

The margin of spare capacity in the economy is estimated to have equalled about ½% of potential output in 2013, about 4 percentage points below its mid-2010 peak. Owing to continued strong GDP growth, it is expected to disappear by mid-2014, about half a year earlier than according to the February forecast (Chart I-13). While the confidence bands around this estimate remain large, it is supported by numerous indicators of the size of the slack in the economy, as is discussed later in this section. As in the February forecast, strong growth in domestic demand will contribute to the gradual development of a positive output gap that will peak at 1½% of potential output in mid-2016 and then narrow to about ½% by mid-2017, the end of the forecast horizon. This estimate of the output gap is based on the assumption that potential output will grow in line with the thirty-year output growth average of 2.7%. Further discussion of potential output and output slack can be found in Section IV.

Chart I-12
Unit labour costs[1] – comparison with MB 2014/1

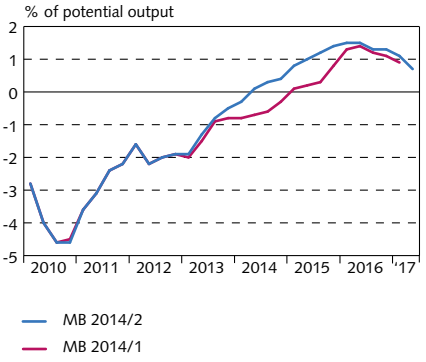


1. Total labour costs adjusted for underlying productivity growth.
Sources: Statistics Iceland, Central Bank of Iceland.

Inflation at target …

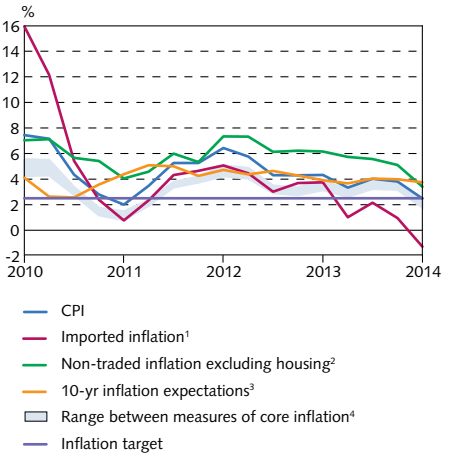
Inflation has subsided rapidly year-to-date and had fallen below the inflation target by February, when it measured 2.1%. It has held close to the target since then, averaging 2.5% in Q1, as compared with

Chart I-13
Output gap – comparison with MB 2014/1



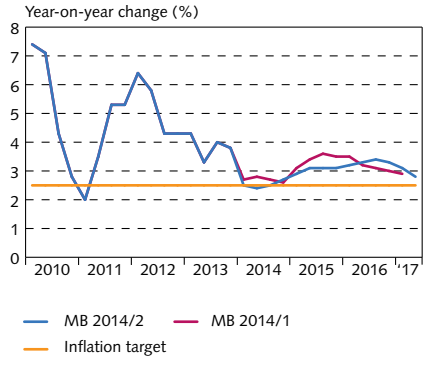
Source: Central Bank of Iceland.

Chart I-14
Inflation and inflation expectations
Q1/2010 - Q1/2014



1. Imported food and beverages, new motor vehicles and spare parts, petrol, and other imported goods. 2. Domestic goods and vegetables, and public and private services. 3. Breakeven rate based on indexed and nominal yield curves. 4. Interquartile range of various measures of underlying inflation (core indices 3 and 4 excluding tax effects, trimmed mean (excluding extreme values that change by 5-25% between months) and weighted median).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-15
Inflation – comparison with MB 2014/1



Sources: Statistics Iceland, Central Bank of Iceland.

4.3% in Q1/2013 and 6.4% in Q1/2012. As inflation has declined, it has become less volatile, as has output (see Box I-1).

In recent years, inflation has been driven primarily by domestic factors such as rising house prices and domestic goods and services prices. However, non-traded inflation excluding housing has fallen in the recent term and, together with low imported inflation, has contributed to declining overall inflation (Chart I-14). Underlying inflation has also declined markedly, and short-term inflation expectations have subsided. Long-term inflation expectations have been relatively persistent, however.

... and likely to remain at target this year, then rise above 3% in 2015 as a positive output gap develops

Q1 inflation proved 0.2 percentage points lower than was forecast in February, and the inflation outlook for 2014 as a whole has improved slightly (Chart I-15). Inflation is expected to remain close to the Bank's 2.5% target throughout this year, as in the February forecast, and then rise again in 2015, when the effects of the recent ISK appreciation have tapered off and the slack in the economy gives way to a positive output gap. As in February, inflation is expected to be in the 3-3½% range in the latter half of the forecast horizon, whereupon it will begin to fall back towards the target in response to a tighter monetary stance. There are a number of significant uncertainties in the forecast, as is discussed below. Further discussion of global price level developments can be found in Section II, and developments in domestic inflation and inflation expectations are discussed in Section VIII.

Key uncertainties

The baseline forecast reflects an assessment of the most likely economic developments over the next three years. It is based on forecasts and assumptions concerning developments in the external environment, and the effects of those developments on the Icelandic economy. The forecast is also based on how individual markets function and how monetary policy is transmitted to the economy. All of these factors are highly uncertain, and economic developments, whether domestic or international, could deviate somewhat from the baseline scenario. The following is a discussion of several important uncertainties.

Global economy

The outlook globally is for a continued gradual economic recovery. Uncertainty continues to subside, although there is still some unrest centring on volatile capital flows to various emerging countries, such as that surfacing in mid-2013. Regional factors like those related to the political turbulence in Ukraine could also have some effect. Dispersion in GDP growth forecasts for leading industrialised countries continues to decline (Chart I-16), and the uncertainty in the International Monetary Fund's (IMF) forecast is considerably less than it was a year ago (Chart I-17). The Fund still considers the risk to be primarily on the downside, however. If the global recovery proves weaker than is assumed in the baseline forecast, there is the risk that

the domestic recovery will be weaker as well: terms of trade could deteriorate further, access to foreign credit markets could prove more difficult, and export growth could be adversely affected.

Exports

According to the baseline forecast, goods and services exports will grow by an average of just over 2½% per year during the forecast horizon. At the same time, trading partners' imports are assumed to increase by approximately 3½% per year and world trade to grow by just over 5% per year. Export growth during the forecast horizon is also somewhat below the past five years' average of 5% and below the average of 5½% over both the past decade and the decade immediately preceding the global financial crisis. As a result, export growth could be underestimated in the baseline forecast. On the other hand, the possibility that global GDP growth has been overestimated could indicate that the baseline forecast is unduly optimistic as regards the outlook for exports. Chart I-18 shows the possible effect of different assumptions concerning export growth during the period would have on both average output growth during the forecast horizon and the current account balance in 2016. On the one hand is an alternative scenario where exports grow in line with growth in trading partners' demand, and on the other is an alternative scenario in which average export growth is about 1 percentage point less than in the baseline forecast. GDP growth changes marginally from the baseline scenario during the period, as the impact of slower export growth is offset by the impact on the exchange rate and domestic demand, and therefore on the domestic interest rate level. As expected, the effects on developments in the current account balance are stronger.

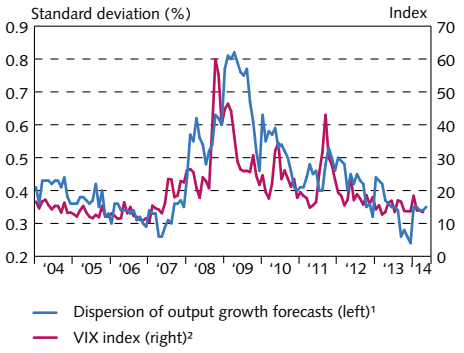
Exchange rate of the króna

As before, the baseline forecast assumes that the exchange rate of the króna will remain relatively stable throughout the forecast horizon. This assumption is highly uncertain, however, particularly in view of the current balance of payments problem facing the economy and the uncertainty related to the settlement of the estates of the failed banks and the liberalisation of capital controls (see *Financial Stability* 2014/1). In addition, external conditions could change, as is discussed above. As Chart I-19 shows, the current exchange rate path is stronger than was assumed in the last two years' forecasts.

Domestic wage developments

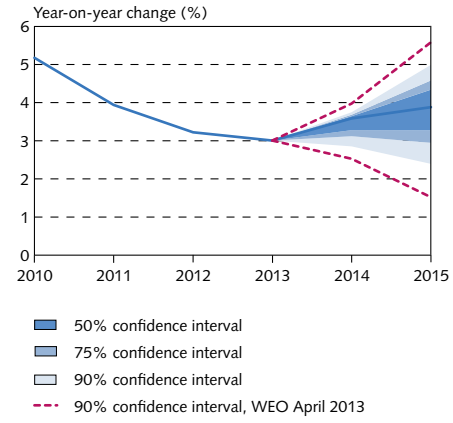
The wage agreements that have now been finalised with most of the labour market provide for relatively modest pay rises, although some groups have negotiated somewhat larger increases. Some groups have yet to negotiate, and a few have announced plans to strike. It is assumed that the next few years' wage rises will be broadly in line with most of the current contracts and that unit labour costs will rise by 2½-4% during the forecast horizon. This assumption is uncertain, however, and there are already signs that some groups are trying to negotiate beyond the current wage settlement framework. If pay negotiations return to their past pattern, there is the risk that some

Chart I-16
Dispersion of output growth forecasts and implied stock price volatility



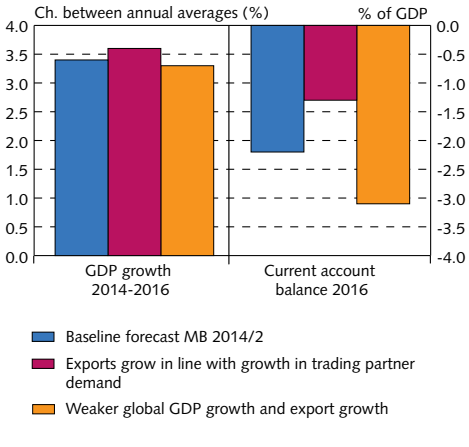
1. Weighted average standard deviation in output growth forecasts compiled by Consensus Forecasts for the G7 (weighted with PPP-adjusted GDP). 2. Chicago Board Options Exchange S&P 500 Implied Volatility Index (VIX).
Sources: Consensus Forecasts, Macrobond.

Chart I-17
IMF forecast of global output growth



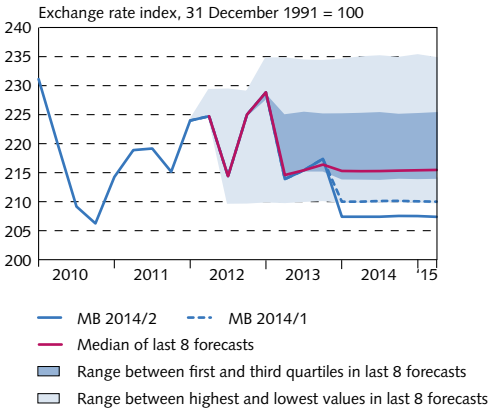
Source: IMF, *World Economic Outlook (WEO),* April 2014.

Chart I-18
GDP growth and current account balance based on various export growth assumptions



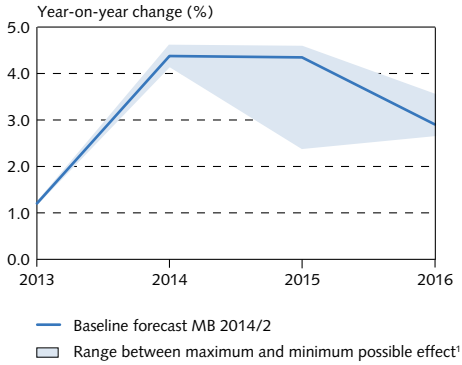
Source: Central Bank of Iceland.

Chart I-19
Exchange rate assumptions in Central Bank baseline forecasts – range of last eight forecasts[1]



1. The chart shows the exchange rate assumptions in the baseline forecasts in *Monetary Bulletin* 2012/2-2014/1 over the horizon of the oldest forecast (through Q2/2015).
Source: Central Bank of Iceland.

Chart I-20
Uncertainty about effects of debt relief and restricted indexed loan supply on private consumption



1. The confidence band reflects the aggregate uncertainty related to the effects of the debtrelief measures discussed in Appendix 2 in *Monetary Bulletin* 2014/1 and the effects of a ban on 40-year indexed mortgage annuities discussed in Box V-1 in *Financial Stability* 2014/1.
Sources: Statistics Iceland, Central Bank of Iceland.

of the increase will be passed through to prices and that inflationary pressures will be greater than is assumed in the baseline forecast. It is also possible that some firms will respond to increased wage costs by slowing down recruitment or even by laying off staff. This, together with higher Central Bank interest rates in response to inflationary and exchange rate pressures, would weaken the domestic economic recovery beyond what is assumed in the baseline forecast.

Private consumption

The baseline forecast assumes that private consumption will grow by just over 4% per year in 2014 and 2015, after relatively weak growth in 2013. Although accelerated private consumption growth is due in part to increased underlying resilience in the domestic economy, it is also attributable to some extent to the Government's debt relief package, which takes effect later this year. As is discussed in Appendix 2 in *Monetary Bulletin* 2014/1, the effects of the debt relief measures are somewhat uncertain. Added to this is the uncertainty in connection with the authorities' declared intention of restricting households' access to long-term indexed mortgages. As is discussed in Box V-1 in *Financial Stability* 2014/1, such a restriction would make new mortgage debt service more front-loaded and would make it more difficult for individuals – particularly those with lower income – to service their mortgage debt. Other things being equal, it would reduce households' disposable income after debt service and reduce their consumption spending, at least initially. If these plans materialise, the assumptions concerning near-term private consumption growth could be overestimated in the baseline forecast. Although a possible underestimation of the demand-side effects of the debt relief package could offset the negative impact of the restriction on households' access to indexed loans, the latter will probably weigh more heavily, particularly in 2015 (Chart I-20). Both domestic demand growth and GDP growth would then be weaker than is assumed in the baseline forecast.

The slack in the economy

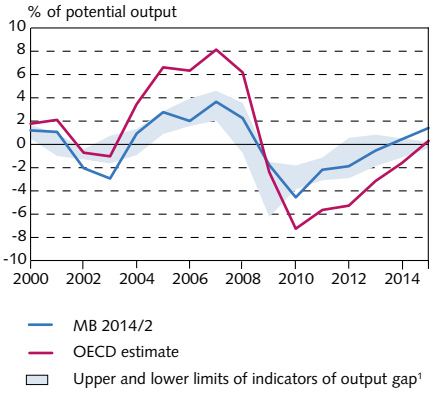
According to the baseline forecast, the slack in the economy has all but disappeared, and a positive output gap will begin to develop this year. Other things being equal, it will cause inflationary pressures to rise again. This assumption is obviously uncertain (see Box IV-1 in *Monetary Bulletin* 2011/4 and Box IV-2 in *Monetary Bulletin* 2013/4). The indicators that the Central Bank considers in estimating the output gap all imply, however, that the slack is almost absorbed or has already given way to a positive output gap (Chart I-21). For instance, the estimated equilibrium unemployment rate suggests that the slack has already disappeared (see Box VI-1 in *Monetary Bulletin* 2013/4), and the outlook is for the wage share to rise above its long-term average this year. On the other hand, executives' responses to questions on whether their operations are close to full capacity and how easily they could add on staff indicate that some spare capacity still exists, although it is diminishing. The same is indicated by the OECD's recent assessment of the slack in the Icelandic economy.

Inflation outlook

All of the uncertainties described above create some uncertainty about the inflation outlook. For example, if the króna is weaker or wage increases larger than in the baseline forecast, there is the risk that the inflation outlook in the forecast or the assumptions concerning the Central Bank interest rate level that will suffice to bring inflation back to target are too optimistic.[5] The same is true if the slack in the economy is overestimated in the baseline forecast. The risk that underlying inflationary pressures are underestimated is also greater than it would be otherwise because of how poorly anchored long-term inflation expectations appear to be. If domestic demand has been overestimated, however, or if global output growth turns out weaker than is assumed in the forecast, the domestic economy could turn out weaker and inflationary pressures therefore less pronounced. The same applies if a weaker global economic recovery also entails larger declines in global oil and commodity prices, at least insofar as the króna does not weaken as a result.

As a consequence, the inflation outlook is uncertain, as before. This is illustrated in Chart I-22, which gives the inflation outlook according to the baseline forecast, together with the estimated confidence intervals for the forecast. The chart shows the probability distribution of the forecast; that is, the confidence bands that represent a 50%, 75%, and 90% probability that inflation will lie within the given range during the forecast horizon (the methodology used for the calculations is described in Appendix 3 in *Monetary Bulletin* 2005/1). The uncertainty in the forecast is broadly similar to that in February, but the risk is somewhat tilted to the upside in the latter part of the forecast horizon.

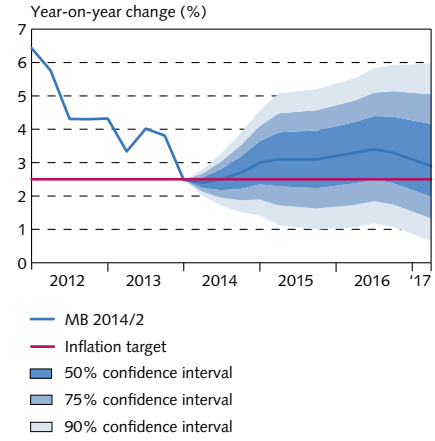
Chart I-21
Various estimates of output gap 2000-2015



1. Two measures of the deviation of unemployment from equilibrium unemployment (see Box VI-1 in MB 2013/4), estimates of firms' capacity to meet unexpected production increases and whether they are short-staffed, the wage share, and the OECD estimate of the output gap in Iceland. In the estimate of the range, all variables are rescaled so that they have the same mean and standard deviation as the estimated output gap.

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

Chart I-22
Inflation forecast and confidence intervals



Sources: Statistics Iceland, Central Bank of Iceland.

5. The baseline forecast is based on the assumption that monetary policy will be applied so as to ensure that inflation trends back to target within the forecast horizon.

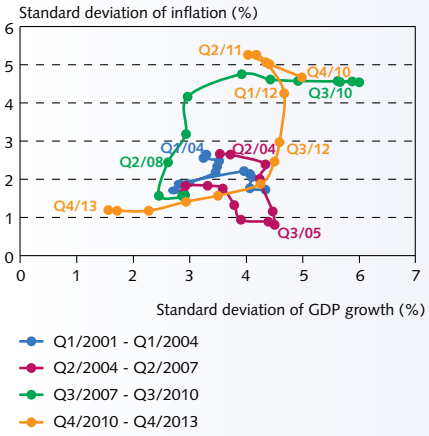
Box I-1

Enhanced economic stability and the role of monetary policy

Chart 1

Output and inflation volatility

Three-year standard deviation of annual changes in quarterly data



Sources: Statistics Iceland, Central Bank of Iceland.

Fluctuations in inflation and output have gradually diminished

Since the economic recovery began in early 2010, the post-crisis loss of output has largely been reclaimed and unemployment has declined significantly. Inflation has subsided as well, after skyrocketing in the wake of the currency crisis, and is now on target. Over time, fluctuations in inflation and output have diminished as well.

This is illustrated in Chart 1, which shows how the volatility of inflation and output developed from the adoption of the inflation target early in 2001 until Q4/2013. The period is divided up into four sub-periods of just over three years each.[1] The first two sub-periods are from Q1/2001 to Q1/2004 and from Q2/2004 to Q4/2007. Together, these two sub-periods capture the period from Iceland's adoption of its inflation-targeting monetary regime until the onset of the global financial crisis. The third sub-period extends from Q3/2007 until Q3/2010, therefore including the financial crisis and its most severe economic repercussions. The last sub-period extends from Q4/2010 until Q4/2013, covering the early part of the recovery and the gradual normalisation of economic activity.

As the chart indicates, output fluctuations gradually diminished after the adoption of the inflation target in 2001, although there was no discernible reduction in inflation volatility until well into 2005. Output growth continued to stabilise through the middle of the decade, whereas inflation grew more volatile once again. Both inflation and output volatility increased dramatically when the financial crisis struck. Inflation volatility peaked early in 2009, with a standard deviation of 4½%, and volatility of output growth peaked a year later, in early 2010, with a standard deviation of 6%. During the last sub-period, however, the fluctuations receded again. Beginning in early 2012, swings in inflation diminished rather rapidly, while output growth remained volatile. In 2013, however, output volatility began to diminish. By the fourth quarter, its standard deviation was down to 1.7% and the standard deviation of inflation was 1.2%. Although the standard deviation of inflation is now broadly similar to that in the mid-2000s, the standard deviation of output growth is at its lowest since the turn of the century. In terms of fluctuations in these two variables, the domestic economy is at its most stable since the beginning of the 21st century. It appears that this decline in output and inflation volatility is not due solely to the gradual tapering of the effects of the financial crisis, as stability also appears to be greater than it was before the crisis struck.

Why have fluctuations in inflation and output declined?

What, then, lies behind this increased stability of output and inflation? Are the shocks hitting the economy smaller or less frequent? Could increased stability be due to structural changes in the economy that enhance its resilience against shocks? Or could it be that monetary policy implementation has improved, resulting in greater inflation and output stability?

At first glance, it appears difficult to assert that monetary policy can claim the credit, as economic theory indicates that if monetary policy is formulated and implemented in the most efficient manner, it cannot reduce inflation volatility without exacerbating output volatility (and vice versa). It was the economist John Taylor who first demonstrated this in a paper from 1979. Taylor showed that even though there is no long-run tradeoff between inflation and output growth,[2] there is in fact a downward-sloping long-run

1. More precisely, four equal 13-quarter periods. The standard deviation of annual inflation and annual GDP growth is therefore based on a 13-quarter moving window. The results are the same if output fluctuations are measured with the standard deviation of the output gap instead of the standard deviation of GDP growth.
2. This is what is referred to when economists say that the Phillips curve is vertical in the long run. Research and painful experience from the runaway inflation years in the 1970s

relationship between the smallest possible fluctuations in the two. Therefore, "efficient" monetary policy can only reduce volatility in one of the two variables at the cost of increased volatility in the other. This downward-sloping relationship is generally referred to as the Taylor curve or the efficient monetary policy frontier. An example of the Taylor curve can be seen in Chart 2.

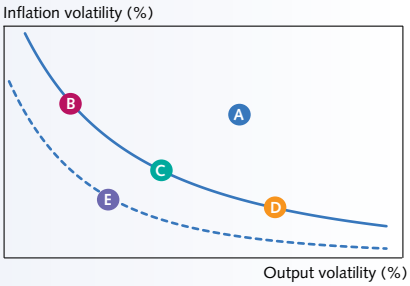
In order to explain this relationship, it is possible to consider the monetary policy response to a negative economic shock – for instance, a supply shock stemming from rising oil and commodity prices. Such a shock would generally reduce domestic activity and employment levels while increasing inflationary pressures. If monetary policy responds with an interest rate increase, the inflationary effects of the shock should be relatively short-lived; however, the tighter monetary stance exacerbates the contractionary effects. Monetary policy is therefore faced with two choices: it can focus on containing the inflationary impact of the shock while exacerbating fluctuations in output, or it can tolerate greater inflation volatility in order to mitigate the effect of the shock on output.[3] Chart 2 illustrates these two options. Point B shows monetary policy that emphasises mitigating the impact of the shock on output and is therefore willing to take time to bring inflation back to target, and point D shows monetary policy that places greater emphasis on rapid mitigation of the inflationary impact, with the associated increase in output volatility. Both options represent equally efficient monetary policy; the difference lies simply in different emphasis on inflation versus output stability. In 1993, Taylor himself introduced a simple monetary policy rule that assigned equal weights to stabilising inflation and output. The result is the well-known Taylor rule, which is used in monetary policy formulation as a simple rule of thumb and an estimate of the desirable monetary stance at any given time. Point C could be an example of such monetary policy.[4]

This description of monetary policy tradeoffs is based on the assumption that monetary policy is at the efficiency frontier; i.e., it is formulated and implemented in the most efficient way possible. This implies that it is not possible to reduce volatility of inflation without exacerbating swings in output (and vice versa): the frontier defines the pairs of the smallest possible fluctuations in inflation and output that can be achieved, assuming a given economic structure and the shocks the economy has sustained. In reality, it is possible to imagine that monetary policy is not implemented efficiently and is therefore inside the efficiency frontier instead of being on it (Point A in Chart 2). If so, it is possible to reduce volatility of both inflation and output with improved monetary policy implementation, thereby moving closer to the frontier. It is also possible that smaller fluctuations in inflation and output reflect a shift of the frontier towards the origin of the graph, where the smallest possible fluctuations in the two variables have become smaller than before (Point E in Chart 2).

Therefore, monetary policy could be a factor in the increased stability of domestic inflation and output in the recent term if policy

Chart 2

Taylor curves: the efficient monetary policy frontier



The chart shows different pairs of fluctuations in inflation and output. The downward slope shows the efficiency frontier (Taylor curve); that is, the pair of the smallest achievable fluctuations in inflation and output. Points B, C, and D reflect differences in the relative monetary policy weights on inflation and output deviations. Point A is within the efficiency frontier and therefore illustrates inefficient monetary policy, while Point E is on the new frontier, which has shifted towards the origin of the graph.

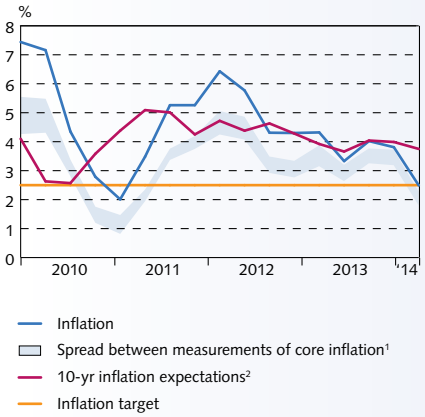
Source: Central Bank of Iceland.

and 1980s have led to a consensus among economists, that it is not possible to use monetary policy to stimulate output growth (or reduce unemployment) permanently by merely being willing to tolerate higher inflation.

3. This implies that monetary policy is not faced with the same tradeoff when responding to a demand shock that combines an increase in demand and inflation (or the reverse). In that instance, monetary policy can combat the effects of the shock and simultaneously reduce volatility in inflation and output.

4. According to Taylor's original version of the Taylor rule, the deviation of inflation from target is assigned a weight equal to that of the deviation of output from potential output: $i = (r^*+\pi) + 0.5(\pi-\pi^T) + 0.5x$ where i is the central bank's policy rate, r^* is the equilibrium real interest rate, π is inflation, π^T is the inflation target, and x is the output gap. For further discussion, see Central Bank of Iceland (2012, Chapter 3).

Chart 3
Inflation and inflation expectations since 2010



1. Interquartile range of different measures of underlying inflation (core indices 3 and 4 excluding tax effects; trimmed mean (excluding extreme values that change by 5 to 25% between months) and weighted median). 2. Breakeven inflation rate from the nominal and indexed yield curves.
Sources: Statistics Iceland, Central Bank of Iceland.

implementation has improved, moving it closer to the underlying frontier, or if the frontier itself has shifted towards the origin. This could be the result of increased predictability and transparency of monetary policy and improved anchoring of inflation and inflation expectations,[5] as can be seen in Chart 3, which shows that both measured and underlying inflation have subsided recently. Long-term inflation expectations have been more persistent, although they, too, have subsided. All of these factors reduce fluctuations in interest rates, inflation, and inflation expectations while enhancing their predictability. This contributes to reduced volatility of real interest rates and exchange rates, which in turn contributes to reduced output volatility. A firmer anchor for inflation expectations can also reduce the risk of sudden "inflation scares", which can be an independent source of inflation and output volatility (see, for instance, Goodfriend, 1993). By the same token, a firmer anchor can weaken the pass-through of fluctuations in the exchange rate and oil and commodity prices to inflation (see, for example, Devereux, Engel, and Storgaard, 2003). Furthermore, the possibility cannot be excluded that there is increased understanding of the functioning of the economy and the role of monetary policy in inflation formulation, as improved understanding of this role can reduce volatility of inflation and output (see, for example, Bernanke, 2004).

It is also possible that volatility of inflation and output have diminished because external shocks are simply fewer and smaller than before. It is difficult, however, to argue that the external environment is more advantageous, given the persistent headwinds facing the domestic economy in recent years, including massive deleveraging and restructuring of domestic balance sheets in the wake of the crisis and the steep deterioration in terms of trade. On the other hand, it can be argued that the capital controls have somewhat sheltered the domestic economy from the impact of global financial market unrest, including that related to the eurozone debt crisis and the uncertainty related to the tapering of the US Federal Reserve's quantitative easing programme last year. In this respect, the capital controls have pulled in the same direction as monetary policy and have enhanced economic stability, although they are doubtless very costly in the long run. It should be noted, though, that the Central Bank's new foreign exchange market intervention policy has also played a part in reducing exchange rate volatility in the recent term. Furthermore, the impact of the global business cycle on the domestic economy could have grown with the increased importance of external trade.

Although it is too early to identify the main reasons for increased macroeconomic stability, there is good reason to assume that improvements in the monetary framework and implementation have played an important role. This would be consistent both with the experience of other countries and with the large number of studies strongly indicating the role of monetary policy in reducing inflation and inflation volatility in other countries (see, for instance, Bernanke, 2004, and Cecchetti *et al.*, 2007).[6]

International comparison

Studies show that volatility of output and inflation has generally been more exaggerated in Iceland than in other industrialised

5. As is stated in Dincer and Eichengreen (2014), the increase in transparency of monetary policy in Iceland has been one of the most striking among developed countries in the past five years.

6. Other countries' experience shows also that substantial imbalances can accumulate in the financial system, even though inflation and output are stable. This can ultimately lead to severe economic instability. For this reason, the spotlight, both in Iceland and abroad, has been on various macroprudential tools and their interaction with conventional monetary policy instruments. See, for example, Borio (2014).

countries (see, for instance, Einarsson *et al*., 2013, and Pétursson, 2008). The findings Honjo and Hunt (2006) also indicate that the efficiency frontier lies above the corresponding frontiers in other industrialised countries with similar monetary policy frameworks.[7] The monetary policy tradeoffs have therefore been less favourable in Iceland, and the opportunity cost (in the form of wider swings in output) of maintaining price stability has been greater than in other industrialised countries. The above-mentioned studies explore a number of possible reasons for this, but in the main, it can be said that the structure and the small size of the Icelandic economy and the frequent natural shocks striking it are chief among them.

As Chart 4 shows, however, the difference between Iceland and other OECD countries has narrowed in the past three years.[8] The OECD countries moved closer to the origin during the 2000s, a development reflecting diminishing economic fluctuations around the world,[9] although the financial crisis set them back significantly. Volatility in inflation and output has diminished again in the past few years but remains more pronounced than before the crisis. Developments since the turn of the century have therefore been broadly in line with those in Iceland, and what is most notable is that, while volatility in Iceland is still above the OECD average, the difference has become much smaller.

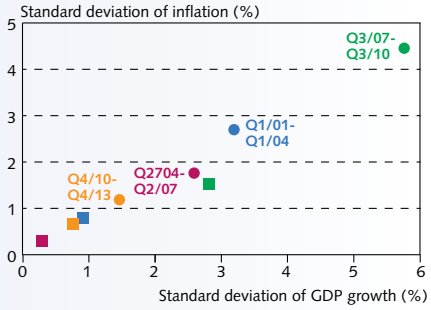
The comparison group includes the largest industrialised countries in the world, however, and it could therefore be more appropriate to compare Iceland with other small industrialised countries. Chart 5, for instance, gives a comparison with the other Nordic countries. The developments are broadly congruent among the countries shown: they managed to reduce inflation volatility as the decade progressed, and in the wake of the financial crisis they have done so again, although output volatility remains greater than it was before the crisis. In this comparison, the results in Iceland are even more noticeable, as the fluctuations in inflation and output growth have become quite similar to those in the other Nordic countries, whereas they were much more pronounced before and during the financial crisis. Chart 6 shows a corresponding comparison with 10 developed emerging market countries (i.e., the 10 OECD countries classified as emerging economies). Again, Iceland's progress is notable: fluctuations are very similar in the last sub-period, after having been considerably wider in Iceland during previous sub-periods. Chart 7 shows, however, that fluctuations in these 10 countries' inflation and output growth were larger, on average, in the previous decade, and larger than they have been in Iceland since the turn of the century. Economic policy reform has been quite successful in these countries, some of which had experienced persistent instability. Their success shows that there can be a time lag before progress becomes visible, not least when there is a long history of undisciplined economic policy. But it shows beyond a doubt that it is possible to take great strides in enhancing economic stability through sound economic policy.

Conclusion

In recent years, fluctuations in inflation and output in Iceland have diminished sharply from their post-crisis peak. They have also diminished in comparison with pre-crisis levels. While the period in question is relatively short, it seems that some progress has been made in stabilising the domestic economy. Comparisons with other countries

Chart 4

Tradeoff between inflation and output volatility in Iceland and other OECD countries[1]

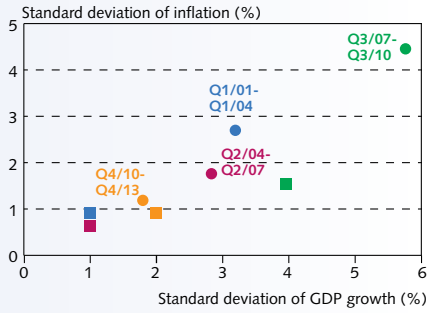


1. The dots represent figures for Iceland, and the squares show corresponding average figures for OECD countries.

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

Chart 5

Tradeoff between inflation and output volatility in Iceland and the other Nordic countries[1]

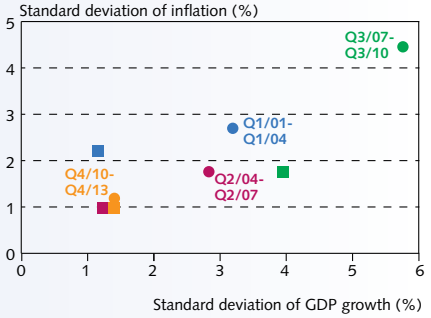


1. The dots represent figures for Iceland, and the squares show corresponding average figures for the other Nordic countries.

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

Chart 6

Tradeoff between inflation and output volatility in Iceland and 10 developed emerging economies[1]



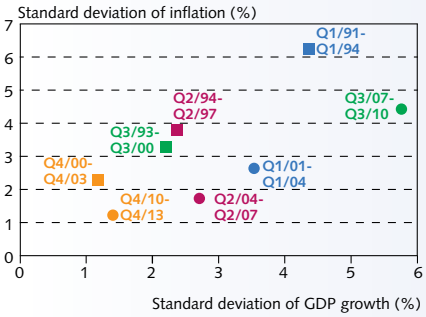
1. The dots represent figures for Iceland, and the squares show corresponding (median) figures for the 10 least-developed OECD countries (Chile, Estonia, Israel, Mexico, Poland, Slovakia, Slovenia, Czech Republic, Turkey and Hungary).

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

7. The comparison includes the US, the UK, Canada, and New Zealand. For further discussion, see also Central Bank of Iceland (2012, Chapter 3).
8. Each dot on Charts 4-6 corresponds to the last dot in each sub-period in Chart 1.
9. This has been termed "the great moderation". See, for example, Blanchard and Simon (2001) and Stock and Watson (2003). See also Daníelsson (2008).

Chart 7

Tradeoff between inflation and output volatility in Iceland and 10 developed emerging economies in the 1990s[1]



1. The dots represent figures for Iceland, and the squares show corresponding (median) figures for the 10 least-developed OECD countries (Chile, Estonia, Israel, Mexico, Poland, Slovakia, Slovenia, Czech Republic, Turkey, and Hungary) during corresponding periods in the 1990s.

Sources: OECD, Statistics Iceland, Thorarinn G. Petursson (2008), Central Bank of Iceland.

show that, even though inflation and output are still more volatile in Iceland than they are, on average, in other OECD countries, the difference is much smaller than it was both before and during the financial crisis. A corresponding development can be seen vis-à-vis the other Nordic countries and developed emerging countries, with fluctuations in Iceland's inflation and output now broadly in line with these two groups.

It can be argued that monetary policy plays an important role in this success. With increased predictability and transparency and with effective application of a wider range of policy instruments, monetary policy has been successful in gradually reducing inflation and anchoring it more firmly. This has diminished the volatility of inflation and inflation expectations, which in turn has mitigated fluctuations in real interest rates and the real exchange rate, ultimately reducing volatility in real variables such as output and unemployment.

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II External conditions and exports

The global economic recovery gained a foothold in mid-2013, as expected. It is projected to improve further in coming years, although it will be driven increasingly by developed countries. The GDP growth outlook among Iceland's main trading partners is unchanged from the February *Monetary Bulletin*. The output growth outlook appears to be improving, although some uncertainty remains, particularly on the downside. Inflation is below target levels in many countries and, in some cases – the euro area in particular – appears likely to remain there for some time. Declining commodity prices and a output slack have contributed widely to low inflation. For this reason, many central banks are now faced with the task of bringing inflation up to target. The outlook for world trade has improved, and the outlook for Iceland's terms of trade is brighter as well. Terms of trade are now expected to improve year by year after having deteriorated steadily since 2010. Export growth is projected to gain pace this year, driven by a strong tourism sector, which will more than offset weak marine product export growth. The outlook for export growth next year has also improved from the February forecast.

Trading partners' economic recovery gained pace in H2/2013 …

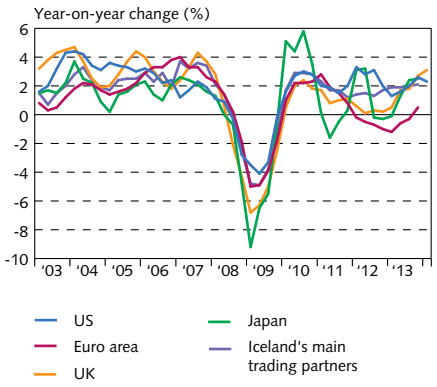
The recovery in the eurozone has solidified after a 1½-year recession ending in spring 2013 (Chart II-1). Since then, domestic demand growth has pulled increasingly in the same direction as external trade growth, driving the recovery forward. Nonetheless, a contraction of nearly ½% was measured for 2013 as a whole, in line with forecasts, with GDP shrinking in nine of 17 euro area countries. Most of the developed countries experiencing a contraction last year were in the euro area (Chart II-2).

The economic recovery in the US and the UK gained pace as the year progressed, with GDP growth for 2013 as a whole measuring almost 2% in both countries (Chart II-3). In Japan, stimulative fiscal and monetary measures have spurred output growth and inflation, although growth was below expectations in the second half of the year. In the Nordic region, year-2013 output growth was strongest in Norway, at 2%, and ranged between ½% and 1½% in Denmark and Sweden, while Finland experienced a 1½% contraction. On average, Iceland's trading partners recorded GDP growth of 0.8% last year, with growth concentrated in H2, at 1.2%, as opposed to 0.5% in H1.

… and developed countries' contribution to global output growth is on the rise

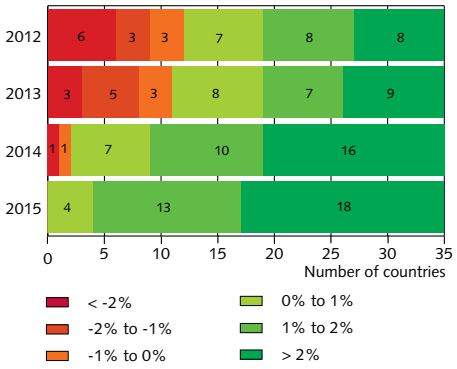
Global output growth measured 3% in 2013, a slight decline from 2012. In its April forecast, the International Monetary Fund (IMF) projects world output growth at 3.6% in 2014 and 3.9% in 2015. This is virtually unchanged from the October forecast; however, the IMF expects developed countries' contribution to increase to about a third and projects that the recovery will extend to a larger number of countries than before. As Chart II-2 shows, the number of countries with GDP growth in excess of 2% is expected to rise. A contraction

Chart II-1
GDP growth in Iceland's main trading partners and selected industrialised countries
Q1/2003 - Q1/2014



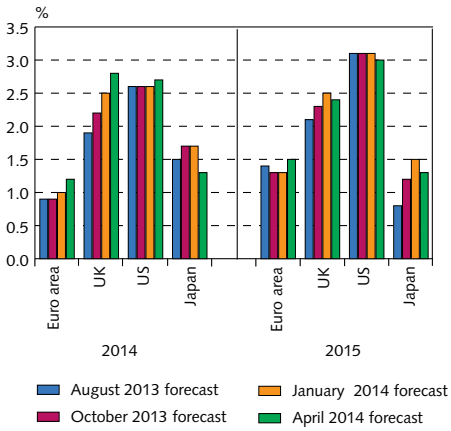
Sources: Macrobond, Central Bank of Iceland.

Chart II-2
Distribution of GDP growth among 35 industrialised countries



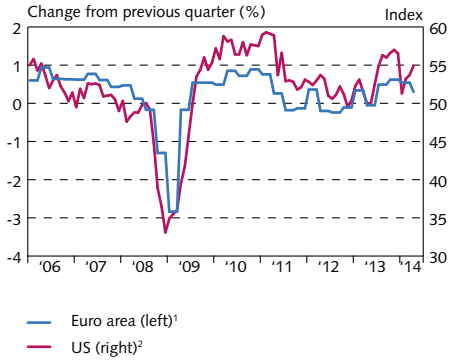
Source: IMF.

Chart II-3
GDP forecasts for 2014 and 2015[1]



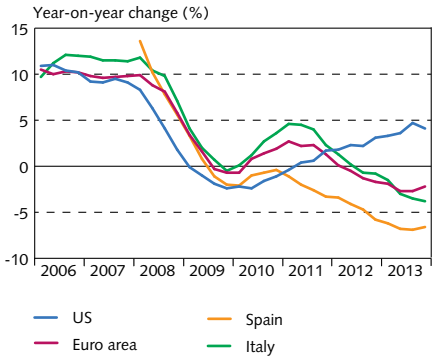
1. Based on monthly forecasts from 250 forecasting agencies which are weighted together.
Source: Consensus Forecasts.

Chart II-4
Leading indicators of GDP growth
January 2006 - April 2014



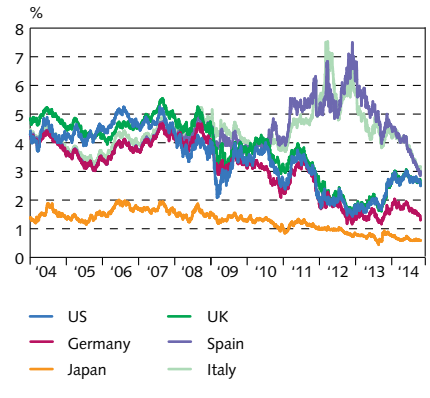
1. The GDP growth indicator devised by OFCE and EUROFRAME estimates quarterly output growth in the euro area two quarters ahead.
2. In the US, the seasonally adjusted Manufacturing Purchasing Managers' Index (PMI) is published monthly. An index value above 50 indicates month-on-month growth, and a value below 50 indicates a contraction.
Source: Macrobond.

Chart II-5
Credit growth in the US and the euro area[1]
Q1/2006 - Q4/2013



1. Non-financial companies and households.
Source: IMF.

Chart II-6
Yields on 10-year government bonds
Daily data 1 January 2004 - 16 May 2014



Source: Macrobond.

is expected in only two developed countries this year, and in none next year.

Economic recovery continues both sides of the Atlantic, with financial conditions improving in the southern eurozone

In general, economic indicators imply that the economic recovery will continue on both sides of the Atlantic, although the US suffered a temporary setback in Q1, due in part to unusually bad weather (Chart II-4). Year-on-year GDP growth is expected to measure about 2½-3% in the US and about 1-1½% in the euro area in 2014-2015. The euro area is still suffering the aftereffects of the financial crisis, including widespread unemployment and weak private and public sector balance sheets. Strained financial conditions are expected to remain a drag on demand in the eurozone for some time to come. Non-performing loans are on the rise in the euro area, and private sector lending continues to contract, unlike the situation in the US (Chart II-5). There are positive signs on the horizon, however: interest rate spreads on heavily indebted Southern European countries have fallen markedly, as they have on European companies with speculative-grade credit ratings. For instance, the interest rate spreads over 10-year German government bonds is now under 2 percentage points for Italy and Spain and under 5 percentage points for Greece (Chart II-6). Spreads are now at their lowest in three to four years. Demand for credit is likely to increase as interest premia decline and household spending grows. Indicators of consumer sentiment in the euro area were higher in April than at any time since late 2007. Uncertainty has also declined (Chart II-7).

Trading partners' output growth outlook unchanged from the last forecast

On the whole, the GDP growth outlook among Iceland's main trading partners is unchanged from the February *Monetary Bulletin*. The outlook is slightly brighter for the eurozone, the UK, and the US (Chart II-3), poorer for Iceland's emerging market trading partners, and slightly poorer for all of the Nordic countries except Sweden. Trading partners' GDP growth is projected at 2% for 2014 and just under 2½% per year in 2015-2016.

Inflation slows down more than expected, falling below target in many developed economies

Inflation has subsided in Iceland's main trading partner countries, due in part to declining commodity prices, particularly energy and food prices. In many countries where spare capacity remains, inflation is at its lowest since 2009, when the contractionary effects of the economic crisis following the global financial crisis were most pronounced. Inflation is therefore below official targets in many economies, not least the eurozone, where disinflation has continued more or less unchecked since year-end 2011. As a result, concerns about deflation have risen, as inflation was 0.7% in April. Deflation has already set in in four euro area countries, and in a total of 18 European countries inflation is below 0.7%. In its April forecast, the IMF projects that euro

area inflation will be below target until at least 2016; in addition, the Fund recommends further stimulative measures to bring inflation back to target and further support the economic recovery. The European Central Bank (ECB) has indicated that it will adopt measures of this kind if need be.

In the UK, inflation began to subside relatively quickly last autumn, after holding steady in the 2½-3% range for about a year and a half. In January 2014, it fell below the Bank of England's 2% inflation target for the first time since November 2009, and in April it measured 1.8%. US inflation has been more stable, measuring 2.0% in April. Japan has seen an abrupt rise in inflation, however, due to increases in value-added tax, which are expected to continue. Also affecting Japan are the low exchange rate of the yen and increased energy prices following the 2011 earthquakes (Chart II-8). On the whole, inflation is expected to average 1.5% in Iceland's main trading partner countries this year, a slight decline from 2013. As in the February forecast, trading partners' inflation is expected to rise as their economic recoveries evolve, measuring just under 2% in 2015 and 2016.

Developed countries' monetary stance set to remain accommodative but to diverge due to differing pace of recovery

Monetary policy has remained accommodative in many developed economies in the wake of the global financial crisis. In view of the low inflation prevailing in the recent term, many central banks are making systematic attempts to bring inflation up to target. In general, forecasts assume that they will ultimately be successful and will forestall a decline in long-term inflation expectations, which would otherwise tighten the monetary stance and undermine economic recovery.[1]

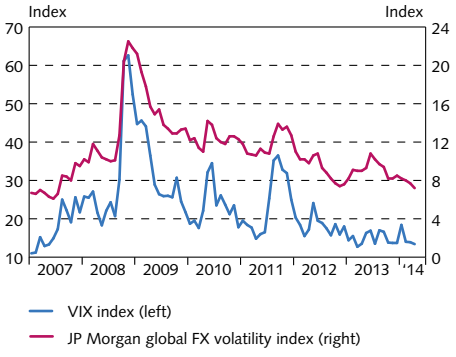
The near-term outlook is for greater divergence in the monetary stance of developed economies, owing to differences in the economic and inflation outlook. As is discussed above, the US and the UK have seen a stronger-than-expected economic recovery, while the recovery in the euro area is relatively weak and inflation is lower. The output slack is still expected to narrow more rapidly in the US and the UK than in the eurozone, with the associated impact on inflation and the monetary stance. The US Federal Reserve Bank has already begun to taper its bond purchase programme and is expected to wind it down entirely later this year. Long-term interest rates rose in spring 2013, in response to indications of the planned tapering; however, they remain below pre-crisis rates (Chart II-6). According to forward interest rates, market agents expect more rapid policy rate hikes in the US and the UK than they did in February. On the other hand, they expect rates to be held lower for somewhat longer in the euro area (Chart II-9).

Outlook for continued declines in commodity prices

As is discussed above, declining commodity prices – energy and food in particular – have been the main driver of disinflation in Iceland's main trading partner countries. Nonetheless, oil prices were slightly

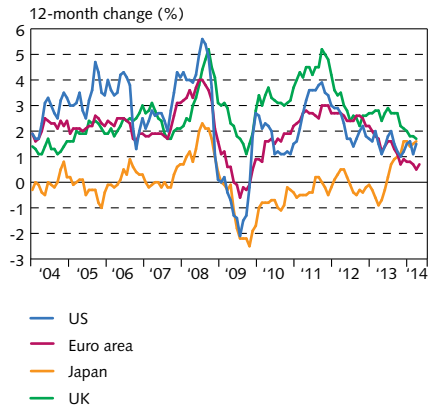
1. See, for example, Box 1.3 in International Monetary Fund (2014), "Anchoring inflation expectations when inflation is undershooting", *World Economic Outlook*, April 2014.

Chart II-7
Implied stock price and currency volatility [1]
January 2007 - April 2014



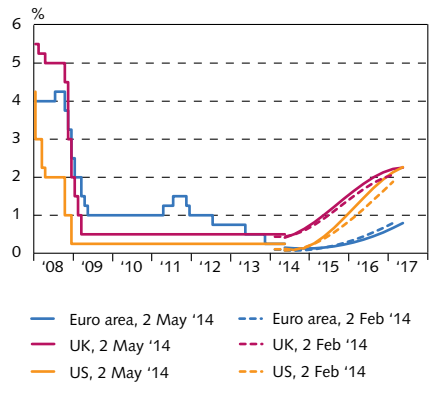
1. Implied volatility of the S&P 500 share price index (Chicago Board Options Exchange) and implied volatility of calculated on the basis of currency options pricing (JP Morgan VXYGL index).
Sources: Bloomberg, Macrobond.

Chart II-8
Inflation in selected industrialised countries
January 2004 - April 2014



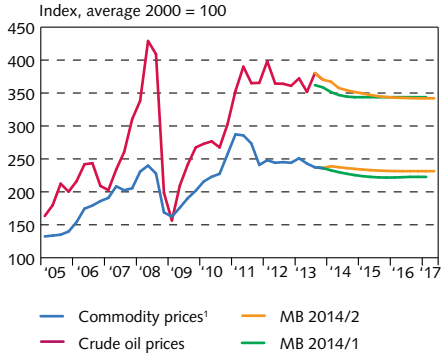
Source: Macrobond.

Chart II-9
Policy rates and forward rates in the euro area, US, and UK
Daily data 1 January 2008 - 2 May 2014, quarterly data Q2/2014 - Q2/2017



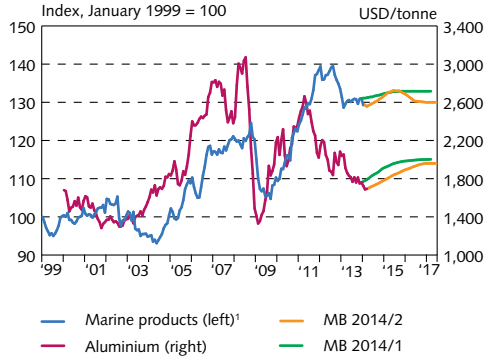
Sources: Bloomberg, Macrobond.

Chart II-10
Commodity prices
Q1/2005 - Q2/2017



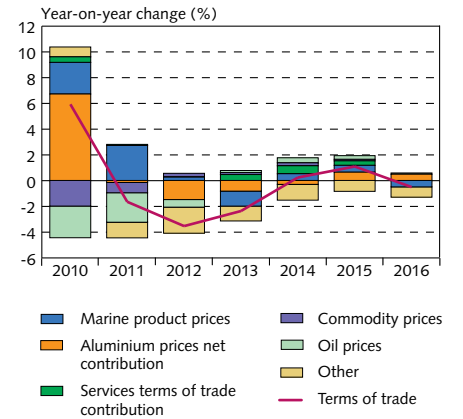
1. Non-oil commodity prices in USD.
Sources: Macrobond, Central Bank of Iceland.

Chart II-11
Prices of marine exports and aluminium
In foreign currency



1. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the export-weighted trade basket.
Sources: London Metal Exchange, Statistics Iceland, Central Bank of Iceland.

Chart II-12
Terms of trade and their main components 2010-2016[1]



1. Central Bank baseline forecast 2014-2016. The contribution of the main sub-indices to year-on-year changes in terms of trade is determined by weighting the annual change in the sub-index concerned together with its weight in the import or export of goods and services. The item "other" is a residual.
Sources: Statistics Iceland, Central Bank of Iceland.

higher than expected in Q1, not least because of regional unrest in Ukraine and Libya. The price of other commodities rose sharply in February, in contravention of forecasts, due in part to inclement weather in Brazil and the US. Oil and commodity prices are projected to continue falling throughout the forecast horizon, as was forecast in the last *Monetary Bulletin*, although the decline is now expected to be less pronounced (Chart II-10). The outlook for petrol and commodity prices is affected, on the one hand, by the advancing global recovery and the associated growth in demand and, on the other, by increased production. Oil prices are expected to decline by 3% this year, or 1½ less than in the previous forecast. Commodity prices are projected to decline by nearly 2% this year, as opposed to the 5½% drop forecast in February. Somewhat smaller declines are expected in 2015 as well.

Improved outlook for export prices

Marine product prices have remained broadly unchanged in recent months. In comparison with the February forecast, the outlook varies by species: it has improved for demersals and deteriorated for pelagic species. The main drivers here are the turnaround in the price of salted products and frozen-at-sea demersals and the expected drop in frozen mackerel prices, owing to increased fishing. For marine products as a whole, an increase of 2% per year is expected in 2014 and 2015, or a percentage point more each year than was assumed in February (Chart II-11). On the other hand, prices are projected to fall by 1.7% in 2016, whereas the previous forecast provided for no change year-on-year.[2]

Aluminium prices have fallen uninterrupted since year-end 2012. In line with futures prices and global forecasts, aluminium prices are now expected to fall by 2% this year, about 1½ percentage points more than in the last forecast. On the other hand, the price increase over the ensuing two years is expected to be somewhat larger than previously assumed.

Terms of trade set to improve this year, after eroding continuously since 2010

Because import prices fell less markedly in 2013 than was assumed in February, terms of trade deteriorated by about a percentage point more than was anticipated then (Chart II-12). The outlook for 2014-2016 has improved since February, however. A slight improvement is expected this year, after steady deterioration since 2010. Terms of trade are projected to improve by just under 1% over the forecast horizon, as opposed to a 2% deterioration according to the February forecast. If the forecast materialises, terms of trade will be similar to those in 2009 by the end of the forecast horizon. The favourable developments over the forecast horizon are due primarily to an improved outlook for export prices, probably reflecting in part an increase in demand among Iceland's trading partners.[3]

2. The forecast for marine product prices is based on the FAO-OECD forecast for global marine product prices and the Bank's forecasting model. Consideration is also given to key domestic market agents' assessment of the outlook for the current year.

3. For a discussion of the reasons for the post-crisis deterioration in terms of trade, see Box II-1 in *Monetary Bulletin* 2013/4.

Real exchange rate at post-crisis high

In terms of relative prices, the real exchange rate was almost 12% higher in Q1 than in the same quarter a year ago (Chart II-13). The increase is due primarily to a higher nominal exchange rate, although inflation has also been about 1½ percentage points higher in Iceland than in trading partner countries. In February 2014, the real exchange rate was at its highest since the onset of the financial crisis in autumn 2008. That notwithstanding, in Q1 it was 11% below the thirty-year average in terms of relative prices and some 13% below the thirty-year average in terms of relative wage costs.

Growing strength in world trade and demand among trading partner countries

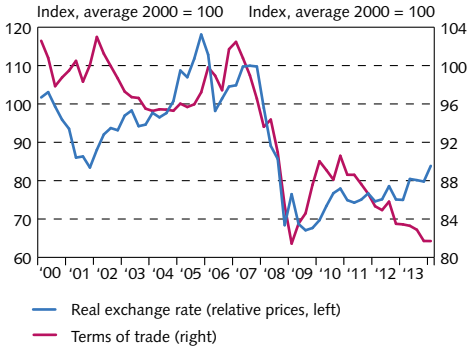
Forecasts for world trade assume strong growth in 2014 and 2015, as economic recovery gains momentum. Among Iceland's main trading partners, annual growth in imports is expected to measure about 3.7% over these two years and then decline to just under 3% in 2016. This is about ½ a percentage point more in 2015-2016 than was assumed in the February forecast and a substantial change from last year's growth rate of 1%. In part, this development reflects the fact that the economic recovery among Iceland's trading partners is driven increasingly by domestic demand instead of net trade.

Outlook for exports improve in spite of weaker growth in marine product exports

The outlook for exports is better for the forecast horizon as a whole than it was in February, not least because of robust services exports. Marine product exports are expected to contract by some 1½ percentage points more this year than according to the February forecast, owing to a poor capelin season (Chart II-14). This is the main reason for the roughly ½ a percentage point larger contraction in goods exports. On the other hand, next year's capelin season is expected to be better, with fishing broadly in line with historical levels, and this explains the lion's share of the 2½% growth in marine product exports projected for 2015. This assumption is somewhat uncertain, however, in part because fishing quotas have not yet been determined for the fishing year beginning on 1 September 2014. The outlook for aluminium exports is virtually unchanged since February: growth is projected at just under 1½% this year and 1-2% over the following two years.

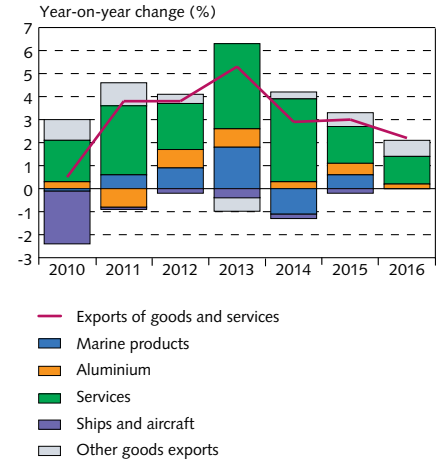
Rapid growth in services exports has been the mainstay of Iceland's post-crisis economic recovery. There are signs that this growth will continue and that it will be even stronger than previously anticipated. Foreign tourist visits to Iceland increased by over a third year-on-year in Q1/2014, and the supply of available flights to the country is on the rise. Finally, the economic recovery has been stronger than expected in developed countries, although the rise in the real exchange rate could have an offsetting effect. Services exports are projected to grow by 9% this year, somewhat outpacing the February forecast. Growth is forecast to be stronger in 2015 as well. For 2014, the positive outlook for tourism more than counteracts weaker growth in marine product exports. On the whole, exports are projected to

Chart II-13
Real exchange rate and terms of trade
Q1/2000 - Q1/2014



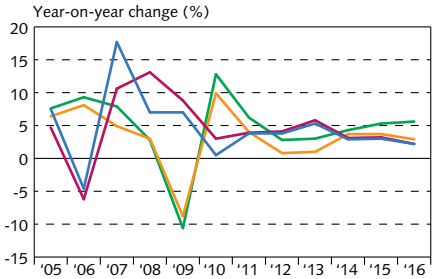
Source: Central Bank of Iceland.

Chart II-14
Developments and main components of exports 2010-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-15
Exports and world trade 2005-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Macrobond, OECD, Statistics Iceland, Central Bank of Iceland.

grow by 3% per year in 2014 and 2015, about 1½ percentage points more each year than in the February forecast. Growth in goods and services exports will average 2.7% per year during the forecast horizon. This is just over ½ a percentage point less than the average for demand growth among major trading partners during the period, but nearly a percentage point more than was assumed in the February forecast (Chart II-15).

Table II-1 Exports and main assumptions for developments in external conditions

	Change from prior year (%) unless otherwise specified[1]			
	2013	*2014*	*2015*	*2016*
Goods exports	2.8 (2.9)	-1.2 (-0.8)	2.5 (1.2)	1.7 (2.0)
Services exports	9.6 (7.6)	8.9 (4.8)	3.8 (2.7)	2.9 (2.9)
Exports of goods and services	5.3 (4.7)	2.9 (1.4)	3.0 (1.8)	2.2 (2.4)
Exports of goods and services, excluding ships and aircraft	5.8 (5.1)	3.1 (1.7)	3.2 (2.0)	2.2 (2.4)
Marine production for export	7.5 (7.5)	-4.5 (-3.0)	2.5 (-0.2)	0.0 (-0.1)
Aluminium production for export	3.3 (3.3)	1.3 (1.2)	2.1 (1.6)	1.0 (2.0)
Foreign currency prices of marine products	-4.4 (-4.4)	2.0 (1.1)	2.0 (0.9)	-1.7 (0.1)
Aluminium prices in USD[2]	-5.0 (-5.0)	-2.1 (-0.6)	6.6 (6.1)	4.8 (1.7)
Fuel prices in USD[3]	-0.9 (-0.9)	-3.0 (-4.4)	-3.2 (-2.4)	-1.1 (-1.4)
Terms of trade for goods and services	-2.4 (-1.3)	0.2 (-0.4)	1.1 (-0.7)	-0.5 (-1.2)
Inflation in main trading partners[4]	1.7 (1.6)	1.5 (1.7)	1.9 (1.9)	1.9 (2.0)
GDP growth in main trading partners[4]	0.8 (0.7)	2.0 (2.0)	2.2 (2.3)	2.3 (2.4)
Short-term interest rates in main trading partners (%)[5]	0.5 (0.5)	0.4 (0.4)	0.8 (0.8)	1.7 (1.7)

1. Figures in parentheses from forecast in *Monetary Bulletin* 2014/1. 2. Forecast based on aluminium futures and analysts' forecasts. 3. Forecast based on fuel futures and analysts' forecasts. 4. Forecast from Consensus Forecasts and Global Insight. 5. OECD forecast for three-month money market rates in Iceland's main trading partner countries.

Sources: Bloomberg, Consensus Forecasts, Global Insight, IMF, New York Mercantile Exchange, Statistics Iceland, Central Bank of Iceland.

III Financial conditions

The Central Bank has held its nominal interest rates unchanged since November 2012, but the monetary stance has tightened since the February *Monetary Bulletin* was published, owing to declining inflation and inflation expectations. Market agents appear to expect nominal rates to remain unchanged this year and then rise in 2015. The króna has appreciated in spite of the Central Bank's foreign currency purchases. Broad money has grown in line with increased economic activity, as has net new deposit money bank (DMB) lending to households and businesses, although credit growth has eased somewhat. Private sector financial conditions have also improved. Net corporate and household wealth has increased in line with rising asset prices and reduced debt. In international context, however, Iceland's private sector debt remains relatively high. Private sector financial restructuring appears to be moving forwards, and non-performing loans have declined.

Nominal Central Bank interest rates unchanged ...

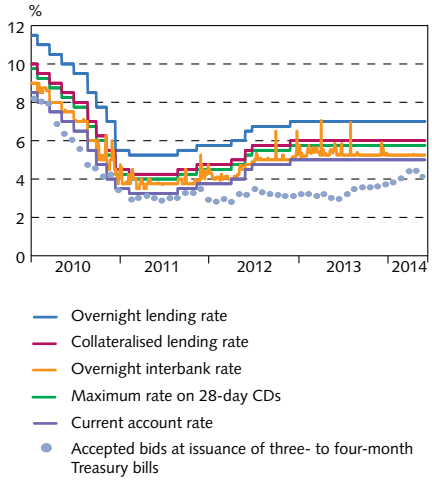
The Central Bank of Iceland's Monetary Policy Committee (MPC) announced on 12 February and again on 19 March that the Bank's nominal interest rates would be held unchanged. Prior to the publication of this *Monetary Bulletin*, the current account rate was 5%, the maximum rate on 28-day certificates of deposit (CDs) 5.75%, the seven-day collateralised lending rate 6%, and the overnight lending rate 7%. The Bank's interest rates have therefore been unchanged since November 2012.

Financial system liquidity is abundant, and there is little demand for Central Bank liquidity facilities at present. As a result, the simple average of Central Bank current account rates and the maximum rate on certificates of deposit, now about 5.4%, remains the best approximation of the Bank rate that determines money market rates. Overnight interbank rates have remained below the centre of the interest rate corridor, at about 5.25%, since the publication of the February *Monetary Bulletin* (Chart III-1). Market turnover year-to-date has totalled only about 41 b.kr., however, some 80% less than in the same period in 2013. This could be a reflection of abundant financial system liquidity and more effective liquidity management by market agents. The fluctuations in interbank rates that have generally accompanied strong outflows from financial institutions have abated in recent months. Interest rates in Treasury bill auctions have moved closer to Central Bank rates. They are now about 0.1 percentage points higher than at the beginning of the year and about 1.2 percentage points higher than in mid-May 2013; however, they remain just under a percentage point below the floor of the interest rate corridor.

... but the monetary stance has tightened

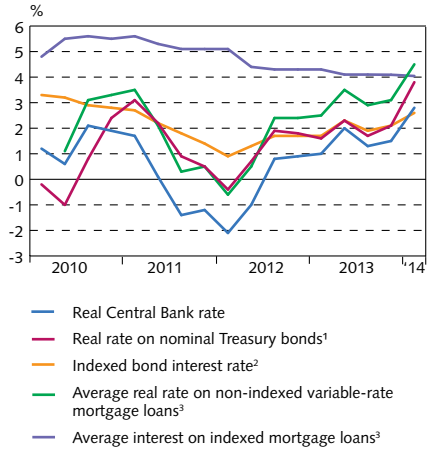
Although the Bank's nominal interest rates have remained unchanged, the monetary stance has tightened since publication of the last *Monetary Bulletin*, in line with declining inflation and inflation expectations. The Bank's effective real rate is now 3% in terms of current

Chart III-1
Central Bank of Iceland interest rates and short-term market interest rates
Daily data 1 January 2010 - 16 May 2014



Source: Central Bank of Iceland.

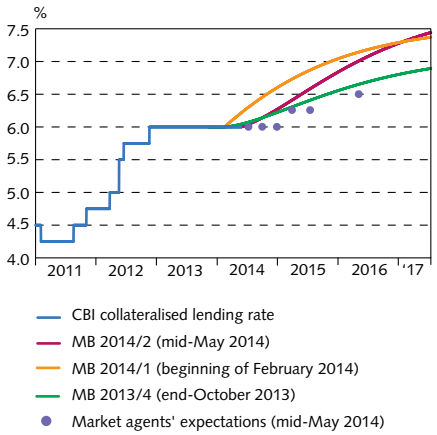
Chart III-2
Real Central Bank interest rate and real market rates
Q1/2010 - Q1/2014



1. Five-year rate estimated from the Treasury bond yield curve. 2. Five-year rate estimated from the yield curve of indexed Treasury bonds and HFF bonds. 3. Weighted average lending rates from the three largest commercial banks. Fixed-rate period of five years or more.

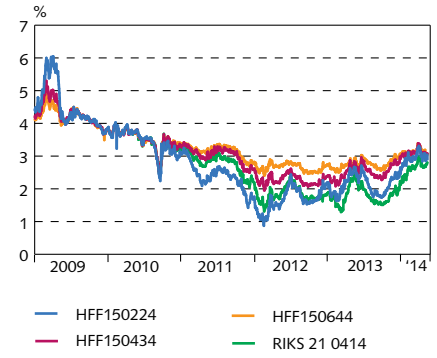
Source: Central Bank of Iceland.

Chart III-3
Collateralised lending rate, forward market interest rates,[1] and market agents' expectations concerning collateralised lending rate[2]
Daily data 1 January 2011 - 30 June 2017



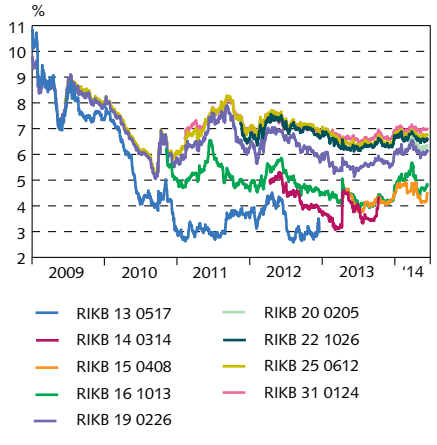
1. Interbank interest rates and Treasury bonds were used to estimate the yield curve. Treasury bonds maturing within two years are excluded, however, because their pricing is assumed to be affected by the capital controls. 2. According to the median response in the Central Bank's market expectations survey for the period 12-14 May 2014.
Source: Central Bank of Iceland.

Chart III-4
Yields on indexed bonds
Daily data 2 January 2009 - 16 May 2014



Source: Central Bank of Iceland.

Chart III-5
Yields on nominal Treasury bonds
Daily data 2 January 2009 - 16 May 2014



Source: Central Bank of Iceland.

twelve-month inflation and 2.3% in terms of the average of various measures of inflation and one-year inflation expectations. This is about 0.5-0.8 percentage points higher than just before the February *Monetary Bulletin* and about 0.8-1.0 percentage points higher than in mid-May 2013 (Table III-1). Other real rates in the market have risen broadly in line with the Bank's real rate (Chart III-2).

Table III-1 The monetary stance (%)

Real interest rates based on:[1]	*Current stance (16 May 2014)*	*Change from MB 2014/1 (17 Feb 2014)*	*Change from MB 2013/2 (10 May 2013)*
Twelve-month inflation	3.0	0.8	1.0
Business inflation expectations (one-year)	2.3	0.9	1.5
Household inflation expectations (one-year)	1.3	1.0	1.0
Market inflation expectations (one-year)[2]	2.2	0.2	0.9
One-year breakeven inflation rate[3]	2.7	0.7	0.4
Central Bank inflation forecast[4]	2.4	-0.3	0.1
Average	2.3	0.5	0.8

1. The effective Central Bank nominal policy rate is the average of the current account rate and the maximum rate on 28-day CDs. 2. Based on survey of market participants' expectations. This survey was first carried out in mid-February 2012. 3. The one-year breakeven inflation rate based on the difference between the nominal and indexed yield curves (five-day rolling average). 4. The Central Bank forecast of twelve-month inflation four quarters ahead.

Market agents expect rates to remain unchanged this year

According to the Bank's survey of market agents' expectations, carried out in mid-May, respondents indicate that they expect nominal Central Bank rates to remain unchanged through the end of 2014 but to rise in 2015 (Chart III-3). As was the case in February, the survey findings indicate that market agents expect the collateralised lending rate to remain unchanged at 6% until Q1/2015 and then rise to 6.25% and, in two years' time, to 6.5%. The forward yield curve indicates, however, that market participants expect the Bank's interest rates to rise by 0.25 percentage points this year and by another 0.25 percentage points, to 6.5%, in the first half of 2015 (Chart III-3).[1] This is 0.25 percentage points lower than was expected in early February but similar to the level in November 2013.

Indexed bond yields have risen in line with the Bank's real rate

Yields on long indexed Treasury and Housing Financing Fund (HFF) bonds are similar now as when the February *Monetary Bulletin* was published, and about 0.2-0.9 percentage points higher than in early November 2013. In recent months, they have reached their highest level since 2011, reflecting to some extent the above-mentioned rise in the real Central Bank rate (Chart III-4). To a degree, it could also be due to market agents' expectations of an increase in the indexed bond supply because of the proposed sale of Central Bank of Iceland Holding Company (ESÍ) assets, announced late last year, as indexed bonds have been relatively scarce in the recent term. In addition, rising yields could reflect increased risk premia on Treasury and HFF bonds, in part because of uncertainty about both the economic impact of the

1. Measurement problems at the short end of the yield curve introduce a measure of uncertainty into the indications provided by the yield curve. Furthermore, Treasury bonds maturing within two years are excluded in the yield curve estimation as their pricing is considered skewed by the effects of the capital controls. For further discussion, see Box III-1 in *Monetary Bulletin* 2013/4.

Government's household debt relief measures and the future of the HFF, as the task force on the future structure of mortgage lending, appointed by the Minister of Social Affairs and Housing, has recommended in a recent report that major changes be made in the HFF's operations.[2]

Nominal Treasury bond yields have fallen

Although real interest rates have risen slightly since February, yields on nominal Treasury bonds have fallen by up to 0.6 percentage points, mostly at the short end of the yield curve (Chart III-5). They are still about 0.3-0.6 percentage points higher than they were in early November, however, and 0.4-1.0 percentage points higher than in mid-May 2013. The recent decline in yields could be due to increased demand, which in turn could be caused by favourable inflation measurements and reduced short-term inflation expectations in the recent term (see Section VIII), as well as to a need to reinvest the proceeds of the Treasury bond maturing in mid-March. That bond was owned predominantly by non-resident investors that invest primarily in shorter securities. On the other hand, real rates on nominal bonds have risen, in line with the aforementioned increase in the real Central Bank rate and with rising indexed interest rates.

The Government Debt Management *Prospect* for 2014 provides for Treasury bond issuance of about 50 b.kr. this year. Net issuance is set at around 25 b.kr., which is more than in 2013. The Treasury is already well on the way towards meeting its yearly target, as bonds have been issued for just under 31 b.kr. year-to-date.

Risk premia on Treasury obligations continue to decline

Risk premia on the Republic of Iceland's foreign obligations have fallen somewhat since the February *Monetary Bulletin*. Just before that publication went to press, rating agency Fitch Ratings affirmed Iceland's sovereign credit rating and stable outlook. In January, Standard & Poor's had changed the outlook on Iceland's ratings from negative to stable. Furthermore, Moody's Investor Service issued an opinion in mid-February, stating that the British and Dutch authorities' lawsuit against the Icelandic Depositors' and Investors' Guarantee Fund did not affect its ratings for the sovereign.

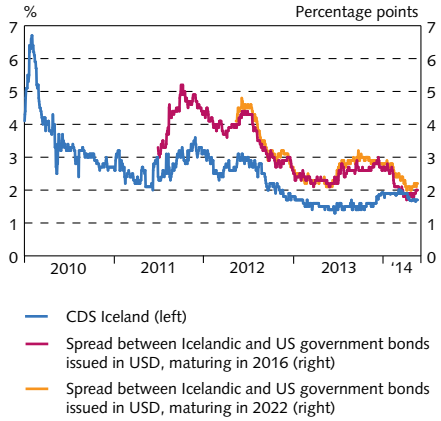
Since February, the CDS spread on five-year Treasury obligations has fallen by 0.2 percentage points, to the current 1.7% (Chart III-6); however, it is still 0.2 percentage points higher than it was in mid-May 2013. The premium on Treasury obligations as measured by the spread between Icelandic Treasury bonds in US dollars and comparable bonds issued by the US Treasury has also fallen to an all-time low in recent weeks. Just before this *Monetary Bulletin* was published, it was around 2%, or just under ½ a percentage point less

2. The task force recommends that the Fund cease issuing new loans according to current arrangements and that its operations be split into two parts: a new State-owned housing financing entity will be established, but without a State guarantee; and the Fund's social role, together with other elements centring on the implementation of the Government's housing policy, will either be absorbed into current institutions or be transferred to a new housing affairs institution. It is also recommended that the HFF's current loan portfolio be allowed to expire.

Chart III-6

Risk premia on Icelandic Treasury obligations

Daily data 1 January 2010 - 16 May 2014

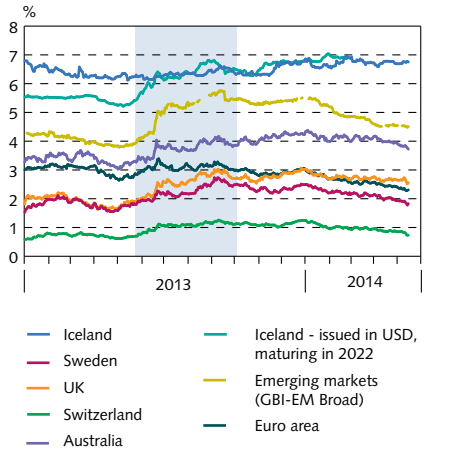


Source: Bloomberg.

Chart III-7

Yield on selected countries' 10-year domestic Treasury bonds and Iceland's foreign Treasury bonds[1]

Daily data 1 January 2013 - 16 May 2014



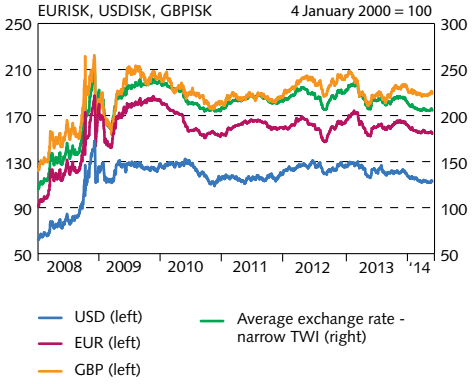
1. The shaded area shows the period of global market unrest from 22 May, when the US Federal Reserve Bank signalled its intention to taper its bond purchase programme, until mid-September, when those plans were postponed.

Sources: BIS, ECB, Macrobond, Central Bank of Iceland.

Chart III-8

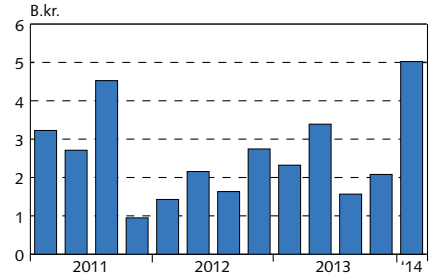
Exchange rate of the króna

Daily data 3 January 2008 - 16 May 2014



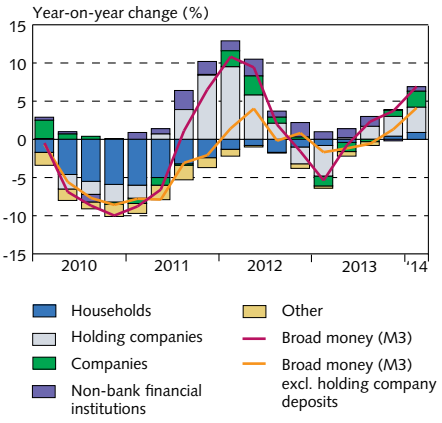
Source: Central Bank of Iceland.

Chart III-9
Non-residents' repatriation of domestic interest payments
Q1/2011 - Q1/2014



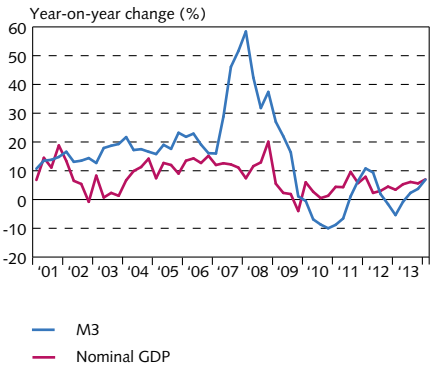
The figures are based on information provided to the Central Bank by domestic financial institutions, on non-residents' foreign exchange transactions involving interest and indexation payments on ISK-denominated bonds issued by domestic parties and deposits with domestic financial institutions. In comparing the amounts, it should be borne in mind that regulatory provisions on foreign exchange transactions involving interest payments have changed between periods. The Central Bank considers data for 2009 and 2010 not reliable enough for official publication. The data imply, however, that foreign exchange transactions resulting from non-residents' interest payments declined between these periods.
Source: Central Bank of Iceland.

Chart III-10
Components of broad money
Q1/2010 - Q1/2014



Source: Central Bank of Iceland.

Chart III-11
Nominal GDP and M3
Q1/2001 - Q1/2014[1]



1. Central Bank estimate for Q1/2014.
Source: Statistics Iceland, Central Bank of Iceland.

than in February. The uptick taking place mid-2013, in the wake of global market unrest triggered by uncertainty about the US Federal Reserve Bank's bond purchase programme, has thereby reversed. That unrest does not appear to have affected either domestic Treasury bond yields or the exchange rate of the króna, as it has in many other countries (Chart III-7), probably reflecting the shelter provided by the capital controls.

The drop in Iceland's sovereign risk premia and the continued decline in risk premia on speculative-grade European companies are signs that domestic firms – financial institutions in particular – are gaining increased access to foreign credit markets on more affordable terms, which is an important prerequisite for capital account liberalisation. The borrowing terms offered to domestic financial institutions in global credit markets will probably continue to improve and risk premia to decline. Signs of this can already be seen in the commercial banks' foreign bond issues.

The króna has appreciated

The króna has appreciated, but more slowly than it did in late 2013. Since the publication of the February *Monetary Bulletin*, it has appreciated by 1.1% in trade-weighted terms, 2.3% against the US dollar, and 1.4% against the euro. It has fallen slightly against the pound sterling, however (Chart III-8). In trade-weighted terms, it is now just over 5% stronger than it was in mid-May 2013 and nearly ½% above its summer-2012 peak. The continued rise in foreign tourist visits to Iceland and the external trade surplus have shored up the króna despite extremely poor terms of trade in historical terms. Terms of trade are forecast to improve this year, however, putting an end to a continuous slide beginning in 2010 (see Section II). In addition, firms' and municipalities' reduced foreign debt service have probably acted as a deterrent to foreign currency outflows, thereby easing downward pressure on the exchange rate. On the other hand, foreign exchange transactions due to domestic interest payments to non-residents have increased markedly (Chart III-9), and the Central Bank has bought foreign currency in the market so as to mitigate exchange rate volatility. The Bank's net foreign currency purchases have totalled 14.2 b.kr. since the February *Monetary Bulletin* and just over 28 b.kr. since the beginning of the year, which is more than in all of 2013, including payments on forward contracts.

Turnover in the interbank foreign exchange market totals about 80 b.kr. year-to-date, up slightly from the same period in 2013. The Central Bank's share is considerably larger, however, at about 36%, as opposed to 9% last year.

Continued growth in deposits …

Residents' total deposits with DMBs grew by 7% year-on-year in Q1/2014. They have grown for the last three consecutive quarters, following a continuous decline since Q4/2012. As before, most of the increase is due to holding company deposits, which rose year-on-year by just over 50 b.kr., or 25.4%, in Q1. Deposits held by companies grew 9.2% over the same period, mostly due to fisheries and service

companies. Household deposits grew 2.2% over the same period, and non-banking financial companies' deposits were up 3.1%.

… and money holdings

M3 has continued to grow year-on-year and was 6.9% higher in Q1/2014 than in the same quarter last year (Chart III-10). It had contracted sharply in 2012 and the first quarter of 2013, in part due to domestic firms' foreign loan payments, and is now broadly the same as at the beginning of 2012. Holding company deposits have increased most, although corporate and household deposits have grown as well.[3] Narrower measures of money also increased year-on-year in Q1, M2 by 7.9% and M1 by 11.4%. Central Bank base money grew by 8.8% over the same period.

Although money holdings have grown somewhat in the recent term, they are well in line with growth in nominal GDP, following a period of somewhat more modest growth from H2/2012 onwards (Chart III-11). In real terms, money holdings have grown in the recent term, after contracting for most of the last four years. In comparison with other countries during recessions, Iceland's post-crisis contraction in real money holdings has persisted longer. Further discussion of developments in Iceland's money holdings can be found in Box III-1. As is stated there, the past few years' developments in money holdings appear to be broadly in line with the historical relationship between money holdings and the determinants of money demand.

Stock of loans to households and businesses broadly unchanged

Towards the end of 2013, Arion Bank hf. took over portfolios of household loans previously owned by Drómi hf. and ESÍ subsidiary Hilda hf., as part of a settlement among the parties. This led to a marked increase in the stock of DMB loans without actual credit growth, as the loan portfolios in question had not been included in DMBs' accounts. In terms of book value, the total exchange rate- and inflation-adjusted stock of DMB loans to households grew by over 9½% year-on-year in Q1/2014. Adjusted for the above-mentioned takeover, the increase was just over 2½% (Chart III-12). Non-indexed loans have continued to grow, while the stock of exchange rate-linked loans and overdrafts has contracted. Total lending to households continued to contract between years, however, including HFF and pension fund loans.

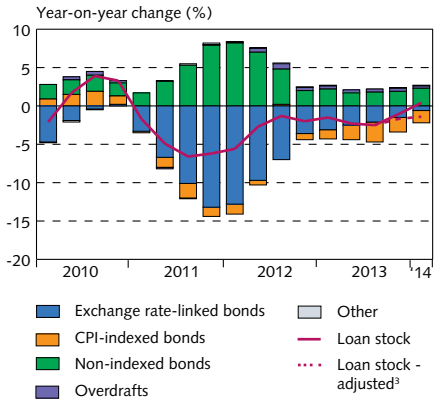
The exchange rate- and inflation-adjusted stock of loans from DMBs and the HFF to non-holding companies contracted slightly year-on-year in Q1. As before, the downturn is due primarily to a contraction in the stock of exchange rate-linked and inflation-indexed loans granted by DMBs, as the stock of non-indexed and overdraft loans has grown.

Slowdown in new loans granted to households …

New DMB loans to households totalled 45.8 b.kr. in Q1, around 2% less than in the same quarter in 2013 (Chart III-13). Some 55% of

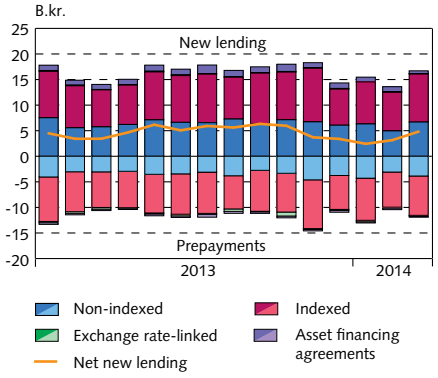
3. As is discussed in Box IV-1, some of the increase in money holdings can be traced to Central Bank foreign currency auctions.

Chart III-12
Contribution to growth in DMB, pension fund, and HFF lending[1] to households and firms[2]
Q1/2010 - Q1/2014



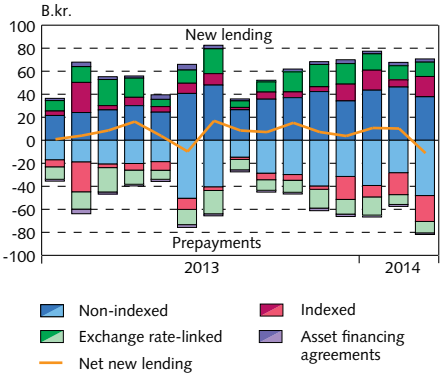
1. Adjusted for estimated effects of price level and exchange rate movements on CPI-indexed and exchange rate-linked loans. DMB loans are assessed at book value. 2. Excluding holding companies. 3. Adjusted for Arion Bank's takeover of Drómi and Hilda's household loans.
Source: Central Bank of Iceland.

Chart III-13
New lending to households and prepayments of older loans
January 2013 - March 2014



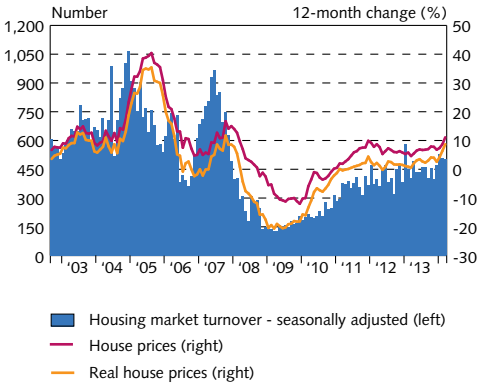
Source: Central Bank of Iceland.

Chart III-14
New lending to companies and prepayments of older loans[1]
January 2013 - March 2014



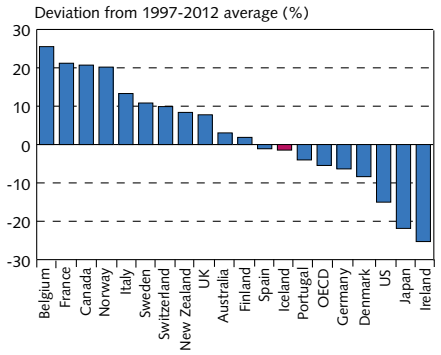
1. Excluding holding companies.
Source: Central Bank of Iceland.

Chart III-15
House prices and turnover in greater Reykjavík[1]
September 2002 - March 2014



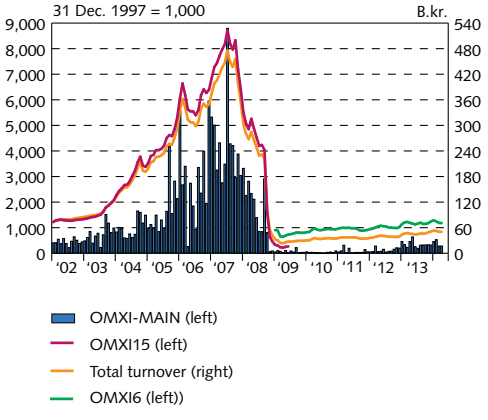
1. Turnover is based on the number of registered purchase agreements.
Sources: Registers Iceland, Central Bank of Iceland.

Chart III-16
Current house price-to-income ratio
in selected OECD countries[1]



1. The ratio for Iceland is for 2013, but the ratios for other countries are from 2012. Based on 1997-2012 average = 100.
Sources: OECD, Statistics Iceland, Central Bank of Iceland.

Chart III-17
Equity market[1]
January 2002 - April 2014



1. Total monthly volume of listed shares and monthly average of main stock indices.
Source: Nasdaq OMX Iceland.

new loans were indexed, and 39% were non-indexed. Prepayment of older loans has been concentrated in indexed loans, presumably because households have taken advantage of favourable developments in indexed mortgage rates and lower real interest on non-indexed loans in recent years. The majority of new indexed loans and loans that have been paid up are fixed-rate mortgages. Net new lending to households (new loans net of prepayments) totalled 10.4 b.kr. in Q1/2014, about 8.5% less than in the same quarter of 2013 and about 30% below last year's average. As before, the majority of net new loans have been non-indexed. Non-indexed loans totalled 6.7 b.kr. in Q1, whereas net new indexed loans totalled around 2.3 b.kr. and asset financing agreements about 1.6 b.kr., virtually all of them motor vehicle loans.

... and businesses

According to information from DMBs, new loans to non-holding companies totalled about 216 b.kr. in Q1, an increase of about 35% year-on-year and 25% more than the 2013 average (Chart III-14). Prepayments of older loans have also increased, to about 206 b.kr. in Q1. Net new corporate loans, most of them non-indexed, totalled nearly 10 b.kr. in Q1, a contraction of nearly 28% year-on-year. The increase in Q1 is attributable primarily to industrial firms, almost all of them fish processing companies, although lending to construction firms increased as well. As is discussed in Section IV, firms have financed their investments primarily from their own operations, although credit financing is gaining ground somewhat.

House prices up markedly since the last *Monetary Bulletin* ...

In the first three months of the year, the number of registered house purchase agreements rose 15% year-on-year nationwide and 9½% in the capital area. The average time-to-sale in greater Reykjavík was around four months during Q1, about a month shorter than during the same period in 2013.

House prices have risen 3.6% since the publication of the February *Monetary Bulletin*. They rose over 9% year-on-year in nominal terms in Q1, and nearly 6½% in real terms (Chart III-15). In March 2014, the twelve-month rise in house prices was over 11%, the highest since the beginning of 2008. The increase is somewhat larger than was provided for in the February forecast. Condominium prices have risen most, and demand for small flats has been strong. According to figures from the Federation of Icelandic Industries, construction is unable to keep pace with demand at present, as the number of residential properties under construction is below the annual requirement in the market. New figures from Registers Iceland show a year-on-year increase in the share of legal entities among buyers of residential property in Q1, particularly in downtown Reykjavík.

... and rent keeps rising

In the first three months of the year, rent was up 7.8% year-on-year in nominal terms and just over 5% in real terms. Owing to personal

bankruptcies and more stringent down payment requirements, many individuals – young people in particular – have resorted to the rental market, stimulating demand, especially for smaller flats. According to new data from Statistics Iceland, the share of households living in rented housing has risen from 15.4% in 2007 to 24.9% as of 2013.[4] At the beginning of the year, the HFF sold a large share of its rental properties to a leasing company owned by the Fund in order to meet this demand and respond to the authorities' interest in increasing the number of flats available for long-term rental. The sale was also an element in reducing the number of HFF-owned flats, which totalled about 2,100 in Q1.

The ratio of house prices to incomes near long term average

The rise in house prices has been well in line with developments in key economic indicators over the past four years. House prices as a share of wages, disposable income, and construction costs were close to their long-term averages in 2013, unlike the situation in many other OECD countries (Chart III-16). The baseline forecast assumes that house prices will continue to rise in line with nominal income throughout the forecast horizon.

Share prices decline, but the number of listings increases

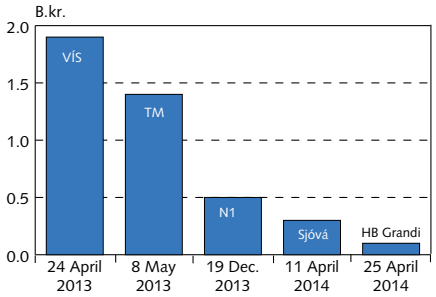
The NASDAQ OMX Iceland (OMXI) Main List index has declined by 5.7% since the last *Monetary Bulletin*, and the OMXI6 index has fallen by 7.9% (Chart III-17). Some of the downturn is due to dividend payments made during the period, however, as comparable indices adjusted for dividend payments have declined by 4.4-6.1% during the same period.

Equity market turnover has grown year-on-year, although the increase has tapered off recently. Total turnover was up 24% year-on-year in Q1, well under the Q1/2013 increase of 156%. In April, Sjóvá and HB Grandi shares were admitted for trading on the OMXI. Their combined market capitalisation was estimated at 71 b.kr. as of end-April, some 50 b.kr. of it due to HB Grandi. Total market capitalisation on the Main List was 33% of year-2013 GDP as of end-April. Excluding the new companies, it was 29% of GDP. There are now 13 Icelandic companies on the Main List, and more new listings are expected in the next two years.

Since the onset of the financial crisis, there has been considerable uncertainty surrounding share capital issuance, which has been reflected in discounts to investors in initial public offerings (IPO). On the other hand, both excess demand and IPO discounts have been on the wane in the recent term (Chart III-18). Declining IPO discounts, estimated as the market value of total issuance at the end of the first day of trading less the sale value of the same issuance, indicate that IPO prices have risen. This could reflect diminishing uncertainty in the equity market.

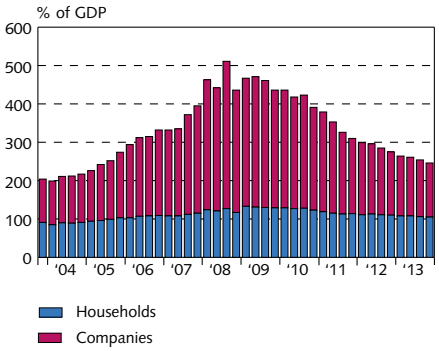
4. Statistics Iceland, "Social indicators: Tenants renting at market rates", *Statistical Series*, 99, 28 April 2014.

Chart III-18
IPO discounts at main market listing in 2013-2014[1]



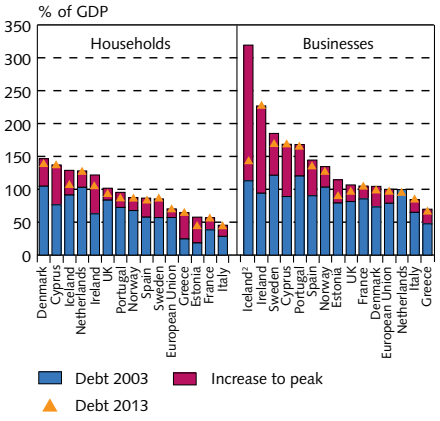
1.Market value of issue at market close on first day of trading, less market value of issue according to sellers' notifications.
Sources: Arion Bank hf., Íslandsbanki hf., Landsbankinn hf., Nasdaq OMX Iceland.

Chart III-19
Corporate and household debt[1]
Q4/2003 - Q4/2013



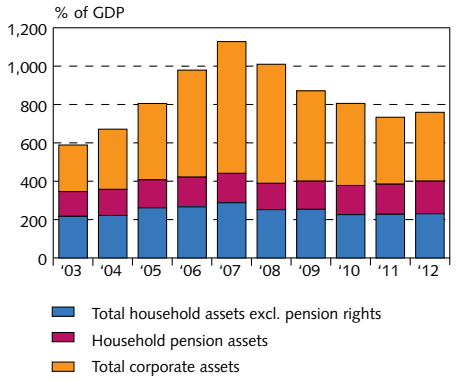
1. According to the Central Bank's seasonally adjusted GDP figures. Debt owed to financial undertakings and market bonds issued.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-20
Developments in household and non-financial corporate debt in selected European countries 2003-2013[1]



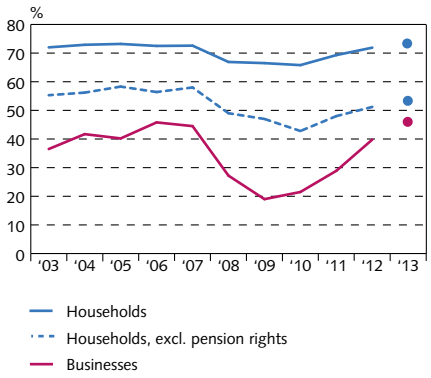
1. The blue columns show household and corporate debt at year-end 2003. The red columns show the increase in debt to the highest year-end value, and the triangles show the position at year-end 2013. Data for 2012 used if 2013 data are not available. Non-consolidated. 2. Only debt owed to financial undertakings and market bonds issued according to figures from the Central Bank of Iceland. The figures include debt of financial holding companies, as they have not been categorised specifically.
Sources: Eurostat, Central Bank of Iceland.

Chart III-21
Total household and business assets 2003-2012[1]



1. Estimates based on data from Statistics Iceland and the Central Bank of Iceland. Non-consolidated.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-22
Estimated household and corporate equity ratios 2003-2013[1]



1. Estimates based on data from Statistics Iceland and the Central Bank of Iceland. 2013 equity ratios are based on the assumption that household and business assets remained virtually unchanged year-on-year. Non-consolidated.
Sources: Statistics Iceland, Central Bank of Iceland.

Private sector debt level continues to fall

Household debt totalled 105% of GDP as of end-2013, after declining about 5 percentage points year-on-year and 28 percentage points from its Q1/2009 peak (Chart III-19). Corporate debt declined by 24 percentage points of GDP in 2013, to 141% of GDP by the year-end. The decline from the autumn 2008 peak measured some 242 percentage points.[5] Private sector debt therefore totalled nearly 250% of GDP at the end of 2013, or just under half of the Q3/2008 peak, and is at its lowest since mid-2005. Even though the post-crisis reduction in debt has been larger in Iceland than in other countries, Iceland's private sector is still relatively leveraged by international comparison, owing to the enormous accumulation of debt during the run-up to the crisis (Chart III-20).

Private sector financial conditions have improved

In broad terms, the financial conditions of households and businesses have continued to improve in the recent term. Net private sector wealth has grown in tandem with rising asset prices and falling debt levels. According to figures from Statistics Iceland, total household assets – i.e., financial assets, real estate, and motor vehicles – totalled about 400% of GDP as of end-2012, after rising by nearly 23 percentage points of GDP since 2010. Some 170 percentage points of this total were due to pension assets (Chart III-21). Households' equity ratio – i.e., the ratio of net assets to total assets – was about 72% at year-end 2012 and had risen by some 6 percentage points from the 2010 trough. Estimated non-financial company assets totalled about 360% of GDP as of end-2012, an increase of nearly 10 percentage points from the trough in the previous year.[6] Firms' estimated equity ratio has also risen. At the end of 2013, it was about 40%, broadly similar to that in 2005. The increase in net private sector wealth is due primarily to declining debt. If it is assumed that private sector assets remained broadly unchanged between years, estimated year-end 2013 equity ratios are 73% for households and 46% for firms, owing to continued deleveraging (Chart III-22).

The outlook is for private sector financial conditions to continue improving in coming years, owing in part to household debt reduction measures. However, other things being equal, the recently discussed restrictions on indexed annuity loan maturities could raise debt service on new loans and push house prices downwards (see Section I).[7] According to recent data from Statistics Iceland, the average individual's housing expense has been relatively stable over the past eight years, measuring 16.8% of disposable income in 2013. Developments in housing costs vary from group to group, however; renters' costs have risen, while homeowners' costs have fallen.

The number of individuals on the default register has declined, although it is still high compared with the beginning of the reces-

5. Figures on Icelandic corporate debt include the debt of holding companies related to financial activities, as these companies have not been classified separately. Corporate non-holding company debt declined by 144 percentage points of GDP over the same period.
6. The value of fixed operational assets is estimated from Statistics Iceland's corporate balance sheet summaries. As 2012 values have not been published, 2011 figures are used instead.
7. Further discussion can be found in Box V-1 in *Financial Stability* 2014/1.

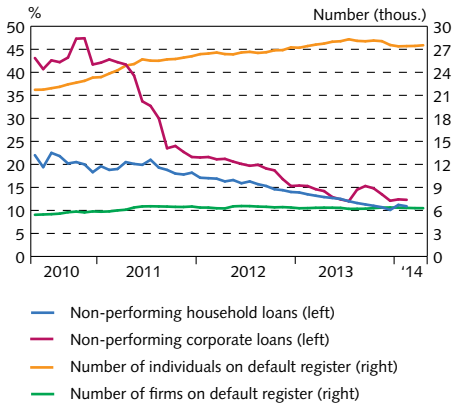
sion (Chart III-23). As is discussed in *Financial Stability* 2014/1, the share of non-performing household and corporate loans from the three largest commercial banks and the HFF has continued to fall. Corporate debt restructuring appears to be moving forward as well. Non-performing loan ratios have declined more rapidly among small and medium-sized companies in the recent term, which may reflect the fact that restructuring is now complete for the majority of large firms, and smaller companies are now being restructured. Registered corporate bankruptcies have also declined in number, although the number of firms on the default register is broadly unchanged.

Credit still appears to be relatively readily available for those with a satisfactory capital position. As Chart III-2 shows, the real equivalent of nominal mortgage lending rates has risen slightly, in line with the real Central Bank rate, and are now higher than comparable rates for indexed mortgages, after having been considerably lower in recent years.

Chart III-23

Number of borrowers on the default register and non-performing loan[1] ratios of the three largest commercial banks and the HFF[2]

May 2010 - April 2014



1. Non-performing loans are defined as loans more than 90 days in arrears or those for which payment is deemed unlikely. If one loan taken by a customer is in arrears by 90 days or more, all of that party's loans are considered non-performing (cross-default). 2. Parent companies, book value.

Sources: CreditInfo, Financial Supervisory Authority, Central Bank of Iceland.

Box III-1

Post-crisis developments in money holdings

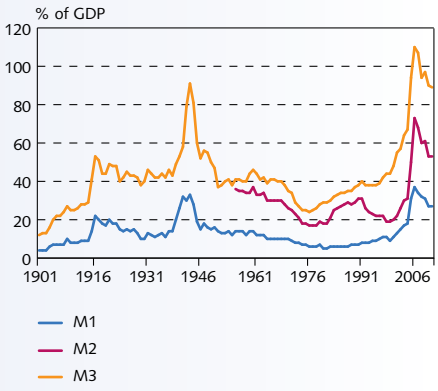
Money holdings grew strongly in Iceland during the economic upswing of the early 2000s, reaching an all-time high relative to GDP during the run-up to the financial crisis. They subsided again in the wake of the crisis but remain high in historical context. In Iceland, the contraction in money holdings during financial crises is greater than has been observed in other industrialised countries but appears to be well in line with the historical relationship between money demand and its main determinants.

Money holdings averaged less than half of GDP in the 20th century …

At the beginning of the 20th century, M3 in Iceland was only about 10% of GDP (Chart 1), reflecting the small size and shallowness of the domestic financial and banking system at that time.[1] The ratio of M3 to GDP began to rise in the first two decades of the century, following the increase in the number of domestic financial institutions and the development of the financial system, and approached 50% by the 1920s. Apart from a steep rise during World War II, it remained relatively steady, averaging 40-50% of GDP until the 1970s, when it began to fall in tandem with mounting inflation and negative real deposit interest rates, which reduced money demand and caused a shift to other asset classes, real estate in particular. It bottomed out at just under 25% towards the end of the 1970s and then began rising again – owing in part to the passage of general legislation on financial indexation in 1979, which triggered an

Chart 1

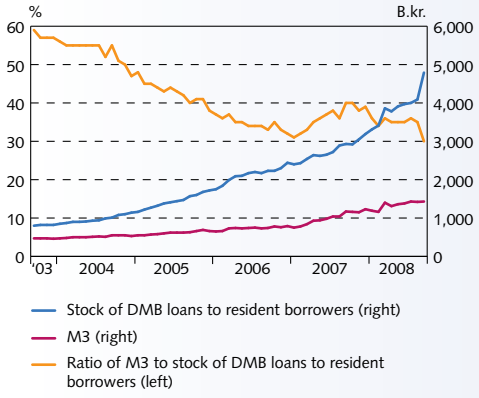
Monetary aggregates as a percentage of GDP 1901-2013



Sources: National Economic Institute, Statistics Iceland, Central Bank of Iceland.

1. The ratio of broad money to GDP is a conventional measure of domestic financial deepening. See, for example, Ólafsson and Pétursson (2011).

Chart 2
M3 and DMB loan stock
September 2003 - September 2008



Source: Central Bank of Iceland.

increase in domestic saving – and reached about 40% of GDP in the 1990s.[2]

… surged during the boom in the 2000s …
Shortly after the turn of the century, money growth began to accelerate in tandem with the surge in credit institution lending. The ratio of M3 to GDP rose by nearly 70 percentage points from the turn of the century until end-2008, when it measured 110% of GDP. Narrow money also grew considerably. Strong growth in banking system credit and the associated rise in money holdings stem from a number of factors: events following the privatisation of the commercial banks, increased economic activity, rapid financial system development, banks' and firms' increased access to cheap foreign credit, elevated mortgage loan-to-value ratios, and an asset price bubble that increased households' wealth and expanded their collateral capacity for further borrowing (see also Box III-2 in *Monetary Bulletin* 2010/2). The monetary stance also appears to have been too loose at the time, as is discussed in Central Bank of Iceland (2012), with monetary policy ultimately constraining deposit money banks' (DMB) money creation through its control over the marginal cost of capital, in particular by setting the policy interest rate.[3] However, only a part of the banking system's credit growth was financed with money creation, which accords with developments internationally during this period. For instance, M3 was nearly 60% of the DMB loan stock in September 2003, but only 30% by the time the crisis struck in late September 2008 (Chart 2).

… and has declined as time has passed since the crisis
Money holdings continued to grow at the beginning of the crisis in late 2008, due in part to increased demand for money following structural shifts in saving behaviour: savings that had been invested in funds were transferred to deposit accounts, and the worsening economic outlook prompted savers to move their money to more liquid and less risky assets such as bank deposits, which were guaranteed in full, in accordance with the Government declaration of 6 October 2008. The reduction in the number of investment options also channelled savings into other avenues such as bank deposits. In addition, falling interest rates and reduced returns on other asset classes after the crisis stimulated money demand.

As time has passed since the financial crisis, however, the situation has turned around, and money holdings relative to GDP have declined again, to about 90% as of year-end 2013. The drop in the ratio is probably due to a number of factors. Money demand began to contract in line with falling household wealth, as some households used their savings to deleverage or to smooth out consumption spending due to shrinking real disposable income. Corporate indebtedness declined as well, as debt has been restructured, written off, and paid down. In addition, the vast majority of firms' investments have been financed from operations rather than through debt financing (see, for example, the results of the Central Bank's investment survey in Section IV). Furthermore, investment options increased, with the associated shift from deposits to other asset classes, and the commercial banks sold assets they took over in the wake of the crisis. Moreover, money demand may have con-

2. Discussions of developments in money holdings and an assessment of the determination of money demand in Iceland can be found in Eggertsson (1982), Gudmundsson (1986), Cornelius (1990), and Pétursson (1996, 2000). A recent estimation of a monetary demand equation for Iceland can be found in the Central Bank's quarterly macroeconomic model (QMM) (see Daníelsson *et al.*, 2009; an updated version of the model is forthcoming).

3. A discussion of how monetary policy restricts DMBs' money creation can be found, for instance, in McLeay *et al.* (2014).

tracted in the wake of rising asset prices, low real deposit rates, and higher returns on other types of investment, and households have become more willing to take risks as the composition of their asset portfolios normalises.

Although money holdings have more or less stopped contracting in the past two years, their share in GDP has continued to drop, particularly considering the effects of the post-crisis reclassification of deposits on the measured money holdings. Residents' deposits have increased, as the commercial banking licences of the failed banks' winding-up committees have been revoked and the companies reclassified as holding companies.[4] Furthermore, there has been an increase in deposits held by special purpose vehicles that, among other activities, invest in real estate mortgages, and this has affected measured money holdings even though these companies are wholly owned by the commercial banks.[5] Adjusting for these deposits, money holdings totalled just over 80% of GDP at year-end 2013, or just under 10 percentage points of GDP less than measured M3.

Developments in money holdings in comparison with other countries

Comparing developments in Iceland to those in selected other European countries during the period 1960-2012 reveals that money holdings relative to GDP were generally lower in Iceland until the turn of the century, and well below the median of the comparison group. As is mentioned above, this indicates that the domestic financial system had been relatively shallow (Chart 3). Just after the turn of the century, the comparison group's ratio rose, but Iceland's ratio rose more rapidly, which reflects the gradual catch-up of the domestic financial system with those in other European countries. In spite of the steep rise in Iceland's money stock relative to GDP, it had only reached the median level for the comparison group as a whole by end-2012. A similar trend can be seen in other small countries (Chart 4). Yet, in this international comparison, it is not possible to conclude that money holdings in Iceland are abnormally high at this juncture, even though they have grown strongly since the turn of the century. The ratio of money holdings to GDP can vary widely from one country to another, and there is no golden rule on what is considered normal. As Chart 5 indicates, however, it is generally higher in higher-income countries.

Post-crisis contraction in Iceland's money holdings larger than after crises in other developed countries …

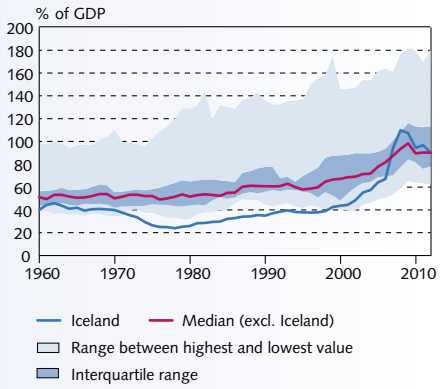
Since the financial crisis struck, M3 has contracted by over 20% in real terms. This is a considerably larger contraction than has generally been seen among industrialised countries in the wake of other economic and financial crises (Chart 6).[6] As could be expected, the contraction in money holdings is even greater and the turnaround in money growth slower in countries that suffer a financial crisis concurrent with a recession.

An examination of the comparison group shows that real money growth usually slows down following a crisis. In some cases, the money stock even contracts for 1-2 years after the crisis strikes –

4. Because money in circulation is defined as the banking system's obligations vis-à-vis the public, the measured money holdings increase when the classification of the winding-up committees' deposits is changed from financial institution deposits – and therefore one financial institution's debt to another – to a financial institution's debt to a non-financial institution, but without any actual increase in deposits.
5. The Central Bank of Iceland is currently revising its definitions of money, including the position of special purpose vehicles. See also Burgess and Janssen (2007).
6. The charts shows developments in broad money following 87 recessions (including 23 concurrent with financial crises) in 23 OECD countries during the period 1960-2013 (see European Central Bank, 2012).

Chart 3

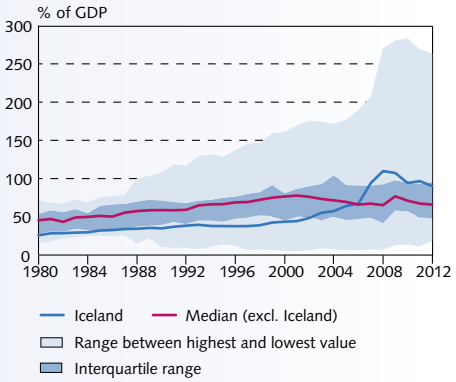
Ratio of broad money to GDP for Iceland and selected European countries 1960-2012[1]



1. Italy, Switzerland, Sweden, Denmark, United Kingdom, Netherlands, Finland, Norway, Germany, France, Portugal, and Spain. For some of the countries, data are not available for the entire period.
Sources: Macrobond, World Bank, Central Bank of Iceland.

Chart 4

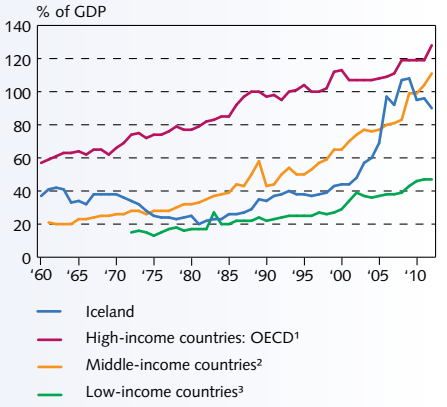
Ratio of broad money to GDP for Iceland and selected small countries 1980-2012[1]



1. Antigua and Bermuda, Aruba, Bahamas, Bahrain, Barbados, Brunei, Estonia, Grenada, Dutch Antilles, Qatar, Cyprus, Latvia, Malta, Mauritius, Equatorial Guinea, Oman, Federation of Saint Christopher and Nevis, Saint Lucia, Seychelles, Trinidad and Tobago. For some of the countries, data are not available for the entire period.
Sources: Macrobond, World Bank, Central Bank of Iceland.

Chart 5

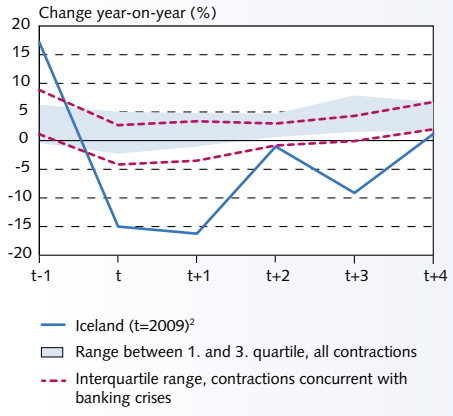
Broad money as a share of GDP, by national income 1960-2012



1. National income per capita in 2012 USD 12,616 or more. 2. National income per capita in 2012 USD 1,036-12,165. 3. National income per capita in 2012 USD 1,035 or less.
Source: World Bank.

Chart 6

Developments in money stock following economic crisis[1]

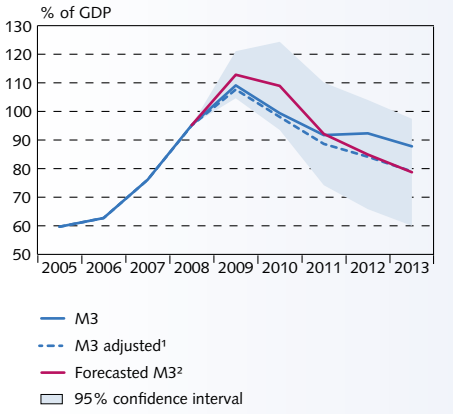


1. Developments in money supply following economic and banking crises in 1960-2013 in 23 OECD countries (year t is the year of crisis onset). Based on broad money (M3 or M2) in real terms (deflated with HICP or CPI). 2. Adjusted for the effects of failed financial institutions and special purpose vehicles owned by financial institutions.

Sources: ECB, OECD, World Bank, Central Bank of Iceland.

Chart 7

Actual and forecasted developments in broad money 2005-2013



1. Adjusted for deposits held by winding-up committees of failed financial institutions that have lost their commercial banking licences and deposits held by special purpose vehicles owned by financial institutions. 2. Forecast for 2009-2013.

Sources: Statistics Iceland, Central Bank of Iceland.

but only in rare instances are money holdings still contracting in real terms nearly four years after the crisis, as was the case in Iceland.

... reflecting the severity of the recession

Chart 6 shows that money holdings contracted much more in Iceland after the current crisis than they did in other OECD countries in the wake of other economic and financial crises. Furthermore, money holdings have been slower to recover in Iceland, perhaps reflecting stronger money stock growth in the run-up to the crisis. For example, M3 doubled in real terms in Iceland during the four years before the crisis but grew by an average of only 20% in other industrialised countries that subsequently suffered financial crises.

It may also be that the steep post-crisis contraction in Iceland's money stock was due in part to the magnitude of the economic crisis. In order to determine whether the post-crisis contraction in money holdings was in line with that implied by historical relationship between money demand and its economic determinants, it is possible to compare the actual contraction with that implied by a conventional money demand relationship. The equation used is the money demand equation in the Bank's quarterly macroeconomic model (QMM) (see Daníelsson *et al.*, 2009). As Chart 7 shows, the contraction is initially somewhat steeper than is implied by the model, but from 2011 onwards, it develops well in line with the conventional relationship between money demand and its macroeconomic determinants, particularly when the money stock is adjusted for the effects of deposits held by special purpose vehicles owned by the banks and the failed financial institutions that have lost their commercial banking licences. The chart also shows that the forecast is well within the 95% confidence bands throughout the period.

Although the post-crisis contraction in money holdings was larger than has been seen in other industrialised countries, post-crisis developments in the money stock appear to be well in line with what could have been expected given the severity of the recession and consistent with the historical relationship between money demand and its key determinants.

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IV Domestic demand and production

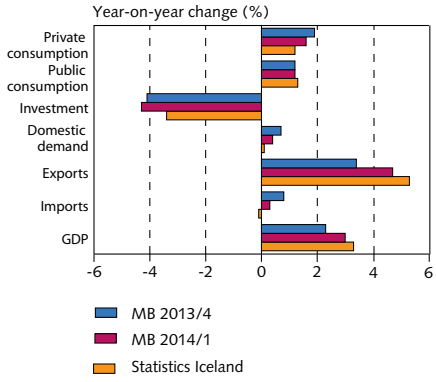
Iceland's economic recovery gained more momentum last year than was assumed in the forecast in the February *Monetary Bulletin*, and the GDP growth outlook for this year has improved markedly as well, mainly due to increased business investment. Year-2013 GDP growth was driven primarily by services exports, while the outlook this year is for domestic demand to take over as the main driver of the recovery. There are signs that private consumption grew strongly in Q1/2014, whereas it was weaker than expected in 2013. Public consumption grew last year, for the first time since 2008. Both public consumption and public investment are expected to continue growing throughout the forecast horizon. The margin of spare capacity has narrowed quickly in the recent term, and a positive output gap is expected to begin developing this year.

2013 output growth stronger than anticipated, driven primarily by exports

Statistics Iceland published national accounts data for Q4/2013 in March, together with the accounts for 2013 as a whole and revisions of previous figures. Output growth measured 3.8% year-on-year during the quarter, as opposed to the 2.7% projected in February. For the year as a whole, GDP growth measured 3.3%, or 0.3 percentage points more than in the February forecast, which was nonetheless considerably more optimistic than the forecast from November (Chart IV-1). Net trade contributed much more to year-2013 output growth than had been assumed, accounting for 3.2 percentage points of the 3.3% growth rate for the year. This was due in large part to services exports, which have been a major contributor to the economic recovery in the recent past (Chart IV-2). In addition, investment contracted less than expected and imports were weaker than anticipated. This was offset, however, by weaker-than-expected private consumption growth.

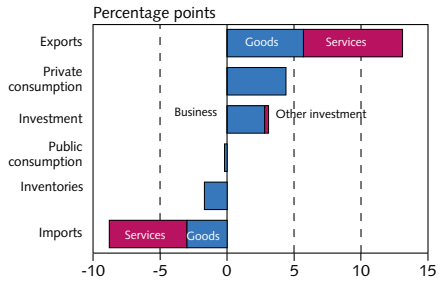
This development can also be seen in the preliminary figures for gross factor income according to the production accounts for 2013.[1] Gross factor income rose by 3.1% during the year. Increased activity in the tourism sector accounted for a significant share of the rise in total factor income. Other sectors contributed less, but signs of a turnaround are emerging in all of Iceland's key sectors, including construction and financial services, which contracted most after the crisis (Chart IV-3).[2]

Chart IV-1
National accounts for 2013 and Central Bank estimate



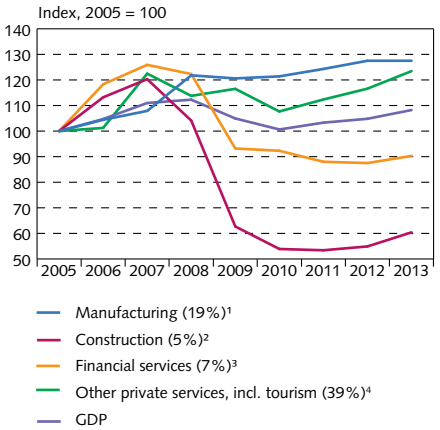
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-2
Contribution of GDP components to economic recovery[1]



1. Seasonally adjusted. 2010 H1 - 2013 Q4.
Sources: Statistics Iceland, Central Bank of Iceland.

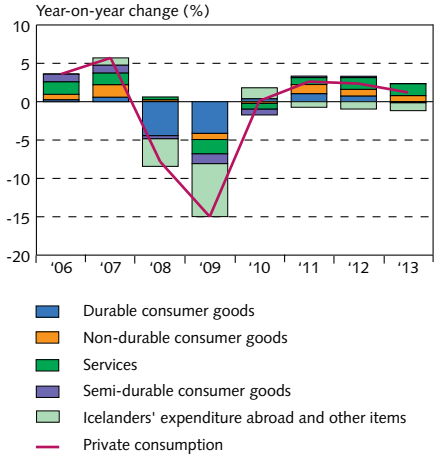
Chart IV-3
GDP and production in selected sectors



1. Manufacturing, mining, utilities, and waste handling. 2. Building and construction. 3. Financial and insurance. 4. Wholesale, retail, transport and storage, restaurants and hotels, information and telecommunications, real estate, and miscellaneous specialised services. Figures in parentheses show the relevant sector's share in year-2013 GDP.
Source: Statistics Iceland.

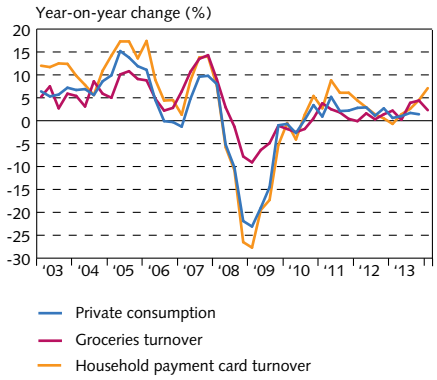
1. The production approach to the national accounts shows in which sectors GDP is generated, while the expenditure approach shows how it is allocated to private consumption, public consumption, investment, and external trade. Gross factor income measures the value of the production of goods and services taking place in the economy. The difference between GDP and gross factor income is that indirect taxes are not included in factor income, as they are not part of companies' revenues, whereas manufacturing subsidies are included. Figures on year-2013 gross factor income at constant prices are not yet available, but volume indices from Statistics Iceland can be used to produce an estimate.
2. The tourism item includes travel agencies, tour operators and other booking services, hotel and restaurant operations, and non-real estate leasing.

Chart IV-4
Developments in private consumption and its main components
2006-2013



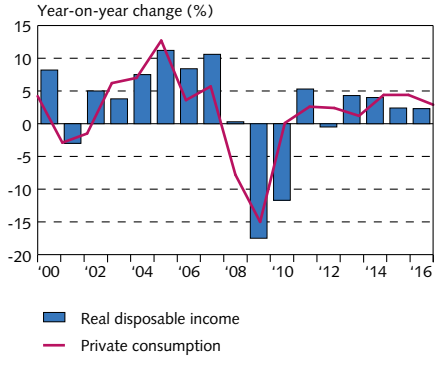
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-5
Private consumption, groceries turnover, and payment card turnover
Q1/2003 - Q1/2014[1]



1. Figures for private consumption are only available until Q4/2013.
Sources: Centre for Retail Studies, Statistics Iceland, Central Bank of Iceland.

Chart IV-6
Private consumption and real disposable income 2000-2016[1]



1. Central Bank baseline forecast for private consumption 2014-2016 and real disposable income 2013-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Private consumption growth somewhat weaker than expected …

Private consumption grew 1.2% in 2013, about ½ a percentage point less than was forecast in February. Q3/2013 numbers were adjusted downwards when the national accounts were revised in March; furthermore, consumption growth between Q3 and Q4 was weaker than indicators had implied. Improved household equity, reduced unemployment, and strong growth in real disposable income all gave cause to expect stronger private consumption growth than was borne out by the Statistics Iceland figures. It is possible that uncertainty about the Government's debt relief measures slowed consumption spending. Another possibly important factor is the recent increase in the modified mortgage payment index, which has risen by an average of 7½% per quarter since mid-2012, owing to declining unemployment and strong increases in the wage index. The rise in the CPI has been much smaller over this period. A number of homeowners' debt service is linked to the modified mortgage payment index, and these borrowers' loan payments have increased in the recent term.

… but indicators imply strong growth early in 2014

There are signs that private consumption has picked up strongly in recent months. Since December 2013, payment card turnover has grown each month by an average of over 7% year-on-year, new motor vehicle registrations are on the rise once again, and sales of durable consumer goods such as electronic equipment and furniture have increased strongly, according to the Icelandic Centre for Retail Studies' retail sales indices. It therefore appears that a turnaround has taken place, as private consumption growth has been driven primarily by purchases of services and non-durable consumer goods since the recovery began (Chart IV-4). Purchases of durable consumer goods have been weak since 2008, indicating that some pent-up demand might be present. In addition, the authorisation for third-pillar pension savings withdrawals was expanded and lengthened at the end of 2013. According to the last *Monetary Bulletin*, this was expected to trigger some additional withdrawals in Q1, but figures from the Directorate of Internal Revenue suggest that the increase in withdrawals outpaced the forecast by some 2.5 b.kr., or 1% of quarterly private consumption.

Key indicators of private consumption suggest a year-on-year increase of some 3.5% in Q1 (Chart IV-5). This trend is expected to continue during the year, with private consumption growth measuring 4.4% for 2014 as a whole, slightly below the forecast in the last *Monetary Bulletin*. The change between forecasts is due primarily to the assumption that the Government's debt relief measures will be implemented one quarter later than was assumed in February. In addition, the impact on household debt service is now projected to be slightly less than was assumed in the February forecast because the authorities plan to write down mortgages that had previously been frozen before writing down the principal of loans currently being serviced. This could be offset if the Government's plans to raise the tax free amount available for debt repayment through the third pillar pension savings materialize. In addition to this, private consumption

appears to have been somewhat stronger at the beginning of the year than was forecast in February.

Private consumption projected to grow strongly in 2015 and then ease in the latter half of the forecast horizon

Employment is projected to continue growing in 2015, with real wages and real disposable income expected to rise by about 2½%. Private consumption growth is forecast at 4.3%, somewhat outpacing growth in disposable income (Chart IV-6). Rising asset prices will support private consumption growth, and household wealth will rise still further because of debt reduction in connection with the Government debt relief package (see Appendix 2 in *Monetary Bulletin* 2014/1). Private consumption is forecast to grow by nearly 3% in 2016. If the forecast materialises, the ratio of private consumption to GDP will have risen to 54% by 2016. This is somewhat below the thirty-year average (58%) but is considered to be well in line with a sustainable external balance.

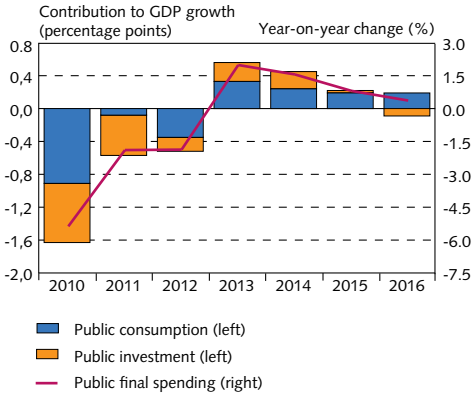
Public consumption grew in 2013, ending a four-year contraction, and is forecast to continue growing in the next two years

The necessary fiscal adjustment has made its mark on the domestic economy in the wake of the financial crisis. Taxes have risen and public consumption has shrunk. Last year was a turning point, however, with public consumption growing by over 1% and public investment growing 12%, after contracting for the preceding five years. As a result, the combined contribution of public consumption and public investment to domestic demand was positive for the first time since post-crisis fiscal consolidation began (Chart IV-7). It is forecast to remain positive both this year and throughout the forecast horizon. Public consumption is expected to grow by just under 1% per year during the period, somewhat more than in the February forecast. Public investment is forecast to grow by nearly 10% this year and about 1½% in 2015. In 2016 it is expected to contract, partly because of the scheduled completion of the Vaðlaheiðargöng tunnel project. Public sector finances are discussed in Section V.

Business investment stronger than forecast in 2013 ...

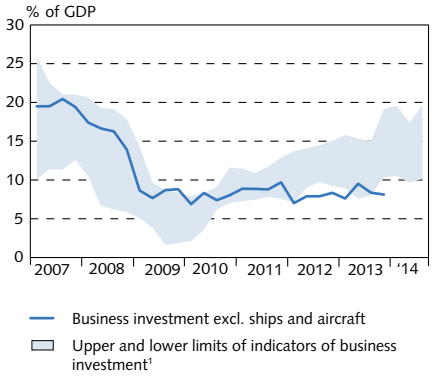
Business investment contracted by over 10% in 2013, owing primarily to negative base effects caused by a year-on-year downturn in investment in ships and aircraft. Adjusting for those base effects, it grew by 3.5% from the previous year. Changes in investment in ships and aircraft make very little impact on GDP growth, as these items are included with goods imports. Hence, last year's contraction in total business investment does not give an entirely accurate view of its contribution to GDP growth. Energy-intensive investment contracted by nearly a fourth during the year, mainly due to the sale of the Reykjavík Energy (OR) headquarters, which reduces this category of investment but increases general business investment by a corresponding amount and therefore has no effect on total investment or output growth. The contraction in business investment was nearly 2 percentage points smaller than was forecast in February, but business

Chart IV-7
Public consumption and investment 2010-2016[1]



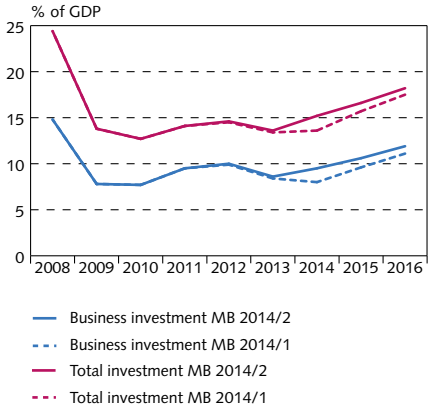
1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-8
Indicators of business investment
Q1/2007 - Q3/2014



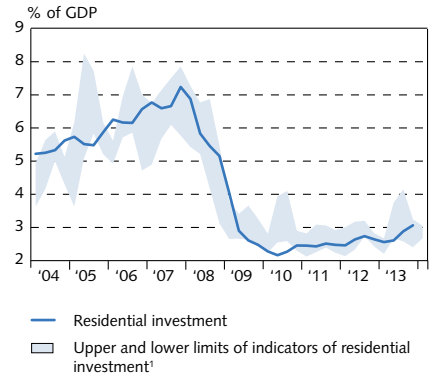
1. The indicators examined are imports of investment goods excluding ships and aircraft, at fixed prices, and responses to four questions from the Capacent Gallup survey of Iceland's 400 largest companies. The questions centre on executives' assessment of (a) the economic outlook six months ahead, (b) how demand for their goods or services will develop in the next six months, (c) whether they expect their company's investment increase year-on-year in the current year, and (d) whether their margins will 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: Statistics Iceland, Central Bank of Iceland.

Chart IV-9
Investment relative to GDP 2008-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-10
Indicators of residential investment
Q1/2004 - Q1/2014



1. Imports of reinforcing steel, imports of other construction materials, and cement sales to buyers other than energy-intensive firms. In assessing the range, the variables are rescaled so that they have the same average and standard deviation as measured residential investment. The chart shows a two-quarter moving average.
Sources: Statistics Iceland, Central Bank of Iceland.

investment excluding energy-intensive industry and ships and aircraft was somewhat stronger than in the February forecast.[3]

… and set to grow even more in 2014

The outlook for 2014 is for even stronger growth in business investment than was forecast in February. A number of factors contribute to the expected improvement: changes in investment plans in the energy-intensive sector, increased investment in ships and aircraft and, according to information on general business investment collected by the Central Bank, firms' greater willingness to invest.

Investment related to the energy-intensive sector will grow much more this year than was anticipated in February, due both to projects that have shifted to this year and to base effects from last year's above-mentioned contraction in connection with the sale of the OR headquarters. Furthermore, investment in ships and aircraft is expected to increase by over 8 b.kr. this year, and the Bank's survey of investment plans, carried out among 129 firms, indicates that other business investment could turn out much stronger than was assumed in the last forecast (Table IV-1).[4] According to the Bank's survey, the increase is greatest among companies in tourism and transport and information technology, but also among independent contractors and other service providers. The findings from the surveys conducted by the Central Bank and Capacent Gallup are broadly consistent with one another. Moreover, imports of investment goods suggest that investment has picked up in recent months. Business investment is projected to grow by about a fifth this year, as opposed to just under 1% according to the previous forecast. The Bank's survey and the indicators in Chart IV-8 could even imply that this baseline forecast could underestimate business investment in 2014.

Table IV-1 Survey of corporate investment plans (excluding ships and aircraft)[1]

Largest 129 firms *Amounts in ISK billions*	*2013*	*2014*	*Change year-on-year (%) (last survey)*
Fisheries (18)	9.5	9.2	-2.7 (-11.1)
Industry (23)	5.2	4.3	-17.5 (-36.2)
Wholesale and retail sale (28)	5.9	5.8	-1.7 (-14.4)
Transport and tourism (12)	9.2	15.9	73.7 (37.4)
Finance/Insurance (11)	4.5	5.1	12.1 (47.1)
Media and IT (13)	7.1	8.5	19.7 (4.1)
Services and other (24)	10.3	12.7	23.5 (0.7)
Total	51.7	61.5	19.1 (4.2)

1. In parentheses is a comparison with the last survey, in which respondents from 55 firms were asked about investment plans for 2012-2014 (*Monetary Bulletin* 2013/4).

Business investment back to historical average by the end of the forecast horizon

Although business investment growth is expected to be much stronger in 2014 than was provided for in the last forecast, it is expected to be

3. As is discussed in Box IV-1, it is likely that the Central Bank's foreign currency auctions have supported investment to some extent.
4. As in the Bank's previous surveys, the vast majority of corporate investment is equity-financed, particularly among large firms, although credit financing is on the rise.

somewhat weaker in 2015, owing to base effects from this year and to projects shifted partly from next year to this one. Investment in ships and aircraft will be considerably stronger this year than in 2013, and other business investment will increase by nearly 25%, some 11½ percentage points more than in the last forecast. In the latter half of the forecast horizon, business investment is projected to grow by 15-18% per year, somewhat less than in the February forecast; however, the investment level will be considerably higher, owing to robust growth at the beginning of the forecast horizon (Chart IV-9). In 2016, it is projected to be in line with the thirty-year average, or 12% of GDP.

Box IV-1

The economic impact of Central Bank foreign currency auctions

The scope of Central Bank foreign currency auctions

Since June 2011, the Central Bank has held regular foreign currency auctions in which investors are invited to use reinvestable foreign currency to buy long-term Treasury bonds. In another auction held the same day, the Central Bank uses the foreign currency from the Treasury bond auctions to buy krónur from non-residents wishing to wind down their ISK positions. Since February 2012, the Bank has also held auctions according to its Investment Programme, under which investors are given the opportunity to use the krónur they acquire in auctions to purchase other assets, subject to a minimum commitment period of five years. The purpose of the auctions is to unwind non-residents' volatile ISK holdings, which could cause substantial instability when the capital controls are lifted.

Nineteen auctions have been held under the Treasury Bond Programme, and investors have imported the equivalent of approximately 56 b.kr. in connection with them. Seventeen auctions have been held under the Investment Programme, generating 153 b.kr. in inflows. About a third of this, or roughly 64 b.kr., has been channelled through the domestic foreign exchange market, as 50% of the amount invested under the Investment Programme must be converted to Icelandic krónur in the domestic market.[1]

Economic impact

The foreign currency auctions have had an economic impact in several ways. To some degree, they have generated more investment than would otherwise have taken place, some of it in export sectors. Furthermore, they have supported asset prices, as a portion of the capital entering the country through the Investment Programme has been invested in real estate and stocks. To the extent that investment via the auctions has refinanced corporate debt with more favourable debt instruments or equity, the auctions have also facilitated domestic firms' balance sheet restructuring and lowered their cost of capital. To the extent that the auctions have stimulated demand for Treasury bonds and raised their prices, the Treasury's cost of financing has declined as well. Moreover, the auctions have enhanced the effectiveness of money holdings by transferring krónur from non-residents to residents. Finally, to the extent that they have generated increased foreign currency inflows for investment and asset purchases, the auctions have probably helped shore up the exchange rate.

Quantifying the magnitude of this economic impact is problematic, in part because it is difficult to estimate what would have

1. Further discussion of the Central Bank's foreign currency auctions can be found in Box II-2 in *Financial Stability* 2014/1.

happened had the auction programme not been introduced. In addition, the auctions have been spread over several years during which there was a slack in the economy and therefore less risk that increased demand would cause a rise in inflation. It is possible to make a rough estimate of the effect of the auctions on effective money holdings and, given certain conditions, on private consumption, investment, house prices, and output growth. The overall effect of the auctions on the economy is more difficult to estimate.

Impact on money holdings

As is stated above, the economic effect of the auctions can be examined in terms of their impact on effective money holdings; that is, the amount of money available to residents for allocation to domestic investment and consumption. Since the Central Bank launched its auction programme, non-residents' deposits with the Bank have contracted by about 85 b.kr. In so doing, they have gone from full reserve requirements to 10%, and effective money holdings have increased by about 77 b.kr. as a result – given, that is, that the effectiveness of the share previously held by non-residents was zero, which is probably an underestimation. At the same time, Central Bank deposits held by international payment intermediaries have increased by about 12 b.kr. These deposits are assigned a reserve ratio of 100% unless they are guaranteed by the Depositors' and Investors' Guarantee Fund. Given that about half of them are guaranteed, it can be assumed that these increased deposits have reduced effective money holdings by about 6 b.kr.

All in all, the foreign currency auctions have therefore effectively increased the money stock by 71 b.kr. at most over this period of just under three years. This is commensurate with an increase in M3 of 4½%, or just over 1½% per year. Other things being equal (including the assumption that the monetary policy response would not have been different had the auctions not taken place), this increase in money holdings corresponds to a reduction in market interest rates of nearly ½ a percentage point, or about 0.16 percentage points per year.[2] It can be assumed that the auctions boosted the domestic economic recovery through the increase in the effective money stock, particularly because they took place at a time where there was some slack in the economy. A rough estimate indicates that house prices and domestic demand increased at most by approximately ½ a percentage point more in 2011-2013 than they would have otherwise, and that GDP growth was stronger by about 0.1 percentage point.

Overall impact

The assessment above merely estimates the auctions' impact on the economy through one channel. There are others, but on the whole, it can be assumed that the impact has been positive. They supported domestic demand when there was a substantial slack in the economy, thereby expediting the economic recovery. They also supported domestic asset prices, which fuelled the recovery even further. In addition, the króna is probably stronger than it would have been without the auctions, and because of this and the slack in the economy at the time they were held, the inflationary effects of the auctions have been negligible hitherto. Now that the spare capacity in the economy is disappearing, however, there is good reason to give closer consideration to the possible effects of the auc-

2. This is because, other things being equal, the public will not want to keep this increased money stock unless the opportunity cost diminishes; that is, unless market interest rates fall. The assessment of the interest rate impact of the increased money holdings is based on the interest elasticity of money demand in the Central Bank's macroeconomic model (QMM).

tions on domestic demand. The Central Bank's forecasts of demand and inflation should incorporate these effects, as well as other key factors that could affect the inflation outlook at any given time.[3]

Finally, it should be noted that the aim of the auctions is to move volatile krónur from parties that want to convert them to foreign currency immediately and put them into the hands of long-term investors. The auctions therefore promote exchange rate stability in the long run and will thereby support the inflation target and financial stability when the capital controls are lifted.

3. In the same way, it is necessary to consider the potential impact of factors such as the sale of the Central Bank of Iceland Holding Company's assets and claims on liquid assets due to deposits owned by the old banks' estates on effective money holdings and economic activity.

Residential investment projected to grow nearly one-fifth per year over the forecast horizon

Residential investment was broadly unchanged year-on-year in the first half of 2013 but picked up in the second half. According to national accounts data from Statistics Iceland, it grew by 10.8% year-on-year in 2013, somewhat weaker than was forecast in February, but in nominal terms, it is only marginally below the February forecast.[5]

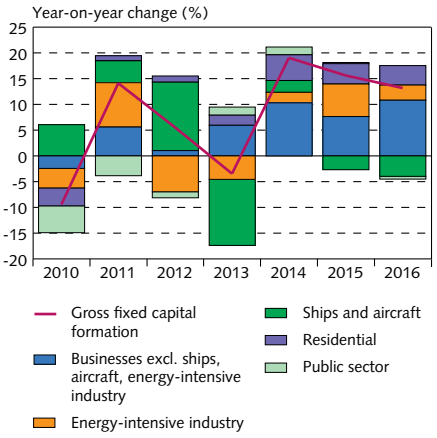
Key indicators of residential investment suggest that it is gaining pace (Chart IV-10): the most recent figures from the Federation of Icelandic Industries, compiled in March, reveal that about 2,000 flats are currently under construction in the greater Reykjavík area, about 450 more than at the same time in 2013. Nearly 900 are weather-proof or at more advanced stages of construction. Cement sales net of sales to energy-intensive industry rose by a third in 2013, and sales in Q1/2014 were up by about the same amount. Imports of reinforcing steel also grew strongly between years. Information from the Administration of Occupational Safety and Health (AOSH) also shows a 15% increase in the number of inspected construction cranes over the same period. The forecast assumes that residential investment will grow this year by just under a fourth, somewhat more than in the last forecast. Growth is estimated to average 17% per year in the next two years. In 2016, residential investment will amount to about 4.3% of GDP, marginally below the thirty-year average.

Total investment projected to grow but still be below the long-term average by the end of the forecast horizon

In 2013, total investment contracted by 3.4%, about a percentage point less than was forecast in February. As is stated above, the contraction is largely due to investment in ships and aircraft, as investment excluding these items grew by over 6% year-on-year. Investment is projected to grow by 19% this year, well above the February forecast of a 5.4% increase. The rise is due to all components of investment,

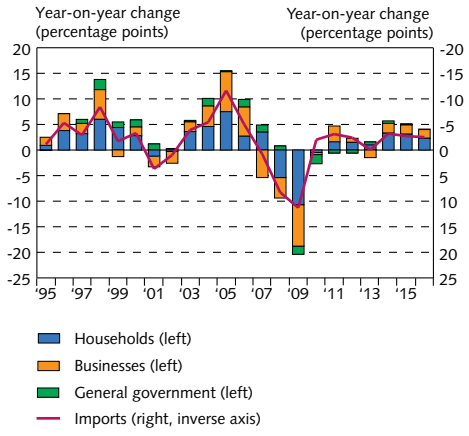
5. It should be borne in mind that figures on residential investment are often adjusted upwards when the national accounts are revised, owing to the availability of more accurate data.

Chart IV-11
Gross fixed capital formation and contribution of its main components 2010-2016[1]



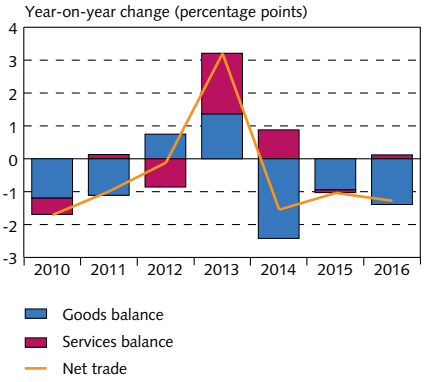
1. Central Bank baseline forecast 2014-2016. Components may not sum to total due to chain-linking.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-12
Contribution to domestic demand growth and contribution of imports to GDP growth 1995-2016[1]



1. Central Bank baseline forecast 2014 - 2016. Households includes private consumption and residential investment, businesses includes business investment and inventories, and general government includes public consumption and public investment.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-13
Contribution of net trade to GDP growth 2010-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

although the aforementioned growth in business investment weighs heaviest. Business investment and residential investment will also be the major contributors to the 15½% growth in total investment projected for next year (Chart IV-11). Growth is expected to lose pace somewhat in 2016, owing primarily to a year-on-year decline in the energy-intensive sector. Investment totalled 13.6% of GDP in 2013, and if the forecast materialises, that share will rise to over 18% by the end of the forecast horizon (Chart IV-9), or just under 2 percentage points below the thirty-year average, owing primarily to weak public investment during the forecast period.

Domestic demand to pick up

Domestic demand is forecast to grow by 5.6% in 2014, after remaining virtually unchanged year-on-year in 2013. This year also marks a turning point, as all expenditure items – household, corporate, and public expenditure – will pull in the same direction for the first time since the crisis struck (Chart IV-12). Robust growth in private consumption and investment will also be a major contributor to strong growth in domestic demand next year.

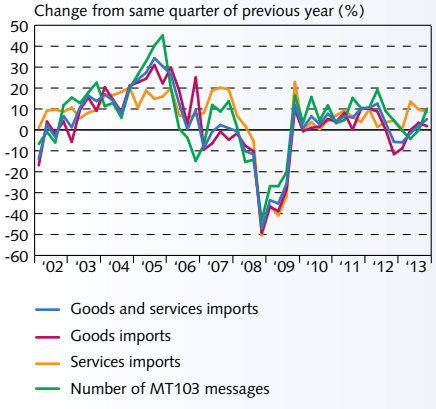
Box IV-2 Indicators of developments in imports based on cross-border payment intermediation orders

In assessing the economic outlook, the Central Bank considers numerous indicators that are measured at a higher frequency than the variables being forecasted. The Bank has recently begun using the number of payment orders for settlement of cross-border trade as an indicator. This variable appears to have considerable forecasting value for developments in imports to Iceland. Because these data are available well before the national accounts are published for the quarter concerned, they improve the Bank's short-term forecasts of imports.

Payment orders for settlement of cross-border trade

When a cross-border transaction is settled, a payment order is sent from the importer's bank to the exporter's bank, and the settlement takes place through a global cooperative system, the Society for Worldwide Interbank Financial Telecommunication, commonly referred to as SWIFT. Since February 2012, SWIFT has compiled indices prepared from its payment intermediation systems, both for the world as an aggregate and for the OECD as a whole. Indices for the European Union, the US, the UK, and Germany were introduced in February 2013. These indices are used increasingly as high-frequency indicators for global economic activity.[1] They measure the number of payment orders sent by a central bank, as the agent of its domestic banks, to foreign banks in the form of requests for payment (so-called MT103 messages). They are available on a monthly frequency since January 2005. The number of payment orders is used rather than the amount of money they represent because it is considered to provide more reliable information on economic activity, as individual payment orders can entail very large amounts (in the case of swap agreements, for instance) that have limited relevance for real economic activity.[2]

Chart 1
Goods and services imports and the number of MT103 messages
Q1/2002 - Q4/2013



Sources: Statistics Iceland, SWIFT.

1. For further information, see the SWIFT website: http://www.swift.com/index.page?lang=en.
2. Because there is no SWIFT index for Iceland, the number of MT103 messages since January 2005 is used; however, data for 2001-2004 have been prepared from the MT103 super-category, based on estimated MT103 values.

Indicative value for developments in imports
As expected, these data have considerable forecasting value as indicators of developments in imports, as they are, in essence, a mirror image of actual payments made for residents' purchases of goods and services from abroad (Chart 1). The contemporaneous correlation of annual changes in the number of MT103 messages and annual changes in total imports was 0.83 for the period as a whole. The contemporaneous correlation with annual changes in goods imports is slightly lower, at 0.81, and for services imports it is 0.76. The correlation is greatest with annual changes in total imports. The contemporaneous correlation with annual changes in GDP was 0.59 over the same period. This indicator has therefore been added to the large number of indicators used to assess recent developments in economic activity and to aid the Bank's short-term forecasts.

Contribution of net trade to output growth negative throughout the forecast horizon despite healthy growth in exports

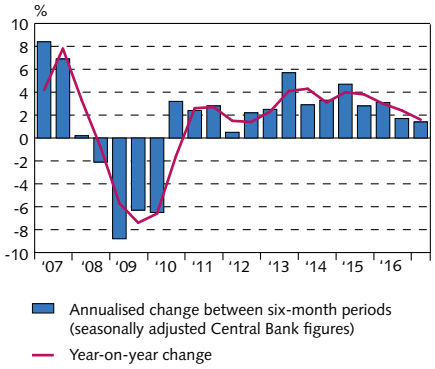
As is mentioned above, year-2013 output growth was fuelled mainly by a positive contribution from net trade. The contribution from services trade is expected to be positive again this year, although the surplus will shrink year-on-year (Chart IV-13). On the other hand, the contribution from goods trade is expected to be negative, owing to increased investment in ships and aircraft and a contraction in marine product exports. On the whole, the contribution from net trade will be negative by about 1.5 percentage points in spite of nearly 3% growth in exports. It will remain negative in 2015 and 2016, by about a percentage point of GDP each year. This is due primarily to strong growth in imports, reflecting the aforementioned surge in domestic demand over the period, and the associated increase in imports.[6] External trade is discussed in greater detail in Section II.

Year-2014 GDP growth expected to be significantly stronger than in the February forecast

The outlook for 2014 is for considerably stronger GDP growth than has been forecast previously. Growth is projected at 4.1% year-on-year in Q1 and 4.3% in H1 (Chart IV-14). The pace is expected to ease in the latter half of the year, and GDP growth for the year as a whole is projected at 3.7%, about a percentage point more than in the February forecast. The difference is primarily due to the improved outlook for investment during the year. For 2015, output growth is forecast at 3.9%, which is broadly in line with the February forecast. It is expected to slow down somewhat in 2016, as domestic demand subsides following the surge in the preceding years. If this forecast materialises, GDP growth will average 3.4% over the forecast horizon, well above the thirty-year average of 2.7% and substantially above the 2.2% average projected for Iceland's main trading partners (Chart IV-15).

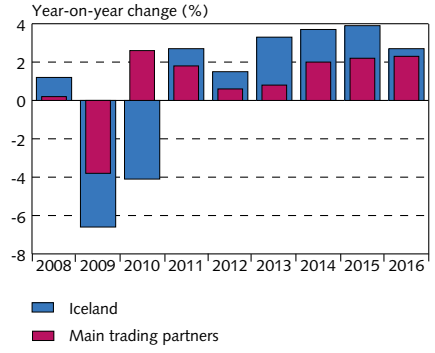
6. This is indicated, among other things, by the increased number of international payment orders submitted for payment intermediation, as is discussed in Box IV-2.

Chart IV-14
GDP growth by six-month periods[1]
H1/2007 - H1/2017



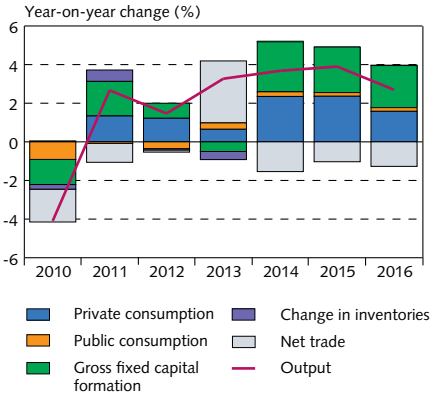
1. Central Bank baseline forecast H2/2014 - H1/2017.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-15
GDP growth in Iceland and its main trading partners 2008-2016[1]



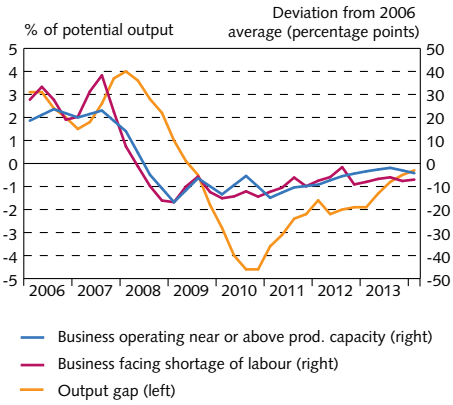
1. Central Bank baseline forecast 2014-2016.
Sources: Macrobond, Statistics Iceland, Central Bank of Iceland.

Chart IV-16
GDP growth and contribution of underlying components 2010-2016[1]



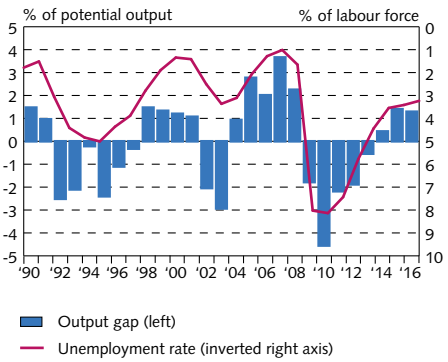
1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-17
Indicators of use of production factors and output gap[1]



1. According to Capacent Gallup Sentement Survey among Iceland's 400 largest firms. Twice a year respondents are asked if output is near or above capacity; therefore, a linear interpolation is used to generate quarterly data. Output gap is the Central Bank's estimate.
Sources: Capacent Gallup, Central Bank of Iceland.

Chart IV-18
Output gap and unemployment 1990-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

GDP growth driven by domestic demand during the forecast horizon

As is discussed above, external trade was the main driver of output growth in 2013, whereas private sector demand was the main contributor early in the economic recovery. This year, however, domestic demand is expected to take over again as the main driver of growth (Chart IV-16). The most salient change since the last forecast is the contribution from business investment, although private consumption is expected to grow strongly as well. On the whole, GDP growth will be driven mainly by private consumption and investment in 2014-2016, as the contribution from public consumption will be limited and the contribution from net trade will be negative as described above.

Slack in output nearly absorbed and positive output gap to develop around mid-year

As has been discussed previously in *Monetary Bulletin*, estimates of potential output are highly uncertain, particularly in the aftermath of a financial crisis. On the other hand, the margin of spare capacity that developed in the wake of the 2008 crisis has narrowed rapidly in recent quarters and has either disappeared or is just about to do so (see also Section I). Not only do various indicators of the output gap suggest this, but it is also unlikely that potential output has kept pace with the rapid output growth in recent quarters. Indicators from the labour market point in the same direction (see Section VI). The wage share has risen and is close to its historical average, and unemployment has declined and may already be below its equilibrium rate. Furthermore, the ratio of the capital stock to GDP shows that capital stock utilisation continued to grow last year, after shrinking markedly in the wake of the crisis. However, the recent Capacent Gallup survey among business executives could suggest that some spare capacity remains but is diminishing (Chart IV-17).

The margin of spare capacity in the economy is estimated to have equalled about ½% of potential output in 2013, a decline of some 1½ percentage points from 2012 (Chart IV-18). The slack is considered likely to give way by mid-2014 to a modest positive output gap that will continue to grow throughout the year, in line with declining unemployment. GDP growth is forecast to exceed potential output in 2015, bringing the positive output gap to a peak of 1½% of potential output at year-end 2015 and the first half of 2016, whereupon it will gradually narrow as output growth slows down in the latter half of the forecast horizon.

V Public sector finances

According to the 2014 National Budget and a new bill of legislation on public sector finances, the Government aims to achieve a small surplus on the overall balance and pass new comprehensive legislation on public sector finances this year. The primary balance showed a surplus in 2012, and according to the original plans drafted by the Government and the International Monetary Fund (IMF) under the Stand-by Arrangement (SBA), there should have been a surplus on the overall balance last year. In the 2012 National Budget, the objective of achieving a surplus on the overall balance was postponed by one year, to 2014. This decision has not been changed. The medium-term fiscal strategy was changed in the 2014 budget proposal, however, from a medium-term budget plan to a simple extrapolation. Even though general government debt is projected to remain high during the forecast horizon, the outlook has improved from the Central Bank's previous forecasts, owing to improvements in the outlook for GDP growth and one-off payments.

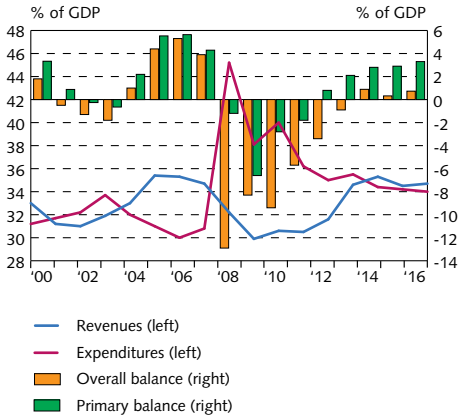
Year-2013 performance much better than the budget supplement indicated ...

The National Budget for 2013 was approved with a 3.7 b.kr. deficit, whereas the budget supplement for the year, approved in December, assumed a deficit of 19.7 b.kr. The deviation amounts to 2.7% of revenues, which is 1.7 percentage points above the 2010-2012 average, excluding irregular revenues and expenses not included in the original Budget. Following the Parliamentary elections, the Ministry of Finance and Economic Affairs published a forecast providing for a 31 b.kr. deficit on an accrual basis in the National Budget, which would have entailed a deviation amounting to 5.6% of estimated year-2013 revenues. As a result, fiscal performance forecasts were quite uncertain. *Monetary Bulletin* 2013/4 contains a forecast of central government performance on an accrual basis as in the National Accounts. That forecast provided for a deficit in the amount of 1.7% of GDP, whereas preliminary figures from Statistics Iceland show a 1.9% deficit. After the budget supplement was approved, Landsbankinn paid out a dividend nearly 14 b.kr. higher than was provided for in the Budget. This will result in a surplus of 6 b.kr., or 0.3% of GDP, on an accrual basis as measured by the National Budget.

... and 2014 will also exceed Budget-based expectations

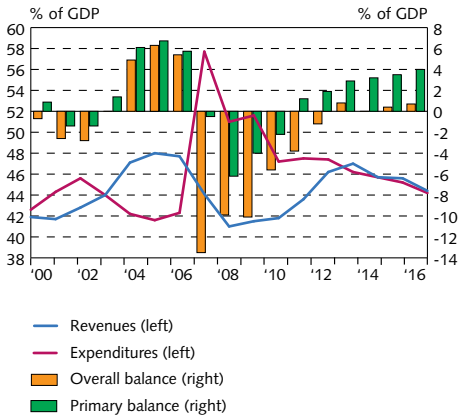
The 2014 National Budget was approved with a 0.9 b.kr. surplus. This is only 0.1% of estimated year-2014 revenues and well within the confidence band of the revenue projections underlying the estimates in the Budget. The outcome for the central government benefits both from the greater resilience in the economy than when the last forecast was prepared and from the new agreement between the Central Bank and the Treasury, which amended the terms of the bond issued by the Treasury to recapitalise the Central Bank. The net effect of this agreement is to increase Treasury revenues by 19 b.kr. According to

Chart V-1
Treasury finances 2000-2016[1]



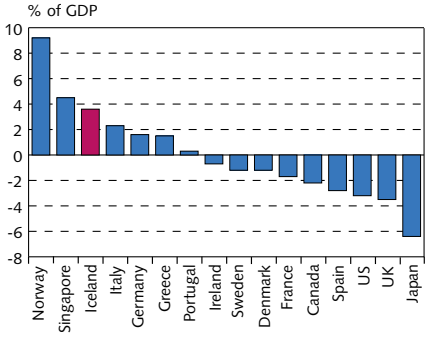
1. Central Bank baseline forecast 2014-2016. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-2
General government finances 2000-2016[1]



1. Central Bank baseline forecast 2014-2016. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-3
General government primary balance
in developed countries in 2014



Source: International Monetary Fund (2014). *Fiscal Monitor,* April 2014.

the forecast in this *Monetary Bulletin*, Treasury performance will be in surplus by 13 b.kr., or 0.7% of year-2014 GDP (Chart V-1). The forecasts for both general government and Treasury performance in 2015 and 2016 assume a continued overall surplus, albeit a smaller one than was provided for under the SBA. For 2016, the SBA projected the general government's overall surplus at 1.6% of GDP and the primary surplus at 5% of GDP. According to the forecast in this *Monetary Bulletin*, the overall and primary surpluses for 2016 will be 0.4% and 3.5% of GDP, respectively (Chart V-2). Even though the goals of the SBA are not fully met, this year's primary surplus is among the highest in developed countries (Chart V-3).

The main uncertainties in the 2014 National Budget centre on the financing of the debt relief package, wage pressures from employees, and expenditure pressures due to municipal elections.

Central Bank bond maturity extended

The National Budget for the year provided for the amendment of the bond issued by the Treasury to recapitalise the Central Bank following the collateral losses sustained by the Bank upon the collapse of Iceland's financial institutions. Under the amendment, the Treasury did not pay 11 b.kr. in interest expense. The original bond, a five-year indexed instrument bearing 2.1% real interest, was to be amended so as to extend the maturity to 20 years, with no nominal interest rate and no indexation. This proposed arrangement prompted the re-examination of the financial interactions between the Central Bank of Iceland and the Ministry of Finance and Economic Affairs. The results of that examination can be seen in the bill of legislation presented by the Minister of Finance and Economic Affairs to Parliament. According to the bill, the Central Bank decides how to allocate its profit based on its equity position and a three-year performance forecast. The objective is to safeguard the financial independence of the Bank and enable it to implement the measures it must take in order to achieve its goals and ensure price stability.

According to the year-end 2013 agreement between the Treasury and the Central Bank concerning the lengthening of the bond, which was to mature at that time, the terms of the bond were to be renegotiated concurrent with the changes in capital adequacy criteria. It has been agreed that the bond will now bear nominal interest based on the Bank's current account rate, which is currently 5%, and will be payable in fixed instalments over a period of 29 years.

According to the bill, the impact on Treasury finances will be to reduce paid-in capital by 26 b.kr., due to the Government's callable equity pledge,[1] which could total up to 3% of GDP. This amount

1. According to the agreement, the Treasury will finance the callable equity pledge with marketable bonds that the Central Bank can redeem to meet the equity requirements. The callable equity can total up to 3% of GDP. Callable equity enables the Central Bank to increase its equity by drawing on the pledge in accordance with the equity requirements without having to negotiate with the Treasury first. This is a favourable financing measure for the Treasury because capital is not locked in the Bank, yet at the same time, there is no reasonable doubt that the Central Bank has full access to the marketable bond to provide for equity. In addition, the Treasury's financing of the callable equity pledge does not show up as Treasury debt until the bonds are sold.

can be used to pay down the renegotiated bond, reducing interest expense by some 1.3 b.kr. and reducing Treasury debt by nearly 1.5% of GDP.

New legislative bill on public sector finances

Since 2011, work has been underway on a new framework for public sector finances, which is to be incorporated into the law via comprehensive legislation at the spring Parliamentary session. The last comprehensive revision was made in 1997, when, among other changes, fiscal budgets were presented on an accrual basis rather than on a cash basis. There have been weaknesses in budget implementation, and fiscal rules have repeatedly not been adhered to. The new Act on Public Sector Finances aims to improve enforcement of budget implementation by creating an independent fiscal council comprising three members with expert knowledge of fiscal affairs who are to provide commentary on whether budget and fiscal policy implementation are consistent with the new fiscal rules that will be adopted if the bill is passed.

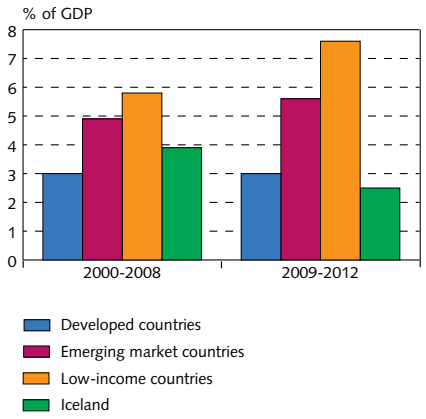
According to the bill, a fiscal strategy is to be formulated for five years at a time for the entire public sector. The strategy is to be presented at the spring legislative session, in part to restrict ministers' scope to increase expenditures over the summer, when the budget proposal is closed. In addition to this strategy formation, three numerical fiscal rules are to be adopted, in order to set boundaries for the strategy and thereby promote fiscal sustainability. Furthermore, budget presentation has been changed so as to emphasise both the strategy and an overview of budgetary objectives. Further discussion of the bill can be found in Box V-1.

Public consumption growth set to remain positive

2013 was the first year since the onset of the financial crisis to see a year-on-year increase in public consumption volume, following a constant contraction since 2009. The increase was seen in all of the entities that combine to form the general government. Public consumption grew by 1.3% in 2013, according to Statistics Iceland's first figures, but in 2009-2012 public consumption contracted by a total of 6.7%. Year-2013 growth was not strong in historical terms, however, as public consumption growth averaged 3.9% during the period 1997-2008, bottoming out at 1.8% in 2003. This is partly because the government's debt position is much worse now than it was before 2008, owing in part to the steep contraction in revenues since 2008.

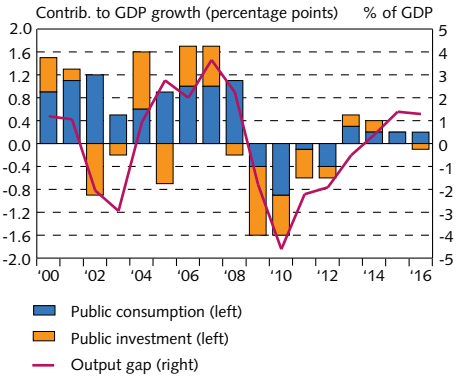
In 2014-2016, public consumption is projected to continue growing at a rate comparable to last year's. As in the forecast in the last *Monetary Bulletin*, goods and services purchases by municipalities are also expected to increase, and the Treasury and the social security system are expected to reduce spending in this category in accordance with declared consolidation targets included in the 2014 budget proposal. The last forecast assumed that wage costs would grow in excess of pay rises because of a lack of restraint. According to the overview of Treasury finances for the first two months of the year, this forecast

Chart V-4
Public investment in Iceland and other countries



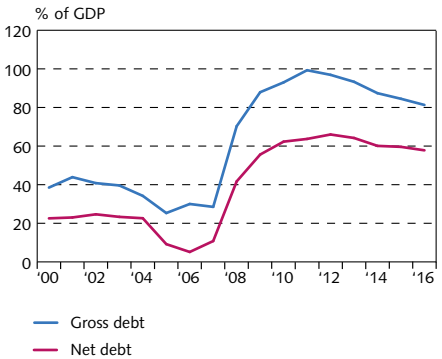
Sources: Center for International Comparisons (2013), IMF - *Fiscal Monitor* April 2014, OECD, Statistics Iceland.

Chart V-5
Public consumption, public investment, and the ouput gap 2000-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-6
General government debt 2000-2016[1]



1. Central Bank baseline forecast 2014-2016.
Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

appears likely to materialise with room to spare, as wage costs were 6% above the Ministry of Finance and Economic Affairs' projections, which included budgetary assumptions concerning wage increases and one-time payments. Such large overruns are unlikely to continue through the year; therefore, wage cost growth is projected at 1.8% for 2014 and 1.4% in 2015 and 2016. The conclusion is therefore that public consumption will continue to rise by nearly 1% per year in 2014-2016, which is somewhat more than was forecast in February.

Public investment rises from historical low

After a contraction of over 60% in volume terms over a five-year period, public investment grew by nearly 12% in 2013. As is assumed in previous forecasts in *Monetary Bulletin*, it is expected to continue growing in 2014 and 2015. According to current plans, it is uncertain whether growth will continue in 2016 because several projects, including the Vaðlaheiðargöng tunnel, are scheduled for completion then. Public investment fell to an all-time low in 2012, measuring only 2% of GDP. If the forecast in this *Monetary Bulletin* is borne out, it will rise to 2.2% of GDP, whereas the thirty-year average is 3.6%.

In 2000-2008, Iceland's public investment level was higher than that in other developed countries but somewhat lower than in emerging market economies (Chart V-4). In the years after the financial crisis, it fell below the level in other developed economies, whose investment levels remained virtually unchanged before and after the crisis, while emerging market economies stepped up investment. In Iceland, the consolidation in government finances was directed to a greater extent at public investment and less at public consumption than was generally observed in other economies.

General government contribution to GDP growth turns positive again

During the years just before the financial crisis, Iceland's GDP growth was strong and there was a sizeable positive output gap. Over this period, the government's contribution to GDP growth averaged 1.5 percentage points and was therefore procyclical (see also Section IV). After the financial crisis struck, GDP growth contracted and a negative output gap developed. The government's contribution to GDP growth was negative by an average of 1.1 percentage points (Chart V-5). Before the financial crisis struck, a favourable debt position facilitated strong growth, but afterwards, the vastly eroded debt position called for the adoption of procyclical measures.

In 2013, the public sector's contribution to GDP growth turned positive again, at the same time that the spare capacity in the economy is disappearing. It is expected to be positive over the forecast horizon.

Debt position developing more positively than in the last forecast

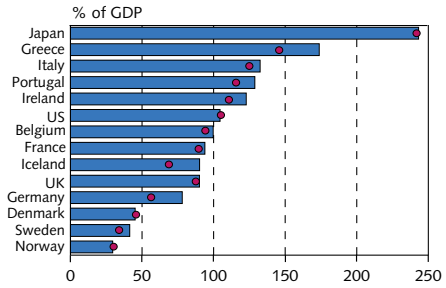
According to the Bank's forecast of developments in the debt level, general government debt relative to GDP is estimated to be just over 81% by the time the forecast horizon ends in 2016 (Chart V-6). The debt profile forecast published in *Monetary Bulletin* 2013/4 assumed a

debt level of just over 84% of GDP at the end of the forecast horizon. The outlook is somewhat improved. Net debt is projected to amount to 58% of GDP at year-end 2016, as opposed to 66% in 2012. The assessment of net debt includes only the general government's cash assets. This is a narrower definition than is usually used, as it is customary to include other monetary assets as well, apart from stock, equity holdings, and initial capital. If these are included, the net general government debt position is stronger than is described here. In the legislative bill on public sector finances, it is assumed that debt will not exceed 45% of GDP, according to the definition of net debt used here.

The forecast assumes no further prepayments of debt taken in connection with the SBA. If additional payments are made, they will reduce gross Treasury debt but will not affect the net debt level. Gross general government debt amounted to 90% of GDP at year-end 2013, compared to 101% at year-end 2011 (V-6). This gross debt level is comparable to that in other developed economies such as the UK and France, but considerably lower than in Greece, Italy, Ireland, Portugal, and Japan. As Chart V-7 shows, the outlook is for Iceland's debt level to improve in coming years, approaching that in Germany by 2019. It will still be quite a bit higher than in other Nordic countries.

Chart V-7

General government gross debt in selected industrial countries for 2013 and 2019[1]



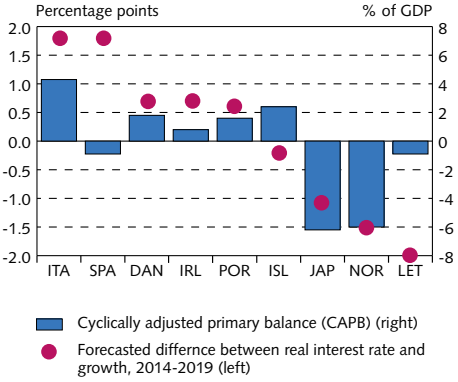
1. IMF forecasts for 2019 are shown with red dots.
Sources: IMF, Central Bank of Iceland.

Reduction of public sector debt an important contribution to a more sustainable external position

Other countries' experience indicates clearly that reduction of general government debt has often played a key role in improving their international investment position.[2] General government debt reduction is therefore important from a number of standpoints: not only does it ensure that the Treasury can obtain financing on acceptable terms and ensure the necessary fiscal discipline, but it can also play a decisive role in increasing national saving, improving the external debt position, and ensuring a favourable solution to the balance of payments problem facing the Icelandic economy.

Chart V-8

Comparison of the difference between real interest rate and GDP growth rate and the Cydically adjusted primary balance



Source: IMF - *Fiscal Monitor,* April 2014.

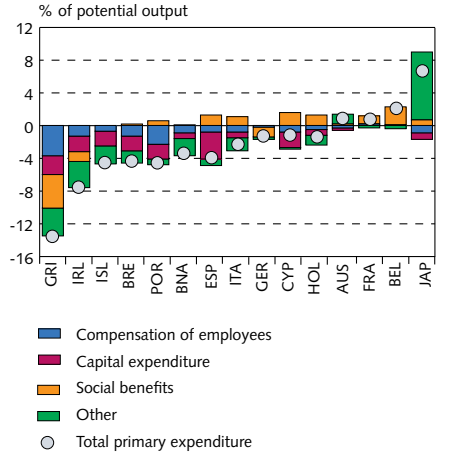
Debt and general government performance in an international context

The change in general government debt relative to GDP is equal to the real interest burden in excess of GDP growth, less the primary balance relative to GDP. The debt ratio falls if the primary balance is positive by more than the real interest burden in excess of GDP growth. In the April edition of *Fiscal Monitor*, the IMF compares expected real interest rate spreads and GDP growth among developed countries through 2019 (Chart V-8). Iceland's GDP growth is projected to exceed its real interest rate by 0.2 percentage points. The Fund also forecasts that the primary and overall balances will be positive; therefore, the debt ratio will fall, owing to strong GDP growth and a balanced budget.

It is noteworthy that many countries have a positive difference between their real interest rates and their GDP growth. This is true of

Chart V-9

Change in primary expenditure Items 2009-2013



Sources: European Commission, IMF - *Fiscal Monitor*, April 2014.

2. For further discussion, see D. Ding, W. Schule, and Y. Sun (2014), "Cross-country experience in reducing net foreign liabilities: Lessons for New Zealand". IMF *Working Paper* no. 14/62.

Italy, Spain, Ireland, Portugal, and Denmark; therefore, these countries must have a cyclically adjusted primary balance equal to the positive difference in order to maintain a stable debt ratio.

In the same issue of *Fiscal Monitor*, the IMF assesses the adjustments that Iceland must make in its cyclically adjusted primary balance in order to bring its public debt ratio to 60% of GDP by 2030 and concludes that no further adjustments are necessary in Iceland (Chart V-9). Major changes took place in primary expenditure between 2009 and 2013, not only in Iceland, but around the world. Among developed countries that owe more than 70% of GDP, only Greece and Ireland cut their primary expenditure more than Iceland did. The IMF divides primary expenditure into four categories: social benefits, capital expenditure, employee compensation, and other expenditure. Greece and Ireland made broadly equal cutbacks in all four functions, whereas Iceland spared social spending. The scope of Iceland's reduction in primary expenditure was similar to that in the UK, the US, Spain, and Portugal, but these countries actually stepped up their social benefits.

Box V-1
Bill of legislation on fiscal framework reform

The revision of the Government Financial Reporting Act, no. 88/1997, has been on the agenda for some time. During the implementation of the Government-IMF economic programme, it became evident that the statutory framework needed reform. The authorities approached the Fund in spring 2011 and requested a technical appraisal of Iceland's fiscal policy framework, together with comments and recommended improvements.

Before the Government Financial Reporting Act entered into force, legislation on the topic was fragmentary. The Act represented Iceland's first comprehensive legislation on Government finances, including budget preparation and implementation, central government accounts, Treasury borrowing, and financial reporting. For instance, major changes were made to the presentation of fiscal budget proposals, including the stipulation that the National Budget be presented on an accrual basis rather than on a cash basis.

The statutory framework for municipal finances has also been improved since the financial crisis struck. The new Local Government Act, no. 138/2011, which entered into force on 1 January 2012, provided for more stringent fiscal rules, cooperation on economic affairs, and supervision. That Act set forth two fiscal rules: combined revenues and expenditures in Parts A and B of the consolidated municipal accounts must balance during each three-year period, and consolidated liabilities and obligations are limited to 150% of revenues.

Comprehensive fiscal policy framework

The bill of legislation currently before Parliament entails a comprehensive framework for fiscal policy, which is broader in scope than the current Government Financial Reporting Act. The new legislation is to extend to the entire public sector, including all entities wielding State and municipal authority and all companies with State or municipal ownership of 50% or more. The Minister is entrusted with ensuring regular, formal consultation with the Association of Local Authorities in Iceland concerning the formulation of the fiscal policy and plan.

Enhanced clarity in fiscal policy

The fundamental values of policy formation are defined as sustainability, prudence, stability, steadfastness, and transparency. These basic values imply emphases and criteria that can easily become tenuous and overly generalised in practice, but they can nonetheless acquire legitimacy in legislative implementation – for instance, in the form of specific fiscal rules. Fiscal policy formation entails the creation, by the newly elected Government, of policy covering a period of at least five years and extending to both State and municipalities. The main emphasis in the fiscal policy shall be on the general government – that is, Part A of State and municipal accounts. Objectives shall also be set for the scope, performance, and evolution of the balance sheets of the public sector as a whole (Parts A, B, and C of the Treasury accounts and Parts A and B of the municipal accounts). Fiscal policy must take into account a far greater number of requirements than the medium-term plan according to the current legislation. The medium-term plan for central government finances covers a horizon of three years following the upcoming fiscal year. But the requirements are not clear, and they could entail a simple statistical extrapolation instead of a strategic fiscal path. On the other hand, the formulation of a strategic fiscal path is the cornerstone of the new bill of legislation and the main fiscal rule. The fiscal rule centres on procedures for the formulation of fiscal policy and entails the incorporation of a so-called procedural fiscal rule into the law. According to the procedural fiscal rule, the authorities shall follow a clear, legislated procedure when formulating fiscal policy; for instance, by setting regular targets defining numerical fiscal rules concerning general government debt or permissible operational deficits as constraint when presenting the fiscal policy and plan.

As soon as possible after it has been formed, the Government must formulate a fiscal policy and submit it to Parliament as a proposed parliamentary resolution. The aim is to increase parliamentary monitoring of policy formulation and implementation. The fiscal plan, which must be based on an approved fiscal policy, is intended to explain the measures and channels through which fiscal policy objectives will be achieved. Each year, the Minister of Finance shall present a fiscal plan to Parliament at the spring legislative session in the form of a parliamentary resolution. A new, independent fiscal council (further described below) is then intended to appraise the implementation of the policy. The fiscal council's opinions must be made public.

New requirements for fiscal policy and plan

The fiscal rule in the bill of legislation is twofold. On the one hand, objectives for the evolution of public sector finances must be set in accordance with a predetermined procedure, and on the other, strict conditions entailing numerical targets for general government performance and debt must be adhered to. The fiscal policy conditions are set with the following three fiscal rules:

1. The overall result over a five-year period must always be positive, and the annual deficit may not exceed 2.5% of GDP.[1]
2. Total debt, excluding pension obligations and accounts payable, but including cash balances and deposits, may not exceed 45% of GDP.[2]

1. Fiscal policy objectives and requirements shall only be revised under extraordinary circumstances, such as a national catastrophe or a severe economic shock.
2. This definition of debt is an approximation of the conventional definition of net debt, where all monetary assets are deducted from liabilities. Here, however, only cash and readily disposable monetary assets are deducted. This definition is used in part because the Treasury has taken account of loans taken, for example, to expand the Central Bank's foreign exchange reserves. Those funds have not been used for operations and

3. If the debt ratio rises above 45%, the excess portion must decline by an average of at least 5% (1/20) per year in each three-year period.[3]

With these fiscal rules and the procedural fiscal rule, an attempt is made to lay the foundations for well-defined procedures for fiscal policy formulation. Clear debt and performance criteria are set on the basis of defined procedure and numerical targets, which should impose significant restraint on the legislative and executive authorities.

Fiscal council

It is considered important to engage independent experts to conduct an impartial assessment of fiscal policy implementation. As a result, it is proposed that an independent fiscal council assess whether the fiscal policy and fiscal plan are in line with the fundamental values and fiscal rules in the bill of legislation. To enhance transparency, the results of this assessment shall be made public. Such fiscal councils can be found in many of Iceland's neighbouring countries, including Denmark, the Netherlands, and Sweden.[4]

Defining budgetary authorisations and reducing the number of budget items

If the bill is passed, fiscal budget proposals will be presented in a new way, based on Parliamentary authorisation of budgetary allocations to various fields and functions, plus a contribution to a general precautionary fund, instead of a large number of budget items. This is a fundamental change from previous practice. The bill assumes that Government ministers will be entrusted with defining the relevant ministries' fields and functions, upon receiving an opinion from a financial reporting council.[5] Redefining budgetary authorisations aims to support substantive discussion of the Government and Parliament's policy on various fields and the total contribution to each of them, instead of a discussion of budgetary allocations to individual institutions and projects.

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are available for repayment of the loans taken. This definition gives a clearer picture of how much debt must be paid down with cash from operations.

3. Based on the current debt position and unchanged nominal GDP, nominal debt must be reduced by about 17 b.kr., or approximately 1% of GDP, per year. General government interest expense amounts to 5% of GDP, which requires a primary surplus of the same amount in order to ensure that the overall balance does not show a deficit. Assuming a 5% primary surplus and 5% growth in nominal GDP, the debt ratio will decline by 3.3% of GDP if the primary surplus is allocated to interest payments. In order to reduce the debt ratio according to the third item under conditions of 5% growth in nominal GDP, a primary surplus of 2.8% of GDP is sufficient.

4. In general, a fiscal council is defined as an independent public agency whose purpose is to strengthen the Government's commitment to sustainable public sector finances through, for instance, appraisals of the fiscal policy and plan, with reference to official policy and its implementation. Furthermore, many fiscal councils issue opinions on macroeconomic assumptions in performance forecasts and the methodologies used for forecasting. The performance of such fiscal councils is discussed, for instance, in Debrun, Kinda, Curristine, Eyraud, Harris, and Seiwald (2013), "The functions and impact of fiscal councils", *IMF Policy Paper*, July 2013, Curristine, Harris, and Seiwald (2013), "Case studies of fiscal councils – Functions and impact," *IMF Policy Paper,* July 2013, and Debrun and Kinda (2014), "Strengthening post-crisis fiscal credibility – Fiscal councils on the rise. A new dataset", *IMF Working Paper*, no. 14/58.

5. A State Financial Reporting Council for Part A of Treasury accounts shall comprise six members appointed for a term of five years at a time. The Director of the Financial Management Authority (FJS), the Director of Statistics Iceland, and the Auditor General shall be members of the council by virtue of their positions. The other three members shall be appointed by the Minister, and one of them must be a chartered auditor. The role of the State Financial Reporting Council is to take decisions on the implementation of financial reporting standards and issues related to them, and other matters of importance for State accounting.

Roles and responsibilities for budget preparation and implementation

The purpose of the Act is to better define the roles and responsibilities of those involved in budget preparation and implementation. Since 1992, this work has been carried out according to a so-called fiscal budget framework. When the framework was introduced, the aim was that all participants in the budget process would base their efforts on Government policy, which entailed deciding the expenditure framework, and the ministries would be responsible for the necessary prioritisation and selection of tasks. These objectives have not been achieved in full. Under the proposed arrangement, Parliament shall take a binding position on budgetary allocations to various fields and functions, and instruct the relevant ministers to divide the allocations among individual institutions and tasks, budget items, in a separate appendix to the fiscal budget proposal. When the fiscal budget is implemented, each minister must report to the Government and the Parliamentary Budget Committee on the implementation of the budget and the financial performance of the Treasury as often as needed, and at least quarterly. The Parliamentary Budget Committee – and other committees, as appropriate – may request information from each minister concerning budget implementation within the scope of the minister's field.

Conclusion

The Icelandic authorities have often had difficulty with budget implementation and adherence to fiscal rules. The new bill of legislation is intended to improve the statutory framework for public sector finances, as it draws on the lessons learnt in recent decades, both in Iceland and in other countries. In order to ensure that budget preparation was based on the best available information, the authorities consulted IMF experts with broad-based expertise and international experience of the topic. A mission from Sweden also provided valuable counsel. The new bill of legislation is a vast improvement over the current legislation. It assumes the use of a procedural fiscal rule that can be flexible within the limits of numerical fiscal rules. The change is also in line with points long emphasised by international institutions such as the OECD and the IMF: that under normal circumstances, changes in public sector performance aimed at affecting demand should primarily take the form of automatic fiscal stabilisers and should be within the scope of formal, well defined fiscal rules.[6]

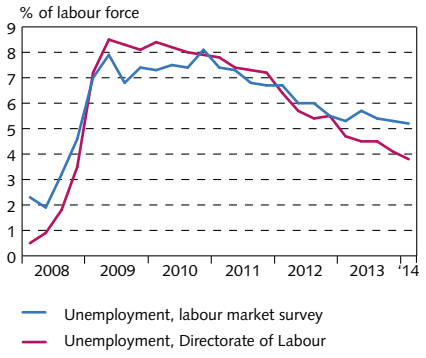
In order for a formal fiscal rule to have the desired effect on the economy, it must be sufficiently credible and must be structured so as to promote disciplined fiscal policy. It must also be flexible enough to respond to unforeseen shocks. Furthermore, it should be borne in mind that, based on the experience gained from the current legislation, even though it is necessary to amend the letter of the law, amendment alone is not necessarily sufficient; it is also necessary to adopt new procedures and work habits in the spirit of the new legislation. If such changes are implemented successfully, however, they will represent a significant step forward in Iceland's fiscal policy, which could prove to be a cornerstone of disciplined, efficient economic policy.

6. See, for example, OECD (1999). "The size and role of automatic fiscal stabilisers", *OECD Economic Outlook* 66, 137-149. See also Central Bank of Iceland (2012). "Iceland's Currency and Exchange Rate Policy Options", *Special Publication* no. 7, Chapter 15.

VI Labour market and wage developments

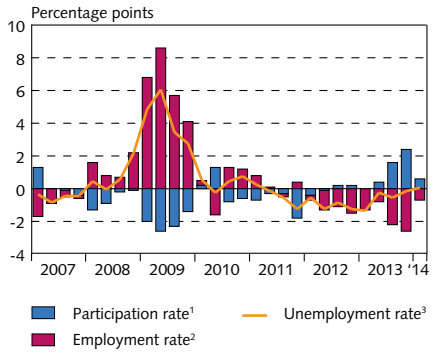
The slack in the labour market has continued to diminish, owing to declining unemployment and rising total hours worked. This trend is expected to continue throughout the forecast horizon. Revised figures from Statistics Iceland indicate that wage growth was weaker than previously thought in 2012-2013. On the other hand, the wage increases taking place this year and next year are somewhat larger than was assumed in the last forecast, even though negotiated pay rises are broadly consistent with the private sector agreement concluded in December. The outlook for unit labour costs in 2014 and the ensuing two years is broadly in line with the February forecast, as larger wage increases are offset by stronger productivity growth. Unit labour costs are projected to rise by just under 4% this year and just under 3% per year, on average, in 2015 and 2016.

Chart VI-1
Seasonally adjusted unemployment
Q1/2008 - Q1/2014



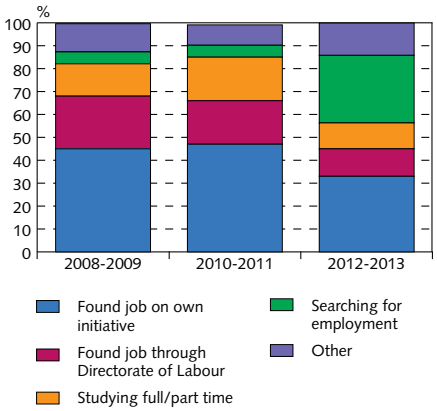
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

Chart VI-2
Contribution to the changes in the unemployment rate
Q1/2007 - Q1/2014



1. Percentage of the population 16-74. 2. Employed persons as percentage of the population 16-74. 3. Unemployed persons as percentage of the labour force. May not equal the sum of its components due to rounding.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VI-3
Workers' status according to when they became unemployed[1]



1. The category "other" mainly reflects retirement, disability, sick leave, and parental maternity leave.
Source: Directorate of Labour.

Unemployment broadly in line with February forecast

Because of changes in entitlement to unemployment benefits taking effect in January 2013, the data from Statistics Iceland's labour market survey probably provide a more accurate measure of unemployment than the figures from the Directorate of Labour (DoL), as the labour market survey includes unemployed persons who have exhausted their unemployment benefits. Since the changes took effect, DoL unemployment has averaged around one percentage point below the survey-based rate. According to the labour market survey, seasonally adjusted unemployment was 5.2% in Q1, while the DoL measured it at 3.8% (Chart VI-1). It declined slightly between quarters by both measures; however, in comparison with the same period last year, it was about a percentage point lower according to DoL measurements but was broadly unchanged according to the labour market survey. Developments in unemployment have been well in line with the forecast in the February *Monetary Bulletin*.

As Chart VI-2 indicates, the fall in unemployment in recent quarters has been smaller than the increase in the employment rate, as labour force participation has increased as well. This is the opposite of what happened in 2008-2009, when the rise in unemployment was smaller than the contraction in the employment rate because labour force participation fell as well.

Unemployment falls because the unemployed find paid work

As has been discussed previously in *Monetary Bulletin*, unemployment has fallen primarily because people have found paid work. According to a survey carried out for the DoL at the end of 2013, it appears that between 12% and 23% of those who have found work have done so through DoL initiatives (Chart VI-3).[1] The share of those who have found work through such DoL programmes was higher among job-seekers who had been unemployed longer, although more members of this group also found work without DoL involve-

1. The survey was conducted among past and present job-seekers in November and December 2013.

ment. The link between the length of unemployment and the share of persons who find work through DoL labour market initiatives is unsurprising, as the initiatives have focused primarily on the long-term unemployed. The measures appear to have significantly reduced the number of long-term unemployed in the past two years, as Chart VI-4 shows, with the fall in unemployment last year almost entirely due to a decline in long-term unemployment.[2]

Long-term unemployed appear to have no more trouble finding work than short-term unemployed

According to the above-mentioned survey, the long-term unemployed appear not to have more difficulty finding work than those who have been unemployed for a shorter period. For example, about 70% of those who lost their jobs in 2008-2009 had become employed by the time the survey was conducted, and only about 5% were still looking for work (Chart VI-3). The share was virtually the same for the group who became unemployed in 2010-2011. On the other hand, only 45% of those who lost their jobs in 2012-2013 had become employed, and about 30% of them were still looking for work.[3] The loss of human capital that usually accompanies long-term unemployment should not be a source of difficulty for this group, but the fact that such a large share of the newly unemployed are still looking for work could indicate that they have less incentive to find a job while they are still eligible for unemployment benefits. It is also possible that some people in this group have actually been unemployed longer because this group is classified according to the date they last became unemployed.

Labour demand stronger than forecast in February

According to the labour market survey, Q1/2014 labour demand was stronger than was assumed in the February forecast, which provided for a 2.5% year-on-year increase in total hours worked, as opposed to the actual increase of 3% (Chart VI-5). As before, the rise in total hours worked is due primarily to an increase in the number of employed persons, although average hours worked rose by 0.9%.

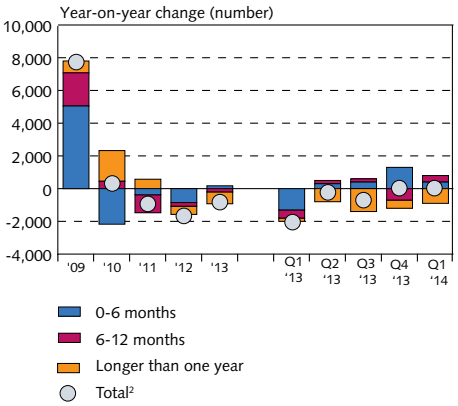
The employment rate therefore rose by ½ a percentage point year-on-year and has risen by 1.8 percentage points from its Q1/2011 trough. This increase is above the OECD average (Chart VI-6). In terms of developments in unemployment, the recovery of the domestic labour market has also been stronger than the average in the OECD.

Labour participation rises again but varies according to worker age and residence

Some workers who lost their jobs in the wake of the financial crisis exited the labour market, enrolled in school, or emigrated from

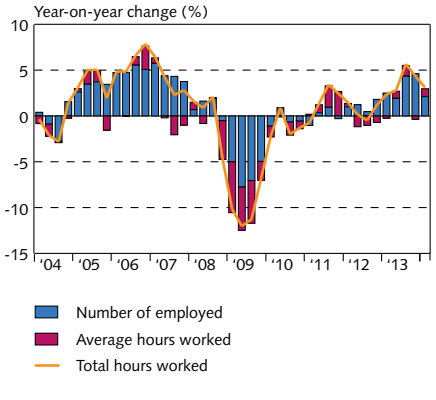
2. Based on labour market survey findings, which also include those who have exhausted their entitlement to benefits.
3. Interpreting the figures is somewhat difficult, as the survey asks when workers last lost their jobs. Some respondents could have been unemployed longer but have taken temporary employment in the interim. This appears to apply to part of the group because 20% of those who last lost their jobs in 2012-2013 had exhausted their right to benefits. In addition, those who first lost their jobs in 2008-2011 could actually have found jobs quickly.

Chart VI-4
Change in umemployment by length of unemployment[1]



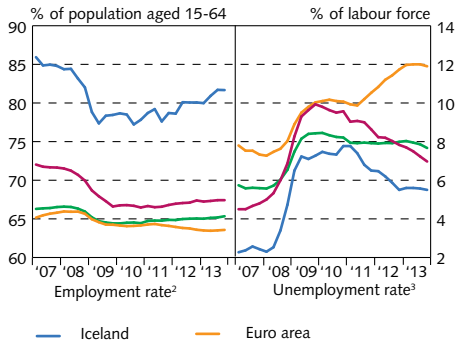
1. According to to Statistics Iceland labour market survey. 2. Excluding those who have already found work.
Source: Statistics Iceland.

Chart VI-5
Changes in employment and hours worked
Q1/2004 - Q1/2014



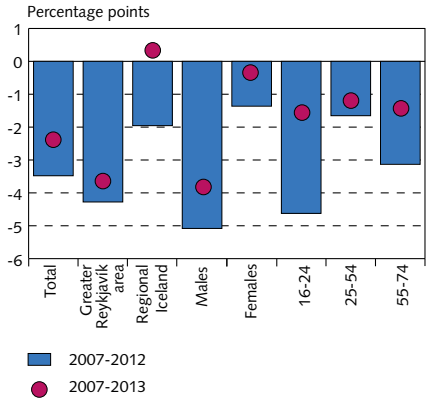
Source: Statistics Iceland.

Chart VI-6
Employment rate and unemployment[1]
Q1/2007 - Q4/2013



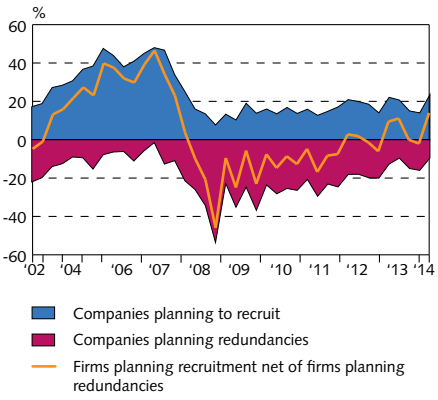
1. Seasonally adjusted figures. 2. Number of employed persons as a share of the population aged 15-64. 3. Number of unemployed persons as a share of the labour force (harmonised OECD measure).
Source: OECD.

Chart VI-7
Changes in labour participation by location, sex and age



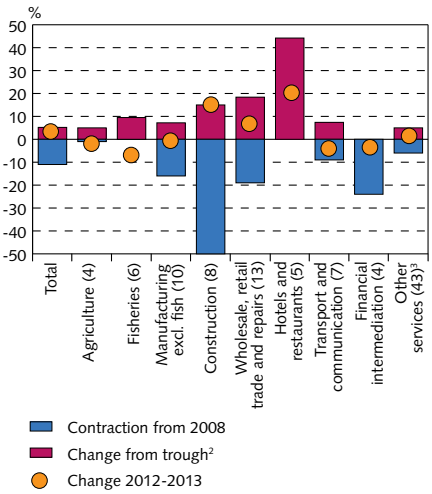
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VI-8
Companies planning to change staffing levels within 6 months



Source: Capacent Gallup.

Chart VI-9
Change in total hours worked 2008-2013[1]



1. Those at work during the reference week. Share of sector in total hours worked in 2013 in parentheses (in %). 2. Timing of trough differs by sector. In some sectors, total hours did not contract. For those sectors, the figures show changes from 2008. 3. Public administration, education, health services, cultural activities, real estate, and other services.
Source: Statistics Iceland.

Iceland. Labour participation therefore declined somewhat, but to varying degrees among different groups (Chart VI-7). The largest decline was among male workers. The contraction in the construction industry is probably a significant factor here, and it is likely that many workers in the sector left Iceland. The participation rate also declined sharply among the youngest age group, as typically occurs in recessions, but it should be borne in mind that the participation rate for this group was very high in 2006-2007, the height of the boom. Labour participation also declined more in the capital area than in regional Iceland. On the other hand, the participation rate has risen somewhat for all groups since the economic recovery began to accelerate, albeit to varying degrees: for instance, in regional Iceland it has now surpassed its pre-crisis peak.

Overall, the participation rate rose by ½ a percentage point year-on-year in Q1/2014, when it was 79.4% of the working-age population, and the number of persons outside the labour market has declined. In Q1/2014, it was down a percentage point year-on-year in Q1/2014.

Firms as upbeat about recruitment as they were in H1/2013

According to Capacent Gallup's March survey carried out among business executives from Iceland's 400 largest firms, the number of firms expecting to recruit staff in the next six months exceeded those planning redundancies by about 14 percentage points (Chart VI-8). The survey results are much more positive than those from surveys conducted in H2/2013, when the number of firms interested in recruiting roughly equalled the number interested in downsizing, but are similar to those from the H1/2013 surveys, which indicated that the number of firms planning to recruit exceeded those planning to lay off staff by 10 percentage points.

In all sectors except fisheries, finance, and insurance, interest in recruiting has increased since the last survey, which was carried out in December, and only in the retail, finance, and insurance sectors has the number of firms planning redundancies risen between surveys. Firms in export sectors (transport and tourism, industry, and other services) are generally more upbeat than they were in either the last survey or the one from a year ago.

Total hours worked increase in all sectors except financial services

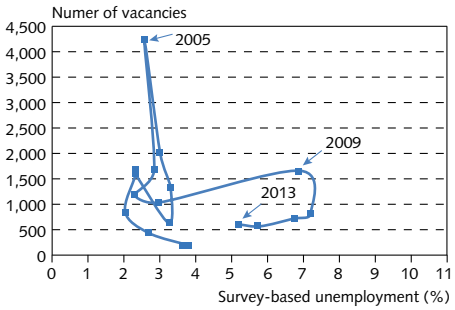
As Chart VI-9 indicates, the sectors that suffered a decline in total hours worked (apart from the financial sector) have recovered somewhat from the trough, and according to executives' recruitment plans for the next six months, this trend is likely to continue. Total hours worked did not fall, however, in the sectors that benefit most from a low real exchange rate; i.e., hotel and restaurant services and fishing and fish processing. They continued to rise last year in the hotel and restaurant sector but declined in fishing and fish processing, and executives' recruitment plans in both sectors suggest that this trend will continue in coming months.

The relationship between unemployment and vacancies is approaching its pre-crisis state

The fact that the long-term unemployed do not have more difficulty finding work than the short-term unemployed accords with recent developments in the Beveridge curve. The Beveridge curve gives an indication of whether the adjustment of unemployment is in line with the economic recovery or whether there are structural problems in the labour market; for example, in matching supply and demand.[4] As can be seen in Chart VI-10, unemployment and vacant jobs developed along a downward-sloping line in 1996-2008, in line with the business cycle, apart from a short deviation in the mid-2000s, due to unusual conditions in the market.[5] In the wake of the financial crisis, unemployment (and equilibrium unemployment) rose rapidly, as is indicated by the shift in the curve in 2009. The increase was temporary, however, and unemployment began to recede again in 2011 and has continued to fall, even though the supply of available jobs has also declined. Although there is still progress to be made in bringing the relationship between vacant jobs and unemployment back to its pre-crisis state, unemployment appears to be adjusting normally in line with increased economic activity and through the Government initiatives designed to prevent long-term unemployment from becoming entrenched.[6]

Chart VI-10

Unemployment as measured by labour market survey and vacancies 1996-2013



Sources: Directorate of Labour, Statistics Iceland.

Slack in the labour market diminishing …

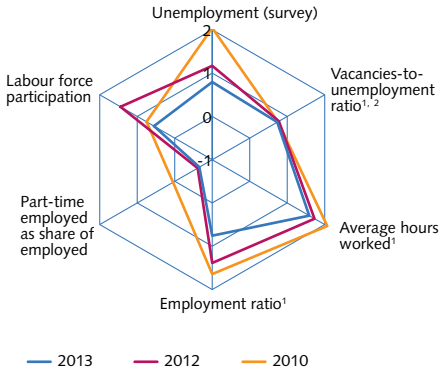
How much scope there is to increase total hours worked without increasing wage pressures depends mainly on the deviation of measured unemployment from its equilibrium value. Declining unemployment alone need not be an indication that the slack in the labour market is disappearing if the equilibrium unemployment rate falls in tandem with it. Equilibrium unemployment rose somewhat in Iceland in the wake of the financial crisis, but since mid-2011 it appears to have begun declining again as the economy has recovered and long-term unemployment has fallen, although it is probably still higher than before the crisis.[7]

On the other hand, other labour market indicators suggest clearly that the slack has diminished considerably since 2010, when the labour market was at its weakest (Chart VI-11). In 2013 alone,

Chart VI-11

Indicators of labour market slack

Difference in number of standard deviations from their 1991-2013 averages



1. Multiplied by -1 so that a larger standard deviation indicates a greater slack. 2. 1996-2013.

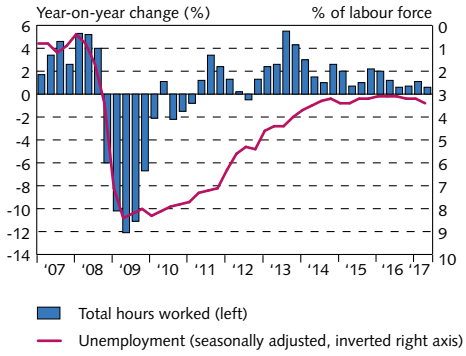
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

4. The vacancy figures used are collected by the DoL from employment agencies (since 1997). Older figures on job vacancies in Iceland are not available. Not all vacant jobs are advertised by agencies, but the relationship between the DoL vacancy measure and unemployment should nonetheless be a sound indication of the efficiency of the matching process.
5. The rightward shift of the curve was due to the fact that employers wanted to import labour but were required to advertise vacancies to show that the jobs could not be filled domestically before they could apply for work permits for foreign employees. See Rannveig Sigurdardóttir (2005), "The Enigma of the Icelandic Labour Market," *Monetary Bulletin* 2005/1.
6. There may be some signs of problems in matching supply and demand in the labour market, however: unemployment has changed very little among the university-educated, while it has declined by nearly 30% among workers in other educational categories, as job creation has been concentrated in sectors requiring less education.
7. See Box VI-1 in *Monetary Bulletin* 2013/4 and Bjarni G. Einarsson and Jósef Sigurdsson (2013), "How "natural" is the natural rate? Unemployment hysteresis in Iceland". Central Bank of Iceland *Working Paper* no. 64.

unemployment, labour force participation and the employment rate moved closer to their historical averages. As the rise in total hours worked has occurred largely through an increase in the employment rate, there has been little change in the deviation of average hours worked from their historical average. This could indicate that there is some scope to increase hours worked without generating significant wage pressures. Firms also appear able to import labour when needed, as can be seen from the fact that recent net immigration is due entirely to foreign nationals. The supply of available jobs relative to the number of unemployed has not changed since 2010, however, due to the above-mentioned decline in job vacancies.[8]

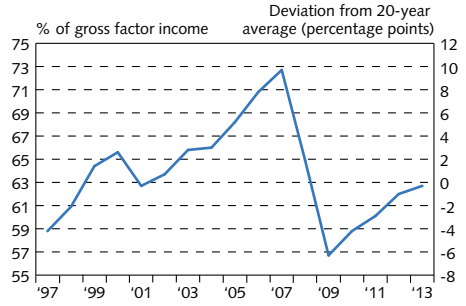
Thus, even though the slack in the labour market has diminished in the recent term, some slack still appears to remain. For instance, the ratio of part-time workers to employed persons was still around ½ a percentage point below the 1991-2013 average in Q1/2014, according to the labour market survey, and average hours worked are almost 2½ hours shorter. By the same token, the Capacent Gallup survey among Iceland's largest firms indicates that the labour supply is still ample. The share of firms reporting a labour shortage is just under 13%, the average over the past two years (see also Section IV).

Chart VI-12
Total hours worked and unemployment
Q1/2007 - Q2/2017[1]



1. Central Bank baseline forecast Q2/2014 - Q2/2017.
Sources: Directorate of Labour, Central Bank of Iceland.

Chart VI-13
Share of wages in gross factor income[1]



1. 20-year average is 63.1% (Base 1997).
Source: Statistics Iceland.

... and continued recovery on the horizon

The slack in the labour market is expected to continue to diminish, due more or less equally to declining unemployment and increased working hours. Registered unemployment is projected to measure about 3.5% in 2014 and fall to about 3.2% by 2016, somewhat below the February forecast of 3.5% (Chart VI-12). It is also somewhat below equilibrium unemployment, which is estimated at 4-4½%, in line with developments in the output gap (see Section IV).

As is mentioned above, executives from Iceland's largest firms are now just about as optimistic as they were in the first half of 2013, after which time labour demand rose sharply, as can be seen in a 5% increase in total hours worked in the second half of the year. Although it is difficult to estimate exactly what the survey findings mean in terms of total hours worked, it is likely that this year's increase will be larger than the almost 1% provided for in the February forecast. While the increase projected for H2/2014 is smaller than that occurring in H2/2013, it is expected that total hours worked will rise by 2% over the year as a whole. The outlook for the upcoming two years is also somewhat brighter, with growth forecast to average just under 1½% over the forecast horizon instead of the previous projection of just over 1% (Chart VI-12).

Wage share approaches its historical average

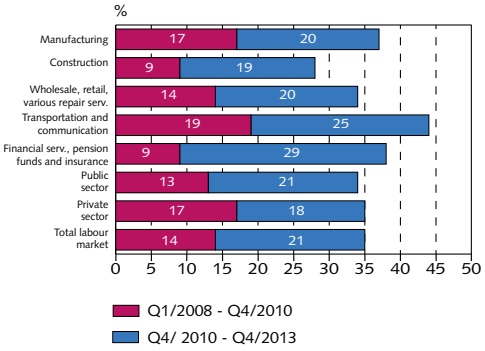
Wage costs (wages and related expenses) relative to gross factor income rose sharply before the financial crisis, peaking in 2007 at nearly 73%, almost 10 percentage points above the average of the past twenty years (Chart VI-13). The wage share dropped as early as

8. It should be noted, though, that only some of the people find employment through jobs listed by the DoL.

2008 and declined still further in 2009, when it fell below 57%. Since then it has risen steadily and, by 2013, was only 0.3 percentage points below the twenty-year average.

Two factors have expedited the increase: exchange rate developments and the wage agreements concluded in 2011.[9] There have been significant wage pressures in sectors that benefit from the low real exchange rate, and workers have received a share of that benefit in the form of higher pay. This can be seen clearly in the substantially larger wage increases in tradable sectors, particularly those where increased demand in the tourism industry affects wages the most; i.e., transport and transportation (Chart VI-14). Large wage increases among export companies subsequently spread to the non-tradable sector with the 2011 wage agreements.[10]

Mynd VI-14
Changes in wages by sector[1]

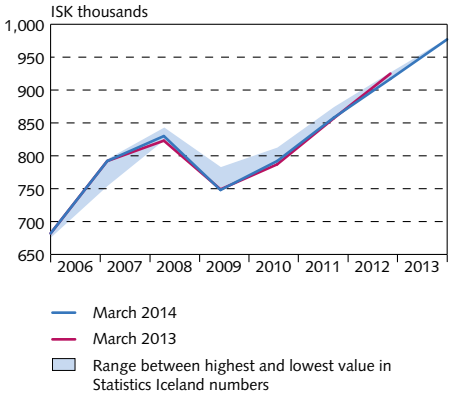


1. Sectors are classified according to ISAT95.
Source: Statistics Iceland.

Wage rises in the past two years smaller than previously estimated

In March 2014, Statistics Iceland published revised wage cost figures based on the national accounts for 2008-2012 and the first figures for 2013. As Chart VI-15 indicates, national accounts figures for wages and related expenses change somewhat with each revision. Whether the revision results in an increase or a decrease seems to follow no particular pattern. According to the current revision, the wage level was about 1.8 percentage points lower in 2008-2012 than previous figures indicated, with the revision for 2012 weighing heaviest. The first figures for 2013 also show that wage cost rose considerably less than previously anticipated. According to these most recent figures, the increase in wages per man-year in 2012-2013 was nearly 3 percentage points less than assumed in the February forecast.

Chart VI-15
Compensation of employees



Source: Statistics Iceland.

Larger contractual pay increases

Wage agreements have been concluded with most of Iceland's labour unions. As is discussed in Box VI-1, direct wage increases as a result of the collective agreements are estimated to be broadly in line with the private sector agreement concluded in December, although some unions negotiated larger pay rises. Furthermore, it is assumed that upcoming agreements will provide for pay rises somewhat larger than those recently negotiated with a majority of the unions.

Contractual pay increases will therefore be larger because of supplements to the December agreement and larger pay increases negotiated with some public and private sector unions (see Box VI-1). As in February, wage drift is expected to be somewhat more pronounced than the negotiating parties assume. Wages are expected to rise by 2% at the beginning of next year, and additional cost increases will come into play when new contracts are negotiated in spring 2015. Wage increases are also spread differently, which results in larger increases between yearly averages over the forecast horizon than in the last forecast.

9. These are precisely the factors that were considered likely to affect the wage share, according to the discussion in *Monetary Bulletin* 2010/2.

10. A discussion of the role of reduced wage costs in the necessary post-crisis adjustment of the economy can be found in Box IV-2 in *Monetary Bulletin* 2013/4.

Box VI-1
New wage settlements

Last December, a new one-year wage settlement was signed by the national member organisations and the largest unions within the Icelandic Federation of Labour (ASÍ) and the Confederation of Icelandic Employers (SA). Only half of ASÍ's member organisations approved the contract in the January vote. Thereafter, the State Conciliation and Mediation Office proposed a supplement to the unions that rejected the December agreement. The proposal was approved, and the wage settlements of the unions that approved the original December agreement were amended accordingly. The public sector has concluded similar agreements with most of its counterparties. Settlements with individual public and private sector unions have entailed larger wage increases, however. Wage negotiations have yet to be concluded with many groups, including air transport workers and some municipal and State workers.

The supplement to the December agreements provides for the following:

- Vacation and December bonus payments will increase by a total of 32,300 kr., or 40% year-on-year.
- The contract period was lengthened from the period originally provided for in the December agreement: in general, by two months for the private sector (to end-February 2015) and by four months for the public sector (to end-April 2015).

It is assumed that the direct increase due to the supplement is in line with the December agreement. The cost of the contract with its supplement is estimated at 3.2% (2.8% due to general wage increases and 0.4% due to an additional increase in the lowest wage rates) as of the date the settlements took effect, either 1 January or 1 February, depending on when they were approved.[1] The employer contribution to employees' education and training funds increased by 0.1%. The cost effect of the increase in the vacation bonuses is estimated to be similar to a 2% wage increase as of 1 January 2015. This is intended as a counterweight to the lengthening of the agreement.The same applies to the 20,000 kr. one-off payment to public sector employees in April 2015. This increase is comparable to 2% higher wages for two months longer than the term of the private sector wage agreements. This provision could be an indication that the contracting parties consider a 2% increase the likely outcome of next year's negotiations.

The contracting parties assume that other wage changes in connection with the implementation of the agreements this year will be small enough to keep the rise in the Statistics Iceland wage index below 4% between December 2013 and December 2014. If this materialises, it will entail an additional pay increase of ½ a percentage point over and above the negotiated pay rises. In view of the fact that negotiated pay increases have accounted for an average of 60% of changes in the wage index since 1990, this could be an underestimation, particularly because some settlements provide for much larger overall pay increases.

1. The unions that approved the settlements effective 1 February received a special one-off payment of 14,600 kr. The cost effect of this payment is estimated to be the same as if wages had increased by 3.2% on 1 January.

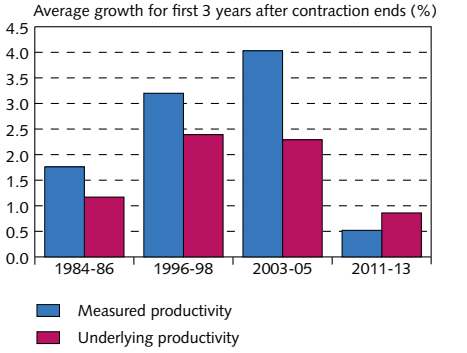
Measured labour productivity contracted in 2013

After the economic recovery began in 2010, measured labour productivity increased somewhat, as total hours worked continued to fall. Once total hours worked began rising – first in 2011 and then more decisively in 2013 – productivity stopped growing, and it began to shrink in H2/2013. This is a somewhat weaker improvement than in earlier recoveries, as can be seen in Chart VI-16. These developments accord with the post-crisis experience of most other developed countries, due most likely to weak demand growth and high corporate debt levels, both of which result in reduced business investment, including investment in productivity-enhancing technology. Another possible explanation is that the composition of production has changed so that sectors with lower productivity have gained in importance (Chart VI-9).

Underlying labour productivity is based on an estimate of the underlying trend in production and hours worked. As Chart VI-16 indicates, underlying labour productivity has grown somewhat faster than measured productivity since the recovery began, although both underlying and measured productivity growth remain below the long-term average.

Chart VI-16

Labour productivity during economic recovery[1]



1. Measured productivity is the ratio of GDP to total hours worked, and underlying productivity is the ratio of the estimated trend of these variables. Contraction periods in Iceland are based on Pétursson (2000), in addition to the contractions in 2002-2003 and 2008-2010.

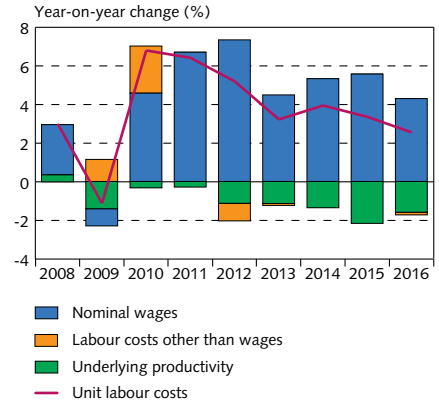
Sources: Thórarinn G. Pétursson (2000). "Business cycle forecasting and regime switching", Central Bank of Iceland *Working Paper* no. 7, Statistics Iceland, Central Bank of Iceland.

Rise in unit labour costs smaller in recent years, but outlook for the forecast horizon broadly unchanged since February

Developments in productivity and the slack in the labour market will be the major determinants of near-term developments in wage costs and inflationary pressures from the labour market. It seems as though some slack still exists, although it is diminishing. Little improvement has been observed in productivity, whereas developments in underlying productivity, which are more important as regards wage costs, have been more favourable. Because of the revision in wage developments over the past two years, it is now thought that unit labour costs rose just over 1½ percentage points less, on average, than was assumed in the February forecast. The outlook for this year and the next two years is broadly unchanged since February: unit labour costs are forecast to rise by just under 4% this year and by an average of just under 3% per year over the forecast horizon, slightly above the Central Bank's inflation target (Chart VI-17).

Chart VI-17

Unit labour costs and contributions of underlying components 2008-2016[1]



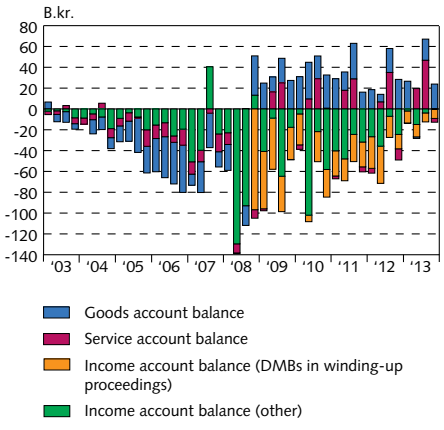
1. Labour productivity growth is shown as a negative contribution to an increase in unit labour costs. Central Bank baseline forecast 2014-2016.

Sources: Statistics Iceland, Central Bank of Iceland.

VII External balance

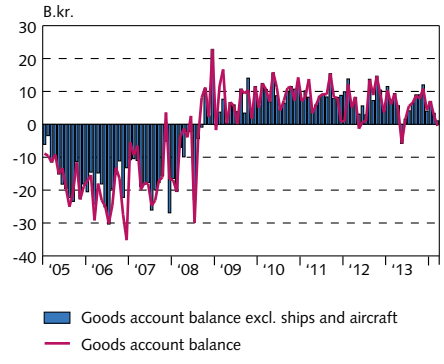
Iceland's underlying current account balance was positive by just under 111 b.kr., or a little more than 6% of GDP, in 2013, far exceeding the 2012 surplus of 48 b.kr. The surplus on goods and services trade totalled almost 132 b.kr., or 7.4% of GDP, whereas the underlying balance on income was negative by 21 b.kr., or 1.2% of GDP. At the same time, the underlying financial balance was negative by 12% of GDP. The outlook is for a larger surplus on goods and services trade over the forecast horizon than was provided for in the forecast in the February *Monetary Bulletin*. The underlying current account balance – i.e., the current account adjusted for the calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates – is expected to be positive by just under 1% of GDP this year but to turn negative thereafter, measuring -½% of GDP in 2015 and about -2% in 2016.

Chart VII-1
Current account balance components[1]
Q1/2003 - Q4/2013



1. Net current transfers are included in the balance on income.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VII-2
Goods account balance
At constant exchange rates, January 2005 - March 2014



Sources: Statistics Iceland, Central Bank of Iceland.

Year-2013 trade surplus in line with February forecast ...

Last year's goods trade surplus was in line with the February forecast, at 70 b.kr. The goods account balance was positive throughout 2013, except for May, when it turned negative for the first time since May 2012 (Chart VII-1). Goods exports contracted by 1.9% year-on-year at constant exchange rates, due primarily to a 5% decline in industrial export values. Imports contracted by 0.9% at the same time, largely because the value of transport equipment fell by a third. Excluding ships and aircraft, the goods account surplus totalled 74 b.kr. in 2013, or 26 b.kr. less than in 2012. Imports of ships and aircraft totalled 7.7 b.kr. last year and 29.5 b.kr. in 2012 (Chart VII-2).

The balance on services was negative by 3.6 b.kr. at constant exchange rates in Q4/2013, after a surplus of nearly 48 b.kr. in the preceding quarter. For the year as a whole, the services account showed a surplus of 66 b.kr., some 35 b.kr. more than in 2012. The surplus is due primarily to net revenues from transportation, which totalled 86 b.kr., and revenues generated by foreign tourists in Iceland, which exceeded Icelanders' travel-related spending abroad by 27 b.kr. It was offset to a degree by imports of "other services", which exceeded exports by 47 b.kr. at constant exchange rates. The deficit in "other services" (e.g., asset leasing and legal and accounting services) cut into the effects of the surplus from transport and tourism. Exported services grew by over 12% from 2012, driven largely by a 21% increase in tourism revenues. At the same time, services imports grew by 3% year-on-year, as tourism-related imports grew by 7½% at constant exchange rates. The surplus on goods and services trade therefore totalled 135 b.kr. for the year, or 7.4% of GDP, which is in line with the February forecast.

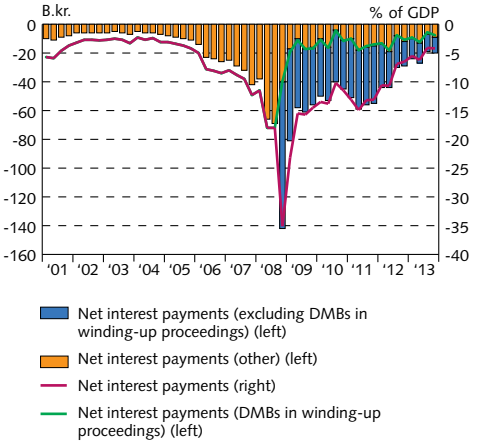
... and the outlook is unchanged for 2014 but has improved for the following two years

The goods account surplus has contracted strongly so far in 2014. In the first three months of the year, exports contracted by about 5½% year-on-year at constant exchange rates, and imports grew by roughly 7%. The goods surplus thus measured totalled 9 b.kr. in the

first three months of the year, which is 17 b.kr. less than in the same period in 2013. The goods trade balance excluding ships and aircraft was also about 17 b.kr. poorer during the first three months of 2014 than over the same period in 2013, when ships and aircraft imports were valued at 2.5 b.kr. at the March exchange rate.

As is discussed in Section II, goods exports are expected to contract this year, largely due to a poor outlook for marine product exports. This will be offset by stronger growth in services exports than previously projected. According to figures from the Icelandic Tourist Board, 35% more foreign tourists came to Iceland in Q1/2014 than in Q1/2013, when the year-on-year increase measured 39%. Both foreign visitors' payment card turnover and the number of hotel bednights are up by about a third year-on-year so far in 2014. Services exports are therefore expected to grow by about 9% year-on-year in 2014 as a whole. It is assumed that combined goods and services exports will grow by 2.9% year-on-year, about 1½ percentage points more than was forecast in February. The outlook for the year is for somewhat stronger goods imports than was projected in February, as imports of ships and aircraft are projected to be about 6 b.kr. more in nominal terms; furthermore, general imports appear likely to be stronger than previously forecast, in line with stronger growth in services exports and domestic demand. As a result, the outlook is for the trade surplus to measure about 5½% of GDP this year, ½ a percentage point less than was forecast in February. The outlook for the next two years has improved however, owing to improved prospects for exports and more positive developments in terms of trade (see Section II). The surplus is projected at almost 5% in 2015 and 3% in 2016, or a percentage point more than was forecast in February.

Chart VII-3
Net foreign interest payments
Q1/2001 - Q4/2013



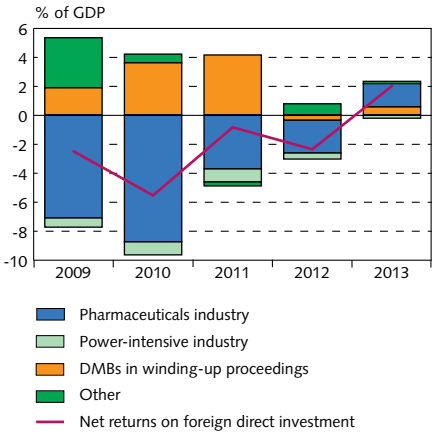
Sources: Statistics Iceland, Central Bank of Iceland.

Underlying income account deficit contracted sharply year-on-year in 2013

The underlying deficit in the balance on income measured just under 9 b.kr. in 2013, excluding transfers totalling ½% of GDP. This is considerably smaller than the 2012 deficit, which measured 45 b.kr. The improvement is due to increased net returns on equity holdings and a smaller interest deficit (Chart VII-3). Interest expense began falling in 2011 and bottomed out in Q3/2013. There are several explanations for the decline: Icelanders' debt position has improved, the currency depreciation of 2012 has reversed, and interest rates in trading partner countries have declined by nearly a percentage point since 2011 About half of Icelanders' foreign debt bears floating interest rates.

The income account deficit was smaller in 2013 than was assumed in the February forecast, largely because of larger returns on foreign equity holdings, which indicates that outward foreign direct investment was more profitable in 2013 than previously anticipated (Chart VII-4). However, the year-on-year improvement in net returns on equity holdings in 2013 is due mainly to weaker returns on non-residents' foreign direct investment in Iceland. Net factor income from pharmaceuticals companies, which weighed heavily in the balance on income for a long period of time, was positive in 2013 for the first time since the financial crisis struck, totalling 29 b.kr., as opposed to -38 b.kr. in 2012. By the same token, the negative impact of energy-

Chart VII-4
Net returns on foreign direct investment
2009-2013



Sources: Statistics Iceland, Central Bank of Iceland.

intensive industry on the balance on income was weaker than in previous years. Energy-intensive companies' profits have shrunk because of the steady decline in aluminium prices since 2012. This reduced profitability has a positive effect on the income account balance.

Transfers totalled 12 b.kr. in 2013, an increase of 1.8 b.kr. year-on-year, and the underlying balance on income plus transfers was therefore negative by 21 b.kr., or 1.2% of GDP, as opposed to a deficit of 55 b.kr. in 2012.

Brighter outlook for the underlying current account balance than in the February forecast

The trade balance was positive by 132 b.kr. in 2013, and the underlying balance on income plus transfers was negative by 21 b.kr. The underlying current account balance was therefore positive by 111 b.kr., or 6.2% of GDP for the year. The surplus is about a percentage point larger than was projected in February, due to more favourable developments in the underlying balance on income, primarily because of the aforementioned favourable impact of foreign direct investment.

As is mentioned above, the trade surplus is expected to measure about 5½% of GDP this year. The underlying deficit in the balance on income is expected to be smaller than was assumed in the February forecast but considerably larger than it was in 2013 because the improvement in returns on equity holdings is unlikely to prove a lasting one, as it is based on one-off effects of foreign pharmaceuticals firms on the balance on income. It is also assumed that the division of the estates of the companies in winding-up proceedings will take place one quarter later than was projected in the February forecast. As a result, the negative impact on this year's balance on income will be correspondingly smaller.[1] As a percentage of GDP, the interest balance is expected to remain unchanged year-on-year. Consequently, the underlying balance on income plus transfers is expected to be negative by 4.8% of GDP this year. The underlying current account balance will therefore be positive by 0.7% of GDP, somewhat less than in 2013 but similar to the February forecast.

Net outflows due to the financial balance stronger in 2013 than in 2012

The financial balance includes all changes in foreign assets and liabilities due to foreign loan payments, new borrowings, or the purchase

1. The forecast of the underlying balance on income is based on the assumption that the assets of companies in winding-up proceedings that are defined as resident entities are divided among creditors according to creditor registers (where 95% of creditors are non-residents) and estimated revenues and expenses deriving from the division of the estate are added to the balance on income. Because of this, the underlying balance on income will be more negative than it would otherwise be, beginning with Q2/2014, when the effects of firms in winding-up proceedings on the underlying balance on income increase from zero to their full amount. The timing of the division of the estates is a technical assumption and has no effect on when the actual division will take place. After the estates have been wound up, there will be no difference between the official and the underlying balance on income. As is discussed in *Monetary Bulletin* 2013/3, pharmaceuticals company Actavis is no longer excluded from the assessment of the underlying balance on income, as its net debt position no longer has the same impact on the balance on income as it did previously. Actavis' debt position has improved markedly following its sale to the American company Watson Pharmaceuticals, and if it were excluded from the assessment of the underlying balance on income, the underlying current account surplus would have measured 4.6% of GDP last year instead of just over 6%.

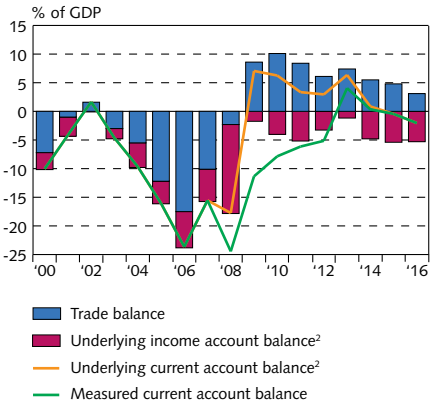
and sale of foreign assets. The underlying financial balance excluding changes in the Central Bank's foreign exchange reserves was negative by just over 206 b.kr. in 2013, or 12% of GDP, which represents stronger net capital outflows than in 2012. In 2012, net capital outflows were substantial because of payments made on the Treasury and Central Bank's foreign loans. Year-2013 outflows, on the other hand, were due largely to loan payments made by other borrowers and partly to foreign securities purchases.

Iceland's net external position has continued to improve, owing in part to the large underlying current account surplus, which has averaged over 5% of GDP in the past five years.[2] The official international investment position (IIP) was negative by 7,532 b.kr., or 421% of GDP, at the end of 2013. Excluding the assets and liabilities of the deposit money banks (DMB) in winding-up proceedings, however, the situation was much better, at -12% of GDP. This position must also be adjusted for the effects of the winding-up of the same institutions with respect to the book value of assets and the underlying classification of creditors based on approved claims in their claims registers.[3] These effects are estimated to be negative by 44% of GDP. In addition, the debt position of other firms being wound up has been assessed and is estimated to be positive by 3% of GDP. According to the Central Bank's most recent assessment, Iceland's underlying IIP is estimated to have been negative by 944 b.kr., or 53% of GDP, in 2013. The position has therefore improved by 180 b.kr., or 10% of GDP, since year-end 2012. The IIP is discussed in greater detail in *Financial Stability* 2014/1.

Underlying current account balance projected to turn negative in the latter half of the forecast horizon

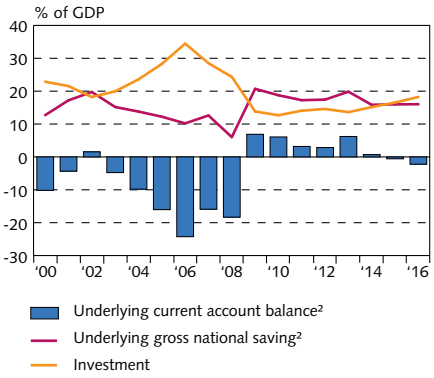
It is assumed that the deficit in the balance on income will be slightly larger in the latter half of the forecast horizon than in 2014, due to improvements in net returns on equity holdings in the energy-intensive industry associated with the expected rise in aluminium price. Despite a larger income account deficit, the underlying current account balance is projected to be about ½ percentage point more positive over the next two years than according to the forecast in the last *Monetary Bulletin*. The improved outlook is due to stronger goods and services exports, particularly in 2015, when they are projected to exceed the February forecast by about 1½ percentage points and to a better terms of trade outlook (see also Section II). If this forecast materialises, the underlying current account balance will be negative in 2015 by ½% of GDP, followed by a 2% deficit in 2016 (Chart VII-5), which means that gross national saving will not keep up with increased domestic investment (Chart VII-6). As before, the outlook for the current account balance is highly uncertain and could easily change if external conditions develop differently than is currently assumed (see Section I).

Chart VII-5
Current account balance 2000-2016[1]



1. Net current transfers are included in the balance on income. Central Bank baseline forecast 2014-2016. 2. Adjusted for calculated revenues and expenses of deposit money banks (DMBs) in winding-up proceedings and the effects of the settlement of their estates, and adjusted for the effects of the pharmaceuticals company Actavis until 2012.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VII-6
Current account balance, investment, and saving 2000-2016[1]



1. Net current transfers are included in the balance on income. Central Bank baseline forecast 2014-2016. 2. Adjusted for calculated income and expenses of DMBs in winding-up proceedings, the effects of the settlement of their estates, Actavis until 2012.
Sources: Statistics Iceland, Central Bank of Iceland.

2. The change in the international investment position is equal to the financial balance plus revaluation due to price and exchange rate changes.

3. See also Central Bank of Iceland (2013), "Iceland's underlying external position and balance of payments", *Special Publication* no. 9, March 2013.

Table VII-1 The current account balance and its subcomponents

	Share of GDP (%)[1]			
	2013	*2014*	*2015*	*2016*
Trade balance	7.4 (7.4)	5.5 (6.0)	4.8 (4.0)	3.1 (2.3)
Measured balance on income[2]	-3.5 (-4.3)	-5.2 (-5.2)	-5.4 (-5.1)	-5.3 (-5.1)
Underlying balance on income[3]	-1.2 (-2.1)	-4.8 (-5.2)	-5.4 (-5.1)	-5.3 (-5.1)
Measured current account balance[2]	3.9 (3.0)	0.2 (0.8)	-0.6 (-1.0)	-2.2 (-2.8)
Underlying current account balance[3]	6.2 (5.3)	0.7 (0.8)	-0.6 (-1.0)	-2.2 (-2.8)

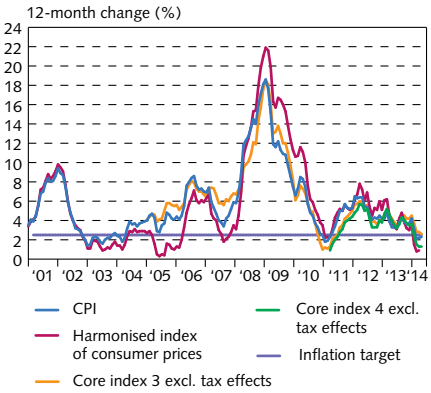
1. Figures in parentheses from forecast in *Monetary Bulletin* 2014/1. 2. Calculated according to IMF standards. Balance on income plus transfers. 3. Adjusted for the calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates.

Sources: Statistics Iceland, Central Bank of Iceland.

VIII Price developments and inflation outlook

Annual inflation has tapered off and has hovered near the Bank's inflation target since the publication of the last *Monetary Bulletin*. Underlying inflation has also subsided and is close to target. Two-year inflation expectations have fallen as well, but long-term inflation expectations have remained broadly unchanged and are still somewhat above target. The inflation outlook has improved slightly from the February forecast, owing to a stronger króna and smaller rises in unit labour costs than was assumed at that time. As in February, the outlook is for inflation to remain close to target throughout this year and then begin to rise early in 2015, as a positive output gap opens up. Lower inflation expectations could counteract this, however. According to the baseline forecast, inflation will average 2.5% this year but will remain above 3% from next year until the latter half of the forecast horizon, when it will begin to fall back to target in response to a tighter monetary stance. As before, the inflation outlook is uncertain. The confidence bands of the forecast indicate that there is about a 50% probability that inflation will be in the 2¼-4% range in one year's time and in the 2-4% range by the end of the forecast horizon. The uncertainty in the forecast is broadly similar to that in February, but the risk profile is tilted to the upside in the latter part of the forecast horizon.

Chart VIII-1
Various inflation measurements[1]
January 2001 - April 2014



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 excludes the market price of housing as well.
Sources: Statistics Iceland, Central Bank of Iceland.

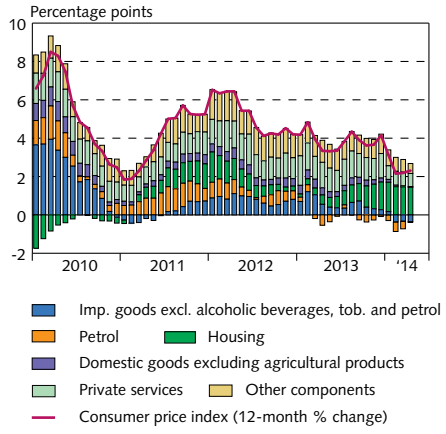
Inflation subsides in line with the forecast ...

The CPI rose by 0.7% month-on-month in February, primarily due to end-of-sale effects and increased international airfares. The rise was offset somewhat by lower groceries prices. Twelve-month inflation fell from 3.1% to 2.1%, due to favourable base effects. The CPI rose 0.2% in March, when the effects of winter sales tapered off, and in April it rose 0.3%, bringing twelve-month inflation to 2.3% (Chart VIII-1). The rise is due mostly to increases in imputed rent and travel and transport costs, which were offset in part by reduced mobile phone service and groceries prices.

CPI inflation excluding the housing component was markedly lower in April, measuring 1% year-on-year. In terms of the European Union's Harmonised Index of Consumer Prices (HICP), which also excludes housing costs, inflation was similarly low, measuring 0.9% in March, down from 4.5% in March 2013.

CPI inflation was broadly in line with the Bank's 2.5% inflation target in Q1, slightly below the February forecast of 2.7%, after falling rapidly, from 3.8% in Q4/2013 and 4.3% in Q1/2013. For some time, inflation has been driven primarily by domestic factors such as rising house prices and domestic goods and services prices (Chart VIII-2). The recent disinflation episode is due primarily to reductions in imported goods prices and smaller increases in private services.

Chart VIII-2
Components of CPI inflation
Contribution to inflation January 2010 - April 2014

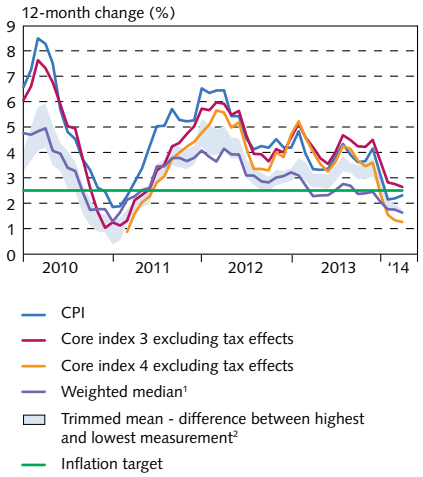


Source: Statistics Iceland.

... and underlying inflation follows suit

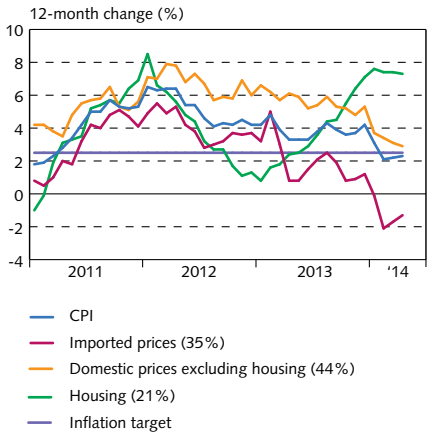
Various measures of underlying inflation have also fallen rapidly. Excluding indirect tax effects, inflation according to core index 3 (which excludes the effects of volatile food items, petrol, public services, and real mortgage interest expense) measured 2.6% in April,

Chart VIII-3
Various measures of underlying inflation
January 2010 - April 2014



1. A measure of underlying inflation based on the price change of the weighted median of the CPI components. 2. The trimmed mean is measured as underlying inflation excluding 10%, 15% and 20% of components with the largest price changes.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-4
Traded and non-traded inflation[1]
January 2001 - April 2014



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 vegetables 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.

down from 4.2% in April 2013 (Chart VIII-3). According to core index 4, which also excludes the effects of changes in the market price of housing, underlying inflation was even lower, or 1.3%, as opposed to 4% a year earlier. Statistical measures of underlying inflation give similar results: using a trimmed mean gives an underlying inflation figure of 1.4-1.8% in April, just over a percentage point less than in April 2013, and in terms of the weighted median, underlying inflation was 1.6% in April, just over ½ a percentage point lower than in April 2013.

Domestic and imported inflation pull in the same direction

Non-traded inflation excluding housing has fallen rapidly in the recent term. In April it aligned with the target for the first time since autumn 2007 (Chart VIII-4).[1] A year ago it measured over 6%. Including housing, however, non-traded inflation measured 4% in April, which shows that rising house prices have been the main driver of non-traded inflation in the recent past. The housing component of the CPI has risen by some 7% in the past twelve months, and it explained nearly two-thirds of the rise in the index in April.

The decline in domestic inflation has pulled in the same direction as imported inflation, which fell by nearly 1% year-on-year in April. The main drivers here were falling global petrol and commodity prices and a year-on-year rise in the average exchange rate of the króna (Chart VIII-5). Furthermore, exchange rate fluctuations have diminished since the Central Bank stepped up its foreign exchange market intervention a year ago, which could expedite the pass-through of lower imported inflation to the domestic price level.[2]

Stage set for modest inflation in coming months

Producer prices for goods sold domestically rose by 3.3% year-on-year in Q1, after having risen by an average of over 1% in 2013 (Chart VIII-6). This is similar to the rise in domestic goods in the CPI, which measured 2.8% in Q1/2014, whereas the difference between producer price hikes and retail price hikes was larger in 2013.

According to the results of Capacent Gallup's March survey among business executives, 40% of respondents expected their EBITDA margins to increase in the next six months, while less than a fifth expected a contraction. This is a markedly more positive assessment than in the December survey. In fact, executives have not been this optimistic about their margins since September 2007. Although the wage share has risen in recent years (see Section VI), it could be a sign that firms consider themselves to have the scope to absorb cost increases without passing them through to prices or slowing down recruitment. Whether firms use that scope depends on market condi-

1. This is only an approximation of non-traded inflation, as some foreign goods could be classified as domestic, and vice versa. Furthermore, inputs for domestic production are often imported; therefore, foreign prices and the exchange rate of the króna could affect domestic production costs. Moreover, the presence or absence of international competition could affect pricing more than whether a product is produced domestically or abroad.
2. The relationship between exchange rate volatility and firms pricing decisions is examined in Thorvardur Tjörvi Ólafsson, Ásgerdur Pétursdóttir, and Karen Á. Vignisdóttir (2011), "Price setting in turbulent times: Survey evidence from Icelandic firms", Central Bank of Iceland *Working Papers*, no. 54.

tions at any given time, however. The survey results also show that about half of executives expect their input prices to rise in the next six months, as opposed to 70% in September. 29% of the respondents expected to raise their product prices, one of the lowest shares since the survey started (Chart VIII-7).

Short-term inflation expectations fall ...

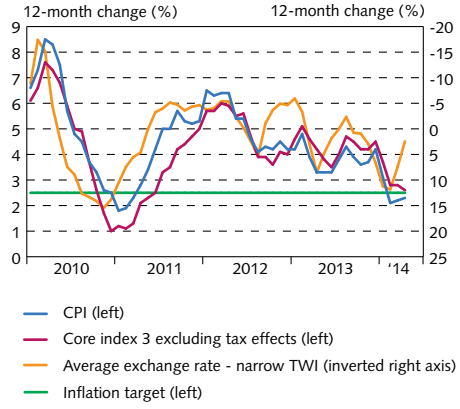
Inflation expectations can be a major determinant of inflation developments, as they affect workers' wage demands and firms' willingness to agree to pay hikes, as well as affecting firms' pricing decisions. In essence, low and stable inflation expectations provide an anchor for inflation and are an important precondition for the maintenance of low inflation.

Short-term inflation expectations as measured in surveys have declined in line with measured inflation in the recent term (Chart VIII-8). According to Capacent Gallup's quarterly survey, carried out in February and March, household inflation expectations measured 4% both one and two years ahead, about a percentage point lower than in November. Household inflation expectations are at their lowest since March 2011. According to a comparable survey conducted among firms in March, business executives expect inflation to measure 3% in one year, about 1 percentage point lower than in November. They project inflation two years ahead at 3.5%, the lowest survey value since measurements were introduced in autumn 2008. Market participants' inflation expectations have developed in a broadly similar manner. According to the survey carried out by the Central Bank in May, they expect inflation to measure 3.2% in one year and 3.5% in two years, which is similar to the February value, but around ½-1 percentage point lower than in a comparable survey from a year ago. Short-term inflation expectations in terms of the breakeven inflation rate in the bond market show a similar pattern, indicating, for instance, that two-year inflation expectations averaged about 3% in so far this year, down from 4% at the beginning of the year (Chart VIII-9).[3] As Chart VIII-10 shows, not only have short-term inflation expectations fallen, but uncertainty about the inflation outlook one year ahead has subsided as well.

... but long-term expectations are more persistent

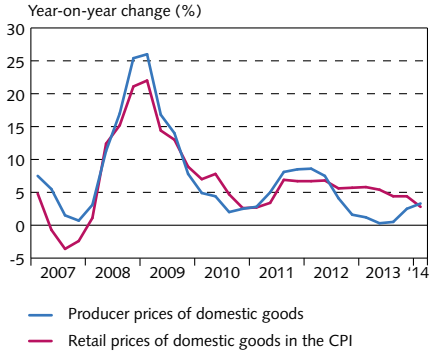
Long-term inflation expectations have been more persistent, however. The breakeven inflation rate five years ahead measured about 4% in early May, while the rate ten years ahead was about 4%. Although both are down by about ½ a percentage point since April 2012, they have changed very little recently (Chart VIII-9).[4] Market participants'

Chart VIII-5
Inflation, core inflation and the exchange rate of the króna
January 2010 - April 2014



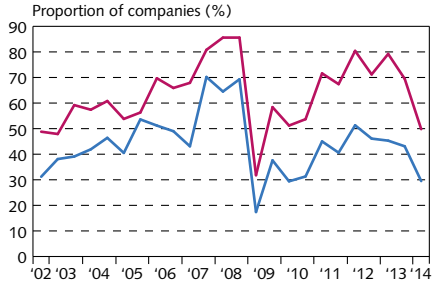
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-6
Producer and retail prices of domestic goods
Q1/2007 - Q1/2014



Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-7
Corporate expectations of input and product prices 6 months ahead
Fall 2002 - Spring 2014

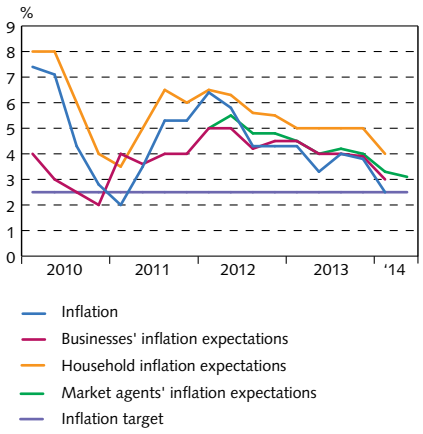


Source: Capacent Gallup.

3. Because of a shortage of short-term indexed bonds, caution should be exercised in interpreting short-term inflation expectations based on the breakeven inflation rate in the bond market. A measured decline in inflation expectations based on the breakeven rate need not indicate lower expectations; it may merely reflect a decline in observed inflation.

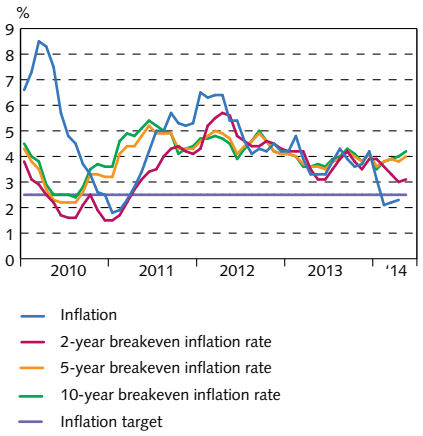
4. It should be borne in mind that in addition to inflation expectations, the breakeven rate includes a risk premium that reflects uncertainty about inflation and a risk premium related to the liquidity of the bonds. Therefore, a breakeven rate higher than 2.5% could actually be consistent with the Bank's inflation target. Empirical research suggests that the risk premium could be in the ½-1 percentage point range on long-term bonds, and that it grows higher as inflation grows more volatile (see, for example, A. Buraschi and A. Jiltsov (2005),

Chart VIII-8
Inflation and inflation expectations
Q1/2010 - Q2/2014



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

Chart VIII-9
Inflation and indicators of medium- and long-term inflation expectations[1]
January 2010 - May 2014



1. Annual CPI inflation. Inflation expectations based on nominal and indexed yield curves (monthly averages; May figures are for 1-16 May).
Sources: Statistics Iceland, Central Bank of Iceland.

inflation expectations tell a similar tale. According to the Bank's April survey, respondents expect inflation to measure 3.6% in five years and 3.8% in ten years, which is broadly unchanged from the February survey and slightly lower than in May 2013.

The inflation outlook has improved since February ...

As is mentioned above, inflation measured 2.5% in Q1/2014, while the Bank's February forecast assumed 2.7%. As in the February forecast, inflation is expected to hold close to target for the remainder of the year. The short-term outlook has improved marginally since February, mainly because the króna has been somewhat stronger and rises in unit labour costs smaller than was assumed in the February forecast (Chart VIII-11).[5]

According to the forecast, the slack in the economy will disappear in mid-2014, and inflation will begin to inch upwards as the year progresses. It will rise above 3% in the first half of 2015, by which time the effects of the appreciation of the króna will by and large have tapered off and a positive output gap will have begun to develop. Inflation is expected to average around 3% next year, rise slightly in 2016, and then subside again in H1/2017, falling to just above the target by the end of the forecast horizon.

... but uncertainty remains

There is some uncertainty about exchange rate developments, in part due to uncertainty about the timing and impact of capital account liberalisation and the settlement of the failed banks' estates. Although recent wage settlements have been relatively moderate on the whole, some groups are trying to negotiate beyond the current wage settlement framework, which could lead to larger pay increases in 2015 than the baseline forecast provides for. Furthermore, if the slack in the economy is overestimated, inflation could be underestimated. The risk that underlying inflationary pressures are underestimated is also greater than it would be otherwise because of the apparent lack of a firm anchor for long-term inflation expectations. However, if the slack in the economy has been underestimated or domestic demand has been overestimated, inflation could turn out lower than forecast. The same is true if global output growth turns out weaker or if oil and commodity prices fall more than is assumed in the forecast.

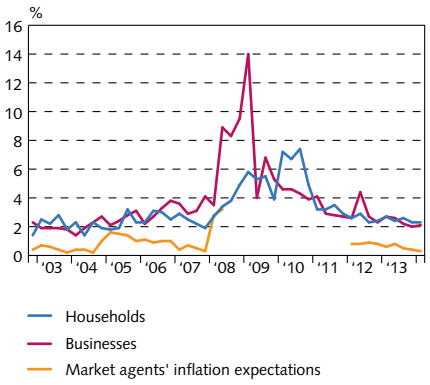
Chart VIII-12 shows the estimate of the probability distribution for developments in inflation during the forecast horizon. The width of the probability distribution sheds light on the extent of the uncertainty, and its shape reflects an assessment of which uncertainties are considered most important and how they affect the inflation outlook. The shaded areas show the confidence intervals in the baseline fore-

"Inflation risk premia and the expectations hypothesis", *Journal of Financial Economics*, 75, 429-490, J. Durham (2006), "An estimate of the inflation risk premium using a three-factor affine term structure model", Federal Reserve Board, *FEDS Paper* 2006-42), A. Ang, G. Bekaert and M. Wei (2008), "The term structure of real rates and expected inflation", *Journal of Finance*, 63, 797-849, and S. D'Amico, D. Kim and M. Wei (2008), "Tips from TIPS: the informational content of treasury inflation-protected security prices", BIS *Working Papers*, no. 248).

5. The Bank uses a number of statistical models to assess the short- and medium-term inflation outlook. These models give results very similar to those in the baseline forecast.

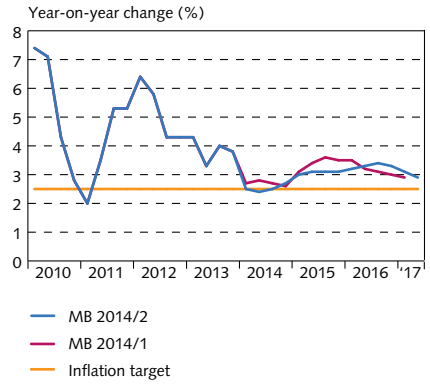
cast. According to the probability distribution, there is considered to be a 50%, 75%, and 90% probability that inflation will lie within the relevant ranges during the forecast horizon (see Appendix 3 in *Monetary Bulletin* 2005/1). According to this assessment, there is a 50% probability that inflation will be in the 2¼-4% range in one year and in the 2-4% range by the end of the forecast horizon. According to the probability distribution, there is about a one-third chance that inflation will be below target during the forecast horizon. The uncertainty in the forecast is broadly similar to that in February, but the risk profile is tilted to the upside in the latter part of the forecast horizon. Further discussion of the uncertainties in the baseline forecast can be found in Section I.

Chart VIII-10
Dispersion in inflation expectations surveys[1]
Q1/2010 - Q1/2014



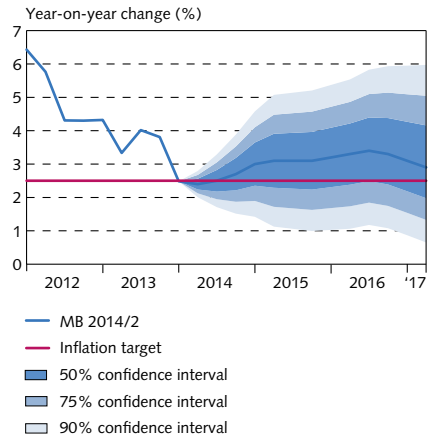
1. Standard deviation of responses concerning one-year inflation outlook. Until 2008, the expectations of 4-6 analysts are used, but from 2012 onwards, the dataset is based on a larger group of analysts and market agents. In instances where measurements are missing for firms and analysts, a linear extrapolation is used.
Sources: Capacent Gallup, Central Bank of Iceland.

Chart VIII-11
Inflation - comparison with MB 2014/1



Sources: Statistics Icealnd, Central Bank of Iceland.

Chart VIII-12
Inflation forecast and confidence intervals



Sources: Statistics Iceland, Central Bank of Iceland.

Appendix 1

Baseline macroeconomic and inflation forecast 2014/2

Table 1 Macroeconomic forecast[1]

		Volume change on previous year (%) unless otherwise stated			
	B.kr.		*Forecast*		
GDP and its main components	*2013*	*2013*	*2014*	*2015*	*2016*
Private consumption	957.4	1.2 (1.6)	4.4 (4.6)	4.3 (4.3)	2.9 (2.9)
Public consumption	455.1	1.3 (1.2)	0.9 (0.6)	0.8 (0.2)	0.8 (0.4)
Gross fixed capital formation	243.3	-3.4 (-4.3)	19.0 (5.4)	15.6 (20.1)	13.2 (14.7)
Business investment	154.0	-10.2 (-11.9)	20.0 (0.8)	17.9 (25.8)	15.3 (17.7)
Residential investment	50.8	10.8 (15.7)	23.9 (20.3)	17.7 (16.6)	16.4 (16.4)
Public investment	38.5	11.7 (8.8)	9.6 (6.1)	1.5 (0.7)	-4.1 (-4.0)
National expenditure	1,654.2	0.1 (0.4)	5.6 (3.6)	5.2 (5.5)	4.2 (4.2)
Exports of goods and services	1,027.6	5.3 (4.7)	2.9 (1.4)	3.0 (1.8)	2.2 (2.4)
Imports of goods and services	895.6	-0.1 (0.3)	6.4 (3.1)	5.5 (5.1)	5.0 (4.6)
Contribution of net trade to growth		3.2 (2.6)	-1.5 (-0.7)	-1.0 (-1.5)	-1.3 (-1.0)
Gross domestic product	1,786.2	3.3 (3.0)	3.7 (2.6)	3.9 (3.7)	2.7 (3.0)
Other key aggregates					
GDP at current prices (in b.kr.)		1,786 (1,789)	1,885 (1,867)	2,025 (1,991)	2,140 (2,104)
Trade account balance (% of GDP)		7.4 (7.4)	5.5 (6.0)	4.8 (4.0)	3.1 (2.3)
Current account balance (% of GDP)		3.9 (3.0)	0.2 (0.8)	-0.6 (-1.0)	-2.2 (-2.8)
Underlying current account balance (% of GDP)[2]		6.2 (5.3)	0.7 (0.8)	-0.6 (-1.0)	-2.2 (-2.8)
Terms of trade (change in average year-on-year)		-2.4 (-1.3)	0.2 (-0.4)	1.1 (-0.7)	-0.5 (-1.2)
Total gross fixed capital formation (% of GDP)		13.6 (13.4)	15.2 (13.6)	16.6 (15.7)	18.2 (17.5)
Business investment (% of GDP)		8.6 (8.4)	9.5 (8.0)	10.6 (9.6)	11.9 (11.1)
Output gap (% of potential output)		-0.5 (-0.8)	0.4 (-0.3)	1.4 (0.8)	1.3 (1.1)
Unit labour costs (change in average year-on-year)[3]		3.2 (4.7)	3.9 (3.7)	3.3 (3.0)	2.5 (2.6)
Real disposable income (change in average year-on-year)		4.3 (4.1)	4.0 (2.7)	2.4 (2.2)	2.3 (2.4)
Unemployment (% of labour force)		4.4 (4.4)	3.5 (3.7)	3.4 (3.7)	3.2 (3.5)
ISK exchange rate against narrow trade-weighted index (31/12 1991 = 100)		218.9 (218.9)	207.4 (210.1)	207.5 (210.1)	207.6 (210.1)
Inflation (annual average, %)		3.9 (3.9)	2.5 (2.7)	3.1 (3.4)	3.3 (3.2)
Inflation excluding tax effects (annual average, %)		3.7 (3.7)	2.4 (2.6)	3.1 (3.4)	3.3 (3.2)

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2014/1. 2. Adjusted for calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates. 3. Based on underlying productivity.

Table 2 Quarterly inflation forecast (%)[1]

Quarter	*Inflation (change year-on-year)*	*Inflation excluding tax effects (change year-on-year)*	*Inflation (annualised quarter-on-quarter change)*
		Measured value	
2013:1	4.3 (4.3)	4.2 (4.2)	6.5 (6.5)
2013:2	3.3 (3.3)	3.2 (3.2)	4.1 (4.1)
2013:3	4.0 (4.0)	3.9 (3.9)	1.7 (1.7)
2013:4	3.8 (3.8)	3.7 (3.7)	3.1 (3.1)
2014:1	2.5 (2.7)	2.4 (2.6)	1.1 (2.0)
		Forecasted value	
2014:2	2.4 (2.8)	2.3 (2.7)	3.9 (4.5)
2014:3	2.5 (2.7)	2.4 (2.6)	1.9 (1.3)
2014:4	2.7 (2.6)	2.6 (2.5)	3.8 (2.5)
2015:1	2.9 (3.1)	3.0 (3.1)	2.3 (4.3)
2015:2	3.1 (3.4)	3.1 (3.4)	4.6 (5.5)
2015:3	3.1 (3.6)	3.1 (3.6)	1.9 (2.0)
2015:4	3.1 (3.5)	3.1 (3.5)	3.6 (2.4)
2016:1	3.2 (3.5)	3.2 (3.5)	2.7 (4.2)
2016:2	3.3 (3.2)	3.3 (3.2)	5.1 (4.2)
2016:3	3.4 (3.1)	3.4 (3.1)	2.2 (1.8)
2016:4	3.3 (3.0)	3.3 (3.0)	3.0 (2.0)
2017:1	3.1 (2.9)	3.1 (2.9)	2.1 (3.7)
2017:2	2.8	2.8	4.1

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2014/1.

Monetary policy and instruments

The objective and implementation of monetary policy

The objective of monetary policy is to ensure price stability. On 27 March 2001, a formal inflation target was adopted, as follows:[1]

- The Central Bank aims for an annual rate of inflation, measured as the twelve-month increase in the CPI, which in general will be as close as possible to 2½%.
- If inflation deviates by more than 1½ percentage points from the target, the Central Bank shall be obliged to submit a report to the Government explaining the reason for the deviation, how it intends to respond, and when it expects the inflation target to be reached again. This report shall be made public.
- The Central Bank shall publish macroeconomic and inflation forecasts, projecting three years into the future. Forecasts shall be published in the Bank's *Monetary Bulletin*, which shall also contain the Bank's assessment of the key uncertainties pertaining to the inflation forecast. The Bank shall also publish its assessment of the current economic situation and outlook.

Because monetary policy aims at maintaining price stability, it will not be applied in order to achieve other economic objectives, such as a balance on the current account or a high level of employment, except insofar as these are consistent with the Bank's inflation target.

Main monetary policy instruments

The Central Bank implements it's monetary policy mainly by applying interest rates with the objective of affecting short-term money market rates, which in turn affect other market interest rates. Yields in the money market also have a strong impact on currency flows and thereby on the exchange rate, and in the long run on domestic demand. Transactions between financial institutions and the Central Bank are subject to the Rules on Central Bank of Iceland Facilities for Financial Undertakings, no. 553 of 26 June 2009.

Standing facilities

- Current accounts: Current accounts are deposits of financial institutions' undisposed assets. They also function as settlement accounts for financial institutions' transactions and are used for reserve requirements. The current account rate forms the floor of the Central Bank interest rate corridor and the interest rate floor in the interbank market for krónur. Current accounts must always have a positive balance at the end of each business day.
- Overnight loans: Overnight loans are loans granted by the Central Bank to financial institutions, upon the request of the latter, until the following business day. Their primary purpose is to provide financial institutions with access to liquidity so as to ensure that the financial institutions concerned fulfil reserve requirements and have

1. Joint declaration of the Government of Iceland and the Central Bank of Iceland. Published on the Central Bank of Iceland website.

a positive current account balance at the end of the day. Overnight loans are granted against eligible collateral. Overnight interest rates form the ceiling for overnight rates in the interbank market for krónur.

Regular facilities

Regular facilities can be granted for up to seven days. Their purpose is to increase or decrease the supply of liquidity in the financial system. The Central Bank decides in each instance how much liquidity it lends to financial institutions or drains from the market. In general, Central Bank facilities are transacted on Wednesdays; however, the Bank may engage in transactions on other days if necessary. The main types of regular facilities are:

- Collateralised loans: Loans with a maturity of up to seven days. Financial institutions must provide collateral that the Bank deems eligible for Central Bank facilities.
- Term deposits with a maturity of up to seven days, which are sold by the Central Bank to financial institutions (for a discussion on longer-term deposits, see *Other facilities*).

As a rule, only one type of regular facility will be offered at any given time, depending on whether the Bank wishes to increase or decrease the supply of liquidity in circulation. In its auctions, the Central Bank may decide to keep interest rates and prices fixed or give financial institutions the option of bidding on either or both. The Bank may reject all bids or a portion of them.

Other financial instruments that the Central Bank may use to increase or decrease market liquidity are repurchase agreements, certificates of deposit, and currency swap agreements.

Other facilities

The Central Bank may decide to carry out transactions with financial institutions for periods longer than a week, but with the same financial instruments as are used in regular facilities.

Beginning in autumn 2009, the Central Bank sold 28-day certificates of deposit to financial institutions on a weekly basis, with the aim of reducing market liquidity and supporting interest rate formation in the interbank market for krónur. In May 2014, however, it began selling seven-day certificates of deposit, as well as monthly certificates of deposit that are offered once a month.

Reserve requirements

Required reserves apply to financial institutions that are not dependent on Treasury budget allocations for their operations. The required reserve base comprises deposits, issued securities, and money market instruments. The required reserve ratio is 2% for the part of the required reserve base that is tied for two years or less. The maintenance period is from the 21st day of each month until the 20th of the following month, and the two-month average reserve must reach the stipulated ratio during the period. Reserve requirements do not apply to foreign branches of Icelandic financial institutions.

Intervention in the foreign exchange market

In keeping with the declaration on the inflation target from 2001, foreign exchange market intervention is employed only if the Central Bank deems it necessary in order to promote the attainment of the inflation target or considers exchange rate fluctuations a potential threat to financial stability.

Overview of Central Bank interest rates 21 May 2014

Traditional instruments	*Current rate (%)*	*Change (percentage points)*	*Last interest rate decision*	*Rate one year ago (%)*
Current accounts	5.00	0.00	19 March 2014	5.00
Required reserves	5.00	0.00	19 March 2014	5.00
Term deposits with a maturity of up to 7 days	5.25	-	-	-
Overnight loans	7.00	0.00	19 March 2014	7.00
Collateralised loans	6.00	0.00	19 March 2014	6.00

Central Bank of Iceland interest rate decisions

	Key Central Bank interest rates, %[1]				
Interest rate decision date	*Financial institutions' current acc. rate*	*Term deposits with a maturity of up to 7 days*	*Maximum rate on 28-day CDs*	*Collateralised lending rate*	*Overnight loans*
21 May 2014	5.00 (0.00)	5.25 .	. .	6.00 (0.00)	7.00 (0.00)
19 March 2014	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
12 February 2014	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
11 December 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
6 November 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
2 October 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
21 August 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
12 June 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
15 May 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
20 March 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
6 February 2013	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
12 December 2012	5.00 (0.00)		5.75 (0.00)	6.00 (0.00)	7.00 (0.00)
14 November 2012	5.00 (0.25)		5.75 (0.25)	6.00 (0.25)	7.00 (0.25)
3 October 2012	4.75 (0.00)		5.50 (0.00)	5.75 (0.00)	6.75 (0.00)
22 August 2012	4.75 (0.00)		5.50 (0.00)	5.75 (0.00)	6.75 (0.00)
13 June 2012	4.75 (0.25)		5.50 (0.25)	5.75 (0.25)	6.75 (0.25)
16 May 2012	4.50 (0.50)		5.25 (0.50)	5.50 (0.50)	6.50 (0.50)
21 March 2012	4.00 (0.25)		4.75 (0.25)	5.00 (0.25)	6.00 (0.25)
8 February 2012	3.75 (0.00)		4.50 (0.00)	4.75 (0.00)	5.75 (0.00)
7 December 2011	3.75 (0.00)		4.50 (0.00)	4.75 (0.00)	5.75 (0.00)
2 November 2011	3.75 (0.25)		4.50 (0.25)	4.75 (0.25)	5.75 (0.25)
21 September 2011	3.50 (0.00)		4.25 (0.00)	4.50 (0.00)	5.50 (0.00)
17 August 2011	3.50 (0.25)		4.25 (0.25)	4.50 (0.25)	5.50 (0.25)
15 June 2011	3.25 (0.00)		4.00 (0.00)	4.25 (0.00)	5.25 (0.00)
20 April 2011	3.25 (0.00)		4.00 (0.00)	4.25 (0.00)	5.25 (0.00)
16 March 2011	3.25 (0.00)		4.00 (0.00)	4.25 (0.00)	5.25 (0.00)
2 February 2011	3.25 (-0.25)		4.00 (-0.25)	4.25 (-0.25)	5.25 (-0.25)
8 December 2010	3.50 (-0.50)		4.25 (-1.00)	4.50 (-1.00)	5.50 (-1.50)
3 November 2010	4.00 (-0.75)		5.25 (-0.75)	5.50 (-0.75)	7.00 (-0.75)
22 September 2010	4.75 (-0.75)		6.00 (-0.75)	6.25 (-0.75)	7.75 (-0.75)
18 August 2010	5.50 (-1.00)		6.75 (-1.00)	7.00 (-1.00)	8.50 (-1.00)
23 June 2010	6.50 (-0.50)		7.75 (-0.50)	8.00 (-0.50)	9.50 (-0.50)
5 May 2010	7.00 (-0.50)		8.25 (-0.50)	8.50 (-0.50)	10.00 (-0.50)
17 March 2010	7.50 (-0.50)		8.75 (-0.50)	9.00 (-0.50)	10.50 (-0.50)
27 January 2010	8.00 (-0.50)		9.25 (-0.50)	9.50 (-0.50)	11.00 (-0.50)
10 December 2009	8.50 (-0.50)		9.75 (-0.25)	10.00 (-1.00)	
5 November 2009	9.00 (-0.50)		10.00	11.00 (-1.00)	
24 September 2009	9.50 (0.00)			12.00 (0.00)	
13 August 2009	9.50 (0.00)			12.00 (0.00)	
2 July 2009	9.50 (0.00)			12.00 (0.00)	

1. Change from last decision in parentheses.

Tables and charts

Tables and charts are generally based on statistical information available on 16 May 2014. A list of symbols is on p. 2.

A Tables

B Charts

Table 1 Main monthly indicators

	Consumer prices		Exchange rate		Yield (end of period, %)					Money and credit (end of period)[6]			
	% change in CPI[1] over the previous		% ch. in effective exchange rate [1,2]		Money market		Bond market[5]			12-month % change			
	1 month	12 months	1 month	12 months	CB collatera-lised loans[3]	3-month REIBOR[4]	RIKB 13 0517	RIKB 19 0226	HFF 150644	Base money	M3	DMB lending	DMB foreign liabilities[7]
2012													
January	0.3	6.5	-1.2	-3.7	4.8	4.8	3.7	6.4	2.6	-5.6	12.7	0.2	-27.4
February	1.0	6.3	-1.9	-4.0	4.8	4.8	4.1	6.8	2.5	18.7	12.1	1.0	-23.2
March	1.0	6.4	-2.0	-5.3	5.0	5.1	4.4	6.9	2.7	10.0	7.8	4.2	-16.4
April	0.8	6.4	-0.2	-5.3	5.0	5.1	4.1	7.0	2.6	-7.6	9.2	5.9	-14.1
May	0.0	5.4	2.1	-2.2	5.5	5.6	3.8	6.6	2.8	17.5	10.7	7.7	-22.5
June	0.5	5.4	1.5	-0.2	5.8	5.7	2.7	6.6	2.8	5.4	8.3	6.0	-24.9
July	-0.7	4.6	2.2	2.4	5.8	5.8	3.1	6.3	2.8	-22.9	4.3	5.5	-28.7
August	-0.2	4.1	3.7	5.4	5.8	5.8	2.8	6.2	2.5	20.6	3.1	5.9	-14.3
September	0.8	4.3	-4.6	-1.0	5.8	5.8	3.1	6.3	2.5	-0.7	-1.5	6.7	-19.1
October	0.3	4.2	-1.5	-3.6	5.8	6.1	3.0	6.0	2.5	8.6	-0.4	6.3	-19.0
November	0.3	4.5	-1.6	-4.9	6.0	6.1	3.5	6.0	2.8	0.0	-1.6	5.4	-17.1
December	0.0	4.2	-0.8	-4.6	6.0	6.2	3.8	6.1	2.7	32.0	-2.7	1.8	-22.3
2013													
January	0.3	4.2	-2.5	-5.9	6.0	6.2	5.3	5.3	2.5	15.8	-8.0	0.9	-16.3
February	1.6	4.8	0.8	-3.3	6.0	6.2	5.6	5.4	2.6	-33.0	-5.7	-0.5	-18.3
March	0.2	3.9	4.3	3.0	6.0	6.2	5.7	5.7	2.7	1.7	-9.0	-0.2	-20.4
April	0.2	3.3	5.2	8.6	6.0	6.2	5.8	5.5	2.8	-7.9	-12.0	-1.9	-19.6
May	0.0	3.3	-1.5	4.8	6.0	6.2	.	5.4	2.7	0.9	-5.7	-1.8	5.4
June	0.5	3.3	-1.3	1.9	6.0	6.2	.	5.5	2.9	9.8	-2.2	-1.2	-1.6
July	-0.3	3.8	0.4	0.1	6.0	6.2	.	5.6	2.7	12.4	-1.9	-0.3	3.7
August	0.3	4.3	1.1	-2.3	6.0	6.2	.	5.8	2.6	-14.3	-0.2	-0.4	-8.4
September	0.3	3.9	-1.6	0.8	6.0	6.2	.	5.8	2.7	4.2	1.5	0.8	0.1
October	0.0	3.6	-1.3	1.0	6.0	6.2	.	5.6	2.8	5.4	0.9	0.7	2.8
November	0.4	3.7	0.4	3.0	6.0	6.2	.	6.0	3.0	8.7	1.3	0.8	8.9
December	0.5	4.2	2.7	6.7	6.0	6.2	.	6.1	3.1	0.3	1.3	0.8	20.2
2014													
January	-0.7	3.1	1.7	11.3	6.0	6.2	.	6.1	3.1	13.5	9.6	2.2	21.2
February	0.7	2.1	1.3	11.9	6.0	6.2	.	6.5	3.2	22.1	5.9	2.7	21.9
March	0.2	2.2	0.2	7.5	6.0	6.1	.	6.1	3.4	-6.5	8.1	3.7	20.2
April	0.3	2.3	0.4	2.5	6.0	6.1	.	6.0	3.2	11.5	...	...	...

1. Percentage change between period averages. 2. Based on the narrow trade-weighted effective exchange rate basket. A positive sign indicates appreciation of the Icelandic króna. 3. From June 2007, the presentation of the policy rate has been changed. It is now presented as a nominal rate instead of a yield. 4. Average yield on the interbank market in Icelandic krónur. 5. For Treasury bonds and HFF bonds, the quoted yield is in excess of changes in the CPI. Trading with HFF bonds began in July 2004; prior figures are for housing bonds. 6. Annual figures are changes over one year. Domestic borrowers only. Latest figures are preliminary. 7. DMBs = deposit money banks = commercial and savings banks and other institutions permitted to accept deposits from the public. Since July 2007, derivatives have been considered foreign liabilities and the presentation of Central Banks' short-term position has been changed.

Table 1 (continued) Main monthly indicators

	Foreign exchange market and reserves				Foreign trade and external conditions					Labour market		Public finance	Asset prices 12-mo. % changes	
	Gross foreign currency reserves			CB net purchases (b.kr.)	Goods account balance (b.kr.)	Goods exports, fob (b.kr.)	Goods imports, fob (b.kr.)	Marine product prices 12-mo.% ch.[10]	Real exchange rate of króna[11]	Unemployment	Wages, 12-mo. % change	Reg. Treasury financial balance, % of reg. revenues, from Jan.[12]	Equity prices[13]	Housing prices[14]
	Position (B.kr.)	as ratio of: Goods imports[8]	as ratio of: For. short-term liabil.[9]											
2012														
January	1,081.1	23.4	7.6	1.2	0.5	47.3	46.8	0.7	75.3	7.2	9.1	-38.1	-5.0	9.2
February	1,095.0	23.1	7.6	1.0	12.6	54.2	41.6	-2.5	74.2	7.3	11.3	6.1	-2.5	7.8
March	976.8	20.3	6.3	-1.0	5.0	55.4	50.3	0.0	72.9	7.1	12.1	-4.5	4.1	8.7
April	942.2	19.7	6.0	1.0	8.8	49.5	40.7	0.8	73.0	6.5	11.9	-3.4	8.6	7.7
May	1,062.8	21.8	7.9	1.2	-2.0	55.4	57.4	0.1	74.7	5.6	11.0	-6.2	8.1	5.3
June	851.6	17.9	6.4	1.0	0.2	52.4	52.2	0.7	76.3	4.8	6.9	-7.1	11.1	6.3
July	829.6	18.0	6.3	2.9	0.5	47.3	46.9	0.7	77.6	4.7	6.0	-9.8	1.9	7.3
August	786.2	17.0	5.6	1.8	13.0	51.9	38.9	0.4	80.1	4.8	5.9	-9.3	7.0	6.7
September	532.5	11.2	4.0	1.9	8.8	55.3	46.5	-1.7	76.6	4.9	5.7	-10.9	12.1	6.0
October	547.8	11.2	4.3	3.2	15.1	63.1	48.0	-0.9	75.4	5.2	5.1	-8.8	6.6	5.9
November	527.1	11.0	4.2	2.0	9.3	54.6	45.3	-0.8	74.6	5.4	5.0	-11.2	12.6	6.3
December	539.7	11.3	4.5	1.0	3.5	45.0	41.5	-0.9	73.8	5.7	4.7	-8.3	16.5	5.8
2013														
January	532.3	11.3	4.4	-2.1	10.5	55.7	45.3	-1.7	72.7	5.5	5.0	-40.3	22.6	5.3
February	514.6	11.2	4.3	-3.1	5.9	49.6	43.8	-2.1	74.0	5.5	5.2	4.3	23.8	5.8
March	505.3	11.4	4.6	-1.0	9.3	50.9	41.7	0.7	77.2	5.3	5.5	-6.1	16.5	4.6
April	479.9	11.2	4.2	0.0	3.6	51.5	47.9	0.6	81.0	4.9	5.8	-1.9	8.6	5.5
May	490.3	11.1	3.7	-1.0	-6.6	43.5	50.1	0.2	79.7	4.3	5.5	-7.6	5.2	6.5
June	486.3	11.0	4.1	0.0	1.1	44.5	43.5	-0.4	79.1	3.9	5.7	-6.6	6.4	6.9
July	474.6	11.0	3.9	1.4	4.5	53.8	49.3	0.3	79.3	3.9	5.5	-7.4	17.5	6.7
August	471.8	10.8	4.0	0.5	2.9	44.1	41.2	0.3	80.4	4.0	5.7	-6.2	16.4	6.8
September	478.2	10.7	4.0	-0.5	8.8	55.5	46.7	-0.1	79.2	3.8	5.9	-7.9	14.0	7.0
October	484.2	10.8	4.1	0.5	8.1	55.0	46.9	-0.9	78.1	3.9	6.0	-3.7	21.7	7.9
November	496.6	11.2	4.0	1.0	11.4	55.2	43.8	1.0	78.7	4.1	6.1	-6.8	22.1	7.8
December	487.4	11.3	4.0	5.3	4.4	45.7	41.2	0.1	81.1	4.2	6.0	-5.0	18.9	6.8
2014														
January	502.6	11.6	4.0	10.6	7.2	48.0	40.8	-1.3	82.5	4.5	6.7	-24.8	9.4	7.4
February	495.5	11.7	3.9	10.8	2.7	43.1	40.5	0.0	83.8	4.5	4.7	5.5	-0.5	8.7
March	468.2	10.9	3.7	2.8	-0.6	45.2	45.8	1.7	83.7	4.5	4.4	5.8	-4.1	11.1
April	468.3	10.9	…	0.5	…	…	…	…	…	…	…	…	…	…

8. Gross foreign exchange reserves at end of period as a ratio of the 12-month average of goods imports. Calculated at fixed exchange rates SDR. 9. The denominator is foreign short-term liabilities of credit institutions and investment banks and includes derivatives as of July 2007. 10. Foreign currency prices of marine products are calculated by dividing marine products prices in Icelandic krónur by the export-weighted trade basket. Annual figures are % changes between annual averages. 11. Real effective exchange rate of the Icelandic króna based on relative consumer prices (a trade-weighted average of 17 trading partner countries' consumer prices is used), 2000 = 100. Average over periods. 12. Cash basis. Without privatisation revenues. 13. OMXI6 index. 14. Residential housing in greater Reykjavík area (7 municipalities). Annual figures are % changes over year.

Sources: Statistics Iceland, Directorate of Labour, State Accounting Office, Nasdaq OMX Iceland, Registers Iceland, Central Bank of Iceland.

Table 2 Historical economic indicators

	Consumer prices [1]		Exchange rate			Interest rates (%)			Money and credit			Ratio of		
				Real exchange rate[3]			Banks' secured lending (real yield)		% change over year			FX reserves	Net ext.	Growth
	Consumer price index	CPI inflation (%)	Trade weighted exch. rate[2]	Relative CPI	Relative ULC	Indexed gov. bonds, yield[4]	Non-indexed	Indexed	M3	DMB lending	Credit system lending	to goods imports[5]	debt[6] GDP (%)	of real GDP (%)
1985	57.9	32.4	148.7	94.8	92.9	6.9	-2.3	5.0	47.6	29.7	35.2	2.8	63.6	3.3
1986	70.2	21.3	171.0	97.1	93.8	8.5	4.3	5.2	35.0	19.1	20.1	3.6	56.5	6.3
1987	83.4	18.8	177.3	106.0	120.4	8.7	4.7	7.7	35.2	42.1	31.4	2.4	49.4	8.5
1988	104.6	25.4	202.6	111.4	126.1	8.7	11.8	9.2	24.0	37.2	34.0	2.4	51.3	-0.1
1989	126.7	21.1	254.7	102.4	110.5	7.4	6.5	7.8	27.2	25.2	33.8	3.0	56.8	0.3
1990	145.5	14.8	283.7	99.1	99.6	7.0	9.3	8.0	14.9	11.0	12.5	3.3	43.8	1.2
1991	155.4	6.8	283.6	101.7	101.9	8.1	10.0	9.2	14.4	11.6	15.4	3.2	44.9	-0.2
1992	161.2	3.7	285.0	101.7	103.2	7.4	11.8	9.3	3.8	5.3	11.8	4.0	53.0	-3.4
1993	167.8	4.1	308.8	96.2	94.7	6.7	11.5	9.1	6.5	5.0	11.1	4.3	58.9	1.3
1994	170.3	1.5	324.8	91.0	83.2	5.0	9.5	7.9	2.3	-1.3	4.5	2.6	53.3	3.6
1995	173.2	1.7	322.3	91.1	88.6	5.6	10.1	8.7	2.2	-8.5	5.9	2.4	52.0	0.1
1996	177.1	2.3	322.9	91.3	88.5	5.5	10.5	8.9	6.8	11.5	9.3	3.0	49.8	4.8
1997	180.3	1.8	318.7	92.2	89.7	5.3	11.1	9.0	8.7	12.4	11.8	2.6	51.3	4.9
1998	183.3	1.7	313.6	93.8	93.7	4.7	11.8	8.8	15.1	30.0	15.1	2.2	57.4	6.3
1999	189.6	3.4	313.1	96.3	97.6	4.4	8.0	8.6	17.1	23.1	17.3	2.5	66.9	4.1
2000	199.1	5.0	313.3	100.0	100.0	5.1	12.7	9.5	11.2	50.1	17.2	2.1	93.8	4.3
2001	212.4	6.7	376.3	87.3	87.1	5.1	9.4	10.2	14.9	12.6	19.2	2.1	101.8	3.9
2002	222.5	4.8	365.2	91.7	90.2	5.2	13.7	10.1	15.3	2.7	3.2	2.5	89.3	0.1
2003	227.3	2.2	343.3	96.0	95.8	4.4	9.4	9.1	17.5	18.3	11.4	3.5	93.9	2.4
2004	234.6	3.2	336.3	98.1	92.3	3.9	8.3	8.0	15.0	39.0	19.9	3.6	112.3	7.8
2005	244.1	4.0	301.8	111.4	105.2	3.7	10.7	7.2	23.2	50.6	31.1	2.9	152.1	7.2
2006	260.6	6.8	337.2	104.2	103.0	4.6	10.9	7.1	19.6	41.5	31.0	4.8	193.1	4.7
2007	273.7	5.0	329.1	108.6	111.4	6.0	14.2	8.9	56.6	30.8	22.7	4.9	222.8	6.0
2008	307.7	12.4	462.1	85.5	84.7	4.6	7.9	10.1	32.1	-27.8	…	7.7	746.9	1.2
2009	344.6	12.0	622.3	70.0	61.6	4.4	4.2	8.0	-1.1	-15.5	…	13.8	769.0	-6.6
2010	363.2	5.4	604.0	74.4	69.9	3.4	4.9	6.4	-9.9	-0.2	…	18.9	669.7	-4.1
2011	377.7	4.0	598.1	75.2	72.3	2.2	3.7	6.1	8.7	-0.8	…	23.4	468.0	2.7
2012	397.3	5.2	600.1	75.8	73.3	2.2	3.0	5.8	-2.8	1.4	…	11.3	555.0	1.4
2013	412.7	3.9	607.5	75.9	70.7	…	4.3	5.3	2.7	2.3	…	11.3	468.0	3.3

1. Annual averages (May 1988=100) and changes between annual averages. 2. Annual averages. Exchange rate of the króna against trade-weighted average of foreign currencies. 1983=100. 3. 2000=100. ULC=unit labour costs. 4. Annual average yield of indexed Treasury bonds of all maturities. Yields on Iceland Stock Exchange (Nasdaq OMX Iceland) from 1987. Before that, primary market yields. 5. Gross foreign exchange reserves at end of period as a ratio of the average monthly value of goods imports in the last 12 months. Calculated at fixed exchange rate of SDR. 6. External debt ratio is based on end-of-period balance as a percentage of GDP at current exchange rate.

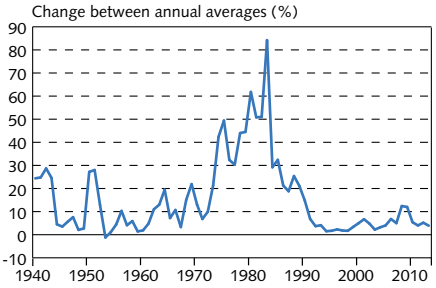
Table 2 (continued) Historical economic indicators

	Components of GDP (% change from previous year)			External trade (% change from previous year)							Labour market (% of labour force)		Wages (% change from previous year)	
				Goods & services (volume changes)				General government (% of GDP)[7]						
	Private consump-tion	Gross fixed cap. formation	National expendi-ture	Exports	Imports	Terms of trade	Curr. acc. balance (% of GDP)	Financial balance	Revenues	Expend-itures	Unem-ployment	Labour particip.[8]	Real wages[9]	Real disp. income
1985	4.2	1.0	2.7	11.1	9.4	-0.9	-3.8	-1.6	35.4	37.0	0.9	79.3	1.2	10.8
1986	6.9	-1.6	4.5	5.9	0.9	5.4	0.7	-4.0	35.4	39.4	0.7	80.9	5.7	9.5
1987	16.2	18.8	15.7	3.3	23.3	4.3	-3.3	-0.8	35.6	36.5	0.4	84.1	9.0	25.8
1988	-3.8	-0.2	-0.6	-3.6	-4.6	-0.8	-3.4	-2.0	39.5	41.5	0.6	80.1	2.2	-1.9
1989	-4.2	-7.9	-4.4	2.9	-10.3	-3.9	-1.3	-4.4	38.5	43.0	1.7	78.7	-9.1	-8.9
1990	0.5	3.0	1.5	0.0	1.0	0.3	-2.1	-3.3	38.1	41.4	1.8	77.5	-4.9	-3.9
1991	3.0	2.6	3.5	-5.9	5.3	3.5	-4.0	-2.9	39.8	42.7	1.5	81.0	1.4	3.1
1992	-3.2	-10.4	-4.6	-2.0	-6.0	-0.6	-2.4	-2.8	40.8	43.6	3.1	81.8	-0.8	-2.8
1993	-4.6	-9.8	-2.9	6.5	-7.5	-3.6	0.7	-4.5	39.0	43.4	4.4	81.1	-2.6	-2.0
1994	2.9	-0.2	1.8	9.3	3.8	0.3	1.9	-4.7	38.6	43.2	4.8	81.3	-0.3	2.5
1995	2.2	-1.7	2.2	-2.3	3.6	1.0	0.7	-3.0	39.6	42.5	5.0	82.9	2.8	2.7
1996	5.7	25.0	6.8	9.9	16.5	-3.1	-1.8	-1.6	40.5	42.0	4.4	81.6	4.0	4.2
1997	6.3	9.3	5.8	5.6	8.0	1.9	-1.8	0.0	40.5	40.5	3.9	81.0	3.6	7.3
1998	10.2	34.4	13.8	2.5	23.4	5.3	-6.8	-0.4	40.8	41.2	2.8	82.3	7.6	8.8
1999	7.9	-4.1	4.2	4.0	4.4	-0.7	-6.8	1.1	43.1	41.9	1.9	83.2	3.3	6.3
2000	4.2	11.8	5.9	4.2	8.6	-2.4	-10.2	1.7	43.5	41.8	1.3	83.5	1.6	8.2
2001	-2.8	-4.3	-2.1	7.4	-9.1	0.4	-4.3	-0.7	41.8	42.5	1.4	83.6	2.0	-3.0
2002	-1.5	-14.0	-2.3	3.8	-2.6	0.5	1.5	-2.6	41.6	44.1	2.5	82.8	2.3	5.0
2003	6.2	11.1	5.8	1.6	10.7	-4.0	-4.8	-2.8	42.7	45.5	3.4	82.1	3.4	3.8
2004	7.0	28.7	10.1	8.4	14.5	-1.2	-9.8	0.0	44.0	44.0	3.1	80.7	1.4	7.5
2005	12.7	34.4	15.4	7.5	29.3	1.0	-16.0	4.9	47.1	42.2	2.1	81.9	2.6	11.2
2006	3.6	24.4	9.9	-4.6	11.3	3.3	-24.3	6.3	48.0	41.6	1.2	83.1	2.6	8.4
2007	5.7	-12.2	-0.4	17.7	-1.5	0.1	-15.9	5.4	47.7	42.3	1.0	83.3	3.8	10.6
2008	-7.8	-20.4	-8.6	7.0	-18.4	-6.1	-24.6	-13.5	44.1	57.7	1.6	82.6	-3.8	0.3
2009	-14.9	-51.4	-20.4	7.0	-24.0	-9.8	-11.5	-9.9	41.0	51.0	8.0	80.9	-7.2	-17.5
2010	0.0	-9.4	-2.7	0.5	4.5	6.0	-8.0	-10.1	41.5	51.6	8.1	81.1	-0.6	-11.7
2011	2.6	14.3	4.1	3.8	6.7	-1.7	-6.2	-5.6	41.8	47.4	7.4	80.4	2.7	5.3
2012	2.7	5.0	1.9	3.8	4.7	-3.5	-4.9	-3.8	43.6	47.4	5.8	80.5	2.5	-0.6
2013	1.2	-3.4	0.1	5.3	-0.1	-2.4	3.9	-2.1	44.2	46.2	4.4	81.4	1.7	1.0

7. Central and local governments and the social security system. 8. Participation rate as per National Economic Institute definition until 1990, but based on Statistics Iceland labour market survey from 1991. 9. Statistics Iceland wage index. Deflated by consumer prices.

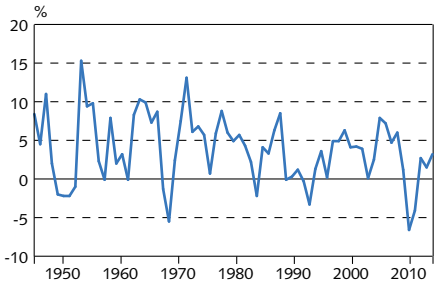
Sources: Directorate of Labour, Ministry of Finance and Economic Affairs, Statistics Iceland, Nasdaq OMX Iceland, Central Bank of Iceland.

Chart 1
Consumer price inflation 1940-2013
Yearly averages of CPI



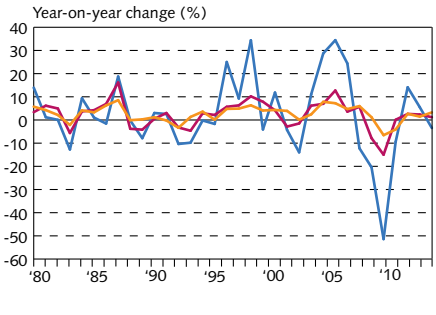
Source: Statistics Iceland.

Chart 2
Output growth 1945-2013[1]
Change in real GDP between years



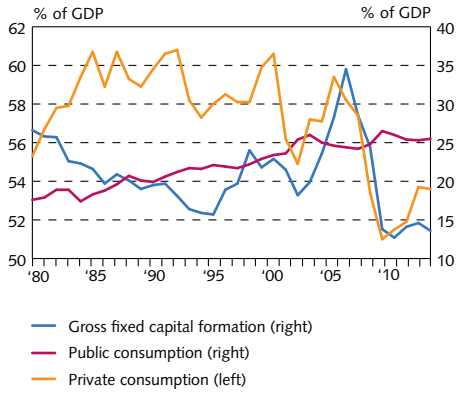
1. Preliminary 2013.
Source: Statistics Iceland.

Chart 3
Growth of GDP, private consumption, and gross fixed capital formation 1980-2013[1]



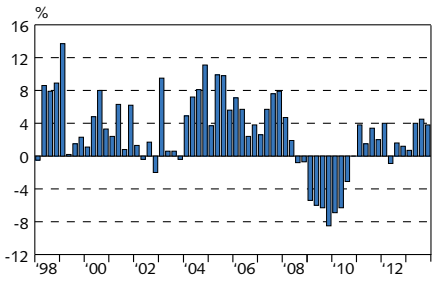
1. Preliminary 2013.
Source: Statistics Iceland.

Chart 4
Private consumption, public consumption, and gross fixed capital formation 1980-2013[1]



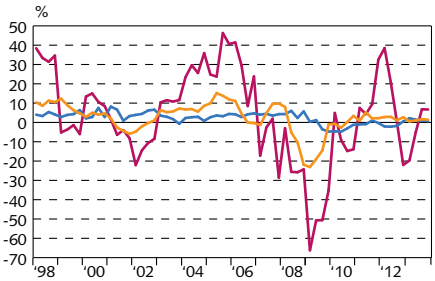
1. Preliminary 2013.
Source: Statistics Iceland.

Chart 5
Output growth Q1/1998 - Q4/2013[1]
Year-on-year change



1. Latest data are preliminary.
Source: Statistics Iceland.

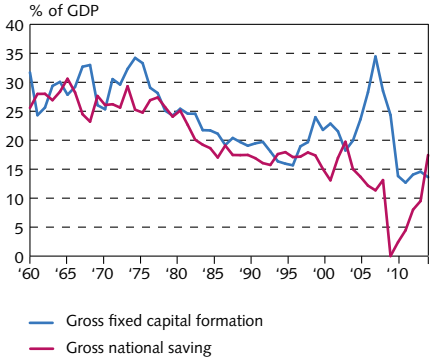
Chart 6
Components of economic growth Q1/1998 - Q4/2013[1]
Year-on-year change



1. Latest data are preliminary.
Source: Statistics Iceland.

Chart 7

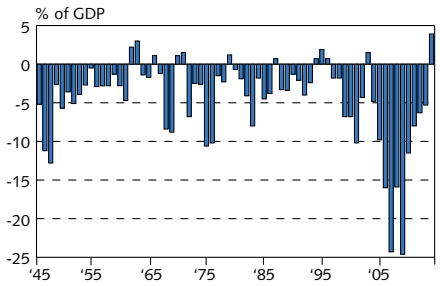
Gross national saving and fixed capital formation 1960-2013[1]



1. Preliminary 2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 8

Current account balance 1945-2013[1]

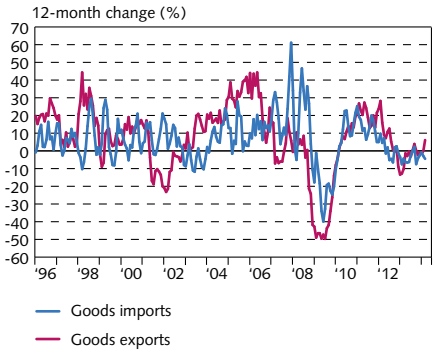


1. Preliminary 2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 9

Goods trade January 1996 - March 2014

3-month moving averages at constant exchange rates

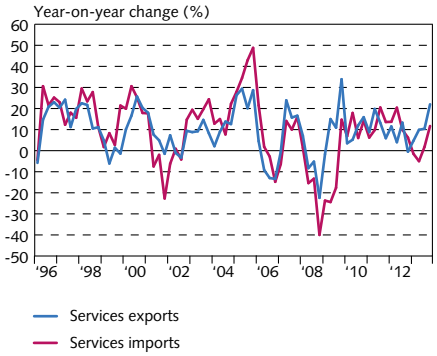


Source: Statistics Iceland.

Chart 10

Exports and imports of services Q1/1996- Q4/2013[1]

At constant exchange rates

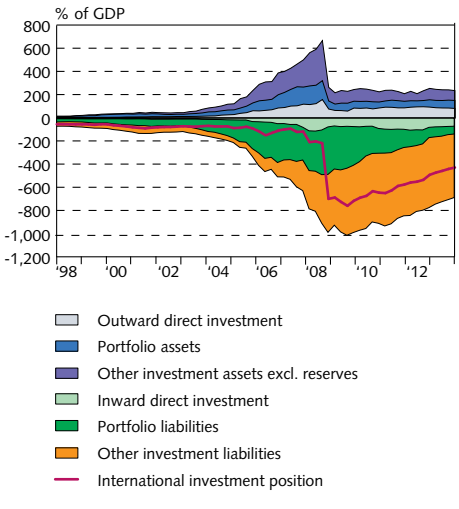


1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 11

External debt and assets Q1/1998 - Q4/2013[1]

At current prices

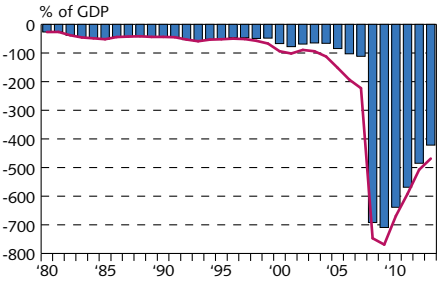


1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 12

Net external debt position 1980-2013[1]

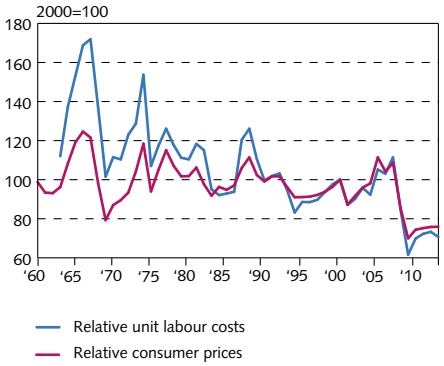
At year-end



1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 13

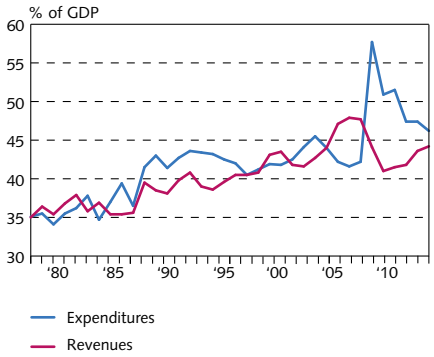
Real effective exchange rate of the Icelandic króna 1960-2013[1]



1. Preliminary 2013.
Source: Central Bank of Iceland.

Chart 14

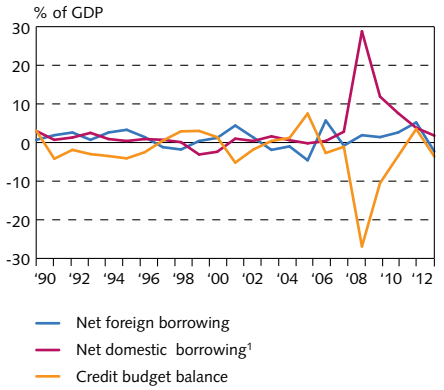
General government revenues and expenditures 1978-2013



Source: Statistics Iceland.

Chart 15

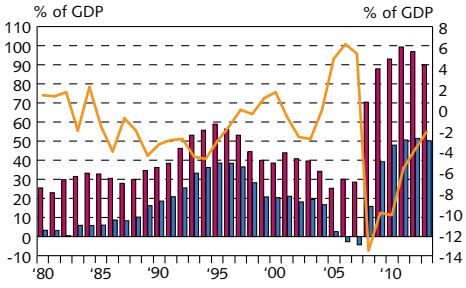
Treasury borrowing and credit budget balance 1990-2012



1. Including increase in pension fund commitments and outstanding long-term interest. State Accounting Office's preliminary calculations for 2012.
Sources: State Accounting Office, Statistics Ieland, Treasury accounts.

Chart 16

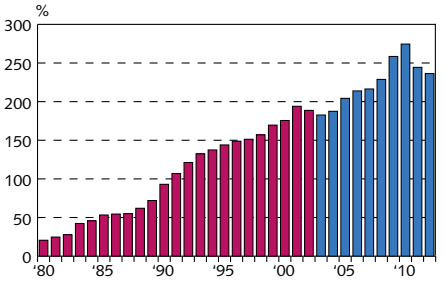
General government balance and debt 1980-2013



1. Debt excludes civil service pension liabilities. Assets include cash position but exclude equity holdings.
Sources: Statistics Iceland, Treasury accounts.

Chart 17

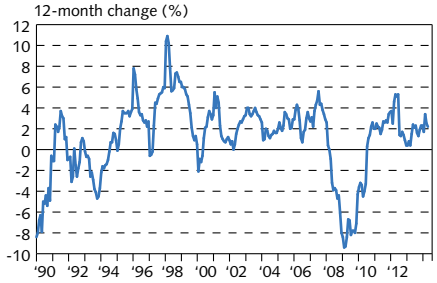
Household debt as percentage of disposable income 1980-2012[1]



1. New classification from 2003 (blue columns). Estimate for 2012.
Sources: Statistics Iceland, Central Bank of Iceland.

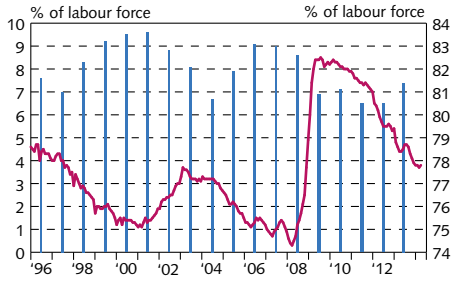
Chart 18

Real wages January 1990 - March 2014



Source: Statistics Iceland.

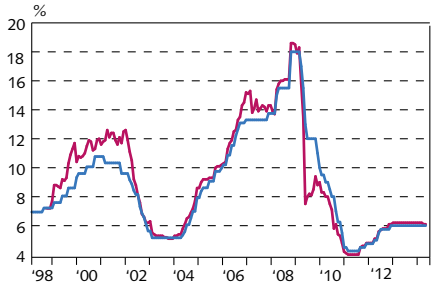
Chart 19
Unemployment and labour participation
January 1996 - March 2014



Participation[1] (right)
Unemployment, seasonally adjusted (left)

1. Statistics Iceland labour market survey 1996-2013.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

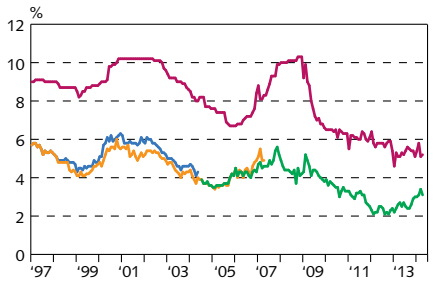
Chart 20
Short-term interest rates
March 1998 - April 2014
At month-end



CB 7-day collateralised lending rate
3-month REIBOR on the interbank market

Source: Central Bank of Iceland.

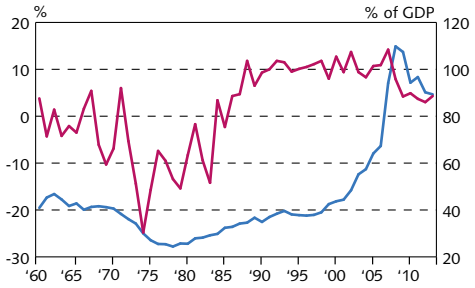
Chart 21
Long-term interest rates
January 1997 - April 2014
At end of month



25-year housing bonds
Indexed bank loans
15-year Treasury bonds
30-year HFF bonds (HFF150434)

Source: Central Bank of Iceland.

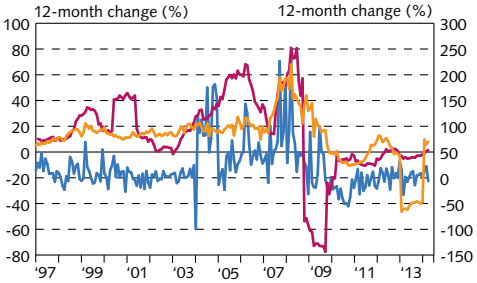
Chart 22
Real yield and broad money 1960-2013[1]
Real yield on non-indexed bank loans
and M3 as percent of GDP



M3 (right)
Real yield (left)

1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

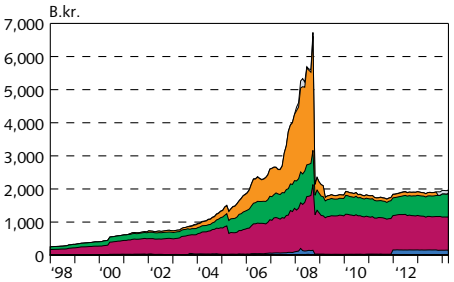
Chart 23
M3, DMB lending, and base money
January 1997 - March 2014[1]



Base money (right)
DMB lending (left)
M3 (left)

1. Latest data are preliminary.
Source: Central Bank of Iceland.

Chart 24
Deposit money bank lending by sector
January 1998 - March 2014[1]



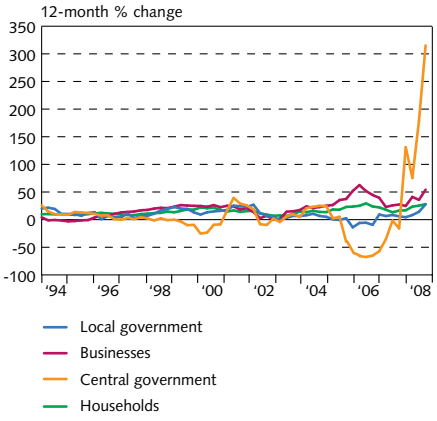
Treasury and government institutions
Non-bank credit institutions
Businesses
Households
Non-residents
Other

1. Reclassification of lending in September 2003 based on the ÍSAT-95 standard led to a reduction in household debt figures and an increase in business and municipalities' debt figures. Latest figures are preliminary.
Source: Central Bank of Iceland.

Chart 25

Growth of credit system lending Q1/1994-Q3/2008

Lending by sectors[1]

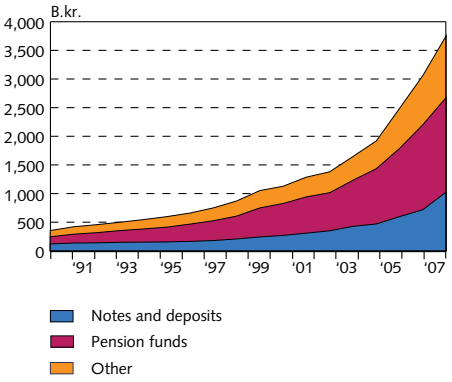


1. Reclassification of lending in September 2003 based on the ÍSAT-95 standard led to a reduction in household debt figures and an increase in businesses' and municipalities' debt figures. Latest figures are preliminary.
Source: Central Bank of Iceland.

Chart 26

Credit system liabilities at year-end 1990-2007

Balance at year-end at current prices

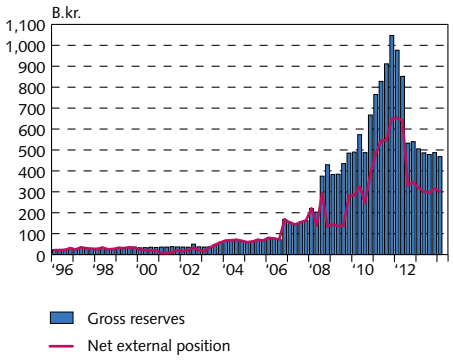


Source: Central Bank of Iceland.

Chart 27

Reserve assets and Central Bank net external positon, Q1/1996 - Q1/2014[1]

At current exchange rates



1. Latest data are preliminary.
Source: Central Bank of Iceland.

Boxes and appendices