MONETARY BULLETIN

2013•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. 61-63 of this edition of *Monetary Bulletin*.

Published by:
The Central Bank of Iceland, Kalkofnsvegur 1, 150 Reykjavík, Iceland
Tel: (+354) 569 9600, fax: (+354) 569 9605
E-mail: sedlabanki@sedlabanki.is
Website: www.sedlabanki.is

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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 15 May 2013

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

In line with weaker output growth globally, output growth has slowed down in Iceland and terms of trade have deteriorated. In 2013 and throughout the forecast horizon, the outlook is for output growth to be somewhat weaker than the Bank projected in February, albeit close to the 30-year average. The recovery in the labour market continues, with increasing employment and declining unemployment. Inflation has tapered off, in line with the Bank's forecasts, and now measures 3.3%. Measures of underlying inflation and inflation expectations are higher, however. Nonetheless, inflation is expected to reach the inflation target earlier than previously anticipated, with weaker output growth and a stronger króna offsetting larger wage increases and weaker productivity growth.

Inflation is now closer to target than it has been since it began rising in the wake of the spring 2011 wage settlements. Uncertainty about near-term exchange rate developments could contribute to more persistent inflation expectations, however, and slow down the disinflation process following this year's appreciation of the króna. Foreign exchange mismatches in financial institutions' balance sheets have been reduced recently, and the exchange rate of the króna has been close to a level that, other things being equal, could be considered sufficient to bring inflation back to target in the near term. The MPC is of the opinion that these conditions create the premises for increased Central Bank activity in the foreign exchange market in the near future, with the aim of reducing exchange rate fluctuation vis-à-vis recent levels of the exchange rate. This is in line with prior MPC statements emphasising the importance of using all of the monetary policy instruments at its disposal to promote price stability.

As circumstances permit, the Bank will attempt to increase its non-borrowed reserves. Increasing the non-borrowed reserves is a long-term goal, however, and the implementation of that aim depends on both the strength of the króna and movements in the exchange rate, which are determined in part by capital movements that vary in their predictability. The Bank's foreign exchange purchases will therefore take into account the strong tendency among other agents for foreign debt deleveraging, particularly while inflation remains above target. In line with this policy, the foreign currency that would be purchased to respond to temporary – in some instances, seasonal – inflows would then be used to support the króna when the currency flows reverse.

The MPC expects this policy to facilitate speedier adjustment of the domestic price level to a stronger króna and to reduce inflation

expectations. In that case, the inflation target could conceivably be reached earlier than is forecast, although this depends on other factors as well. If there are major changes in external conditions or if other aspects of economic policy undermine economic stability, the foreign exchange market intervention policy will be reviewed. Particular attention will be given to fiscal policy and to whether wage settlements and wage developments are consistent with the inflation target. Before decisive steps are taken to lift controls on capital outflows, it will be necessary to re-evaluate this policy. The same applies if decisions are taken concerning the monetary policy framework.

Although the economic recovery has lost some pace for the present, the margin of spare capacity in the economy has continued to narrow. The accommodative monetary stance has supported the economic recovery in the recent term. It is still the case that as spare capacity disappears from the economy, it is necessary that slack in monetary policy should disappear as well. The degree to which such normalisation takes place through higher nominal Central Bank rates will depend on future inflation developments, which in turn will depend on wage developments and exchange rate movements. In addition, monetary policy must at all times take account of fiscal policy and other factors that affect demand.

Economic recovery continues despite poorer GDP growth outlook

The króna has appreciated markedly in the recent term, in spite of further deterioration in terms of trade. The global economy has been weaker than previously forecast, and global output growth has deteriorated. Uncertainty has receded, however, as have fears of a new recession. Among Iceland's main trading partners, a modest recovery is expected to take hold later this year. Although domestic demand has developed in line with the forecast in the February Monetary Bulletin, *output growth has been somewhat weaker. Domestic output growth is expected to be weaker this year than was forecast in February, or 1.8% as opposed to 2.1%. The downward revision is due primarily to the poorer outlook for business investment, which is based on new information about domestic firms' investment plans for the year. Although the output growth outlook for 2014 and 2015 is also weaker than in February, growth is still expected to measure about 3-3½% per year. If the forecast materialises, output growth will average 2.8% per year in 2013-2015, which is well in line with the 30-year average and one of the highest among developed countries. Therefore, the domestic economic recovery is still advancing, albeit more slowly than previously hoped. The most recent indicators imply a continued recovery in the labour market as well. The number of working persons continued to rise in Q1, and average hours worked appear to have stopped falling. Total hours worked rose somewhat more than was forecast in February. Seasonally adjusted unemployment has fallen to 4.6%. The recent drop in unemployment and rise in the employment rate have exceeded the OECD average. The jobless rate is expected to have fallen to 4% by the end of the forecast horizon in mid-2016, broadly in line with the February forecast. In keeping with Central Bank projections, inflation has fallen relatively quickly in the recent term, measuring 3.3% in April. Core inflation and other measures of domestic inflation have fallen more slowly, however. This, together with long-term inflation expectations above target, indicates the continued presence of inflationary pressures. Because of the higher exchange rate and weaker economic activity, the inflation outlook has improved somewhat since February; however, wage growth has been stronger than previously anticipated, and productivity growth is now expected to be weaker over the forecast horizon, giving rise to a more pronounced increase in unit labour costs. As before, there is some uncertainty about the exchange rate and inflation outlook and the strength and durability of the domestic economic recovery, particularly in view of the uncertain global situation.*

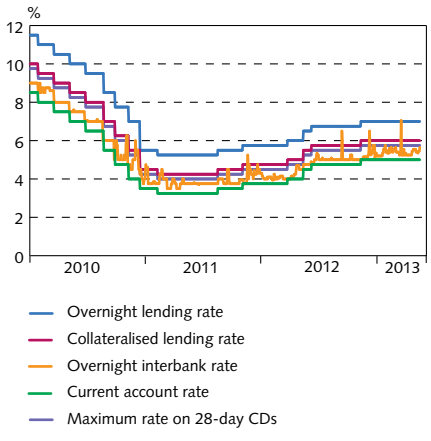
I Economic outlook and key uncertainties

Highlights of the Central Bank's baseline forecast

Central Bank interest rates unchanged since November 2012 …

The Central Bank of Iceland Monetary Policy Committee (MPC) has held the Bank's interest rates unchanged since raising them by 0.25 percentage points last November. 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 the rates on its deposit facilities, or 5.4% according to the simple average of the interest rates on financial institutions' deposit accounts with the Central Bank and the maximum rate on 28-day certificates of deposit. The Bank's effective policy rate has risen by about 1.75 percentage points from the trough in August

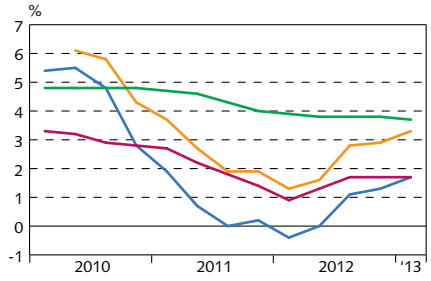
Chart I-1
Central Bank interest rates and short-term interbank rates
Daily data 1 January 2012 - 10 May 2013



Source: Central Bank of Iceland.

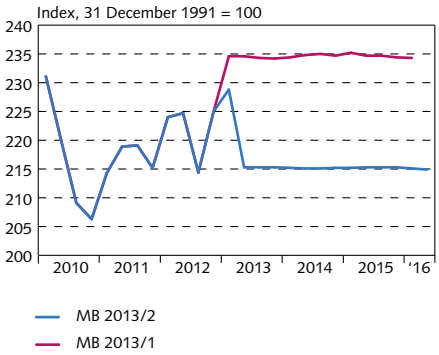
1. The analysis presented in this *Monetary Bulletin* is based on data available in mid-May.

Chart I-2
Real Central Bank interest rates and real market rates



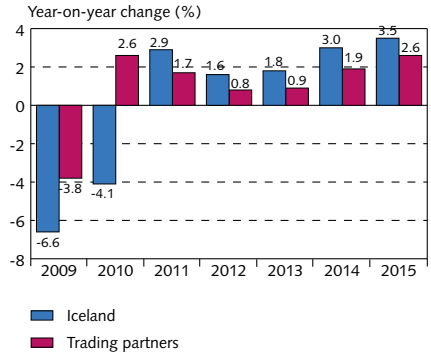
1. Real interest rates based on 5-year inflation expectations from the bond market. 2. Based on yield curve of indexed Treasury bonds and HFF bonds.
Source: Central Bank of Iceland.

Chart I-3
Trade-weighted exchange rate index of the króna - comparison with MB 2013/1



Source: Central Bank of Iceland.

Chart I-4
GDP growth in Iceland and its main trading partners



Sources: Statistics Iceland, Central Bank of Iceland.

2011 and by about 1 percentage point in the past year. Short-term interbank rates have developed broadly in line with Central Bank rates, with the overnight rate at 5.25% just before the publication of this *Monetary Bulletin*. Unlike the policy rates in most other industrialised countries, the Central Bank of Iceland's nominal interest rates have been rising since August 2011, due to more adverse developments in inflation and greater persistence of inflation expectations above the target in Iceland (see Box I-1).

... but the monetary stance has continued to tighten

Even though nominal Central Bank rates have remained unchanged since the February *Monetary Bulletin*, the real rate has risen by most measures. It is now about 2% in terms of current inflation and about 1½% in terms of the average of various measures of inflation and inflation expectations. It has risen by roughly ½ a percentage point since February and about 2.8 percentage points in the past year. In general, long-term real market rates have followed suit, after having declined in line with Central Bank rates earlier on. Most likely, though, the Bank's real rate is still somewhat below the level that is consistent in the long run with full factor utilisation, and it should therefore continue to support the economic recovery. At the same time, net private sector wealth has continued to grow. Interest rate developments and private sector financial conditions are discussed in greater detail in Section III.

The króna has appreciated strongly year-to-date

After a weak phase, the króna began to rally in February, partly in response to Central Bank intervention in the foreign exchange market, which appears to have been successful, at least temporarily, in putting a dent in market expectations of a continued depreciation until the spring. The exchange rate has continued to rise even though the Bank has not intervened in the market since early March. Just before the publication of this *Monetary Bulletin*, the trade-weighted exchange rate index (TWI) was about 211 points, 10.2% stronger than in February. Over the same period, the króna strengthened by roughly 11% against the euro, from almost 172 kr. per euro to around 155. Although foreseeable foreign exchange inflows during the peak of the summer tourist season could boost the exchange rate still further, domestic firms and other parties with little or no access to foreign credit markets continue to need to accumulate foreign currency to meet heavy foreign debt payments. These parties and others with the margin needed may have considered the summer a good time to buy currency, given recent intra-year exchange rate movements. This, together with the recent appreciation, could cut into the strength of the króna during the summer. The same can be said of poorer terms of trade. Further ahead, wage negotiations, the settlement of the failed banks' estates, and steps taken towards capital account liberalisation could affect exchange rate developments. This uncertainty could affect current exchange rate expectations and, in part, explain the persistently high inflation expectations in spite of the recent appreciation of the króna.

In trade-weighted terms, the króna proved to be 2.5% stronger in Q1 than was anticipated in February. As before, the Bank's baseline

forecast is based on the technical assumption that the exchange rate will remain broadly unchanged in trade-weighted terms from the time the forecast is prepared until the end of the forecast horizon. Consequently, it is assumed that the TWI will remain around 215 throughout the horizon, about 9% stronger than was projected in February and roughly 6½% stronger than in the May 2012 forecast. As is discussed later in this section, this assumption could change significantly between forecasts, and the current assumption is relatively high in comparison with previous Central Bank forecasts. As a result, it is subject to considerable uncertainty. Further discussion of developments in the exchange rate and the foreign exchange market can be found in Sections II and III.

Outlook for terms of trade has worsened since February but has improved for exports, owing to a surge in services exports

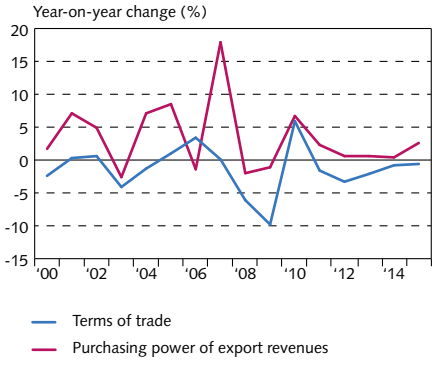
The global economic recovery has lost pace somewhat since the publication of the last *Monetary Bulletin*. Uncertainty has abated, however, due to government stimulus measures in leading industrialised countries, which have played a role in improving market sentiment (see further discussion later in this section). Global output growth is expected to gain some momentum as the year progresses, although the economic recovery is still projected to be relatively weak. In Iceland's main trading partner countries, output growth is expected to measure just under 1% this year and 2-2½% per year in 2014 and 2015.

Even though the outlook is for lower oil and commodity prices in the near term than was forecast in February, the outlook for terms of trade has continued to deteriorate. Marine product prices have fallen somewhat, and further declines are expected in the next two years, in line with trends in global oil and commodity prices and the slow pace of growth in Iceland's main market areas. By the same token, aluminium prices are considerably less favourable than was forecast in February. Offsetting poorer terms of trade is the prospect of stronger growth in total exports for the majority of the forecast horizon, which is due to increased services exports, as the outlook for goods imports has deteriorated. Goods and services exports combined are projected to grow by almost 3% this year and over 2% per year, on average, for the following two years. Despite the deterioration in terms of trade, the purchasing power of export revenue in terms of import prices is expected to improve throughout the forecast horizon. Because of the improved export outlook and slower import growth in line with weaker economic activity domestically, the contribution of net trade to output growth will be somewhat more favourable in 2013-2015 than was forecast in February. Further discussion of the global economy, exports, and external conditions can be found in Section II.

Trade surplus expected to be smaller than in the February forecast

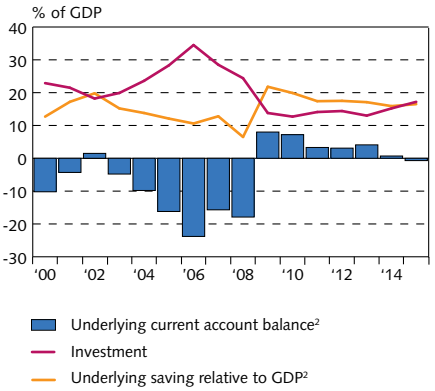
The trade surplus is expected to be just under 7% of GDP this year, slightly less than was forecast in February, due to the offsetting effects of poorer terms of trade and a more positive contribution from net trade to output growth. The surplus is projected to shrink in the fol-

Chart I-5
Terms of trade and purchasing power of export revenues[1]



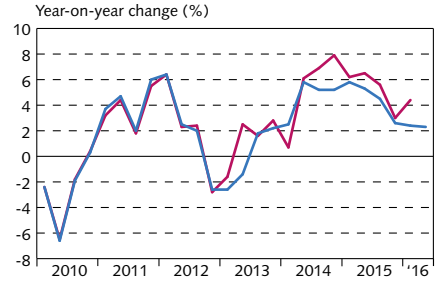
1. Terms of trade are the relative price of goods and services imports and exports. The purchasing power of export revenues is defined as goods and services exports deflated by goods and services import prices. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-6
Current account balance 2000-2015[1]



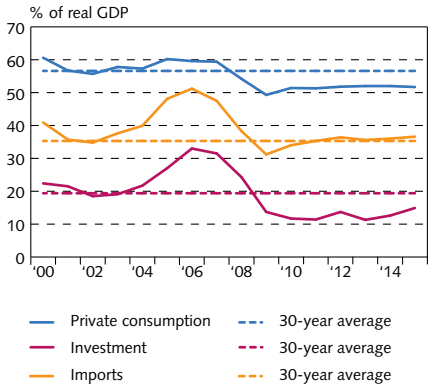
1. Central Bank baseline forecast 2013-2015. 2. Adjusted for the calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates, and for Actavis.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-7
Domestic demand – comparison with MB 2013/1



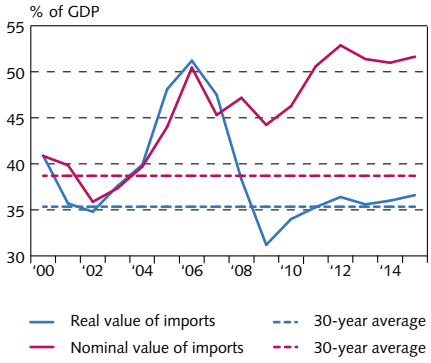
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-8
Private consumption, investment, and imports relative to GDP



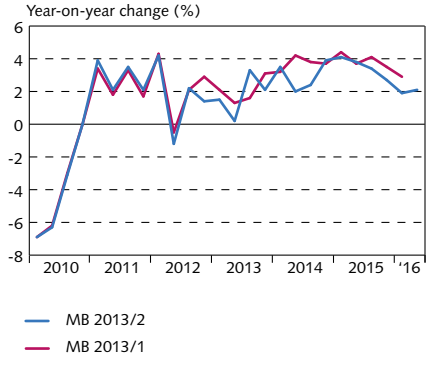
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-9
Imports relative to GDP



Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-10
GDP growth – comparison with MB 2013/1



Sources: Statistics Iceland, Central Bank of Iceland.

lowing two years, primarily because of poorer terms of trade. It is forecast at 4½% of GDP in 2014 and just under 3½% in 2015.

The current account balance as calculated according to official standards is projected to show a deficit amounting to 1½% of GDP this year. However, the underlying current account balance (which adjusts for the calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates and for Actavis) is expected to be positive by over 4%. The underlying current account surplus is forecast to diminish somewhat over the forecast horizon, however, reflecting the fact that saving will not keep pace with growth in domestic investment. It is forecast to measure just under 1% of GDP in 2014 and turn slightly negative in 2015, which is somewhat less favourable than in the February forecast. The external balance is discussed further in Section VII.

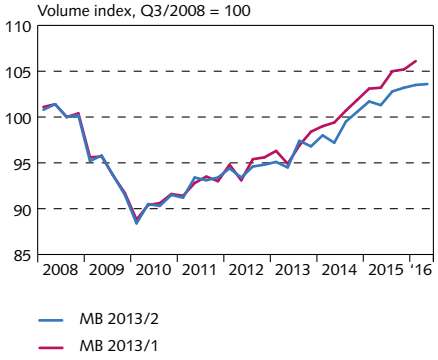
Poorer outlook for domestic demand growth during the forecast horizon

Private consumption growth turned out virtually identical to the February forecast, or 2.7%. Stronger than expected growth in Q4/2012 offset the weaker growth of previous quarters as reflected in revised Statistics Iceland figures. Municipal public consumption expenditure was considerably more than previously indicated. Business investment growth was weaker in Q4, however.[2] Total investment was weaker in 2012 than was forecast in February, owing to slower growth in residential investment. All in all, domestic demand grew by 1.9% last year, broadly in line with the February forecast of 2%, but is expected to grow considerably more slowly in 2013 than previously forecast. It is now expected to remain virtually unchanged, whereas the February forecast provided for 1.3% growth. Leading indicators suggest that private consumption was weak in Q1, and despite stronger growth in real disposable income in 2012 and 2013, it is projected to grow by 2.2% this year, about 0.3 percentage points below the February forecast. The slower growth in domestic demand in 2013 is due primarily to the changed outlook for investment growth. Business investment is projected to contract by 23% year-on-year instead of the 11½% provided for in the February forecast, and total investment is expected to contract by 9% instead of the previously anticipated 1%. These figures are based in part on new information from the Central Bank's survey of domestic companies' investment plans. Most likely, the survey results and other indicators reflect the high debt levels among Icelandic firms, which are concentrating more on repairing their balance sheets than on undertaking new investment. Uncertainty about the durability of the economic recovery and the presence of sufficient capacity to meet increased demand could also play a role. Moreover, investment in energy-intensive industry is less than previously anticipated. Such investment requires a long preparation and development phase and depends a large degree on external conditions as regards demand and financing.

2. Based on previous experience of the revision of investment figures, it can be expected that Q4 will be adjusted upwards when Statistics Iceland next publishes the year-2012 national accounts.

Domestic demand is expected to grow by about 4½% per year in 2014 and 2015. The outlook has worsened since February, when the forecast provided for almost a percentage point stronger growth in each of the two years. The poorer outlook is due to slower growth in private consumption and investment. The share of private consumption and investment will remain somewhat below the historical average at the end of the forecast horizon, as can be seen in Chart I-8, but to a degree, that average may be too high to use as a reference for individual categories of national expenditure, as it is coloured by a persistent current account deficit, which is not possible under current conditions. The share of import expenditure in GDP will be broadly in line with the 30-year average; however, as Chart I-9 shows, this only applies to real expenditures as a share of real GDP. In nominal terms, import expenditure as a share of GDP is well above the historical average, as relative import prices have risen sharply in the wake of the depreciation of the króna. The share of net trade in GDP is also expected to rise gradually, as external trade increases. Further discussion of private and public sector demand can be found in Sections IV and V.

Chart I-11
Seasonally adjusted GDP – comparison with MB 2013/1[1]



1. Seasonally adjusted Central Bank data.
Sources: Statistics Iceland, Central Bank of Iceland.

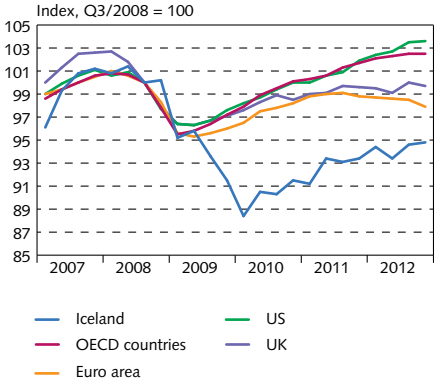
Output growth in 2013 and 2014 weaker than forecast in February

According to preliminary figures from Statistics Iceland, output growth measured 1.6% in 2012, about 0.6 percentage points less than in the February forecast, due primarily to stronger import growth than previously anticipated. In the latter half of the year, growth measured 1.8% year-on-year, while the February forecast had assumed 2.5%. Seasonally adjusted GDP is now estimated to have grown in Q1 by 0.3% quarter-on-quarter and 1.5% year-on-year.[3] It is forecast to be even weaker in Q2 and then gain pace in the second half of the year, measuring 1.8% for the year as a whole, as opposed to 2.1% in the February forecast. The poorer outlook is attributable primarily to much weaker investment than was forecast in February, in line with the results of a recent survey on domestic firms' investment plans for 2013, as has been mentioned previously. Offsetting the slowdown in domestic demand growth, however, is a somewhat more positive contribution from net trade to output growth than in the February forecast.

GDP growth outlook for 2014 and 2015 weaker as well

The GDP growth outlook for the next two years is also weaker than in February. The current forecast estimates year-2014 growth at 3%, as opposed to 3.7% in the February forecast. The forecast for 2015 has been revised as well, to 3.5% from the previous 3.9%. The weaker outlook is due mainly to slower growth in domestic demand, which in turn is attributable largely to weaker investment growth for the majority of the forecast horizon. If the forecast materialises, output growth will average 2.8% per year over the 2013-2015 period, as opposed

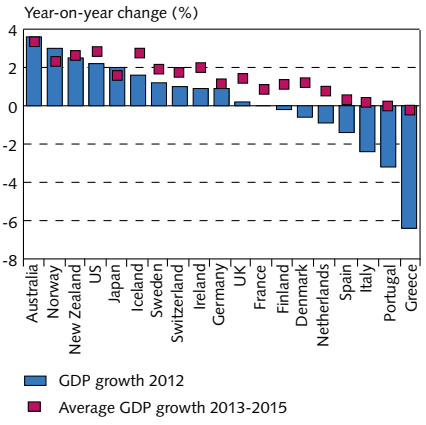
Chart I-12
Post-crisis developments in GDP[1]



1. Seasonally adjusted data for Iceland are from the Central Bank of Iceland.
Sources: OECD, Central Bank of Iceland.

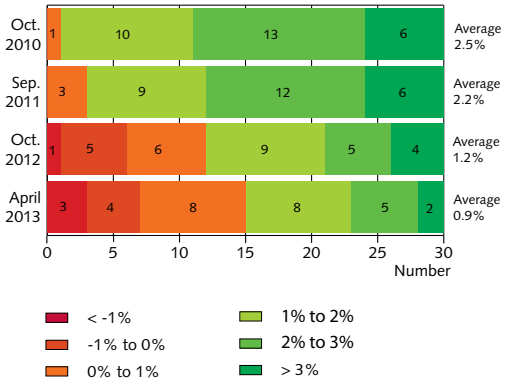
3. This refers to seasonally adjusted figures based on Central Bank estimates. As is discussed in Box IV-1 in *Monetary Bulletin* 2012/4, Statistics Iceland's method for seasonal adjustment does not appear suitable for interpreting intra-year economic developments; therefore, the Central Bank chooses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

Chart I-13
Developments in GDP growth in industrialised countries[1]



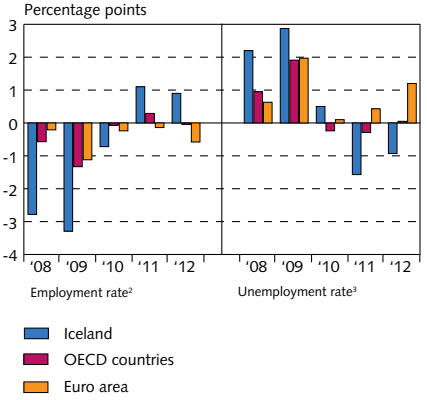
1. Baseline forecast from MB 2013/2 for Iceland and IMF forecast for the other countries.
Sources: IMF, Statistics Iceland, Central Bank of Iceland.

Chart I-14
IMF forecast of average GDP growth in 30 developed countries, 2012-14



Source: IMF.

Chart I-15
Post-crisis labour market developments[1]



1. Year-on-year change in Q4 of each year. 2. Number of employed persons as a share of the population aged 15-64 (seasonally adjusted). 3. Number of unemployed as a share of the labour market (internationally standardised measure, seasonally adjusted).
Source: OECD.

to 3.2% in the February forecast. This is well in line with the 30-year average of 2.5%. Although domestic demand is expected to grow somewhat more slowly than was forecast in February, it will nonetheless be the main driver of output growth during the forecast horizon.

GDP will be about 2½% less at the end of the forecast horizon than was assumed in February

Preliminary figures from Statistics Iceland indicate weaker output growth in 2012 than was forecast in February, and GDP measured almost 1% less at the end of the year than previously assumed. If the Bank's forecast materialises, GDP will be about 9% more in mid-2016, the end of the forecast horizon, than it is estimated to have been in Q1/2013, and about 2½% below the level forecast in February. According to seasonally adjusted Central Bank figures, GDP has grown by about 7½% since bottoming out in Q1/2010. It is nonetheless about 5% below the level at the onset of the crisis in autumn 2008.[4]

Iceland's output growth outlook compares reasonably well with other developed countries

As Chart I-12 shows, Iceland's post-crisis contraction was deeper than the OECD average, which 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 findings indicate that the economic contraction following a twin banking and currency crisis is, on average, up to three times deeper than that following a conventional banking crisis and that a twin crisis lasts an average of twice as long (see, for example, Section IV of the present report and Box I-2 in *Monetary Bulletin* 2012/4). Chart I-12 shows, however, that from the trough in the first half of 2010, GDP growth in Iceland has been virtually on a par with that in the US. Furthermore, it has kept pace with other OECD countries and has been considerably stronger than in the UK and the euro area. This can be seen in Chart I-13, which illustrates year-2012 output growth in several developed countries and the outlook for 2013-2015. Even though growth was weaker than forecast in Iceland in 2012 and 2013, it was among the strongest in developed countries and appears likely to remain so in coming years. As is shown in Charts I-4 and I-14, trading partner output growth has slowed down and the outlook in developed countries has repeatedly been below expectations (see also Section II), and this plays a role in the poorer outlook for Iceland (see also Chart I-22). Further discussion of Iceland's GDP growth and outlook can be found in Section IV.

Labour market to continue recovering

Unemployment continued to fall in the first quarter of the year. Registered seasonally adjusted unemployment measured 4.6%, while

4. GDP will be weaker, however, than it would have been had it grown in line with long-term trend growth before the crisis. In that sense, a portion of GDP has been lost permanently in the financial crisis. In this context, however, it must be borne in mind that potential output had risen far above sustainable levels during the pre-crisis boom. As such, a portion of the loss reflects an inevitable adjustment to pre-crisis overheating. For further discussion, see Box IV-1 in *Monetary Bulletin* 2011/4.

the Statistics Iceland labour market survey indicated a jobless rate of 5.3%. Unemployment has therefore fallen by 1½ percentage points since the same period a year ago. Registered unemployment has fallen by nearly 4 percentage points from the post-crisis peak, while the survey-based rate has fallen by 2½ points. As Chart I-15 indicates, the turnaround in the Icelandic labour market has been stronger than the average among OECD countries, in terms of either the increase in the employment rate or the reduction in unemployment.

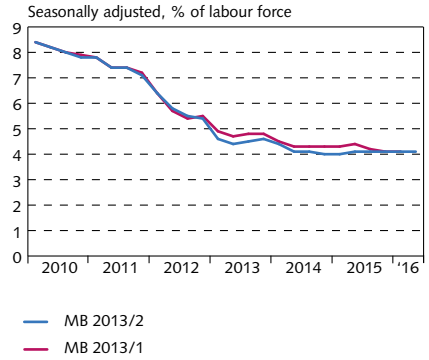
According to the most recent Statistics Iceland labour market survey results, the number of employed persons rose 2.7% year-on-year in Q1. This was the fifth consecutive quarter to see a year-on-year increase. Average hours worked contracted by a scant 0.2% from the previous year, and it appears that the downturn since early 2012 is reversing. Total hours worked therefore increased by 2.5% year-on-year and have risen by over 5% from the trough in Q3/2010. Capacent Gallup's recent corporate survey indicates that firms planning to recruit workers in the next six months outnumbered those planning redundancies by over 9%. The decline in the number of long-term unemployed and recent net migration figures are further signs of continuing labour market recovery.

In spite of the signs of continuing recovery in the labour market, total hours worked are expected to increase more slowly over the 2013-2015 period than was forecast in February, owing to the poorer GDP growth outlook. The unemployment outlook is broadly unchanged, however, with the jobless rate projected at 4.6% in Q4/2013 and about 4% at the end of the forecast horizon in mid-2016. The slower growth in total hours worked is not sufficient to offset the poorer output growth outlook, however. As a result, productivity growth is expected to be weaker during the forecast horizon than was projected in February. Unit labour costs will therefore rise by an average of just over 3½% per year, outpacing the February forecast. This is in addition to Statistics Iceland's revision of recent developments in wage costs. New figures imply that wages have risen somewhat more in the past three years than previous figures had indicated. Further discussion of the labour market can be found in Section VI.

Output slack estimate broadly unchanged despite weaker output growth during the forecast horizon

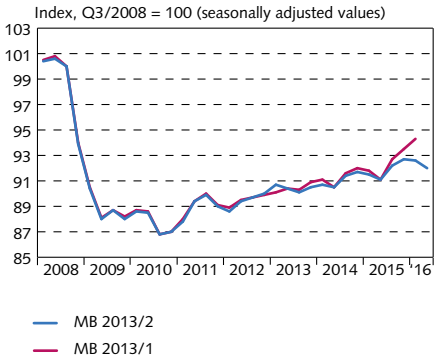
According to Statistics Iceland's output growth figures and the Central Bank's assessment of growth in potential output, the margin of spare capacity in the economy measured 1.3% in Q1, as was forecast in the February *Monetary Bulletin*. The estimate of spare capacity for 2013 as a whole is also virtually unchanged since February. A small slack is now expected to remain at the end of 2014, whereas the February forecast assumed that it would have disappeared by then. The current forecast assumes that, although growth in potential output is recovering gradually after the financial crisis, it will be below long-term trend growth for the majority of the forecast horizon. Further discussion of potential output and output slack can be found in Section IV.

Chart I-16
Unemployment – comparison with MB 2013/1



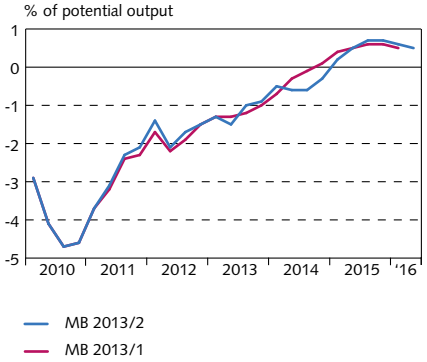
Sources: Directorate of Labour, Central Bank of Iceland.

Chart I-17
Total hours worked –
comparison with MB 2013/1



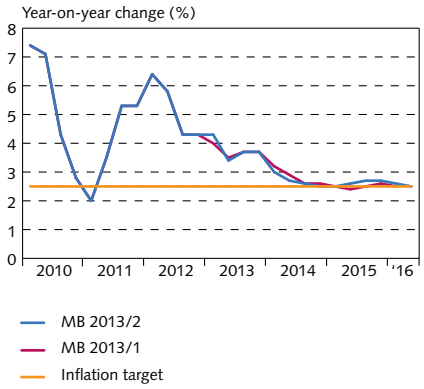
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-18
Output gap – comparison with MB 2013/1



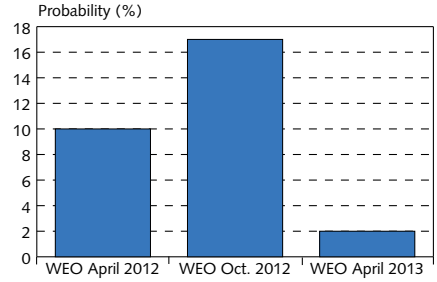
Source: Central Bank of Iceland.

Chart I-19
Inflation – comparison with MB 2013/1



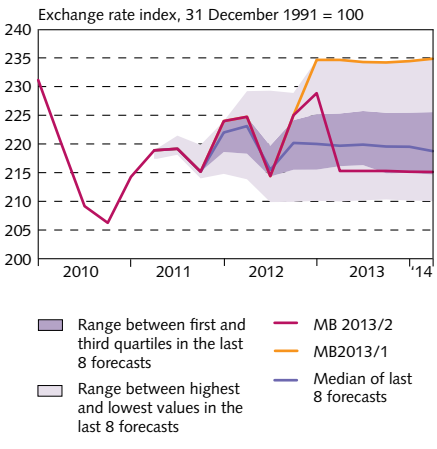
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-20
Probability of economic contraction in 2013 according to IMF forecasts[1]



1. IMF assessment of the probability that global GDP growth will be less than 2% (which corresponds to a contraction in industrialised countries and very slow growth in emerging economies).
Sources: IMF, *World Economic Outlook* (WEO), various publications.

Chart I-21
Exchange rate assumptions in *Monetary Bulletin* baseline forecasts – range of last eight forecasts[1]



1. The chart shows the exchange rate assumptions in the baseline forecasts in *Monetary Bulletin* 2011/2-2013/2 for the period of the oldest forecast (through Q2/2014).
Source: Central Bank of Iceland.

Inflation outlook slightly improved since February

Inflation measured 4.3% in Q1/2013, for the third quarter in a row. It has subsided in the past two months, however, following the recent appreciation of the króna and the drop in oil prices, and measured 3.3% in April. It is now at its lowest point since April 2011. However, core inflation (which excludes various volatile items), measures of domestic inflation, and indicators of long-term inflation expectations suggest the continued presence of underlying inflationary pressures; therefore, inflation could rise again relatively quickly if, for example, the exchange rate should fall to any marked degree.

Inflation proved somewhat higher in Q1 than was assumed in February but is expected to be broadly in line with the February forecast for the remainder of the year. It is now projected to decline to 3.4% in Q2 but then rise slightly in the second half due to unfavourable base effects from last year, measuring 3.7% in Q4. It is forecast to reach the inflation target in the first half of 2014, slightly earlier than was assumed in February. The more favourable inflation outlook is due primarily to a stronger króna than was assumed in the February forecast. Another factor is the somewhat weaker economic outlook over the forecast horizon. Offsetting this is the fact that inflation expectations remain above target and inflationary pressures from the labour market are stronger than previously forecast, due to an upward revision of wage growth in historical data and the prospect of slower productivity growth over the forecast horizon. 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 of the Icelandic economy, and the effects of those developments on the Icelandic economy. The forecast is also based on an assessment of activities in individual markets and how monetary policy is transmitted to the economy. All of these factors are uncertain, and the outlook for economic developments, whether domestic or international, could easily deviate from the baseline scenario. The following is a discussion of several important uncertainties in the baseline forecast.

Global economy

The baseline forecast assumes, first of all, that enough progress will be made in resolving the euro area banking and debt crisis that the contraction there will give way to a modest recovery in the latter half of the year, and second, that the global economy will gradually rally, although global output growth is expected to be relatively weak in the near term. Although the probability of major shocks such as the disintegration of the eurozone and sharp fiscal tightening in the US has diminished greatly and the risk of a global recession has receded (see Chart I-20), the global economic outlook remains highly uncertain. This is particularly the case for Iceland's main export markets.

Adverse developments in these areas could undermine export growth in Iceland, erode terms of trade still further, and hinder access to foreign credit markets. Iceland's economic recovery would therefore be slower than is assumed in the baseline forecast.

Exchange rate of the króna

In general, it has proven extremely difficult to forecast the exchange rate of the króna. There is uncertainty about near-term developments in domestic parties' access to foreign capital market and global developments, which have important effects on Iceland's export revenues. Further ahead is the uncertainty about the timing of the removal of the capital controls and the settlement of the failed banks' estates, and the effect of both of these on the króna. Under such conditions, forecasting the exchange rate involves perhaps even more uncertainty than usual. As a result, the baseline forecast is based on the assumption that throughout the forecast horizon, the exchange rate of the króna will remain broadly stable at the level prevailing when the forecast was prepared. As experience has shown, the outlook can easily change in a short period of time (see Chart I-21). The exchange rate outlook is therefore extremely uncertain and will probably be affected by, on the one hand, pressure on the króna due to foreign loan repayments, and on the other, the trade surplus, which is expected to be sizeable early in the forecast horizon, as the real exchange rate is probably below long-term equilibrium at present. Exchange rate developments later in the forecast horizon could also be affected markedly by the refinancing of Landsbankinn's foreign debt to old Landsbanki Íslands.

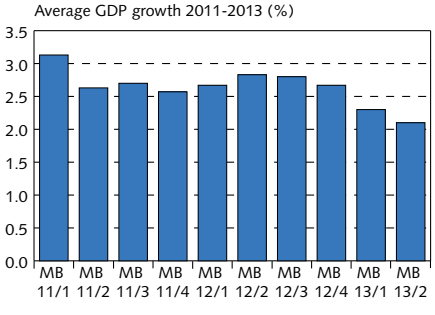
Public sector finances

According to the fiscal consolidation plan, a surplus is expected in 2014 and Iceland's debt-to-GDP ratio will continue to fall. However, these estimates are based on revenue assumptions, some of which are quite uncertain. By the same token, there are signs of increased expenditure pressures following the austerity of the past few years and in connection with the recent Parliamentary elections. The Housing Financing Fund is in a vulnerable position as well and will probably require further capital contributions from the Treasury. As a result, public sector finances are a source of uncertainty, and there is the risk that plans to put them on a sound footing will be derailed. This would be extremely imprudent in view of Iceland's sizeable public debt, as it could interfere with capital account liberalisation and call for a tighter monetary stance than would otherwise be needed. The economic recovery could therefore be slower than in the baseline forecast.

Domestic wage developments

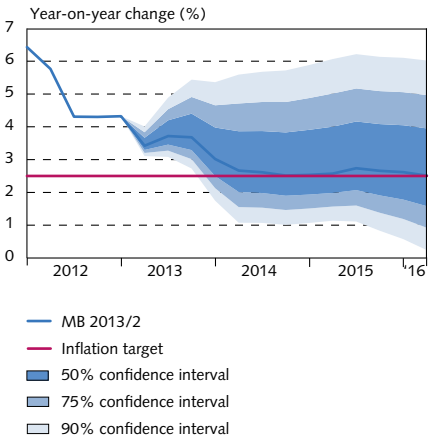
The baseline forecast assumes that the low real exchange rate and the strong position of Iceland's export sectors will cause large pay increases in those sectors to spread to the rest of the economy, so that wage increases will outpace productivity growth for the majority of the forecast horizon. According to the forecast, wage increases are not large enough to prevent inflation from falling back to target, provided that the króna remains relatively stable and there is some spare capacity in

Chart I-22
Revision of Central Bank GDP growth forecasts 2011-2013



Source: Central Bank of Iceland.

Chart I-23
Inflation forecast and confidence intervals



Sources: Statistics Iceland, Central Bank of Icleand.

the economy. These assumptions are quite uncertain, however, and there has been vociferous mention of the need for a "correction" of the relative wages of a number of occupational groups. If wages rise excessively, there is the risk that the inflation outlook will be eroded by increased domestic inflation and a weakening of the króna. As a result, there is also the risk of a slowdown in the domestic economic recovery, with firms responding to increased wage costs by cutting back labour use. In addition, the Central Bank would be forced to respond to increased inflationary pressures by tightening the monetary stance.

Domestic economic recovery

The economic recovery began to lose pace and the GDP growth outlook to deteriorate as 2012 progressed (see Chart I-22). The baseline forecast assumes that economic activity will be weak in the first half of 2013 but then improve, fuelled by increased domestic demand. The outlook is somewhat uncertain, however, in part because of uncertainty about the global economic outlook and domestic investment in the energy-intensive sector. Another factor is Iceland's high private sector debt level, although it has fallen significantly from its pre-crisis peak. This indebtedness could turn out to be a greater drag on output growth than is assumed in the baseline forecast, and uncertainty about domestic and global economic developments could discourage households and businesses from undertaking further consumption spending or investment. If the global economy recovers more rapidly, however, and if the restructuring of the remaining private sector debt in Iceland can be expedited, including through court judgments, domestic demand could recover more strongly than the baseline forecast indicates.

Inflation forecast

The baseline forecast assumes that the exchange rate of the króna will remain relatively stable throughout the forecast horizon and that wage increases will not be large enough to impede disinflation.[5] This assumption is highly uncertain, however, as is the assumption that global oil and commodity prices will develop relatively favourably. The baseline forecast also assumes that some spare capacity remains in the economy and will continue to do so for most of the forecast horizon. How much spare capacity there is in the economy, how quickly it will disappear, and to what degree it contains domestic inflationary pressures – particularly in view of the lack of a credible anchor for long-term inflation expectations – is very uncertain, however.

As a consequence, the inflation outlook is uncertain, as before. This is illustrated in Chart I-23, 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).

5. It is appropriate to remember that the baseline forecast is based on the assumption that monetary policy will be applied so as to guarantee that the inflation target is reached within the forecast horizon.

Box I-1

Why is the policy rate higher in Iceland than in other developed countries?

By the beginning of 2011, the Central Bank of Iceland's collateralised lending rate had fallen by almost 14 percentage points, to 4.25%, from its peak at year-end 2008. Since then, it has risen back to 6%, whereas the Bank's effective policy rate – i.e., the rate determining market interest rates at any given time – is somewhat lower, or about 5.4%, down from 15% (using the simple average of the Bank's current account rate and the maximum rate on 28-day certificates of deposit).[1]

In spite of this dramatic decline, the Central Bank of Iceland's interest rates are still somewhat higher than those in Iceland's main trading partners. As Chart 1 shows, policy rates in other industrialised countries currently range between 0.125% and 1.5% and have not risen since mid-2011, when the Central Bank of Iceland began raising rates again. This Box explores the reasons why the policy rate is not as low in Iceland as in neighbouring countries.[2]

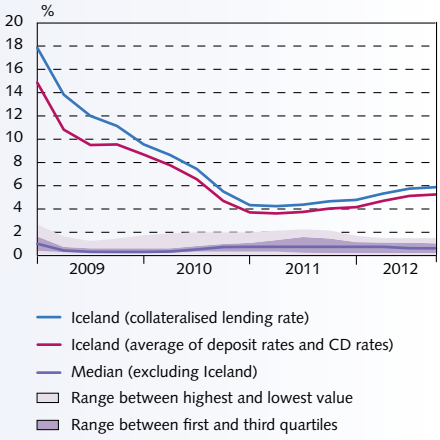
High interest rates are caused by persistent inflation and inflation expectations ...

In the wake of the global financial crisis and the ensuing economic crisis, inflation has remained low in most industrialised countries. Headline inflation has sometimes spiked following increases in commodity and oil prices, but underlying inflation has stayed very low. This is shown clearly in Charts 2 and 3, which illustrate headline CPI inflation, on the one hand, and core inflation, on the other, which excludes volatile items and items that reflect supply shocks (such as oil prices and direct tax effects). Since the beginning of 2009, the twelve-month change in the price level has fluctuated from 1½% deflation to 3½% inflation in the vast majority of the countries. According to the median value, measured inflation is currently about 1%, with the range extending from 1% deflation to 3% inflation. Core inflation, however, has fluctuated within a much narrower range of ½-2% for most of the countries.

Developments in Iceland have differed for most of the period, however. Unlike in other countries, inflation rose sharply in the wake of the financial crisis, owing to a steep depreciation of the króna, and peaked at nearly 19% in early 2009. It then declined steadily, with headline inflation falling to just under 2% by the beginning of 2011 and core inflation to 1% (according to core index 3; i.e., the CPI excluding the effects of volatile food items, petrol, the price of public services, real mortgage interest expense and direct taxes). It rose again thereafter, following hefty private sector wage increases negotiated in the summer of 2011, and measured about 4% in terms of headline inflation and 4½% in terms of core inflation by the end of 2012.

Chart 1

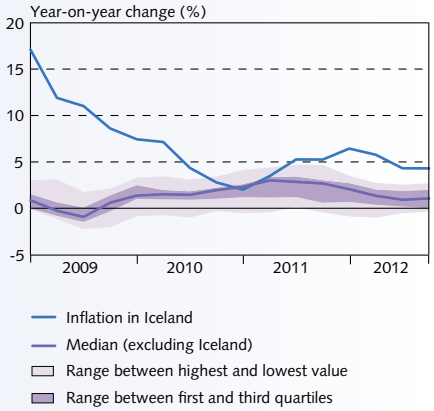
Central bank interest rates in Iceland and selected industrialised countries 2009-2012



Sources: Macrobond, Central Bank of Iceland.

Chart 2

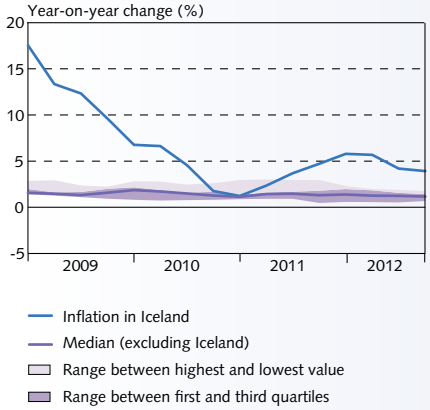
Inflation in Iceland and selected industrialised countries 2009-2012



Sources: OECD, Central Bank of Iceland.

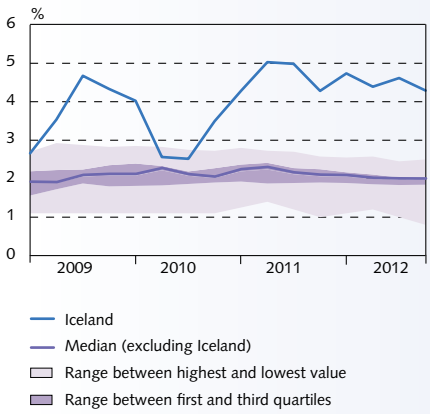
1. The effective policy rate reflects rates on the Bank's deposit accounts, as financial system liquidity has been abundant in the wake of the crisis and demand for collateralised loans from the Bank has been accordingly limited. The opposite was true before the crisis, when the system was faced with a persistent liquidity shortage. It is more common that a financial system operates in a liquidity shortage and that a central bank's lending rates are the indicator of its effective policy rate. This is not always the case, however. In Norway, for instance, financial system liquidity is persistently ample, and Norges Bank's effective policy rate is therefore its deposit rate.
2. A comparison of Chart 1 and other charts in this Box shows central bank rates in the US, the UK, the euro area, Canada, Japan, Norway, Switzerland, and Sweden. The median rate and the difference between the highest and lowest rates in the comparison group are shown. Also shown is the difference between the first and third quartiles; that is, the distribution of 75% of the countries around the median. Denmark is omitted from the comparison because its central bank rates broadly follow the rates of the European Central Bank, as the Danish currency is pegged to the euro. In order to give further focus to the comparison between Iceland and other industrialised countries, Australia and New Zealand are omitted as well, as they have weathered the financial crisis more successfully and their policy rates have been closer to Iceland's.

Chart 3
Core inflation in Iceland and selected industrialised countries 2009-2012



Sources: Macrobond, Norges Bank, Central Bank of Iceland.

Chart 4
Long-term inflation expectations in Iceland and selected industrialised countries 2009-2012[1]



1. Iceland (5-yr expectations 5 yrs ahead, bond market), US (30 yrs ahead, bond market), UK (3 yrs ahead, analysts' forecasts), euro area (3-4 yrs ahead, analysts' forecasts), Japan (6- to 10-yr expectations, Consensus Forecasts), Canada (long-term, bond market), Norway (5 yrs ahead, analysts' forecasts), Switzerland (6- to 10-yr expectations, Consensus Forecasts), and Sweden (5 yrs ahead, analysts' forecasts).
Sources: Consensus Forecasts, Macrobond, Central Bank of Iceland, applicable central banks.

Post-crisis inflation has therefore been considerably higher in Iceland than in other industrialised countries, with the exception of a short period from end-2010 to mid-2011. In addition, long-term inflation expectations have been considerably higher in Iceland than in other industrialised countries. As Chart 4 shows, inflation expectations 5-10 years ahead have ranged between 4% and 5% in Iceland for the majority of the period, as opposed to about 2% in the other countries.[3] In Iceland, inflation expectations have therefore been about 2 percentage points above the Central Bank's inflation target, whereas they have been close to target in other industrialised countries, even though measured inflation rose above target temporarily.[4] The fact that long-term inflation expectations are persistently higher in Iceland than in neighbouring countries is an important explanation of inflation persistence in Iceland. For instance, if wage earners expect persistent 4-5% inflation for the next decade, they are likely to demand wage increases in line with those expectations. If wages increase over and above productivity growth, firms will pass the increases through to prices, thus maintaining inflation. In the same vein, firms are willing to agree to such pay increases, as they assume they will be able to raise their prices in line with the rise in the general price level. Expectations of higher inflation in Iceland than in neighbouring countries also imply expectations that the króna will depreciate against other currencies in the long run, which also entails higher inflation.[5] High long-term inflation expectations can therefore cause high inflation to become entrenched due to persistent pressure on the exchange rate.

... even after accounting for the deeper contraction in Iceland

In comparing Iceland's Central Bank interest rates with those in other industrialised countries, it is also necessary to bear in mind that although inflation and inflation expectations are higher in Iceland, its post-crisis economic contraction was deeper. From the pre-crisis peak in 2008 to the post-crisis trough, GDP contracted by more than 12% in Iceland, as opposed to about 5% in comparison countries. Unemployment also rose much more steeply in Iceland, or by over 5 percentage points (in terms of the OECD's harmonised measure of unemployment), as compared with just under 3 percentage points in other industrialised countries. Higher inflation and a deeper economic contraction therefore offset one another in a comparison of monetary policy in Iceland and other countries.

A simple way to weight together the effects of these factors on monetary policy formation is to study the interest rate path generated by the Taylor rule. The Taylor rule is commonly referenced in general and academic discussion of monetary policy. Most central

3. Long-term inflation expectations are determined from surveys among experts or from the spread between indexed and nominal Treasury bonds. For Japan and Switzerland, the median values from the Consensus Forecasts inflation forecasts 6-10 years ahead are used. Because those forecasts are only published semi-annually, quarterly data are obtained by linear interpolation.
4. The inflation target of the Bank of England, the Bank of Canada, and Sveriges Riksbank is 2%, while the Norwegian inflation target is 2.5%. At the beginning of 2012, the US Federal Reserve Bank formally adopted a 2% inflation target, which is used as a reference for the entire period. The Bank of Japan had set a 1% inflation goal at the beginning of 2012 but adopted a formal 2% target in January 2013. This Box uses the 1% target as a reference, as the data period extends only until year-end 2012. The European and Swiss central banks do not have a formal numerical inflation target but have declared price stability their primary objective. The European Central Bank defines price stability as inflation "below but close to" 2%, while the Swiss National Bank defines it as inflation in the 0-2% range. As a result, their targets are generally assumed to be 2% and 1%, respectively, which is the assumption in this Box.
5. The real exchange rate should reverse towards its equilibrium value over time, irrespective of developments in domestic inflation. If inflation is higher in Iceland than abroad, the nominal exchange rate of the króna must therefore fall over time by an amount roughly equal to the difference between domestic and foreign inflation.

banks use it as a reference for decision-making, although none follow it mechanically.[6]

According to the Taylor rule, the central bank interest rate is determined from the deviation of inflation from target and the deviation of output from potential, or the output gap (sometimes the deviation of unemployment from its equilibrium level is used instead of the output gap), and in its simplest form, it assigns equal weight to each factor:

$$i = (r^*+\pi^T) + 0.5\ (\pi-\pi^T) + 0.5x$$

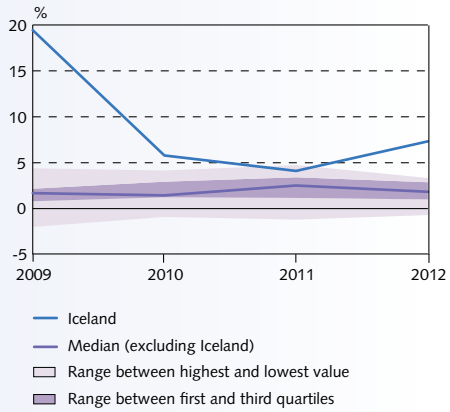
where i is the central bank interest rate, r^* is what is called the neutral real rate,[7] π is inflation, π^T is the inflation target, and x is the output slack or gap. As the Taylor rule implies, at equilibrium (where inflation is at target and there is neither an output slack nor an output gap), the central bank rate is given as ($r^*+\pi^T$), which corresponds to the neutral nominal rate. If inflation is above target and factor utilisation exceeds capacity, however, central bank rates should be above the neutral level, and vice versa if inflation is below target and there is a slack in the economy. The situation becomes more complicated if inflation is above target in spite of an output slack, as the interest rate level is determined by the relative size of each gap.

Chart 5 illustrates interest rate developments in Iceland and other industrialised countries, based on the Taylor rule. It uses core inflation and the Central Bank's assessment of the output gap for Iceland and the OECD estimate of the output gap for other countries. The neutral real rate is assumed to be 2% in all countries, as is commonly done in calculating the interest rate path using the Taylor rule. The neutral level after the financial crisis is subject to debate, however, and it can be argued that it has fallen. On the other hand, Central Bank research indicates that the neutral real rate was somewhat above 2% in Iceland until the crisis struck, as has been the experience in other small countries with a low level of saving and high debt levels; therefore, it could be above 2% after the crisis, although it is probably below the pre-crisis level.[8] As can be seen, the Taylor rule suggests that rates in other developed countries should have been about 1½-2%, on average, from 2009 onwards, and about 1-3½% in most of them. The Taylor rule suggest that Iceland's policy rate should have been nearly 20% in 2009 and then fallen to about 4% by 2011, before rising back to just over 7% in 2012. The rule therefore implies that, even though the economic contraction was deeper in Iceland, a somewhat higher policy rate would have been needed here than in the other industrialised countries, owing to much more persistent inflation in the post-crisis period.

When inflation expectations are considered sufficiently anchored, it is generally considered safe to ignore temporary fluctuations in inflation during monetary policy formulation. In addition, the effects of interest rate decisions only emerge over time, so that monetary policy must be forward-looking. Therefore, it can also be interesting to examine interest rate paths generated by the Taylor rule using long-term inflation expectations instead of current inflation (see Chart 6). In this instance, the Taylor rule gives interest rates

Chart 5

Central bank interest rates in Iceland and selected industrialised countries according to the Taylor rule[1]

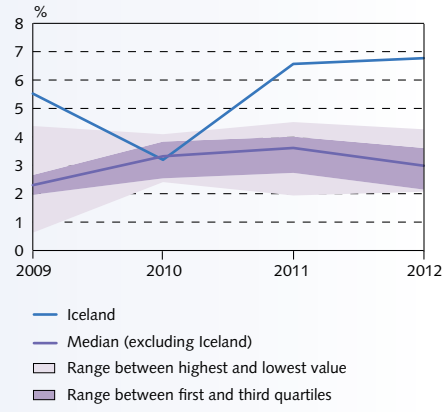


1. Taylor rule based on deviation of core inflation from target and output gap (OECD estimate for countries other than Iceland), with a weight of 0.5 on each. Assuming that the neutral real rate is 2% in all countries throughout the period.

Sources: Macrobond, Central Bank of Iceland.

Chart 6

Central bank interest rates in Iceland and selected industrialised countries according to the Taylor rule[1]



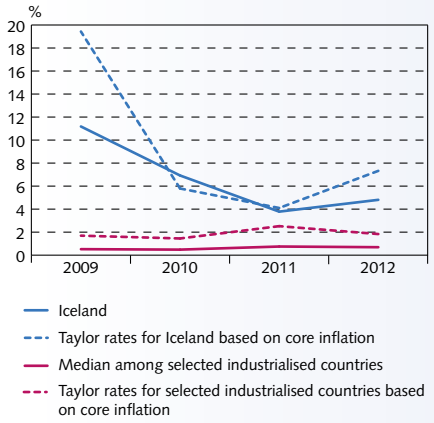
1. Taylor rule based on deviation of long-term inflation expectations from target and output gap (OECD estimate for countries other than Iceland), with a weight of 0.5 on each. Assuming that the neutral real rate is 2% in all countries throughout the period.

Sources: Macrobond, Central Bank of Iceland.

6. For a detailed discussion of the Taylor rule and a empirical evaluation of it during various periods in Iceland, see Chapter 3 of "Iceland's Currency and Exchange Rate Policy Options", Central Bank of Iceland *Special Publication* no. 7, September 2012. The Taylor rule is also discussed in Boxes in *Monetary Bulletin* 2002/2 and 2007/3.
7. This is the interest rate that reflects the internal and external balance of the economy; it is determined by economic factors beyond the scope of monetary policy, such as productivity of capital, the propensity to save, and the long-term growth potential of the economy.
8. See Chapter 3 of "Iceland's Currency and Exchange Rate Policy Options", Central Bank of Iceland *Special Publication* no. 7, September 2012.

Chart 7

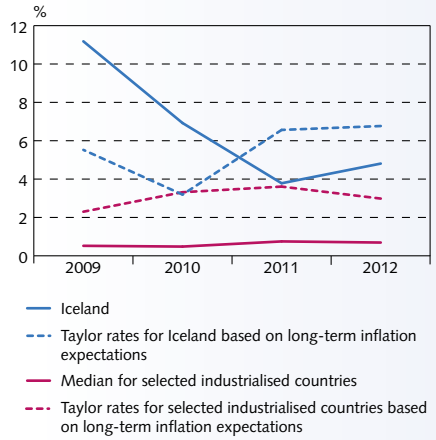
Comparison of policy rates and Taylor rates in Iceland and selected industrialised countries[1]



1. Taylor rule based on current core inflation and output gap.
Sources: Macrobond, Central Bank of Iceland.

Chart 8

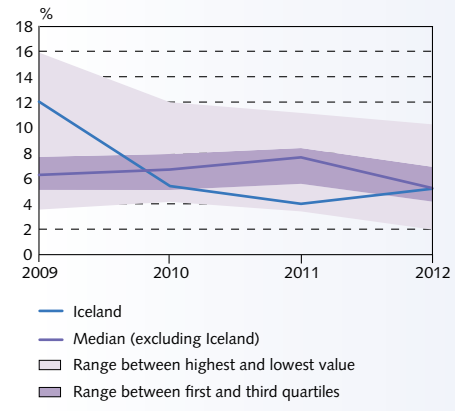
Comparison of central bank rates and Taylor rates in Iceland and selected industrialised countries[1]



1. Taylor rule based on long-term inflation expectations and output gap.
Sources: Macrobond, Central Bank of Iceland.

Chart 9

Inflation in Iceland and 15 other countries, 2009-2012[1]



1. The countries are Argentina, Armenia, Brazil, India, Indonesia, Kazakhstan, Mexico, Rumania, Russia, Serbia, South Africa, Turkey, Hungary, Ukraine and Uruguay.
Sources: IMF, Macrobond.

in the 2-3½% range in comparison countries and in the 3-7% range in Iceland, implying that considerably higher rates would have been needed here than in the other countries for the majority of the period.[9]

Finally, Charts 7 and 8 show central bank rates in Iceland and the other countries in comparison with the interest rate paths derived from the Taylor rule based on core inflation, on the one hand, and inflation expectations, on the other.[10] As can be seen, the Taylor rule indicates that, based on core inflation, interest rates would have needed to be considerably higher in 2009 than they in fact were, which reflects the benefits of the capital controls imposed in late 2008.[11] The Central Bank rate was then broadly in line with the Taylor rate in 2010-11 but rose less in 2012, when it averaged 2½ percentage points below the Taylor rate. In contrast, interest rates in the other industrialised countries are similar to their corresponding Taylor rates, although they are somewhat below the rates implied by the Taylor rule throughout the period. Based on long-term inflation expectations, however, interest rates fell too slowly in Iceland in 2009-10 but have been too low since 2011. As in Chart 7, interest rates in the other countries are below Taylor rates, although the difference is greater using inflation expectations than using current inflation.

In comparing interest rates, it is more appropriate to consider countries with similar inflation rates

As the interest rate comparison above suggests, it should be borne in mind that inflation has been much more persistent in Iceland than in other industrialised countries. In such a comparison, it can therefore be more instructive to consider other countries whose inflation rates are more in line with developments in Iceland. Chart 9 gives a comparison of inflation in Iceland and in 15 relatively developed emerging economies where inflation has fluctuated in a range similar to that in Iceland (that is, within one standard deviation from average inflation in Iceland in 2009-12). Inflation was somewhat higher in Iceland than in most of the other countries in 2009, while it was lower in 2010-11 and broadly similar in 2012. In Chart 10, which shows central bank interest rates in the same countries, it can be seen that interest rates in Iceland have been much more in line with those in the other countries, although the policy rate has fallen somewhat more in Iceland than in the comparison countries in the past two years.

Summary

Since the financial crisis struck in the autumn of 2008, the Central Bank's policy rate has been higher in Iceland than policy rates in other industrialised countries for the simple reason that inflation and long-term inflation expectations have been higher in Iceland. This reflects Iceland's lack of success in controlling inflation before the cri-

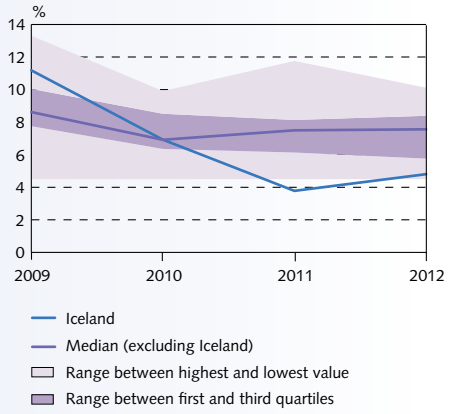
9. Very similar results are obtained using the deviation in measured unemployment from the equilibrium unemployment rate (i.e., the NAIRU estimated by the Central Bank for Iceland but by the OECD for the other countries).
10. The previously mentioned uncertainty concerning the exact level of the real neutral rate should be kept in mind, however.
11. The capital controls enabled the Central Bank to lower interest rates much more rapidly than would otherwise have been possible, as there was less need for concern that a reduction in interest rates would push the exchange rate even lower. This can be seen clearly, for instance, when interest rate developments in Iceland are compared with those in South Korea in the wake of the latter's currency and financial crisis in 1997. The decline in the real exchange rate from peak to trough in the two crises was of similar magnitude (58% in Iceland and 45% in South Korea). In South Korea, the short-term real interest rate rose by nearly 7 percentage points in three months following the crisis and was higher than at the beginning of the crisis for about half a year. In Iceland, however, the short-term real rate fell immediately after the crisis and, one year later, was almost 9 percentage points lower than at the beginning of the crisis (see, for example, http://www.sedlabanki.is/library/Skráarsafn/Erindi/Lionsklúbbur%20feb13.pdf).

sis, when inflation was above target for protracted periods of time. At the same time, central banks in other industrialised countries have been successful in keeping inflation at target. In this way, their monetary policy has garnered credibility, as is reflected in long-term inflation expectations that have remained close to target in spite of historically low interest rates, even though measured inflation has deviated somewhat from target at times. This has also enabled them to use monetary policy to support the real economy more decisively in the wake of the crisis than has been possible in Iceland, owing to the lack of a credible anchor for inflation expectations. If anything, the problem faced by many industrialised countries has been the risk of prolonged deflation, with the associated repercussions for economic activity, as Japan's experience shows so clearly. In order to offset this risk, the central banks in these countries have lowered interest rates as much as possible, as well as adopting a variety of stimulative measures such as quantitative easing. In most instances, attempts to avoid deflation have been successful, but it has proven more difficult to expedite economic recovery and ensure more favourable private sector financial conditions.

The problem faced by domestic monetary policy is far from unique, however. Other industrialised countries faced the same situation about 30 years ago, and even more recently a number of emerging economies managed to solve the same problem. In both cases, the countries concerned finally managed to control inflation and anchor inflation expectations securely. Although it required short-term sacrifices, the benefits were obvious during the financial crisis, as they were able to ease the monetary stance considerably in order to counteract the economic contraction. There is no reason to assume that such anchoring cannot be achieved in Iceland as well, but it will take time and perseverance.

Chart 10

Central bank rates in Iceland and 15 other countries, 2009-2012[1]

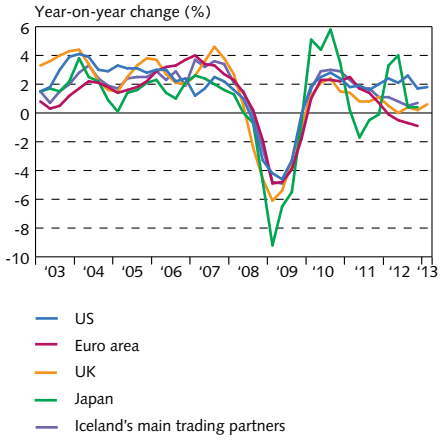


1. The countries are Argentina, Armenia, Brazil, India, Indonesia, Kazakhstan, Mexico, Rumania, Russia, Serbia, South Africa, Turkey, Hungary, Ukraine and Uruguay.
Sources: IMF, Macrobond.

II External conditions and exports

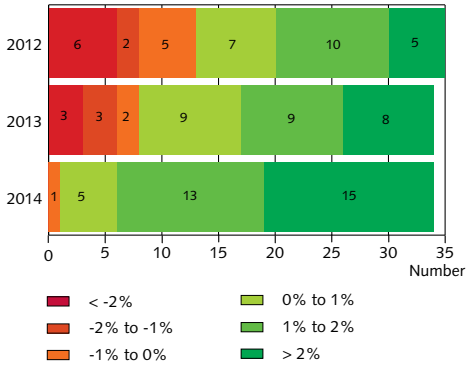
The global economic recovery has lost pace somewhat since the publication of the last Monetary Bulletin. Nonetheless, the outlook is brighter than was anticipated a year ago, and uncertainty has been reduced somewhat by government stimulus measures that have bolstered optimism in global financial markets. Inflation has been low in Iceland's main trading partner countries, and the outlook is broadly unchanged since the last forecast. Terms of trade are expected to be poorer than was assumed in the February forecast, particularly due to less favourable export prices. World trade will grow little this year and is expected to grow slightly less than previously forecast in the next few years. That notwithstanding, the outlook for export growth during the forecast horizon has improved marginally since February, due in particular to increased services to foreign tourists.

Chart II-1
GDP growth in Iceland's main trading partners and selected industrialised countries
Real GDP growth Q1/2003 - Q1/2013



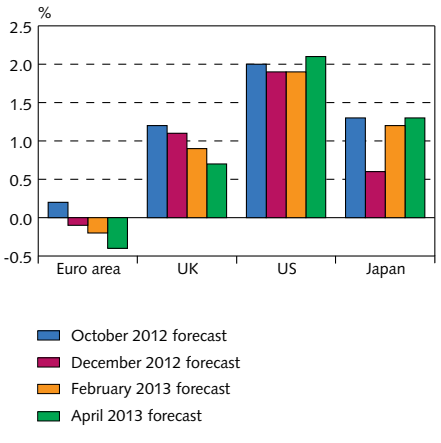
Sources: Macrobond, Central Bank of Iceland.

Chart II-2
Distribution of GDP growth among 35 industrialised countries[1]



1. Projections for Cyprus are excluded due to the ongoing crisis; hence the dataset consists only of 34 countries in 2013 and 2014.
Source: IMF.

Chart II-3
GDP forecasts for the year 2013



Source: Consensus Forecasts.

The economic recovery has lost momentum in Iceland's main trading partner countries in the past two years ...

The economic recovery in Iceland's main trading partner countries has been relatively week in the recent past. Trade-weighted output growth has been slowing for a full two years, and the outlook deteriorated rapidly over the course of 2012. Preliminary figures for 2012 indicate that GDP contracted in 13 of 35 developed countries, and only five of them recorded growth in excess of 2%. The contraction deepened, for instance, in the euro area, measuring almost 1% year-on-year in Q4. GDP also contracted in Denmark and Finland, and GDP growth lost pace in Norway and Sweden. In Japan, the recovery that began early in 2012 had virtually disappeared by year-end. The UK recorded more or less flat output growth, while growth in the US had fallen below 2% by year-end but measured 2.2% for the year as a whole. In keeping with the recent pattern, emerging countries experienced considerably stronger GDP growth than their developed counterparts, with growth gaining pace slightly in Q4, particularly in China.

... but stronger growth is on the horizon

Although global output growth forecasts have been revised downwards slightly since the beginning of the year, forecasters still expect growth to gain pace gradually. Uncertainty remains, although it has diminished in the recent term, owing to government stimulus measures in leading industrialised countries. According to the newly published forecast from the International Monetary Fund (IMF), the number of developed economies experiencing a contraction should fall to eight this year from last year's total of 13. The leading economic indicators for the euro area and the US that were released in February, just after the publication of the last Monetary Bulletin, were somewhat more favourable than forecasters had anticipated; however, since early April, indicators for the euro area have been significantly below expectations, US indicators have been marginally below expectations. High-frequency indicators imply an improvement in Q1/2013, although the outlook is for a weak Q2. It is generally assumed that the recovery will pick up as the year advances, however.

The new IMF forecast for this year still assumes a small contraction in the euro area and just under 2% growth in the US.

The GDP growth outlook among Iceland's main trading partners is broadly unchanged from last year, or 0.9%, as opposed to 0.8%. This is 0.2 percentage points less than was forecast in February, and it is attributable mainly to the expectation of a larger contraction in the euro area and weaker growth in the Nordic countries, the UK, and Japan. Iceland's trading partners are expected to see somewhat stronger growth in the next two years, or 1.9% in 2014 and 2.6% in 2015, which is broadly in line with the February forecast.

Government stimulus measures boost financial market sentiment ...

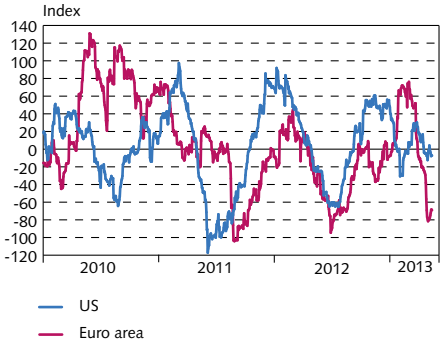
Leading industrial countries' central banks responded aggressively with additional stimulus measures as the GDP growth outlook deteriorated in 2012. The US managed to escape the so-called fiscal cliff at the end of December and raised the fiscal debt ceiling in January. The US Federal Reserve Bank has continued its quantitative easing programme with monthly purchases of housing bonds and long Treasury bonds, in addition to further delaying potential interest rate hikes. The Bank of England also stepped up its bond purchases, and early signs indicated that its measures had been successful in stimulating financial institutions' lending to households and businesses. In the same manner, further stimulative measures were taken by the Bank of Japan, including a large-scale fiscal stimulus and a doubling of the money supply, with the aim of boosting demand and raising inflation. Because of the poor prospects for output growth in Europe, the European Commission postponed several EU member states' deadlines for reaching fiscal deficit targets, thereby lending support to the European Central Bank's (ECB) stimulative measures in the euro area. So far, the postponement has not been put to the test.

As a result of the above-mentioned stimulus measures, stock prices rose markedly, interest rates and risk premia declined, and concerns about major upheavals such as the dissolution of the euro area and a sharp fiscal tightening in the US abated. These positive factors are offset by the crisis in Cyprus, although the effects have not yet been as widespread as was feared at first. In emerging economies as well, measures have been taken to stimulate output growth. Interest rates have been kept unchanged in the vast majority of countries since the last *Monetary Bulletin*, although ECB lowered its interest rates again by 0.25 percentage points in early May. In China, the authorities stepped up their infrastructure investments with increased lending through banks and companies.

... and financial imbalances in the euro area have diminished

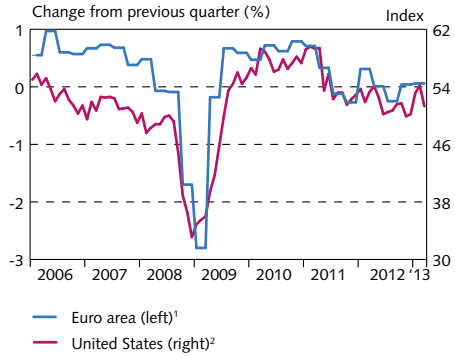
As a result of the euro area debt crisis, peripheral eurozone countries' financial conditions vis-à-vis countries closer to the core of the area have changed radically. Financing bank, corporate, and public sector debt has proven difficult in the periphery of the euro area, as investors have moved their funds elsewhere and the ECB's monetary easing has not fully reached these countries. Outflows of private sector

Chart II-4
Economic surprise index[1]
Daily data 1 January 2010 - 10 May 2013



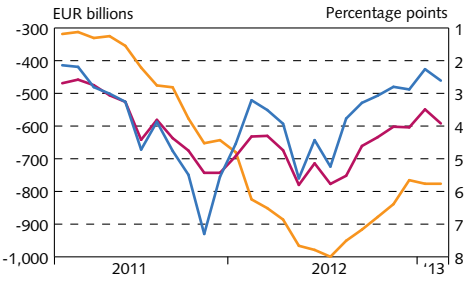
1. When the index is lower than 0, the indicators are more negative than expected; when the index is higher than 0, the indicators are more positive than expected. The index does not imply that the indicators are positive or negative.
Source: Macrobond.

Chart II-5
Leading indicators of GDP growth



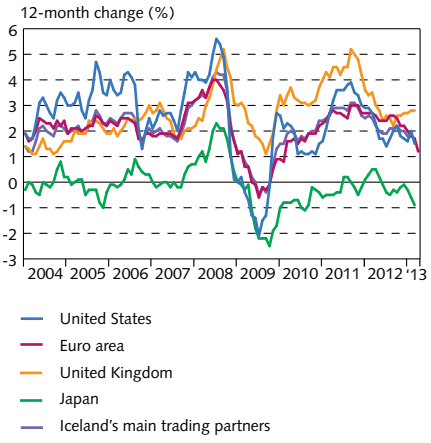
1. The GDP growth indicator devised by OFCE and EUROFRAME estimates quarterly output growth in the euro area two quarters ahead. 2. In the US, the seasonally adjusted Manufacturing Purchasing Managers' Index (PMI) is published monthly. An index value above 50 indicates month-on-month growth, and a value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

Chart II-6
TARGET2 balances of peripheral countries and interest spreads over German government bonds



1. Peripheral countries are: Greece, Ireland, Italy, Portugal and Spain.
Source: IMF.

Chart II-7
Inflation in Iceland's main trading partners and selected industrialised countries[1]



1. CPI. Monthly data.
Source: Macrobond.

capital from peripheral countries have been offset by a central bank lending, as can be seen in payment flows in the ECB's TARGET2 payment system and, in some instances, with large-scale IMF-supported emergency lending. Last autumn appeared to be a turning point, after the ECB declared at mid-year that it would do everything possible to prevent the disintegration of the euro area – with extensive government bond purchases, if necessary. The declaration bolstered market confidence in the periphery, and funds began to flow back into those countries and banks' and governments' financing costs declined. Private sector financial conditions have changed little in peripheral countries, however, due to the weakness of their banking system. The ECB is seeking ways to stimulate financial institution lending to small and medium-sized companies in these countries.

Inflation outlook broadly unchanged since February

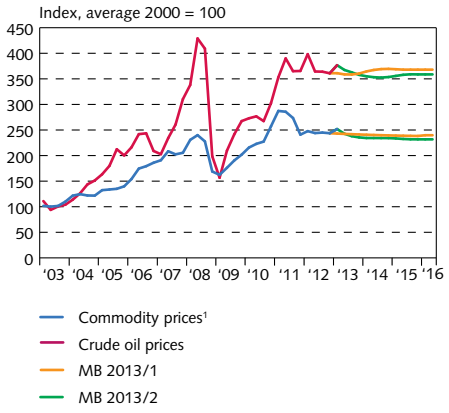
Inflation has been falling in Iceland's main trading partners in the recent term. Deflation has accelerated in Japan, and slight deflation has been measured in Sweden in the past four months. Inflation has risen slightly in the UK in recent months, however, and in March, inflation rose in the US and Norway for the first time this year. Since the last *Monetary Bulletin*, the inflation outlook for 2013 and 2014 has deteriorated marginally in the UK but has improved slightly in the euro area and Canada. In addition, the deflationary episode in Japan is expected to come to an end this year, with inflation beginning to rise in 2014. The two-year outlook for Iceland's main trading partners is therefore broadly unchanged from the February forecast, with inflation projected at 1.9-2.2% over the forecast horizon.

Lower oil and commodity prices than assumed in February

Oil prices rose sharply at the beginning of the year, peaking in mid-February and then tapering off, leaving the average Q1 price about the same as that in Q4/2012 but about 5% below the price level a year ago. Oil prices are expected to continue falling throughout this year, with the average decline measuring about 3%, which is broadly in line with the February forecast. As before, the Bank's forecast is based on futures prices and leading analysts' forecasts. An even larger decline in prices is forecast for next year, as supplies are expected to increase substantially, particularly from North America and other non-OPEC producers, whereas the last forecast assumed a slight increase.

Global commodity prices rose as well in the first two months of the year but then fell again in March, due in part to declining demand from larger emerging countries. Nonetheless, they turned out marginally higher year-on-year in Q1. Commodity prices are expected to continue falling throughout 2013, by an average of just under 2%, whereas the February forecast provided for a 1% decline. Prices are projected to keep falling over the next two years, in line with increases in supply. These projections are subject to considerable uncertainty, however, particularly on the upside, as inclement weather can easily have a profound impact on supplies of commodities such as food, thereby pushing prices upwards.

Chart II-8
Commodity prices
Q1/2003 - Q2/2016



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

Poorer outlook for developments in export prices ...

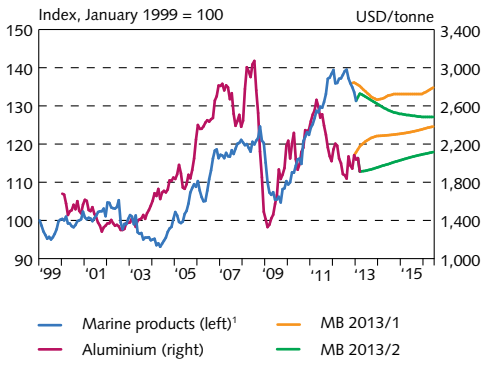
Marine product prices have been falling in recent months, after peaking in mid-2012, although the drop in prices has varied from species to species. The decline is caused primarily by difficult economic conditions and falling purchasing power in various European countries, particularly in the Mediterranean region, but also by a growing supply of cod products from the Barents Sea. This has particularly affected the more expensive product types, many of which had risen sharply in price, far outpacing other comparable foods. Pelagic fish products (frozen mackerel, capelin, cod liver oil, etc.) have continued to rise in price, however, as they are relatively inexpensive, and Iceland has a large market share in Eastern Europe, Africa, and Asia. In addition, Iceland has a strong position in the market for fishmeal and cod liver oil, owing to high product quality, proximity to buyers, and limited supplies from competitors. At the beginning of the year, foreign currency prices of marine products were, on average, 6% lower than at the same time in 2012. Most market agents are of the opinion that the slide in demersal fish prices is losing momentum, although no clear signs of a slowdown have emerged as yet. The current forecast assumes that the average price for marine products will fall by just over 2% this year, slightly more than was assumed in February, in spite of the continued increase in pelagic product prices. Marine product prices are expected to continue falling in 2014, following the general trend in global food and commodity prices and the weak growth in major market areas. The decline in foreign currency terms is projected at 2% on average in 2014, followed by a 1% drop in 2015.

Aluminium prices have fallen this year, in line with other commodity prices, after a slight uptick at the end of 2012. The month-on-month decline in March was nearly 7%, the largest in a single month in nearly three years. Aluminium prices fell by about 8% year-on-year in Q1. The average price was just under 2,020 US dollars per barrel, down from 2,400 a year earlier. By April, it had fallen to just over 1,850 US dollars. Prices are expected to remain low throughout the year, in line with developments in futures prices and market agents' forecasts. They are now expected to be about the same this year, on average, as in 2012, instead of rising nearly 5%, as was projected in the last *Monetary Bulletin*. They are forecast to rise by just over 3% per year in 2014 and 2015, slightly outpacing the February forecast.

... eroding terms of trade more than previously projected

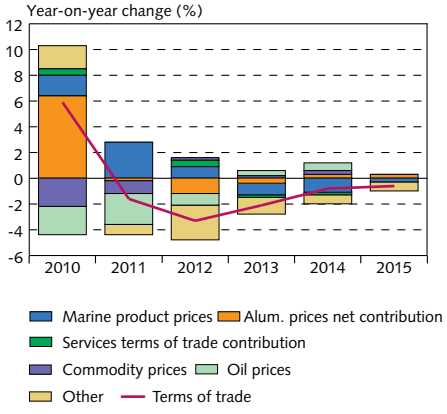
As is mentioned above, international price trends and prospects have changed somewhat since the beginning of the year, particularly for aluminium and marine products. On the other hand, oil prices are expected to develop in line with the previous forecast, while commodity prices are projected to decline slightly more than previously assumed, somewhat offsetting the drop in export prices. The same can be said for the price of aluminium manufacturing inputs such as alumina, which is expected to fall in line with aluminium prices. Nonetheless, the outlook is for terms of trade to be markedly poorer in 2013 than according to the February forecast, deteriorating by over 2% instead of remaining virtually unchanged. The same is true of

Chart II-9
Prices of marine exports and aluminium
In foreign currency



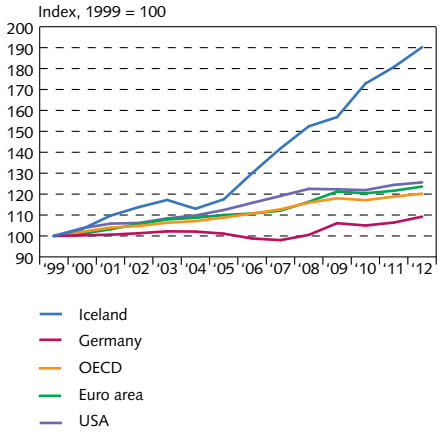
1. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the export-weighted trade basket.
Sources: London Metal Exchange, Statistics Iceland, Central Bank of Iceland.

Chart II-10
Terms of trade and their main components
2010 - 2015[1]



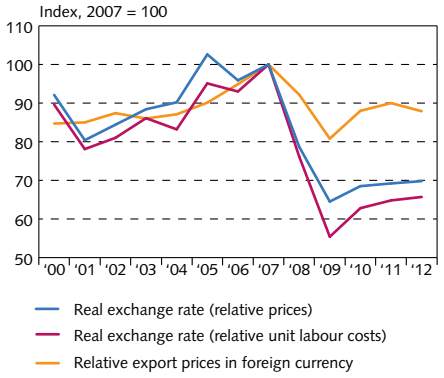
1. Central Bank baseline forecast 2013 - 2015. The contribution of the main sub-indices to year-on-year changes in terms of trade is determined by weighting the annual change in the sub-index concerned together with its weight in the import or export of goods and services. The item "other" is a residual.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-11
Unit labour costs in 19 developed countries



Sources: Macrobond, Central Bank of Iceland.

Chart II-12
Real exchange rate and relative export prices[1]



1. Ratio of Iceland's export prices and those of its main trading partners, measured in the same currency.
Sources: Macrobond, Statistics Iceland, Central Bank of Iceland.

Chart II-13
World trade and Icelandic exports 2000 - 2015[1]

1 Central Bank baseline forecast 2013 - 2015. 2. Imports of goods and services in Iceland's main trading partners.
Sources: OECD, Central Bank of Iceland.

2014, as terms of trade are now expected to deteriorate by approximately ½% instead of improving by almost 1%, as in the February forecast. The outlook for 2015 is broadly unchanged since February, however, or a further ½% deterioration of terms of trade.

Real exchange rate has risen in the recent term

In terms of relative prices, the real exchange rate was almost 1% higher in Q1 than in the same quarter a year ago. It rose to a four-year peak last August and then fell steadily until January and then rose by almost 2% in February, followed by another 4% in March and just over 5% in April, the largest month-on-month increase in over four years. The real exchange rate has not been as high since September 2008. Nonetheless, it was 9% below the 10-year average in April.

In terms of relative unit labour costs, the real exchange rate rose sharply in the prelude to the financial crisis, as wages rose considerably more in Iceland than in competitor countries, with a corresponding deterioration of Iceland's competitive position. That deterioration reversed – and more besides – in the wake of the crisis; however, since 2011 unit labour costs have been rising faster in Iceland than in other countries (see also Section VI), and the real exchange rate has begun rising and Iceland's competitive position has started to worsen again. According to the baseline forecast, the nominal exchange rate will remain relatively stable during the forecast horizon (see Section I), and the real exchange rate will therefore tend to rise, in line with more rapid increases in prices and wages in Iceland than in competitor countries. The real exchange rate will remain low in historical terms throughout the forecast horizon, however.

Modest growth in world trade

World trade has grown very little in the recent term, in line with weak output growth in larger countries. According to forecasts from the IMF and the Organisation for Economic Co-operation and Development (OECD), global trade will be somewhat stronger this year than in 2012, particularly due to increased trade among emerging countries; however, the IMF's April forecast for 2013 has been adjusted downward from its previous forecast, released in January. Among Iceland's main trading partners, the outlook for imports has also deteriorated somewhat, owing to a weaker output growth outlook in those countries. Imports are expect to rise by 2.5% this year in Iceland's main trading partner countries, somewhat below the 3.2% provided for in the last forecast. Growth is projected to gain momentum in the following two years, in line with increased output growth, and is forecast at 4.5% and 3.5%, respectively, in 2014 and 2015.

Export outlook improved since February due to stronger services exports

Goods exports are projected to contract by 0.6% this year, broadly in line with the last forecast, even though a larger contraction in marine product exports is now expected. The Bank's forecast assumes that the cod catch will increase somewhat this year, while the haddock catch will shrink. In addition, pelagic fish quotas are expected to be markedly smaller than in 2012, resulting in a 3% contraction in marine

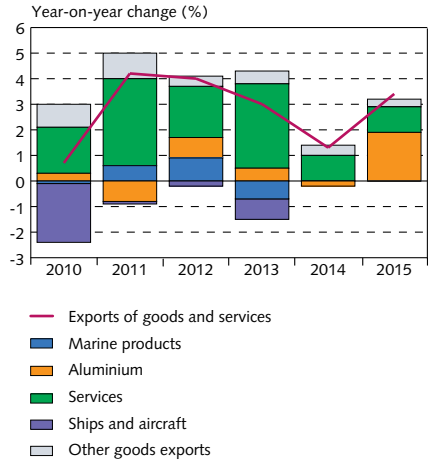
exports. The forecast of 2% growth in aluminium product exports is unchanged from February, but exports apart from aluminium and marine products are expected to grow more rapidly. The low real exchange rate and the accompanying competitive advantage are considered to have some impact, as other exports have increased in real terms in recent years. As Chart II-12 shows, relative export prices have not fallen in line with the real exchange rate; therefore export profitability has risen, thus increasing exporters' capacity and incentive to invest. Significant investments are currently underway or in the pipeline in various export sectors, with the aim of increasing the supply and diversity of exports. As in the last forecast, however, growth in goods exports is expected to be weak next year and then gain pace in 2015.

Offsetting slower goods export growth are indications that growth in services exports is even stronger than previously assumed. Figures from the tourism industry show a surge in tourist visits to Iceland year-to-date, and if the trend continues, 2013 is likely to be yet another record year in the tourism sector. Services exports are projected to grow by 8½% this year, somewhat outpacing the February forecast. The outlook for the ensuing two years is marginally better as well.

Total exports are projected to grow by 2.9% this year and 1.2% in 2014, and by 3.3% in 2015, when the effects of increased aluminium exports begin to emerge. In the February forecast, total exports were projected to grow by 1.8%, 1.5%, and 2.8%, respectively. The outlook for exports has therefore improved somewhat since February, particularly due to increased services to tourists.

Even though export growth projections for 2013 and 2014 are not extremely strong, they are quite acceptable in view of the weak global economy. Icelandic exporters appear to have gained market share vis-à-vis trading partners since the global financial crisis struck as relative export prices have fallen, albeit by a smaller margin than the real exchange rate has. In 2008-2012, annual export growth excluding ships and aircraft averaged 7%, while world trade grew by about 3% on average and major trading partners' imports grew by only 2%. According to the current forecast, this increased market share will hold throughout the forecast horizon, as Chart II-13 indicates.

Chart II-14
Export development and its main components 2010 - 2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

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

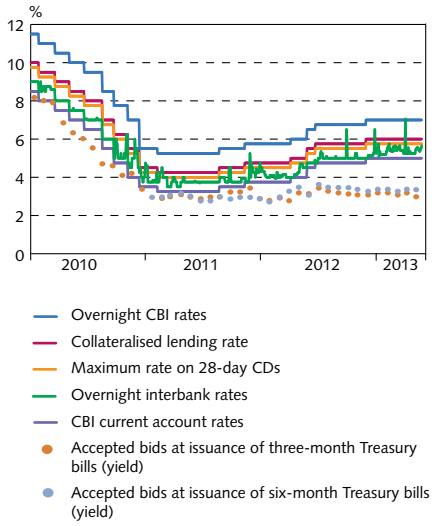
	Change from prior year (%) unless otherwise specified[1]			
	2012	*2013*	*2014*	*2015*
Goods exports	3.1 (3.1)	-0.6 (-0.4)	0.4 (0.7)	3.8 (4.1)
Services exports	5.2 (5.2)	8.6 (5.6)	2.4 (2.7)	2.5 (0.8)
Exports of goods and services	3.9 (3.9)	2.9 (1.8)	1.2 (1.5)	3.3 (2.8)
Exports of goods and services, excluding ships and aircraft	4.1 (4.1)	3.6 (2.6)	1.2 (1.5)	3.3 (2.8)
Marine production for export	3.7 (3.8)	-3.0 (-1.1)	0.0 (0.0)	0.0 (0.0)
Aluminium production for export	3.2 (3.2)	2.1 (2.1)	-0.9 (-0.9)	8.0 (8.1)
Foreign currency prices of marine products	0.9 (0.8)	-2.1 (-1.8)	-2.4 (0.3)	-1.0 (0.0)
Aluminium prices in USD[2]	-13.1 (-13.2)	-0.1 (4.8)	3.5 (2.9)	3.3 (1.8)
Fuel prices in USD[3]	1.0 (1.0)	-3.0 (-3.3)	-4.7 (2.2)	0.0 (0.1)
Terms of trade for goods and services	-3.3 (-3.8)	-2.1 (0.3)	-0.8 (0.9)	-0.6 (-0.6)
Inflation in main trading partners[4]	2.2 (2.2)	1.9 (2.0)	2.0 (2.0)	2.2 (2.0)
GDP growth in main trading partners[4]	0.8 (0.7)	0.9 (1.1)	1.9 (1.9)	2.6 (2.7)
Short-term interest rates in main trading partners (%)[5]	0.8 (0.8)	0.6 (0.6)	0.7 (0.7)	1.3 (1.3)

1. Figures in parentheses from forecast in *Monetary Bulletin* 2013/1. 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. Based on weighted average forward interest rates of Iceland's main trading partner countries.
Sources: IMF, Bloomberg, Consensus Forecasts, Global Insight, New York Mercantile Exchange, Statistics Iceland, Central Bank of Iceland.

III Financial conditions

Although nominal interest rates have been unchanged since November 2012, the monetary stance has continued to tighten. Market agents appear to assume that the Bank will keep interest rates unchanged this year and then begin raising them in 2014. The risk premium on Treasury obligations has declined, and Iceland's sovereign credit rating has improved since the last *Monetary Bulletin*. The króna has appreciated markedly since end-February, after falling virtually uninterrupted since August. The increase in house prices has lost pace in the recent term, but stock prices have risen sharply and new companies have been listed on the stock exchange. Private sector financial conditions are broadly unchanged since the beginning of the year.

Chart III-1
Central Bank of Iceland interest rates and short-term market interest rates
Daily data 1 January 2010 - 10 May 2013

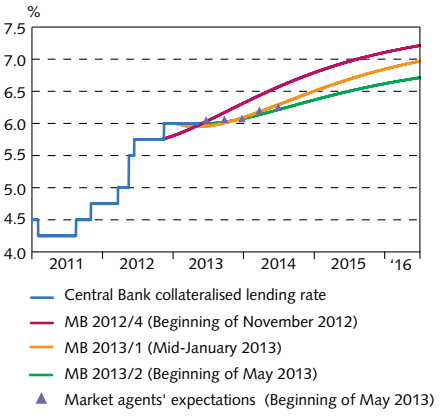


Source: Central Bank of Iceland.

Central Bank interest rates unchanged ...

At its 6 February and 20 March rate-setting meetings, the Central Bank of Iceland Monetary Policy Committee (MPC) decided to hold the Bank's interest rates 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 last November. Overnight interbank rates have developed more or less in line with Central Bank rates. They have remained below the centre of the interest rate corridor, due to ample banking system liquidity, with the exception of one day in March, when they moved over the upper half of the corridor, to 7%, because of a temporary fluctuation in market liquidity. Rates have changed more frequently in the recent term, however, and turnover has increased, which could indicate enhanced market effectiveness.

Chart III-2
Collateralised lending rate, forward market interest rates[1] and market agents' expectations concerning the collateralised lending rate[2]
Daily data 1 January 2011 - 30 June 2016



1. Interbank interest rates and Treasury bonds were used to estimate the yield curve. Treasury bonds maturing in May 2013 and March 2014 are excluded 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 6-10 May, 2013.
Source: Central Bank of Iceland.

... but the monetary stance has tightened

Even though the Bank's interest rates have remained unchanged, the monetary stance has tightened in line with declining inflation and inflation expectations since the last *Monetary Bulletin*. In terms of the average of various measures of inflation and inflation expectations, the Bank's real rate is now 1.5%, which is 0.6 percentage points high-

Table III-1 The monetary stance (%)

Real interest rates based on:[1]	*Current stance (10 May 2013)*	*Change from MB 2013/1 (1 Feb. 2013)*	*Change from MB 2012/2 (11 May 2012)*
Twelve-month inflation	2.0	0.9	3.9
Business inflation expectations (one-year)	0.8	0.0	1.0
Household inflation expectations (one-year)	0.4	0.5	2.4
Market inflation expectations (one-year)[2]	1.3	0.5	2.4
One-year breakeven inflation rate[3]	2.3	1.1	4.2
Central Bank inflation forecast[4]	2.3	0.7	2.9
Average	1.5	0.6	2.8

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.

er than just before the publication of the February *Monetary Bulletin* and 2.8 percentage points higher than at the same time a year ago.

Market agents expect rates to remain unchanged this year but edge upwards in 2014

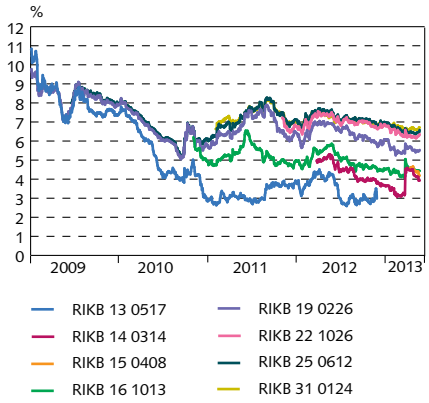
According to forward interest rates, market agents' expectations concerning Central Bank rates have changed little since January. The yield curve indicates that the Bank's rates will remain unchanged this year and then begin rising gradually in the first half of 2014. According to the yield curve, market participants expect the Bank's collateralised lending rate to rise by 0.5 percentage points, to 6.5%, by the end of 2014, and to 6.75% by the end of the forecast horizon, which is 0.25 percentage points below the expectations implied by the forward yield curve in January and about 0.5 percentage points less than was expected a year ago.[1] The Central Bank market expectations survey carried out at the beginning of May also indicates that market agents expect Bank's collateralised lending rate to remain unchanged until the end of 2013, but that rates will rise by 0.25 percentage points in Q1/2014, to 6.25%, which is 0.25 percentage points below the expectations in a similar survey carried out at the end of January.

Bond market volatile in March

The bond market responded strongly to the presentation of a bill of legislation amending the Foreign Exchange Act before Parliament on 9 March. The bill contained provisions authorising the Central Bank to set rules on exemptions from the prohibition set forth in Article 13, Paragraph 3 of the Foreign Exchange Act, which discusses the prohibition of cross-border movement of domestic currency. Some investors appeared to assume that the proposed legislative amendment entailed a narrowing of foreign investors' investment options under the capital controls, but this interpretation proved incorrect.[2] Yields on nominal Treasury bonds rose by as much as a percentage point on 13 March, mostly at the short end of the yield curve, which has been dominated by foreign investors in the recent term. The uptick has reversed in large part, apart from the rise in yields on the Treasury bond maturing in March 2014, which is still about 0.8 percentage points higher than it was just before the publication of the February *Monetary Bulletin*. Yields on longer Treasury bonds are on the other hand almost unchanged over the same period.

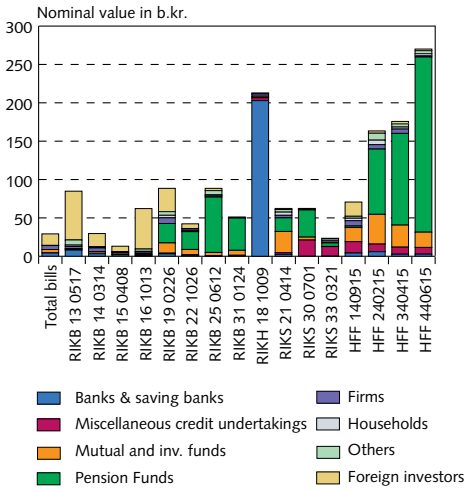
The Government Debt Management issuance calendar provides for net Treasury bond issuance of 7 b.kr. during the year. Furthermore, it has been announced that benchmark Treasury bonds amounting to 15-30 b.kr. will be offered for sale in Q2. Bonds have already been issued for just under 19 b.kr. Non-residents' need to reinvest follow-

Chart III-3
Yields on nominal Treasury bonds
Daily data 2 January 2009 - 10 May 2013



Source: Central Bank of Iceland.

Chart III-4
Owners of Government securities and HFF bonds
30 April 2013

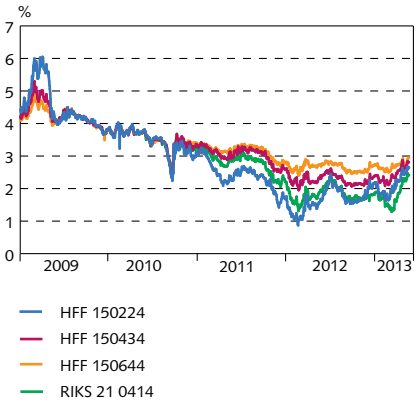


Source: Central Bank of Iceland.

1. Measurement problems at the short end of the yield curve (caused by the ineffectiveness of the interbank market) introduce a measure of uncertainty into the indications provided by the yield curve.

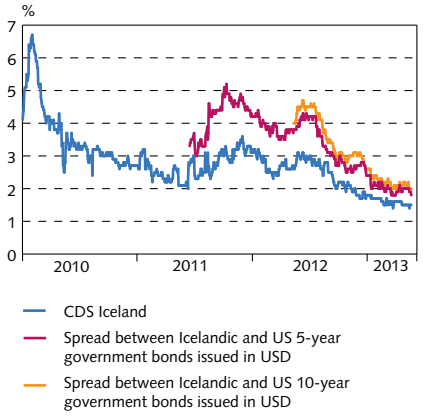
2. On 5 April, the Central Bank of Iceland issued the Rules on Foreign Exchange, no. 300/2013, in accordance with the provisions of Act no. 35/2013 Amending the Foreign Exchange Act. The Rules contain provisions on foreign investors' investment options in the domestic market when payment is remitted by withdrawal from the investor's account with a financial institution in Iceland, on the one hand, and when payment is remitted by withdrawal from a Vostro account owned by a foreign financial institution, on the other.

Chart III-5
Yields on indexed bonds
Daily data 2 January 2009 - 10 May 2013



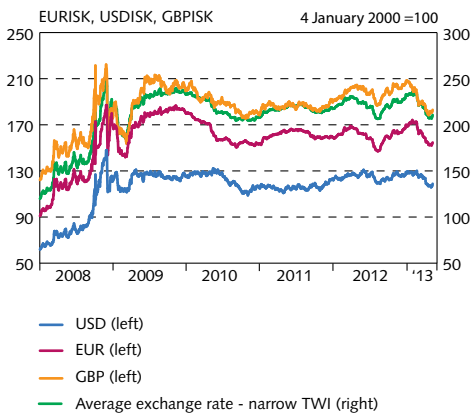
Source: Central Bank of Iceland.

Chart III-6
Risk premia on the Icelandic Treasury
Daily data 1 January 2010 - 10 May 2013



Sources: Bloomberg, Central Bank of Iceland.

Chart III-7
Exchange rate of the króna
Daily data 3 January 2008 - 10 May 2013



Source: Central Bank of Iceland.

ing the Treasury bond maturity on 17 May could push Treasury bond yields downwards in the near term. The bond in question had a nominal value of almost 85 b.kr. at end-April, and 75% of the outstanding stock is owned by foreign investors. If non-residents' investment strategies remain unchanged, the effects will probably be felt primarily at the short end of the yield curve.

Indexed bond yields have risen

On 20 February, Moody's downgraded the Housing Financing Fund's (HFF) credit rating to Baa3, whereupon yields on the Fund's bonds began to rise and the spread between HFF bonds and a comparable indexed Treasury bond maturing in 2021 began to widen. It peaked in early March at an all-time high of 0.8 percentage points vis-à-vis the HFF bond maturing in 2024 but has fallen back to 0.2 percentage points since then. Indexed bond yields have risen still higher in the recent term, in line with rising short-term real rates stemming from the tighter monetary stance, and are now 0.4-1.0 percentage points higher than just before the last *Monetary Bulletin*.

The HFF has not issued bonds since January 2012, and loan prepayment by borrowers has been substantial. Uncertainty about the Fund's future has probably affected yields on HFF bonds. A recent report by a work group on the future role of the HFF proposes changes in the Fund's future financing arrangements, although the final decision must be made by the new Government.

Risk premia on sovereign debt decline and credit ratings improve

The risk premium on Treasury obligations has continued to fall since the last *Monetary Bulletin*. The CDS spread on five-year Treasury debt is now 1.5 percentage points, after falling 0.1 percentage points since the last *Monetary Bulletin* and 1.2 percentage points from the same time last year. The risk premium according to the spread between the Icelandic Treasury's five- and ten-year US dollar bonds and comparable bonds issued by the US Treasury is now about 2 percentage points, which is 0.3 percentage points lower than in February and 2.0 percentage points smaller than a year ago. Market trading in these instruments is sparse, however. The declining risk premium has also been reflected in improved credit ratings. On 8 February, Moody's changed the outlook on Iceland's sovereign rating from negative to stable, and a week later Fitch Ratings upgraded both country ceiling and the sovereign rating for long-term obligations in foreign currency.

It is likely that domestic financial institutions' access to foreign capital markets will improve on the strength of declining risk premia and improved sovereign credit ratings. One of the commercial banks recently concluded a foreign bond issue, the first by an Icelandic financial institution since 2008.

Króna appreciates strongly

The exchange rate of the króna began to rise in late February, ending an almost uninterrupted slide since the latter half of 2012. Since the February *Monetary Bulletin*, the króna has appreciated by 10.2% in trade-weighted terms and by roughly 11% against the euro. Over the

same period, it has appreciated by 6.8% against the US dollar and 8.6% against the pound sterling. The appreciation is probably due to a combination of factors. After having bought foreign currency for over 20 b.kr. since the beginning of 2012, Central Bank decided at the beginning of this year to suspend its programme of regular foreign currency purchases and began buying krónur in the foreign exchange market instead. It has intervened in the market five times year-to-date, selling foreign currency for a total of 6.2 b.kr. The Bank also concluded a forward currency swap with Landsbankinn hf. on 19 February, with the aim of easing pressure on the króna. The agreement provides for the future delivery of euros in the amount of 6 b.kr. so as to reduce the bank's foreign currency imbalances. In spite of foreign currency sales amounting to 15 b.kr. (including the forward swap agreement) since the beginning of 2012, net accumulated foreign exchange purchases since that time total almost 5 b.kr. The Central Bank's intervention has eased pressure on the króna, not least by mitigating self-fulfilling expectations of a lower exchange rate, and has therefore facilitated the sale of foreign currency for krónur. In addition, domestic firms and municipalities have been successful in extending loan agreements until the second half of 2013, which should reduce the need to accumulate currency. Finally, the number of foreign tourists coming to Iceland has grown strongly from last year, which increases foreign exchange inflows and should offset the downward pressure due to domestic firms' upcoming foreign loan payments.

Deposits continue to contract ...

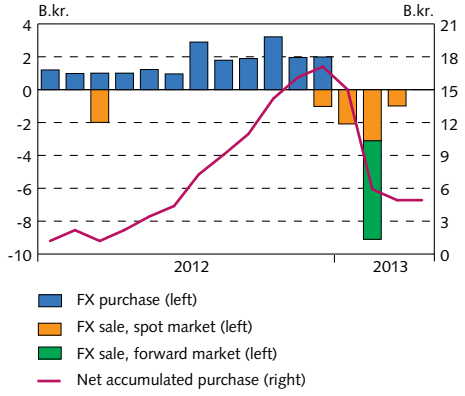
Total deposits held by residents in deposit money banks (DMB) contracted by 5.7% year-on-year in Q1. Household deposits declined by 2.1% over the same period. Household deposits soared following the collapse of the banking system, rising 36% in 2008 and 2009, and peaking in July 2009 at nearly 800 b.kr., or 53% of GDP. They have contracted by a fourth in the past three years are now roughly back to spring 2008 levels. Early on, this reflected in part the shift of deposits to other investment types offering higher returns, but the recent contraction does not appear to stem from this cause. This recent decline in deposits therefore indicates that households have invested some of their savings in real estate, paid down debt, or stepped up consumption of durables and semi-durables, prompted by low real deposit interest rates.

... and the money supply to shrink

M3 has contracted slightly in recent months and was down 5.5% year-on-year in Q1. The contraction is due primarily to a downturn in holding companies' sight deposits, although households' and firms' sight deposits declined as well. Excluding holding companies' deposits, M3 was down 1.7% year-on-year in Q1. For the past three quarters M3 has shrunk as a share of GDP, after having been well in line with nominal GDP growth since Q4/2011.

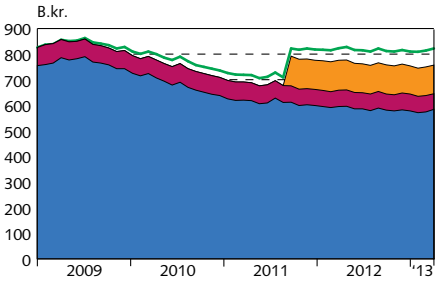
Narrow money has contracted more than M3, reflecting in part a shift from general savings accounts and sight deposits to term deposits. For instance, M2 was down 12% year-on-year in Q1 and M1

Chart III-8
Central Bank intervention in foreign exchange market
2012-2013



Source: Central Bank of Iceland.

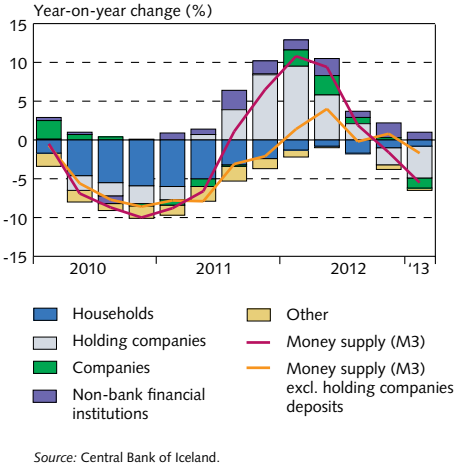
Chart III-9
Household financial assets[1]
January 2009 – March 2013



1. Information on households' holdings in investment funds is not available prior to September 2011. Indexed deposits have been CPI-adjusted, investment funds have been adjusted with reference to bond market yields, and securities holdings have been adjusted with reference to share prices and bond market yields.

Sources: Icelandic Securities Depository, Statistics Iceland, Central Bank of Iceland.

Chart III-10
Components of money supply
Q1/2010 - Q1/2013

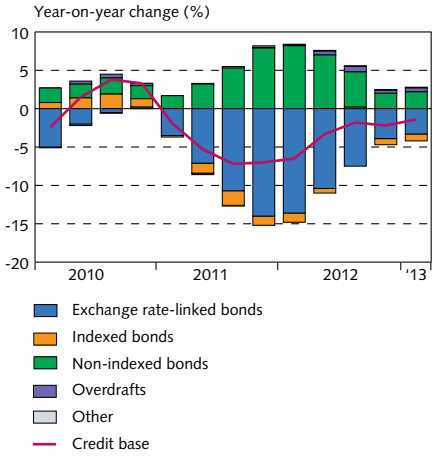


Source: Central Bank of Iceland.

Chart III-11

Contribution to growth in lending[1] to households and firms by DMBs, pension funds, and the Housing Financing Fund[2]

Q1/2010 - Q1/2013



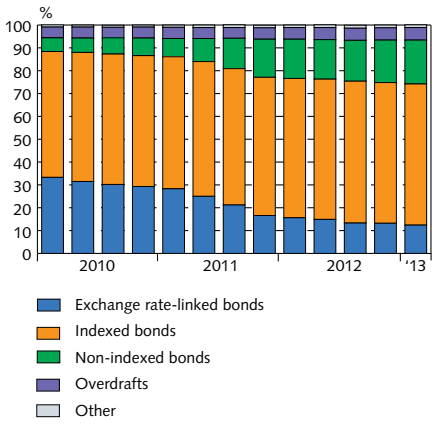
1. Adjusted for estimated effects of price level and exchange rate movements on CPI-indexed and exchange rate-linked loans. Loans of DMBs are assessed at book value. 2. Excluding holding companies.

Source: Central Bank of Iceland.

Chart III-12

Composition of the stock of loans[1] granted to households and firms[2] by DMBs, pension funds, and the Housing Financing Fund

Q1/2010 - Q1/2013



1. DMBs loan stock assessed at book value. 2. Excluding holding companies.

Source: Central Bank of Iceland.

by 10.7%. At the same time, Central Bank base money declined by 8.2%, primarily due to a contraction in DMB's deposits with the Bank.

Private sector loan stock has decreased slightly

In terms of book value, the exchange rate- and CPI-adjusted stock of loans from DMBs, pension funds, and the HFF to households and firms other than holding companies fell by 1.4% year-on-year in Q1. The decline is concentrated in DMBs' exchange rate-linked loans to firms, although the CPI-adjusted stock of HFF and pension fund loans fell over the same period, in part due to loan prepayment. On the other hand, the stock of non-indexed DMB loans to households and businesses has continued to grow year-to-date, in part due to refinancing.

The total amount of new mortgage loans from DMBs, the HFF, and pension funds was just over 14 b.kr. in Q1, slightly more than in the same quarter of 2012. DMBs account for the majority of new mortgage loans, and pension fund lending has increased as well, while new mortgage loans from the HFF have continued to decline between years. The majority of new DMB mortgages since the beginning of 2012 have been non-indexed, some of them for refinancing of older debt. Nonetheless, the share of indexed mortgage loans began growing in the latter half of 2012, which may be attributable in part to the rise in nominal mortgage lending rates in line with Central Bank interest rate hikes.

As Chart III-12 shows, the composition of the loan stock has changed radically since 2010. Exchange rate-linked loans have been written off or converted to non-indexed or indexed ISK loans. Exchange rate-linked loans constituted about one-third of all loans from DMBs, pension funds, and the HFF at the beginning of 2010 but now account for about 12%. At the same time, the share of non-indexed loans has risen from 6% to 19% and the share of indexed loans from 55% to 62%.

Rise in house prices loses pace ...

Capital area house prices have remained unchanged since the last *Monetary Bulletin* but have risen by roughly 4.6% in the past twelve months. Rent has continued to rise as well, with the rent price index almost 9% higher in Q1 than in the same quarter a year ago.

Even though the twelve-month increase in real estate prices has slowed down, the Bank's baseline forecast assumes that house prices will rise by nearly 5% this year, in line with the rise in disposable income and nominal GDP. Population growth and new property sales in the real estate market indicate the presence of some pent-up demand for housing. Furthermore, the difference between construction costs and real estate prices has narrowed sharply in the recent terms, and in some instances construction costs are higher than house prices, which has reduced the incentive to build homes, although the incentive to build rental housing is probably quite strong, given high rent prices. Based on information on residential investment in recent years and figures on new property sales, it can be assumed that the pre-crisis glut of new housing has diminished. Construction costs are

unlikely to decline in the near future, in part because of a new construction regulation that will raise building costs. On the other hand, first-time buyers could find it difficult to obtain sufficient credit, as maximum loan-to-value ratios have fallen from peak levels. In addition, guarantor mortgages have become far less common since the law was amended to tighten the requirements for this type of borrowing. Moreover, many homeowners are overleveraged as a result of inflation and declining property values in the post-crisis period, and they have limited room for manoeuvre in the market. The stock of flats owned by credit institutions could also keep house prices from rising when the properties are put on the market.[3]

House prices are projected to rise by an average of over 5% per year during the forecast horizon, in line with growth in disposable income and nominal GDP. Real house prices are now back to the level prevailing in mid-2004, just before the major structural changes in the domestic mortgage market. If the forecast materialises, they will be about 11% above the early-2010 trough by the end of the forecast horizon. This would still be a full one-fifth below the pre-crisis peak, however.

... although turnover continues to grow

Although price increases have slowed down, housing market turnover is still rising. In Q1, registered purchase agreements area rose by 14% year-on-year in the greater Reykjavík area and 10% nationwide.

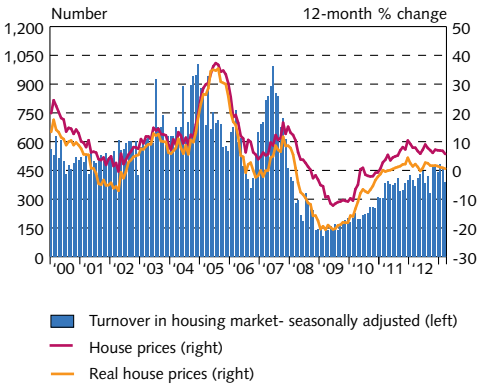
The Central Bank's foreign currency auctions have probably affected demand for residential housing. The 10 auctions held to date have channelled nearly 11.7 b.kr., just over 16% of the total auction amount, into the real estate market since February 2012. In comparison, housing market turnover totalled just under 183 b.kr. in 2012. The minimum amount eligible for participation in the auctions under the Bank's Investment Programme was reduced from 50,000 euros to 25,000 euros in February 2013, which should increase the number of investors able to participate. In the last auction, flats were available at a discount of 18.9% from the Bank's official EURISK exchange rate.

Share prices and corporate listings on the rise

Since the February *Monetary Bulletin* was published, the OMXI main list index has risen by 2.5% and the OMXI6 by 0.6%. Turnover was up 140% year-on-year in Q1, although it is still far below pre-crisis levels. The total market value of the domestic equity market is now just above 22% of 2012 GDP, which is not high in either historical or international context, but is probably very high considering that only nine domestic firms are listed on the market in Iceland. Three new firms were listed on the market last year, another two have joined them this year, and still others have announced plans for listing in coming months. Participation in initial public offerings has been brisk, clearly reflecting investors' keen interest in buying stock. The capital

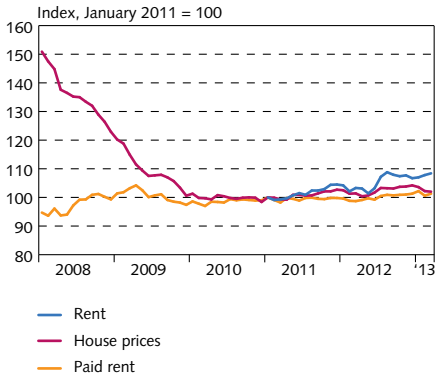
3. The number of flats owned by the HFF, the banks, and holding companies rose slightly in 2012, to just under 3,200 at year-end. Almost 39% of the flats were being rented out and about 16% were under construction, while the remainder were fully finished flats not being rented out. It can be concluded from this that a large percentage of the homes are probably being sold, although the distribution varies from region to region.

Chart III-13
Housing market prices and turnover in greater Reykjavík[1]
January 2000 - March 2013



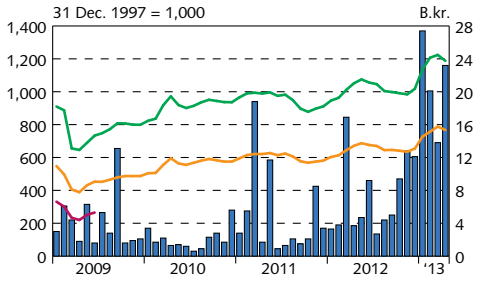
1. Turnover is based on the number of purchase agreements on the date of purchase.
Sources: Registers Iceland, Central Bank of Iceland.

Chart III-14
Rent, house prices and paid rent in real terms[1]
January 2008 - March 2013



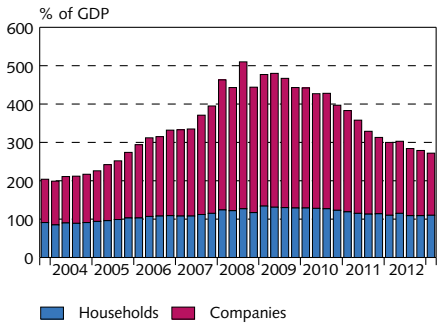
1. Rent and house price are for greater Reykjavík, paid rent is for the entire country.
Sources: Registers Iceland, Statistics Iceland.

Chart III-15
Equity market[1]
January 2009 - April 2013



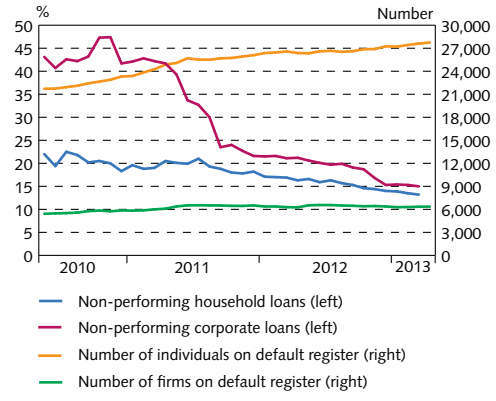
1. Total monthly volume of listed shares and monthly average of main stock indices.
Source: Nasdaq OMX Iceland.

Chart III-16
Company and household debt[1]
Q4/2003 - Q1/2013



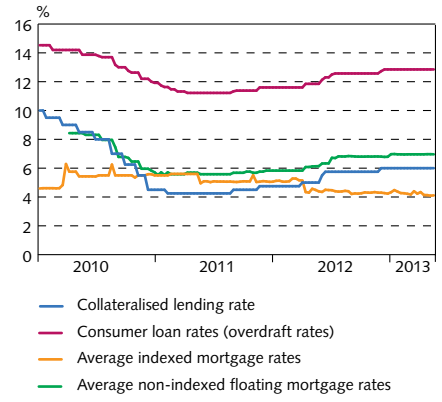
1. According to the Central Bank's seasonally adjusted GDP figures.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-17
Number of borrowers on the default register and non-performing loan[1] ratios of the three largest commercial banks and the Housing Financing Fund[2]
May 2010 - April 2013



1. Non-performing loans are defined as loans that have not been paid in more than 90 days 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.

Chart III-18
Central Bank collateralised lending rate and retail lending rates to households[1]
1 January 2010 - 10 May 2013



1. Weighted average lending rates, based on loan amount, from Arion Bank, Íslandsbanki, and Landsbanki. Indexed mortgages bear fixed interest for at least five years and up to the entire loan period.
Source: Central Bank of Iceland.

controls may have an indirect impact on price formation in the equity market, as they limit the investment options available to investors. Even though listed companies' earnings reports have generally been on a par with or below analysts' expectations in the past year, stock prices have been affected very little. It is therefore possible that the past few months' rise in stock prices has caused investors to lower their profitability requirements and set a lower price on risk than they did previously. There are signs that some investors have financed stock purchases with borrowed funds, which could cause greater volatility in the market.

Private sector financial conditions broadly unchanged

In the main, households' financial conditions are unchanged since the last *Monetary Bulletin*. Household debt has held steady as a share of GDP, but corporate debt has continued to decline. In international context, however, Iceland's private sector debt remains high. Non-performing loan ratios have declined at the three largest commercial banks and the HFF, but the number of individuals on the default register has risen. Asset prices have continued to rise, although house price increases have lost pace. Access to credit appears reasonably abundant for those with sufficient capital, but real interest rates have been rising with increased monetary tightening.

Corporate financial conditions are also broadly unchanged since the beginning of the year, although domestic banks' bond issues and strong participation in recent stock offerings indicate that their financing options are increasing, as has been assumed in previous analyses appearing in *Monetary Bulletin*. Corporate debt restructuring efforts seem to be proceeding reasonably well, and the number of bankruptcies and unsuccessful distraint measures was broadly unchanged year-on-year in Q1. The number and percentage of firms on the default register has changed little in recent months.

The outlook is for continued improvement in private sector financial conditions in the near term.[4] The full effects of the Supreme Court judgment on the validity of full-payment receipts in settling illegal exchange rate-linked loans have not yet come to the fore, although recalculation of the loans affected is well underway. Some cases involving such loans are still awaiting court handling.

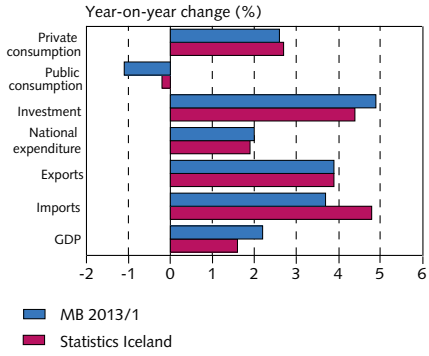
In addition, the authorities and the Icelandic Pension Funds Association have signed a memorandum of understanding on measures to assist overleveraged households with guarantor mortgages in buying homes, according to which parties with guarantor mortgages will be offered a solution comparable to the so-called 110% option. If the measure is implemented successfully, it could provide an estimated 2,000 households with total write-downs of about 3 b.kr.

4. See also the discussion of private sector financial conditions in Section IV of *Financial Stability* 2013/1.

IV Domestic demand and production

Since autumn, economic indicators have implied that the recovery has lost momentum, as is reflected in the Central Bank's forecast of weaker domestic economic activity. A similar development is discernible in many other economies, where in some cases a weak recovery has given way to a contraction in GDP. Recent figures from Statistics Iceland indicate that the recovery slowed down more markedly in 2012 than was provided for in the Bank's February forecast. Household and corporate demand appears to have deteriorated more rapidly than previously expected, and it is uncertain how protracted the setback will prove to be. The baseline forecast assumes that the outlook will improve, however, and that private consumption growth will gain pace later this year and investment will grow robustly in 2014-15, driven primarily by increased development in the energy-intensive sector. According to the forecast, the economic recovery will continue, albeit more slowly than previously anticipated. Even though output growth is forecast to be weaker during the forecast horizon, it will be broadly in line with the 30-year average and will be sufficient to ensure that the margin of spare capacity disappears by the end of the forecast period.

Chart IV-1
National accounts 2012
and Central Bank estimate



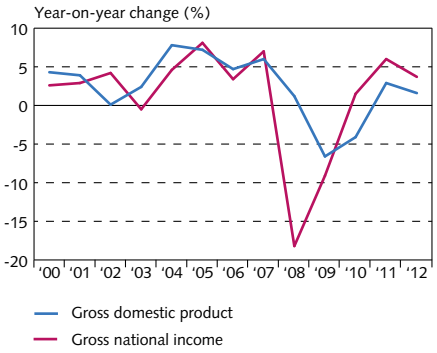
Sources: Statistics Iceland, Central Bank of Iceland.

GDP growth weaker in 2012 than according to the February forecast

Output growth measured 1.6% in 2012, according to preliminary figures from Statistics Iceland, slightly over ½ a percentage point less than was provided for in the February forecast. Seasonally adjusted growth was in line with the February forecast in the first half of the year but below expectations in the latter half, or 0.9% instead of the forecasted 1½%.[1] An important factor here was the unexpectedly strong increase in services imports, which cut into the contribution of net trade to output growth. Domestic demand grew by almost 2%, however, broadly in line with the February forecast.

When examining last year's national accounts, it is important to bear in mind that the data are preliminary, business investment figures in particular. Based on revisions from previous years, it is not unlikely that year-2012 output growth figures will ultimately exceed 1.6%. In this context, it is worth noting that output growth estimates for 2011 have recently been revised upwards by 0.3 percentage points, to 2.9%, primarily because more reliable corporate data show stronger growth in investment. The results of the Central Bank's survey of firms' investment plans may also indicate that a revision of total investment for 2012 could be in the offing.

Chart IV-2
Gross domestic product and gross national income[1]

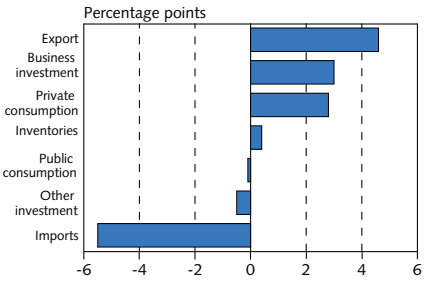


1. Gross national income (GNI) is defined as GDP adjusted for the effects of terms of trade and net external wage and interest income.
Source: Statistics Iceland.

National income growth outpaces GDP

Gross national income grew by 6% year-on-year in 2011 and just under 4% in 2012, thereby outpacing GDP in the past two years. This is due to the positive effects of wage and interest income, which more than offset the deterioration in terms of trade.

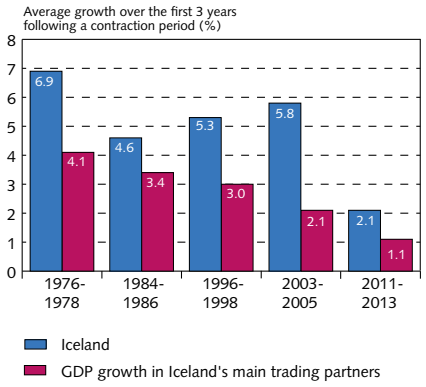
Chart IV-3
Contribution of GDP components to economic recovery[1]



1. From Q2/2010 - Q4/2012
Sources: Statistics Iceland, Central Bank of Iceland.

1. 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 intra-year economic developments; therefore, the Central Bank chooses to use other methods.

Chart IV-4
GDP growth during recovery periods[1]

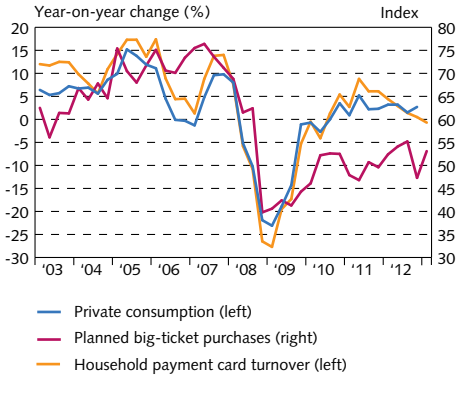


1. Contraction periods in Iceland are based on estimates from Thorarinn G. Petursson (2000), in addition to the periods 2002-2003 and 2008-2010. GDP growth for 2013 is based on the forecast in MB 2013/2.
Sources: Thorarinn G. Petursson (2000). "Business cycle forecasting and regime switching", Central Bank of Iceland *Working Paper* no. 7, Statistics Iceland, OECD, Central Bank of Iceland.

Chart IV-5
Export growth during recovery periods[1]

1. Contraction periods in Iceland are based on estimates from Thorarinn G. Petursson (2000), in addition to the periods 2002-2003 and 2008-2010. GDP growth for 2013 is based on the forecast.
Sources: Thorarinn G. Petursson (2000). "Business cycle forecasting and regime switching", Central Bank of Iceland *Working Paper* no. 7, Statistics Iceland, OECD, Central Bank of Iceland.

Chart IV-6
Private consumption, planned big-ticket purchases, and payment card turnover[1]
Q1/2003 - Q1/2013



1. Data for private consumption only available until Q4/2012.
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland

GDP has grown by over 7½% from the trough …

GDP grew by more than 7½% from the mid-2010 trough to the end of 2012. The recovery was driven mainly by export growth and private sector demand; i.e., private consumption and business investment. However, because import growth outpaced export growth, the contribution of net trade to the recovery was negative.

… but the recovery is weak in historical terms

The economic recovery is proceeding slowly, however, in comparison with post-contraction recoveries in recent decades (see, for example, the discussion in *Monetary Bulletin* 2010/2). This is unsurprising in view of the balance sheet shocks sustained by households, businesses, and the public sector as a result of the collapse of the banks, the depreciation of the króna, and the resulting surge in inflation (see also the discussion in *Monetary Bulletin* 2012/4). The effects could be seen, for instance, in the slower recovery of household consumption and business investment than in previous recoveries, and the weaker growth in public consumption and investment, owing to the difficult fiscal situation. In addition, Iceland's main trading partners are grappling with a deep contraction, which impedes export-driven recovery and is a factor in the slower pace of export growth than in previous recoveries, in spite of favourable exchange rate developments.

Private consumption growth slowed between H1 and H2/2012 …

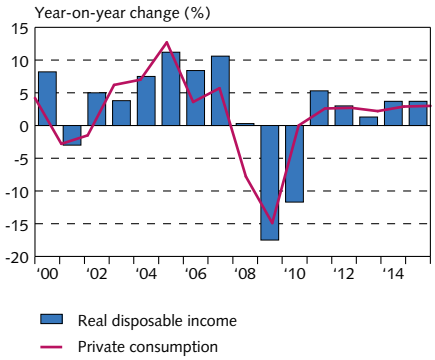
Private consumption growth measured 2.7% in 2012, in line with the Bank's February forecast. As expected, expenditure growth declined between the two halves of the year, although H2 growth was still somewhat stronger than was projected in February. The slowdown over the course of the year accords with major indicators of private consumption, such as payment card turnover and consumer goods imports. In addition, real wage growth was weaker in H2 than in H1, and household demand did not benefit from third-pillar pension savings withdrawals in the second half, as it did earlier in the year. The current forecast assumes that there will be fewer special measures to stimulate private consumption this year than there were in 2012, although there is still considerable uncertainty about the impact of the so-called receipt judgment (see Box IV-1) and possible policy measures following the recent Parliamentary elections. Although private consumption growth was modest in 2012, it still outpaced GDP growth, raising the share of private consumption in GDP from just under 52% in 2011 to nearly 54%.

… and appears set to grow more slowly this year than forecast in February

In spite of increased growth in real disposable income in 2012 and the outlook for stronger growth this year, household consumption spending appears to have been substantially weaker year-to-date. Payment card turnover contracted by 0.7% year-on-year in real terms during the first quarter, planned big-ticket purchases as measured by Capacent Gallup's March survey were virtually flat, and the rise in new motor vehicle registrations has slowed down, which may reflect the

depreciation of the króna at the turn of the year. A number of factors therefore suggest that private consumption growth will be weaker than was forecast in the last *Monetary Bulletin*. On the other hand, it is difficult to tell whether this is a harbinger of weaker growth further ahead or whether consumers are staying their hand temporarily in response to greater uncertainty about the economic outlook and the household debt position. The forecast assumes that, unlike last year, growth will be weaker in the first half of the year than in the second half. Private consumption is projected to grow by 2.2% in 2013 and 3% per year in 2014 and 2015, which is weaker than in the February forecast but an average of ½ a percentage point above the 30-year average. If the forecast materialises, private consumption relative to GDP will remain virtually unchanged during the forecast horizon, and slightly below the historical average.

Chart IV-7
Private consumption and real disposable income 2000 - 2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

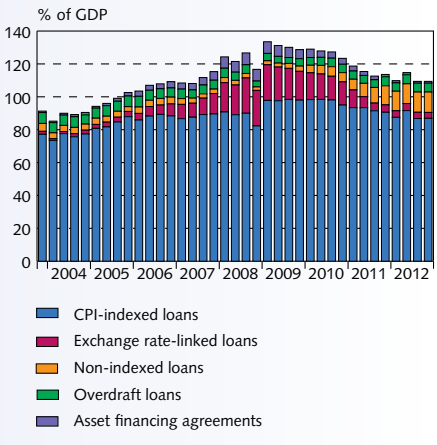
Box IV-1

Payments to households in the wake of the financial crisis

Icelandic households suffered severe financial shocks in the prelude to and aftermath of the banking and currency crisis. The króna depreciated by more than half from its peak in mid-2007 to its trough shortly after the collapse of the domestic banking system. Prices skyrocketed thereafter, and inflation soared to a high of 18.6% in January 2009. All of this hit Icelandic households especially hard, not least because they had accumulated substantial debt during the pre-crisis period (see Section III). The rise in inflation- and exchange rate-linked debt, the plunge in real house prices by about a third, and the collapse of money market funds and the stock market severely damaged many households' balance sheets. Moreover, nominal wages did not rise in tandem with prices, and unemployment surged from 1% in 2007 to over 9% early in 2010. As a result, households' solvency and debt sustainability problems were greatly exacerbated, and household demand contracted sharply.[1] The contraction in private consumption measured nearly 8% in 2008 and about 15% in 2009, and private consumption as a share of GDP fell to about 51%, some 6½ percentage points below its 30-year average.[2] Private consumption has gradually recovered since mid-2010, although it is still somewhat below the long-term average as a share of GDP.

It is clear that the contraction in private consumption could have been even more severe and the crisis even deeper if various supportive measures had not been undertaken. Many neighbouring countries stepped up public spending and cut taxes. In Iceland, however, the steep rise in public sector debt following the crisis placed strict limitations on the authorities' scope to take such action. A number of measures were adopted by the Government and other parties, however, with the aim of supporting household demand. The measures included expanded entitlement to unemployment benefits, the Government-sponsored "Back to Work" initiative and the third-pillar pension savings withdrawals. Offsetting this, however, were cutbacks in payments from the Maternity/Paternity leave Fund and the social security system, as well as a reduction in child benefits in 2010 and 2011. The reduction in child benefits will expire this year.

Chart 1
Household debt as a share of GDP
Q4/2003 - Q4/2012

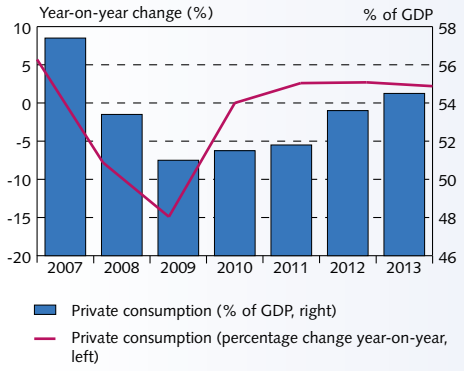


Sources: Statistics Iceland, Central Bank of Iceland.

1. See, for example, Thorvardur Tjörvi Ólafsson and Karen Áslaug Vignisdóttir (2012), "Households' position in the financial crisis in Iceland", Central Bank of Iceland *Working Paper*, no. 59, June 2012.
2. The Central Bank forecasts published before the financial crisis materialised assumed that domestic consumption was markedly above the level that was sustainable in the long term and that some sort of adjustment in consumption spending was inevitable. The crisis expedited and exacerbated that adjustment.

Chart 2

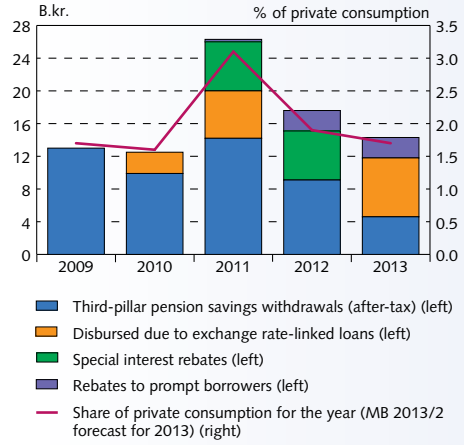
Pre- and post-crisis developments in private consumption[1]



1. Central Bank of Iceland forecast for 2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 3

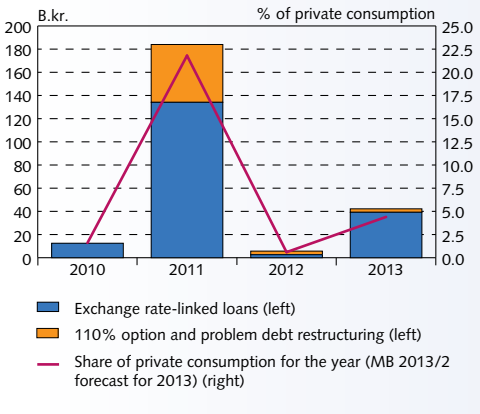
Special post-crisis disbursements to households



Sources: Statistics Iceland, Central Bank of Iceland.

Chart 4

Post-crisis write-downs of household debt



Sources: Icelandic Financial Services Association, Statistics Iceland, Central Bank of Iceland.

Third-pillar pension savings withdrawals

One of the most important post-crisis measures did not strain public sector finances but actually generated fiscal revenues: the temporary authorisation for withdrawal of third-pillar pension savings. Under this measure, households with supplementary pension savings were authorised to withdraw a portion of those funds, subject to a specified maximum, thereby enabling them to respond to the economic shocks accompanying the crisis.[3]

By end-March, nearly 66,000 individuals had applied to withdraw 84.5 b.kr. of their third-pillar pension savings. The authorisation for such applications expires on 1 January 2014, although payments will be remitted for up to 15 months thereafter. From 2009 through end-2012, pension savings withdrawals totalled 46 b.kr. after taxes, or an average of 2% of private consumption per year. Although the pace of withdrawals has slowed down, payments are still substantial, totalling an estimated 4.6 b.kr. after taxes this year. Third-pillar pension savings withdrawals therefore generated some 51 b.kr. after taxes during the period 2009-2013, the equivalent of 5.2% of estimated year-2013 private consumption, or almost 3% of GDP.[4]

Other special payments to households

Furthermore, households have received special interest rebates in the amount of 12 b.kr.[5] They have also been reimbursed for overpaid interest and instalments on exchange rate-linked loans, with payments totalling an estimated 15.6 b.kr., including this year's reimbursements. Commercial bank customers whose mortgage payments are up to date have received roughly 5.3 b.kr. in interest rebates, including this year's payments. These payments amount to a total of 32.9 b.kr., the equivalent of just over 3% of estimated year-2013 private consumption, or nearly 2% of GDP. Including post tax third-pillar pension savings withdrawals, disbursements in accordance with these measures totalled 83.7 b.kr. during the period 2009-2013, the equivalent of nearly 9% of estimated year-2013 private consumption, or almost 5% of GDP.

Write-downs of household debt

It is estimated that the principal amount of exchange rate-linked loans that have been deemed illegal by court rulings will be written down by over 39 b.kr. this year.[6] This is in addition to the more than 149 b.kr. in write-downs in 2010-2012, as a result of court judgments on the illegality of numerous loans linked to foreign currencies, and a reduction of 56 b.kr. in debt in connection with the special problem debt restructuring programme and the so-called 110% option. Included in these figures is the recently concluded

3. A large portion of Icelandic households' savings is invested in pension funds and housing and is therefore inaccessible at short notice if households should suffer temporary shocks. Because a significant share of households had limited access to financial markets and their assets lost collateral value in the wake of the crisis, they had difficulty responding to a temporary reduction in income by borrowing money in order to smooth their consumption spending, even though their expected permanent income had been reduced very little. Without access to such savings, even though it was their own, households would probably have had to curtail private consumption even further.
4. It can be assumed that most of those who withdrew a portion of their third-pillar savings continued to make contributions to third-pillar funds, prompted by tax advantages and matching employer contributions. In spite of the authorisation for pension savings withdrawals, the total balance of households' third-pillar pension savings has continued to grow year by year and is now some 33% higher than at year-end 2008.
5. These are payments in addition to regular mortgage interest subsidies.
6. It is assumed that the legal uncertainty surrounding the recalculation of the loans will be eliminated by end-2013. It is possible that some write-downs and reimbursements of overpaid interest will be deferred until 2014.

memorandum of understanding between the authorities and the Icelandic Pension Funds Association, which authorises borrowers with guarantor mortgages from pension funds to apply for debt reduction in accordance with the 110% option. The Treasury will reimburse the pension funds for the bulk of the expense involved. The write-downs could equal an estimated 3 b.kr. Since the crisis struck, household debt has been reduced by over 244 b.kr. as a result of these measures. This is equivalent to one-fourth of estimated year-2013 private consumption, or nearly 14% of GDP. Not included in these figures are the write-downs implemented by some credit institutions before official measures were introduced and exchange rate-linked loans deemed illegal.

Municipal consumption stronger than expected, while Treasury expenditure in line with expectations

Nominal public consumption for 2011 has been revised upwards by 2.6 b.kr. from previous figures, and the contraction in real terms is now estimated to be considerably smaller than previously assumed, or 0.2% instead of 0.9%. The revision is attributable to stronger municipal consumption than previously assumed, and the contraction in public consumption is now assumed to be virtually nil instead of just over 1%. Furthermore, the consolidation in public finances has been somewhat less pronounced than the Bank had assumed. The upward revision by Statistics Iceland is attributable to a large degree to increased expenditure by the municipalities with the strongest operating performance. The consolidation in central government consumption is in line with the Bank's February forecast, however.

Contribution of public expenditure to GDP growth turns positive again

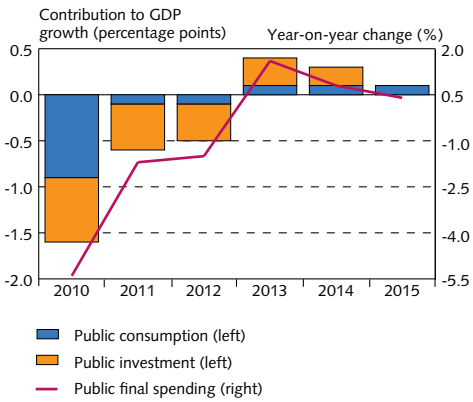
Although public consumption was stronger than previously assumed, the contribution of public expenditure to GDP growth was negative by 0.4 percentage points in 2012, as public investment contracted by 17% during the year. As a share of GDP, public investment fell to 1.8%, its lowest point in decades. Public consumption is expected to increase by 0.5% this year and public investment by almost 18%. Public consumption growth is forecast to be broadly unchanged and public investment to continue growing throughout the forecast horizon, albeit somewhat less strongly than in 2013. If this forecast materialises, the contribution of public expenditure to GDP growth will be positive this year and for the remainder of the forecast horizon, whereas it has been negative since 2009. Public sector finances are discussed in Section V.

Business investment grew while sub-components diverged

Total business investment grew by 8.6% last year. Investment in ships and aircraft weighed heavily in the total, as investment related to energy-intensive industry contracted by over a fourth year-on-year and general business investment (i.e., excluding ships and aircraft and the energy-intensive sector) was flat. As in recent forecasts, however, the outlook for energy-intensive investment has changed significantly. The current forecast assumes that investment in the sector will

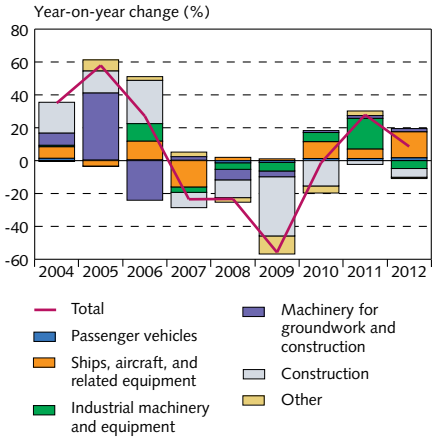
Chart IV-8

Public consumption and investment 2010-2015[1]



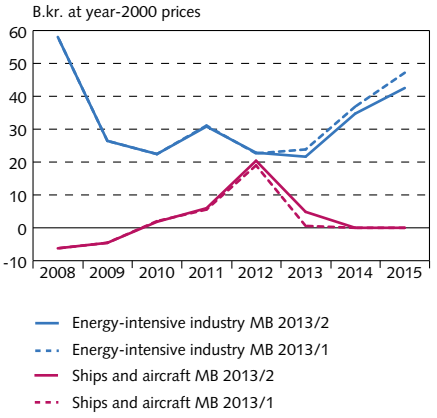
1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-9
Business investment by category
2004 – 2012



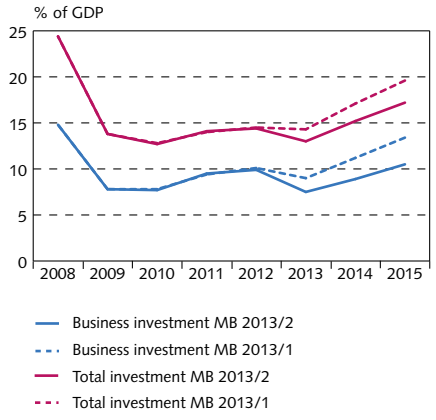
Source: Statistics Iceland.

Chart IV-10
Investment in energy-intensive industry and ships and aircraft 2008-2015[1]



1. Central Bank baseline forecast 2013 - 2015.
Sources: Statistics Iceland, Central Bank of Iceland..

Chart IV-11
Investment as a share of GDP 2008-2015[1]



1. Central Bank baseline forecast 2013 - 2015.
Sources: Statistics Iceland, Central Bank of Iceland.

continue to shrink, measuring just under 5½% this year, whereas the February forecast projected that it would grow by roughly that amount. Therefore, it is forecast to be about 5-10% weaker than previously projected over the forecast horizon as a whole. The changes in the forecast are due in particular to the postponement of development projects, in some cases beyond the current forecast horizon.

Table IV-1 Survey of corporate investment plans

Largest 134 firms (number) Amounts in ISK billions	*2011*	*2012*	*2013*	*Change between 2011-2012 (%)*[1]	*Change between 2012-2013 (%)*[1]
Fisheries (20)	4.0	9.0	6.9	122	-23
Industry (22)	5.2	7.6	4.8	47	-37
Wholesale and retail sale (35)	4.4	7.2	3.8	42	-31
Transport and tourism (12)	12.5	12.6	15.2	-17	2
Finance/Insurance (11)	2.7	3.4	3.8	22	12
Media and IT (12)	5.3	5.7	6.5	7	14
Services and other (22)	6.2	10.4	9.7	68	-7
Total (134)	40.3	55.9	50.7	31	-11

1. Paired comparison.

Outlook for general business investment considerably bleaker this year …

The outlook for general business investment has deteriorated since the Bank's last forecast. An increase of about one-fifth was expected in February, whereas the current forecast assumes a contraction of over 5%, based in particular on the most recent Central Bank survey of firms' investment plans for the year (see Table IV-1). According to the survey findings, in most sectors investment will be weaker this year than in 2012. In comparing the two surveys, however, it should be borne in mind that, both overall and in most individual sectors, actual investment was stronger in 2012 than the results of last year's survey indicated.

Offsetting the poorer outlook for general business investment and the energy-intensive sector, investment in ships and aircraft is projected to be stronger than was assumed in February. On the whole, business investment is therefore expected to contract by 23% instead of the 11½% according to the February forecast. Over the next two years, however, the outlook is for 20% growth per year, most of it due to increased investment in energy-intensive industry and related projects.

… with signs that only a fifth of general investment is credit-financed

In the above-mentioned Central Bank survey, respondents were asked about investment financing. The results indicate that only about a fifth of planned investment projects will be externally financed through borrowing. The majority of general business investment will be therefore financed internally with equity, as appears to have been the case last year. This could be an indication that a significant proportion of investment is being carried out by companies that have substantial capital due to strong operating results in the recent past. It can be seen, for instance, in the concentration of investment in sectors with

the most favourable operating conditions. This is not universally the case, however, and unfortunately it is impossible to determine from the survey findings whether the low percentage of credit-financed investment stems from limited corporate demand for credit due to emphasis on deleveraging rather than increasing production capacity, or to a limited supply of credit caused by lenders' tighter credit assessments. As Chart IV-12 shows, there is a reasonably strong connection between firms' investment and their profit expectations; therefore, it can be assumed that investment will pick up when corporate sentiment improves.

Continued growth in residential investment expected

Investment in residential housing has grown steadily since bottoming out in 2010. Residential investment growth measured just under 7% in 2012 and is projected at 28½% this year. This forecast is based in part on Federation of Icelandic Industries estimates of the number of residential buildings expected to be under construction in 2013, taking into account that a large share of the planned new homes will be relatively high-priced. The housing market is still showing the signs of the financial crisis and its effect on demand and credit supply. In addition, data from Registers Iceland show that, for condominium housing in greater Reykjavík, the price per square metre differs greatly from neighbourhood to neighbourhood, so that the incentive to undertake new investment varies likewise, depending on the ratio of construction costs to sale price. According to the forecast, residential investment growth is estimated at 11-26% in 2014-15, somewhat more than was projected in February. Residential investment relative to GDP measured 2.6% in 2012 and, if the forecast materialises, is projected to rise to 4.5% by 2015, which is close to the 30-year average.

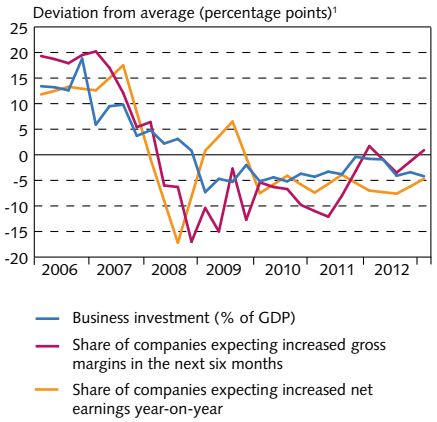
Outlook for weaker investment than previously expected

Growth in total investment measured 4.4% in 2012, some 10 percentage points less than in 2011, and was driven by ships and aircraft and residential housing, however, as general investment remained unchanged and energy-intensive and public investment contracted sharply, as is discussed above. Public investment is expected to turn around and residential investment to continue growing this year, but these increases will do little to counteract the roughly 25% contraction in business investment. As a result, total investment is projected to shrink by 9.2% this year, due in large part to the strong year-on-year contraction in investment in ships and aircraft. Total investment excluding these items is expected to grow by 5% year-on-year. The forecast assumes that investment will gain momentum as public and private sector economic conditions improve and debt restructuring measures begin to bear fruit. This will show as a marked improvement in investment in 2014-15, with a positive contribution from virtually all subcomponents. Total investment is projected to grow by over 20% next year and only slightly than that amount in 2014.

Investment as a share of GDP is expected to grow during the forecast horizon, albeit less strongly than in the Bank's last forecast. According to the current forecast, it will rise from 14.4% in 2012 to

Chart IV-12

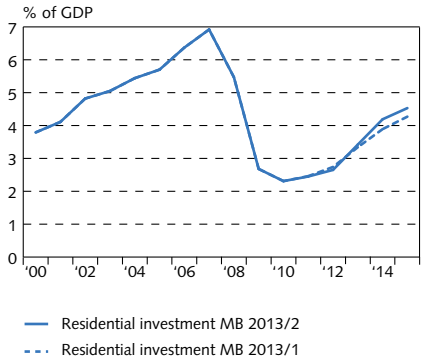
Business investment as a share of GDP and corporate expectations



1. Based on 30-year average share of business investment in GDP and the average share of companies expecting increased gross margins and net earnings, according to Capacent Gallup survey from 2006. A linear interpolation is used to generate quarterly data.
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland.

Chart IV-13

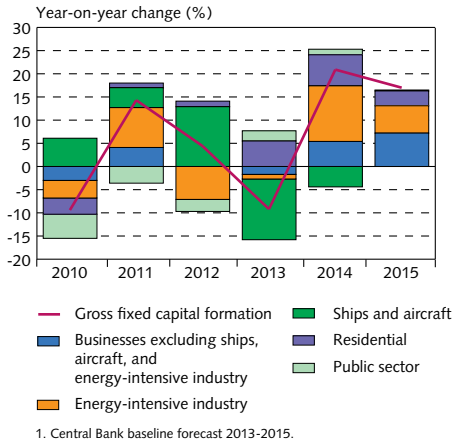
Residential investment 2000-2015[1]



1. Central Bank baseline forecast 2013- 2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-14

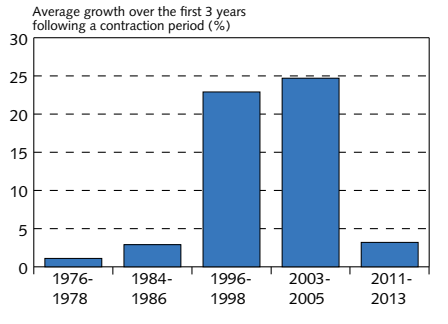
Gross fixed capital formation and contribution of its main components 2010 - 2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

over 17% in 2015, or slightly more than 3 percentage points below the 30-year average.

Chart IV-15
Investment growth during recovery periods[1]

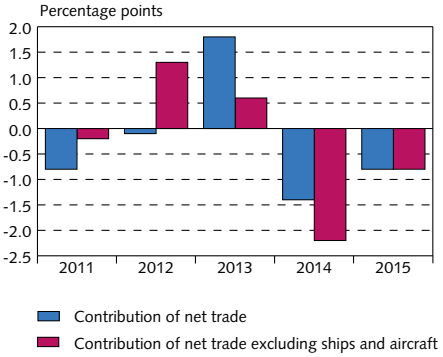


1. Contraction periods in Iceland are based on estimates from Thorarinn G. Petursson (2000), in addition to the periods 2002-2003 and 2008-2010. GDP growth for 2013 is based on the forecast in MB 2013/2.
Sources: Thorarinn G. Petursson (2000). "Business cycle forecasting and regime switching", Central Bank of Iceland *Working Paper* no. 7, OECD, Statistics Iceland, Central Bank of Iceland.

Growth in total investment broadly similar as in previous recovery phases

According to the forecast, total investment growth will average 3.2% per year in 2011-13. It is therefore much weaker during the current recovery than in the wake of the contractions of the past two decades, when it was driven by major development projects in the energy-intensive sector. On the other hand, it is more in line with the recoveries following the contractions of the 1970s and 1980s. It should be noted, though, that the public and private sector debt level is far higher during the current recovery and debt service burdens are therefore more likely to hinder investment activity. Furthermore, the global economy is exceptionally unfavourable at present, which complicates access to foreign credit and tends to discourage firms from undertaking new investment (see Box I-2 in *Monetary Bulletin* 2012/4 and the discussion above).

Chart IV-16
Contribution of net trade to GDP growth[1]

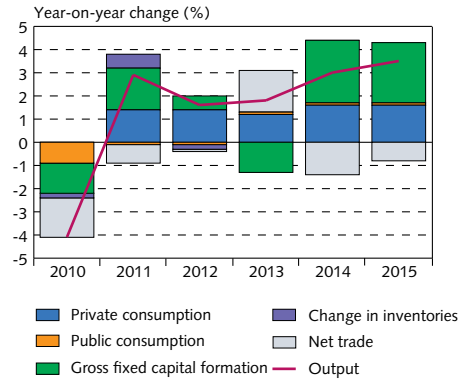


1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Contribution from net trade most positive than previously forecast

Export growth measured 3.9% in 2012, in line with the February forecast. Goods exports grew by 3.1% and services exports by a full 5.2%. Imports grew by 4.8%, over a percentage point more than previously forecast. Primarily because of strong growth in services imports in Q4, the contribution of net trade to output growth was less than according to the February forecast. If imports and exports related to investment in ships and aircraft are excluded, export growth somewhat outpaced import growth in 2012, and the contribution from net trade adjusted for these items was positive by just over 1 percentage point. The contribution from net trade is projected to be positive by about 1½ percentage points, mainly reflecting the year-on-year reduction in imports of ships and aircraft. If these items are excluded, export growth exceeds import growth, but by a smaller margin. Import growth is expected to overtake export growth in coming years. If the forecast materialises, the contribution from net trade will be negative by just under 1 percentage point in 2014 and about 0.3 percentage points in 2015.

Chart IV-17
GDP growth and contribution of underlying components 2010 - 2015[1]



1. Central Bank baseline forecast 2013 – 2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Weaker recovery than previously projected, but GDP growth to gain momentum in coming years

The economic recovery that began in 2010 has slowed down, with year-2012 GDP growth and the outlook for 2013 weaker than previously forecast. GDP growth is projected to be under 1% in the first half of this year and then gain strength, measuring 1.8% for the year as a whole, or 0.3 percentage points less than in the February forecast. It will be driven by private consumption and the contribution from net trade, due both to export growth and to the contraction in imports of ships and aircraft. Growth in private consumption will be offset by the contraction in investment, and national expenditure will therefore remain virtually unchanged year-on-year. Domestic demand is

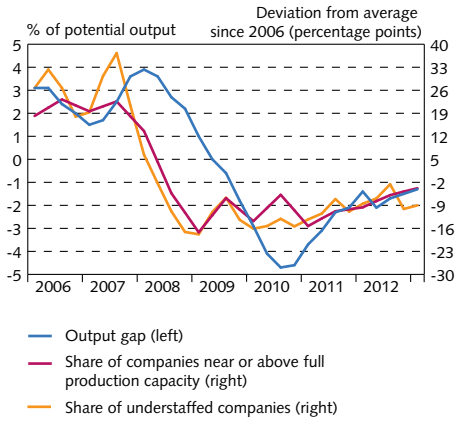
expected to rally in the next two years, primarily because of increased investment – particularly in the energy-intensive sector – and grow by an average of 4½% per year. On the other hand, the contribution from net trade will be negative because of increased imports related to demand growth. GDP growth will be in the 3-3½% range and will average 2.8% during the forecast horizon, which is somewhat less than was forecast in February but well in line with the 30-year average.

Margin of spare capacity diminishes steadily

Since 2008, there has been a significant slack in the economy. Although the exact amount of spare capacity is uncertain, as is its future path, it is forecast to taper off steadily. This assumption is supported by the declining unemployment rate and the Capacent Gallup surveys of outlook and expectations among Iceland's largest firms. The survey findings show that, since the first half of 2011, executives who consider their firms to be operating close to capacity have increased steadily in number, while the number of those who consider their firms to be operating below capacity has declined. Nonetheless, companies with spare capacity outnumber those operating at full capacity. Responses concerning staffing show as well that a larger number consider themselves short-staffed than at the same time in 2011. These indications imply that the slack in the economy is narrowing, although some spare capacity remains. The capital-output ratio and developments in wages as a share of factor income also indicate that the margin of spare capacity is diminishing. The capital-output ratio has declined since 2010, indicating improved utilisation of the capital stock, and the wage share has risen towards its long-term average.

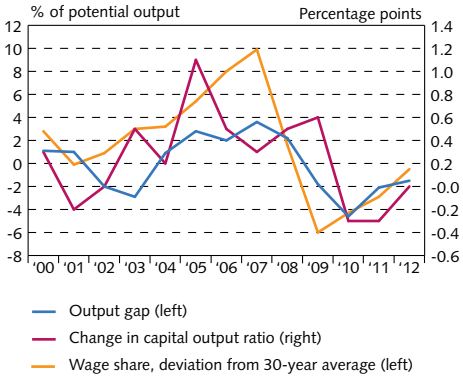
Even though year-2012 output growth was below the February forecast, it is estimated now, as it was then, that the margin of spare capacity in 2012 was about 1½% of potential output. The unchanged assessment of the 2012 output slack reflects both the upward revision of year-2011 GDP by Statistics Iceland and the assumption that growth in potential output was less than previously projected. It is assumed that, during the forecast horizon, potential output will grow more slowly than output growth, or around 1-2½% per year. The margin of spare capacity will diminish as the forecast horizon progresses, in line with declining unemployment, and is expected to have disappeared by the end of the forecast period.

Chart IV-18
Output gap and indicators of spare capacity



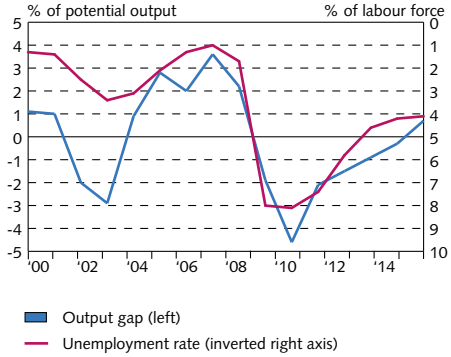
Sources: Capacent Gallup, Central Bank of Iceland.

Chart IV-19
Output gap, wage share and capital output ratio 2000-2012



Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-20
Output gap and unemployment 1990-2015[1]

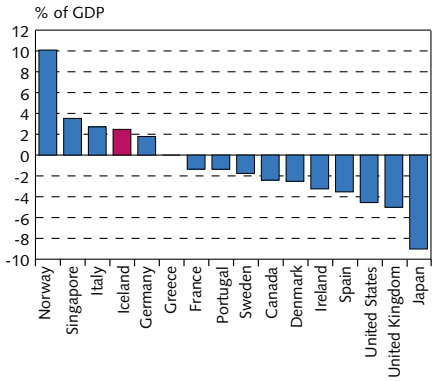


1. Central Bank baseline forecast 2013-2015.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

V Public sector finances

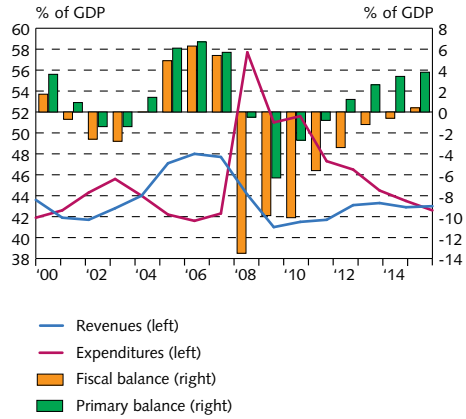
The main objective of post-crisis budget planning has been to put Iceland's fiscal debt on a sustainable footing. At the beginning of the recession, the fiscal deficit was large because of the steep decline in revenues and abrupt increase in expenses related to rising unemployment and the recapitalisation of the financial system. It was necessary to tackle this deficit build-up in order to keep government debt from growing unsustainably. A medium-term plan to bring public sector finances into balance was presented and has been amended as uncertainty about the debt position has abated and the debt ratio stabilised. Targets for the primary and overall balance have always been used as a reference for budget planning. The current medium-term plan, which was approved in the 2012 National Budget, assumes a primary surplus in 2012 and an overall surplus in 2014. According to this, government debt should stop accumulating next year.

Chart V-1
General government primary balance in developed countries in 2013



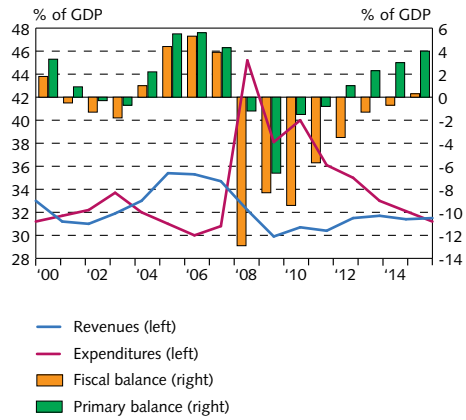
Source: International Monetary Fund (2013). *Fiscal Monitor*, april 2013.

Chart V-2
General government finances 2000-2015[1]



1. Central Bank baseline forecast 2013 - 2015. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-3
Treasury finances 2000-2015[1]



1. Central Bank baseline forecast 2013-2015. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Primary surplus target met in 2012 ...

The first full year after the conclusion of the Stand-By Arrangement (SBA) between the Icelandic Government and the International Monetary Fund (IMF) is now at an end. In order to support the economic recovery, the fiscal budget for 2012 slightly eased the consolidation measures included in the budget proposal submitted in 2011, when the SBA was still in progress. The objective of achieving a surplus on the overall balance was postponed by one year, to 2014, and this adjusted target was confirmed in the fiscal budget for 2013. The objective of achieving a surplus on the primary balance in 2012 was still in effect, however, and was used as a basis for the 2012 National Budget. The preliminary figures for Treasury performance on a cash basis are now available for the year 2012.[1] Those figures indicate that most of the targets in the 2012 National Budget were met. The budget assumed a primary surplus of 2%. Underlying operations are therefore in line with budgetary goals, and the primary surplus target was met, as were revenue targets, and expenditures were 2% below total expenditure appropriations. As Chart V-1 shows, this year's primary surplus is one of the largest among developed countries.

... but whether the overall surplus target for 2014 will be met is uncertain

The 2012 fiscal budget did not include a possible charge for the contribution to the Housing Financing Fund (HFF) in the amount of 13 b.kr. The contribution was considered a capital injection and was therefore not expensed. The need for write-offs due to the HFF's deficit operations is probably much larger, however, and is one of the chief threats to the achievement of a balanced budget. According to Statistics Iceland's preliminary Treasury performance figures for 2012, which were calculated on an accrual basis, this contribution is charged, however, and it will probably be charged as well in the Treasury accounts when they are released in June.

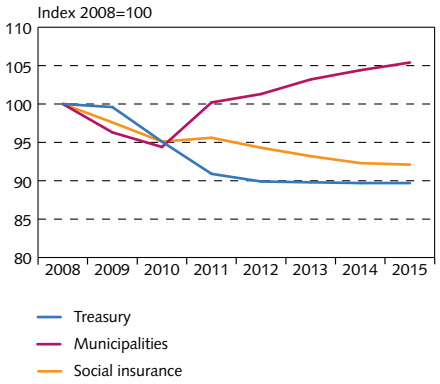
1. The objectives of the fiscal consolidation plan are presented in the National Budget on a cash basis, which usually depicts a poorer fiscal performance than accounting on an accrual basis.

In considering whether Treasury debt is sustainable, it is important to take account of accrued pension obligations, although according to international standards they are not included in official government debt figures. Statistics Iceland's preliminary figures for 2012 show that pension obligations due to Government employees increased by 10 b.kr. upon revaluation, but this does not appear in the accrual basis accounting used for the National Budget. Based on the revaluation, the pension obligations are now just under 23% of GDP and are added to the debt ratio of just over 80% of GDP. The Treasury's scope to fund expansionary fiscal measures to support the economic recovery is therefore quite limited.

Risks to the fiscal situation in coming years are primarily on the downside. The economic recovery has lost pace somewhat, which puts pressure on the revenues side of the budget, and new proposals for increased expenditures have emerged, such as the construction of the new hospital and the bill of legislation on social security pension benefits and social support. Other things being equal, these proposals would call for offsetting measures on the expenditures and/or revenues side if the long-term objective of balanced government finances is to be achieved.

The Central Bank forecast of the fiscal outlook does not assume further charges due to the HFF's write-off requirement. This is not because it is considered unlikely that such write-offs will be needed, as the Bank is of the opinion that the Fund's operations are currently unsustainable.[2] It is difficult, however, to project how much write-offs will be and at what point in time the Treasury will allocate increased funds to the HFF.

Chart V-4
Growth of real public consumption 2008-2015[1]



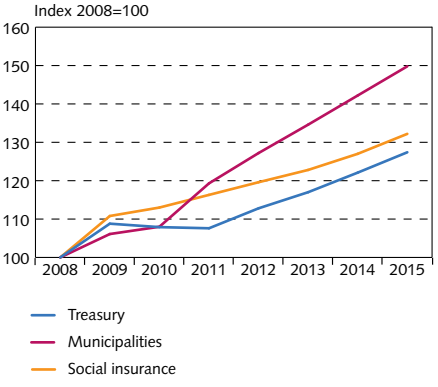
1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Treasury public consumption shrinks while municipal public consumption grows

In 2012, public consumption by the Treasury and the social security system continued to shrink. Treasury public consumption contracted by 1% and social security consumption by 1.4%. Treasury public consumption has therefore contracted in volume terms by a total of 10% since 2008, and the social security system's public consumption expenditure has declined by 5.7% over the same period.

The municipalities' first response to the economic crisis was to cut back on public consumption, with the result that their consumption expenditure contracted more than that of the Treasury in the first two years after the crisis struck, or by 5.7%. There was a turning point in 2011, however, when municipal public consumption expenditure began growing again, rapidly enough that it rose by 5% in 2011 and 2012 combined. The deficit in municipal operations totalled only 0.3% of GDP in 2011 and 2012, however, as opposed to nearly 1% in 2009 and 2010. Municipalities' consolidation therefore appears to be at an end, and the local authorities are no longer observing the same austerity as the national government. One factor affecting the municipalities is the benefit to many regional communities from the upswing in fishing and tourism. It should be noted, however, that

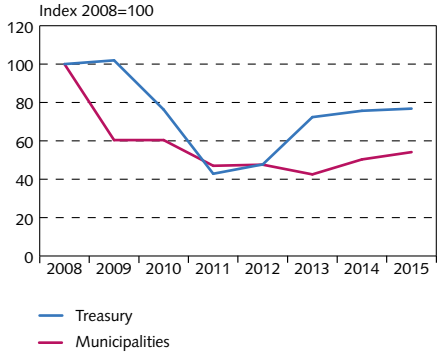
Chart V-5
Growth of nominal public consumption 2008-2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

2. See Box III-1 in *Financial Stability* 2013/1.

Chart V-6
Growth of nominal public investment 2008-2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

the Statistics Iceland figures for 2012 are primarily estimates, and the final figures will not be available until the municipalities publish their annual accounts in September.[3]

It is instructive to examine developments in nominal public consumption, which shows even more clearly the divergence between the national and local governments. Nominal Treasury public consumption rose by nearly 8 b.kr. between 2009 and 2012 while nominal municipal consumption rose by over 28 b.kr., even though total Treasury expenditure for public consumption is 35% higher than that of the municipalities. In 2012, the nominal increase in Treasury consumption measured 3.6%, while nominal municipal consumption rose 16.6%. The difference is attributable primarily to differing developments in expenditures for goods and services purchases, as wage costs are comparable. Nominal Treasury expenditure for the purchase of goods and services was unchanged, while the municipalities' expenditure rose by 9% in 2011 and an estimated 6% in 2012.

Public investment at a historical low in 2012

Public investment contracted by 17% in 2012, falling from 35 b.kr. to 30.5 b.kr. The contraction at the national level was similar to that for local governments. National and local government investment has been cut virtually in half since 2008, with the contraction measuring a full 62% at constant price levels. The municipalities were quicker to reduce investment after the crisis struck, cutting nominal investment by 40% in 2009. The Treasury, on the other hand, maintained an unchanged nominal investment level in 2009 and then cut back by 25% in 2010 and 43% in 2011. As a share of GDP, public investment measured 1.8% in 2012, as opposed to 4.1% in 2008.

A turnaround is expected this year, however, with public investment projected to grow by almost 18%, owing primarily to increased Central Government investment under a special investment plan for 2013-2015, which has been incorporated into the fiscal budget. In addition, construction of the Vaðlaheiðargöng tunnel is expected to begin this year. The tunnel project is classified as a public development project in the national accounts, although it is not included in the National Budget.[4] In 2015, the ratio of public investment to GDP is expected to rise to 2.1%, which is still 1.5 percentage points below the 30-year average.

The forecast in this *Monetary Bulletin* assumes that public investment will be broadly the same as was projected in February. It is still assumed that the new Landspítalinn hospital will not be built during the forecast horizon. The uncertainty surrounding the project is considerable. At the spring legislative session, the Government passed a law changing the role of the public limited company Nýi Landspítalinn ohf. The company's role is now only to prepare the construction of the hospital and make the project ready for a tender offer,

3. Preliminary figures from municipalities are often subject to major revisions because of how late their final figures are available.

4. The project is a private initiative, and a limited company was established for the operation and construction of the tunnel; however, Statistics Iceland considers the Government to bear all of the financial risk of the operations and therefore classifies it as a public project.

not to finalise a public-private partnership related to it. As a result, the hospital construction will not be considered a private development project but will be included in the National Budget. The fact that the Government itself must finance construction from the budget could slow down the project. In the absence of mitigating measures, such a large-scale investment would severely disturb the medium-term fiscal consolidation plan. Because the passage of the new legislation does not imply a decision by Parliament to authorise or fund the project, the new Government is not obligated by it.

Limited scope for expansionary measures despite a considerable turn-around in government finances

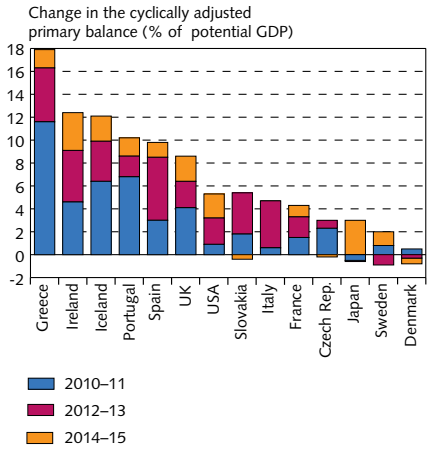
A three-year period of strict fiscal austerity measures is now over. Some continued consolidation is planned, however, and the fiscal consolidation plan for the period through 2016 assumes a primary surplus in the amount of 5% of GDP by the end of the period. The IMF estimates that the cyclically adjusted primary balance will improve by 12% of potential output during the period 2010-2015. This is virtually the same as is projected for Ireland, with only Greece forecast to improve its primary balance by a larger margin (18%). Following Iceland and Ireland are Spain and Portugal, both of which are projected to improve their primary balance by 10%.

The success of the Treasury's foreign bond issuance has depended in large part on the credibility of the plan to balance government finances. The new Government's focus will be apparent when it presents its budget proposal for 2014. The high debt ratio places considerable limitations on it, however. There may still be the temptation to implement expansionary measures on the expenditures and/or revenues side. But the effects of such measures are probably stronger in larger European countries than in a small, open economy like Iceland, where part of the increase in demand would leak out of the country through increased imports. As a result, the fiscal multipliers are generally smaller in Iceland.[5]

The spare capacity in the economy has diminished. The monetary stance at any given time takes account of this, and if expansionary measures were undertaken as the slack in the economy disappeared, or soon afterwards, a tighter monetary stance would be called for. This would further reduce the fiscal multipliers. No matter what measures the Government undertakes, it is important not to deviate markedly from the current fiscal consolidation plan, as a poorer performance could cast doubt on Iceland's debt sustainability, which could translate into higher risk premia and borrowing costs. It should be kept in mind that other countries with debt levels similar to Iceland's, such as Spain and Portugal, have experienced difficulties that Iceland has avoided because of the capital controls.

Chart V-7

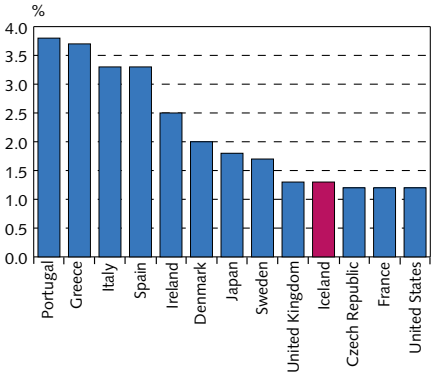
International comparison of fiscal adjustment in advanced economies in the global crisis[1]



1. Fiscal adjustment in 2010-11 refers to the changes in the cyclically adjusted primary balance (CAPB) in 2011 compared to 2009; 2012-13 refers to the change in the CAPB in 2013 compared to 2011; and 2014-15 refers to the change in the CAPB in 2015 compared to 2013.
Source: International Monetary Fund (2012). *Fiscal Monitor,* October 2012.

Chart V-8

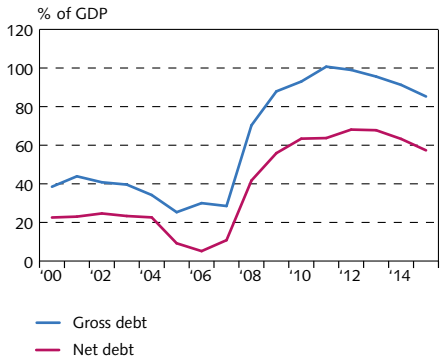
Real interest rate burden of general government debt in 2012[1]



1. Based on the estimates of the International Monetary Fund in the *Fiscal Monitor*, October 2012. Real interest rates of government debt are calculated as a share of interest payments of last period debt.
Source: International Monetary Fund.

5. See, for instance, Chapter 15 of "Iceland's currency and exchange rate policy options," Central Bank of Iceland *Special Publication* no. 7, September 2012, and an international comparison of fiscal multipliers in Appendix 4 of *Monetary Bulletin* 2008/1.

Chart V-9
General government debt 2000-2015[1]



1. Central Bank baseline forecast 2013-2015.
Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

The capital controls have reduced government interest expense ...

The Government has managed to finance its deficit operations on more favourable terms than it otherwise could because of the capital controls. In spite of this, its interest burden is very heavy; indeed, interest expense is now the Treasury's third-largest expenditure item. Interest payments according to the 2013 National Budget total 88 b.kr., including interest payments on foreign loans in the amount of 23 b.kr. Other things being equal, the interest expense on Treasury debt related to new bond issues would rise if the capital controls were lifted.

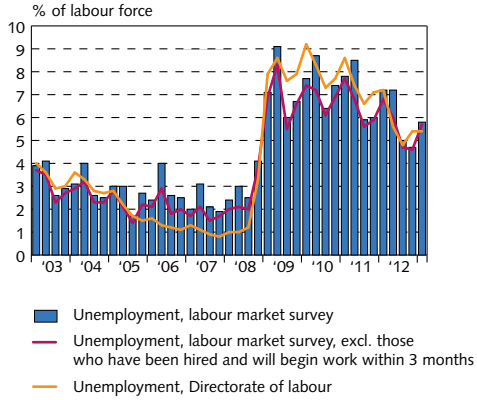
...and have helped to stabilise government debt

The government debt path rises by 4-5 percentage points from the last forecast because of a decrease in nominal GDP. Government debt will decline as a share of GDP during the forecast horizon, however, not because the nominal principal will fall but because nominal GDP will rise due to GDP growth and rising prices. As a result, the reduced debt ratio will not lower the interest burden in krónur terms. No decisions have been taken on further prepayment of foreign loans.

VI Labour market and wage developments

Unemployment continued to fall in the first quarter of the year and was slightly below the February forecast. It is assumed that registered unemployment will continue to fall, due to the continuing pick-up in economic activity and to the fact that many unemployed persons will have fully utilised their entitlement to benefits. Total hours worked increased significantly more in Q1 than was forecast in February, and optimism seems to have been on the rise among corporate executives. Because of the weaker GDP growth outlook, however, labour demand is expected to grow more slowly in coming years than according to the February forecast. Revised figures from Statistics Iceland indicate that the wage level has been lower in 2007-2011 than previous figures indicated. The revised figures show that wages rose somewhat less in 2007-2009 than previously expected but that wage rises in 2010 and 2011 were larger than previous figures anticipated. Because of this and the outlook for slower productivity growth in the medium term, it is now assumed that unit labour costs have grown more strongly in recent years, and will grow more rapidly in coming years, than in the February forecast.

Chart VI-1
Different measures of unemployment
Q1/2003 - Q1/2013



Sources: Statistics Iceland, Directorate of labour.

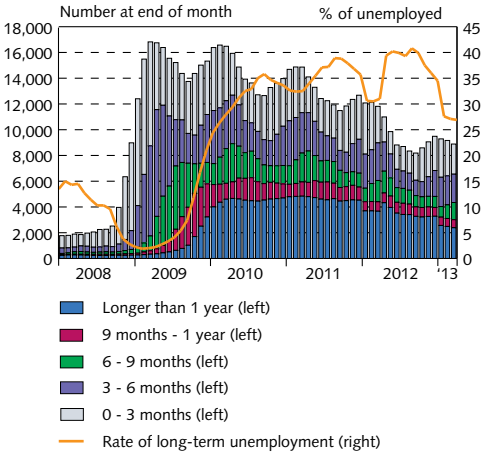
Unemployment lower due to exhaustion of entitlement to benefits

Unemployment as measured by the Directorate of Labour (DoL) usually rises in the first quarter of the year. This year, however, it remained unchanged, probably due largely to the expiry at year-end 2012 of the temporary statutory provision lengthening entitlement to unemployment benefits from three years to four. Unemployment measured 5.4% in Q1/2013, slightly lower than was assumed in the last forecast. Seasonally adjusted unemployment declined by 0.7 percentage points, to 4.6%, its lowest point since Q4/2008.

The DoL estimates that about 1,900 individuals lost their entitlement to benefits in the first third of the year. Of that total, about 400 have been jobless for 3-3½ years and receive severance subsidy for up to six months, during which time they must confirm that they are looking for work and are therefore still registered as unemployed by the DoL. The employment programme Liðsstyrkur is designed to offer public or private sector jobs to those who have exhausted their entitlement to unemployment benefits, and to offer occupational rehabilitation to those in need of it. As of end-April, 500 people had become employed through the programme, 300 were awaiting employment offers, and about 40 had begun occupational rehabilitation. Little or nothing is known about those no longer entitled to unemployment benefits, but based on DoL estimates, this group could include 600-700 people, or just under half a percent of the labour force. Some of them will remain on the unemployment register if they wish to avail themselves of the DoL's employment agency services, but it is expected that only a small proportion will do so.

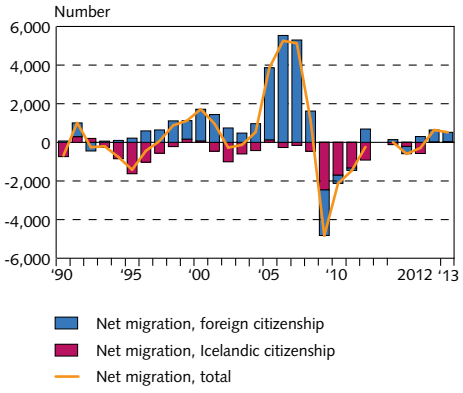
Although unemployment according to the DoL register declines because those who have been without work the longest have exhausted their benefits, people who are no longer entitled to ben-

Chart VI-2
Unemployment by duration
January 2008 - March 2013



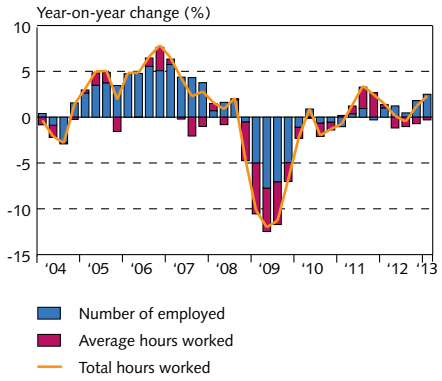
Source: Directorate of labour.

Chart VI-3
Migration



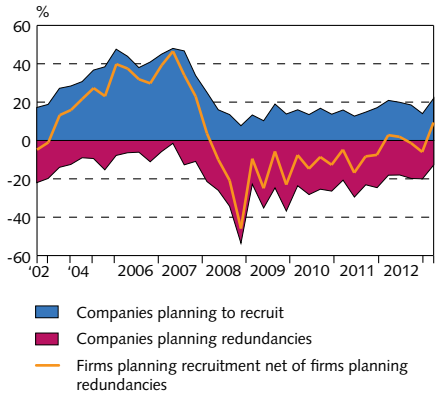
Source: Statistics Iceland.

Chart VI-4
Changes in employment and hours worked
Q1/2004 - Q1/2013



Source: Statistics Iceland.

Chart VI-5
Companies planning to change staffing levels during the next 6 months



Source: Capacent Gallup.

efits but are actively looking for work should measure as unemployed according to the Statistics Iceland labour market survey, which defines the unemployed as jobless persons who are active job-seekers and are willing to begin work within two weeks, irrespective of their entitlement to benefits. Not least because of these changes in entitlement to benefits, Statistics Iceland's figures are probably a more accurate measure of actual developments in the labour market at present. Unemployment according to the labour market survey for Q1/2013 was slightly higher than the DoL measurement, or 5.8% (5.3% seasonally adjusted). Furthermore, registered unemployment according to the DoL can be expected to fall more rapidly than unemployment according to the labour market survey, with the difference growing larger as more jobless people exhaust their benefits. In addition, it can be assumed that unemployment as measured by the labour market survey will rise when those who left the job market and have exhausted their unemployment benefits begin looking for work again.

Long-term unemployment continues to decline

The number of long-term unemployed persons – those out of work for more than a year – began to decline in 2012 and has continued to fall this year. The reduction has been more rapid among this group than among those without work for a shorter period, as DoL initiatives have targeted the long-term unemployed in particular. The long-term unemployed now account for 27% of the total number of jobless persons, as opposed to 31% a year ago.

Net migration positive in the past two quarters

A significant number of Icelanders emigrated in the wake of the financial crisis, but the number of emigrants net of immigrants has declined steadily as time has passed. In 2012, emigrants outnumbered immigrants by 319, or 0.1% of the population. The net migration rate was negative by ½% in 2011 and by 1½% in 2009, the peak of emigration. In Q4/2012 and Q1/2013, however, the net migration rate was positive by 0.2% of the population.

Total hours work rise because of an increase in the number of employed persons

According to the labour market survey, labour demand was somewhat stronger in Q1 than was assumed in the February forecast, with total hours worked increasing by 2.5%, as opposed to the 1.5% projected in the forecast. In Q1, the number of employed persons rose by almost one percentage point more than in the previous quarter, or 2.7%. However, unlike previous quarters, average hours worked were almost unchanged in Q1.

As has been discussed in previous issues of *Monetary Bulletin*, the rise in total hours worked was initially due to an increase in average hours worked, which is normal in view of the fact that the post-crisis adjustment in labour use took place largely through a decline in average hours worked.[1] Beginning in Q2/2012, the number of

1. See Section VI and Box VI-1 in *Monetary Bulletin* 2012/4.

employed persons began rising as well. Soon after, average hours worked began to decline, although the rise in the number of employed persons was large enough to counteract the fall in hours worked. It is unclear why average hours worked contracted last year. A possible explanation is that newly hired employees work fewer hours than the average worker. The results of the Statistics Iceland wage survey show that paid hours rose by 0.2% in 2012, while the labour market survey indicated a reduction of 0.6%. The divergence between these two surveys may result from differences in survey methods. Average hours worked are still below the long-term average, however, and it is therefore likely that, instead of declining, they will rise again as employment increases.

Firms planning to recruit outnumber those expecting to downsize

According to the Capacent Gallup survey carried out among executives from Iceland's 400 largest firms in February and March, respondents interested in recruiting staff in the next six months outnumbered those planning redundancies by over 9%. Compared to the last survey, there was both an increase in the number of firms interested in recruiting and a decline in the number interested in reducing their staffing levels. Only in the fisheries and financial sectors did companies planning redundancies outnumber those interested in adding on staff. The most pronounced change, both from the last survey and from the survey conducted a year ago, was among construction firms, 44% of which showed an interest in recruiting in the March 2013 survey.

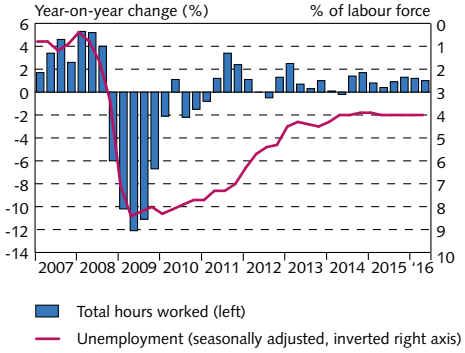
Total hours worked expected to rise more slowly during the forecast horizon ...

Because the outlook is now for weaker output growth during the forecast horizon than was projected in February, the rise in total hours worked is expected to be somewhat slower as well. Total hours worked are projected to increase by 1.1% this year but grow at a slightly slower pace throughout the forecast horizon. As the expected rise in hours worked is below the projected rise in output growth, labour productivity will continue rising during the period. It grew by 1.2% in 2012 and is now a full 6% higher than when the financial crisis struck in autumn 2008. It is expected to grow by an average 1.8% per year in 2013-2015, marginally below long-term trend growth and below the February forecast. The economic recovery will therefore take place to some extent without a corresponding increase in total hours worked.

... but the unemployment outlook remains broadly unchanged

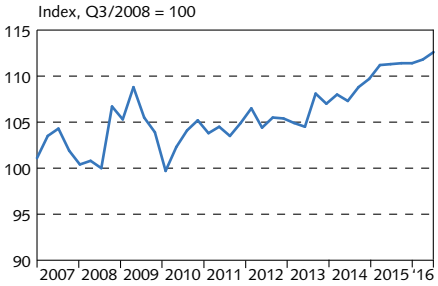
As is stated above, developments in unemployment year-to-date have been broadly in line with the February forecast, albeit slightly more positive. The unemployment outlook for the next three years is similar to that in the February forecast. Unemployment is expected to measure about 4.6% this year and around 4.2% next year and to fall to about 4% by the end of the forecast horizon.

Chart VI-6
Total hours worked and unemployment
Q1/2007 - Q2/2016[1]



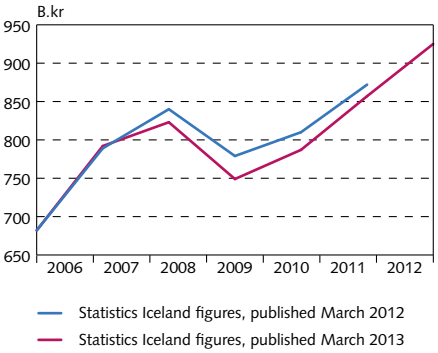
1. Central Bank baseline forecast Q2/2013 - Q2/2016.
Sources: Directorate of Labour, Central Bank of Iceland.

Chart VI-7
Labour productivity
Q1/2007 - Q2/2016[1]



1. GDP as a ratio of total hours. Seasonally adjusted data of the Central Bank. Central Bank baseline forecast Q1/2013 - Q2/2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VI-8
Compensation of employees



Source: Statistics Iceland.

Chart VI-9
Unit labour costs and contributions of underlying components 2008 - 2015[1]

1. Labour productivity growth is shown as a negative contribution to an increase in unit labour costs. Central Bank baseline forecast 2013-2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Revision of Statistics Iceland wage figures

In March, Statistics Iceland published revised national account figures on total wages for 2007-2011, which show that wages rose somewhat less in the immediate aftermath of the crisis than previous figures had indicated. On the other hand, the most recent data indicate that wage rises in 2010 and 2011 were larger than previous figures suggested. The wage level remains about 1½% lower for the entire period than previous figures indicated, however. At the same time, Statistics Iceland published its first figures for 2012, which show a somewhat larger increase in total wages than was assumed in the February forecast, or 8.5% as compared with 7.8%. As a result, wage increases in 2010-2012 are a percentage point larger, on average, than was assumed in the February forecast.

Wage developments in Q1/2013 were in line with the February forecast. The wage index rose by 2.4% quarter-on-quarter and 5.2% year-on-year. The rise in the index is due mainly to the negotiated wage increases that took effect during the quarter, although a portion of it is due to pay increases at Landsspítalinn hospital. It is still uncertain whether, and to what extent, these wage increases will lead to comparable pay increases for other public and private sector employees, or whether wages will rise in general. As in the previous forecast, it is not assumed that the effects will be strong or widespread, as the institutions that employ these groups have limited scope for pay increases.

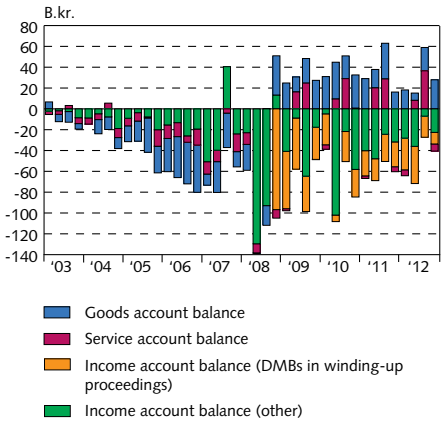
The assumptions concerning near-term wage developments have therefore changed little since the last forecast. Quarter-on-quarter changes are expected to be broadly the same, although year-on-year increases will be somewhat larger, as Statistics Iceland figures indicated a relatively larger increase in 2012, as is stated above. Productivity growth is expected to be somewhat weaker during the forecast horizon than according to the last *Monetary Bulletin*; therefore, unit labour costs are projected to rise more strongly than in the February forecast, or by just over 3½% per year on average, which is somewhat above the Central Bank's inflation target.

VII External balance

Iceland's current account balance as calculated according to international standards was negative by just under 5% of GDP in 2012. This is a smaller deficit than in 2011 by a full percentage point. The surplus on the trade account was just under 108 b.kr., while the deficit in the balance on income measured 191 b.kr. The underlying income account deficit (after adjusting for calculated income and expenses of deposit money banks (DMBs) in winding-up proceedings and the effects of the settlement of their estates, and for pharmaceuticals company Actavis) was 136 b.kr. less than the headline deficit, or about 55 b.kr.[1] The underlying current account balance for 2012 was therefore positive by 52 b.kr., or just over 3% of GDP.

The outlook for the forecast horizon is for a somewhat smaller trade surplus than was assumed in the February *Monetary Bulletin*, owing to the offsetting effects of adverse developments in terms of trade and the prospect of a somewhat more positive contribution from net trade to output growth. The underlying current account balance is expected to be positive by 4% of GDP in 2013 and just under 1% in 2014. It is forecast to turn slightly negative in 2015, which is somewhat worse than was forecast in February, due in particular to a smaller trade surplus.

Chart VII-1
Current account balance components[1]
Q1/2003 - Q4/2012



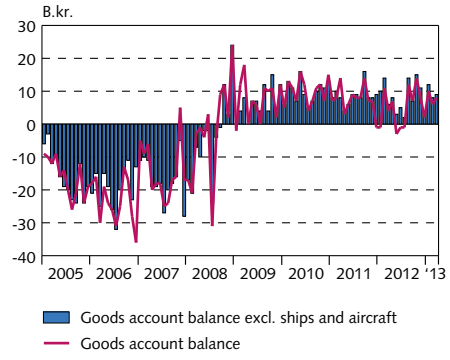
1. Net current transfers are included in the balance on income.
Sources: Statistics Iceland, Central Bank of Iceland.

Trade surplus expected to be smaller than in February forecast

So far in 2013, the surplus on the goods account has grown somewhat year-on-year. In the first three months of 2013, imports contracted by almost 10% year-on-year at constant exchange rates, and exports contracted by just over 2%. The goods account surplus measured slightly more than 27 b.kr. at constant exchange rates during the period, which is about 10 b.kr. more than over the same period a year ago. However, the goods trade balance excluding ships and aircraft was about 2 b.kr. poorer during the first three months of 2013 than over the same period in 2012, when ships and aircraft imports were valued at 12.6 b.kr. at constant exchange rates. The goods account surplus, with and without ships and aircraft, was roughly the same as that for the same period in 2010 and 2011.

The services balance was negative by 6.8 b.kr. at constant exchange rates in Q4/2012, after a surplus of nearly 39 b.kr. in the previous quarter. The services trade surplus measured 34 b.kr. last year, about 8 b.kr. less than in 2011. Last year's surplus was due to increased net revenues from transport and tourism, but those revenues were offset by increased expense stemming from "other services" (including leasing and legal and auditing services), which far exceeded revenues from other services and greatly diminish the

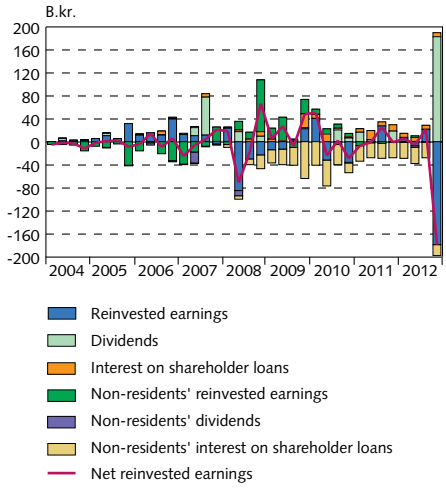
Chart VII-2
Goods account balance
At fixed exchange rate, January 2005 - March 2013



Sources: Statistics Iceland, Central Bank of Iceland.

1. As in previous forecasts, it is considered appropriate to exclude pharmaceuticals company Actavis when assessing the underlying balance on income, as the company has been heavily leveraged and accrues significant interest expense. Payments on the debts are small, however (see the paper by Arnór Sighvatsson, Ásgeir Daníelsson, Freyr Hermannsson, Gunnar Gunnarsson, Hrönn Helgadóttir, Regína Bjarnadóttir, and Ríkardur B Ríkardsson, "What Does Iceland Owe?", published in the Central Bank series *Economic Affairs* no. 4, in February 2011, and "Iceland's Underlying External Position and Balance of Payments", Central Bank of Iceland *Special Publication* no. 9, March 2013).

Chart VII-3
Return on foreign direct investment
Q1/2004 - Q4/2012



Sources: Statistics Iceland, Central Bank of Iceland.

effect of the transport- and tourism-related surplus. Tourism service exports increased strongly year-on-year, although tourism imports grew somewhat as well.

The outlook is for a continued surplus on goods and services trade in 2013. Goods exports are forecast to contract by approximately ½% during the year, owing primarily to a 3% contraction in total marine product exports. This is offset by the prospect of strong growth in exports of other goods that benefit from a favourable real exchange rate and are not subject to short-term capacity constraints (see also Section II). Indicators suggest that exports of tourism services grew rapidly in Q1/2013. Foreign credit card turnover, for instance, was up almost 20% from Q1/2012, and has been rising each year. Information from the Icelandic Tourist Board implies that the number of foreign tourists visiting Iceland rose year-on-year by nearly 34,000, or 39%, in the first three months of 2013. It is assumed that services exports will grow by 8.6% in volume terms this year and that goods and services exports combined will grow by nearly 3% year-on-year, about a percentage point more than was forecast in February. In spite of stronger export growth and weaker import growth, the trade surplus will be smaller than assumed in February by about one percentage point of GDP, or about 6½%. This is due to the marked deterioration in terms of trade this year, as is discussed in Section II. The trade surplus is forecast at about 4½% of GDP in 2014 and just under 3½% in 2015. This is somewhat less than was assumed in the February forecast, with the difference stemming primarily from poorer terms of trade.

Income account deficit sizeable in 2012 but considerably smaller than in 2011

The headline income account deficit for 2012 proved to be 191 b.kr., or 11.2% of GDP, which is nevertheless 48 b.kr. less than in 2011. The change between years is due largely to an 85 b.kr. decline in the interest balance, which in turn is due primarily to a reduction in foreign interest expense. Interest expense has been decreasing since Q2/2011. Net returns on dividends and reinvested earnings, which are much more volatile than net interest expense, fell by over 35 b.kr., however, and the explanation for the contraction is to be found primarily on the revenues side. Combined income from dividends and reinvested earnings totalled just under 28 b.kr., a decrease of 38 b.kr. since 2011. The same is true of interest income from shareholder loans, which totalled just under 28 b.kr., after contracting by 13 b.kr. since 2011. The deficit in the balance on income was 130 b.kr. in the first half of 2012 but only 61 b.kr. in the second half of the year.

The underlying income account deficit for 2012 was much smaller than the headline deficit, however, or just over 55 b.kr. (or 3.2% of GDP), which is 29 b.kr. smaller than in 2011. It is due in particular to a 45 b.kr. deficit on the interest balance, and it was smaller in 2012 than in 2011 because the deficit in dividends and reinvested earnings was smaller by 16 b.kr. and the interest deficit was smaller by 14 b.kr.

Sizeable underlying current account surplus in 2013 ...

The balance on the trade account was positive by just under 108 b.kr. in 2012, while the deficit in the balance on income plus transfers totalled almost 191 b.kr.[2] The headline current account balance was therefore negative by slightly less than 84 b.kr., or 4.9% of GDP. The underlying current account balance for 2012 showed a surplus of 52 b.kr., however, or 3.1% of GDP.

As is discussed above, the outlook this year is for a trade surplus of 119 b.kr., or about 6½% of GDP. The deficit in the balance on income is expected to be somewhat smaller this year than last year, owing to lower interest expense. This is due mainly to lower interest expense deriving from pharmaceuticals company Actavis, but as has been assumed in Central Bank forecasts, the sale of Actavis to US pharmaceuticals company Watson will make a marked impact on Iceland's international investment position as calculated according to official standards and will thereby affect the balance on income. The smaller income account balance will more than offset the smaller trade balance; therefore, the headline current account balance will improve slightly over last year and is projected at -27 b.kr., or 1½% of GDP. It is expected that this year's underlying income account deficit will be smaller than the headline deficit by about 35 b.kr., which leads to an underlying current account surplus of 73 b.kr. (4.1% of GDP), somewhat larger than in 2012 and slightly more than was forecast in February.

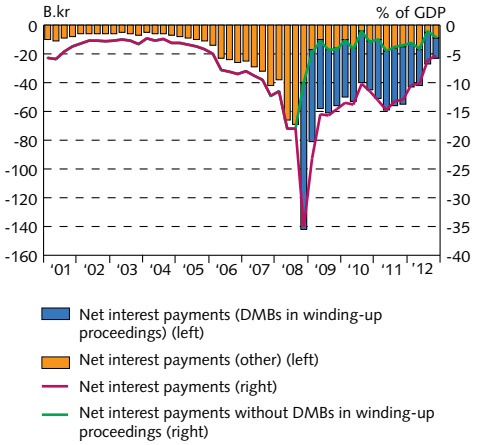
... but a marginal deficit in 2015

It is assumed that the underlying income account deficit will grow somewhat in 2014 due to increased interest expense on foreign obligations. This is mainly because the calculation of the balance on income has been based on the assumption that at least two of the three DMBs being wound up will change their operational form during the year, which will result in a change in the classification of assets and liabilities in the official balance of payments calculation. No firm new information has emerged to justify a revision of that assumption. Once such agreements are concluded, the assets and liabilities of these defunct DMBs will no longer be set aside when the underlying balance on income is assessed. This will have a negative impact on the development of the underlying balance on income, as the net external position will deteriorate when the former DMBs are settled because interest and dividend payments will rise due to the domestic assets received by foreign creditors.

The headline current account deficit is forecast to increase to 4½% of GDP in 2014, while the underlying current account balance is projected to show a surplus of just under 1%. This is a slightly smaller surplus than was forecast in the February *Monetary Bulletin,* owing to the fact that the trade surplus for 2014 was projected to be almost 2 percentage points larger at that time. The headline current account deficit is projected to grow slightly more in 2015, and the underlying current account balance will be slightly negative, as the trade surplus will diminish as the income account deficit grows.

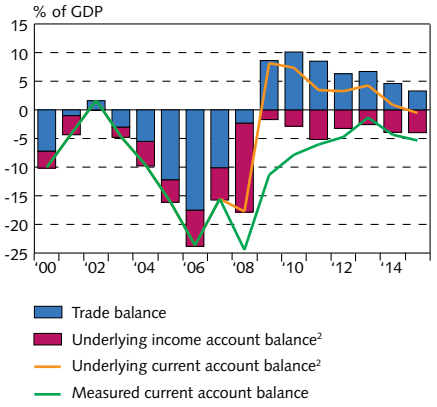
2. Transfers amounted to 10 b.kr. during the year and have increased steadily since the financial crisis struck in 2008.

Chart VII-4
Net foreign interest payments
Q1/2001 - Q4/2012



Sources: Statistics Iceland, Central Bank of Iceland.

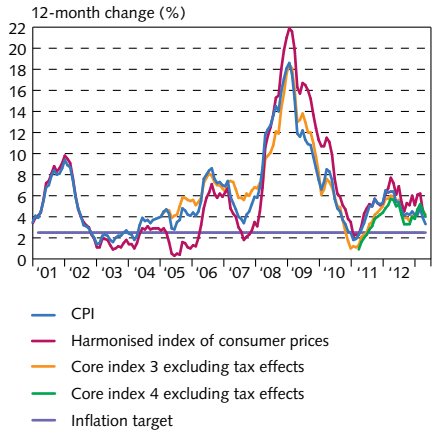
Chart VII-5
Current account balance 2000-2015[1]



1. Net current transfers are included in the balance on income. Central Bank baseline forecast 2013-2015. 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 for pharmaceuticals company Actavis.
Sources: Statistics Iceland, Central Bank of Iceland

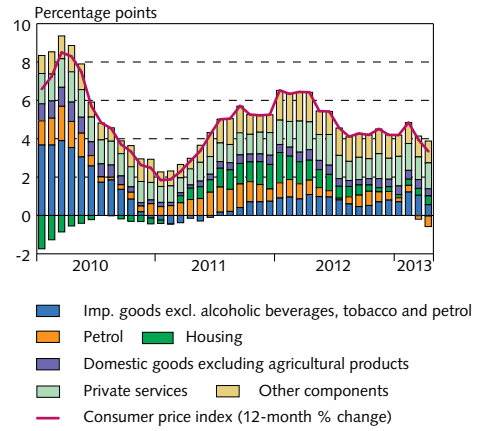
VIII Price developments and inflation outlook

Chart VIII-1
Various inflation measurements[1]
January 2001 - April 2013



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.

Chart VIII-2
Components of CPI inflation
Contribution to inflation January 2010 - April 2013



Source: Statistics Iceland.

Twelve-month inflation has subsided since the last *Monetary Bulletin* was published, measuring 3.3% in April. However, underlying inflation has fallen more slowly and, together with long-term inflation expectations somewhat above the inflation target, indicates the continued presence of factors that impede further disinflation. The inflation outlook has improved somewhat in the wake of the recent appreciation of the króna, even though inflation proved slightly higher in Q1/2013 than previously forecast. A larger output slack next year than previously assumed will also weaken inflationary pressures, although increased wage pressures will offset this. Inflation is forecast to average 3.8% this year and 2.7% in 2014. As before, however, the inflation outlook is highly uncertain and will depend to a significant degree on developments in wages and the exchange rate. The analysis of uncertainties in the forecast indicates a roughly 50% probability that inflation will lie in the 2-4% range a year from now.

Headline inflation has subsided in recent months ...

Inflation measured 4.3% in Q1/2013, for the third quarter in a row. Price increases for private services and imported goods excluding alcoholic beverages, tobacco, and petrol were the items affecting the CPI most strongly in Q1/2013. The strong pass-through from the depreciation of the króna at the beginning of the year emerged primarily in price increases in January and February, although it is possible that some lingering pass-through effects could offset the recent appreciation of the króna. In addition, end-of-sale effects and wage increases also played a role in the 1.6% month-on-month rise in the CPI in February, which in turn caused twelve-month inflation to rise to 4.8%. In March, however, the index rose much less between months, or by 0.2%, and twelve-month inflation fell back again to 3.9%. In the wake of the 0.2% rise in the CPI in April, due primarily to a rise in the cost of owner-occupied housing, twelve-month inflation fell even further. It now measures 3.3%, or 0.8 percentage points above the Central Bank's inflation target, and is at its lowest point since April 2011.[1]

... while underlying inflation has declined more slowly

Inflation is somewhat higher in terms of the Harmonised Index of Consumer Prices (HICP) and various core indices, although it has fallen by these measures also. Inflation according to the HICP, which excludes house prices, measured 4.5% in March, down from over 6% in January. Underlying twelve-month inflation as measured by core index 3 (which excludes the effects of indirect taxes, volatile food items, petrol, public services, and real mortgage interest expense) was 4.2% in April, as opposed to 4.6% in January. Underlying inflation has therefore subsided more slowly than headline inflation in the recent term, as the decline in petrol prices has strongly affected the CPI in the

1. Strong base effects have been present in recent months, as the CPI rose by over 1% month-on-month in March 2012 and another 0.8% in April 2012.

past two months. Calculating underlying inflation using the trimmed mean gives the same result, showing that it has declined by an average of 0.3 percentage points since January. The price of private services, a good indicator of domestic inflation, has risen by 6.4% in the past twelve months, also signalling that domestic inflationary pressures are somewhat greater than is reflected in the headline numbers.

Inflation subsides due to appreciation of the króna

The króna has appreciated by 10.2% in trade-weighted terms since the February *Monetary Bulletin,* thereby reducing inflationary pressures. Historically, the effects of exchange rate movements on inflation tend to be asymmetric, with depreciation of the króna passing through to prices faster and more strongly than appreciation does.[2] It is clear that, the longer the exchange rate remains stable following an appreciation, the stronger and more lasting the effect on the price level, although it could take some time for the impact on firms' pricing decisions to take hold. The recent appreciation appears to have had some effect on imported goods prices in March and April; furthermore, global oil prices have fallen by almost 4½% in the past three months, and petrol price decreases lowered the CPI by about ½ a percentage point in March and April. There is still some spare capacity in the economy, and the recovery has proceeded relatively slowly, which could also tend to strengthen the effects of a stronger currency. The contribution of imported goods (excluding alcoholic beverages, tobacco, and petrol) to twelve-month inflation was still 0.6 percentage points in April and, together with private services, accounts for over half of the inflation figure. It is also noteworthy that the twelve-month increase in private services prices has averaged 6½% since autumn 2005 and has not fallen below 3½% since that time (private services weigh just over 20% of the CPI).

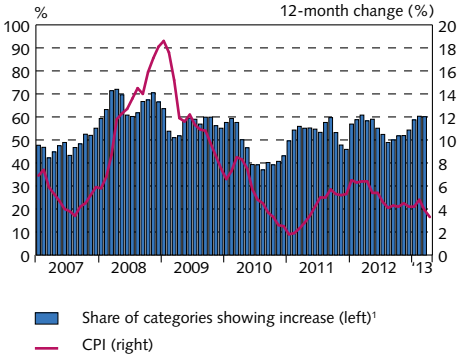
Divergent developments in domestic producer prices and retail prices

Developments in producer prices are a possible indicator of underlying cost pressures in domestic firms, and thereby of general inflation trends. In March, producer prices of goods sold domestically had risen by just over 1% year-on-year. By that criterion, inflation subsided rapidly in 2012. It is noteworthy, though, that at that time, domestic goods prices in the CPI had risen by 5.9% over the preceding twelve months. It appears, then, that these two measures of domestic inflation have diverged, possibly indicating the presence of a larger slack in the goods market than recent CPI measurements have suggested. It could also be a manifestation of how persistent inflation has been in recent years, as is reflected in high inflation expectations.

The Capacent Gallup survey carried out in February and March showed executives to be more optimistic about profit margins (measured by EBITDA) in the upcoming six months than they were in either the previous survey or the survey taken a year earlier. This indicates

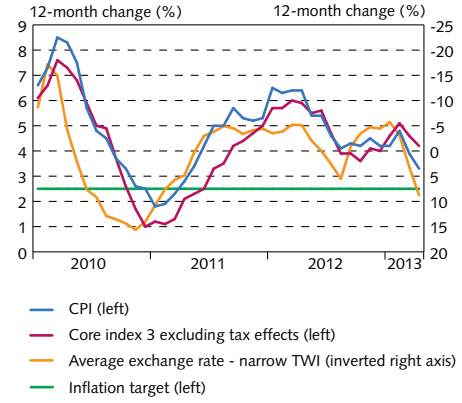
2. See the paper by Thorvardur Tjörvi Ólafsson, Ásgerdur Ó. Pétursdóttir, and Karen Á. Vignisdóttir (2011), "Price setting in turbulent times: Survey evidence from Icelandic firms", Central Bank of Iceland *Working Papers,* no. 54.

Chart VIII-3
Distribution of price increases in the CPI
January 2007 - April 2013



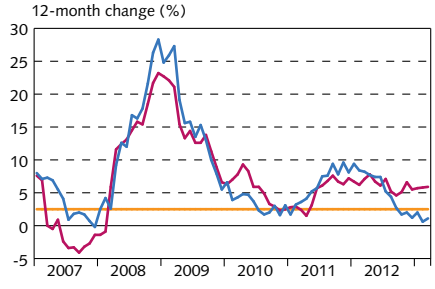
1. The percentage of goods categories that rise in price is a 3-month centred average.
Source: Statistics Iceland.

Chart VIII-4
Inflation, core inflation and the exchange rate of the króna
January 2010 - April 2013



Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-5
Production and retail price of domestic goods
January 2007 - March 2013



Sources: Statistics Iceland, Central Bank of Iceland.

that firms could have some scope to absorb cost increases without passing them through to prices or slowing down recruitment. An examination of the change from the survey performed at the same time last year reveals that the outlook is much brighter for retail, communications, transport, and tourism. Executives in industrial and production firms also appear more optimistic than in the September 2012 survey. Whether firms will use this increased scope to absorb cost increases will depend on current market conditions, however.

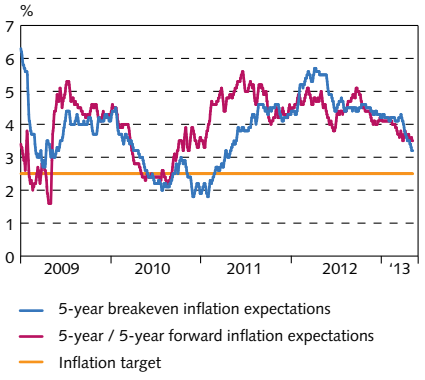
Inflation expectations have fallen according to several measures

Whether inflation continues to subside to target will depend in large part on the exchange rate of the króna, wage developments, and inflation expectations. Inflation expectations have been above target for some time. In view of their impact on workers' wage demands and firms' pricing decisions, it is important that inflation expectations be reduced in the near future, particularly because of the upcoming round of wage negotiations in the autumn (see Section VI).

The breakeven inflation rate according to the spread between indexed and nominal bonds has declined since the last *Monetary Bulletin,* which may indicate that inflation expectations have subsided somewhat. The five-year breakeven inflation rate is 3.2% and has fallen by almost a percentage point since early February, and the five-year breakeven inflation rate five years ahead is 3½%, a reduction of about ½ a percentage point. It is unclear how much of the decline since February is due to reduced inflation expectations, though, as a part of it is probably linked to the rise in the risk premium on indexed Housing Financing Fund (HFF) bonds in the wake of the HFF's credit rating downgrade in February (see Section III). In addition, the risk premium due to liquidity risk and uncertainty about inflation may have fallen in the recent term because of the marked appreciation of the króna. The drop in the five-year breakeven inflation rate has taken place since inflation began subsiding in March and is probably attributable in part to recent developments in inflation and the exchange rate.

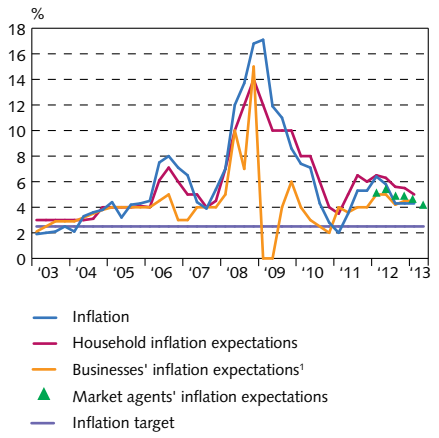
According to Capacent Gallup's quarterly survey of household inflation expectations, carried out in February, households' expectations concerning inflation one year ahead were 5% and had fallen by ½ a percentage point since the December 2012 survey. Household inflation expectations two years ahead measured 5% as well and have remained unchanged since autumn 2012. Thus they have been extremely sticky on the downside, as there is a strong correlation between household inflation expectations and recent inflation. A similar pattern can be seen in the Capacent Gallup survey of corporate inflation expectations, carried out in February and March. Corporate executives expected 4.5% inflation one year ahead, as in the last survey. Their expectations two years ahead, also 4.5%, had fallen by ½ a percentage point since the last survey, however. Corporate inflation expectations have therefore been broadly in line with expectations in the bond market in the recent term. Nearly 80% of respondents expected input prices to rise in the next six months, a larger share than in the last survey but similar to that in the survey conducted a year ago.

Chart VIII-6
Breakeven inflation expectations[1]
Daily data, 2 January 2009 - 10 May 2013



1. Breakeven inflation expectations are calculated from yield spreads between nominal and index-linked Government and Government-backed bonds (5-day moving averages).
Source: Central Bank of Iceland.

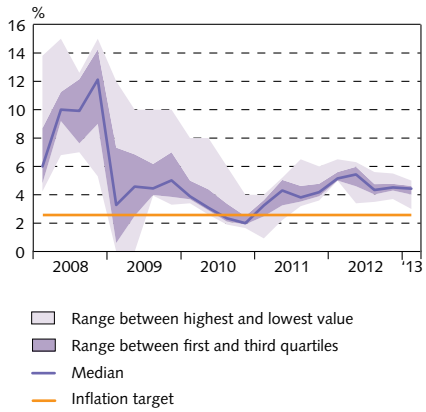
Chart VIII-7
Inflation and inflation expectations
Q1/2003 - Q2/2013



1. Businesses' inflation expectations were measured on an irregular basis before Q3/2006 and are therefore interpolated until that time.
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland.

According to the Central Bank market expectations survey carried out in May, just before the publication of this *Monetary Bulletin*, market agents expect lower inflation than in the survey carried out at the end of January. They now project inflation at 4% one and two years ahead, about ½ a percentage point lower than in the last survey. Their long-term inflation expectations are broadly unchanged, however, at just over 4%.

Chart VIII-8
Inflation expectations according to various measurements[1]
Q1/2008 - Q1/2013



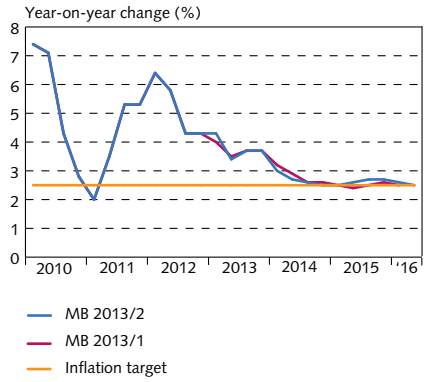
1. Based on corporate, household, and breakeven inflation expectations one year ahead and the Central Bank inflation forecast one year ahead.
Sources: Capacent Gallup, Central Bank of Iceland.

The inflation outlook has improved slightly since the last forecast …

Inflation measured 4.3% in Q1/2013, 0.3 percentage points more than was forecast in February. The deviation is due mainly to stronger-than-expected exchange rate pass-through from the depreciation episode in January and early February. On the other hand, inflation has subsided relatively quickly in recent months, owing largely to the strong appreciation of the króna since mid-February and the decline in oil prices, and looks set to measure about 3.4% in Q2, which is similar to the last forecast. It is projected to begin rising again in the latter half of the year, primarily due to base effects, and measure 3.7% in Q4 and 3.8% for the year as a whole, which is in line with the February forecast. The statistical models used to compare with the baseline forecast indicate that inflation might turn out somewhat higher at year-end than expected.

According to the forecast, the output slack will be somewhat greater in 2014 than was projected in February (see Section IV) and inflationary pressures therefore less. Global oil and commodity prices are also expected to fall more in the near term than according to the last forecast (see Section II). In view of these factors and the stronger exchange rate (see Section III), the inflation outlook for the forecast horizon has improved slightly. On the other hand, productivity growth is forecast to be weaker than previously anticipated and the rise in unit labour costs correspondingly larger throughout the forecast horizon (see Section VI), offsetting the effects of a weaker economy. Inflation is expected to approach the target in the first half of 2014, however, a bit earlier than in the February forecast.

Chart VIII-9
Inflation - comparison with MB 2013/1

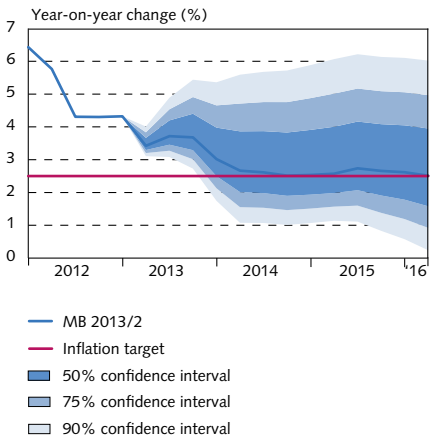


Sources: Statistics Iceland, Central Bank of Iceland.

… but will depend to a large extent on exchange rate developments

Even though the inflation outlook for the forecast horizon has somewhat improved (assuming an unchanged exchange rate), inflation can be extremely persistent if inflation expectations remain high and wage increases are inconsistent with the inflation target. The exchange rate uncertainty stemming from the prospect of capital account liberalisation and large foreign loan payments by domestic firms could also make it more difficult to anchor inflation expectations firmly. In addition, core inflation and some measures of domestic inflation, including developments in private service prices, have been higher than headline inflation in the recent term, possibly indicating the presence of greater underlying inflationary pressures than are assumed in the baseline forecast. Therefore, if the króna weakens markedly again, inflation could rise relatively quickly. Another uncertainty is the out-

Chart VIII-10
Inflation forecast and confidence intervals



Sources: Statistics Iceland, Central Bank of Iceland.

look for wage pressures in connection with the autumn wage negotiations. If pay increases are larger than currently expected, the inflation outlook will worsen, other things being equal, both because firms may pass part of the pay hikes through to prices and because large wage increases would put additional pressure on the exchange rate. On the other hand, the economic recovery has proven weaker than previously assumed, and the slack in the economy is forecast to remain throughout 2014. Furthermore, the global economic outlook is uncertain at present, and the recovery in Iceland's trading partners is weak. If these conditions persist, inflationary pressures could prove less pronounced and the margin of spare capacity in the economy greater than currently expected, although there is some uncertainty about the degree to which the slack in the economy will contain inflationary pressures. In addition, inflation can be expected to subside further if the króna should continue to appreciate.

Chart VIII-10 illustrates the uncertainties in the baseline forecast and the probability distribution of inflation developments. The width of the probability distribution reflects the risks to the baseline outlook, and the shape of the distribution reflects an assessment of which risks are considered most important and how they affect the inflation outlook. The chart shows confidence bands that represent a 50%, 75%, and 90% probability that inflation will lie during the forecast horizon (see Appendix 3 in *Monetary Bulletin* 2005/1). According to the estimated probability distribution, there is a roughly 50% probability that inflation will lie in the 2-4% range in mid-2014. Further discussion of the uncertainties in the baseline forecast can be found in Section I.

Appendix 1

Baseline macroeconomic and inflation forecast 2013/2

Table 1 Macroeconomic forecast[1]

		Volume change on previous year (%) unless otherwise stated			
	B.kr.		*Forecast*		
GDP and its main components	*2012*	*2012*	*2013*	*2014*	*2015*
Private consumption	915.9	2.7 (2.6)	2.2 (2.5)	2.9 (2.9)	3.0 (3.1)
Public consumption	435.8	-0.2 (-1.1)	0.5 (0.1)	0.3 (0.2)	0.3 (0.4)
Gross fixed capital formation	245.8	4.4 (4.9)	-9.2 (-1.0)	20.9 (24.9)	17.0 (18.7)
Business investment	169.9	8.6 (8.6)	-23.0 (-11.4)	22.5 (30.5)	22.5 (23.4)
Residential investment	45.3	6.9 (11.6)	29.7 (26.3)	25.6 (20.5)	11.6 (13.0)
Public investment	30.6	-17.0 (-19.8)	17.7 (19.0)	7.5 (5.8)	1.4 (1.8)
National expenditure	1,600.4	1.9 (2.0)	0.0 (1.3)	4.7 (5.4)	4.5 (5.3)
Exports of goods and services	1,011.0	3.9 (3.9)	2.9 (1.8)	1.2 (1.5)	3.3 (2.8)
Imports of goods and services	903.2	4.8 (3.7)	-0.2 (0.5)	4.1 (4.2)	5.2 (5.2)
Contribution of net trade to growth	-	-0.1 (0.4)	1.8 (0.8)	-1.4 (-1.3)	-0.8 (-1.0)
Gross domestic product	1,708.2	1.6 (2.2)	1.8 (2.1)	3.0 (3.7)	3.5 (3.9)
Other key aggregates					
GDP at current prices (in b.kr.)		1,708 (1.710)	1,778 (1.827)	1,877 (1.947)	1,996 (2.061)
Trade account balance (% of GDP)		6.3 (6.6)	6.7 (7.5)	4.6 (6.4)	3.3 (4.9)
Current account balance (% of GDP)		-4.9 (-4.6)	-1.5 (-1.9)	-4.5 (-2.3)	-5.5 (-3.6)
Underlying current account balance (% of GDP)[2]		3.1 (3.9)	4.1 (3.8)	0.7 (3.0)	-0.7 (1.3)
Terms of trade (change in average year-on-year)		-3.3 (-3.8)	-2.1 (0.3)	-0.8 (0.9)	-0.6 (-0.6)
Total gross fixed capital formation (% of GDP)		14.4 (14.5)	13.0 (14.3)	15.2 (17.1)	17.2 (19.6)
Business investment (% of GDP)		9.9 (10.1)	7.5 (9.0)	8.9 (11.2)	10.5 (13.4)
Output gap (% of potential output)		-1.5 (-1.5)	-0.9 (-1.0)	-0.3 (0.1)	0.7 (0.6)
Unit labour costs (change in average year-on-year)[3]		6.3 (5.4)	3.9 (3.0)	3.8 (3.5)	3.9 (3.0)
Real disposable income (change in average year-on-year)		3.0 (1.8)	1.3 (0.9)	3.7 (4.0)	3.7 (4.2)
Unemployment (% of labour force)		5.8 (5.8)	4.6 (4.8)	4.2 (4.3)	4.1 (4.2)
ISK exchange rate against narrow trade-weighted index (31/12 1991 = 100)		222.0 (222.0)	218.7 (234.4)	215.2 (234.7)	215.3 (234.8)
Inflation (annual average, %)		5.2 (5.2)	3.8 (3.8)	2.7 (2.8)	2.6 (2.5)
Inflation excluding tax effects (annual average, %)		5.0 (5.0)	3.6 (3.6)	2.7 (2.8)	2.6 (2.5)

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2013/1. 2. Adjusted for calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates and for Actavis. 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	
2012:1	6.4 (6.4)	6.3 (6.3)	6.4 (6.4)
2012:2	5.8 (5.8)	5.6 (5.6)	8.1 (8.1)
2012:3	4.3 (4.3)	4.2 (4.2)	-1.0 (-1.0)
2012:4	4.3 (4.3)	4.1 (4.1)	3.9 (3.9)
2013:1	4.3 (4.0)	4.2 (3.9)	6.5 (5.2)
		Forecasted value	
2013:2	3.4 (3.5)	3.3 (3.4)	4.5 (6.2)
2013:3	3.7 (3.7)	3.6 (3.6)	0.1 (-0.3)
2013:4	3.7 (3.7)	3.6 (3.6)	3.8 (3.9)
2014:1	3.0 (3.2)	3.0 (3.2)	3.8 (3.0)
2014:2	2.7 (2.9)	2.7 (2.9)	3.1 (4.9)
2014:3	2.6 (2.6)	2.6 (2.6)	-0.1 (-1.2)
2014:4	2.5 (2.6)	2.5 (2.6)	3.4 (3.8)
2015:1	2.5 (2.5)	2.5 (2.5)	3.8 (2.8)
2015:2	2.6 (2.4)	2.6 (2.4)	3.2 (4.3)
2015:3	2.7 (2.5)	2.7 (2.5)	0.6 (-0.8)
2015:4	2.7 (2.6)	2.7 (2.6)	3.0 (4.4)
2016:1	2.6 (2.5)	2.6 (2.5)	3.7 (2.4)
2016:2	2.5	2.5	2.8

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2013/1.

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 quarterly *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 its 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 they fulfil reserve requirements and have a positive current account

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

balance at the end of the day. Overnight loans are granted against 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.
- Certificates of deposit issued with a maturity of up to seven days sold by the Central Bank to financial institutions.

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, currency swap agreements, and term deposits.

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.

Since autumn 2009, the Central Bank has 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.

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 15 May 2013

Traditional instruments	*Current rate (%)*	*Change (percentage points)*	*Last interest rate decision*	*Rate one year ago (%)*
Current accounts	5.00	0.00	20 March 2013	4.50
Overnight loans	7.00	0.00	20 March 2013	6.50
Required reserves	5.00	0.00	20 March 2013	4.50
Collateralised loans	6.00	0.00	20 March 2013	5.50
Certificates of deposit, 28 days	5.75	0.00	20 March 2013	5.25

Central Bank of Iceland interest rate decisions

	Key Central Bank interest rates, %[1]		
Interest rate decision date	*Collateralised lending rate*	*Financial institutions' current account rates*	*Maximum rate on 28-day CDs*
15 May 2013	6.00 (0.00)	5.00 (0.00)	5.75 (0.00)
20 March 2013	6.00 (0.00)	5.00 (0.00)	5.75 (0.00)
6 February 2013	6.00 (0.00)	5.00 (0.00)	5.75 (0.00)
12 Desember 2012	6.00 (0.00)	5.00 (0.00)	5.75 (0.00)
14 November 2012	6.00 (0.25)	5.00 (0.25)	5.75 (0.25)
3 October 2012	5.75 (0.00)	4.75 (0.00)	5.50 (0.00)
22 August 2012	5.75 (0.00)	4.75 (0.00)	5.50 (0.00)
13 June 2012	5.75 (0.25)	4.75 (0.25)	5.50 (0.25)
16 May 2012	5.50 (0.50)	4.50 (0.50)	5.25 (0.50)
21 March 2012	5.00 (0.25)	4.00 (0.25)	4.75 (0.25)
8 February 2012	4.75 (0.00)	3.75 (0.00)	4.50 (0.00)
7 December 2011	4.75 (0.00)	3.75 (0.00)	4.50 (0.00)
2 November 2011	4.75 (0.25)	3.75 (0.25)	4.50 (0.25)
21 September 2011	4.50 (0.00)	3.50 (0.00)	4.25 (0.00)
17 August 2011	4.50 (0.25)	3.50 (0.25)	4.25 (0.25)
15 June 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
20 April 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
16 March 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
2 February 2011	4.25 (-0.25)	3.25 (-0.25)	4.00 (-0.25)
8 December 2010	4.50 (-1.00)	3.50 (-0.50)	4.25 (-1.00)
3 November 2010	5.50 (-0.75)	4.00 (-0.75)	5.25 (-0.75)
22 September 2010	6.25 (-0.75)	4.75 (-0.75)	6.00 (-0.75)
18 August 2010	7.00 (-1.00)	5.50 (-1.00)	6.75 (-1.00)
23 June 2010	8.00 (-0.50)	6.50 (-0.50)	7.75 (-0.50)
5 May 2010	8.50 (-0.50)	7.00 (-0.50)	8.25 (-0.50)
17 March 2010	9.00 (-0.50)	7.50 (-0.50)	8.75 (-0.50)
27 January 2010	9.50 (-0.50)	8.00 (-0.50)	9.25 (-0.50)
10 December 2009	10.00 (-1.00)	8.50 (-0.50)	9.75 (-0.25)
5 November 2009	11.00 (-1.00)	9.00 (-0.50)	10.00
24 September 2009	12.00 (0.00)	9.50 (0.00)	
13 August 2009	12.00 (0.00)	9.50 (0.00)	
2 July 2009	12.00 (0.00)	9.50 (0.00)	
4 June 2009	12.00 (-1.00)	9.50 (0.00)	
7 May 2009	13.00 (-2.50)	9.50 (-3.00)	
8 April 2009	15.50 (-1.50)	12.50 (-1.50)	
19 March 2009	17.00 (-1.00)	14.00 (-1.00)	
29 January 2009	18.00 (0.00)	15.00 (0.00)	

1. Change from last decision in parentheses.

Tables and charts

Tables and charts are generally based on statistical information available on 10 May 2013. 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	Central Bank collateral loans[3]	3-month REIBOR[4]	RIKB 13 0517	RIKB 19 0226	HFF 150644	Base money	M3	DMB lending	DMB foreign liabilities[7]
2011													
January	-0.9	1.8	-2.1	10.6	4.5	4.1	2.6	5.9	3.3	-2.8	-9.3	-5.6	-38.0
February	1.2	1.9	-1.6	7.5	4.3	4.0	3.3	6.3	3.2	16.4	-8.8	-5.0	-40.0
March	1.0	2.3	-0.6	5.6	4.3	4.0	3.1	6.2	3.1	-31.9	-8.2	-6.9	-46.4
April	0.8	2.8	-0.3	4.7	4.3	4.0	3.0	6.5	3.1	9.7	-7.7	-7.3	-40.2
May	0.9	3.4	-1.1	0.1	4.3	4.0	3.0	7.4	3.3	-25.1	-7.0	-7.3	-39.2
June	0.5	4.2	-0.6	-3.2	4.3	4.0	2.8	7.2	3.3	-17.8	-5.0	-6.8	-40.4
July	0.1	5.0	-0.4	-3.9	4.3	4.0	3.0	7.6	3.3	4.9	-2.0	-4.4	-37.1
August	0.3	5.0	0.8	-5.1	4.5	4.5	3.6	7.8	3.2	-14.8	0.0	-4.5	-38.9
September	0.6	5.7	1.5	-4.7	4.5	4.6	3.7	7.0	3.2	-1.0	5.5	-4.0	-19.5
October	0.3	5.3	1.2	-3.5	4.5	4.6	3.9	6.6	2.9	11.7	5.1	-4.8	-17.7
November	0.0	5.2	-0.3	-4.3	4.8	4.8	3.7	6.1	2.8	-15.8	5.8	-5.9	-23.2
December	0.4	5.3	-1.1	-4.6	4.8	4.8	3.8	6.2	2.7	-20.7	8.7	-0.2	-26.1
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	-27.9
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	-23.6
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	-16.8
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	-14.4
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	-22.8
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	-25.1
July	-0.7	4.6	2.2	2.4	5.8	5.8	3.1	6.3	2.8	-22.9	4.3	5.6	-27.5
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	-14.4
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	-17.6
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	-17.5
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	-15.4
December	0.0	4.2	-0.8	-4.6	6.0	6.2	3.8	6.1	2.7	32.0	-2.8	1.7	-20.7
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	-14.5
February	1.6	4.8	0.8	-3.3	6.0	6.2	4.8	5.4	2.6	-33.0	-5.7	-0.6	-16.5
March	0.2	3.9	4.3	3.0	6.0	6.2	4.8	5.4	2.7	1.7	-2.6	0.0	-18.7

1. Percentage changes 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 as of January 2002. 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.)	Trade 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]											
2011														
January	732.7	20.2	5.8	0.9	6.8	42.2	35.4	1.5	75.0	8.5	4.4	-39.4	24.9	0.5
February	719.4	19.4	5.4	1.0	8.3	42.7	34.4	0.7	74.3	8.6	4.2	3.8	14.4	2.0
March	765.4	20.5	4.1	1.2	13.9	59.1	45.2	1.3	73.9	8.6	4.4	-2.6	5.8	1.9
April	759.2	20.2	4.1	1.0	3.2	40.3	37.0	1.5	73.9	8.1	4.4	-9.9	-0.6	2.7
May	708.6	17.9	3.9	1.2	5.7	55.5	49.8	-0.3	73.7	7.4	5.3	-15.8	11.2	3.5
June	827.8	20.7	4.7	1.0	8.7	51.7	43.0	1.1	73.7	6.7	7.1	-16.4	5.4	4.7
July	858.2	21.1	4.7	1.0	9.4	51.5	42.0	-0.2	73.7	6.6	7.8	-26.9	5.2	5.9
August	915.3	22.4	5.5	1.2	9.3	54.9	45.6	1.2	74.4	6.7	8.0	-20.1	-0.8	6.3
September	911.7	21.8	5.6	1.0	15.6	62.5	46.9	1.6	75.5	6.6	8.4	-21.1	-3.1	7.3
October	982.8	23.7	6.3	1.0	8.0	52.7	44.6	3.0	76.6	6.8	8.9	-16.6	-3.9	7.5
November	1,110.3	25.8	7.5	1.2	7.9	53.4	45.5	0.2	76.4	7.1	9.0	-18.3	-4.2	7.6
December	1,047.3	23.4	6.9	1.0	0.2	53.7	53.4	0.8	75.6	7.3	9.2	-13.2	-2.6	9.9
2012														
January	1,081.3	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	-4.6	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	-6.3	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	-9.4	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	-11.0	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	-8.9	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	11.4	4.4	-2.1	11.6	55.7	44.2	-1.7	72.7	5.5	5.0	-40.3	22.6	5.3
February	514.6	11.3	4.3	-3.1	7.6	49.6	42.0	-2.1	74.0	5.5	5.2	4.3	20.6	5.8
March	505.3	11.4	4.6	-1.0	9.3	50.9	41.6	0.7	77.2	5.3	5.5	-6.1	13.6	4.6

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. 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. 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]		Króna effective exchange rate			Interest rates (%)			Money and credit			Ratio of		
				Real exchange rate[3]					% change over year					
	Consumer price index	CPI inflation (%)	Nominal exchange rate[2]	Relative CPI	Relative ULC	Indexed gov. bonds, yield[4]	Banks' secured lending (real yield) Non-indexed	Banks' secured lending (real yield) Indexed	M3	DMB lending	Credit system lending	FX reserves to goods imports[5]	Net ext. debt[6] GDP (%)	Growth of real GDP (%)
1983	33.9	84.2	100.0	91.8	95.1	3.8	-14.2	3.0	78.7	85.6	82.9	2.5	57.2	-2.2
1984	43.7	29.2	116.3	96.3	92.1	7.0	3.4	5.5	33.4	43.0	40.2	2.1	60.2	4.1
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	2.9
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	1.6

1. Annual averages (May 1988=100) and changes between years. 2. Annual averages. Exchange rate of the króna against a 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 rates. 6. External debt ratio is calculated 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
1983	-5.6	-12.7	-8.6	11.0	-9.7	-1.4	-1.8	-2.0	35.8	37.8	1.0	77.4	-16.7	-12.5
1984	3.7	9.4	6.4	2.4	9.1	0.7	-4.5	2.2	36.9	34.7	1.3	77.6	-3.1	-2.5
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	0.6	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	4.1	6.8	-1.7	-6.2	-5.6	41.7	47.3	7.4	80.0	2.7	5.3
2012	2.7	4.4	1.9	3.9	4.8	-3.3	-4.9	-3.4	43.1	46.5	5.8	80.0	2.5	2.4

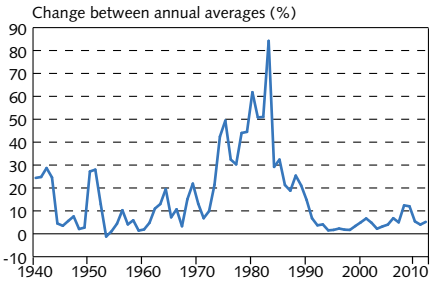
7. Central and local governments and the social security system. 8. Participation rate as per National Economic Institute definition until 1990, but based on Statistics Iceland labour market survey from 1991. 9. Statistics Iceland wage index. Deflated by consumer prices.

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

Chart 1

Consumer price inflation 1940-2012

Yearly averages of CPI

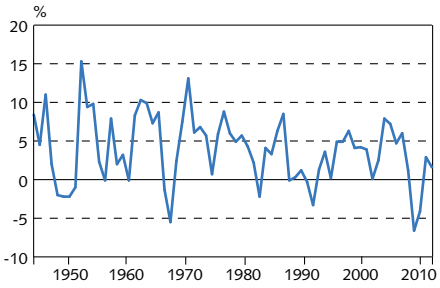


Source: Statistics Iceland.

Chart 2

Output growth 1945-2012[1]

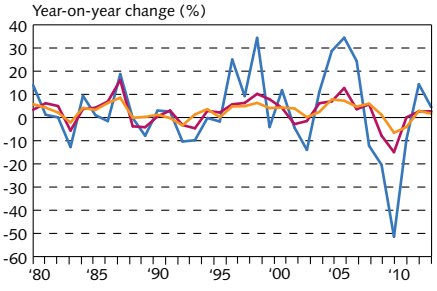
Change in real GDP between years



1. Preliminary data 2012.
Source: Statistics Iceland.

Chart 3

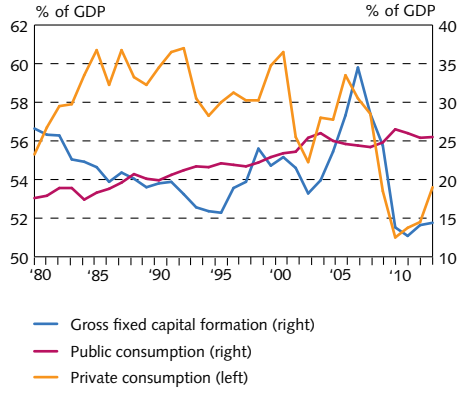
Growth of GDP, private consumption, and gross fixed capital formation 1980-2012[1]



1. Preliminary data 2012.
Source: Statistics Iceland.

Chart 4

Private consumption, public consumption, and gross fixed capital formation 1980-2012[1]

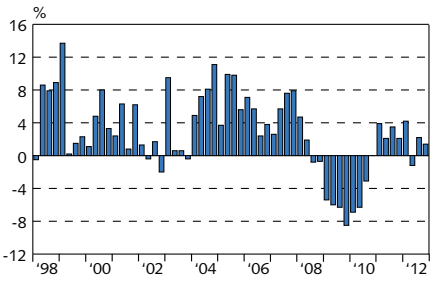


1. Preliminary data 2012.
Source: Statistics Iceland.

Chart 5

Economic growth Q1/1998 - Q4/2012[1]

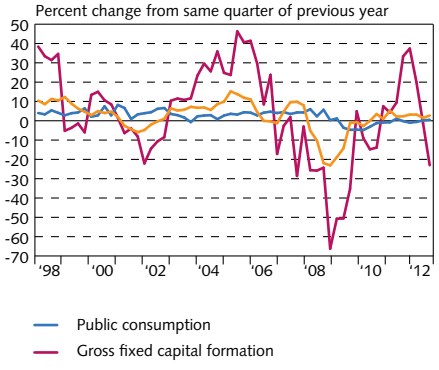
Change from same quarter a year earlier



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

Chart 6

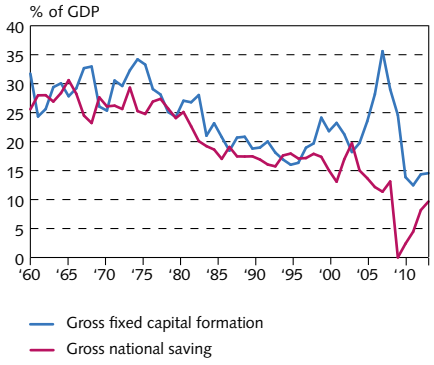
Components of economic growth Q1/1998 - Q4/2012[1]



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

Chart 7

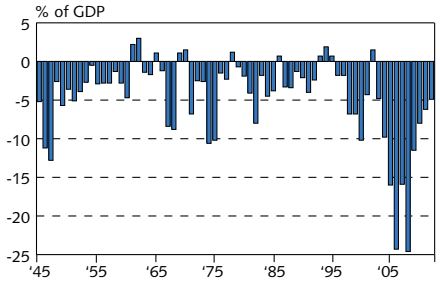
Gross national saving and fixed capital formation 1960-2012[1]



1. Preliminary data 2012.
Source: Statistics Iceland.

Chart 8

Current account balance 1945-2012[1]

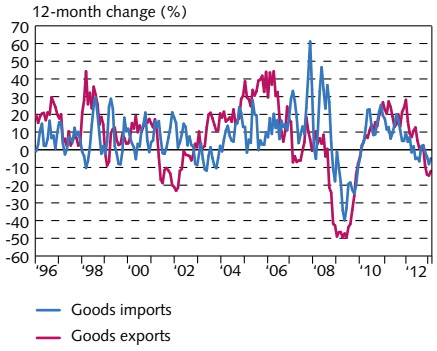


1. Preliminary data 2012.
Source: Statistics Iceland.

Chart 9

Goods trade January 1996 - March 2013

3-month moving averages at fixed exchange rates

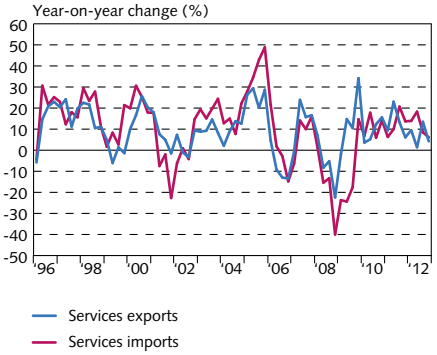


Sources: Statistics Iceland, Central Bank of Iceland.

Chart 10

Exports and imports of services Q1/1996 - Q4/2012[1]

At constant exchange rates

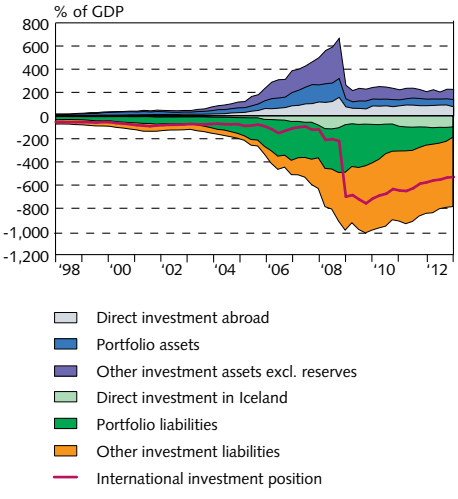


1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 11

External debt and assets Q1/1998 - Q4/2012[1]

At current prices

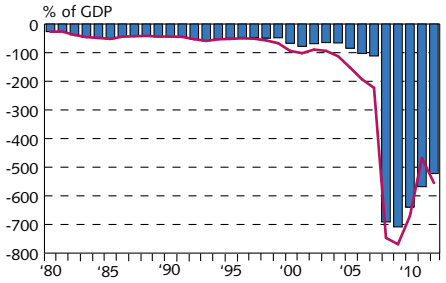


1. Latest data are preliminary.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 12

Net external debt position 1980-2012[1]

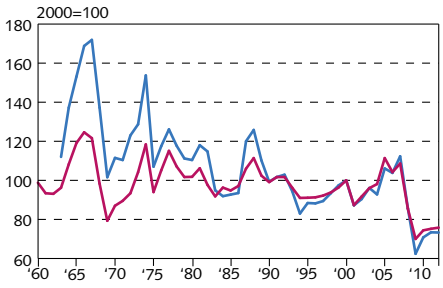
At year-end



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

Chart 13

Real effective exchange rate of the Icelandic króna 1960-2012[1]

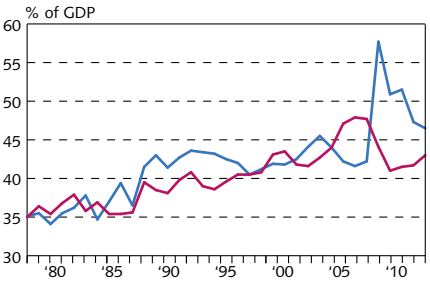


Relative unit labour costs
Relative consumer prices

1. Preliminary data 2012.
Source: Central Bank of Iceland.

Chart 14

General government revenues and expenditures 1978-2012

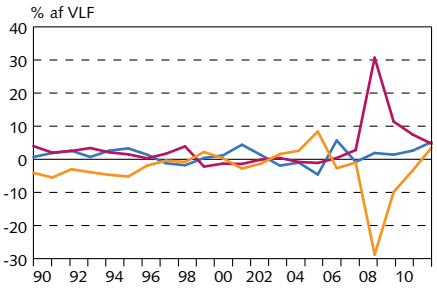


Expenditures
Revenues

Source: Statistics Iceland.

Chart 15

Treasury borrowing and credit budget balance 1990-2011

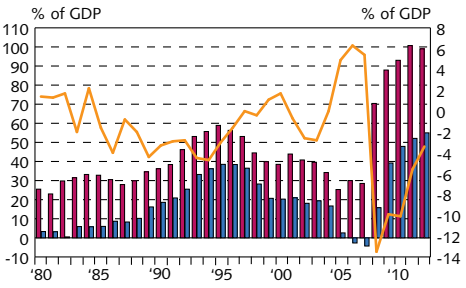


Net foreign borrowing
Net domestic borrowing[1]
Credit budget balance

1. Including increase in pension fund commitments and outstanding long-term interest. State Accounting Office's preliminary calculations for 2011.
Sources: State Accounting Office, Statistics Ieland, Treasury accounts.

Chart 16

General government balance and debt 1980-2012

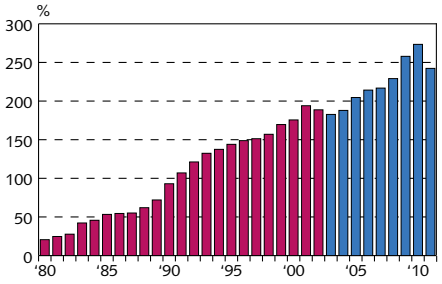


Net debt (left)[1]
Gross debt (left)
Financial balance (right)

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

Chart 17

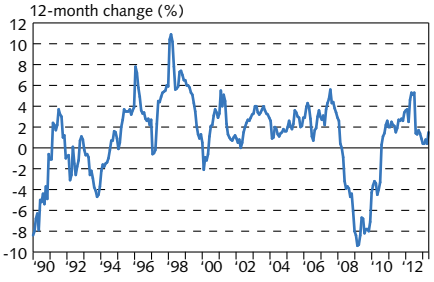
Household debt as percentage of disposable income 1980-2011[1]



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

Chart 18

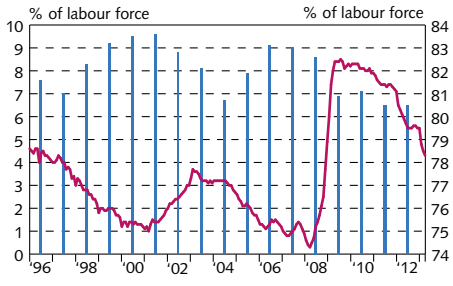
Real wages January 1990 - March 2013



Source: Statistics Iceland.

Mynd 19

Unemployment and labour participation
January 1996 - March 2013

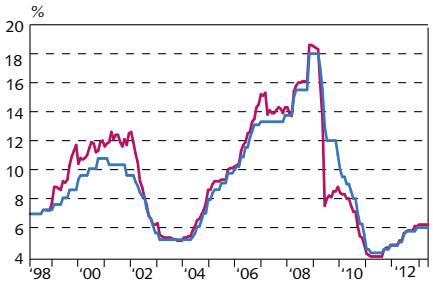


1. Statistics Iceland labour market survey 1996-2012.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

Chart 20

Short-term interest rates
March 1998 - April 2013

At end of month

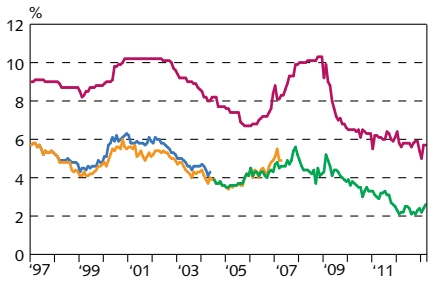


Source: Central Bank of Iceland.

Chart 21

Long-term interest rates
January 1997 - March 2013

At end of month

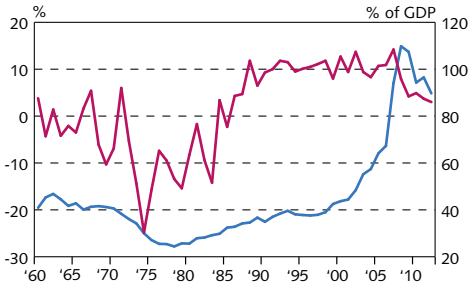


Source: Central Bank of Iceland.

Chart 22

Real yield and broad money 1960-2012[1]

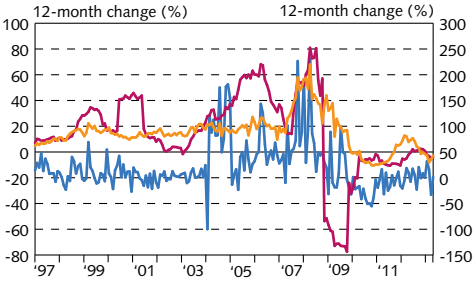
Real yield on non-indexed bank loans
and M3 as percent of GDP



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

Chart 23

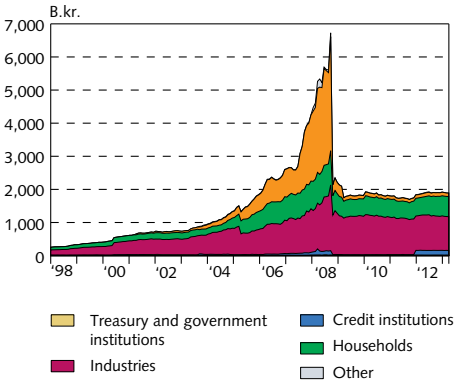
M3, DMB lending, and base money
January 1997 - March 2013[1]



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

Chart 24

Deposit money bank lending by sector
January 1998 - March 2013[1]

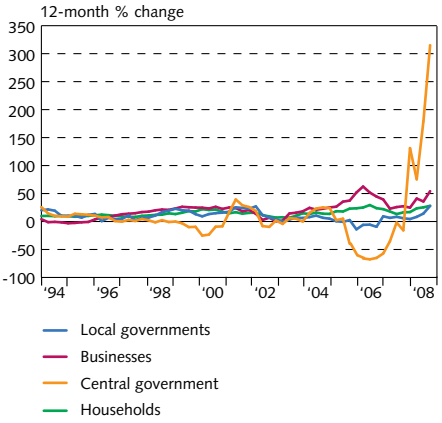


1. Reclassification of lending in September 2003 based on the ÍSAT-95 standard led to a reduction in household debt figures and an increase in business and municipalities' debt figures. Latest figures are preliminary.
Source: Central Bank of Iceland.

Chart 25

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

Lending by sector[1]

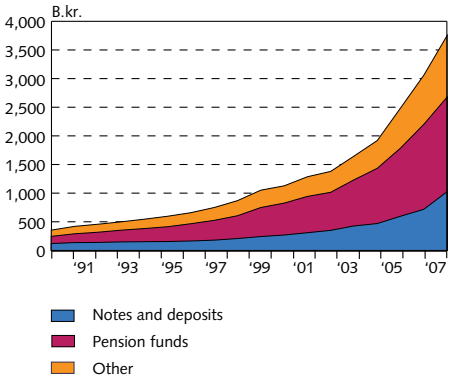


1. Reclassification of lending in September 2003 based on the ÍSAT-95 standard led to a reduction in household debt figures and an increase in business and municipalities' debt figures. Latest figures are preliminary.
Source: Central Bank of Iceland.

Chart 26

Credit system liabilities at year-end 1990-2007

Balance at year-end at current prices

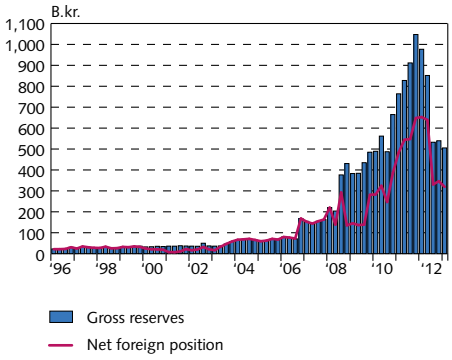


Source: Central Bank of Iceland.

Chart 27

Reserve assets and Central Bank net foreign positon, Q1/1996- Q1/2013[1]

At current exchange rates



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

Boxes and appendices

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2011/2 Baseline macroeconomic and inflation forecast 2011/2
2011/1 Baseline macroeconomic and inflation forecast 2011/1
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2009/2 Baseline macroeconomic and inflation forecast 2009/2
2009/1 Baseline macroeconomic and inflation forecast 2009/1
2008/3 Baseline macroeconomic and inflation forecast 2008/3