Economic and monetary developments and prospects[1]

The inflation outlook has deteriorated

The global economic outlook has improved somewhat since the Bank's last forecast. Output growth measured just over 3% in 2011 and is projected at 2½-3% per year this year and the next two years, making the outlook one of the strongest among industrial countries. Private consumption and business investment contributed more or less equally to last year's output growth and are expected to continue to be its main drivers. Unemployment has continued to decline, and employment is rising, although the increase in Q1 was somewhat below expectations. In the early stages of the recovery, the rise in employment was fuelled primarily by an increase in average hours worked, but jobs have grown in number as the recovery has taken hold. Q1 inflation was higher than was forecast in February, and the outlook for 2012 has deteriorated, owing to larger rises in oil prices, a weaker króna, relatively less spare capacity in the economy, rising inflation expectations, and intrinsic inflation persistence. According to the current forecast, inflation will not return to the 2½% target until end-2014. The Bank's real rate has therefore declined somewhat despite the recent rate hike. Considerable uncertainty surrounds the exchange rate and inflation outlook and the durability of the domestic economic recovery, particularly in view of the troubled global outlook.

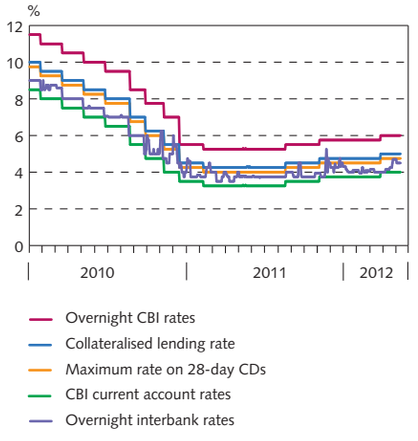
I Economic outlook and key uncertainties

Highlights of the Central Bank's baseline forecast

Central Bank interest rates raised in March

At its March meeting, the Central Bank of Iceland Monetary Policy Committee (MPC) decided to raise the Bank's interest rates by 0.25 percentage points, after keeping rates unchanged at the February meeting. Therefore, prior to the publication of this *Monetary Bulletin*, the current account rate was 4%, the maximum rate on 28-day certificates of deposit (CDs) was 4.75%, the seven-day collateralised lending rate was 5%, and the overnight lending rate was 6%. Short-term market rates had risen accordingly. The relatively abundant liquidity position of the financial system has limited domestic credit institutions' demand for Central Bank liquidity facilities. As a result, the Bank's effective policy rate probably lies close to the average of its deposit rates, or just under 4.4%. For the same reason, the shortest interbank rates are still below the centre of the Bank's interest rate corridor.

Chart I-1
Central Bank of Iceland interest rates and short-term market interest rates
Daily data 1 January 2010 - 11 May 2012



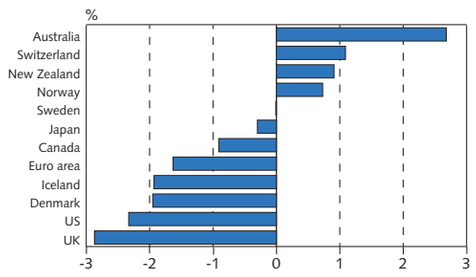
Source: Central Bank of Iceland.

Real Central Bank interest rate has fallen slightly and is among the lowest in industrialised countries

In spite of the rate hike in March, the Central Bank's real interest rate has fallen slightly, with inflation and inflation expectations rising by more than the nominal rate hike. Based on various measures of inflation and inflation expectations, the Bank's real interest rate is now about -1.2% on average, nearly 2 percentage points lower than it was a year ago. It is even lower in terms of the current inflation level, or -1.9%, which is more than 3 percentage points below last year's real rate. As Chart I-2 shows, it is among the lowest real interest rate in industrialised countries.

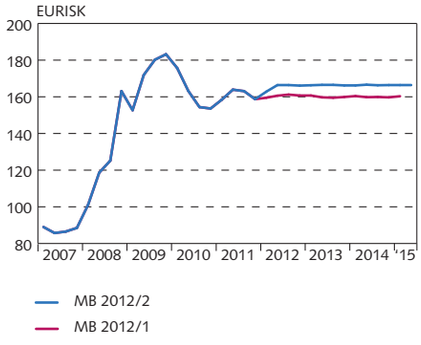
1. The analysis presented in this *Monetary Bulletin* is based on data available in early May.

Chart I-2
Real interest rates in various industrial countries
Effective central bank interest rates less annual inflation[1]



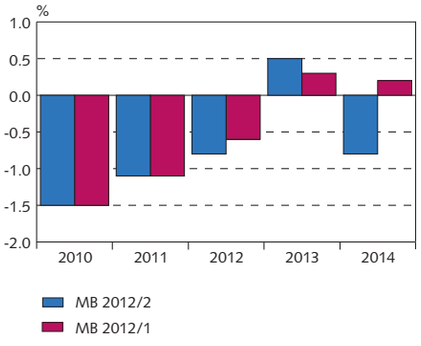
1. For Iceland, the rate is based on average interest rates on deposits and the maximum bid rate for 28-day CDs.
Sources: Macrobond, Central Bank of Iceland.

Chart I-3
The ISK exchange rate against the euro - comparison with MB 2012/1



Source: Central Bank of Iceland.

Chart I-4
Net exports - contribution to GDP growth



Sources: Statistics Iceland, Central Bank of Iceland.

Monetary policy therefore continues to support the economic recovery with an extremely low real interest rate. This low rate has also contributed to the gradual improvement in households' and businesses' financial conditions. Rising asset prices, including house prices, and reduction of debt following restructuring and write-offs in connection with court judgements have improved private sector finances. Households' and businesses' net worth has therefore increased, enhancing their willingness and ability to undertake new expenditure. At the same time, the growth rate of the money supply has picked up. Interest rate developments and private sector financial conditions are discussed in greater detail in Section III.

Króna slid from end-2011 to early April

The króna depreciated from early in the year until early April but then began to strengthen again. In Q1, it was 2% weaker against the euro than in the February forecast. Just before this *Monetary Bulletin* went to press, it had weakened by almost 3% year-to-date in trade-weighted terms and almost 1% since the February *Monetary Bulletin*. It has fallen by a similar amount against the euro.

The decline in the exchange rate appears to be caused by firms paying down foreign-denominated debt, in some instances by necessity and in others because they consider it advantageous given the low domestic real interest rate. In addition, financial institutions have been hoarding foreign currency towards foreign obligations. Seasonal fluctuations, poorer terms of trade, and rising domestic costs are also likely contributors. The slide in the exchange rate stopped in early April, presumably owing in part to the amendments to the Foreign Exchange Act. On the other hand, the ensuing appreciation in late April and early May could stem from reduced need among financial institutions to hoard foreign currency and from positive seasonal effects.

Developments in the exchange rate in coming quarters are highly uncertain. In the short run, developments in the above-mentioned factors could be important in determining whether the recent appreciation continues. In the latter half of 2013 and the beginning of 2014, general removal of capital controls could begin to affect the exchange rate, adding another uncertainty to that surrounding conventional factors such as the interest rate differential, terms of trade, and the real exchange rate. The Bank's baseline forecast therefore assumes that the exchange rate will remain unchanged throughout the forecast horizon. This implies that it will be lower than according to the February forecast during the period. Further discussion of developments in the exchange rate and the foreign exchange market can be found in Sections II and III.

Outlook for stronger exports than previously anticipated …

Although uncertainty remains, the global economic outlook has improved, and optimism is on the rise. International forecasts suggest stronger output growth among Iceland's major trading partners, which will support exports. As before, the outlook remains poor for the euro area, Iceland's most important export market. Marine product price

increases have lost pace, while oil and commodity prices rose sharply in the first few months of the year. As a result, Iceland's terms of trade are poorer than previously assumed. Nonetheless, export growth has been stronger than in the February forecast, and the outlook for 2012 is markedly improved, primarily due to a brighter outlook for exports of marine products and services. Total imports are forecast to increase by almost 4% this year and over 3% per year in 2013 and 2014, whereas the February forecast assumed just under 2% growth this year and about 2½% next year. The outlook for exports has therefore improved significantly from the February forecast.

The forecast for import growth in 2012 has also been revised upwards. The contribution from net trade will therefore remain negative in 2012, as in the last two years. Net trade is projected to contribute positively to GDP growth in 2013, but become negative again in 2014, as a result of substantial investment goods imports in connection with the energy-intensive development projects that have been shifted back to 2014 in the forecast. Further discussion of the global economy, exports, and external conditions can be found in Section II, while import developments and the contribution of net trade to growth are discussed in Section IV.

… but a smaller current account surplus

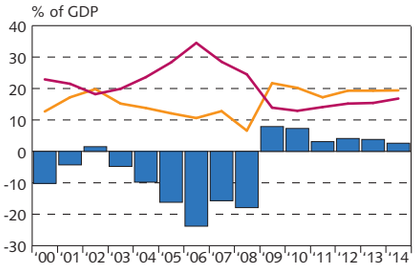
The current account surplus will be somewhat smaller during the forecast horizon than was forecast in February. The smaller surplus will stem from poorer terms of trade in the early part of the forecast period, but in 2014 it is expected to decline primarily because the investment rate will rise more rapidly than the national saving rate. The external balance is discussed further in Section VII.

Domestic demand growth to remain strong

Preliminary figures from Statistics Iceland indicate that national expenditure grew by about 4.7% in 2011, after having contracted by almost 30% in 2008-2010. The Bank's February forecast assumed growth of 4.4%. Growth in private consumption proved to be 0.5 percentage points less than forecast, or 4%, due mostly to the reduction in private consumption in Q3/2011 in Statistics Iceland's revised figures. Public consumption and inventory accumulation were also weaker than forecast. Investment was somewhat stronger than in the February forecast, however: growth was projected at 7% in February, whereas the actual figure was 13½%, including a one-fourth rise in business investment. Business investment and private consumption thus contributed equally to GDP growth during the year, at about 2 percentage points each. An examination of the contribution from individual sectors reveals as well that last year's GDP growth was driven primarily by increased industrial and marine production, miscellaneous services, and electronic communications. There has been very little recovery in the sectors that contracted most as a result of the economic crisis, such as construction, retail trade, and financial services.

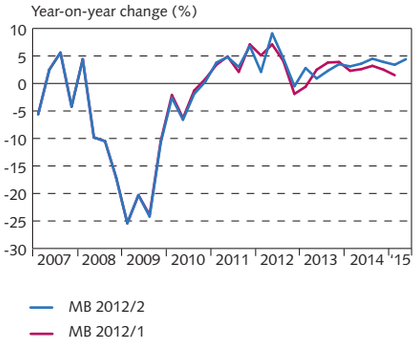
Reasonably robust growth is expected in private consumption and investment this year, offset by a contraction in public consumption. Private consumption growth will be somewhat stronger than

Chart I-5
Current account 2000-2014[1]



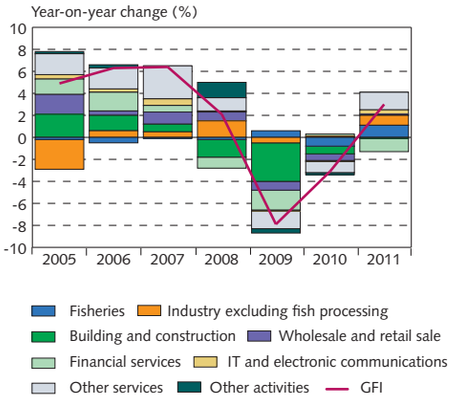
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-6
Domestic demand - comparison with MB 2012/1



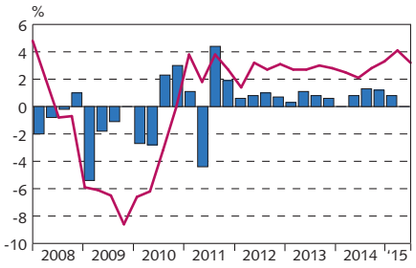
Sources: Statistics Iceland, Central Bank of Iceland.

Mynd I-7
Developments in gross factor income and sectoral contribution[1]



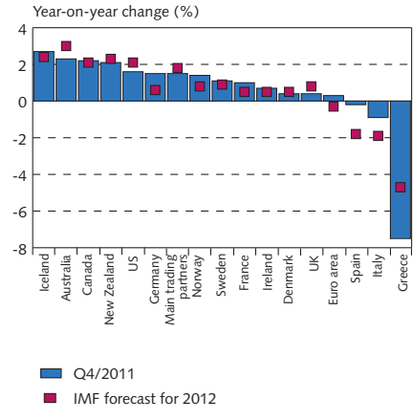
1. Gross factor income (GFI) is equivalent to GDP less indirect taxes, and plus manufacturing subsidies. GFI is assessed based on production in individual economic sectors.
Source: Statistics Iceland.

Chart I-8
GDP growth
Q1/2008 - Q2/2015[1]



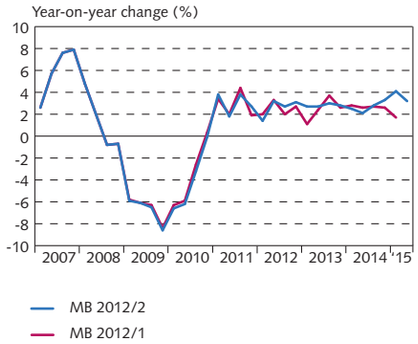
1. Central Bank baseline forecast Q1/2012 - Q2/2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-9
GDP growth in Q4/2011 and outlook for GDP growth in 2012



Sources: Eurostat, IMF, OECD, Statistics Iceland.

Chart I-10
GDP growth - comparison with MB 2012/1



Sources: Statistics Iceland, Central Bank of Iceland.

previously forecast, and private business investment excluding energy-intensive industry, ships, and aircraft is expected to grow significantly as well. On the other hand, delays are expected in energy-intensive development projects. Total investment is therefore projected to be somewhat weaker than in the February forecast. National expenditure as a whole is assumed to grow by 3.7% this year, 0.3 percentage points more than forecast in February. It is expected to grow by 2½% in 2013, as was forecast in February, and by 3.8% in 2014, whereas the February forecast assumed 2.7%. The surge in 2014 is due mainly to the fact that some of the planned energy-intensive development projects have been shifted back to that year. Further discussion of private and public sector demand can be found in Sections IV and V.

GDP growth outlook for 2012 broadly unchanged from February …

According to preliminary figures from Statistics Iceland, GDP grew by just under 2% between Q3 and Q4/2011, and year-on-year growth measured 2.7%. Growth for the year as a whole was 3.1%, compared to the 3% projected in the Bank's February forecast.

GDP is expected to grow by an average of just over ½% between quarters in 2012. Annual GDP growth is expected to measure about 1½% in Q1, just over 3% in Q2, and roughly 2½% for the year as a whole, which is virtually identical to the February forecast.

… and more promising than in most industrialised countries

Given the global economic situation and GDP growth developments in other industrialised countries, the outlook in Iceland must be viewed as quite acceptable. Annual GDP growth in Q4/2011, for instance, was among the highest in the OECD and the highest among industrialised countries.

Forecasts for 2012 indicate as well that GDP growth will be strongest among industrialised countries heavily reliant on commodity and food production, including Iceland. The outlook for the euro area, Iceland's most important export market, is poor, however, particularly in the southern part of the region.

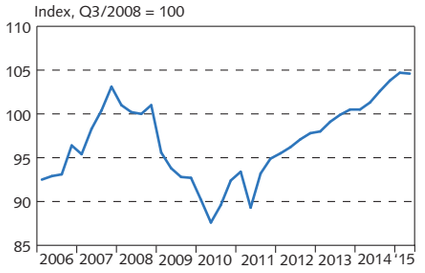
Output growth projected at 2½-3% for the next two years

The output growth outlook for 2013 has improved slightly since February. The forecast at that time assumed 2.5% growth, as opposed to the current projection of 2.8%. Private consumption is expected to rise more than in the previous forecast, due in particular to a more positive contribution from net trade. Output growth is projected to remain broadly unchanged in 2014, or 2.7%, and gain pace in the first half of 2015, rising to 4% on a year earlier. In part, this upsurge late in the forecast horizon is due to the aforementioned delays in energy-intensive development projects. As before, output growth is driven primarily by domestic demand, with roughly equal contributions from private consumption and investment for most of the forecast horizon.

Based on seasonally adjusted data from Statistics Iceland, year-end 2011 GDP was about 5% below the GDP level in autumn 2008, when the crisis struck. When it bottomed out in mid-2010, however,

it was some 12½% below the autumn 2008 level. Since the mid-2010 trough, growth in GDP has been rather broadly based, with roughly equal contributions from exports, business investment, and private consumption. According to the Bank's current baseline forecast, GDP will return to the autumn 2008 level in the second half of 2013 and rise to almost 5% above that level by the end of the forecast horizon. It will take some time, however, to attain the level it would have reached had it continued in line with its pre-crisis long-term trend growth. In that sense, a part of GDP has been lost permanently in the financial crisis.[2] 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 part of the loss reflects an inevitable adjustment to pre-crisis overheating. Further discussion of GDP growth and the GDP growth outlook can be found in Section IV.

Chart I-11
Seasonally adjusted GDP
Q1/2006 - Q2/2015[1]



1. Central Bank baseline forecast Q1/2012 - Q2/2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Labour market developments broadly in line with previous forecasts

In line with the Central Bank's previous forecasts, seasonally adjusted unemployment measured 6½% in Q1/2012, down from over 7% in the previous quarter and almost 8% in Q1/2011. At the same time, the Statistics Iceland labour market survey indicates that employment is up by just 1% year-on-year, somewhat less than was forecast in February. In line with typical cyclical behaviour, increased employment is initially concentrated in longer average hours worked. The most recent figures from Statistics Iceland indicate increased job creation, however.

The employment situation is projected to improve gradually over the forecast horizon. Unemployment will remain around 6½% this year, according to the forecast, and then taper off to about 5½% at year-end 2013 and just over 4% by mid-2015, the end of the forecast horizon. According to the forecast, the recovery of employment will lag somewhat behind output growth, boosting labour force productivity during the forecast period. Productivity growth will not be sufficient to prevent a sizeable increase in unit labour costs in 2012, however. Further discussion of the labour market can be found in Section VI.

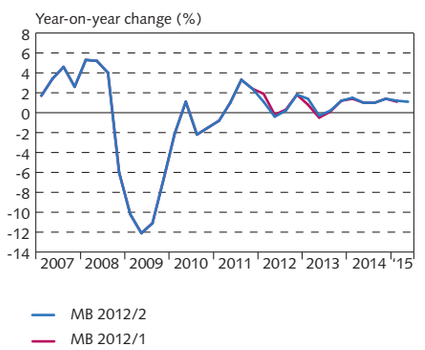
Chart I-12
Unemployment - comparison with MB 2012/1

Sources: Directorate of Labour, Central Bank of Iceland.

Economy approaching full capacity utilisation by early 2014

The assessment of the current slack in the economy has changed little since February. Output is estimated to have been about 2% below capacity in 2011 and about 1% below it this year, somewhat less slack than was assumed in February. The economy is projected to approach full capacity utilisation by the beginning of 2014, which is well in line with the February forecast. Underlying this is the assumption that while growth in potential output is recovering gradually in the wake of the financial crisis, it will be below long-term trend growth for the majority of the forecast period. Further discussion of potential output and output slack can be found in Section IV.

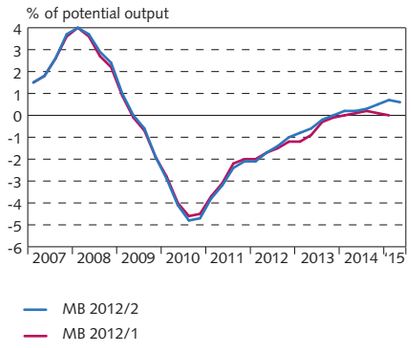
Chart I-13
Employment - comparison with MB 2012/1



Sources: Statistics Iceland, Central Bank of Iceland.

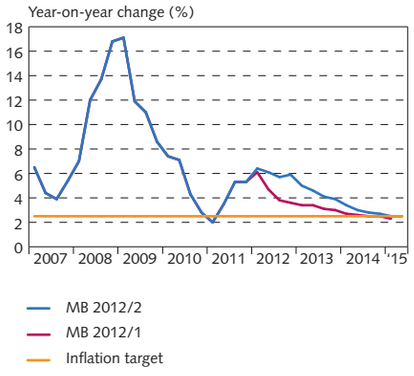
2. See Box IV-1, "Why did Iceland's potential output contract in the wake of the financial crisis?", in *Monetary Bulletin* 2011/4, pp. 35-38.

Chart I-14
Output gap - comparison with MB 2012/1



Source: Central Bank of Iceland.

Chart I-15
Inflation - comparison with MB 2012/1



Sources: Statistics Iceland, Central Bank of Iceland.

Inflation outlook deteriorates

Inflation measured 6.4% in Q1/2012, 0.3 percentage points higher than in the February forecast. The deviation stems primarily from larger-than-anticipated increases in the price of oil and private services and a weaker-than-expected króna. Although inflation is considered to have peaked, the outlook is for it to subside more slowly than previously expected. Q2 inflation is projected at about 6%, a full percentage point above the February forecast. According to the forecast, it will subside only slightly over the remainder of the year, unlike the February forecast, and will remain significantly above projected levels well into 2014. This is due to a number of factors: a somewhat weaker króna, a slightly smaller margin of spare capacity in the economy, rising inflation expectations, and marked inflation persistence. Inflation is forecast to measure slightly less than 6% in Q4/2012 and just under 4% a year later. According to the forecast, it will not return to the target until end-2014, almost a year later than in the February forecast. 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 it. The forecast is also based on an assessment of how individual markets function and how monetary policy is transmitted to the economy. All of these factors are subject to considerable uncertainty, 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.

The global economic recovery could be overestimated

According to the baseline forecast, the global economic outlook has improved somewhat in the recent term and uncertainty has subsided, but the recent rise in Spain's CDS spread shows that the problem is far from resolved. The possibility of a reversal in the most debt-ridden European countries and a resurgence in investors' fears cannot be ruled out. The debt crisis could therefore escalate still further and spread to other euro area countries, pulling the global economy back into a new recession that could prove prolonged. In that instance, financial market unrest could mount even further, and the impact on the Icelandic economy would probably be greater than is assumed in the baseline forecast. The outlook for exports could deteriorate further, as the euro area is Iceland's chief export market. Terms of trade could deteriorate further, especially if prices of marine products weaken substantially. Domestic investment plans that depend on external financing could also be thrown into disarray, delaying domestic development and reducing export capacity for the long term. Iceland's economic recovery could be threatened as a result.

Recovery of domestic private consumption could turn out weaker due to heavy indebtness

The baseline forecast assumes that private consumption will continue to grow, albeit more slowly than in the recent past. Initially, the surge in private consumption reflected pent-up demand following a sharp post-crisis contraction in consumption expenditure financed in part with third-pillar pension savings withdrawals and special mortgage interest rebates. It can be assumed that greater optimism among consumers and less uncertainty about the overall economic outlook and their own financial situation (partly as a result of court decisions on illegal exchange rate-linked loans) have also reduced precautionary savings. A low short-term real interest rate and increased household net worth caused by rising house prices and reduced debt have also supported increased consumer spending. Last but not least, employment and nominal wages have picked up, increasing disposable income, although rising inflation has eaten into its purchasing power.

It is possible that the baseline forecast is overly optimistic about private consumption growth. For example, a global economic reversal could prompt households to step up precautionary saving once again. Households may also consider it necessary to take more time to restructure their balance sheets and pay down debt, as they are still heavily leveraged in comparison with households in many other countries. Positive news about the global economy and increased optimism could discourage households from deleveraging, however, resulting in a stronger domestic economy over the forecast horizon than in the baseline scenario.

Is fiscal austerity easing?

Fiscal restraint has been one of the cornerstones of the restoration of Iceland's credibility in global financial markets. The current National Budget and fiscal projections assume that Government finances will be in balance somewhat later than previous proposals assumed, in part because of extremely costly wage settlements concluded last year. Furthermore, a number of assumptions underlying the Budget appear fragile, and it is not impossible that expenditures will exceed estimates and/or revenues will be below projections. Expenditure pressures appear to be mounting, and there is the risk that those pressures will gain further momentum as Parliamentary elections draw near. Fiscal space is very limited, however, due to the high debt level. The capital controls lead to lower interest rates on Government debt than could otherwise be expected given the high debt level. When the controls are lifted, this will change; therefore, it is important to use this shelter to reduce the Government's net borrowing need.

If the slack in Government finances proves to be greater than in the baseline forecast, short-term domestic demand may turn out somewhat stronger than is currently projected. On the other hand, a larger deficit could push domestic interest rates upwards, thereby squeezing out private sector investment plans. Government financing costs would also be higher, particularly if risk premia on Treasury debt begin rising again. Pressure on the króna could escalate, and with it the risk of higher inflation, which would call for a tighter monetary

stance. The economic recovery could therefore be weaker than in the baseline forecast. Other things being equal, such a turn of events would reduce Treasury revenues and undermine the authorities' attempts to control public sector debt.

The demand-side effects of the recent Supreme Court judgment could be overestimated

The baseline forecast assumes that the Supreme Court's February 2012 judgment on the settlement of illegal exchange rate-linked loans will boost disposable income for a number of households and businesses, further easing their debt burden, and contribute to a temporary upsurge in private consumption and investment, thereby boosting output growth temporarily. The size of the impact could be significant, according to the likeliest outcome.

The possibility cannot be excluded that the demand effects of the Court ruling are overestimated, as it could significantly erode the quality of the credit institutions' balance sheets and reduce their expected future profits. A weaker capital position could reduce their willingness to extend new credit, and their reduced revenue potential could be offset with wider interest rate spreads. The cost of funding for households and firms could therefore rise. If these effects are strong enough, they could counterbalance or even fully offset the temporary rise in income among those affected by the Supreme Court decision, thereby slowing down the economic recovery later on.

Exchange rate outlook is highly uncertain

According to the baseline forecast, the exchange rate of the króna will remain close to the level at the time of the current forecast for the majority of the forecast horizon. As a small currency of an indebted country paying a relatively high risk premium, the króna is generally vulnerable to global financial market unrest despite being sheltered by capital controls. The plans are to lift the capital controls during the forecast horizon, and this could cause fluctuations in the exchange rate. The timing and the conditions at the time of liberalisation are uncertain; therefore, it is extremely difficult to take account of these factors in the baseline forecast.

The exchange rate could turn out lower than is assumed in the baseline forecast if domestic firms continue paying down external debt, and if domestic agents' access to international financial markets remains restricted. Further deterioration in terms of trade would lead to a similar result. The króna could turn out to be stronger than is assumed in the baseline forecast, however. For example, large investment projects could lead to stronger capital inflows than are currently envisaged, and the recent pressures on the króna related to currency hoarding by domestic financial institutions could be reversed.

According to the baseline forecast, the real exchange rate will rise gradually in coming years, as it is currently very low in historical terms, and probably somewhat below its long-term equilibrium level. Estimating this equilibrium level is difficult, however, due in part to uncertainty about the external debt level of the economy. The

adjustment of the króna to its equilibrium value is unlikely to be rapid while access to international financial markets remains limited and domestic firms work on restructuring foreign debt. The adjustment could prove faster if market conditions change, and it is appropriate to bear in mind that nominal exchange rate changes can cause the real exchange rate to shift both above and below its equilibrium value.

Uncertainty concerning wage agreements

The private sector wage settlements approved in spring 2011 included premises concerning the developments in the exchange rate, inflation, and real wages. According to the Bank's baseline forecast, these premises are unlikely to hold. In spite of this, the baseline forecast does not assume that the review of the contracts will trigger substantial additional pay increases. This assumption is uncertain. If wage agreements are terminated and/or additional pay increases are negotiated, there is the risk of greater inflationary pressures than in the baseline forecast. Although nominal wage rises could stimulate private consumption in the short run, there is the danger that private and public sector entities will quickly pass the cost increases through to prices, as has been the pattern recently. If additional pay hikes are not based on a further increase in productivity, they will also push the exchange rate downwards. Increased inflationary pressures directly caused by rising wages and a falling exchange rate would necessitate further interest rate increases, which would reduce demand and employment beyond the levels assumed in the baseline forecast.

How much spare capacity is there in the economy?

The baseline forecast assumes that a continuing slack in the economy and rising productivity will help contain inflation and ensure that it moves back to the 2½% target as the impact of temporary cost factors tapers off.

It is quite uncertain how strong these effects are and when inflation will begin to subside. Potential output has been reduced by the financial crisis. It is possible that the loss has been underestimated and spare capacity overestimated accordingly. This could mean, for instance, that the current unemployment rate would not suffice to contain excessive wage demands because the equilibrium unemployment level has risen more than is assumed in the baseline forecast and underlying inflationary pressures are therefore underestimated.

According to the baseline forecast, potential output declined until mid-2011. This is an unusually long adjustment compared to international experience, reflecting the severity of the financial crisis in Iceland. The possibility cannot be ruled out that the contraction was smaller and the recovery began earlier. The slack in the economy could therefore be greater than in the baseline forecast, in which case the economy could grow faster without generating increased inflationary pressures.

The speed of disinflation towards the inflation target is uncertain

The baseline forecast assumes that there is still enough slack in the economy to ensure that, when the cost effects of pay increases and

import price hikes begin to diminish, inflation will gradually fall back to the Central Bank's inflation target, reaching it by year-end 2014.

As is stated above, the margin of spare capacity in the economy is extremely uncertain. Furthermore, inflation persistence may well be underestimated. When inflation is consistently well above the target, there is the risk that high inflation expectations will become entrenched, as is indicated by various measures of long-term inflation expectations. If households and businesses expect inflation to remain above the Bank's inflation target for a protracted period, the risk is that workers' wage demands, firms' responses to those demands, and firms' pricing decisions will be coloured by these elevated expectations. Inflation will be higher as a result, and more resistant to attempts to reduce it. In addition, research carried out by the Bank indicates that Icelandic firms' pricing behaviour is often directly linked to decisions based on historical inflation, which prolongs current inflation through automatic increases in the price of goods and services.[3] This is typical in countries with a history of high inflation and exacerbates inflation persistence. In the absence of changes in the assessed spare capacity in the economy and the assumptions concerning global inflation and the exchange rate, the disinflation process could take longer than is assumed in the baseline forecast.

3. See Þorvarður Tjörvi Ólafsson, Ásgerður Ó. Pétursdóttir and Karen Á. Vignisdóttir (2011), "Price setting in turbulent times: Survey evidence from Icelandic firms". *Working Paper*, no. 54.

II External conditions and exports

The global economic outlook has improved since the last *Monetary Bulletin*, but significant risks remain. Uncertainty in financial markets has subsided since February, but some countries in Southern Europe have seen their CDS spreads rise anew. Inflation has declined in Iceland's main trading partner countries. The rise in marine product prices appears to be losing pace, and aluminium prices have fallen. Oil and commodity prices rose sharply at the beginning of the year, however, leading to a poorer terms of trade outlook for 2012. Growth in global trade has slowed down in the recent term, and the real exchange rate has continued to fall. Exports are projected to continue growing during the forecast horizon, with stronger growth this year than according to the February forecast.

The global GDP growth outlook has improved somewhat ...

Iceland's major trading partners, particularly those in the euro area, saw a marked contraction in output growth in Q4/2011. In the US, the UK, Japan, and Norway, however, growth was broadly unchanged from previous quarters, and even slightly stronger. In general, the global GDP growth outlook has improved slightly since the beginning of the year, but significant uncertainty remains, and it is clear that growth will be weaker this year than in 2011. Major economic indicators for the euro area and the US, released shortly after the publication of the February *Monetary Bulletin*, were generally better than most analysts had projected, but since mid-March they have been on a par with or below market expectations, particularly for the euro area.

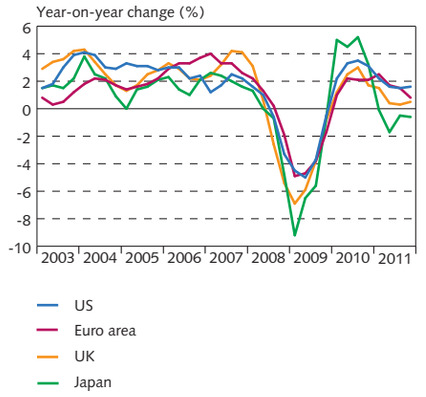
The most recent forecasts from Consensus Forecasts and the International Monetary Fund (IMF) for 2012 indicate that GDP growth will be somewhat stronger in Iceland's trading partners than was assumed in the Bank's last forecast.[1] Nevertheless, it is projected to measure only 0.8% this year, as GDP is expected to grow more slowly than last year in all of Iceland's main trading partners except the US and Japan. Growth among Iceland's main trading partners is forecast at 2% in 2013 and 2½% in 2014, slightly outpacing the February forecast.

... and global financial market uncertainty has diminished

The severe uncertainty in international financial markets last summer and autumn has subsided. Agreements reached with Greece's creditors and the improved GDP growth outlook in the US appear to have had a positive effect, lowering CDS spreads on government bonds around the world in the first few months of 2012. Spreads have begun to rise anew in Spain and Italy, however, due to escalating concerns about the two countries' ability to service their debt, and long-term interest rates are climbing once again.

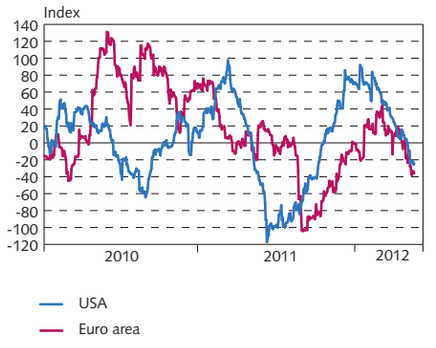
1. Because Brazil and China now weigh about 3% each in Iceland's trade basket, it was decided to include them among Iceland's main trading partners for the analysis of external conditions.

Chart II-1
International GDP growth
Real GDP growth Q1/2003 - Q4/2011



Source: Macrobond.

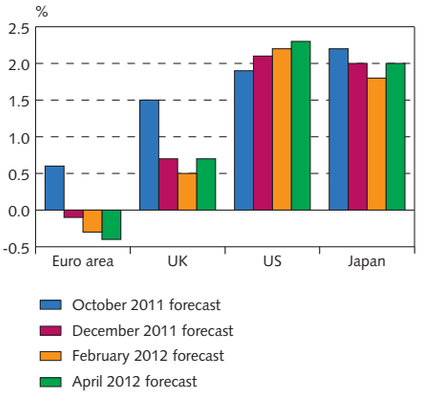
Chart II-2
Economic surprise index[1]
Daily data 1 January 2010 - 11 May 2012



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.

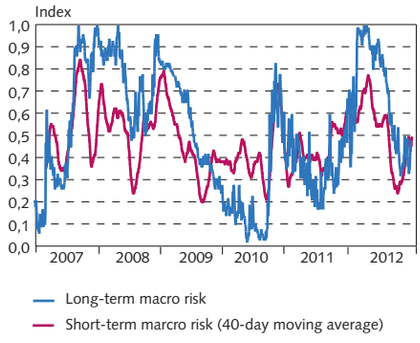
Source: Macrobond.

Chart II-3
GDP forecast for the year 2012



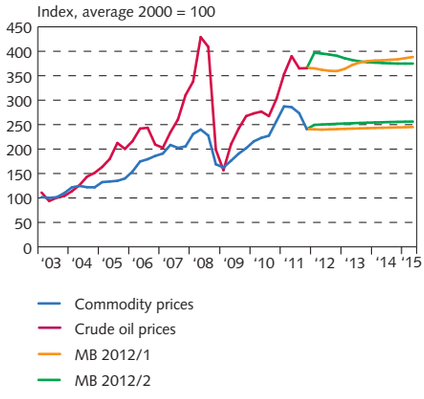
Source: Consensus Forecasts.

Chart II-4
Macro risk index[1]
Daily data 2 January 2007 - 11 May 2012



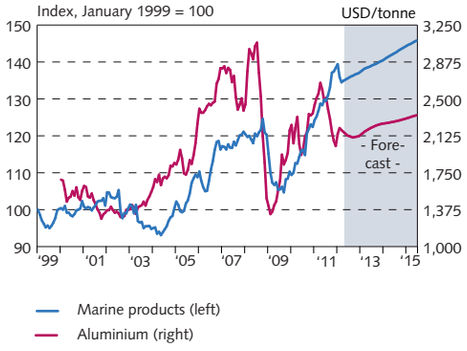
1. Zero means low risk aversion and one high risk aversion.
Source: Macrobond.

Chart II-5
Commodity prices[1]
Q1/2003 - Q2/2015



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

Chart II-6
Prices of marine exports and aluminium
In foreign currency



Sources: London Metal Exchange, Statistics Iceland, Central Bank of Iceland.

Share prices have risen around the world in recent months, particularly at the beginning of the year, after declining sharply in 2011. In general, it appears as though prices bottomed out last September before recovering on the heels of growing optimism in the markets. The improved GDP growth outlook in the US and reduced concerns about the euro area have therefore shored up stock prices. Equities have risen steeply in the other Nordic countries and the US, for instance, and are now above pre-crisis levels. Developments in the next few months are highly uncertain, however, especially because of the aforementioned concerns about Spain and Italy and the considerable uncertainty related to Greek politics.

Inflation outlook broadly unchanged since February

Inflation has declined in Iceland's main trading partners in recent months, after peaking last autumn. Core inflation also appears to be declining in line with general inflation. It is assumed that inflation in Iceland's major trading partner countries will be slightly higher in 2012 than was forecast in the last *Monetary Bulletin*, as the inflation outlook for both the euro area and the US is slightly worse than at the beginning of the year. The outlook for the next two years is unchanged, however. Developments for the remainder of 2012 are nonetheless quite uncertain, and inflation could prove more persistent than currently assumed if oil prices rise again.

A number of central banks have cut interest rates in recent months – particularly in Asia, but also in the Nordic region – although central banks in leading industrial countries have kept rates unchanged so far this year. Nevertheless, the minutes of the Bank of England Monetary Policy Committee's most recent meeting indicate mounting concern about inflation in the UK.

Oil and commodity prices higher than forecast in February

Oil prices have risen steeply in the first few months of the year, due in particular to shrinking inventories. The price hikes far outstrip the projections in the last *Monetary Bulletin*, prompting a sharp upward adjustment in the forecast for 2012. It is now assumed that oil prices will peak in Q2 and that the average increase for the year will be 7%, as opposed to the 2% decline projected in the last *Monetary Bulletin*. As before, the Bank's forecast is based on futures prices and major analysts' forecasts. The price hikes from early this year are expected to recede somewhat in 2013, with the average price for the year just over 3% below the 2012 average, whereas the last *Monetary Bulletin* assumed an increase of 3%.

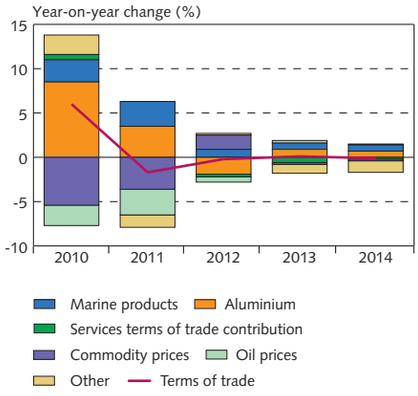
Global commodity prices have also risen markedly early in 2012, after bottoming out at the beginning of December, but are still considerably lower than they were a year ago. The average decline for the year is projected at just under 8% instead of the 12% in the February forecast, reflecting the increase in Q1. While no increases are expected in the next two years, commodities are expected to hold their ground, bolstered by the overall rise in GDP growth and the continued growth in demand from emerging economies.

Marine product price hikes lose pace and aluminium prices continue falling

Marine product prices have risen sharply in recent years but appear to be settling down at present. Prices declined somewhat in February, particularly for demersal species and fresh fish products, which have more or less driven the price hikes of recent months. The tapering off is due both to an increased supply of demersal fish and to the weaker economic situation in most European countries, which strongly affects costlier food products such as fresh fish. Nonetheless, marine product prices were up by an average of 11% year-on-year in the first two months of 2012. They are expected to fall a bit further during the year, with the projected average price for 2012 about 3.5% above the 2011 average, which is slightly poorer than in the February forecast. Prices are expected to rise more strongly in 2013, however, with the increase projected at 2.5% for the year instead of the 2% forecast in February.

Aluminium prices rose at the beginning of the year, in line with other commodities, and then began to fall again in March. The forecast for the year is broadly unchanged, with the average decline projected at 7.5%. The forecast for 2013 is largely unchanged as well, although the outlook for 2014 has deteriorated.

Chart II-7
Terms of trade and its main components
2010-2014[1]

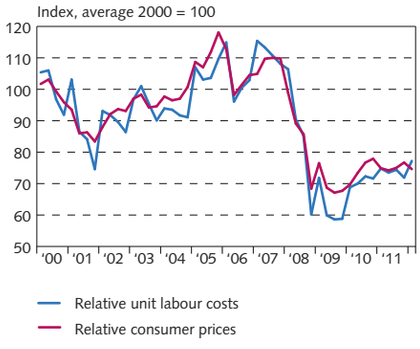


1. Central Bank baseline forecast 2012 - 2014. The contribution of the main sub-indices to year-on-year changes in terms of trade is determined by weighting the annual change in the sub-index concerned together with its weight in the import or export of goods and services. The item "other" is a residual.
Sources: Statistics Iceland, Central Bank of Iceland.

Terms of trade deteriorate slightly

As is described above, the global situation has changed notably as regards price developments and prospects. The outlook for Iceland's two main export products has deteriorated, but by differing degrees, while oil prices continue to rise. Terms of trade are therefore likely to deteriorate slightly this year, or by 0.2%, instead of improving by over 1%, as was forecast in February. In addition to this, they were somewhat poorer in 2011 than previously thought. Preliminary figures from Statistics Iceland suggest that terms of trade worsened by 1.7% year-on-year, whereas the February forecast assumed a decline of about 0.6%. The deviation is due primarily to a larger-than-expected increase in import prices of goods and services in 2011. On the other hand, the outlook for terms of trade in 2013 and 2014 is broadly unchanged.

Chart II-8
Real exchange rate
Q1/2000 - Q1/2012

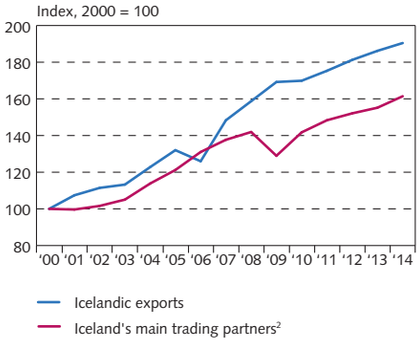


Source: Central Bank of Iceland.

Continued decline in real exchange rate

The real exchange rate of the króna appeared to hit bottom in mid-2011 but then began to decline again in November, reaching a two-year low this March. It is now over 23% below the 30-year average in terms of relative prices and some 20% below the 30-year average in terms of relative unit labour costs. In terms of relative prices, the real exchange rate is expected, on average, to be almost 1% lower in 2012 than in 2011, and then to begin rising slowly. According to the forecast, it will remain low in historical context.

Chart II-9
World trade and Icelandic exports
2000-2014[1]

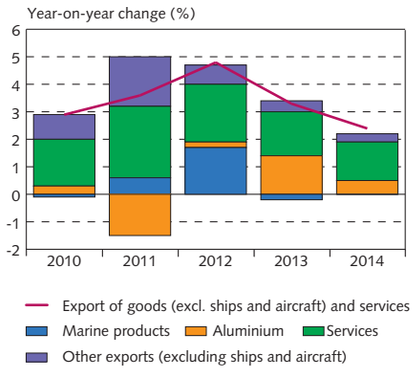


1. Central Bank baseline forecast 2012-2014. 2. Imports of goods and services in Iceland's main trading partners.
Sources: OECD, Central Bank of Iceland.

World trade growing despite slowdown in global output growth

Growth in global trade slowed markedly in the latter half of 2011, concurrent with declining output growth. Both the IMF and the Organisation for Economic Co-operation and Development (OECD) forecast continued growth in world trade in 2012, albeit much slower

Chart II-10
Export development (excl. ships and aircraft) and its main components 2010-2014[1]



1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

than in 2011. Trade is forecast to recover again in 2013, driven by emerging economies. The forecast in this *Monetary Bulletin* assumes that Iceland's main trading partners will see imports rise by just over 2½% in 2012, which accords well with the February forecast. Growth is projected at 2% in 2013 and 4% in 2014, bolstered by increased output global growth.

Export outlook better than in February

Exports of marine products are expected to rise sharply year-on-year in 2012. The increase in the catches of pelagic species is substantial, and this year's capelin season was successful. In addition, the cod stock is very strong at present, giving rise to expectations of an increase in the total allowable catch for the upcoming fishing year, which begins on 1 September. As a result, marine product exports are expected to rise by 7% at constant prices this year, instead of the 3% projected in the last *Monetary Bulletin*, while aluminium exports are expected to increase by 1% at constant prices this year, as opposed to the 2% in the last forecast. These two sectors account for about 80% of Iceland's goods exports. Total exports of other goods are expected to increase by just over 3% during the year, a full percentage point more than was forecast in February. On the whole, goods exports are expected to grow by over 3% in 2012, as compared with over 2% in the February forecast. Growth in goods exports is projected at just under 3% in 2013, roughly the same as in the last forecast. Growth is forecast at just under 2% for 2014, whereas the February forecast assumed just over 1% growth in goods exports.

Services exports have continued to grow strongly, although growth slowed down somewhat in Q4/2011. 2012 looks set to be another excellent year for the tourism industry, with record numbers of foreign travellers visiting Iceland. Services exports are expected to grow by 5½% this year and about 4% per year in 2013 and 2014, a marked improvement over the February forecast.

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

	Change from prior year (%) unless otherwise specified[1]			
	2011	*2012*	*2013*	*2014*
Goods exports	1.1 (1.2)	3.1 (2.1)	2.7 (2.6)	1.7 (1.1)
Services exports	7.1 (7.2)	5.6 (2.5)	4.3 (2.2)	3.7 (3.2)
Exports of goods and services	3.2 (3.3)	3.8 (1.8)	3.2 (2.4)	2.3 (1.8)
Exports of goods and services, excl. ships and aircraft	3.5 (3.7)	4.7 (2.6)	3.2 (2.4)	2.3 (1.8)
Marine production for export	2.5 (2.3)	7.0 (3.0)	-1.0 (0.0)	0.1 (0.0)
Aluminium production for export	-0.9 (-0.9)	1.0 (2.0)	6.0 (4.0)	2.0 (2.0)
Foreign currency prices of marine products	10.5 (9.9)	3.5 (4.0)	2.5 (2.0)	2.5 (2.5)
Aluminium prices in USD[2]	13.6 (13.7)	-7.5 (-7.1)	3.6 (3.6)	2.9 (5.0)
Fuel prices in USD[3]	31.6 (31.7)	7.0 (-1.9)	-3.3 (3.2)	-1.4 (2.4)
Terms of trade for goods and services	-1.7 (-0.6)	-0.2 (1.2)	0.0 (-0.2)	-0.1 (-0.1)
Inflation in main trading partners[4]	2.8 (2.8)	2.2 (1.9)	1.9 (1.9)	2.0 (1.9)
GDP growth in main trading partners[4]	1.8 (1.6)	0.8 (0.5)	1.8 (1.5)	2.5 (2.1)
Short-term interest rates in main trading partners (%)[5]	1.3 (1.3)	1.0 (1.0)	0.9 (0.9)	1.5 (1.5)

1. Figures in parentheses from forecast in *Monetary Bulletin* 2012/1. 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 in Iceland's main trading partner countries.

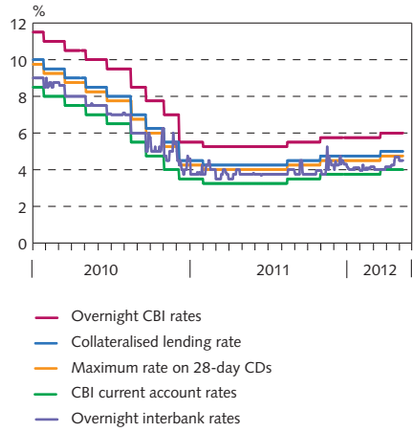
Sources: IMF, Bloomberg, Consensus Forecasts, Global Insight, Statistics Iceland, New York Mercantile Exchange, Central Bank of Iceland.

Exports as a whole are forecast to increase by 3.8% in 2012 and about 2½-3% per year in 2013-2014. Excluding exports of ships and aircraft, export growth is expected to be even stronger this year, or 4.7%. The February forecast assumed just under 2% growth in total exports in 2012, and about 2% per year in 2013 and 2014. Overall, the export outlook for 2012-2014 has improved substantially since the February forecast, due mainly to stronger export growth of marine products and tourism-related services.

III Financial conditions

Despite the interest rate hike in March, the real Central Bank rate has declined slightly since February. Further interest rate hikes appear to be priced into the yield curve. The exchange rate has fallen since the beginning of the year and is lower than was expected in February. Financial system liquidity appears strong, and the money supply is rising. Asset prices have also risen, and private sector debt is declining. The financial position of households and firms has therefore continued to improve, although debt levels remain high.

Chart III-1
Central Bank of Iceland interest rates and short-term market interest rates
Daily data 1 January 2010 - 11 May 2012



Source: Central Bank of Iceland.

Central Bank interest rates rise ...

The Central Bank of Iceland Monetary Policy Committee raised the Bank's interest rates by 0.25 percentage points at its 21 March meeting. Prior to the publication of this *Monetary Bulletin*, the current account rate was 4%, the maximum rate on 28-day certificates of deposit (CDs) was 4.75%, the seven-day collateralised lending rate was 5%, and the overnight lending rate was 6%. Short-term interbank market interest rates have also inched upwards, in line with rising Central Bank rates. Because of ample liquidity, however, interbank interest rates are still below the centre of the Bank's interest rate corridor.

... but the real Central Bank rate has fallen slightly

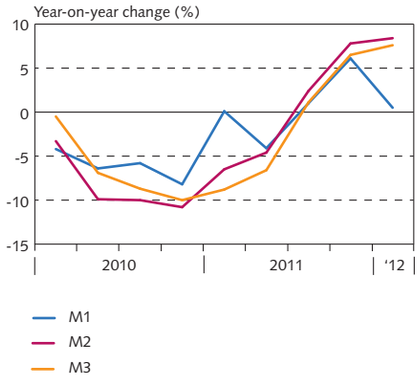
Despite interest rate increases, the Bank's real rate has declined slightly since February, to -1.2% in terms of the average of various measures of inflation and inflation expectations. It is about 0.3 percentage points lower than just before the February *Monetary Bulletin* was published, and almost 2 percentage points lower than a year ago.

Table III-1 Monetary stance (%)

	Current stance (11 May 2012)	*Change from MB 2012/1 (7 Feb. 2012)*	*Change from MB 2011/2 (19 April 2011)*
Real interest rates based on:[1]			
Twelve-month inflation	-1.9	0.3	-3.2
Business inflation expectations (one-year)	-0.1	-0.2	0.2
Household inflation expectations (one-year)	-2.0	-0.2	-2.1
Market inflation expectations (one-year)[2]	-1.1	-	-
One-year breakeven inflation rate[3]	-1.8	-0.3	-3.8
Central Bank inflation forecast[4]	-0.6	-1.1	-1.2
Average	-1.2	-0.3	-1.9

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 a 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.

Chart III-2
Money supply
Q1/2010 - Q1/2012



Source: Central Bank of Iceland.

Money supply began growing again in autumn 2011

Central Bank base money was up by a full 8% year-on-year in Q1/2012, and financial system liquidity has been ample. M1 grew by 0.5% over the same period, whereas M2 and M3 grew 7½-8½%. The growth in M2 and M3 in the past two quarters has been well in line with nominal GDP growth; thus broad money has been relatively stable as a share of GDP, after declining uninterrupted from the beginning of 2009 until it bottomed out in mid-2011.

Broad money has grown more than narrow money because the commercial banking licences of the Glitnir Bank hf. and Kaupthing Bank hf. winding-up committees were revoked in July 2011, and the companies are now defined as non-financial holding companies rather than financial institutions. As a result, their banking system deposits have become a part of deposit money banks' (DMB) liabilities vis-à-vis the public and are therefore part of the money supply. Because the deposits were predominantly held in accounts that are included in the calculation of broader forms of money, the change affects M2 and M3 more than M1.

Yield curve implies an expected 1-point rise in Central Bank interest rates by year-end

The yield curve indicates that market agents expect the Central Bank to raise interest rates by another 1 percentage point in 2012. If this is borne out, the Bank's seven-day collateralised lending rate will be 6% by year-end. This accords with the market participant survey carried out by the Bank in early May. As regards the May decision, it appears that the market has priced unchanged rates into the yield curve. Based on expectations as reflected in the responses to the Central Bank survey, however, market agents appear to expect a 0.5 percentage point rate hike in Q2. The measurement difficulties at the short end of the yield curve, caused by the inefficiency of the domestic interbank market, probably cause the yield curve to give unreliable indications of market expectations about Central Bank near-term interest rate decisions.

Long Treasury bond interest rose in tandem with March rate hike

On 13 March, the Foreign Exchange Act was amended to prohibit the conversion of bond instalments and indexation of principal to foreign currency. Yields on nominal Treasury bonds rose in February but tapered off after the amendment was passed. They rose again in the wake of the Central Bank's March interest rate increase and are now 0.1 - 0.6 percentage points higher than they were prior to the publication of the last *Monetary Bulletin,* with the exception of the Treasury bond maturing in August 2012, which has dropped by 0.4 percentage points.

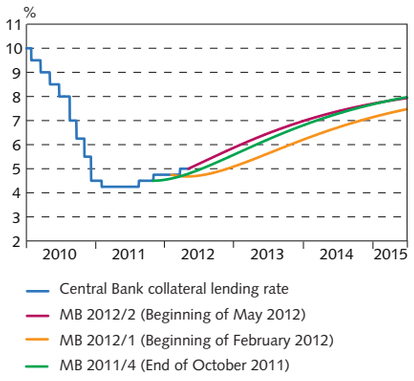
Minor change in long indexed rates

Yields on indexed bonds had risen in February and began climbing again after the Foreign Exchange Act was amended. They fell once again, however, after the March rate hike. The decline can perhaps be traced in part to a reduced supply of indexed bonds, as the Treasury plans no indexed issuance in Q2 apart from foreign exchange auctions, and the Housing Financing Fund has cut back its own issuance by half in 2012. Indexed bond yields are now virtually on a par with those in February, before the publication of the last *Monetary Bulletin,* with the exception of the indexed housing bond maturing in February 2024, which has risen by 0.4 percentage points.

Long-term interest rate differential has widened

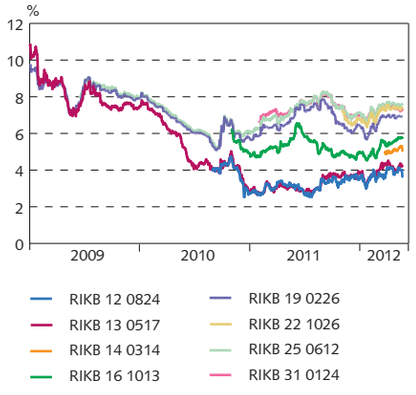
The long-term differential with German government bonds has widened by 0.8 percentage points since the last *Monetary Bulletin*, to

Chart III-3
Collateral lending rate and forward market interest rates[1]
Daily data 1 January 2010 - 30 June 2015



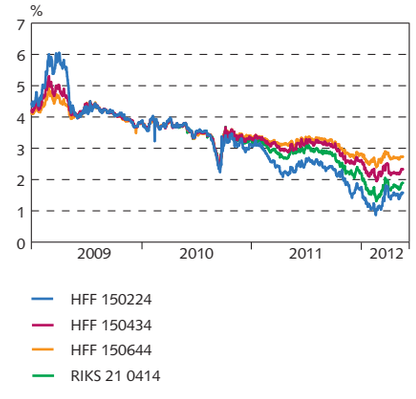
1. Interbank interest rates and Tresury notes were used to estimate the yield curve.
Source: Central Bank of Iceland.

Chart III-4
Yields on nominal Treasury bonds
Daily data 2 January 2009 - 11 May 2012



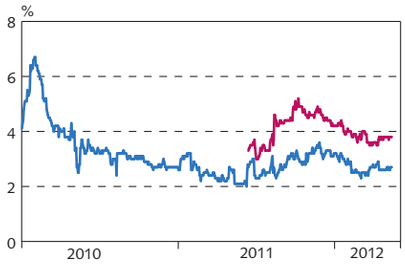
Source: Central Bank of Iceland.

Chart III-5
Yields on indexed bonds
Daily data 2 January 2009 - 11 May 2012



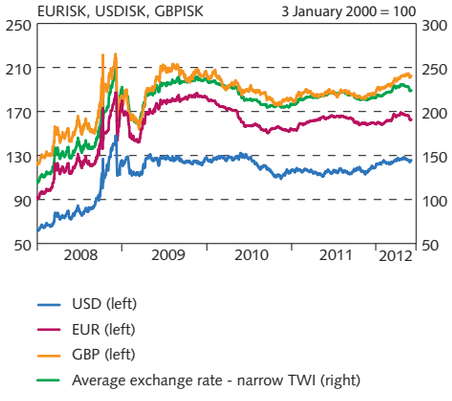
Source: Central Bank of Iceland.

Chart III-6
Risk premia on the Icelandic Treasury
Daily data 1 January 2010 - 11 May 2012



Sources: Bloomberg, Central Bank of Iceland.

Chart III-7
Exchange rate of the króna
Daily data 3 January 2008 - 11 May 2012



Source: Central Bank of Iceland.

5.7 percentage points just prior to this issue. The short-term spread between three-month Icelandic and German Treasury bills narrowed by 0.9 points, however, to 3.4 percentage points. The risk premium on Treasury obligations as measured in terms of the spread between five-year bonds issued by the Icelandic Treasury in US dollars and comparable bonds issued by the US Treasury is virtually unchanged since the February *Monetary Bulletin*, at 3.8 percentage points. The risk premium as measured by Iceland's sovereign CDS spread has declined by 0.2 percentage points over the same period, to the current 2.7 points. In early May, the Icelandic Treasury issued a new 10-year US dollar bond at a rate of 6%, implying a 4-point spread on a similar US Treasury bond.

Króna depreciated from end-2011 to early April

The exchange rate fell from early in the year until early April but then began to rise again. The exchange rate of the króna was down almost 3% year-to-date in trade-weighted terms as this *Monetary Bulletin* went to press. So far this year, the króna has fallen 2.4% against the euro, 6.1% against the pound sterling, and 2.4% against the US dollar. This year's depreciation is probably due to a number of factors.

First of all, firms appear to have been paying down foreign-denominated debt, in some instances because they have been forced to do so, and in other cases because they consider it advantageous in view of the low domestic real interest rate. In the second place, financial institutions have been hoarding foreign currency towards foreign obligations. Third, seasonal fluctuations and poorer terms of trade have probably made an impact as well. The slide in the exchange rate stopped in early April, presumably owing in part to the amendments to the Foreign Exchange Act. On the other hand, the ensuing appreciation in late April and early May could stem from reduced need among financial institutions to stockpile foreign currency and from positive seasonal effects. And finally, sizeable domestic cost increases are probably putting pressure on the króna. Other things being equal, larger wage and price hikes in Iceland than in trading partner countries raise the real exchange rate. This increase reduces export revenues and increases imports, which in turn reduces the supply of foreign currency while stimulating demand and pushing the nominal exchange rate downwards.

On 6 March, the Central Bank of Iceland sold 12 million euros in the interbank market so as to counteract the effects of capital controls exemptions that were granted by the Bank and entailed foreign exchange outflows. The short-term impact on the exchange rate of the króna was considerable, as the purchases were made at a time when foreign loan payments were sizeable and foreign exchange inflows generated by external trade were at a low ebb. As has been reported previously, loopholes in the Foreign Exchange Act were closed in mid-March, and the depreciation of the króna lost pace afterwards. In recent weeks, the króna has begun appreciating again.

Exchange rate outlook extremely uncertain

The EURISK exchange rate averaged 162.8 in Q1/2012, roughly 2% lower than assumed in the February forecast. As this publication went

to press, the onshore exchange rate was about 162 krónur per euro, about the same as in early February. Just prior to the publication of this *Monetary Bulletin*, the króna was trading at about 252 against the euro in the offshore market, almost 2% lower than in February. However, the offshore exchange rate provides limited information on the pressure that could develop upon the removal of the capital controls, but trading in the offshore market has been almost non-existent in the recent term.

The effects of continuing liberalisation of the capital controls and the exact timing of the final removal are quite uncertain. However, it is unlikely that removal of the controls, with the associated uncertainty about foreign currency outflows, will take place before late 2013 and early 2014. As a result, it is extremely difficult to base an exchange rate forecast on conventional economic factors. For this reason, the baseline forecast is based on the simple assumption that the exchange rate will remain unchanged throughout the forecast horizon. This implies that it will be lower than according to the February forecast during the period.

Household deposits contract

Total deposits held by firms other than holding companies increased by about 10.5% year-on-year in March. The largest increase was in domestic foreign exchange account deposits, due most likely to firms' accumulation of foreign currency in order to pay down debt. Total household deposits contracted 2.7% year-on-year in March, however, with the decline concentrated in money market funds and sight deposits. To some extent, the downturn is due to household investment in collective fund units and real estate, but it is also likely that some households are deleveraging or depleting their savings.

Credit creation limited

The Housing Financing Fund and the pension funds were the principal mortgage lenders from the onset of the crisis until last autumn, when the commercial banks' market share began to grow. As a result, new mortgage lending by the Housing Financing Fund and the pension funds has contracted. Total DMB lending to households declined by about 10% year-on-year in Q1, mostly due to write-offs.[1]

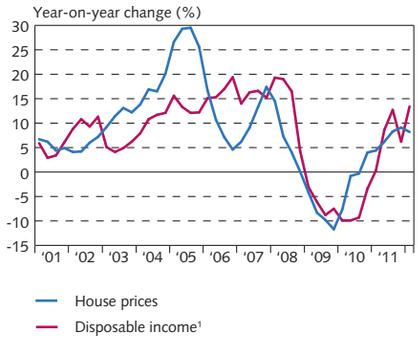
New corporate lending remains limited, even though business investment is on the rise. It is likely that firms, especially exporters, have financed their investments to some degree with their own cash flow. According to the Central Bank forecast, corporate lending growth can be expected to rise in tandem with continued recovery of business investment.

House prices and real estate market activity on the rise

According to figures from Registers Iceland, nominal house prices rose by 8.6% year-on-year in Q1 and have risen by 11.3% from their year-end 2009 trough. Real prices rose by 2% year-on-year in Q1 and just over 3% from the end-2010 trough. The number of registered purchase agreements in the greater Reykjavík area grew by almost 58% year-on-year in 2011, as only 2,800 contracts were registered

1. Here, lending is measured at claim value.

Chart III-8
House prices and disposable income
Q1/2001 - Q1/2012



1. Central Bank estimate Q1/2011 - Q1/2012.
Sources: Statistics Iceland, Central Bank of Iceland.

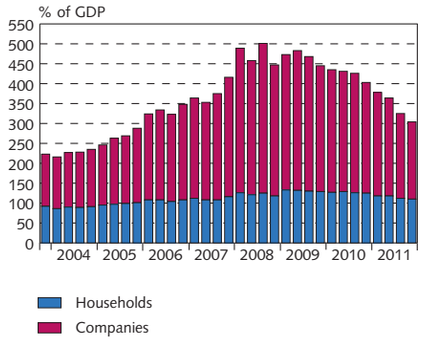
in 2010. Real estate market turnover nationwide rose somewhat less, or by 47%. Registered purchase agreements continued to increase in number in Q1/2012, to about one-fourth more than during the same period in 2011.

The Housing Financing Fund, the banks, and holding companies acquired a large number of residential properties in the wake of the financial crisis (see Box III-1 in *Monetary Bulletin* 2011/4). As of end-March 2012, these parties held some 3,000 properties, about 500 more than when data were collected for the publication of *Monetary Bulletin* in October 2011. About one-third of these 3,000 properties were rented out immediately, while about half are registered as fully finished but not rented out. The remainder were still under construction at the end of March.

Registers Iceland recently released information on paid rent, categorised by location and property size. According to these data, rent had risen by almost 11% year-on-year in March. This is higher than the corresponding rental cost figure in the consumer price index, which sets the annual rise in rent at about 7%. At the same time, house prices have risen by just under 9%. Further discussion of the rental property market can be found in Box III-1.

The recent increase in house prices has been consistent with the rise in disposable income and construction costs. Although real house prices are still somewhat high in long-term context, they appear to be rather close to the long-term average as a share of disposable income and construction costs.These measures do not indicate that a bubble has begun to form in the real estate market. As is stated in Box III-1, house prices are also rather low relative to rent. The baseline forecast assumes that house prices will evolve in line with developments in prices, wages, and construction costs over the forecast horizon.

Chart III-9
Company and household debt
Q4/2003 - Q4/2011



Sources: Statistics Iceland, Central Bank of Iceland.

Private sector debt declines but remains high in international comparison

The poorer inflation outlook reduces households' real wages and raises the nominal interest burden on household and business debt. Nominal interest on new loans has also risen in response to a bleaker inflation outlook and the increase in Central Bank interest rates.

A share of private sector debt has been written off, however, and some progress has been made in debt restructuring. For instance, corporate debt declined by just under one-fifth last year and household debt by over 3%. Corporate debt was 194% of GDP by Q4/2011, down from the peak of nearly 380% in autumn 2008. Similarly, household debt declined from just over 130% of GDP in mid-2009 to 110% at year-end 2011. Total private sector debt therefore amounted to 304% of GDP at the end of 2011, after peaking at 501% in autumn 2008. It is still high in international comparison and remains among the highest among industrial countries.[2] Thus

2. According to the International Monetary Fund's *Global Financial Stability Report* (April 2012, p. 7), private sector debt amounts to 364% of GDP in Ireland, followed by 285% in Spain, 259% in Portugal, and 231% in Belgium. On average, private sector debt in 12 industrial countries amounts to about 211% of GDP. The IMF considers the debt of half of these countries excessive. If Iceland had been included in the IMF's analysis, both household and business debt would have fallen into that category.

Icelandic firms and households are still heavily leveraged in spite of a sizeable reduction in debt over the past two years.[3]

The financial position of a number of households and businesses could improve still further as a result of the Supreme Court's 15 February judgment on settlement of illegal exchange rate-linked loans. Since the judgement was handed down, DMBs have expensed potential losses resulting from it, but the ultimate amount will depend on the results of a number of court cases still pending. According to information from the Financial Supervisory Authority, it is not possible to net out a portion of the DMBs' loss; therefore, it is likely that the amount in question will be paid directly to firms and households. DMBs' recalculations are not yet complete, however, and it is unclear when the disbursements will be made.

3. According to a recent paper by Thorvardur Tjörvi Ólafsson and Karen Á. Vignisdóttir, "Households' position in the financial crisis in Iceland: Analysis based on a nationwide household-level database" (forthcoming in the Central Bank of Iceland *Working Papers* series), household debt and the associated payment difficulties vary greatly among income and age groups.

Box III-1

The Icelandic rental market

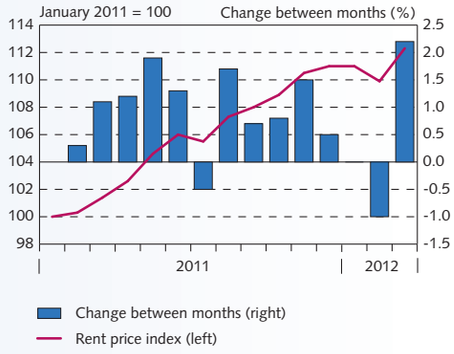
This February, Registers Iceland (RI), in collaboration with the Housing Financing Fund, began publishing data on paid rent, categorised by location and size of property. RI had previously published monthly data on the number of registered rental agreements. From now on, data published each month will extend to the number of registered rental agreements, the average rent price by property location and size, and the greater Reykjavík residential rent index, which shows the change in the weighted average price per square metre.

Various indices for the rental market

The rental market has grown by leaps and bounds in recent quarters, due in particular to financial hardships faced by a large number of households in the wake of the financial crisis. Hitherto, the index for paid rent, which Statistics Iceland (SI) compiles and uses as an input into the calculation of the consumer price index, has been the only information available on developments in rent prices. There is some difference between SI's paid rent index and the new rent price index from RI. The SI paid rent index is based on information for the entire country, while the RI rent price index includes only registered leases in the greater Reykjavík area. The calculation of the SI paid rent index is also based on rent information from municipalities where Reykjavík Social Housing is by far the largest landlord (50%) and from associations dominated by students and the Icelandic Federation for the Handicapped. Information on the general market is obtained from the rent subsidy allowance system. As a consequence, rental data compiled by SI strongly reflect rental agreements subsidised by the Government and therefore do not necessarily reflect true market prices.

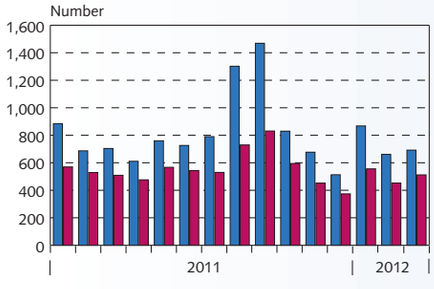
In calculating the rent price index, RI categorises average rent prices and the number of registered leases by size of property (number of rooms), neighbourhood, and region. To enhance the quality of the index, leases for flats of unknown size, leases more than 60 days old, and leases for subsidised rental housing are excluded. The difference in the number of leases can be significant, as can be seen in Chart 2.

Chart 1
Registers Iceland rent price index
January 2011 - March 2012



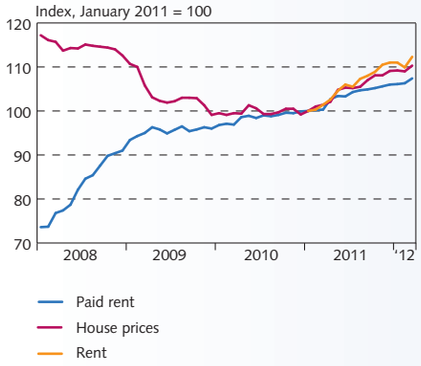
Source: Registers Iceland.

Chart 2
Number of registered residential leases nationwide
January 2011 - March 2012



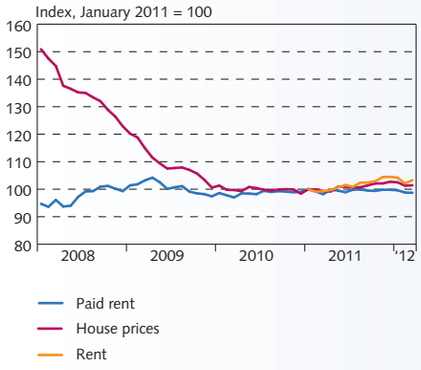
Source: Registers Iceland.

Chart 3
Rent, house prices, and paid rent in nominal terms
January 2008 - March 2012



Sources: Registers Iceland, Statistics Iceland.

Chart 4
Rent, house prices, and paid rent in real terms
January 2008 - March 2012



Sources: Registers Iceland, Statistics Iceland.

To enhance the quality of the paid rent index, SI plans to gain access to RI data but will continue to gather data from Reykjavík Social Housing, as those leases do not require registration.

Shortcomings in the RI rent price index

Registration of leases is not required by Icelandic law; therefore, it is likely that some rental contracts are not registered. This is probably more often the case with higher-priced properties, as high-income tenants are not eligible for rent subsidy allowances and therefore have little incentive to register their leases.[1] By the same token, leases for the least expensive flats are unlikely to be registered, as no subsidies are paid for single rooms, reducing the incentive to register these leases as well. Leases for six months or less are also ineligible for rent subsidies and may also be underrepresented in registration data.

Developments in house prices and rent

It is interesting to compare developments in house prices and rent. Because RI rent price index data extend back only to the beginning of 2011, the paid rent index from Statistics Iceland is used for earlier periods. Chart 3 shows developments from the beginning of 2008, with nominal prices falling by over 15% from their January 2008 peak until they hit bottom in December 2009. Paid rent rose by about 30% over the same period, however. The year-on-year change in the RI rent price index was 10.7% in March 2012, whereas SI's paid rent index and house price index rose by 7% and 8.7%, respectively, over the same period. Chart 4 shows that real house prices fell by about a third from January 2008 onwards. The real price of paid rent has remained relatively stable since January 2008, with the RI rent price index rising about 4% in excess of inflation between March 2011 and March 2012.

Price-to-rent ratio

The publication of data on average rent price and number of registered leases by property size (number of rooms), neighbourhood, and region provides a good overview of the rental market. This information can also help prospective buyers faced with deciding whether to buy or rent, as the price-to-rent ratio gives an indication of which option is more economical. It is often argued that if the price-to-rent ratio is under 15, it is more profitable to buy than to rent. If the ratio is between 16 and 20, it is better to buy if the intention is to hold the property and better to rent if the intended holding period is short. If the ratio is higher than 20, it is considered more profitable to rent than to buy.[2] Table 1 shows the price-to-rent ratio by neighbourhood and region in 2011. It is under 15 in all cases, indicating that it is more economical to buy a flat than to rent. The price-to-rent ratio is often considerably higher in Europe and the US than in Iceland, due to differences in factors such as interest rates, credit system, statutory rent control (which is non-existent in Iceland), and variations in rent by location.

1. Monthly rent subsidy allowances are reduced by 1% of annual income in excess of 2 m.kr. This refers to combined total income of all individuals with a legal domicile or residential address at the rental property in question. See also the Act on Rent Subsidy Allowances: http://althingi.is/lagas/nuna/1997138.html. (in Icelandic).
2. See, for example, http://www.investopedia.com/terms/p/price-to-rent-ratio.asp#axzz1peJ2rnr4.

Table 1 Price-to-rent ratio in 2011, by neighbourhood and region

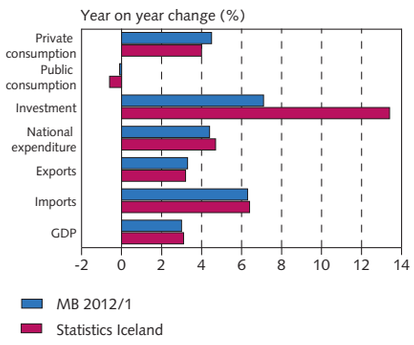
Reykjavík west of Kringlumýrarbraut and Seltjarnarnes	13.4
Reykjavík between Kringlumýrarbraut and Reykjanesbraut	12.8
Kópavogur	13.4
Garðabær, Hafnarfjörður, and Álftanes	13.3
Grafarvogur, Grafarholt, Árbær, Norðlingaholt, and Úlfarsárdalur	12.5
Breiðholt	11.4
Kjalarnes and Mosfellsbær	13.5
Suðurnes peninsula	11.8
West Iceland	12.5
West Fjords	8.9
North Iceland	11.4
East Iceland	9.6
South Iceland	10.9

Source: Registers Iceland.

IV Domestic demand and production

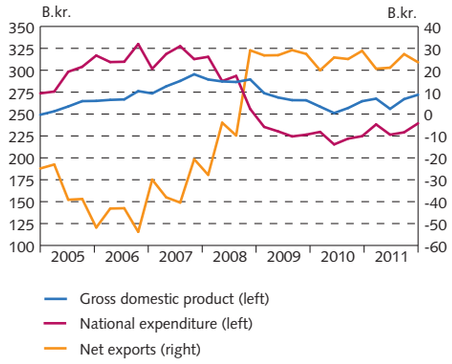
The economic recovery that began around mid-2010 continued in 2011, with output growth for the year measuring 3.1%, according to preliminary figures from Statistics Iceland. Private consumption and business investment are the principal drivers of the recovery, contributing to it in equal measure. In coming years, output growth is projected to average 2½-3%, slightly above the Bank's February forecast. According to the forecast, continuing recovery of private consumption and investment will contribute to GDP growth, whereas the contribution from net trade will be negative throughout the forecast horizon except in 2013, as a result of increased imports concurrent with rising domestic demand. The output slack that developed in the wake of the financial crisis has narrowed considerably from its peak in 2010 and will have disappeared by the end of 2013.

Chart IV-1
National accounts 2011
and Central Bank estimate



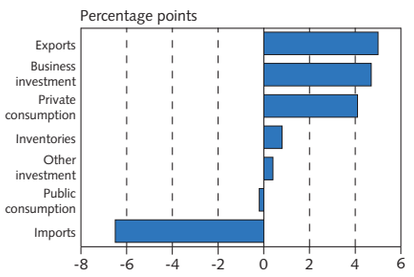
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-2
GDP, national expenditure and net exports
Q1/2005-Q4/2011
Seasonally adjusted at year-2005 prices[1]



1. Because of the chain linkage, the sum does not necessarily add up to GDP.
Sources: Statistics Iceland, Central Bank of Iceland.

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



1. From Q2/2010 - Q4/2011.
Sources: Statistics Iceland, Central Bank of Iceland.

Broad-based economic recovery

In March, Statistics Iceland published its first estimated national accounts for Q4/2011, together with revisions of previously published figures. Seasonally adjusted GDP growth measured 1.9% quarter-on-quarter and 2.7% year-on-year. National expenditure growth was 6.8% year-on-year during the quarter and 4.7% for the year as a whole. Since bottoming out in Q2/2010, seasonally adjusted GDP has grown almost interrupted and was up by 8.3% between Q2/2010 and Q4/2011. Of all components of GDP, exports have contributed most to the recovery, at 5.1 percentage points. Business investment also played a major role, especially in the latter half of 2011, contributing 4.7 percentage points, followed by private consumption, with 4.1 percentage points. Concurrent with growing domestic demand, imports rose in excess of exports during the period; thus the contribution of net trade was negative by 1½ percentage points.

Developments broadly in line with February forecast

The Central Bank projected output growth at 3% in 2011 in its February forecast, reflecting growing domestic demand. In the main, this forecast materialised, although private consumption was about ½ a percentage point weaker and investment growth stronger than in the February forecast. To a large extent, the deviation can be traced to Statistics Iceland's revision of previous national accounts figures, with Q3 private consumption and 2010 business investment revised downwards, while Q3/2011 business investment was revised markedly upwards. The contribution from net trade was consistent with the Bank's forecast.

Strong recovery of private consumption

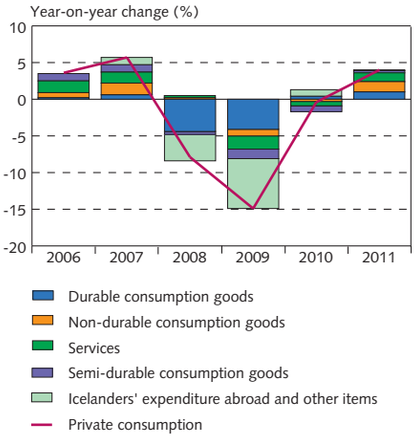
Household demand has been on the rise in recent quarters, and in 2011 private consumption was up 4% from the previous year. In Q4/2011, the seasonally adjusted increase was 1.6% from the previous quarter and 3.9% year-on-year. A number of factors supported this development in 2011, such as real wage income, which increased in line with rising employment and real wages. Added to

this were substantial third-pillar pension savings withdrawals during the year and supplemental mortgage interest rebates, which bolstered demand. Households' net worth has also grown with rising house prices and declining debt, which stems in part from debt restructuring and Supreme Court judgments on illegal exchange rate-linked loans. Short-term real interest rates are also very low, encouraging households to wind down savings and accelerate spending, particularly on big-ticket items, as new motor vehicle registrations and housing market turnover indicate.

Outlook for continuing private consumption growth

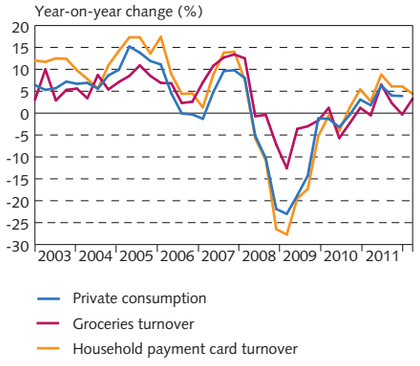
Leading indicators of private consumption in Q1/2012 suggest continued growth during the quarter. This applies to factors such as card turnover, consumer goods imports, new motor vehicle registrations, employment levels, real wages, and consumer expectations (see Box IV-1 for further discussion of indicators of private consumption). The forecast is based on the assumption of 0.4% seasonally adjusted growth quarter-on-quarter, which translates to a 4.7% rise between years. In the first half of 2012, household demand will be supported strongly by third-pillar pension payouts, but these will diminish as the year progresses. The forecast assumes continued growth in wage income, which will offset weaker support from temporary Government policy measures. On the basis of these factors, private consumption is expected to grow modestly during the current year, with the increase over and above 2011 measuring about 3.2%. In the latter half of the forecast horizon, private consumption is projected to grow by 3% per year, driven to a large degree by components of disposable income not deriving from temporary policy measures. The modest growth in disposable income in 2012 and 2013 is due in part to the fact that third-pillar pension savings payouts, which totalled 24 b.kr. in 2011 and are considered part of disposable income, are expected to diminish sharply this year and next.

Chart IV-4
Private consumption development and main components 2006-2011



Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-5
Private consumption, groceries and payment card turnover
Q1/2003 - Q1/2012[1]



1. Figures for private consumption are only available until Q4/2011.
Sources: Centre for Retail Studies, Statistics Iceland, Central Bank of Iceland.

Box IV-1

Using high-frequency indicators to forecast private consumption

Developments in private consumption are an extremely important aspect of overall economic developments, as private consumption is the largest single expenditure item of GDP, with a share of over one-half. As a consequence, it is important that monetary policy decisions be based on the best possible information on developments in private consumption. Forecasting private consumption in Iceland is complicated, however, as it is quite volatile, much more so than in other industrialised countries.[1]

Assessments of private consumption – both recent developments the near-term outlook – often include an examination of indicators such as household payment card turnover, retail sales, and information on developments in consumer goods imports. A simple way to assess the underlying common trend of various variables is to apply principal component analysis. Briefly, principal component analysis involves finding the linearly weighted sums of data

1. See, for example, Box IV-1 in *Monetary Bulletin* 2010/2, "Fluctuations in private consumption."

series that best explain the variation in the data. These linear sums are called principal components, and usually 1-2 of them suffice to explain the bulk of the variation in the data.[2]

The Bank's forecasts of developments in private consumption are based mainly on its quarterly macroeconomic model (QMM). On the other hand, Statistics Iceland publishes its first national accounts estimates for any given quarter about two months after the quarter-end, when various high-frequency indicators are available. In order to utilise this information, it is possible to use principal component analysis to forecast private consumption for a period after that covered by national accounts data but for which high-frequency indicators are available. The variables examined are household payment card turnover, the product of real wages and the employment rate,[3] housing market turnover, real house prices, consumer goods imports, new motor vehicle registrations, and groceries turnover. All of the variables are monthly, seasonally adjusted, and in logarithmic form. The average for each variable has been deducted from the original data. The results of the principal component analysis can be found in Table 1.

Table 1 Principal component analysis

Principal component	1	2
Groceries turnover	0.16	0.63
Number of registered house purchase agreements	0.27	-0.54
Consumer goods imports	0.46	-0.01
Approximated real disposable income	0.45	-0.07
Payment card turnover	0.42	0.29
Real house prices	0.42	0.26
New motor vehicle registrations	0.37	-0.40
Cumulative variability ratio	64%	94%

It can be seen that all of the variables have a positive weight in principal component 1, and most are of similar size. The first principal component can therefore be interpreted as a common underlying driver of developments in all of these variables. It is mainly groceries turnover that is given a relatively low weight in the first component, but it weighs rather heavily in the second component, while others weigh less and some volatile items are assigned a negative weight. It can also be seen that the first component explains about 64% of the variability in the data, while the second component explains about 30%. These two components combined explain about 94% of the variability of the data most often used as a basis for short-term forecasts of private consumption.

Table 2 shows a strong contemporary correlation between several of the indicators, such as payment card turnover and consumer goods imports, and less between, for instance, groceries turnover and other indicators. This is probably because the subcomponents of private consumption vary in their volatility and the link between each indicator and each subcomponent varies.

If these two principal components are then used to forecast private consumption, it can be seen (Charts 1 and 2) that they give a good indication of how it develops (using quarterly averages of

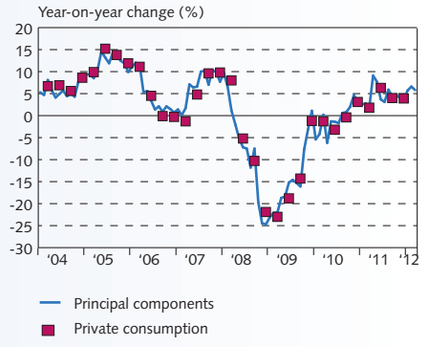
2. More specifically, the covariance matrix of the data series is calculated, followed by the eigenvectors of the set and their eigenvalues. The eigenvector with the highest eigenvalue is classified as the eigenvector of principal component 1, and so on. The eigenvectors are then used to calculate the principal components themselves (here as a time series) by multiplying them together with original data.
3. Obtained by deducting the Directorate of Labour unemployment rate from 1.

Table 2 Correlation matrix of private consumption indicators

	DVV	*FHS*	*INV*	*KM*	*GKV*	*RVH*	*NSB*
DVV	1						
FHS	-0.46	1					
INV	0.32	0.56	1				
KM	0.20	0.59	0.89	1			
GKV	0.69	0.20	0.87	0.78	1		
RVH	0.57	0.18	0.84	0.84	0.92	1	
NSB	-0.25	0.88	0.77	0.79	0.45	0.46	1

DVV = Groceries turnover; FHS = No. registered house purchase agreements; INV = Consumer goods imports; KM = Approximation of developments in purchasing power; GKV = Household payment card turnover; RVH = Real house prices; NSB = New motor vehicle registrations.

Chart 1
Private consumption and principal components of high-frequency indicators



Sources: Statistics Iceland, Central Bank of Iceland.

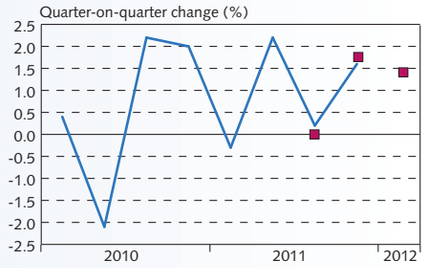
principal components in Chart 2). A simple regression gives the following equation:[4]

$$\ln(C_t) = \underset{(0.00027)}{11.862} + \underset{(0.0012)}{0.047}PC_{1t} + \underset{(0.0020)}{0.017}PC_{2t}$$

C_t represents seasonally adjusted private consumption, and PC_{it} represents the principal components. It can be seen that the first component plays a much larger role in explaining consumption movement than the second component, but the latter is still statistically significant. This equation is used to generate short-term forecasts of private consumption, whereas the Bank's QMM is used for forecasts over a longer horizon.

In order to test the forecasting quality of the model, it is possible to evaluate the model for a shorter period than the data series provide for and then forecast private consumption a few quarters ahead. Chart 2 shows how the equation performs in forecasting private consumption in Q3 and Q4/2011 by estimating the equation only until Q2 of that year. The chart indicates that the principal components prepared from these high-frequency data are very useful in evaluating recent developments in private consumption, but of course the forecast will always entail some uncertainty.

Chart 2
Private consumption and high frequency indicators



Sources: Statistics Iceland, Central Bank of Iceland.

4. The regression also contains a dummy variable for Q4/2008 and a first-order autocorrelation component. Figures in parentheses show the standard deviations of the parameter estimates.

Contribution of public expenditure to GDP growth negative in 2012

Seasonally adjusted public consumption was down 0.1% quarter-on-quarter in Q4/2011, while the contraction for the year totalled 0.6%. Even though a volume decrease is measured between years, nominal public consumption has risen after having virtually stood still since the onset of the financial crisis. To some extent, this reflects the impact of wage settlements on public sector wages. Public consumption is expected to contract this year to about the same extent as in 2011, with modest growth projected from mid-2013 onwards.

Public investment has been limited since austerity measures were introduced in 2009. Public investment totalled 2.2% of GDP last year, well below its 30-year average of 3.7%. In 2011, public investment was down to only 43% of the 2007 peak. Because of this low level, indi-

vidual projects can make a major impact on volume changes from year to year. The forecast published here assumes a larger increase in public investment in coming years than did the February forecast. The upward adjustment is due largely to the inclusion of the Vaðlaheiðargöng tunnel project, which is now classified as public investment. By the end of the forecast horizon, public investment will still be far below its long-term average; it is projected at about 2% of GDP.

The contribution of final public expenditure to output growth, which has been negative since 2008, is projected to be negative by 0.2 percentage points this year but turn positive by 0.1-0.2 percentage points in 2013 and 2014. Public sector finances are discussed in greater detail in Section V.

Slight changes in the outlook for investment in the energy-intensive sector

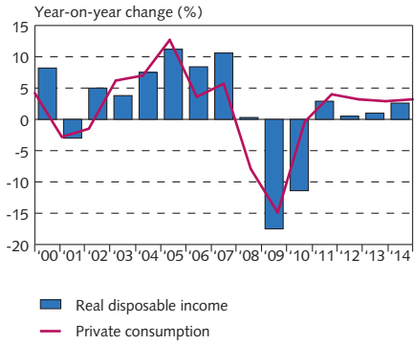
Investment in energy-intensive industry played an important part in business investment in 2011, accounting for 42% of all business investment during the year and increasing by almost 39% year-on-year in real terms. Assumptions concerning investment in energy-intensive industry, power procurement, and utilities operations during the forecast horizon have changed somewhat since February. In nominal terms, the level of investment is assumed to be some 30 b.kr. higher during the horizon than was forecast in the February *Monetary Bulletin*, due to revaluation of the cost of several projects. The largest difference lies in the increased scope of various projects carried out by Landsvirkjun. Offsetting the increased scope of some projects in the first half of the horizon is the postponement of projects related to the planned aluminium smelter at Helguvík until later in the forecast horizon. The path of energy-intensive investments is therefore more back-loaded but even than in the Bank's February forecast. It is now assumed that investment will remain close to end-2011 levels throughout the forecast horizon, whereas the February forecast assumed a sizeable increase this year and a sharp contraction in 2014.

Results of Central Bank survey of corporate investment plans broadly unchanged

Business investment excluding ships, aircraft, and energy-intensive industry and associated projects grew by over 7% in 2011, somewhat more than was projected in February. The deviation is due primarily to Statistics Iceland's downward revision of year-2010 figures. The updated numbers were published in March, together with an upward revision of Q3/2011 figures. According to the Bank's survey of corporate investment plans, firms intend to step up investment by 2% in real terms this year. The largest increase planned is in the fishing industry, both in ships and in processing. The largest contraction, however, is in the transport and tourism sector, due to less investment in aircraft this year than in 2011, when aircraft investment was extensive.[1] The survey results can be seen in Table IV-1. Offsetting

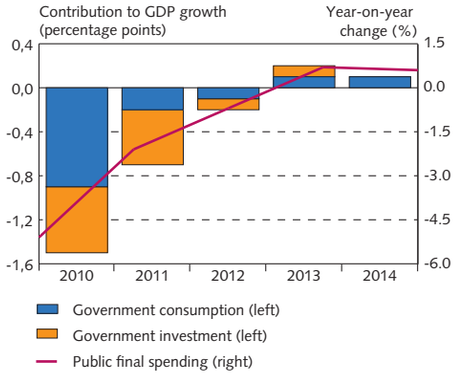
1. The forecast assumes increased investment in aircraft, but that increase is primarily among companies outside the survey.

Chart IV-6
Private consumption and real disposable income 2000-2014[1]



1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-7
Public consumption and investment 2010-2014[1]



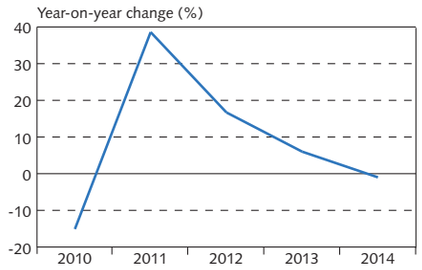
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

the increase indicated in the survey, construction of the Harpa concert and conference centre was more or less completed last year. The forecast assumes that business investment excluding ships, aircraft, and energy-intensive industry will remain flat this year and then grow strongly in 2013 and 2014, an upward revision from February.

Table IV-1 Survey of corporate investment plans

Largest 132 firms (number) *Amounts in ISK millions*	*2011*	*2012*	*Change between 2011-2012 (%)*
Fisheries (20)	3,976	12,529	215%
Industry (20)	5,939	3,787	-36%
Wholesale and retail sale (35)	4,302	3,581	-17%
Transport and tourism (14)	22,621	17,347	-23%
Finance/Insurance (12)	2,759	3,334	21%
Media and IT (12)	5,477	6,224	14%
Services and other (19)	3,529	2,414	-32%
Total (132)	48,604	52,816	9%

Chart IV-8
Large scale investment 2010-2014[1]

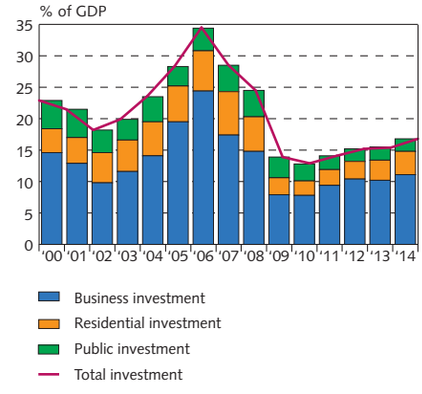


1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Business investment grows during forecast horizon

Business investment grew by 25.8% in 2011. To a large extent, this growth can be traced to projects related to energy-intensive industry and investment in ships and aircraft. The contribution of business investment to GDP growth was equal to that from private consumption, at about 2 percentage points. The greatest changes in the outlook for business investment in 2012 as compared with the February forecast are due to investment in ships and aircraft, which is projected at almost 9 b.kr. more than was assumed in February. Business investment as a whole is estimated to increase by over 14% this year. In 2013, investment in ships and aircraft is expected to contract sharply, so that in spite of significant growth in business investment excluding energy-intensive industry, ships, and aircraft, growth will only measure about 2.4%. 2014 will be stronger, however, with growth estimated at over 12%. By the end of the forecast horizon, in mid-2015, it is assumed that business investment as a share of GDP will have returned to the 30-year average of 12½% after bottoming out at 4½% in early 2009.

Chart IV-9
Investment as a share of GDP 2000-2014[1]



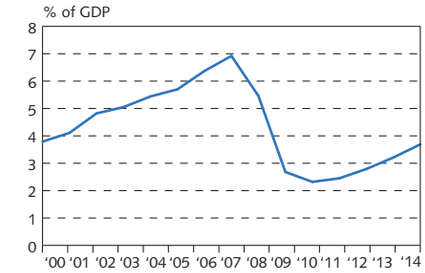
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Continued growth in residential investment expected

After a steep decline in the wake of the financial crisis, residential investment rose by 8.6% last year, less than according to the Bank's February forecast. In spite of considerable growth during the year as a whole, residential investment fell year-on-year in Q4. According to figures on value-added tax reimbursements from the Director of Internal Revenue in connection with the Government-sponsored "Back to Work" initiative, the bulk of last year's residential investment seems to have been focused on repair and maintenance rather than new construction.

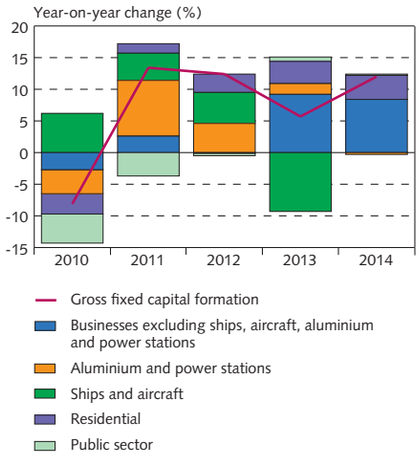
The construction industry is expected to recover somewhat in the next 2-3 years, after a deep slump. If announcements from real estate companies and construction firms are a reliable indication, new construction projects seem to be in the starting blocks. In addition,

Chart IV-10
Investment in residential housing 2000-2014[1]



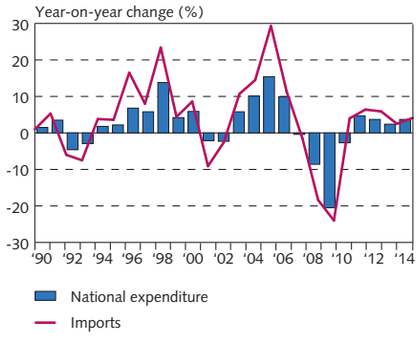
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-11
Gross fixed capital formation and contribution of its main components 2010-2014[1]



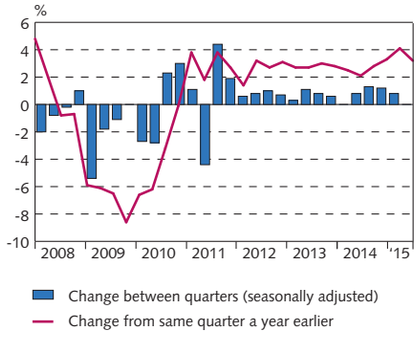
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-12
National expenditure and imports 1990-2014[1]



1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-13
GDP growth
Q1/2008 - Q2/2015[1]



1. Central Bank baseline forecast Q1/2012 - Q2/2015.
Sources: Statistics Iceland, Central Bank of Iceland.

cement sales have risen steadily in the recent term. In one of the larger projects, the municipality of Kópavogur has already allocated about 300 lots at Þorrasalir, Rjúpnahæð, and Kópavogstún and is expected to begin construction in the latter part of the year. The majority of these projects will probably be well underway in 2013 and 2014. According to the forecast, residential investment will grow by an estimated 17-19% per year during the forecast horizon and will grow as a share of GDP as well, from 2.5% in 2011 to nearly 4% by the end of the forecast period. Over the past thirty years, the ratio of residential investment to GDP has averaged 4.9%.

Investment level rises during the forecast horizon

Since the global financial crisis struck in autumn 2008, investment levels have been extremely low in most industrialised countries. In Iceland, investment dropped to 10½% of GDP in early 2009, whereas the 30-year average is 20.8%. Since that time, it has risen gradually, to 14.1% in 2011 and 17.8% in Q4, as a result of large investments in ships and aircraft.

The low investment rate since the financial crisis is due to a variety of factors, including the high investment rate prior to the crisis. The capital stock had grown very large, and there was substantial underutilised production capacity. Even though total investment grew by 13.4% in 2011, the increase in the capital stock was smaller than the increase in GDP; therefore, the productivity of the capital stock grew for the first time since 2005. Such a development is one of the prerequisites for an increased pace of investment. According to the forecast, overall investment is projected to grow 12.4% this year and 5.7% in 2013. The investment ratio is expected to approach the long-term average by the end of the forecast horizon, at about 18% of GDP in mid-2015. As has previously been mentioned, business investment is expected to return to its long-term average by the end of the horizon. The overall investment ratio will remain below the long-term average primarily because of the low level of public investment and because residential investment is still below its long-term average.

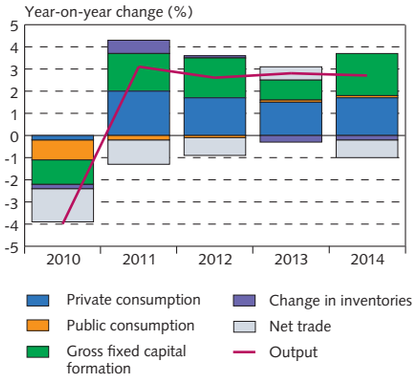
Imports rise concurrent with growth in domestic demand

The contribution of net trade to output growth was negative by just over a percentage point in 2011, with imports up by 6.4% while exports grew 3.2%. This year is expected to develop in a similar fashion, with imports growing by almost 6% and exports by 3.8%. This year's steep rise in imports is due in part to investments in ships and aircraft, which emerge almost entirely as imports. Both imports and exports are expected to continue growing over the forecast horizon. The contribution of net trade to GDP growth is forecast to be positive by ½ a percentage point next year. It is projected to turn negative again in 2014, by 0.8 percentage points, due to hefty imports of investment goods in connection with energy-intensive industry projects, which have been shifted to 2014 according to the assumptions underlying the forecast. External trade is discussed in greater detail in Sections II and VII.

Output growth driven by growth in private consumption and investment

As is discussed above, most components of domestic demand are projected to continue recovering during the forecast horizon, after contracting in the wake of the financial crisis. Output growth is forecast at 2.6% in 2012, owing to increased private consumption and investment, with each contributing 1.7 percentage points. Offsetting this is the negative contribution from net trade, forecast at 0.8 percentage points. In 2013, output growth is projected at 2.8%, as the contribution from private consumption will be broadly unchanged, whereas the contribution from investment will be considerably smaller, at about half of this year's forecasted level. The contribution from net trade will also be positive, primarily due to less importation of ships and aircraft. Output growth is forecast at 2.7% for 2014, and the contribution of individual components is expected to be very similar to that for 2012.

Chart IV-14
GDP growth and contribution of underlying components 2010-2014[1]



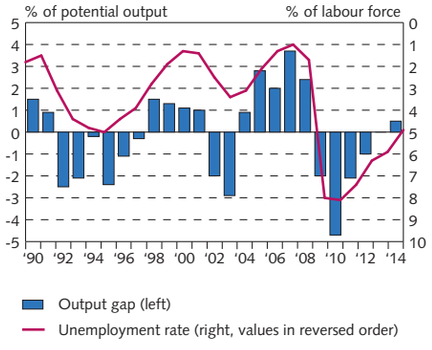
1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

Output slack diminishing

From before the financial crisis until Q2/2010, GDP contracted by 12½%. As a result, a substantial pre-crisis output gap turned into a sizeable slack, with high unemployment and underutilisation of the capital stock. The output slack amounted to an estimated 4.7% in 2010 but narrowed significantly last year, as growth in the factors of production was limited while output growth measured 3.1%. The slack is estimated at 2% for 2011.

It should be borne in mind that estimating factor utilisation at any time is highly uncertain. The assessment becomes more accurate as time passes and more data become available. This uncertainty is greater than usual in the wake of profound changes in the economy like those resulting from the financial crisis. As a result, it is always important to consider a variety of indicators of the utilisation level. GDP per unit of capital grew by over 4% in 2011, while GDP per unit of labour grew by 1½%. According to the Capacent Gallup survey among Iceland's largest firms, a growing number of respondents would consider it difficult to respond to an unexpected spurt in demand, although a far larger share would have no particular problem doing so. The unemployment rate has declined and the employment level has risen. All of these indicators support the Bank's assessment that the output slack narrowed in 2011. The forecast assumes that potential output will grow relatively slowly during the forecast horizon and that the output slack will be about 1% of potential output this year and disappear by the end of 2013.

Chart IV-15
Output gap and unemployment
1990-2014[1]

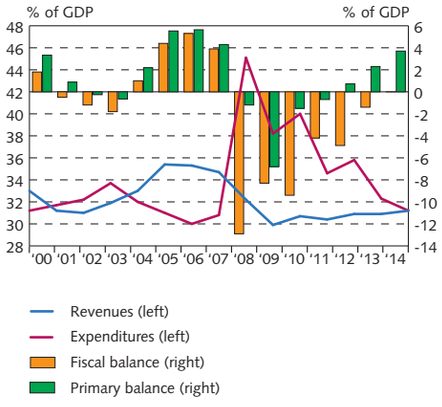


1. Central Bank baseline forecast 2012-2014.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

V Public sector finances

Plans related to the adjustment of Government finances towards a sustainable debt position have changed as the Government-IMF programme has progressed. The new long-term plan published with the 2012 budget proposal relaxed the strictures imposed in the long-term plan from the previous year. It assumes that a surplus on the overall balance will not be achieved until 2014, a year later than previously planned, and that the surplus will be smaller than originally estimated. Uncertainty about whether the target will be achieved has risen, despite the slower adjustment envisaged.

Chart V-1
Treasury finances 2000-2014[1]



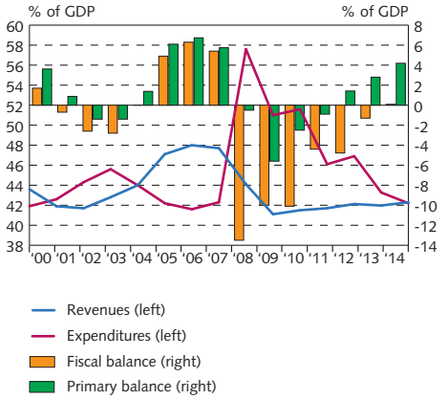
1. Central Bank baseline forecast 2012-2014. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Performance in 2011 was in line with the *Monetary Bulletin* forecast

Statistics Iceland's newly published preliminary figures on Government performance in 2011 were very similar to the forecast in the last *Monetary Bulletin*. The operational deficit proved to be 4.4% of GDP instead of the forecasted 4.2%. There was a similar difference between Central Bank forecasts of revenues and expenditures as a share of GDP, on the one hand, and Statistics Iceland figures, on the other. The ratio of revenues and expenditures to GDP was larger in the Bank's forecast than in the Government-IMF plan for balanced public sector finances by nearly 1% of GDP, and the Bank's forecast proved accurate. Although last year's performance was close to estimates (a 4% deficit), significant expenditure pressures clearly exist.

The forecast in *Monetary Bulletin* and the Government-IMF plan assumed that write-offs related to the SpKef savings bank and the Housing Financing Fund in 2011 would amount to 2.2% of GDP, or nearly 36 b.kr. Those write-offs did not materialise; therefore, there is a deviation from previous forecasts in this amount. The write-offs will probably occur this year; therefore, they have been included in the forecast for 2012.

Chart V-2
General government finances 2000-2014[1]



1. Central Bank baseline forecast 2012-2014. On accrual basis.
Sources: Statistics Iceland, Central Bank of Iceland.

Uncertainty about 2012 budget outcome

The Government's operating performance is expected to improve by an estimated 1.5% of GDP this year. However, there is some uncertainty concerning the implementation of the 2012 National Budget that could result in poorer performance than the budget allows for. First of all, on the revenues side is the intended sale of assets in the amount of 7 b.kr., but it is uncertain whether those plans will come to fruition, as the sale process has not formally begun. Weighing against this, however, are indications that dividend payments could turn out higher. Second, there is some uncertainty about revenues from the new financial institutions tax, which was originally to be levied on total wage and salary payments. During consideration by Parliament, however, the tax base was changed so as to reflect a mixture of total wages and salaries plus profits. In the wake of the recent Supreme Court judgment concerning settlement of payments on exchange rate-linked loans, it is likely that financial institutions' operating performance will be poorer than previously expected in 2012 and that tax revenues will possibly be 2.3 b.kr. lower as a result. Third, the

legislative bill on fishing fees has met with vociferous objections, and there is some uncertainty about the 1.5 b.kr. in revenues assumed to derive from those fees. Offsetting this uncertainty on the revenues side of the National Budget, the income tax payment from the Central Bank of Iceland Holding Company ehf. (ESÍ) will be 3 b.kr. higher than previously estimated. On the expenditures side, the budget assumes a continued contraction in public consumption, but it is not a given that this assumption will hold because of expenditure pressures that have developed, partly as a result of the wage settlements and the upcoming Parliamentary elections. It should also be noted that social transfers to households exceeded forecasts by ½% of GDP.

Unclear whether a positive overall balance will be achieved in 2014

The IMF's August 2011 review of the Government-IMF plan for balanced public sector finances, assumes an overall surplus in 2014. Since then, the IMF has issued a new forecast of the Government's fiscal performance, projecting a deficit of 0.6% of GDP in 2014 and a surplus the year after. The forecast published here assumes that Government operations will be nearly in balance in 2014, with the difference due in part to higher revenues generated by stronger GDP growth than is assumed in the IMF forecast.

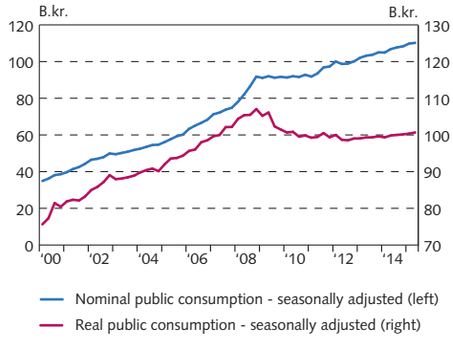
This is a poorer outlook than has previously been assumed in Central Bank forecasts. The Bank's November forecast, prepared shortly after the approval of the budget proposal, assumed a public sector surplus of 1% of GDP in 2014. According to their most recent forecasts, however, neither the IMF nor the Central Bank expects that target to be achieved.

Turnaround in public consumption

The onset of the financial crisis in autumn 2008 triggered an abrupt change in public consumption. In nominal terms, public consumption remained virtually unchanged at around 100 b.kr. per quarter for 11 consecutive quarters. It began growing again in Q3/2011, however, and rose by 5-6% year on year in nominal terms between Q3 and Q4, a considerably larger increase than originally assumed by the authorities. The turnaround is attributable primarily to negotiated wage increases, which were much larger than expected. Purchases of goods and services also rose in excess of forecasted amounts. This rise in public consumption is nonetheless at the lower end of the growth range of 6-16% that prevailed from the turn of the century until the onset of the financial crisis. Consumption grew most strongly in 2008, just before the crisis struck.

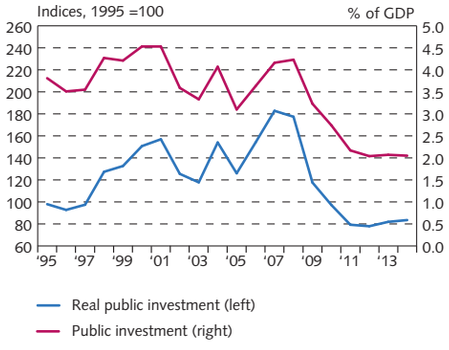
Even though nominal public consumption has begun to rise again, it contracted by 0.6% in volume terms in 2011. From the turn of the century until 2008, public consumption volume grew by an average of just under 4% per year. In the wake of the financial collapse, it became necessary to implement austerity measures in order to ensure sustainable Government debt. These measures caused public consumption to contract by 1.7% in 2009 and 3.4% in 2010. From 1980 until the financial crisis, public consumption volume contracted only once, in 1992, when it declined by 0.6%.

Chart V-3
Public consumption
Q1/2000 - Q2/2015[1]



1. Central Bank baseline forecast Q2/2012 - Q2/2015.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-4
Public investment
1995-2014[1]



1. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

The outlook is for nominal public consumption to continue growing throughout the forecast horizon, due to both the aforementioned wage settlements and other price increases. According to the Central Bank forecast, the inflation outlook for 2012 has worsened. In addition, planned austerity measures are narrower in scope than before. For example, this year's austerity measures are estimated at 0.5% of GDP, far below the 2010 peak of 3.6%. The Bank's forecast nonetheless assumes that public consumption will continue to contract in volume terms, for the fourth year in a row. This year's contraction is projected at 0.6%. Consumption is forecast to grow slightly in the following two years, however.

The forecast of a drop in public consumption volume in 2012 is based on the assumption that it will be possible to contain wage pressures. The Treasury's wage costs totalled 120 b.kr. in 2011 and are projected at 121 b.kr. in 2012, according to the National Budget. Given the public sector wage increases that generally took effect on 1 March 2012, it is clear that employment levels must be reduced if wage costs are to adhere to budgetary allocations. The forecast published here does not assume that this reduction will take place to the full extent.

Public investment continues to contract in 2012, hits historical low

The largest municipalities' three-year budgets indicate that municipal investment will continue to contract this year, in spite of a substantial reduction in 2011. For example, the City of Reykjavík intends to reduce investment sharply at a time when large municipalities such as Hafnarfjörður and Reykjanesbær have extremely limited fiscal space for investment.

According to the 2012 National Budget, Government investment will be unchanged from 2011 in nominal terms. On the other hand, the statement made by the Government upon negotiation of private sector wage settlements included a pledge of extensive new investment occurring primarily in 2011 and 2012. To a large degree, those projects are outside the budget, such as the construction of the new national hospital, the Vaðlaheiðargöng tunnel, and municipal investment in nursing home construction. It was intended that the bulk of the construction would occur in 2011 and 2012, but the projects have been delayed. As a result, it is assumed that they will be initiated in 2012 and 2013.

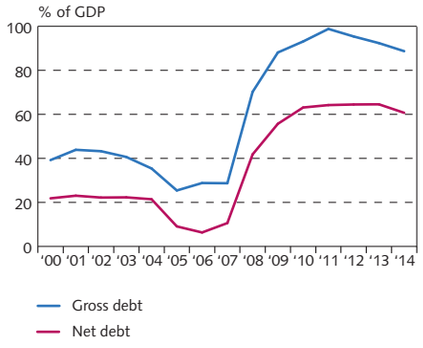
The last Central Bank forecast assumed that the Vaðlaheiðargöng tunnel project will go ahead. This project was not included with public investment, however, but was considered a private project, in accordance with statements made by the Government on its financing at the time. Since then, the assumptions underlying the project have changed, and it will probably be classified as public investment. As a result, the current forecast assumes rather more public investment than did the February forecast. The Vaðlaheiðargöng tunnel is an investment of about 10 b.kr. that will be spread over 3-4 years, whereas total public investment for 2012 is estimated at 37 b.kr. When public investment peaked in 2008, it amounted to 77 b.kr. at 2011 price levels.

Prepayment of IMF and Nordic loans

In order to reduce the cost of maintaining the foreign exchange reserves, the Treasury of Iceland and the Central Bank of Iceland decided to prepay upcoming instalments of loans connected with the Government-IMF programme. In all, the prepayments amounted to 116 b.kr., or just over 20% of the loans taken from the IMF and the other Nordic countries. This reduces the Treasury's gross debt, but net debt remains unchanged.

Gross public sector debt peaked in 2011 at about 99% of GDP. It will decline somewhat this year because of the above-mentioned prepayment; however, the reduction will be offset by depreciation of the króna and expected write-offs during the year; i.e., SpKef savings bank and the Housing Financing Fund. Gross debt is therefore estimated at about 95% of GDP in 2012. In nominal terms, gross debt will grow only marginally until 2014, whereas nominal GDP will grow by about 11%. As a result, gross debt will decline to about 89% of GDP by 2014. Net debt as a share of GDP will not fall as sharply. After peaking this year at roughly 65% of GDP, it is expected to fall to about 61% of GDP by 2014. Net debt is actually expected to be slightly higher compared to the previous forecast, as the fiscal outlook has deteriorated.

Chart V-5
General Government debt 2000-2014[1]

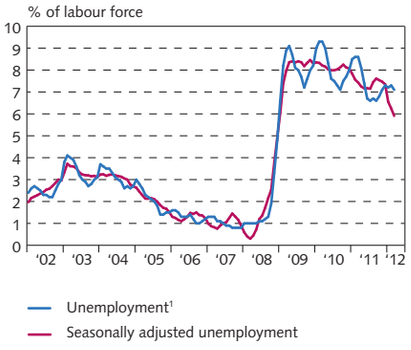


1. Central Bank baseline forecast 2012-2014.
Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

VI Labour market and wage developments

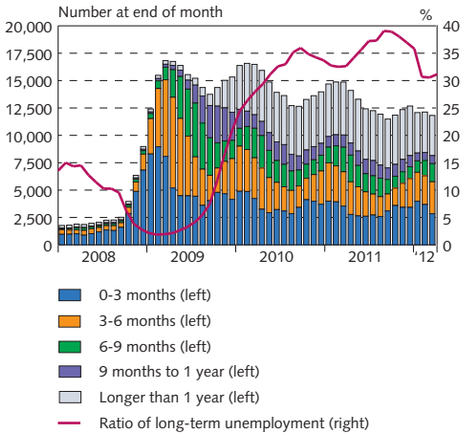
Unemployment continued to fall in Q1 and remained close to the level forecast in February. Long-term unemployment is down as well. Unemployment is projected to continue declining in line with increased economic activity, measuring just over 4% by the end of the forecast horizon. Employment rose somewhat slower in Q1/2012 than was forecast in February. The increase in employment stems primarily from a rise in the number of employed persons, whereas last year's increase was due chiefly to a rise in the average number of hours worked. Wages are expected to rise broadly in line with the February forecast in coming years, although revised figures from Statistics Iceland indicate larger pay increases in the past three years than previous numbers suggested. Unit labour costs are forecast to rise considerably more than is consistent with the Central Bank's inflation target in 2012 but to be broadly in line with the target in the latter half of the forecast horizon.

Chart VI-1
Unemployment
January 2002 - March 2012



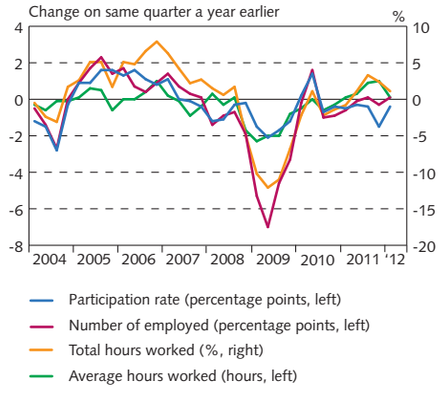
1. Registered unemployment is the average number of individuals registered with employment agencies nationwide as a percentage of the estimated number of persons in the labour market in each month.
Sources: Directorate of Labour, Central Bank of Iceland.

Chart VI-2
Unemployment by duration
January 2008 - March 2012



Source: Directorate of Labour.

Chart VI-3
Changes in labour market
Q1/2004 - Q1/2012



Source: Statistics Iceland.

Unemployment in line with forecasts

Unemployment as measured by the Directorate of Labour (DoL) was 7.2% in Q1, in line with the February forecast. After adjusting for seasonality, it measured 6.4%. Unemployment according to the Statistics Iceland labour market survey also measured 7.2% in Q1.

In a departure from the historical pattern, unemployment fell in January, due to the deregistration of about 1,400 persons. About two-thirds of those deregistered in January had participated in a DoL initiative offering persons without work for more than six months the opportunity to attend school while collecting unemployment benefits during the autumn 2011 term. Those who elected to continue their academic studies during the spring term are no longer eligible for unemployment benefits and were therefore deregistered. Others dropped off the unemployment register because of the expiry of a temporary statutory provision enabling salaried and self-employed persons to collect partial unemployment benefits against part-time employment without an income-linked reduction in benefits.

Long-term unemployment is on the wane ...

The number of persons on the unemployment register fell by 2,800 year-on-year in Q1/2012. Of that total, those out of work longer than 12 months according to DoL records declined by 1,100. The deregistration of some 900 persons in January due to participation in the aforementioned DoL initiative probably explains the bulk of this decline in long-term unemployment. The results of the Statistics Iceland labour market survey show a similar decline.

... and net migration has levelled off

As has been discussed previously in *Monetary Bulletin*, the post-crisis surge in emigration caused unemployment to rise less during the 2009-2010 contraction than it would have otherwise.[1] Net emigration totalled about 1.5% of the population in 2009 but declined to just

1. See, for instance, Box VI-1 in *Monetary Bulletin* 2011/4.

under ½% in 2011, and since Q4/2011 the number of emigrants to Iceland has roughly matched the number of immigrants.

Employment rises due to an increase in the number of employed persons

The results of the Statistics Iceland labour market survey for Q1/2012 showed employment continuing to grow, but at a slower rate than according to the Central Bank's February forecast. Total hours worked, which are a measure of man-years, rose by 1.1% year-on-year, whereas the forecast assumed an increase of 1.9%. While the recovery of employment from Q2/2011 has hitherto reflected primarily a rise in average hours worked, the Q1 rise in employment stems primarily from an increase in the number of persons employed. Because the adjustment in labour use after the onset of the crisis took place largely through a reduction in average hours worked, it was to be expected that increased labour demand would be reflected first in longer hours worked by those already employed. As the recovery continues, however, it becomes more difficult to meet increased labour demand solely with longer hours, and the adjustment shifts more and more to creation of new jobs.

The labour participation rate was 78.9% in Q1/2012, which is the same as in Q1/2004 when it was at its lowest, during the business cycle downturn of the early 2000s. Seasonally adjusted, the labour participation rate increased by 1.1 percentage points between Q4/2011 and Q1/2012, to 80.4%.

Firms interested in recruiting outnumber those seeking to downsize

The results above accord well with the results of the Capacent Gallup survey carried out in February and March among Iceland's 400 largest firms. For the first time since March 2008, the survey shows that firms considering adding staff in the next six months outnumber those considering redundancies. On the other hand, demand for labour will probably not grow very rapidly in the near term, as over 60% of firms surveyed planned to keep unchanged staffing levels, about the same share as in the surveys of the past two years.

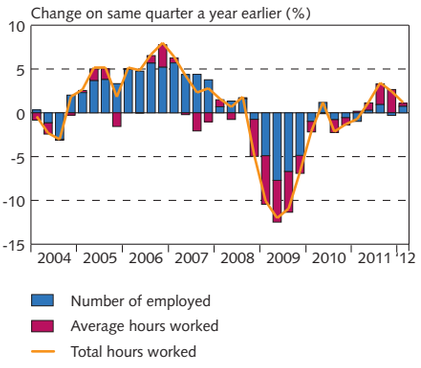
Labour market outlook broadly unchanged from February

In view of this, and given that other countries have experienced slow employment growth in the wake of previous financial crises, it is assumed that employment will grow relatively slowly during the forecast horizon, or just under 1% per year on average, which is broadly in line with the last forecast. The unemployment outlook for the next three years is also similar to that in the February forecast. It is assumed that unemployment will continue to decline as economic activity increases, measuring 6.3% in 2012 and falling to about 4.3% (adjusted for seasonality) by mid-2015.

Revised Statistics Iceland figures show larger increase in wages

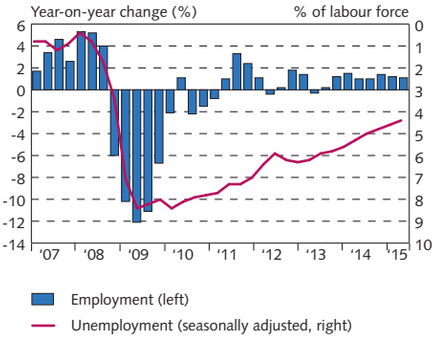
In March, Statistics Iceland published revised figures on overall wage cost increases in recent years. The largest adjustment was a significantly larger pay rise in 2009, or 2% as opposed to 0.5%. On the

Chart VI-4
Changes in employment and hours worked
Q1/2004 - Q1/2012



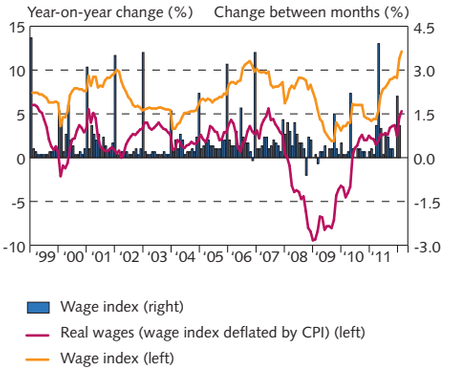
Source: Statistics Iceland.

Chart VI-5
Employment and unemployment
Q1/2007 - Q2/2015[1]



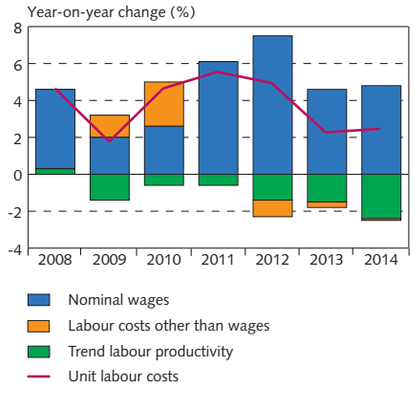
1. Central Bank baseline forecast Q2/2012 - Q2/2015.
Sources: Directorate of Labour, Central Bank of Iceland.

Chart VI-6
Nominal and real wages[1]
January 1999 - March 2012



1. Real wages are the wage index deflated by the CPI.
Source: Statistics Iceland.

Chart VI-7
Unit labour costs and contributions of underlying components 2008-2014[1]



1. Positive labour productivity growth is shown as a negative contribution to an increase in unit labour costs. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

other hand, it is estimated that wages rose relatively less in 2010, or by 2.6% instead of 3.1% according to the Bank's previous estimate. Also in March, Statistics Iceland published its first figures for the year 2011, which show a somewhat larger increase in total wages than was assumed in the February forecast, or 6.1% as compared with 5.7%.

Contractual wage increases in line with the forecast

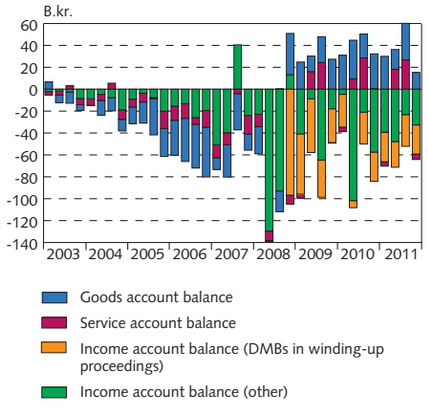
Contractual wage increases in Q1/2012 have been in line with the February forecast, however. The wage index rose by 2.1% quarter-on-quarter in Q1, largely due to a general 3.5% contractual increase and a 11,000 kr. rise in pay scales below 314,000 kr. per month. The overall effect of the latter increase is estimated to have been about ½ a percentage point. The contractual increases in February and March were offset by a 1.2% decline in the wage index, however, because the effect of the 50,000 kr. one-time payment implemented at the time the wage settlements were signed disappeared from the index. The twelve-month rise in the index amounted to 10.8% in Q1/2012, but it should be noted that two contractual wage increases were implemented during the period.

The baseline forecast assumes that the wage settlement review at the end of the year will not trigger substantial additional wage increases, even though the forecast for 2012 indicates that the conditions underlying the contracts will not be met. On the other hand, there are no economic premises for large additional pay rises until inflation and inflation expectations are firmly on a path towards the target. The assumptions concerning wage developments have therefore changed little since the February forecast. Unit labour costs are considered likely to remain broadly unchanged from that forecast during the current forecast horizon. It is assumed that they will rise by about 5% in 2012 and then rise in tandem with the Central Bank's inflation target, or about 2½-3% per year on average, for the remainder of the forecast period.

VII External balance

The current account balance was negative by just over 7% of GDP, or 116 b.kr., in 2011, only slightly less than in 2010. The surplus on the trade account was 125 b.kr., while there was a 240 b.kr. deficit in the balance on income. The income account deficit excluding DMBs in winding-up proceedings was much smaller, at 135 b.kr. It is appropriate to ignore bankruptcy estates in analysing the external balance because the majority of the failed firms' accrued expenses will never be paid and will disappear from entries of external expense when the estates are settled. The deficit in the balance on income excluding the impact of Actavis and the DMBs in winding-up proceedings was even smaller, or 75 b.kr. The current account balance excluding Actavis and the estates was therefore positive by just under 50 b.kr., or 3.1% of GDP. The outlook is for a continued surplus on the current account in 2012 and throughout the forecast horizon, after adjusting for Actavis and the DMBs in winding-up proceedings.

Chart VII-1
Current account balance components[1]
Q1/2003 - Q4/2011

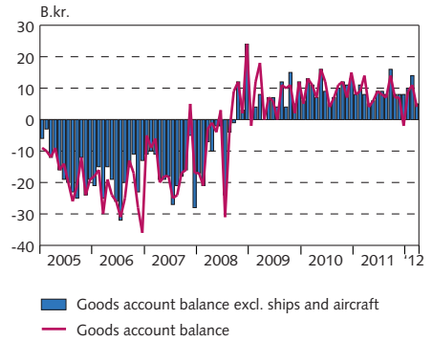


1. Net current transfer is included in the balance on income.
Sources: Statistics Iceland, Central Bank of Iceland.

Outlook for continued trade account surplus

The goods account balance was positive throughout 2011, except for December, when it turned negative for the first time since the beginning of 2009. The goods account surplus totalled 97 b.kr. for the year as a whole. Goods imports have grown year-on-year since March 2010; they rose by 18% at constant exchange rates in 2011, and by over 5% at constant prices. The most pronounced difference was in increased imports of transport equipment and increased fuel prices. Goods exports were up more than 10% at constant exchange rates, due in large part to increased exports of marine products and aluminium, whereas the volume increase was only just over 1%. Goods imports and exports continued to rise in value in Q1/2012, with a 28 b.kr. surplus in external goods trade during the quarter.

Chart VII-2
Goods account balance
At fixed exchange rate, January 2005 - March 2012

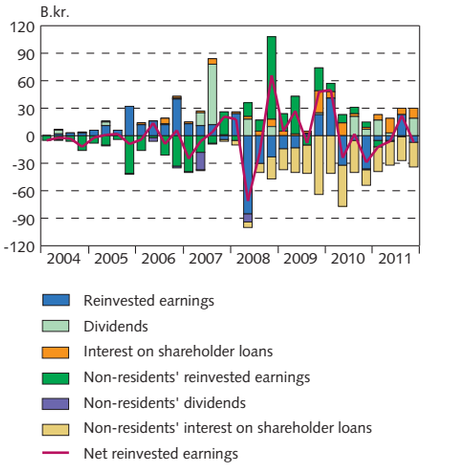


Sources: Statistics Iceland, Central Bank of Iceland.

The services balance was positive by 36 b.kr. in 2011 and was broadly unchanged from 2010. There was a small deficit in the services account balance in the first and fourth quarters of 2011, but the second and third quarters saw a sizeable surplus. The surplus is due mainly to last year's tourism revenues, particularly those deriving from transport items.

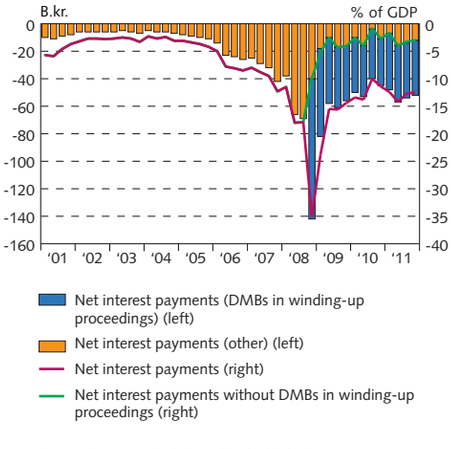
The outlook is for a continuing surplus on the trade account this year. Total marine product exports are projected to rise by 7% and the real exchange rate is expected to remain low, stimulating exports, particularly in sectors not subject to short-term capacity constraints. Indicators from the tourism sector suggest that 2012 has begun strongly. Foreign credit card turnover was much higher in the first quarter than in the preceding three years. Information from the Icelandic Tourist Board implies that the number of foreign tourists visiting Iceland rose year-on-year by nearly 16,000, or 22%, in Q1. The outlook for this spring and summer seems to be exceptionally good. Consequently, it is assumed that the export value of goods and services will be somewhat higher this year than in the last forecast, although imports are expected to grow more strongly as well, particularly due to aircraft imports. Because of poorer terms of trade, the sur-

Chart VII-3
Direct investment and investment expenditure
Q1/2004 - Q4/2011



Sources: Statistics Iceland, Central Bank of Iceland.

Chart VII-4
Net foreign interest payments
Q1/2001 - Q4/2011



Sources: Statistics Iceland, Central Bank of Iceland.

plus on goods and services trade is forecast to be 1 percentage point smaller this year than in the previous forecast, or 7% of GDP. Imports are expected to grow more rapidly than exports during the forecast horizon; however, the trade surplus is projected at 6-7% of GDP over the next two years, which is slightly below the February forecast. A poorer initial position is the main cause of the smaller surplus in the next two years than in the last forecast, while the smaller surplus in 2014 is also due to import growth in connection with energy-intensive investment projects.

Income account deficit sizeable but shrinking

Offsetting last year's considerable trade surplus was a hefty deficit in the balance on income, which largely reflects the debt accumulation in the pre-crisis years, when the current account deficit was sizeable. The income account deficit totalled over 240 b.kr. in 2011, due primarily to a 213 b.kr. deficit in the interest balance and 29 b.kr. in negative returns on dividends and reinvested earnings. Last year's income deficit was nonetheless smaller than that in 2010, or 15% of GDP instead of 18%. The deficit on the interest balance grew between 2010 and 2011, but the smaller negative returns on dividends and reinvested earnings resulted in a reduction of the overall deficit in the balance on income. On the other hand, excluding Actavis and the DMBs in winding-up proceedings, the 2011 income account deficit was much smaller, at 75 b.kr., or 7% of GDP. The deficit is due mainly to a 50 b.kr. deficit in the interest balance, although returns on dividends and reinvested earnings were also negative, by 25 b.kr. The income account deficit was somewhat larger in 2011 than in 2010, when it measured just over 2% of GDP. The interest deficit was larger in 2011, but the largest difference was because of changes in returns on dividends and reinvested earnings. Net returns on dividends and reinvested earnings were slightly positive in 2010 but negative by 25 b.kr. in 2011. The change is attributable largely to sizeable losses on inward foreign direct investment (FDI) in 2010, which have a positive effect on net returns on dividends and reinvested earnings and therefore on the balance on income. Returns on inward FDI were positive in 2011, however, reducing net returns on dividends and reinvested earnings and therefore factor income. Returns on outward FDI therefore exceeded returns on inward FDI in 2010, whereas the reverse was true in 2011.

Modest trade surplus after adjusting for income and expenses of failed DMBs

The balance on the trade account was positive by almost 133 b.kr. in 2011, while the deficit in the balance on income plus transfers totalled 249 b.kr. The current account balance was therefore negative by about 116 b.kr., or 7.1% of GDP. After adjusting for accrued interest due to the DMBs in winding-up proceedings, the current account deficit is much smaller, only 10 b.kr., or 0.6% of GDP. After adjusting for Actavis as well, however, the current account was in surplus by 50 b.kr., or 3.1% of GDP.

A sizeable trade surplus is expected this year in spite of increased imports, as the low real exchange rate continues to support export

growth. The surplus will nonetheless be smaller than was assumed in the last *Monetary Bulletin*, owing primarily to poorer terms of trade than in that forecast. Because of the deficit in the balance on income, the official current account balance is projected to be negative by 88 b.kr., or 5% of GDP, in 2012. After adjusting for accrued income and expenses due to the DMBs being wound up, it is expected to be positive by nearly 4 b.kr., or 0.2% of GDP. This is a smaller surplus than was projected in February, due to a smaller trade surplus.

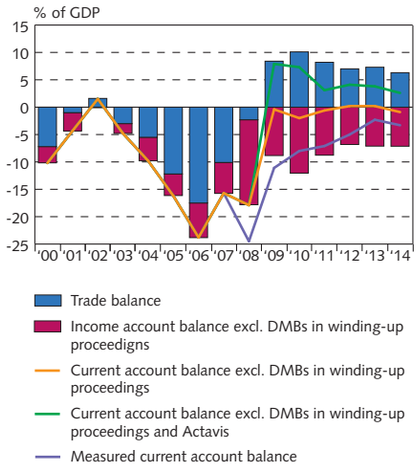
According to a paper by Central Bank staff, published in the Bank's *Economic Affairs*[1] series in February 2011, accrued interest on the debt of the international pharmaceutical company Actavis weighs heavily in the balance on income, as the company has substantial foreign liabilities. Because these liabilities consist primarily of loans with a single final maturity date (bullet bonds), the interest expense is accrued but unpaid and therefore generates no actual foreign exchange outflows. In addition, the Central Bank has no information on dividend payments that should cover the interest expense; therefore, a large negative balance is created in the balance on income but without associated outflows. Since the above-mentioned paper was published, the Central Bank has also excluded Actavis' factor income and expense in its estimates of Iceland's balance on income and current account balance. The sale of the firm to US pharmaceuticals company Watson has now been finalised; therefore, the effect of Actavis' assets and liabilities on Iceland's external balance will change considerably, and the company will make a much lesser impact on the income balance. It is not yet clear, however, what the effect on the income balance and the external position will be. It will depend in part on what position the Actavis companies in Iceland occupy in the Watson organisational structure. It will also depend on whether foreign firms owned by Actavis Iceland are placed under Watson or continue to be owned in Iceland. Moreover, the impact on the external position will depend on whether the domestic holding companies are wound up (see Box VII-1). At all events, the impact is expected to be substantial, and the balance on income and current account balance will be closer to the Central Bank's estimates excluding Actavis. By that measure, the income account deficit will be much smaller this year and the current account balance will be positive by 4.1% of GDP, compared with 0.2% including Actavis.

Current account balance net of failed DMBs positive in coming years

The deficit in the balance on income excluding the DMBs in winding-up proceedings is expected to rise again in 2013 due to increased interest expense. This is mainly because the calculation of the balance on income is based on the assumption that at least two of the three DMBs being wound up will conclude some sort of agreements with their creditors in the next year. When that occurs, these firms' assets and liabilities will no longer be excluded from estimates of fac-

1. Arnór Sighvatsson, Ásgeir Daníelsson, Daníel Svavarsson, Freyr Hermannsson, Gunnar Gunnarsson, Hrönn Helgadóttir, Regína Bjarnadóttir and Ríkardur B. Ríkardsson (2011), "What does Iceland owe?", *Economic Affairs* no. 4, February 2011.

Chart VII-5
Current account balance 2000-2014[1]



1. Net current transfer is included in the balance of income. Central Bank baseline forecast 2012-2014.
Sources: Statistics Iceland, Central Bank of Iceland.

tor income excluding DMBs in winding-up proceedings. The change will have a negative effect on the balance on income net of the failed DMBs; the negative external balance will become more negative than before upon the settlement of the estates, and interest and dividend payments will therefore increase. From 2013 onwards, this will have an adverse effect on the balance on income.

Nonetheless, the official current account deficit is expected to fall to 2½% of GDP in 2013, and the difference between it and the current account balance excluding the DMBs in winding-up proceedings will narrow, assuming that some of the DMBs' estates are settled next year. When this takes place, accrued interest will no longer be calculated on the claims that have been settled. Excluding the DMBs in winding-up proceedings, it is assumed that the current account balance will show a surplus of just under ½% of GDP in 2013. This is a somewhat smaller surplus than was forecast in February, as the trade surplus is a percentage point less than in that forecast and the króna is expected to be weaker. Other things being equal, this increases the income account deficit. The current account deficit is projected to grow slightly in 2014, and the current account balance excluding the DMBs in winding-up proceedings may well turn negative again, as the trade surplus will diminish at the same time as the income account deficit grows, due in particular to rising interest rates abroad. The current account balance excluding the failed DMBs and Actavis will be positive throughout the forecast horizon, however, by 3-4% of GDP. As is stated above, the underlying current account balance will be close to this estimate beginning in 2013 because of the sale of Actavis.

Box VII-1

The outlook for Iceland's external debt and payment flows

In February 2011, a paper entitled "What does Iceland owe?" by Central Bank staff was published in the Bank's publication series *Economic Affairs*.[1] In the paper, the authors peered through the dust that swirled up with the collapse of Iceland's financial system and caused the official accounting of its external assets and liabilities to give a misleading view of the country's long-term debt position, as the majority of the liabilities still recognised officially as Icelandic liabilities are related to the estates of the failed banks. The authors estimated the value of external assets and liabilities that are likely to remain after the dust has settled. Also discussed was the impact of the international pharmaceuticals company Actavis, which significantly affects headline figures on Iceland's debt position.

As is emphasised in the paper, some of the information on which it was based was highly uncertain. Now, a year later, a great deal of new information has surfaced. In this Box, the main findings in "What does Iceland owe?" are re-evaluated in view of the new data. The reassessment shows larger underlying net debt than in the earlier assessment, although it is still Iceland's best debt position in quite a long time. Furthermore, the outlook is for external debt

1. Arnór Sighvatsson, Ásgeir Daníelsson, Daníel Svavarsson, Freyr Hermannsson, Gunnar Gunnarsson, Hrönn Helgadóttir, Regína Bjarnadóttir, and Ríkardur B. Ríkardsson (2011), „What does Iceland owe?", *Economic Affairs* no. 4, February 2011.

to decline rapidly in coming years. It concludes with an estimate of developments in the balance of payments in the next few years.

Assets and division of the failed banks' claims

In order to estimate Iceland's international investment position (IIP) after the failed banks' bankruptcy proceedings are completed, it is necessary to consider the settlement of the failed banks' estates. In Section III of "What does Iceland owe?", an attempt is made to estimate how Iceland's IIP will be affected by the fact that the failed financial institutions' domestic and foreign assets will ultimately be settled or sold and the proceeds allocated to domestic or foreign creditors, while claims exceeding the value of reclaimed assets are written off. It should be noted that even though the estates' liabilities will never exceed their assets, obligations between residents and non-residents could develop during the bankruptcy proceedings.

There is still considerable uncertainty about the value of the estates' assets. The failed banks' creditors have declared their claims against the estates, but a number of disputes related to the legitimacy of the claims have yet to be resolved. As a result, the ultimate division of the claims between residents and non-residents is still unknown. Nonetheless, a number of factors have been ascertained in the year since the valuation was last made, and the current assessment gives a more accurate portrayal of the expected division between domestic and foreign creditors. The majority of the old banks' assets are foreign, although there are substantial domestic assets as well. The old banks' main domestic assets, which will ultimately revert to creditors, are their holdings in the new banks and the debt instrument between old and new Landsbanki. Even though a sizeable amount of the foreign assets and a portion of the domestic assets have been recovered and there is greater certainty about the value of certain assets, the overall asset value is still unknown. The timing of the final settlement is also uncertain. Therefore, as before, the figures presented here must be interpreted with caution.

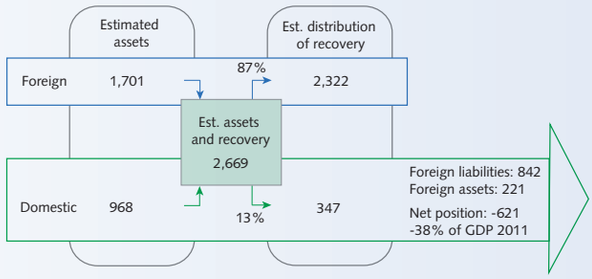
Net foreign debt grows once failed banks' estates are settled

The division of claims varies by bank. For purposes of simplification, as in the paper, it is assumed that all old Landsbanki creditors are foreign but that some of Glitnir and Kaupthing's creditors are domestic. It is estimated that, in all, 13% of the creditors of old Landsbanki, Glitnir, and Kaupthing are residents and 87% are non-residents. These figures are similar to those from a year ago, when it was estimated that 15% of the claims were domestic.

At the end of 2011, expected recovery from the three banks' estates was estimated at 2,669 b.kr., including 1,701 b.kr. in foreign assets and 968 b.kr. in domestic assets. This takes into account the disbursement from the old Landsbanki estate in December 2011, and the bank's total assets has been reduced by that amount. Offsetting this, the value of a number of assets in the three banks' portfolios is now considered to be higher than at the time the paper was prepared a year ago. The valuation of individual assets has been carried out with extreme caution. As a result, the estimated value has been gradually rising as outstanding debt has been collected and foreign assets sold. In this Box, account is also given to the fact that foreign-denominated deposits with the Central Bank of Iceland are offset by foreign assets that the estates delivered to the Bank when they were established. These are classified as foreign Central Bank assets. As a result, this domestic asset is now considered foreign. This presentation affects the division of the underlying IIP between financial institutions in winding-up proceedings (now estimated to be less negative than in last year's paper by 5% of GDP) and other parties, but it does not affect the overall results.

Based on the above estimate of the estates' assets and the division between creditors, it can be expected that 2,322 b.kr. will revert to non-residents and 347 b.kr. to residents when the estates are settled. Both here and in "What does Iceland owe?", an estimate is made of residents' net external debt when the proceeds of sold assets have been paid to creditors. This is the equivalent of dividing current domestic and foreign assets among domestic and foreign creditors according to the percentages listed above. Thus 842 b.kr. of domestic assets would revert to non-residents and create external debt. In addition, 221 b.kr. of foreign assets would revert to residents and create an external asset. The result is net foreign debt in the amount of 621 b.kr., or 38% of year-2011 GDP (see Chart 1).

Chart 1



Amounts in ISK billions. Based on portfolio balances as of end-2011. Deposits with the Central Bank and domestic assets that have foreign collateral are considered foreign assets.
Source: Central Bank of Iceland.

For payments to creditors to take place without affecting the balance of payments, those who buy the estates' assets must finance them entirely with foreign credit or equity. This is not a given, of course. Some of the recovery will be in krónur or foreign currency deriving from Icelandic residents' foreign currency revenues. Since the failed financial institutions' general exemptions from the Foreign Exchange Act were revoked in mid-March, the authorities can set the winding-up committees conditions or ensure through contracts that assets will be sold to a large extent for foreign currency that is eligible for reinvestment (exempt from repatriation requirements) according to the Foreign Exchange Act. In this context, it should be noted that the estates' largest assets, apart from Central Bank deposits against the Bank's foreign exchange holdings, are shares in Arion Bank and Íslandsbanki and the debt instrument between old and new Landsbanki. If the new Landsbankinn can refinance the debt instrument, and stakes in the other banks are sold to investors that can pay with foreign currency (exempt from repatriation requirements) that they own or acquire through foreign long-term loans, what remains is 349 b.kr. that must be paid to non-residents from the proceeds of the sale of other domestic assets, as opposed to the 221 b.kr. that residents will receive from the sale of foreign assets, according to current estimates. This amount is not likely to cause substantial balance of payments problems given the current outlook for the current account balance, particularly if a portion of the amount is converted to long-term debt that can be sold in foreign markets.

Underlying IIP improving

Iceland's underlying IIP can be defined as the position that will be most important in determining long-term developments in the balance of payments. As a result, it is necessary, on the one hand,

to take into account the position that will result when the estates' domestic and foreign assets have been sold and the proceeds distributed among domestic and foreign creditors, and on the other, to set aside large international companies' assets and liabilities, which will not affect those flows. According to currently available data, it is assumed that the net position excluding financial institutions in winding-up proceedings was negative by just over 60% of GDP as of end-2010, as compared with liabilities equivalent to just over six times GDP according to official information. This is similar to, or even lower than, the IIP of other OECD countries (see Chart 2).

This large deviation from headline figures can be attributed to the fact that a large share of Iceland's assets and liabilities were those of the failed banks and that, according to standardised calculations, their liabilities far exceeded their assets, particularly after they collapsed. Had all of the estates' assets been sold at the then-current price and their value distributed to creditors, net debt equivalent to 43% of GDP would have been added to the total. The net balance of these two factors combined would have amounted to -119% of GDP at year-end 2010.

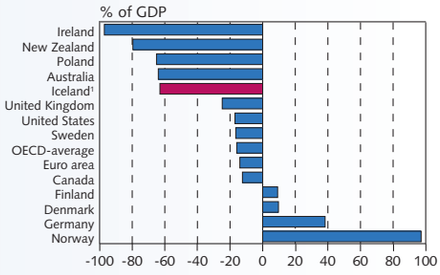
If the net debt of the pharmaceuticals company Actavis is also excluded, the net position at year-end 2010 amounted to about -60% of GDP. The sale of the firm to US pharmaceuticals company Watson has now been finalised, and the impact of Actavis' assets and liabilities on Iceland's external balance will change substantially. It is not yet clear, however, exactly what the effect will be on the external position. It will depend in part on what position the Actavis companies in Iceland occupy in the Watson organisational structure. It will also depend on whether foreign firms owned by Actavis Iceland are placed under Watson or continue to be owned in Iceland. Moreover, the impact on the external position will depend on whether the domestic holding companies are wound up. In any case, though, the impact is likely to be substantial; therefore, Actavis' net debt will be only a small proportion of its present level.

Even though the underlying IIP is thus estimated to be only a fraction of that indicated by headline figures, and less than half of Iceland's net debt prior to the collapse of the banks, it is a poorer position than was assumed in the paper written a year ago. The difference lies mainly in a revaluation of foreign direct investment. Preliminary figures for the first quarters of 2010 revealed that the value of foreign assets held by residents was overestimated in previous figures. This applied in particular to assets that had been appropriated by the banks' winding-up committees but were previously included in the assessment of the net position excluding the failed banks. In many instances, when the banks have appropriated these assets, they have written them off to a large extent. Given the experience of recent years, however, that valuation is probably cautious.

Offsetting the less favourable historical data, preliminary figures for 2011 indicate that the underlying position has improved markedly, as was assumed in the previous forecast. The estimated underlying IIP is thought somewhat worse than in previous estimates. Further ahead in time, the difference between current and previous forecasts narrows. According to the Central Bank's most recent baseline forecast, Iceland's underlying IIP will amount to only -30% of GDP at the end of 2013. It is assumed that the State, firms with a State guarantee, and the private sector will refinance their foreign debt to some degree and that some new borrowing will occur. The timing and terms of such refinancing and new borrowing are highly uncertain, however. As a result, forecasts of the external position are extremely uncertain. It is expected that there will be an underlying surplus on the current account in coming years, and that the public and private sectors will continue deleveraging. The

Chart 2

International investment position of OECD countries 2010



1. IIP excluding DMBs in winding-up proceedings.
Sources: IMF, Central Bank of Iceland.

premises for refinancing and new borrowing are revised slightly downwards from the Bank's previous forecast. If the economy recovers more strongly than is assumed in Central Bank forecasts and foreign credit markets open up sooner, foreign borrowing could be more extensive and net liabilities would decline at a slower pace. This would actually be positive for the Icelandic economy, as it is not necessarily advantageous to pay down debt too quickly.

Table 1 Iceland's debt position (% of GDP)

	2010	*2011*	*2012*	*2013*	*2014*
Total liabilities	-905 (-867)	-835 (-866)	-815 (-800)	-759 (-754)	-714
- excl. DMBs in winding-up proceedings	-216 (-218)	-221 (-224)	-211 (-202)	-193 (-191)	-178
- based on calculated settlement of DMBs in winding-up proceedings	-260 (-261)	-258 (-265)	-246 (-242)	-226 (-227)	-209
- underlying debt based on calculated settlement of DMBs in winding-up proceedings, but excl. Actavis	-191 (-208)	-185 (-212)	-174 (-193)	-159 (-181)	-145
International investment position	-633 (-594)	-566 (-584)	-551 (-540)	-526 (-507)	-493
- excl. DMBs in winding-up proceedings	-63 (-28)	-53 (-25)	-46 (-20)	-53 (-17)	-45
- including calculated settlement of DMBs in winding-up proceedings	-119 (-72)	-111 (-66)	-100 (-59)	-89 (-54)	-79
- underlying position based on calculated settlement of DMBs in winding-up proceedings, but excl. Actavis	-60 (-23)	-47 (-18)	-37 (-14)	-30 (-12)	-23

Figures in parentheses are the estimates of the variables in question as they appeared in the paper "What does Iceland owe?" (2011). DMBs are deposit money banks.
Sources: Statistics Iceland, Central Bank of Iceland.

Balance of payments outlook

The Central Bank has assessed potential developments in the balance of payments in coming quarters. The assessment is based on the Bank's baseline forecast of developments in the domestic economy and the progress made in the capital account liberalisation strategy. It takes into account the Treasury's recent foreign borrowing but does not take into account further loan prepayments that may occur in the near future. It is important to bear in mind that the premises behind the estimate are highly uncertain and could easily change, with profound effects on the balance of payments.

Table 2 presents the Bank's estimate of the balance of payments until year-end 2014. The items are shown as percentages of GDP except for the foreign exchange reserves, which are shown as a percentage of Iceland's short-term liabilities. A positive current account balance (excluding the DMBs in winding-up proceedings and Actavis) is forecast throughout the period. The deficit in the balance on income is projected to grow slightly in 2013, however, and the trade surplus is expected to decline in 2014. On the other hand, the financial account balance will be negative in 2012 and 2013. It is projected to be strongly negative in 2013, in part because substantial outflows from the DMBs in winding-up proceedings are expected in that year.

According to Central Bank estimates, the ratio of foreign exchange reserves to short-term liabilities will rise somewhat in 2012 and 2013. One of the premises of the estimate is that the capital controls will be removed entirely, in accordance with the liberalisation strategy. Although there is considerable uncertainty about the

impact of liberalisation and other assumptions behind the estimate, the results show that the Central Bank's foreign exchange reserves are sufficient to cover unexpected outflows should they occur.

Table 2 Balance of payments (% of GDP)

	2011	*2012*	*2013*	*2014*
Current account balance[1]	3,1	4,1	3,8	2,6
Trade balance	8,2	7,0	7,3	6,2
Balance on income	-5,1	-2,9	-3,5	-3,6
Financial account balance (excl. reserves)	27	-6	-17	0
Foreign exchange reserves (% of short-term liabilities)	106	123	132	132

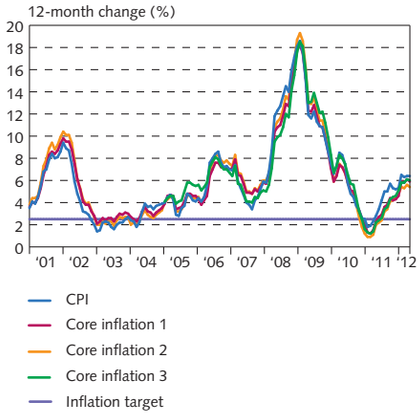
1. The table shows the trade balance and balance on income excluding Actavis and the DMBs in winding-up proceedings.

Source: Central Bank of Iceland.

VIII Price developments and inflation outlook

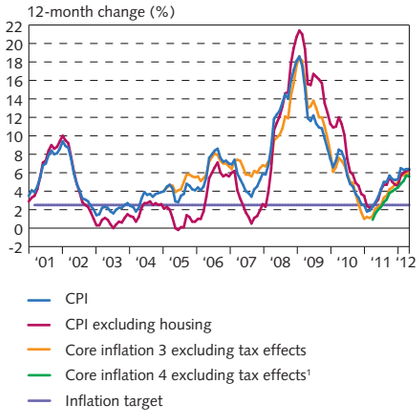
The inflation outlook has deteriorated. Inflation measured 6.4% in Q1/2012, somewhat above the Bank's February forecast. The deviation is due primarily to larger-than-anticipated increases in the price of oil and private services and a weaker króna than was forecast at that time. The outlook is for slow disinflation over the forecast horizon, with inflation averaging 6% in 2012, markedly higher than was projected in February. The inflation outlook for most of the forecast horizon has also deteriorated from the February forecast, owing to a weaker króna, less slack in the economy, and the high degree of inflation persistence. Inflation expectations have risen according to all measures and have remained high for a sustained period, which exacerbates this persistence. The inflation outlook is highly uncertain and, as often before, the exchange rate will be a major determinant of near-term developments.

Chart VIII-1
Inflation
January 2001 - April 2012[1]



1. The core indices measure underlying inflation. Core Index 1 is CPI excluding prices of agricultural products and petrol, and Core Index 2 excludes prices of public services as well. Core Index 3 also excludes the effect of changes in real interest rates on owner-equivalent rent.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-2
Various inflation measurements
January 2001 - April 2012



1. Core Index 4 is the consumer price index excluding prices of agricultural products, petrol, public services and owner-equivalent rent.
Sources: Statistics Iceland, Central Bank of Iceland.

Little difference between headline inflation and measures of underlying inflation

In Q1/2012, inflation measured 6.4%, up from 5.3% in the last quarter of 2011 and from 2% a year earlier.[1] The CPI components that rose most sharply in the first quarter were fuel and public and private services. In the latter half of 2011, however, inflation was driven chiefly by increases in domestic food and housing, as well as private services, the single largest contributor to twelve-month inflation.

The CPI rose by 0.8% month-on-month in April, on the heels of 1% increases in both February and March. The April increase is attributable in large part to rises in the price of food and beverages, clothing, and petrol, although house prices contributed as well. Twelve-month inflation was 6.4% in April, virtually unchanged from January.

Underlying twelve-month inflation, measured in terms of core index 3, which excludes taxes, volatile food items, petrol, public services, and real mortgage costs, measured 5.9% in April, up from 5.7% in January. Statistics Iceland has published a new core index (core index 4) which excludes the effects of changes in market prices of housing as well as the items excluded in core index 3. Core inflation 4 measured 5.6% in April, as opposed to 4.8% in January. In the past year, core inflation has risen the most in terms of core index 4, or by 4 percentage points.

Broad-based inflationary pressures

Twelve-month inflation has remained above 5% since summer 2011. The consequences of last year's hefty pay hikes have emerged in across-the-board increases in the price of domestic goods and services. Private services have risen in price by 6.7% in the past twelve months, and public services by 11%. These two items account for

1. Strong base effects caused headline inflation to rise more than it would otherwise in January 2012, as the broadcasting fee, which was excluded from the CPI a year earlier, lowered the index by 0.4 percentage points until January.

almost 2½ percentage points of the 6.4% headline inflation figure. Price increases have surfaced in nearly all service subcomponents. Domestic food and beverage prices have also risen sharply in the recent term.

The króna has depreciated by almost 3% in trade-weighted terms since the beginning of the year, aggravating inflationary pressures. In addition, average global oil prices rose by 7½% between January and April and domestic petrol prices by 10.3% over the same period, even though part of the oil price increase has reversed in recent weeks. Other inflationary effects of the currency depreciation emerged to a large extent in the April CPI measurement.

The rise in house prices has slowed down year-to-date, following strong increases in 2011. As of April, prices were up 7.4% year-on-year, with the rise concentrated in condominium housing in the greater Reykjavík area more than housing in regional Iceland. The housing component as a whole, which includes paid rent and maintenance, had little or no impact on inflation in Q1; in fact, the effect has not been this small since Q3/2010.

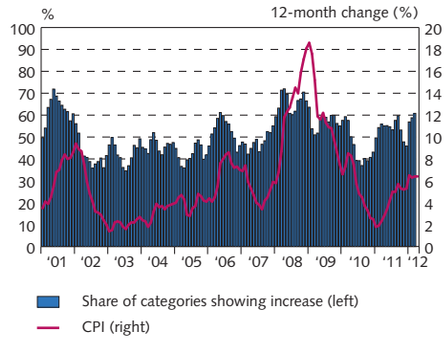
Rising inflation expectations

A sustainable decline in inflation depends largely on developments in inflation expectations and the credibility of the inflation target in the eyes of businesses and households. Furthermore, there seems to be a strong link between inflation expectations, on the one hand, and economic activity and actual inflation at any given time, on the other hand.

Inflation expectations based on the spread between indexed and nominal bond yields appear to have increased since the February *Monetary Bulletin*. By this criterion, called the breakeven inflation rate, inflation expectations one and five years ahead are 6.4% and 5½%, respectively, on average. Both of these figures are around ½ a percentage point higher than in early February. Expectations of average inflation over the next five years have risen even more sharply year-to-date, or by just over 1 percentage point. Five-year inflation expectations five years ahead (expectations for 2017-2022) measure 4.6% on average, which is broadly unchanged since February and somewhat higher than at the beginning of the year. All of these measures therefore indicate that inflation expectations have been on the rise in 2012. It is not impossible, however, that the rise in the breakeven inflation rate stems to some extent from the rise in the inflation risk premium due to increased uncertainty about inflation, including uncertainty about developments in the exchange rate during capital account liberalisation.

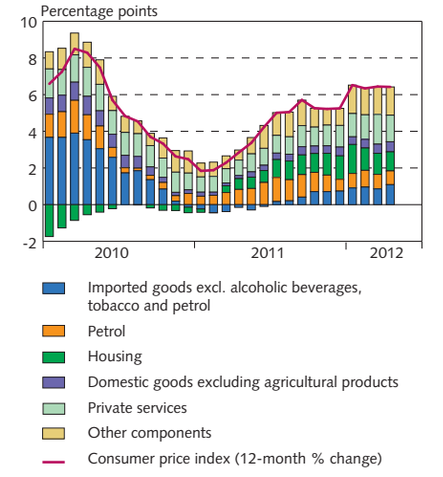
According to a quarterly Capacent Gallup survey carried out in March, household inflation expectations had risen again after tapering off in December. One-year expectations measured 6.5%, up ½ a percentage point from the December survey. Two-year household inflation expectations had risen by the same amount between the two surveys, to 6%. According to Capacent Gallup's survey of corporate inflation expectations, carried out in February and March, inflation expectations in the corporate sector were up as well, with one-year

Chart VIII-3
Distribution of price increases in the CPI[1]
January 2001 - April 2012



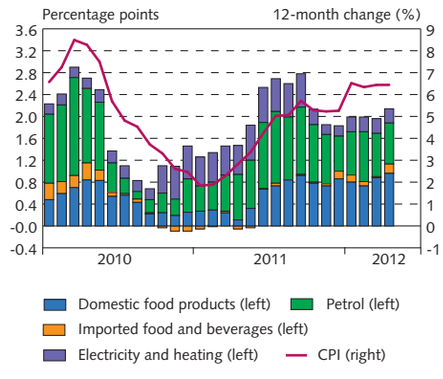
1. The percentage of goods categories that increase in price is a 3-month centred average.
Source: Statistics Iceland.

Chart VIII-4
Components of CPI inflation
Contribution to inflation January 2010 - April 2012



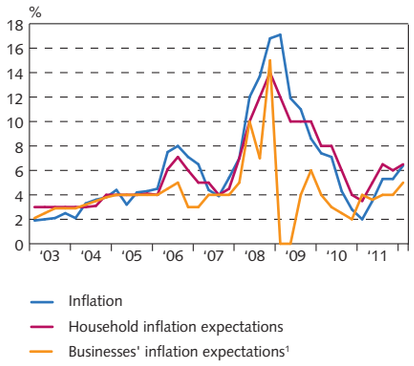
Source: Statistics Iceland.

Chart VIII-5
Contribution of food, petrol and energy costs to annual inflation
January 2010 - April 2012



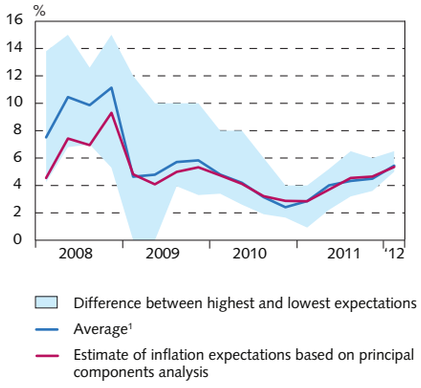
Source: Statistics Iceland.

Chart VIII-6
Inflation expectations of businesses and households one year ahead and inflation
Q1/2003 - Q1/2012



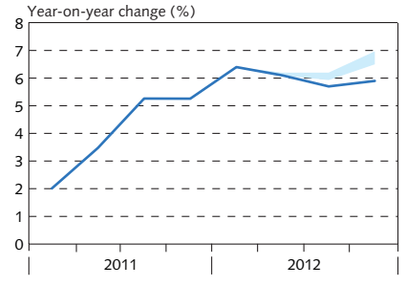
1. Businesses' inflation expectations were measured on an irregular basis before Q3/2006, so until then measurements are interpolated.
Sources: Capacent Gallup, Statistics Iceland, Central Bank of Iceland.

Chart VIII-7
Inflation expectations according to various measurements
Q1/2008 - Q1/2012



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

Chart VIII-8
Inflation forecasts using different models1
Inflation Q1/2011 - Q4/2012



1. The Central Bank baseline forecast is based on the QMM model, while other forecasts are based on simple time-series models.
Sources: Statistics Iceland, Central Bank of Iceland.

expectations measuring 5%, a percentage point higher than in the December survey. Executives also expected inflation to measure 5% in two years' time – again, an increase of 1 percentage point from the survey conducted in October. When asked whether they expected the price of their products to rise or fall in the next six months, over half of executives responded that they would rise, as opposed to around 40% in the October survey. The Central Bank of Iceland has also begun conducting regular surveys of market agents' inflation expectations.[2] According to the median response in a survey carried out in early May, market participants expect annual inflation at 5½% after one year and about 5½% after two years. They also assume that inflation will measure 5.8% in Q4/2012. The results were similar further along the horizon, with market agents expecting inflation to average around 5% over the next five and ten years. The inflation expectations are somewhat higher than in the last survey in February.

Overall, inflation expectations have therefore inched upwards and are far above the inflation target, even for the very long term. A simple way to assess underlying developments in inflation expectations is to estimate the common trend of a number of measures of inflation expectations, both from surveys and from the bond market, by using principal components analysis. By this measure, inflation expectations were 5.3% in Q1/2012, after having risen by 0.7 percentage points quarter-on-quarter and by 2½ percentage points year-on-year.

Short-term inflation outlook has deteriorated

Inflation has been rather higher than expected in the recent term. It measured 6.4% in Q1/2012, 0.3 percentage points more than was forecast in February. The deviation is due primarily to unexpectedly large increases in the price of private services and petrol, as global oil prices rose far in excess of expectations in Q1. In addition, the króna has been weaker than forecast, even though it has recovered some of its value in May.

The short-term inflation outlook has deteriorated, and the outlook is for inflation to measure just over 6% in Q2 and remain above 5½% for the remainder of 2012. It is expected to average 6% for the year, nearly 1½ percentage points higher than in the last forecast. Simple statistical models indicate even more persistent inflation, however, suggesting that inflation will remain above 6% throughout the year. The worsening inflation outlook stems primarily from expectations of a weaker króna throughout the horizon than in the previous forecast, in addition to higher initial inflation and relatively less spare capacity in the economy. Moreover, the risk of second-round effects is increased when inflation remains high and inflation expectations are above the inflation target for a protracted period.

Gradual disinflation in coming years

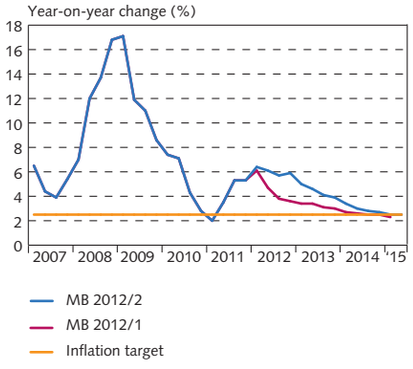
In view of the above, inflation is expected to subside relatively slowly during the forecast horizon. It is projected to rise temporarily in the

2. Surveys will be conducted of market participants' short- and long-term expectations concerning a number of economic variables. The first such survey was carried out in February 2012. For further information, see: http://www.sedlabanki.is/?PageID=1227.

latter half of this year and then taper off, averaging 4½% in 2013 and approaching the inflation target by the end of 2014. A weaker króna, less spare capacity in the economy, rising inflation expectations, and high inflation persistence contribute to a poorer long-term inflation outlook than in the February forecast.

All of these factors are subject to considerable uncertainty. The króna could appreciate more than anticipated in the forecast, as it has in recent weeks, and the slack in the economy could prove greater. In that instance, inflation could subside more rapidly than forecast. Conversely, the exchange rate could fall more during the forecast period, the recovery could be stronger, or the existing slack in the economy could prove less, in which case inflationary pressures would be underestimated. Developments in house prices are also highly uncertain, as is the degree to which recent wage and price increases might trigger a further wage-price spiral. Further discussion of major uncertainties in the baseline forecast can be found in Section I.

Chart VIII-9
Inflation - comparison with MB 2012/1



Sources: Statistics Iceland, Central Bank of Iceland.

Appendix 1

Baseline macroeconomic and inflation forecast 2012/2

Table 1 Macroeconomic forecast[1]

		Volume change on previous year (%) unless otherwise stated			
	B.kr.			*Forecast*	
GDP and its main components	*2011*	*2011*	*2012*	*2013*	*2014*
Private consumption	852.3	4.0 (4.5)	3.2 (2.2)	2.9 (2.3)	3.2 (3.2)
Public consumption	411.0	-0.6 (-0.1)	-0.6 (-1.2)	0.3 (0.3)	0.5 (0.2)
Gross fixed capital formation	229.7	13.4 (7.1)	12.4 (17.5)	5.7 (6.5)	12.0 (5.4)
Business investment	154.0	25.8 (16.0)	14.1 (19.3)	2.4 (6.5)	12.3 (3.9)
Residential investment	40.0	8.6 (11.0)	16.9 (19.9)	19.0 (15.9)	18.1 (15.4)
Public investment	35.7	-17.6 (-24.0)	-2.7 (4.0)	5.5 (-6.1)	1.5 (-1.8)
National expenditure	1,497.2	4.7 (4.4)	3.7 (3.4)	2.4 (2.4)	3.7 (2.7)
Exports of goods and services	951.6	3.2 (3.3)	3.8 (1.8)	3.2 (2.4)	2.3 (1.8)
Imports of goods and services	818.7	6.4 (6.3)	5.9 (3.4)	2.5 (2.2)	4.1 (1.6)
Contribution of net trade to growth	-	-1.1 (-1.1)	-0.8 (-0.6)	0.6 (0.3)	-0.8 (0.2)
Gross domestic product	1,630.2	3.1 (3.0)	2.6 (2.5)	2.8 (2.5)	2.7 (2.7)
Other key aggregates					
GDP at current prices (in b.kr.)		1,630 (1,656)	1,763 (1,788)	1,885 (1,883)	1,991 (1,981)
Trade account balance (% of GDP)		8.2 (8.6)	7.0 (8.3)	7.3 (8.2)	6.3 (8.2)
Current account balance (% of GDP)		-7.1 (-5.9)	-5.0 (-3.2)	-2.3 (0.5)	-3.3 (0.5)
Current account balance excl. DMBs (% of GDP)[2]		-0.6 (0.4)	0.2 (1.6)	0.2 (1.9)	-0.9 (1.9)
Current account balance excl. DMBs and Actavis (% of GDP)[2]		3.1 (3.4)	4.1 (3.1)	3.8 (3.3)	2.6 (3.3)
Terms of trade (change in average year-on-year)		-1.7 (-0.6)	-0.2 (1.2)	0.0 (-0.2)	-0.1 (-0.1)
Total gross fixed capital formation (% of GDP)		14.1 (14.0)	15.2 (16.0)	15.4 (16.5)	16.8 (17.0)
Business investment (% of GDP)		9.4 (9.5)	10.4 (11.1)	10.2 (11.4)	11.1 (11.6)
Output gap (% of potential output)		-2.1 (-2.0)	-1.0 (-1.2)	0.0 (-0.1)	0.5 (0.1)
Unit labour costs (change in average year-on-year)		5.6 (5.0)	5.0 (5.1)	2.3 (2.7)	2.5 (2.2)
Real disposable income (change in average year-on-year)		2.9 (2.7)	0.5 (0.8)	1.0 (1.5)	2.6 (3.3)
Unemployment (% of labour force)		7.4 (7.4)	6.3 (6.3)	5.9 (6.0)	4.9 (5.0)
EURISK exchange rate		161.0 (161.0)	165.4 (160.5)	166.4 (159.9)	166.4 (159.9)
Inflation (annual average, %)		4.0 (4.0)	6.0 (4.6)	4.4 (3.2)	3.0 (2.6)
Inflation excluding tax effects (annual average, %)		3.8 (3.8)	5.9 (4.4)	4.4 (3.2)	3.0 (2.6)

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2012/1. 2. DMBs undergoing winding-up proceedings.

Table 2 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	
2011:1	2.0 (2.0)	1.8 (1.8)	1.8 (1.8)
2011:2	3.5 (3.5)	3.3 (3.3)	10.9 (10.9)
2011:3	5.3 (5.3)	5.0 (5.0)	4.6 (4.6)
2011:4	5.3 (5.3)	5.0 (5.0)	3.9 (3.9)
2012:1	6.4 (6.1)	6.3 (6.0)	6.4 (5.2)
		Forecasted value	
2012:2	6.1 (4.7)	5.9 (4.6)	9.5 (5.2)
2012:3	5.7 (3.8)	5.6 (3.6)	3.2 (0.9)
2012:4	5.9 (3.6)	5.8 (3.5)	4.7 (3.3)
2013:1	5.0 (3.4)	5.0 (3.4)	2.9 (4.0)
2013:2	4.6 (3.4)	4.6 (3.4)	7.7 (5.5)
2013:3	4.1 (3.1)	4.1 (3.1)	1.4 (-0.5)
2013:4	3.9 (3.0)	3.9 (3.0)	3.8 (3.1)
2014:1	3.4 (2.7)	3.4 (2.7)	0.9 (3.0)
2014:2	3.0 (2.6)	3.0 (2.6)	6.2 (4.9)
2014:3	2.8 (2.5)	2.8 (2.5)	0.4 (-0.9)
2014:4	2.7 (2.5)	2.7 (2.5)	3.4 (2.9)
2015:1	2.5 (2.3)	2.5 (2.3)	0.1 (2.5)
2015:2	2.5	2.5	6.2

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2012/1.