

# MONETARY BULLETIN

### **Contents**

- 3 Statement of the Monetary Policy Committee
- 5 Economic and monetary developments and prospects
  The inflation outlook has deteriorated

#### Boxes:

- The Icelandic rental market 25
- Using high-frequency indicators to forecast private consumption  $\ \ 29$
- The outlook for Iceland's external debt and payment flows 46
- Appendix 1: Baseline macroeconomic and inflation forecast 2012/2 56
- 57 Monetary policy and instruments
- 61 Economic and monetary chronicle
- 71 Tables and charts
- 81 Boxes and appendices

The objective of the Central Bank of Iceland's monetary policy is to contribute to general economic well-being in Iceland. The Central Bank does so by promoting price stability, which is its main objective. In the joint declaration made by the Government of Iceland and Central Bank of Iceland on 27 March 2001, this is defined as aiming at an average rate of inflation, measured as the 12-month increase in the CPI, of as close to  $2\frac{1}{2}$ % as possible. Professional analysis and transparency are prerequisites for credible monetary policy. In publishing *Monetary Bulletin* four times a year, the Central Bank aims to fulfil these principles.

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

The framework of monetary policy and its implementation and instruments are described in the chapter entitled "Monetary policy and instruments", on pp. 57-59 of this edition of *Monetary Bulletin*.

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#### Icelandic letters:

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

#### Symbols:

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

# Statement of the Monetary Policy Committee 16 May 2012

The Monetary Policy Committee (MPC) of the Central Bank of Iceland has decided to raise the Bank's interest rates by 0.5 percentage points.

The macroeconomic forecast published in *Monetary Bulletin* today confirms that the recovery that began in late 2010 is continuing and is broadly based. Domestic demand is quite strong, and the labour and real estate markets are showing clear signs of recovery. Private sector financial conditions continue to improve.

The outlook is for slightly stronger output growth than in the Bank's February forecast. On the other hand, inflation has been higher than was forecast in February and the inflation outlook has deteriorated, in part because of a weaker króna. Other things being equal, the outlook is for inflation to remain above the inflation target longer than was forecast in February, particularly if the króna remains weak.

Moving forward, it will be necessary to continue withdrawing the current degree of monetary accommodation as the recovery progresses further and the margin of spare capacity diminishes. The degree to which such normalisation takes place through higher nominal Central Bank rates will depend on future inflation developments. If inflation does not subside in the next few months, other things being equal, it will be necessary to raise nominal interest rates further in order to ensure that inflation returns to target.

### Economic and monetary developments and prospects<sup>1</sup>

### 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  $2\frac{1}{2}-3$ % 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  $2\frac{1}{2}$ % 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

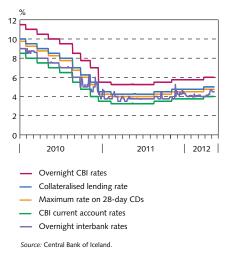
#### Central Bank interest rates raised in March

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.

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

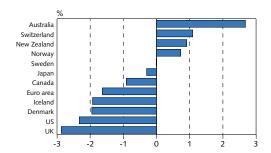
In spite of the rate hike in March, the Central Bank's real interest rate has fallen slightly, with inflation and inflation expectations rising by more than the nominal rate hike. Based on various measures of inflation and inflation expectations, the Bank's real interest rate is now about -1.2% on average, 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.

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



<sup>1.</sup> The analysis presented in this Monetary Bulletin is based on data available in early May.

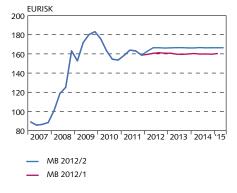
Chart I-2
Real interest rates in various industrial countries
Effective central bank interest rates less annual inflation<sup>1</sup>



For Iceland, the rate is based on average interest rates on deposits and the maximum bid rate for 28-day CDs.

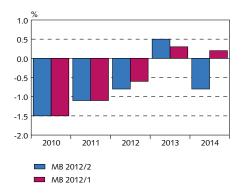
Sources: Macrobond, Central Bank of Iceland

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 tradeweighted 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

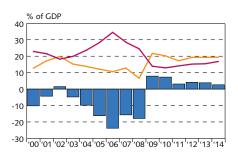
The current account surplus will be somewhat smaller during the forecast horizon than was forecast in February. The smaller surplus will stem from poorer terms of trade in the early part of the forecast period, but in 2014 it is expected to decline primarily because the investment rate will rise more 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 131/2%, 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

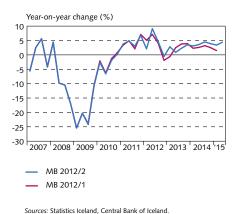
Chart I-5
Current account 2000-2014<sup>1</sup>



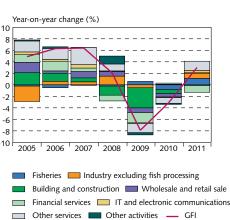
- Current account balance excl. DMBs in winding-up proceedings and Actavis
- Investment
   Gross national saving excl. DMBs in winding-up proceedings and Actavis
- Central Bank baseline forecast 2012-2014.
   Sources: Statistics Iceland, Central Bank of Iceland.

Chart I-6
Domestic demand - comparison

with MB 2012/1

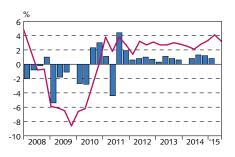


Mynd I-7
Developments in gross factor income and sectoral contribution<sup>1</sup>



 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.

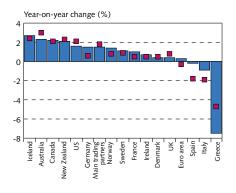
Chart I-8
GDP growth
Q1/2008 - Q2/2015



Change between quarters (seasonally adjusted)
 Change from same quarter a year earlier

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

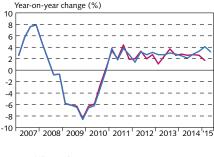


Q4/2011

IMF forecast for 2012

Sources: Eurostat, IMF, OECD, Statistics Iceland.

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



MB 2012/2MB 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  $2\frac{1}{2}$ % 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  $\frac{1}{2}$ % between quarters in 2012. Annual GDP growth is expected to measure about  $\frac{1}{2}$ % in Q1, just over 3% in Q2, and roughly  $\frac{2}{2}$ % 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 21/2-3% 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, yearend 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.<sup>2</sup> 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.

## 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.

#### Economy approaching full capacity utilisation by early 2014

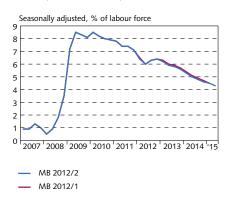
The assessment of the current slack in the economy has changed little since February. Output is estimated to have been about 2% below capacity in 2011 and about 1% below it this year, somewhat less slack than was assumed in February. The economy is projected to approach full capacity utilisation by the 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-11 Seasonally adjusted GDP Q1/2006 - Q2/2015<sup>1</sup>



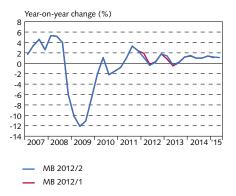
Central Bank baseline forecast Q1/2012 - Q2/2015.
 Sources: Statistics Iceland, Central Bank of Iceland.

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



Sources: Directorate of Labour, Central Bank of Iceland

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

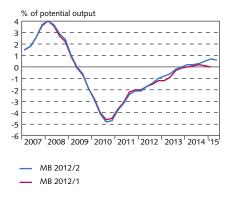


Sources: Statistics Iceland, Central Bank of Iceland

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.

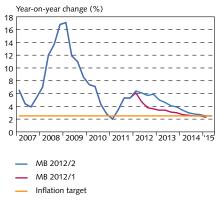
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Chart I-14 Output gap - comparison with MB 2012/1



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  $2\frac{1}{2}$ % 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.<sup>3</sup> 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.

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 ...

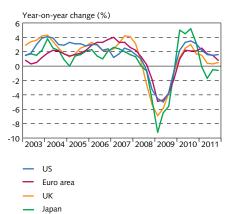
Iceland's major trading partners, particularly those in the euro area, saw a marked contraction in output growth in Q4/2011. In the US, the UK, Japan, and Norway, however, growth was broadly unchanged from previous quarters, and even slightly stronger. In general, the global GDP growth outlook has improved 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. 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.

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



Source: Macrobond

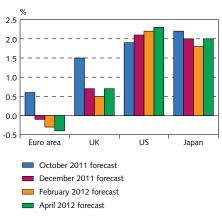
Chart II-2 Economic surprise index<sup>1</sup> Daily data 1 January 2010 - 11 May 2012



 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.

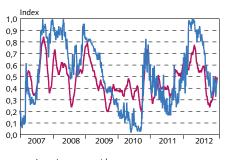
Chart II-3 GDP forecast for the year 2012



Source: Consensus Forecasts.

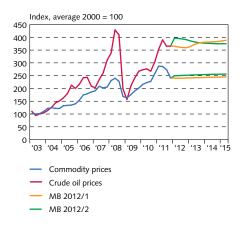
Because Brazil and China now weigh about 3% each in Iceland's trade basket, it was decided to include them among Iceland's main trading partners for the analysis of external conditions.

Chart II-4 Macro risk index<sup>1</sup> Daily data 2 January 2007 - 11 May 2012



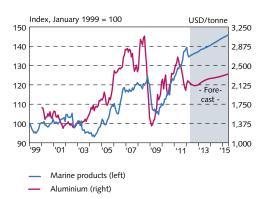
- Long-term macro risk
   Short-term macro risk (40-day moving average)
- 1. Zero means low risk aversion and one high risk aversion. Source: Macrobond.

Chart II-5 Commodity prices<sup>1</sup> Q1/2003 - Q2/2015



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.

#### 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.

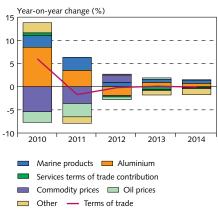
#### Continued decline in real exchange rate

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.

#### 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-7
Terms of trade and its main components 2010-2014<sup>1</sup>



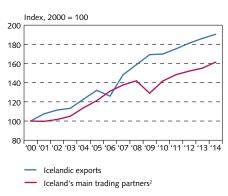
1. Central Bank baseline forecast 2012 - 2014. The contribution of the main sub-indices to year-on-year changes in terms of trade is determined by weighting the annual change in the sub-index concerned together with its weight in the import or export of goods and services. The item "other" is a residual.

Sources: Statistics Iceland, Central Bank of Iceland

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

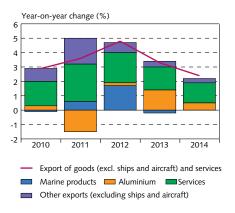


Chart II-9 World trade and Icelandic exports 2000-2014<sup>1</sup>



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

Chart II-10 Export development (excl. ships and aircraft) and its main components 2010-2014<sup>1</sup>



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 <sup>1</sup>			
	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 <sup>2</sup>	13.6 (13.7)	-7.5 (-7.1)	3.6 (3.6)	2.9 (5.0)
Fuel prices in USD <sup>3</sup>	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 <sup>4</sup>	2.8 (2.8)	2.2 (1.9)	1.9 (1.9)	2.0 (1.9)
GDP growth in main trading partners <sup>4</sup>	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)

<sup>1.</sup> 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  $2\frac{1}{2}-3\%$  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.

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

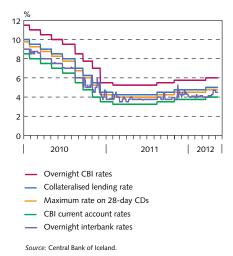
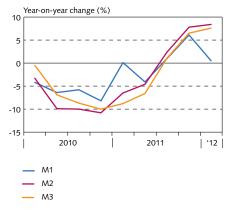


Chart III-2 Money supply Q1/2010 - Q1/2012



Source: Central Bank of Iceland

#### 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.

#### 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	r) -2.0	-0.2	-2.1
Market inflation expectations (one-year) <sup>2</sup>	-1.1	-	-
One-year breakeven inflation rate <sup>3</sup>	-1.8	-0.3	-3.8
Central Bank inflation forecast <sup>4</sup>	-0.6	-1.1	-1.2
Average	-1.2	-0.3	-1.9
Market inflation expectations (one-year) <sup>2</sup> One-year breakeven inflation rate <sup>3</sup> Central Bank inflation forecast <sup>4</sup>	-1.1 -1.8 -0.6	-1.1	-1.2

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

#### 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.

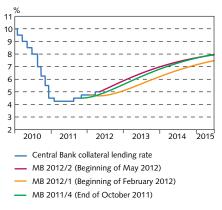
#### Minor change in long indexed rates

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<sup>1</sup>
Daily data 1 January 2010 - 30 June 2015



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

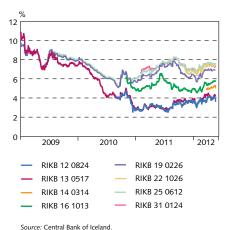
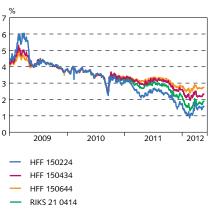
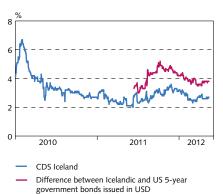


Chart III-5 Yields on indexed bonds Daily data 2 January 2009 - 11 May 2012



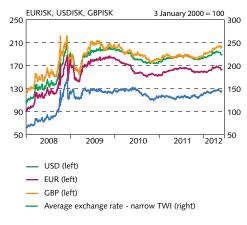
Source: Central Bank of Iceland.

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 foreigndenominated 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.<sup>1</sup>

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

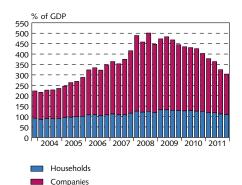
According to figures from Registers Iceland, nominal house prices rose by 8.6% year-on-year in Q1 and have risen by 11.3% from their year-end 2009 trough. Real prices rose by 2% year-on-year in Q1 and just over 3% from the end-2010 trough. The number of registered purchase agreements in the greater Reykjavík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

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



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

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



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.

# 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.<sup>2</sup> Thus

<sup>2.</sup> 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.<sup>3</sup>

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.

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.

#### Box III-1

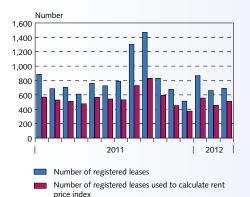
# The Icelandic rental market

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



<sup>3.</sup> 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.

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



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. 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.<sup>2</sup> Table 1 shows the price-torent 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.

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).

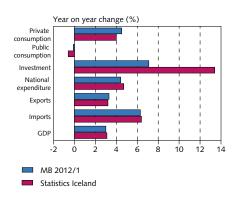
See, for example, http://www.investopedia.com/terms/p/price-to-rent-ratio. asp#axzz1peJ2rnr4.

### 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

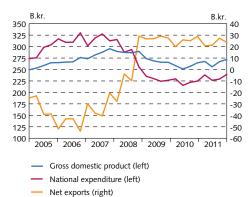
Source: Registers Iceland.

Chart IV-1 National accounts 2011 and Central Bank estimate



Sources: Statistics Iceland, Central Bank of Iceland.

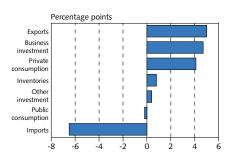
Chart IV-2
GDP, national expenditure and net exports
Q1/2005-Q4/2011
Seasonally adjusted at year-2005 prices¹



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<sup>1</sup>



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

#### 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

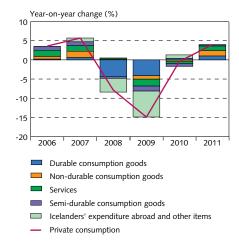
Household demand has been on the rise in recent quarters, and in 2011 private consumption was up 4% from the previous year. In Q4/2011, the seasonally adjusted increase was 1.6% from the previous quarter and 3.9% year-on-year. A number of factors supported this development in 2011, such as real wage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

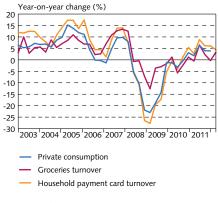
Leading indicators of private consumption in Q1/2012 suggest continued growth during the quarter. This applies to factors such as card turnover, consumer goods imports, new motor vehicle registrations, employment levels, real wages, and consumer expectations (see Box IV-1 for further discussion of indicators 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<sup>1</sup>



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

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.<sup>1</sup>

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

#### Box IV-1

Using high-frequency indicators to forecast private consumption

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.<sup>2</sup>

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

<sup>2.</sup> 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.

<sup>3.</sup> 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.

principal components in Chart 2). A simple regression gives the following equation:<sup>4</sup>

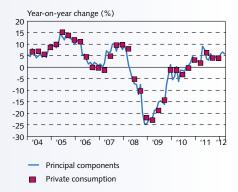
$$\ln(C_t) = 11.862 + 0.047PC_{1t} + 0.017PC_{2t}$$

$$_{(0.00027)} + 0.047PC_{1t} + 0.017PC_{2t}$$

 $C_t$  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.

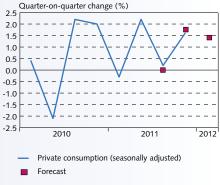
In order to test the forecasting quality of the model, it is possible to evaluate the model for a shorter period than the data series provide for and then forecast private consumption a few quarters ahead. Chart 2 shows how the equation performs in forecasting private consumption in Q3 and Q4/2011 by 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 1
Private consumption and principal components of high-frequency indicators



Sources: Statistics Iceland, Central Bank of Iceland.

Chart 2
Private consumption and high frequency indicators



Sources: Statistics Iceland, Central Bank of Iceland

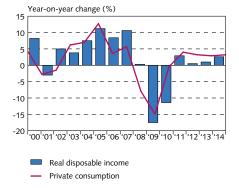
## Contribution of public expenditure to GDP growth negative in 2012

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-

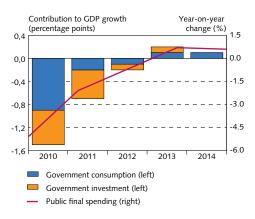
The regression also contains a dummy variable for Q4/2008 and a first-order autocorrelation component. Figures in parentheses show the standard deviations of the parameter estimates.

Chart IV-6 Private consumption and real disposable income 2000-2014<sup>1</sup>



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

Chart IV-7 Public consumption and investment 2010-2014<sup>1</sup>



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

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-onyear in real terms. Assumptions concerning investment in energyintensive 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. The survey results can be seen in Table IV-1. Offsetting

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

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)	2044	2042	Change between 2011-2012
Amounts in ISK millions	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%

#### Business investment grows during forecast horizon

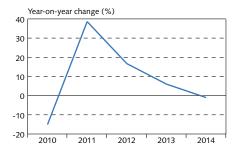
Business investment grew by 25.8% in 2011. To a large extent, this growth can be traced to projects related to energy-intensive industry and investment in ships and aircraft. The contribution of business investment to GDP growth was equal to that from private consumption, at about 2 percentage points. 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 121/2% after bottoming out at 41/2% in early 2009.

#### 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.

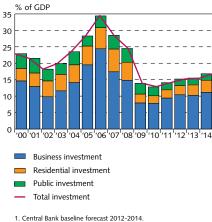
The construction industry is expected to recover somewhat in the next 2-3 years, after a deep slump. If announcements from real estate companies and construction firms are a reliable indication, new construction projects seem to be in the starting blocks. In addition,

Chart IV-8 Large scale investment 2010-2014<sup>1</sup>



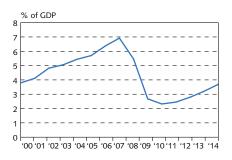
Central Bank baseline forecast 2012-2014.
 Sources: Statistics Iceland, Central Bank of Iceland

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



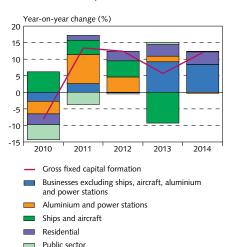
Central Bank baseline forecast 2012-2014.
 Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-10 Investment in residential housing 2000-2014<sup>1</sup>



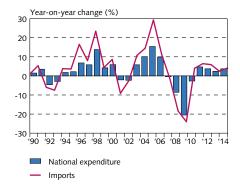
Central Bank baseline forecast 2012-2014.
 Sources: Statistics Iceland, Central Bank of Iceland

Chart IV-11 Gross fixed capital formation and contribution of its main components 2010-2014<sup>1</sup>



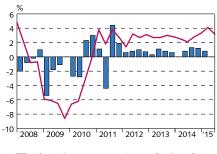
<sup>1.</sup> Central Bank baseline forecast 2012-2014. Sources: Statistics Iceland, Central Bank of Iceland

Chart IV-12 National expenditure and imports 1990-2014<sup>1</sup>



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

Chart IV-13 GDP growth Q1/2008 - Q2/2015



Change between quarters (seasonally adjusted)Change from same quarter a year earlier

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 Porrasalir, 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  $10\frac{1}{2}$ % 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 longterm 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.

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

#### Output growth driven by growth in private consumption and investment

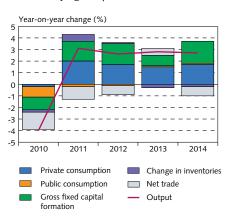
As is discussed above, most components of domestic demand are projected to continue recovering during the forecast horizon, after contracting in the wake of the financial crisis. Output growth is forecast at 2.6% in 2012, owing to increased private consumption and investment, with each contributing 1.7 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.

#### Output slack diminishing

From before the financial crisis until Q2/2010, GDP contracted by 121/2%. 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.

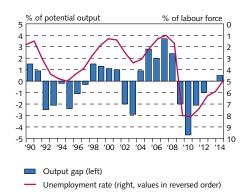
It should be borne in mind that estimating factor utilisation at any time is highly uncertain. The assessment becomes more accurate as time passes and more data become available. This uncertainty is greater than usual in the wake of profound changes in the economy like those resulting from the financial 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 11/2%. 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-14 GDP growth and contribution of underlying components 2010-20141



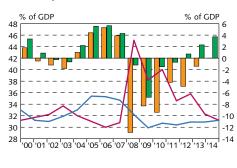
 Central Bank baseline forecast 2012-2014. Sources: Statistics Iceland, Central Bank of Iceland

Chart IV-15 Output gap and unemployment 1990-2014<sup>1</sup>



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

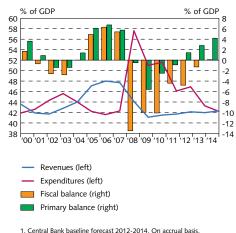
Chart V-1 Treasury finances 2000-2014<sup>1</sup>



Revenues (left)
 Expenditures (left)
 Fiscal balance (right)
 Primary balance (right)

1. Central Bank baseline forecast 2012-2014. On accrual basis.

Chart V-2
General government finances 2000-2014<sup>1</sup>



Sources: 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.

## 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.

#### 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.

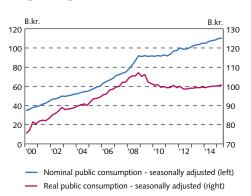
This is a poorer outlook than has previously been assumed in Central Bank forecasts. The Bank's November forecast, prepared shortly after the approval of the budget proposal, assumed a public sector surplus of 1% of GDP in 2014. According to their most recent forecasts, however, neither the IMF nor the 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 - Q2/20151



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

Chart V-4
Public investment
1995-20141



ources: 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.

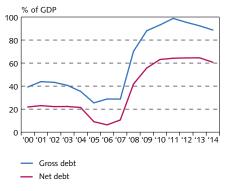
The last Central Bank forecast assumed that the Vaðlaheiðargöng tunnel project will go ahead. This project was not included with public investment, however, but was considered a private project, in accordance with statements made by the Government on its financing at the time. Since then, the assumptions 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.

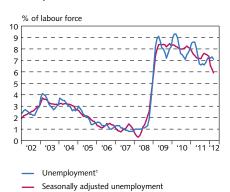
Chart V-5 General Government debt 2000-2014<sup>1</sup>



1. Central Bank baseline forecast 2012-2014.

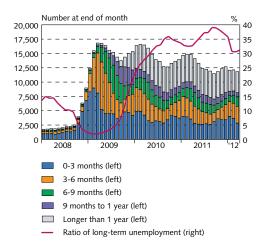
Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

#### Chart VI-1 Unemployment January 2002 - March 2012



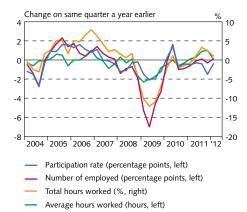
 Registered unemployment is the average number of individuals registered with employment agencies nationwide as a percentage of the estimated number of persons in the labour market in each month. Sources: Directorate of Labour, Central Bank of Iceland.

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.

### 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.

#### 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.<sup>1</sup> Net emigration totalled about 1.5% of the population in 2009 but declined to just

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
O1/2004 - Q1/2012

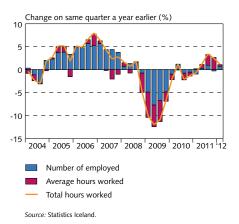
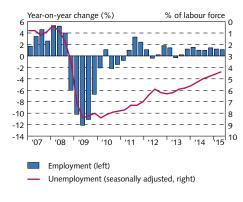
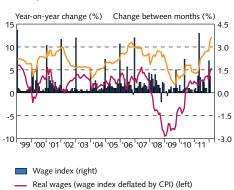


Chart VI-5 Employment and unemployment Q1/2007 - Q2/2015<sup>1</sup>



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

Chart VI-6 Nominal and real wages<sup>1</sup> January 1999 - March 2012

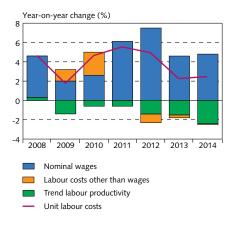


Real wages are the wage index deflated by the CPI.

Source: Statistics Iceland.

Wage index (left)

Chart VI-7 Unit labour costs and contributions of underlying components 2008-2014<sup>1</sup>



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  $2\frac{1}{2}$ -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.

#### 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.

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-1 Current account balance components<sup>1</sup> Q1/2003 - Q4/2011

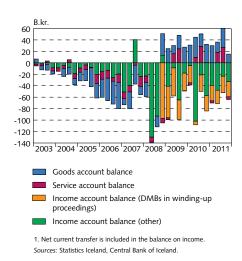
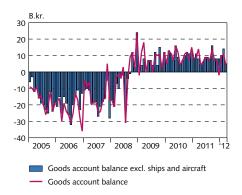
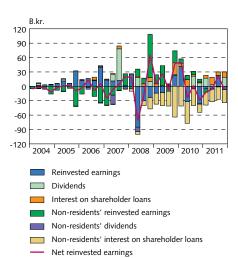


Chart VII-2 Goods account balance At fixed exchange rate, January 2005 - March 2012



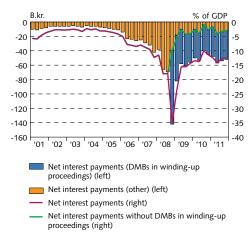
Sources: Statistics Iceland, Central Bank of Iceland

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.

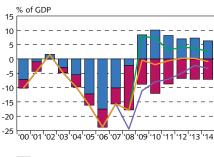
According to a paper by Central Bank staff, published in the Bank's Economic Affairs<sup>1</sup> series in February 2011, accrued interest on the debt of the international pharmaceutical company Actavis weighs heavily in the balance on income, as the company has substantial foreign liabilities. Because 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-

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<sup>1</sup>



- Trade balance
- Income account balance excl. DMBs in winding-up proceedigns
- Current account balance excl. DMBs in winding-up proceedings
- Current account balance excl. DMBs in winding-up proceedings and Actavis
- Measured current account balance

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 21/2% 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 1/2% 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*.<sup>1</sup> 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

<sup>1.</sup> 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.

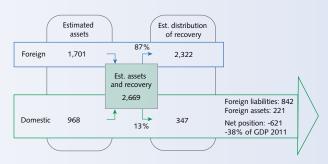
#### Net foreign debt grows once failed banks' estates are settled

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).

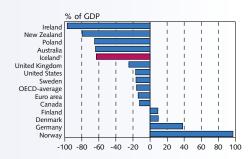
This large deviation from headline figures can be attributed to the fact that a large share of Iceland's assets and liabilities were those of the failed banks and that, according to standardised calculations, their liabilities far exceeded their assets, particularly after they collapsed. Had all of the 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



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
<ul> <li>underlying debt based on calculated settlement of DN in winding-up proceedings, but excl. Actavis</li> </ul>		-185 (-212)	-174 (-193)	-159 (-181)	-145
International investment	622 ( 504)	EGG ( EQA)	-551 (-540)	526 ( 507)	-493
position - excl. DMBs in winding-up	-633 (-594)	-200 (-284)	-551 (-540)	-526 (-507)	-493
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
<ul> <li>underlying position based on calculated settlement of in winding-up proceedings,</li> </ul>	DMBs				
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.

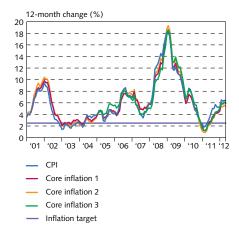
Table 2 Balance of payments (% of GDP)

	2011	2012	2013	2014
Current account balance <sup>1</sup>	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

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

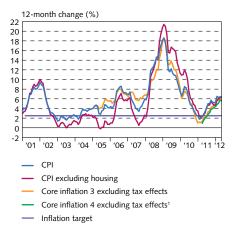
Source: Central Bank of Iceland.

#### Chart VIII-1 Inflation January 2001 - April 2012



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 rept

Sources: Statistics Iceland, 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.

# 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.<sup>1</sup> 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

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.

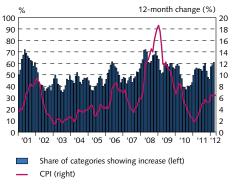
#### Rising inflation expectations

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 51/2%, respectively, on average. Both of these figures are around 1/2 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<sup>1</sup>
January 2001 - April 2012



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

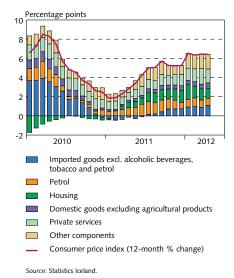
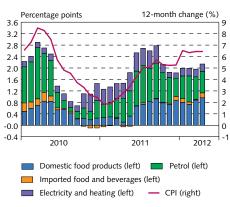
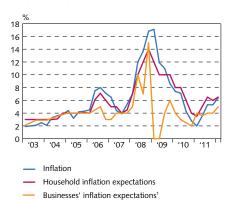


Chart VIII-5 Contribution of food, petrol and energy costs to annual inflation January 2010 - April 2012



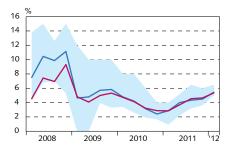
Source: Statistics Iceland.

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



<sup>1.</sup> 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.

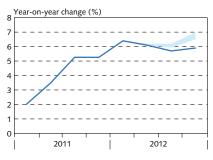
Chart VIII-7
Inflation expectations according to various measurements
Q1/2008 - Q1/2012



- Difference between highest and lowest expectations
   Average<sup>1</sup>
- Estimate of inflation expectations based on principal components analysis.

Sources: Capacent Gallup, Central Bank of Iceland

Chart VIII-8 Inflation forecasts using different models<sup>1</sup> Inflation Q1/2011 - Q4/2012



Difference between highest and lowest forecastMB 2012/2

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.<sup>2</sup> 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  $2\frac{1}{2}$  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

Based on corporate, household, and bond market inflation expectations one year ahead and the Central Bank inflation forecast one year ahead.

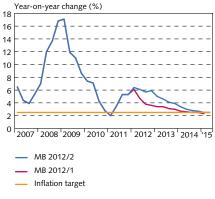
The Central Bank baseline forecast is based on the QMM model, while other forecasts are based on simple time-series models.
 Sources: Statistics Iceland, Central Bank of Iceland.

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  $4\frac{1}{2}\%$  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<sup>1</sup>

Table 1 Macroeconomic forecast		V-1			-4-4- 4
	B.kr.	Volume change on <sub>l</sub>	previous year (%) i	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) <sup>2</sup>		-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) <sup>2</sup>		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)

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

#### Table 2 Inflation forecast (%)<sup>1</sup>

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

<sup>1.</sup> Figures in parentheses are from the forecast in Monetary Bulletin 2012/1.

### Monetary policy and instruments

#### The objective and implementation of monetary policy

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

- The Central Bank aims for an annual rate of inflation, measured as the twelve-month increase in the CPI, which in general will be as close as possible to  $2\frac{1}{2}$ %.
- If inflation deviates by more than 1½ percentage points from the target, the Central Bank shall be obliged to submit a report to the Government explaining the reason for the deviation, how it intends to respond, and when it expects the inflation target to be reached again. This report shall be made public.
- The Central Bank shall publish inflation forecasts, projecting inflation three years into the future. Forecasts shall be published in the Bank's *Monetary Bulletin*, which shall also contain the Bank's assessment of the main uncertainties pertaining to the inflation forecast. The Bank shall also publish its assessment of the current economic situation and outlook.

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

#### Main monetary policy instruments

In particular, the Central Bank implements its monetary policy by managing money market interest rates, primarily by determining the interest rate for its collateralised loan agreements with financial institutions, which then affects other interest rates. Yields in the money market also have a strong impact on currency flows and thereby on the exchange rate, and in the long run on domestic demand. Transactions between financial institutions and the Central Bank are subject to the Rules on Central Bank of Iceland Facilities for Financial Undertakings, no. 553 of 26 June 2009.

#### Fixed trading instruments

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

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

financial institutions with access to liquidity so as to ensure that they fulfil reserve requirements and have a positive current account balance at the end of the day. Overnight loans are granted against collateral in securities. Overnight interest rates form the ceiling for overnight rates in the interbank market for krónur.

#### Regular facilities

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

- Collateralised loans: Collateralised loans have a maturity of seven days or less. Financial institutions must provide collateral that the Bank deems eligible for Central Bank facilities.
- Certificates of deposit: Certificates of deposit are issued with a maturity of seven days or less and are sold by the Central Bank to financial institutions.

In its auctions, the Central Bank may decide to keep interest rates and prices fixed or give financial institutions the option of bidding on either or both. The Bank may reject all bids or a portion of them.

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

#### Other facilities

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

#### Reserve requirements

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

#### Intervention in the foreign exchange market

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

#### Overview of Central Bank interest rates 16 May 2012

		Change		Rate
Traditional instruments	Current rate (%)	(percentage points)	Last interest rate decision	one year ago (%)
Current accounts	4.50	0.50	21 March 2012	4.00
Overnight loans	6.50	0.50	21 March 2012	7.00
Required reserves	4.50	0.50	21 March 2012	4.00
Collateralised loans	5.50	0.50	21 March 2012	5.50
Certificates of deposit, 28 days	5.25	0.50	21 March 2012	5.25

#### Central Bank of Iceland interest rate decisions

	Central	Bank key interest rates, %	51
Interest rate		Financial institutions' current	Maximum
Interest rate decision date	Collateralised lending rate	account rates	rate on 28-day CDs
16 May 2012	5.50 (0.50)	4.50 (0.50)	5.25 (0.50)
21 March 2012	5.00 (0.25)	4.00 (0.25)	4.75 (0.25)
8 February 2012	4.75 (0.00)	3.75 (0.00)	4.50 (0.00)
7 December 2011	4.75 (0.00)	3.75 (0.00)	4.50 (0.00)
2 November 2011	4.75 (0.25)	3.75 (0.25)	4.50 (0.25)
21 September 2011 17 August 2011	4.50 (0.00) 4.50 (0.25)	3.50 (0.00) 3.50 (0.25)	4.25 (0.00) 4.25 (0.25)
15 June 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
20 April 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
16 March 2011	4.25 (0.00)	3.25 (0.00)	4.00 (0.00)
2 February 2011	4.25 (-0.25)	3.25 (-0.25)	4.00 (-0.25)
8 December 2010	4.50 (-1.00)	3.50 (-0.50)	4.25 (-1.00)
3 November 2010	5.50 (-0.75)	4.00 (-0.75)	5.25 (-0.75)
22 September 2010	6.25 (-0.75)	4.75 (-0.75)	6.00 (-0.75)
18 August 2010	7.00 (-1.00)	5.50 (-1.00)	6.75 (-1.00)
23 June 2010	8.00 (-0.50)	6.50 (-0.50)	7.75 (-0.50)
5 May 2010 17 March 2010	8.50 (-0.50) 9.00 (-0.50)	7.00 (-0.50)	8.25 (-0.50)
27 January 2010	9.50 (-0.50)	7.50 (-0.50) 8.00 (-0.50)	8.75 (-0.50) 9.25 (-0.50)
10 December 2009	10.00 (-1.00)	8.50 (-0.50)	9.75 (-0.25)
5 November 2009	11.00 (-1.00)	9.00 (-0.50)	10.00
24 September 2009	12.00 (0.00)	9.50 (0.00)	
13 August 2009	12.00 (0.00)	9.50 (0.00)	
2 July 2009	12.00 (0.00)	9.50 (0.00)	
4 June 2009	12.00 (-1.00)	9.50 (0.00)	
7 May 2009	13.00 (-2.50)	9.50 (-3.00)	
8 April 2009	15.50 (-1.50)	12.50 (-1.50)	
19 March 2009	17.00 (-1.00)	14.00 (-1.00)	
29 January 2009	18.00 (0.00)	15.00 (0.00)	
17 December 2008	18.00 (0.00)	15.00 (-2.50)	
6 November 2008 28 October 2008	18.00 (0.00) 18.00 (6.00)	17.50 (0.00)	
15 October 2008	12.00 (8.00)	17.50 (6.00) 11.50 (-3.50)	
11 September 2008	15.50 (0.00)	15.00 (0.00)	
3 July 2008	15.50 (0.00)	15.00 (0.00)	
22 May 2008	15.50 (0.00)	15.00 (0.00)	
10 April 2008	15.50 (0.50)	15.00 (0.50)	
25 March 2008	15.00 (1.25)	14.50 (1.25)	

<sup>1.</sup> Change from last decision in parentheses.

### Economic and monetary chronicle

#### October 2011

On 4 October, the Financial Supervisory Authority announced that it had granted Íslandsbanki hf. a licence to issue covered bonds. On 5 December, Arion Bank hf. received the same type of licence.

On 11 October, an agreement was reached at a meeting of coastal nations concerning blue whiting fishing in 2012. The total allowable catch will be 391,000 tonnes, a considerable increase year-on-year, and the Icelandic quota will be 63,477 tonnes.

On 14 October, the relevant coastal nations concluded an agreement on fishing from the Norwegian summer-spawning herring stock in 2012. The total allowable catch will be 833,000 tonnes, and the Icelandic quota will be 123,000 tonnes.

On 20 October, Parliament passed Act no. 146/2011. This Act amends Chapter XII of the Act on Financial Undertakings, no. 161/2002, so as to legalise a special venue provision concerning rescission cases involving Icelandic financial institutions undergoing winding-up proceedings, and to extend the deadline for initiation of rescission cases involving financial institutions.

On 20 October, the Financial Supervisory Authority announced that it had revoked Saga Investment Bank hf.'s licence to operate as a credit institution effective 3 October, as the company did not meet the statutory capital requirements.

On 28 October, the Supreme Court handed down judgments in 11 cases that had been appealed at the district court level. The cases centred on whether specified claims against the old banks should be considered deposits and whether they should be considered priority claims with reference to the Emergency Act, no. 125/2008. The priority of deposit claims was deemed to stand. On that occasion, the Prime Minister's Office published a statement to the effect that the provisions of the Emergency Act giving priority to deposit claims against the old banks were deemed valid by the Court.

#### November 2011

On 1 November, it was announced that MP Bank had purchased Júpiter rekstrarfélag hf. Júpiter specialises in asset management. It operates four mutual funds and one institutional investment fund.

On 2 November, the Monetary Policy Committee of the Central Bank of Iceland decided to raise the Bank's interest rates by 0.25 percentage points. Interest rates were raised to the following amounts: interest on deposit institutions' current accounts, to 3.75%; the maximum rate on 28-day certificates of deposit (CDs), to 4.5%; seven-day collateralised loans, to 4.75%; and overnight loans, to 5.75%.

On 7 November, the Ministry of Fisheries announced the Minister's decision to raise the total allowable catch of Icelandic summer-spawning herring by 40,000 tonnes for the 2011/2012 fishing year.

On 10 November, the boards of Auður Capital hf. and Tindar verðbréf hf. agreed to merge the two firms' operations under the name Auður Capital. Tindar verðbréf had been licensed by the Financial Supervisory Authority to operate as a securities undertaking and to offer its customers securities brokerage and corporate finance services, whereas Auður Capital had not offered securities brokerage services prior to the merger.

On 11 November, the Minister of Finance signed an agreement with the municipality of Reykjanesbær concerning the State's purchase of land and energy resources owned by Reykjanesbær, subject to Parliamentary approval. The acquisition was authorised in the budgetary supplement on 17 November.

On 15 and 16 November, rating agency Moody's Investors Service published a statement on Iceland's sovereign credit ratings. The ratings were kept unchanged at Baa3 for long-term obligations and P-3 for short-term obligations.

On 17 November, the supplementary budget for 2011 was approved by Parliament. Estimated revenues rose by 8 b.kr. and expenditure authorisations by 17.4 b.kr., due primarily to transfers and increased expenses for Government operations, whereas interest expense declined due to falling interest rates. The budget supplement also authorised the sale of the Government's holding in Byr hf.

On 18 November, the Central Bank of Iceland announced a new step in capital account liberalisation under the title "Investment Programme". The Investment Programme is an element in the Bank's capital account liberalisation strategy of 25 March 2011. It authorises investors interested in investing in Iceland with foreign currency to purchase Icelandic krónur for a portion of their foreign currency via Central Bank auctions. The investor concerned must purchase at least the same amount of krónur through a conventional transaction with a financial institution, and the investment is subject to a long-term commitment period.

On 23 November, rating agency Standard & Poor's affirmed Iceland's sovereign credit rating of BBB-/A-3 for long- and short-term obligations in foreign and local currency. The outlook on the rating was changed from negative to stable.

On 25 November, it was announced that the Government had sold its holding in Byr hf. to Íslandsbanki with the consent of the Financial Supervisory Authority, the Competition Authority, and the EFTA Surveillance Authority. The purchase price was 740 m.kr. for an 11.8% stake.

#### December 2011

On 7 December, the National Budget for 2012 was approved by Parliament. Total revenues according to the 2012 budget are estimated at 523 b.kr., an increase of 9% over the 2011 budget supplement; total expenditures are estimated at 544 b.kr., an increase of 3%; and the deficit is estimated at 35 b.kr., as opposed to 57 b.kr. according to the 2011 budget supplement.

On 7 December, the Central Bank of Iceland Monetary Policy Committee decided to hold the Bank's interest rates unchanged. The current account rate therefore remained 3.75%, the maximum rate on 28-day certificates of deposit (CDs) was 4.5%, the seven-day collateralised lending rate was 4.75%, and the overnight lending rate was 5.75%.

On 14 December, the EFTA Court confirmed that capital controls like those in effect in Iceland are in compliance with the EEA Agreement. The ruling was a guideline opinion requested by the District Court of Reykjavík in connection with a case then under consideration by the Court.

On 14 December, the EFTA Surveillance Authority announced that it had been decided to refer the so-called Icesave case concerning Iceland's alleged violation of the EU Deposit Insurance Directive to the EFTA Court.

On 17 December, Parliament passed Act no. 156/2011 Amending the Mandatory Insurance of Pension Rights and on Activities of Pension Funds. New provisions include these: a) extending by one year the pension funds' authorisation to maintain a difference of up to 15% between asset items and future pension obligations without amendment to the Articles of Association; b) requiring pension funds to pay into a vocational re-education fund; c) imposing a tax of 0.0814% on pension fund assets for supplemental housing benefits in 2011-2012; and d) postponing the implementation of a prohibition on simultaneous participation in numerous pension fund boards.

On 17 December, Parliament passed Act no. 164/2011, which sets forth various fiscal measures. It was decided, among other things, to reduce the payroll tax by 0.91% of the tax base beginning in 2012, to raise the share of the childbirth benefits fund from 1.08% to 1.28% of the base payroll tax, and raise payments to the Wage Guarantee Fund by 0.05% of the same base. The personal income tax deduction was increased by 5.2%, the threshold between tax brackets #1 and #2 was increased by 15%, and the threshold between tax brackets #2 and #3 was increased by 8.4%. The national tax percentage did not change, but the average local tax rate and the tax withholding percentage rose by 0.03% of the tax base. Parish fees rose by 0.5%, the wealth tax levy was extended by two years, and the deduction from the tax base for premiums to acquire supplemental pension rights was reduced from 4% to 2% of income for the period 2012-2014. In addition, the fuel tax, the alcoholic beverage tax, and the carbon tax were increased. The imposition of a special tax on financial institutions was extended through 2013, as were various other tax provisions related to financial shocks.

On 17 December, Parliament passed the Financial Administration Tax Act, no. 165/2011. The Act provides for a tax on financial institutions and entities engaged in insurance operations. The tax base for the tax will be these entities' total wage and salary payments, and the tax rate was set at 5.45%. The Act is an element in special revenue generation

measures in the 2012 National Budget, and revenues deriving from the new tax are estimated at 2.25 b.kr. in 2012. Concurrent with this, a special 6% income tax was levied on these companies' profits in excess of 1 b.kr.

On 17 December, Parliament passed Act no. 175/2011 Amending the Act on Landsvirkjun, no. 42/1983, the Act on the Establishment of the Partnership Orkuveita Reykjavíkur, no. 139/2001, the Electricity Act, no. 65/2003, and Act no. 19/2011 Amending the Electricity Act, no. 65/2003, with subsequent amendments. The amendment to the Act on Landsvirkjun is intended to eliminate all uncertainty about which financial obligations shall enjoy owner guarantees. A comparable amendment was made to the Act on the Establishment of the Partnership Orkuveita Reykjavíkur. In addition, Article 8 of the Electricity Act was amended so that, instead of stipulating that firms engaged in electricity transmission shall be directly owned by the Icelandic Government and/or Icelandic municipalities, they shall be majority-owned by them and/or firms owned by them.

On 17 December, Parliament passed Act no. 178/2011, amending various laws concerning social security. Among other provisions, social security benefits were increased by 3.5% starting in 2012, and the benefit period for those becoming unemployed after the end of February 2008 was extended by one year, until end-2012.

On 17 December, Parliament extended by one year the main provisions of Act no. 107/2009 on measures to assist individuals, households, and businesses due to extraordinary circumstances in the financial market. These provisions are now valid until year-end 2012.

On 21 December, the Ministry of Finance announced the key figures for tax withholding in 2012. The average local tax rate will be 14.44%, an increase of 0.03% year-on-year. Tax withholding percentages increase by this amount (0.03%), to 37.34% for income up to 230,000 kr. per month; 40.24% for income between 230,000 and 704,000 kr. per month; and 46.24% on income above 704,000 kr. per month. The tax-free threshold will be 130,000 kr. per month, an increase of 5.2%; the lower threshold for tax bracket #2 rises by 9.8% to 230,000 kr.; and the lower threshold for tax bracket #3 rises by 3.5% to 704,000 kr.

On 31 December, the temporary provision in the Act on Unemployment Insurance authorising payment of partial benefits against reduced employment expired. A corresponding provision for self-employed individuals expired at the same time.

#### January 2012

On 3 January, it was announced that the Republic of Iceland and the Central Bank of Iceland had decided to draw the full amount of the Nordic loan facilities. The loans concerned were negotiated in connection with the Government-IMF Stand-By Arrangement programme that concluded in 2011. The decision to draw on the loans was made in view of the situation in the global credit markets. In all, the Nordic loan facilities totalled 1,775 million euros (just under 300 b.kr. at the

current exchange rate) and were to expire at the end of the year. The amount of the loan was 140 b.kr.

On 9 January, the Financial Supervisory Authority announced that it had imposed per diem fines on Stapi Pension Fund in the amount of 200,000 kr. per day due to shortcomings in the Authority's access to the fund's financial information.

On 10 January, the Financial Supervisory Authority approved the merger of Tindar verðbréf hf. and Auður Capital hf. under the name of the latter, on the basis of the Act on Financial Undertakings.

On 12 January, the Central Bank of Iceland offered to purchase euros in exchange for Icelandic krónur for long-term investment in the Icelandic economy, or in exchange for payment in Treasury bond series RIKS 30 0701. The Central Bank offered to purchase up to a maximum of 100 million euros in the two auctions combined. The objective of the measures was to sell Icelandic krónur for foreign currency to parties that have decided to invest in the Icelandic economy or in Icelandic Treasury bonds for at least five years. The deadline for submittal of bids was 15 February 2012.

On 20 January, the negotiating committees of the member organisations of the Icelandic Federation of Labour (ASÍ) and the Confederation of Icelandic Employers (SA) announced that the review committee had decided not to terminate the wage agreement signed on 5 May 2011, even though the commitment given by the Government in its statement at the time of the settlement had not been fulfilled. In the parties' opinion, other conditions considered during the review of the wage settlement had been met: that purchasing power must have grown in 2011, that prices must have been stable, and that the króna must have appreciated markedly.

On 23 January, it was announced that the board of directors of the Central Bank of Iceland Holding Company ehf. (ESI) had decided to drop claims against holders of guarantee capital in Sparisjóður Svarfdæla. The claims in question were loans granted by Saga Investment Bank to over 100 parties at the end of 2007 in connection with an increase in Sparisjóður Svarfdæla guarantee capital.

On 25 January, the Financial Supervisory Authority ruled that Íslensk verðbréf hf. was eligible to own a qualifying holding of up to 50% in T Plús hf., in accordance with the Act on Financial Undertakings.

On 26 January, Parliament passed Act no. 5/2012, authorising the Government to approve an increase in Iceland's International Monetary Fund (IMF) quota and confirm amendments to the IMF Articles of Agreement on Iceland's behalf. The Act authorises the Government to negotiate an increase in Iceland's IMF quota from SDR 117.6 million to SDR 321.8 million. The Central Bank of Iceland is to contribute the funds needed for the quota increase. The Government is also authorised, on behalf of Iceland, to approve the amendments to the IMF Articles of Agreement that concern the arrangements for the Executive Board and were approved by the Board of Governors of the Fund on 15 December 2010.

On 26 January, the Supreme Court ruled that the Icelandic Government was not liable to compensate the losses of those who owned shares in Landsbanki money market funds at the time the banks collapsed in 2008.

#### February 2012

On 1 February, Parliament passed Act no. 8/2012 Amending the Act on Public Limited Companies and the Act on Private Limited Companies (simplification of merger and division rules, etc.). The Act primarily incorporates into Icelandic law EU Directive 2009/109/EC, which amends four directives in the field of company law. The main purpose of the Directive is to reduce the administrative burden in limited liability companies, which are subject to a variety of information requirements. Those obligations are reduced under certain conditions as regards preparation and publication of documents and reports. The authorisation to utilise companies' websites, among other things, is expanded.

On 8 February, the Central Bank of Iceland Monetary Policy Committee decided to keep the Bank's interest rates unchanged. The overnight lending rate therefore remained 5.75%, the seven-day collateralised lending rate was 4.75%, the maximum rate on 28-day certificates of deposit (CDs) was 4.5%, and the current account rate was 3.75%.

On 9 February, the Central Bank announced that the swap rate for the Bank's foreign currency purchases in connection with the sale of RIKS 30 0701 Treasury bonds would be based on the auction price and the fixed price of the Treasury bond, which was 115.675833 kr. per bond unit including accrued interest and indexation (dirty price), assuming settlement on 17 February 2012 (yield 2.50%). The formula is as follows: Swap rate = auction price/(bond price/100).

On 9 February, the Financial Supervisory Authority approved the transfer of Saga Capital hf. Corporate Finance to MP Bank hf.

On 10 February, the Ministry of Finance announced that it had finalised an agreement with the Icelandic Pension Funds Association concerning the pension funds' share in the financing of special interest rebates as stipulated in the 3 December 2010 memorandum of understanding concluded by the Government, the financial institutions, and the pension funds.

On 15 February, an auction took place in connection with the removal of restrictions on movement of capital as set forth in the Central Bank's capital account liberalisation strategy, published on 25 March 2011. In all, 77 bids totalling 173.6 million euros were submitted, and bids in the amount of 141.3 million euros were accepted. All approved bids were accepted at the same price, which was set at 240 kr. per euro. Investors selling foreign currency according to the Treasury bond option received indexed RIKS 30 0701 bonds as payment. Bonds sold in the series had a total nominal value of 17.1 b.kr. As payment for foreign currency sold, investors participating in the Investment Programme received Icelandic krónur for long-term investment in the Icelandic

economy. Euros purchased in the auction totalled the equivalent of 14.2 b.kr.

On 15 February, the Supreme Court ruled that Frjálsi Investment Bank was prohibited from demanding increased interest, pursuant to Article 4 of the Act on Interest and Price Indexation, for interest periods that concluded prior to the date of the judgment in the same parties' case concerning the illegality of exchange rate-linked loans in Icelandic krónur (14 February 2011), subject to the existence of a receipt for full payment according to the loan agreement. Following the Court decision, the Competition Authority authorised financial institutions to work together to resolve the matter and recalculate comparable loans.

On 16 February, the Financial Supervisory Authority published a statement to the effect that the Supreme Court judgment of 15 February 2012 on recalculation of exchange rate-linked loans did not jeopardise financial stability.

On 17 February, international credit rating agency Fitch Ratings upgraded the Republic of Iceland's credit rating for long-term obligations in foreign currency from BB+ to BBB-. The rating for short-term obligations in foreign currency was also raised, from B to F3. The outlook remained stable.

#### March 2012

On 2 March, a mission from the International Monetary Fund (IMF) concluded its visit to Iceland. The mission's assessment was that the outlook was for a good economic recovery. For the medium term, the source of output growth would shift from domestic demand (investment in particular) to foreign demand (with increased exports). In spite of this, however, the mission was of the opinion that a number of hurdles of domestic and foreign origin remain.

On 5 March, the Minister of Economic Affairs appointed Dr. Katrín Ólafsdóttir to a position on the Central Bank of Iceland Monetary Policy Committee. Katrín replaced Anne Sibert on the Committee.

On 5 March, the District Court of Reykjavík handed down a decision in the case Saga Capital hf. vs. Financial Supervisory Authority. Saga Capital filed suit in an attempt to have the Court nullify the Financial Supervisory Authority's decision to revoke the company's licence to operate as a credit undertaking. The Court ruled in favour of the Financial Supervisory Authority; therefore, the Authority's decision stands unchanged.

On 6 March, the Central Bank of Iceland sold 12 million euros in the interbank foreign exchange market. There had been unusually large foreign exchange outflows in previous weeks, a situation that the Bank considered temporary. Exemptions from the Foreign Exchange Act granted by the Bank had entailed substantial purchases of foreign currency in the market. The sale was carried out in accordance with the Central Bank's policy of intervening in the foreign exchange market when necessary in order to mitigate exchange rate volatility.

On 7 March, the Ministry of Finance published preliminary figures on Treasury finances for 2011. According to these figures, collected revenues totalled 468 b.kr., an increase of 1½% year-on-year in nominal terms. Expenditures excluding final accounting items totalled 526 b.kr., a decrease of 1%. Expenditures net of revenues totalled 57 b.kr. by that measure, as opposed to 69 b.kr. in 2010.

On 13 March, Parliament passed Act no. 17/2012 amending the Foreign Exchange Act, no. 87/1992, with subsequent amendments. The Act entered into force the same day, implementing the following amendments: First, it rescinded the exemption for payments from a bankruptcy estate and payments of contractual claims in accordance with composition of creditors agreements (cf. Act no. 21/1991) in domestic currency when payment is disbursed from the payer's account with a financial institution in Iceland. The purpose of the amendments was to provide the Central Bank of Iceland with a prudential tool to prevent disbursements from domestic bankruptcy estates from disrupting the balance of payments or undermining the capital account liberalisation strategy. Second, the Act amended Article 13(j) of the Foreign Exchange Act. According to the amendment, it is no longer permissible to purchase foreign currency for the value of indexation on bond principal; furthermore, it is prohibited to purchase foreign currency for instalments of bond principal. Third, the amendment rescinded the exemption from the statutory prohibition against cross-border movement of foreign currency, which was previously enjoyed by the resolution committees and winding-up committees of the old banks.

On 13 March, the Competition Appeals Committee confirmed the Competition Authority's decision to authorise the merger of Íslandsbanki and Byr Savings Bank, with respect to the provisions of the Competition Act pertaining to firms in distress.

On 14 March, the Central Bank offered to purchase euros in exchange for Icelandic krónur for long-term investment in the Icelandic economy, or in exchange for payment in Treasury bond series RIKS 33 0321. The Bank also advertised for bids on the sale of Icelandic krónur for cash payment in foreign currency. The three auctions were an element in the removal of restrictions on movement of capital as set forth in the Bank's capital account liberalisation strategy of 25 March 2011, and in the Bank's Terms of foreign exchange transactions according to the Investment Programme for capital account liberalisation, dated 18 November 2011, with subsequent amendments. The deadline for submittal of bids was 28 March 2012.

On 15 March, it was announced that the Treasury of Iceland and the Central Bank of Iceland had partially prepaid loans from the International Monetary Fund (IMF) and the Nordic countries. The prepayments totalled SDR 289 million (55.6 b.kr.) to the IMF and 366 million euros (60.5 b.kr.) to the Nordic countries, and are about 20% of the loans taken from these parties. The transaction was an element in paying down short-term debt and reducing the expense associated with maintenance of the Central Bank's foreign exchange reserves.

On 19 March, the Financial Supervisory Authority approved the merger of Alfa verðbréf hf. and MP Bank hf. under the name of the latter, on the basis of the Act on Financial Undertakings.

On 21 March, the Monetary Policy Committee of the Central Bank of Iceland decided to raise the Bank's interest rates by 0.25 percentage points. The overnight lending rate was raised to 6.0%, the seven-day collateralised lending rate to 5.0%, the maximum rate on 28-day certificates of deposit (CDs) to 4.75%, and the current account rate to 4.0%.

On 22 March, the Financial Supervisory Authority approved the transfer of the operation of 10 mutual funds, three investment funds, and eight institutional investment funds from Landsvaki hf. to Landsbréf hf., effective 31 March.

On 28 March, the Central Bank of Iceland held auctions for the purchase of euros against payment in Icelandic krónur and for the purchase of Icelandic krónur against payment in foreign currency. In the euro purchase auction, 79 bids totalling 92.9 million euros were submitted, and bids in the amount of 22.5 million euros were accepted. All approved bids were accepted at the same price, which was set at 239 kr. per euro. Investors selling foreign currency according to the Treasury bond option received indexed RIKS 33 0321 bonds as payment. Bonds sold in the series had a total nominal value of 416.7 m.kr. As payment for foreign currency sold, investors participating in the Investment Programme received Icelandic krónur for long-term investment in the Icelandic economy. In the króna purchase auction, the Bank purchased euros for a total of 4.9 b.kr., with the minimum price set at 235 kr. per euro.

On 30 March, the Financial Supervisory Authority approved the merger of Íslandsbanki hf. and Kreditkort hf. Íslandsbanki hf. will take over all rights and responsibilities of Kreditkort hf., and the two companies will be merged under the name Íslandsbanki hf.

### Tables and charts

Tables and charts are generally based on statistical information available on 4 May 2012. A list of symbols is on p. 2.

	Α	Tables
72	Table 1	Main monthly indicators
74	Table 2	Historical economic indicators
	В	Charts
76	Chart 1	Consumer price inflation 1940-2011
76	Chart 2	Output growth 1945-2011
76	Chart 3	Growth of GDP, private consumption, and gross fixed capital formation 1980-2011
76	Chart 4	Private consumption, public consumption, and gross fixed capital formation 1980-2011
76	Chart 5	Economic growth Q1/1998 - Q4/2011
73	Chart 6	Components of economic growth Q1/1998 - Q4/2011
77	Chart 7	Gross national savings and fixed capital formation 1960-2011
77	Chart 8	Current account balance 1945-2011
77	Chart 9	Goods trade January 1996 - March 2012
77	Chart 10	Exports and imports of services Q1/1996 - Q4/2011
77	Chart 11	External debt and assets Q1/1998 - Q4/2011
77	Chart 12	Net external debt position 1980-2011
78	Chart 13	Real effective exchange rate of the Icelandic króna 1960-2011
78	Chart 14	General government revenues and expenditures 1978-2011
78	Chart 15	Treasury borrowing and credit budget balance 1990-2011
78	Chart 16	General government balance and debt 1980-2011
78	Chart 17	Household debt as percentage of disposable income 1980-2010
78	Chart 18	Real wages January 1990 - March 2012
79	Chart 19	Unemployment and labour participation January 1996 - March 2012
79	Chart 20	Short-term interest rates January 1997 - April 2012
79	Chart 21	Long-term interest rates January 1997 - April 2012
79	Chart 22	Real yield and broad money 1960-2011
79	Chart 23	M3, DMB lending, and base money January 1997 - March 2012
79	Chart 24	Deposit money bank lending by sector January 1998 - March 2012
80	Chart 25	Growth of credit system lending Q1/1994 - Q3/2008
80	Chart 26	Credit system domestic liabilities at year-end 1990-2007
20	Chart 27	Reserve assets and Central Rank net external position 01/1996 - 01/2012

Table 1 Main monthly indicators

over the previous           1         1         12           January         -0.3         6.6           February         1.1         7.3           March         0.6         8.5           April         0.2         8.3           August         0.0         3.7           October         0.0         3.7           October         0.0         3.7           December         0.0         3.7           August         0.1         2.5           March         1.0         2.3           April         0.9         3.4           June         0.5         4.2           June         0.9         3.4           June         0.5         4.2           July         0.1         5.0           August         0.3         5.0           September         0.6         5.7           October         0.0         5.7           October         0.3         5.0           September         0.0         5.7           October         0.0         5.7           October         0.0         5.7           Octo		% cn. m er	tective	Money market	narket	В	Bond market <sup>5</sup>			12-mont	12-month % change	
ary -0.3  uary -0.3  uary -0.3  uary -0.3  .0.5  .0.7  .0.7  .0.7  .0.7  .0.7  .0.7  .0.9  ary -0.9  ary -0.9  ary -0.9  ary -0.9  .0.9	snc	exchange rate <sup>1,2</sup>	ate 1,2	Central								DMB
any -0.3  uary 1.1  th 0.6  0.2  0.4  -0.3  -0.7  str 0.2  ember 0.0  any -0.9  any -0.9  uary 1.2  th 0.3  ember 0.1  any 0.6  any 0.6  ember 0.3  ember 0.3  any 0.9  on o		1 month	12 months	Bank col- Iateral Ioans <sup>3</sup>	3-month REIBOR⁴	RIKB 13 0517	RIKB 19 0226	HFF 150644	Base	X	DMB	foreign Iiabilities <sup>7</sup>
any -0.3  uary 1.1  th 0.6  0.2  0.4  -0.3  -0.7  sember 0.0  any 0.0  any -0.9  any -0.9  any -0.9  any -0.9  any -0.9  any 0.0										!	0	
any 1.1  ih 0.6  0.2  0.4  -0.3  -0.7  sember 0.0  ober 0.7  any 0.0  any -0.9  any -0.9  any -0.9  any 0.0	9.9	0.7	-8.8	9.5	8.3	7.3	7.8	3.9	-22.1	-0.1	-14.4	-52.7
sh 0.6  10.2  0.4  -0.3  -0.3  -0.3  -0.7  -0.7  -0.7  -0.7  -0.7  -0.7  -0.7  -0.7  -0.7  -0.8  any -0.9	7.3	1.2	-17.3	9.5	8.3	7.1	7.4	3.7	-19.2	-2.0	-14.6	-51.1
0.2  0.4  -0.3  -0.7  seruber  0.0  smber  0.1  smber  0.1  any  -0.9  -0.9  any  -0.9  -0.9  any  -0.9  -0	8.5	1.2	-15.1	9.0	8.0	6.3	7.1	3.8	-16.3	0.7	4.6	5.2
ast 0.4  -0.3  -0.7  -0.3  ember 0.0  on o	8.3	9.0	4.4	0.6	8.0	5.9	9.9	3.7	-41.5	-5.7	1.1	-5.9
-0.3 -0.7 -0.7 -0.7 -0.7 -0.7 -0.9 -0.9 -0.9 -0.9 -0.9 -0.9 -0.9 -0.9	7.5	3.5	6:1	8.5	7.5	5.1	6.3	3.6	-21.5	9.9-	-0.1	-6.2
-0.7 ember 0.2 ember 0.0 aber 0.7 amber 0.1 anther 0.3 any -0.9 any 1.2 th 0.8 0.8 0.9 0.7 ch 0.8 anther 0.8 anther 0.6 anther 0.6 anther 0.6 anther 0.0	5.7	2.8	7.2	8.0	7.1	4.2	0.9	3.4	-40.0	-8.5	-0.4	-17.9
anber 0.2  The subser 0.0  The subser 0.7  The subser 0.3  The 0.3  The 0.9  The 0.9	4.8	0.4	9.0	8.0	7.1	4.3	5.9	3.5	-50.7	-7.9	-1.3	-18.8
ember 0.0  smber 0.7  smber 0.7  any -0.9  any 1.2  th 1.0  th 0.8  0.9  0.9  0.1  st 0.3  ember 0.6  anber 0.6	4.5	2.0	12.7	7.0	6.1	4.0	5.3	2.9	-49.6	-8.0	-0.7	-21.7
ary 0.7  ary 0.3  ary 0.3  ary -0.9  uary 1.2  th 0.8  0.9  0.9  0.1  set 0.3  ember 0.6  amber 0.6	3.7	1.1	13.4	6.3	5.4	4.2	6.1	3.4	-55.2	-10.2	-3.0	-40.2
ary -0.9 ary -0.9 uary 1.2 th 0.8 0.8 0.9 0.5 0.1 sst 0.3 ember 0.6 ember 0.0	3.3	0.0	14.2	6.3	5.3	4.8	6.5	3.5	-38.1	-10.5	-2.7	-42.6
any -0.3  any -0.9  uary 1.2  th 0.8  0.8  0.9  0.9  0.1  st 0.3  ember 0.6  maker 0.3	2.6	0.5	15.5	5.5	4.8	3.7	5.6	3.4	-3.7	9.6-	6:0	-40.7
ary -0.9  uary 1.2  th 0.8  0.8  0.9  0.5  0.1  st 0.3  ember 0.6  more 0.0	2.5	-0.8	13.8	4.5	4.2	2.9	5.7	3.3	-19.4	9.6-	6:0	-33.3
eary -0.9  h 1.2  h 0.8  0.9  0.9  0.5  mber 0.3  mber 0.6												
1.2 h 1.0 h 1.0 0.8 0.9 0.5 0.1 st 0.3 mber 0.6 mber 0.0	1.8	-2.1	10.6	4.5	4.1	2.6	5.9	3.3	-2.8	-9.3	-5.6	-38.0
h 1.0 0.8 0.9 0.5 0.1 st 0.3 mber 0.6 mber 0.6	1.9	-1.6	7.5	4.3	4.0	3.3	6.3	3.2	16.4	-8.8	-5.0	-40.0
0.8 0.9 0.5 0.1 st 0.3 mber 0.6 mber 0.6	2.3	9.0-	9.6	4.3	4.0	3.1	6.2	3.1	-31.9	-8.2	-6.9	-46.4
0.9 0.1 st 0.3 mber 0.6 mber 0.0	2.8	-0.3	4.7	4.3	4.0	3.0	6.5	3.1	7.6	-7.7	-7.3	-40.2
0.5 0.1 mber 0.3 mber 0.6 mber 0.0	3.4	-1.1	0.1	4.3	4.0	3.0	7.4	3.3	-25.1	-7.0	-7.3	-39.2
o.1  wher 0.3  ber 0.3  mber 0.6	4.2	-0.6	-3.2	4.3	4.0	2.8	7.2	3.3	-17.8	-5.0	-6.8	-40.4
0.3 0.6 0.3	5.0	-0.4	-3.9	4.3	4.0	3.0	7.6	3.3	4.9	-2.0	-4.4	-37.1
0.6	5.0	8.0	-5.1	4.5	4.5	3.6	7.8	3.2	-14.8	0.0	-4.5	-38.9
0.3	5.7	1.5	-4.7	4.5	4.6	3.7	7.0	3.2	-1.0	5.5	-4.0	-19.5
0.0	5.3	1.2	-3.5	4.5	4.6	3.9	9.9	2.9	11.7	5.1	-3.0	-17.6
	5.2	-0.3	-4.3	4.8	4.8	3.7	6.1	2.8	-15.8	5.8	1.4-	-23.2
December 0.4 5.	5.3	-1.1	-4.6	4.8	4.8	3.8	6.2	2.7	-20.7	9.8	-1.2	-25.9
2012												
J anuary 0.3 6.	6.5	-1.2	-3.7	4.8	4.8	3.7	6.4	5.6	-5.6	9.5	-0.8	-27.9
February 1.0 6.	6.3	-1.9	-4.0	4.8	4.8	4.1	6.8	2.5	18.7	8.9	0.2	-23.6
March 1.0 6.	6.4	-2.0	-5.3	5.0	5.1	4.4	6.9	2.7	10.0	4.4	2.3	-16.8

1. Percentage changes between period averages. 2. Based on the official effective exchange rate basket (trade-weighted). A positive sign indicates appreciation of the Icelandic króna. 3. From June 2007, the presentation of the policy rate has been changed. It is now presented as a nominal rate instead of a yield. 4. Average yield on the interbank market in Icelandic krónur. 5. For Treasury bonds and HFF bonds, the quoted yield is in excess of changes in the CPI. Trading with HFF bonds began in July 2004; prior figures are for housing bonds. 6. Annual figures are changes over one year. Domestic borrowers only as of January 2002. Latest figures are preliminary. 7. DMBs = deposit money banks = commercial and savings banks and other institutions permitted to accept deposits from the public. Since July 2007, derivatives have been considered foreign liabilities and the presentation of Central Banks' short-term position has been changed.

	Forei	ign exchange	Foreign exchange market and reserves	serves		Foreign tra	Foreign trade and external conditions	l conditions			•	Public finance Reg. Treasury		
	Gross 1	Gross foreign currency reserves:	ncy reserves:	CB	F	Mer-	Mer-	Marine	Real	Labour	Labour market	financial	Assei 12-mo	Asset prices
	Docition	Morch	as ratio or:	net pur-	Irade	chandise	chandise	product	exchange	-00	Wages,	balance, % of	Fauity	Housing
	(B.kr.)	imports <sup>8</sup>	merch. For short- imports <sup>8</sup> term liabil. <sup>9</sup>	(b.kr.)	(b.kr.)	fob (b.kr.)	fob (b.kr.) 12-mo.% ch. <sup>10</sup>	Prices -mo. % ch. <sup>10</sup>	króna <sup>11</sup>	empioy- ment	12-1110. % change <sup>12</sup>	reg. revenues, from lan <sup>13</sup>	equity prices <sup>14</sup>	Prices <sup>15</sup>
2010				<u> </u>							0	HOIH JAH.		
January	475.0	13.5	2.0	0.0	5.7	38.6	32.9	-0.7	68.1	9.0	3.1	-56.9	-10.8	-10.2
February	480.1	13.9	2.0	0.0	13.9	44.3	30.4	0.5	69.4	9.3	3.6	-8.3	4.7	-10.0
March	489.9	14.0	1.9	0.0	11.4	52.8	41.3	2.4	70.2	9.3	3.6	-18.2	47.9	-5.9
April	506.3	14.5	2.2	0.0	7.3	41.1	33.8	-0.1	70.5	9.0	4.0	-16.6	54.8	-3.6
May	506.1	14.6	2.2	0.0	16.6	52.3	35.7	1.6	73.2	8.3	4.0	-21.6	20.4	-1.0
June	573.1	16.3	2.5	0.0	11.4	20.7	39.2	1.5	75.0	7.6	6.1	-22.8	21.2	-1.3
July	570.0	16.7	2.5	0.0	4.0	44.0	39.9	0.2	75.0	7.5	0.9	-31.7	25.6	-2.9
August	546.3	15.8	2.8	1.0	7.1	41.9	34.7	-1.2	9.92	7.3	0.9	-25.3	14.4	-3.6
September	487.2	14.5	3.6	1.4	10.7	49.8	39.1	5.1	77.2	7.1	0.9	-24.0	13.7	-3.2
October	468.3	13.9	3.6	6:0	11.2	47.0	35.9	1.0	77.5	7.5	6.0	-21.3	16.9	-2.3
November	542.5	15.6	4.1	1.2	6.9	48.3	41.4	6.0	77.8	7.7	4.7	-20.2	19.4	6.0-
December	664.8	18.9	3.3	25.5	13.9	50.4	36.5	-0.5	77.1	8.0	4.5	-20.1	14.6	0.2
2011														
January	732.7	20.2	5.8	6:0	7.8	42.3	34.6	1.5	75.0	8.5	4.4	-39.4	24.9	0.5
February	719.4	19.5	5.4	1.0	8.5	42.8	34.3	0.7	74.3	8.6	4.2	3.8	14.4	2.0
March	765.4	20.6	4.1	1.2	13.8	58.8	45.0	1.3	73.9	8.6	4.4	-2.6	5.8	1.9
April	759.2	20.3	4.1	1.0	3.6	40.7	37.0	1.5	73.9	8.1	4.4	6.6-	-0.6	2.7
May	708.6	17.9	3.9	1.2	5.7	929	49.8	-0.3	73.7	7.4	5.3	-15.8	11.2	3.5
June	827.8	20.8	4.7	1.0	8.7	51.7	43.0	1.1	73.7	6.7	7.1	-16.4	5.4	4.7
July	858.2	21.2	4.7	1.0	9.5	51.5	42.0	-0.2	73.7	9.9	7.8	-26.9	5.2	5.9
August	915.3	22.5	5.5	1.2	8.4	54.1	45.6	1.2	74.4	6.7	8.0	-20.1	-0.8	6.3
September	911.7	21.9	9.6	1.0	15.6	62.5	46.9	1.6	75.5	9.9	8.4	-21.1	-3.1	7.3
October	982.8	23.7	6.3	1.0	8.0	52.7	44.6	3.0	9.9/	8.9	8.9	-16.6	-3.9	7.5
November	1,110.3	25.9	7.5	1.2	7.9	53.4	45.6	0.2	76.4	7.1	9.0	-18.3	-4.2	7.6
December	1,047.3	23.4	6.9	1.0	9.0-	52.8	53.4	0.8	75.6	7.3	9.2	-13.2	-2.6	6.6
2012														
January	1,081.3	23.9	7.6	1.2	10.1	47.3	37.2	0.7	75.3	7.2	9.1	-38.1	-5.0	9.2
February	1,095.0	23.5	7.6	1.0	12.6	54.2	41.6	-2.5	74.2	7.3	11.3	6.1	-2.5	7.8
March	8.926	20.7	6.3	-1.0	5.4	54.6	49.3	0.0	73.0	7.1	12.1	:	4.1	8.7

8. Gross foreign exchange reserves at end of period as a ratio of the 12-month average of goods imports. Calculated at fixed exchange rates. 9. The denominator is foreign short-term liabilities of credit institutions and investment banks and includes deviage between annual averages. 11. Real effective exchange rate of the caparate of the caparate banks. Annual figures are shown change in annual averages. 13. Cash basis. Without privatisation revenues. 14. OMX16 index. Annual figures are % changes over year. 15. Residential housing in greater Reykjavík area. Annual figures are % changes over year. 15. Residential housing in greater Reykjavík area. Annual figures are % changes over year.

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

Table 2 Historical economic indicators

	Consume	Consumer prices <sup>1</sup>	Króna efi	Króna effective exchange rate	rate	II	Interest rates (%)			Money and credit	l credit	Ratio of		
	Consumer	CPI	Nominal	Real exchange ra	ange rate <sup>3</sup>	Indexed	Banks' secured	nred		% change over year	ver year	gr. reserves	$Net \ ext.$	Growth
	price	inflation	exchange	Relative	Relative	gov. bonds	lending (real yield)	yield)		DMB	Credit system	to merch.	$debt^6$	of real
	index <sup>1</sup>	(%)	$rate^2$	CPI	OTC	yiel d <sup>4</sup>	Non-indexed	Indexed	M3	lending	lending	imports <sup>5</sup>	GDP (%)	GDP (%)
1982	18.4	51.0	54.5	7.76	115.1	3.5	4.6-	2.9	58.0	92.0	100.2	2.1	46.4	2.2
1983	33.9	84.2	100.0	91.8	95.1	3.8	-14.2	3.0	78.7	85.6	82.9	2.5	57.2	-2.2
1984	43.7	29.2	116.3	96.3	92.1	7.0	3.4	5.5	33.4	43.0	40.2	2.1	60.2	4.1
1985	57.9	32.4	148.7	94.8	92.9	6.9	-2.3	5.0	47.6	29.7	35.2	2.8	9.89	3.3
1986	70.2	21.3	171.0	97.1	93.7	8.5	4.3	5.2	35.0	19.1	20.1	3.6	56.5	6.3
1987	83.4	18.8	177.3	106.0	120.3	8.7	4.7	7.7	35.2	42.1	31.4	2.4	49.4	8.5
1988	104.6	25.4	202.6	111.4	126.1	8.7	11.8	9.5	16.5	37.2	34.0	2.4	51.3	-0.1
1989	126.7	21.1	254.7	102.4	110.5	7.4	6.5	7.8	32.8	25.2	33.8	3.0	56.8	0.3
1990	145.5	14.8	283.7	99.1	9.66	7.0	6.9	8.0	24.9	11.0	12.5	3.3	43.8	1.2
1991	155.4	6.8	283.6	101.7	101.9	8.1	10.0	9.2	19.9	11.6	15.4	3.2	44.9	-0.2
1992	161.2	3.7	285.0	101.7	103.2	7.4	11.8	9.3	1.3	5.3	11.8	4.0	53.0	-3.4
1993	167.8	4.1	308.8	96.2	94.6	6.7	11.5	9.1	5.4	5.0	11.1	4.3	58.9	1.3
1994	170.3	1.5	324.8	91.0	83.2	5.0	9.5	7.9	10.7	-21.7	4.5	2.6	53.3	3.6
1995	173.2	1.7	322.3	91.1	88.6	5.6	10.1	8.7	9.6	477.3	5.9	2.4	52.0	0.1
1996	177.1	2.3	322.9	91.3	88.5	5.5	10.5	8.9	8.5	11.5	9.3	3.0	49.8	4.8
1997	180.3	1.8	318.7	92.2	9.68	5.3	11.1	9.0	16.5	12.4	11.8	2.6	51.3	6.4
1998	183.3	1.7	313.6	93.8	93.7	4.7	11.8	8.8	20.2	30.0	15.1	2.2	57.4	6.3
1999	189.6	3.4	313.1	96.3	97.6	4.4	8.0	9.8	19.3	23.1	17.3	2.5	6.99	4.1
2000	199.1	5.0	313.3	100.0	100.0	5.1	12.7	9.5	4.4	50.1	17.2	2.1	93.8	4.3
2001	212.4	6.7	376.3	87.3	87.1	5.1	9.4	10.2	-2.3	12.6	19.2	2.1	101.8	8.6
2002	222.5	4.8	365.2	91.7	90.2	5.2	13.7	10.1	23.8	2.7	3.2	2.5	89.3	0.1
2003	227.3	2.2	343.3	96.0	95.8	4.4	9.4	9.1	22.6	18.3	11.4	3.5	93.9	2.4
2004	234.6	3.2	336.3	98.1	92.3	3.9	8.3	8.0	30.1	39.0	19.9	3.6	112.3	7.8
2005	244.1	4.0	301.8	111.4	105.2	3.7	10.7	7.2	23.5	9.09	31.1	2.9	152.1	7.2
2006	260.6	8.9	337.2	104.2	103.0	4.6	10.9	7.1	22.4	41.5	31.0	4.8	193.1	4.7
2007	273.7	9.0	329.1	108.6	111.4	0.9	14.2	8.9	94.2	30.8	22.7	4.9	222.8	0.9
2008	307.7	12.4	462.1	85.5	84.7	4.6	7.9	10.1	32.1	-27.8	:	7.7	746.9	1.3
2009	344.6	12.0	622.3	70.0	61.8	4.4	4.2	8.0	-5.3	-15.5	:	13.8	770.5	-6.8
2010	363.2	5.4	604.0	74.4	70.1	3.4	4.9	6.4	-3.2	-0.2	:	18.9	2.699	-4.0
2011	377.7	4.0	598.1	75.2	72.4	2.2	2.3	6.1	4.6	-1.8	:	23.4	583.3	3.1
	000	1 1 1 1 1 1 1		-					0000		4			-

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

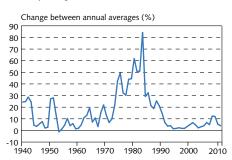
Table 2 (continued) Historical economic indicators

	(% cha	Components of GDP (% change from previous year)	GDP ius year)	(% chan	External trade (% change from previous year)	e ıs year)					Labour	Labour market	Wages (% change from previous year)	ange from year)
	Private	Gross fixed cap.	National expendi-	Goods & services	services	Terms	Curr. acc. balance	General go	General government (% of GDP) <sup>7</sup> ancial Expen	: GDP) <sup>7</sup> Expend-	(% of labour force)	our force)	Real	Real disp.
	tion	formation	ture	Exports	Imports	trade	(% of GDP)	balance	Revenues	itures	ployment	particip.8		income
1982	5.0	0.1	5.0	-8.9	9.0-	-0.7	-8.0	1.7	37.9	36.2	0.8	77.6	1.7	2.2
1983	-5.6	-12.7	-8.6	11.0	-9.7	4.1-	-1.8	-2.0	35.8	37.8	1.0	77.4	-16.7	-12.5
1984	3.7	9.4	6.4	2.4	9.1	0.7	-4.5	2.2	36.9	34.7	1.3	9.77	-3.1	-2.5
1985	4.2	1.0	2.7	11.1	9.4	6.0-	-3.8	-1.6	35.4	37.0	6.0	79.3	1.2	10.8
1986	6.9	-1.6	4.5	5.9	6.0	5.4	0.7	-4.0	35.4	39.4	0.7	80.9	5.7	9.5
1987	16.2	18.8	15.7	3.3	23.3	4.3	-3.3	-0.8	35.6	36.5	0.4	84.1	9.0	25.8
1988	-3.8	-0.2	9:0-	-3.6	-4.6	-0.8	-3.4	-2.0	39.5	41.5	9.0	80.1	2.2	-1.9
1989	-4.2	-7.9	-4.4	2.9	-10.3	-3.9	-1.3	-4.4	38.5	43.0	1.7	78.7	-9.1	-8.9
1990	0.5	3.0	1.5	0.0	1.0	0.3	-2.1	-3.3	38.1	41.4	1.8	77.5	-4.9	-3.9
1991	3.0	2.6	3.5	-5.9	5.3	3.5	-4.0	-2.9	39.8	42.7	1.5	81.0	4.1	3.1
1992	-3.2	-10.4	-4.6	-2.0	-6.0	9.0-	-2.4	-2.8	40.8	43.6	3.1	81.8	-0.8	-2.8
1993	-4.6	8.6-	-2.9	6.5	-7.5	-3.6	0.7	-4.5	39.0	43.4	4.4	81.1	-2.6	-2.0
1994	2.9	-0.2	1.8	9.3	3.8	0.3	6:1	-4.7	38.6	43.2	4.8	81.3	-0.3	2.5
1995	2.2	-1.7	2.2	-2.3	3.6	1.0	0.7	-3.0	39.6	42.5	5.0	82.9	2.8	2.7
1996	5.7	25.0	6.8	6.6	16.5	-3.1	-1.8	-1.6	40.5	42.0	4.4	81.6	4.0	4.2
1997	6.3	9.3	5.8	5.6	8.0	1.9	-1.8	0.0	40.5	40.5	3.9	81.0	3.6	7.3
1998	10.2	34.4	13.8	2.5	23.4	5.3	-6.8	-0.4	40.8	41.2	2.8	82.3	9.7	8.8
1999	7.9	-4.1	4.2	4.0	4.4	-0.7	-6.8	1.1	43.1	41.9	1.9	83.2	3.3	6.3
2000	4.2	11.8	5.9	4.2	9.6	-2.4	-10.2	1.7	43.5	41.8	1.3	83.5	1.6	8.2
2001	-2.8	-4.3	-2.1	7.4	-9.1	9.0	-4.3	-0.7	41.8	42.5	4.1	83.6	2.0	-3.0
2002	-1.5	-14.0	-2.3	3.8	-2.6	0.5	1.5	-2.6	41.6	1.44	2.5	82.8	2.3	5.0
2003	6.2	11.1	5.8	1.6	10.7	-4.0	-4.8	-2.8	42.7	45.5	3.4	82.1	3.4	3.8
2004	7.0	28.7	10.1	8.4	14.5	-1.2	8-6-	0.0	44.0	44.0	3.1	80.7	1.4	7.5
2005	12.7	34.4	15.4	7.5	29.3	1.0	-16.0	4.9	47.1	42.2	2.1	81.9	2.6	11.2
2006	3.6	24.4	6.6	-4.6	11.3	3.3	-24.3	6.3	47.9	41.6	1.2	83.1	2.6	8.4
2007	5.7	-12.2	-0.4	17.7	-1.5	0.1	-15.9	5.4	47.7	42.2	1.0	83.3	3.8	10.6
2008	-7.9	-20.0	-8.6	7.0	-18.4	-6.1	-24.5	-13.5	14.1	97.6	1.6	82.6	-3.8	0.3
2009	-14.9	-51.6	-20.5	9.9	-24.0	-9.8	-11.7	-10.0	41.1	51.0	8.0	6.08	-7.2	-17.5
2010	-0.4	-8.1	-2.7	4.0	4.0	5.9	-8.0	-10.1	41.5	51.6	8.1	81.1	-0.6	-11.4
2011	4.0	13.4	4.7	3.2	6.4	-1.6	-7.1	-4.4	41.7	46.0	7.4	80.0	2.7	0.9

7. Central and local governments and the social security system. 8. Participation rate as per National Economic Institute definition until 1990, but based on Statistics Iceland labour market survey from 1991. 9. Statistics Iceland wage index. Deflated by consumer prices. Sources: Directorate of Labour, Ministry of Finance, Statistics Iceland, Nasdaq OMX Iceland, Central Bank of Iceland.

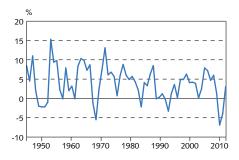
Chart 1 Consumer price inflation 1940-2011

Yearly averages of CPI



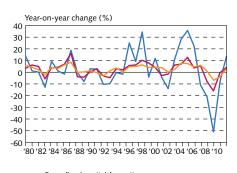
Source: Statistics Iceland.

Chart 2 Output growth 1945-20111 Change in real GDP between years



1. Preliminary data 2011 Source: Statistics Iceland

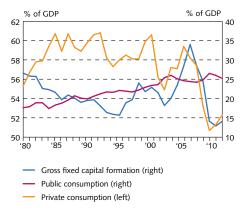
Chart 3 Growth of GDP, private consumption, and gross fixed capital formation 1980-20111



 Gross fixed capital formation — Private consumption — GDP

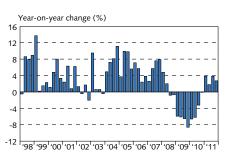
1. Preliminary data 2011. Source: Statistics Iceland

Chart 4 Private consumption, public consumption, and gross fixed capital formation 1980-20111



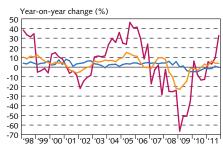
1. Preliminary data 2011. Source: Statistics Iceland

Chart 5 Economic growth Q1/1998 - Q4/2011<sup>1</sup> Volume change in GDP



1. Latest data are preliminary Source: Statistics Iceland

Chart 6 Components of economic growth Q1/1998 - Q4/20111



Public consumption

Gross fixed capital formation

Private consumption

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

Chart 7 Gross national saving and fixed capital formation 1960-2011

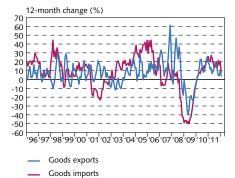


Gross fixed capital formation

Gross national saving

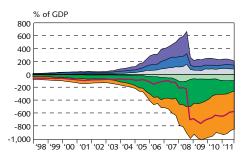
1. Preliminary data 2011 Source: Statistics Iceland.

Chart 9 Goods trade January 1996 - March 2012 3-month moving averages at fixed exchange rates



Sources: Statistics Iceland, Central Bank of Iceland.

External debt and assets Q1/1998 - Q4/20111 At current prices



Direct investment abroad

Portfolio assets

Other investment assets excl. reserves

Direct investment in Iceland

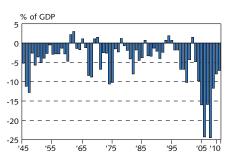
Portfolio liabilities

Other investment liabilities

International investment position

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

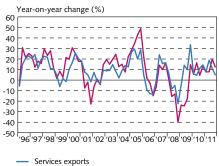
Chart 8 Current account balance 1945-2011<sup>1</sup>



1. Preliminary data 2011.

Chart 10 Exports and imports of services Q1/1996 - Q4/2011<sup>1</sup>

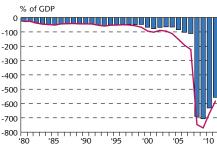
At constant exchange rates



— Services imports

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

Chart 12 Net external debt position 1980-2011<sup>1</sup> At year-end

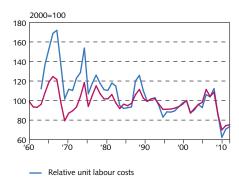


IIP Net foreign debt

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

78

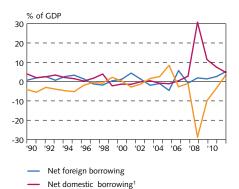
Chart 13
Real effective exchange rate
of the Icelandic króna 1960-2011



1. Preliminary data 2011. Source: Central Bank of Iceland.

Relative consumer prices

Chart 15
Treasury borrowing and credit budget balance 1990-2011

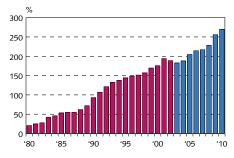


1. Including increase in pension fund commitments and outstanding long-term interest. State Accounting Office's preliminary calculations for 2011.

Sources: State Accounting Office, Treasury accounts.

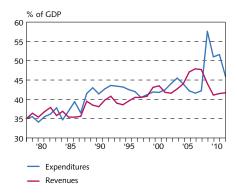
Credit budget balance

Chart 17 Household debt as percentage of disposable income 1980-2010<sup>1</sup>



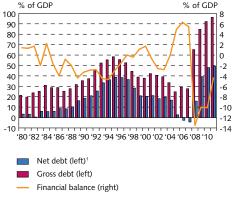
1. New classification from 2003 (blue columns). Estimate for 2010. *Sources:* Statistics Iceland. Central Bank of Iceland.

Chart 14
General government revenues and expenditures
1978-2011



Source: Statistics Iceland.

Chart 16 General government balance and debt 1980-2011



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

Chart 18 Real wages January 1990 - March 2012



Source: Statistics Iceland.

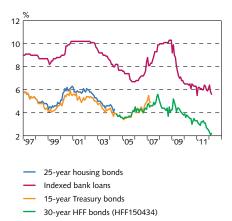
Chart 19 Unemployment and labour participation January 1996 - March 2012<sup>1</sup>



1. Statistics Iceland labour market survey 1996-2011. Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

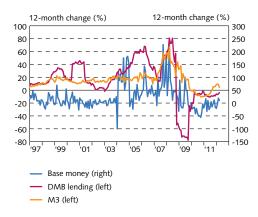
Chart 21 Long-term interest rates January 1997 - April 2012

At end of month



Source: Central Bank of Iceland

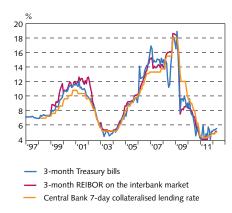
Chart 23 M3, DMB lending, and base money January 1997 - March 20121



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

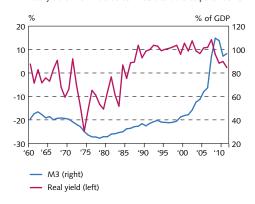
Chart 20 Short-term interest rates January 1997 - April 2012

At end of month



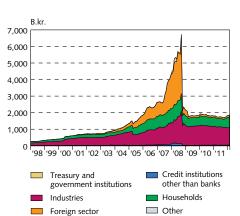
Source: Central Bank of Iceland.

Chart 22 Real yield and broad money 1960-20111 Real yield on non-indexed bank loans and M3 as percent of GDP



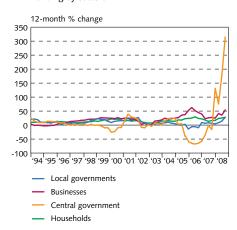
Latest data are preliminary.
 Source: Central Bank of Iceland.

Chart 24 Deposit money bank lending by sector January 1998 - March 2012



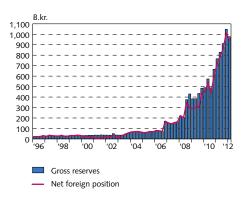
Reclassification of lending in September 2003 based on the ISAT-95 standard led to a reduction in household debt figures and an increase in business and municipalities' debt figures. Latest figures are preliminary. Source: Central Bank of Iceland.

Chart 25 Growth of credit system lending Q1/1994 - Q3/2008 Lending by sectors<sup>1</sup>



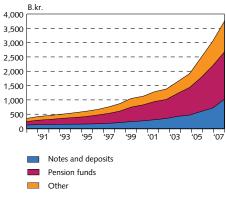
Reclassification of lending in September 2003 based on the ISAT-95 standard led to a reduction in household debt figures and an increase in business and municipalities' debt figures. Latest figures are preliminary. Source: Central Bank of Iceland.

Chart 27 Reserve assets and Central Bank net foreign positon, Q1/1996 - Q1/2012<sup>1</sup> At current exchange rates



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

Chart 26 Credit system liabilities at year-end 1990-2007 Balance at year-end at current prices



Source: Central Bank of Iceland.

# Boxes and appendices

Inflation a	and prices
2011/2	Exchange rate pass-through
2008/2	Inflation developments in emerging market economies and
	monetary policy restraint
2008/2	The effect of exchange rate movements on inflation
The natio	nal economy and economic prospects
2011/4	Housing owned by the Housing Financing Fund and the
	banks
2011/4	Why did Iceland's potential output contract in the wake of
	the financial crisis?
2011/2	Housing bubbles
2011/2	Survey of large corporations' investments
2010/4	The Icelandic contraction and timing of recovery in
	international context
2010/4	Assumptions concerning investment in heavy industry in
	the Central Bank's baseline forecasts
2010/2	Fluctuations in private consumption
2010/2	Real estate market developments
2009/4	Developments in house prices: Different calculation
	methods point in the same direction
2009/2	The outlook for aluminium prices
2008/3	Global financial crisis deepens
2008/2	The housing market in a global context
2008/2	Iceland and Latvia: Macroeconomic and monetary policy
2008/2	Outlook for EMU expansion in coming years
External b	palance and debt
2010/4	Foreign direct investment and output growth
2010/2	Terms of trade and real exchange rate
2010/2	New method for estimating foreign direct investment
2010/2	The balance of payments outlook
2009/2	Foreign debt and balance on income
	markets and financial stability
2010/2	Central bank balance sheet expansion in the financial crisis
2010/2	Capital controls and their role in the economic recovery
2009/2	The offshore market for krónur
2009/2	Facing the "impatient investor" challenge
2008/3	Sudden stop of international capital flows
2008/3	Domestic asset prices and the Bank of England financial
	market liquidity index
2008/2	The importance of well-functioning financial markets
	ctor finances
2011/4	National Budget 2012

2011/4	National Budget 2012
2010/4	National Budget 2011

2008/3 Sustainability of public sector debt

Labour market and wage developments		
2011/4	The flexibility of the Icelandic labour market and migration	
	flows	
2011/4	Is the increase of equilibrium unemployment reversing?	
2010/4	Productivity development and employment growth	
2010/2	Changes in measurement of employment	
2009/2	Unemployment and financial crisis	

#### Central Bank research and forecasts

2011/4	The Central Bank of Iceland forecasting record
2010/2	Errors in Central bank forecasts
2009/2	Updated macroeconomic model
2009/2	Forecast errors in Central Bank of Iceland inflation
	forecasts

#### Periodical boxes and appendices

2012/1	Baseline macroeconomic and inflation forecast 2012/1
2011/4	Baseline macroeconomic and inflation forecast 2011/4
2011/3	Baseline macroeconomic and inflation forecast 2011/3
2011/2	Baseline macroeconomic and inflation forecast 2011/2
2011/1	Baseline macroeconomic and inflation forecast 2011/1
2010/4	Baseline macroeconomic and inflation forecast 2010/4
2010/3	Baseline macroeconomic and inflation forecast 2010/3
2010/2	Baseline macroeconomic and inflation forecast 2010/2
2010/1	Baseline macroeconomic and inflation forecast 2010/1
2009/4	Baseline macroeconomic and inflation forecast 2009/4
2009/3	Baseline macroeconomic and inflation forecast 2009/3
2009/2	Baseline macroeconomic and inflation forecast 2009/2
2009/1	Baseline macroeconomic and inflation forecast 2009/1
2008/3	Baseline macroeconomic and inflation forecast 2008/3
2008/2	Financial market analysts' assessments of the economic outlook
2008/2	Changes in the macroeconomic forecast since Monetary
	Bulletin 2008/1
2008/2	Changes in the inflation forecast since Monetary Bulletin
	2008/1
2008/2	Alternative scenarios
2008/2	Baseline macroeconomic and inflation forecast 2008/2