



# MONETARY BULLETIN

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**Icelandic letters:**

ð/Ð (pronounced like th in English this)

þ/Þ (pronounced like th in English think)

In *Monetary Bulletin*, ð is transliterated as d and þ as th in personal names, for consistency with international references, but otherwise the Icelandic letters are retained.

**Symbols:**

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

## Introduction

# Worse inflation outlook calls for a significantly tighter stance

The inflation outlook has worsened even further since the Central Bank of Iceland last raised its policy interest rate. When the inflation forecast presented here was prepared, the króna had depreciated by roughly 12% from the value assumed in the forecast published in *Monetary Bulletin* at the end of March – at the same time as the Bank raised the policy rate by 0.75 percentage points – and by roughly 6% from May when a further hike of 0.75 percentage points was made. The depreciation has already contributed to soaring inflation and will keep it high over the coming months. The wage review agreed between the Confederation of Employers and Federation of Labour in June will also increase inflationary pressures. For a long while, unit labour costs have been rising by much more than is compatible with the inflation target in the long run. The increments now agreed will add to inflationary pressures which coincide with the peak of the current episode of overheating. This settlement entails large wage rises for the lowest-paid. In the present climate there is a risk that the increases will spread up the pay scale. Real incomes are already at an unsustainable level relative to the production capacity of the economy. The wage rise agreed for July will boost real wages even further in the short run, but the subsequent erosion of purchasing power as inflation outpaces wage growth or employment declines is likely to be all the greater. If the policy rate remains unchanged, the surge in wages is more likely to fuel inflation, first through cost pressures and later via the effect on domestic demand and the exchange rate.

The presentation of the Central Bank's assessment of the inflation outlook in this *Monetary Bulletin* deviates from recent praxis. The baseline forecast is now conditioned on market expectations and financial market analysts' forecasts for the policy rate path, instead of assuming an unchanged policy rate from the day of forecast. On this basis, inflation will climb to almost 11% in Q4/2006, remain in that vicinity until mid-2007 and begin to fall thereafter, but still be far above target at the end of the forecast horizon. According to the baseline forecast, inflation will be roughly 5 percentage points higher half-way across the forecast horizon and 2 percentage points higher at its end than in the forecast published in March. This outlook is unacceptable. However, an alternative scenario entailing a considerably greater rise in the policy rate shows that by tightening the monetary stance the inflation target could be attained roughly two years hence, although the short-term impact will be limited. In the long run, a tighter monetary policy stance does not cause a more pronounced contraction of output, but will expedite the adjustment, generating less inflation with correspondingly less erosion of real wages.

Macroeconomic and inflation forecasting is not a precise science and the results of individual forecasting models must always be

interpreted with caution. However, they do give some idea of the possible way that events might unfold. Two eventualities in particular could preclude the need for the policy rate to be raised by as much as the inflation forecast implies. First, the pace of transmission of monetary policy across the interest rate spectrum could accelerate. Second, domestic demand and the output gap could contract more sharply than currently assumed, for example if real estate prices fall by more than is forecast. A tighter fiscal stance can also make a contribution. At present the impact of measures announced by the Government is difficult to assess, but all efforts towards restraint are important.

On the downside, exchange rate developments could turn more unfavourable than forecast. The króna is likely to come under pressure in light of the large current account deficit which is now heading beyond previous forecasts for this year. However, the deficit is forecast to close rapidly over the next two years. A less favourable exchange rate development than expected could lead to even higher inflation, requiring an even higher policy rate to rein it in. The Central Bank will closely monitor these and other indicators that will affect its policy rate decisions in the period ahead.

On the basis of available data, the present monetary policy stance is clearly inadequate for bringing inflation back to target within an acceptable period of time. As it happens, the stance appears to have eased considerably in recent months. Higher inflation expectations have counteracted the 1.75 percentage-point rise in the policy rate this year. In real terms the policy rate is broadly unchanged or lower than at the beginning of the year, depending on the criteria used to gauge it. Relative to past inflation, it has not been lower since the second half of 2004. The króna depreciated sharply in the first half of this year and the impact has already emerged in looser wage developments. Since inflation expectations have increased, the higher policy rate has had little impact on indexed lending rates so far, although developments in recent weeks point in the right direction.

Inflation way above target, a much poorer inflation outlook than in the Central Bank's last forecast and mounting inflation expectations embody a clear message that a considerable increase in the policy rate is still required, although it is uncertain how high the policy rate needs to go in order to bring inflation back to target. In the absence of data indicating that inflation will come down faster than the current outlook implies, the Central Bank will continue to raise interest rates. The Board of Governors of the Central Bank has therefore decided to raise the policy rate by 0.75 percentage points. The Board of Governors has furthermore decided to assess the need for further measures in mid-August and announce a decision on the policy interest rate.

# The inflation outlook deteriorates due to depreciation of the króna and rising wage costs

*The inflation outlook has shown a marked deterioration since the last Monetary Bulletin was published on March 30. Contributing factors are a depreciation of the króna coupled with soaring domestic demand and mounting pressures in the labour market. Although an exchange rate adjustment was inevitable sooner or later and the exchange rate is currently broadly consistent with long-term stability, it began sooner and took place faster than is desirable from the viewpoint of the inflation target. Only part of the impact of exchange rate movements has been passed through to inflation and could be felt more quickly if the króna depreciates even further. The recent agreement to raise wages over and above the settlement made in 2004 will fuel inflationary pressures even further in the current climate. While there are some signs of a slowdown in demand growth in the near future, it is still premature to claim that a turning point has been reached. Macroeconomic imbalances are so great that a sharp contraction in demand is probably inevitable before balance is restored. Over the medium term a more timely tightening of the monetary stance might actually soften the adjustment by bringing it about sooner. Increased inflation expectations and the recent króna depreciation have countered the tightening of the policy interest rate. Even if the policy rate is raised to bring it in line with expectations of market agents and analysts, there is virtually no likelihood of attaining the inflation target within the next two years. Nonetheless, if the policy rate is raised substantially, the outlook is that the inflation target could be attained within an acceptable period of time.*

## I Overview of macroeconomic and inflation forecast

### **New presentation of the forecast**

The Central Bank's macroeconomic and inflation forecast is presented in a new form in this edition of *Monetary Bulletin*. Until now the baseline forecast has assumed an unchanged policy rate and exchange rate across the entire forecast horizon. The current forecast, however, is based on a policy interest rate path reflecting medium-term expectations of market agents and analysts. The exchange rate is forecast using the Central Bank's macroeconomic model. This forecast is now called the baseline forecast.

Two alternative scenarios are presented. One assumes an unchanged policy rate across the forecast horizon. It is therefore comparable with the previous baseline scenario, except that the exchange rate, instead of being held constant across the horizon, is forecast from the interaction between uncovered interest rate parity and the deviation from purchasing power parity. The other alternative scenario is broadly the same as that published in *Monetary Bulletin* in March, which uses a simple monetary policy rule to ensure that the inflation target will be attained over the forecast period.

One aim behind publishing three inflation paths is to play down the focus on individual paths, to reflect more closely the inevitable uncertainty about the way that economic developments will unfold,

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1. This article

especially in the current climate. By no longer assuming an unchanged policy rate and exchange rate across the entire horizon, the baseline forecast should also be more realistic and internally consistent. The new presentation of the forecast and arguments supporting the changeover are discussed in Box VIII-3. The three forecast paths are referred to in discussion of economic developments in the main text but the risk profile refers to the baseline forecast.

This edition of Monetary Bulletin presents an inflation forecast until Q2/2008 and the first macroeconomic forecast for the whole of 2008. A detailed overview of the development of the main variables in the baseline forecast is given in Table 1 in the Tables and charts section.

### **Outlook for marginally higher growth in 2006 and a contraction in subsequent years ...**

According to the new baseline forecast, domestic demand and GDP growth are likely to be somewhat higher than forecast in *Monetary Bulletin* in March, despite a lower export growth projection. However, domestic demand is also forecast to contract more sharply in 2007, mainly due to a downward revision of the outlook for residential investment. Slower domestic demand growth is largely due to the policy rate being on average one percentage point higher next year than in the March baseline forecast. Offsetting this, imports are now expected to drop more sharply which, combined with robust export growth, will leave GDP growth in 2007 higher than in the March forecast, at almost 2%. The outlook for 2008 is that domestic demand will shrink and GDP will contract slightly, in spite of a surge in aluminium exports.

A contraction is inevitable if macroeconomic balance is to be restored reasonably quickly. Despite a slightly smaller positive output gap following a revision of historical data for the capital stock, it is expected to remain quite pronounced in 2006 and 2007. It will gradually wane in 2008 and turn slightly negative.

### **... but the inflation outlook has turned much bleaker**

Although the positive output gap is not quite as large as previously thought and will gradually abate over the coming years, the inflation outlook has turned much bleaker since the last *Monetary Bulletin* was published in March. Part of the explanation lies in a sharp depreciation of the króna, by almost 9% this year and more than 11% in 2007 compared with the March forecast assumptions. Accordingly, the exchange rate index will stand at just over 131 at the end of the forecast horizon, leaving the króna just under 2½% weaker than at the start of the forecast period.

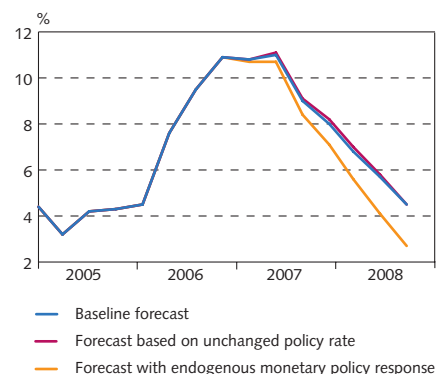
Wage costs also look set to rise much faster in the near term than in previous Central Bank forecasts. One reason is the recent private sector wage agreement. The baseline forecast assumes that unit labour costs will rise by 7-8% in 2006 and 2007, and by more than 4% in 2008. Such a leap in unit labour costs inevitably implies strong inflationary pressures which could push inflation expectations higher and feed inflation even further.

So far this year the Central Bank has underforecast inflation by quite a wide margin. The impact of the weaker króna than assumed in the March forecast has been transmitted to prices quite swiftly. Inflation has now already overshoot the peak that was forecast in *Monetary Bulletin* in March. It seems likely to go on surging to reach almost 11% at the end of 2006. Afterwards inflation will slow down and fall below 7% two years hence, which is still almost two percentage points above the March forecast, although that forecast assumed an unchanged policy rate and exchange rate across the horizon. In the alternative scenario presented in March, which assumed that the króna would depreciate, inflation dipped below 6%. The inflation outlook is therefore totally unacceptable over the entire forecast horizon.

### Growth similar for most of the time in the alternative scenarios, but will contract faster if the monetary stance is tighter ...

The three forecast paths show very similar prospects for the economy in 2006. Further along the horizon, domestic demand and GDP growth contract by considerably more in the scenario based on applying a monetary policy rule, which raises the policy rate sharply to attain the inflation target at the end of the forecast period. The baseline forecast and the alternative scenario based on an unchanged policy rate show that the monetary stance is too lax, causing a slower return to balance. Eventually, however, a contraction is unavoidable, whether the stance is tightened or not – the contraction will last longer, the weaker the monetary response, and imbalances will be more pronounced and take longer to unwind if the stance is not tightened in good time. If a timely response is not made, the economy will remain in contraction at the end of this decade, whereas healthy GDP growth will have been achieved in the scenario with stronger monetary policy responses.

Chart I-1  
Different inflation paths



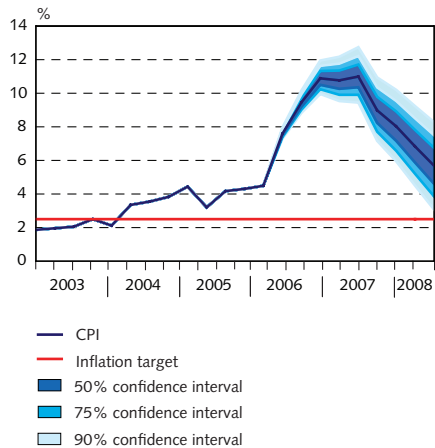
Sources: Statistics Iceland, Central Bank of Iceland.

Table I-1 Inflation developments and outlook

Year-on-year changes in the CPI (%)

Quarter	Baseline forecast	Alternative scenario with unchanged policy rate	Alternative scenario applying monetary policy rule
	2005:1	4.4	4.4
2005:2	3.2	3.2	3.2
2005:3	4.2	4.2	4.2
2005:4	4.3	4.3	4.3
Annual average	4.0	4.0	4.0
2006:1	4.5	4.5	4.5
2006:2	7.6	7.6	7.6
2006:3	9.5	9.5	9.5
2006:4	10.9	10.9	10.9
Annual average	8.1	8.1	8.1
2007:1	10.8	10.8	10.7
2007:2	11.0	11.1	10.7
2007:3	9.0	9.1	8.4
2007:4	8.0	8.2	7.1
Annual average	9.7	9.8	9.2
2008:1	6.8	7.0	5.6
2008:2	5.7	5.8	4.1

Chart I-2  
Central Bank inflation forecast  
Forecasting period: Q2/2006 - Q2/2008



Source: Central Bank of Iceland.

### ... enabling the target to be attained by the end of the forecast horizon

Table I-1 shows the inflation outlook until mid-2008 as projected in the Central Bank's baseline forecast and alternative scenarios. The scenario with an unchanged policy rate produces broadly the same inflation outlook as the baseline forecast. The scenario with endogenous policy responses, on the other hand, indicates that inflation can be brought down to roughly 4% by mid-2008 and the target attained in the following quarter. That scenario implies a much more favourable inflation outlook, because its monetary stance is much tighter, even though the path is similar. The inference is that, in order to attain the target, the monetary stance needs to be tightened by substantially more than market agents and analysts have forecast.

### Inflation outlook fraught with uncertainties

Presenting scenarios based on different assumptions underlines the uncertainties that shroud the outlook for the coming years. Yet each separate scenario is fraught with uncertainties as well. An attempt is made to estimate the main uncertainties and show the changes implied by their deviations from the baseline forecast. An overall risk profile for the baseline forecast is then produced on the basis of these special risk factors and the alternative scenarios. The risks are broadly unchanged since March, except that short-term inflation is more likely to be underforecast now than overforecast. Two years ahead the risk profile is basically symmetric, unlike the March forecast which was tilted quite sharply to the upside.



## II External conditions and exports

Global economic conditions have on the whole been favourable recently and the short-term outlook is fair. Most of Iceland's trading partner countries recorded fairly strong GDP growth in Q1/2006. Icelandic exporters have been in a position to take advantage of these favourable conditions with the substantial strengthening of their competitive position after the króna depreciated. The real exchange rate has fallen markedly in recent months. However, global inflationary pressures have been mounting since the last *Monetary Bulletin* was published in March, putting upward pressure on interest rates and expectations about how they will develop. Coupled with underlying imbalances in the global economy – reflected in the large and widening US current account deficit – this development has caused some unrest in markets recently, for example volatility in equity and commodity markets. A downturn in external financial conditions, connected with major shocks or rapid shifts in the world trade position, could prove quite detrimental for macroeconomic conditions in Iceland.

### European recovery firms up

GDP growth gained momentum in Europe in Q1/2006 and most indications are that the recovery is firming up. Twelve-month growth in the euro area in Q1 was 1.9%. Another positive sign is that the main driver of GDP growth is increased private consumption, which has been sluggish in responding to the recent economic upturn in the euro area. Hitherto, GDP growth has mainly been driven by increased exports. Joblessness has been steadily declining since the second half of 2004. Unemployment in the euro area currently runs at 8%, whereas it is 0.3 percentage points higher in the EU as a whole. An upbeat outlook in both France and Germany indicates that this trend will broadly continue. Industrial production growth has been robust so far in 2006, but lags behind the pace experienced in the US. Surveys also suggest improved business and household confidence.

### Inflation in Europe driven up by rising energy prices

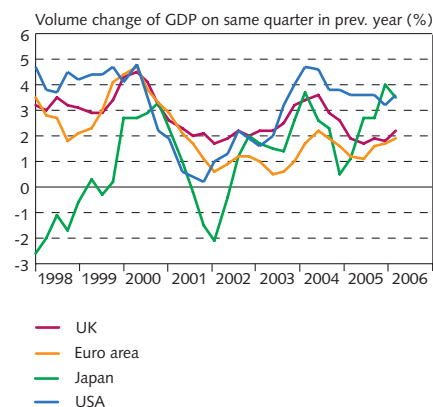
Sentiment in the euro area may be turning more optimistic, but inflation is on the increase too. Currently at 2.5%, it is 0.5 percentage points above European Central Bank (ECB) target. The inflationary spike in recent months may be largely traced to higher energy prices. On the positive side, energy price hikes have not yet caused major rises in the general price level. Core inflation dropped from 1.5% in April to 1.3% in May after climbing in the preceding months. If fuel hikes persist, however, it will only be a matter of time before they provoke wage rise demands to counter higher household expenditures and producer prices.

The ECB has twice raised its minimum bid rate by 0.25 percentage points in 2006, most recently in June. It has also indicated strongly that further increases could prove necessary. EU-wide inflation has been rising and now measures 2.4%.

According to preliminary estimates, GDP growth in the UK was 2.2% in Q1 but inflation has also been heading upwards and meas-

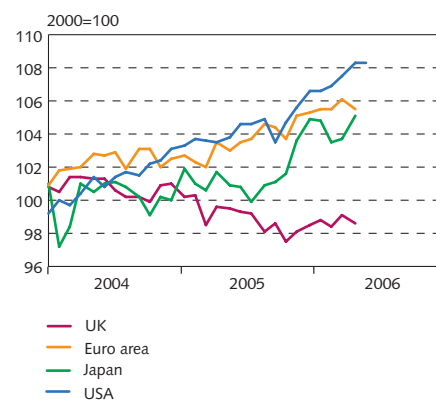
Chart II-1  
International economic developments  
Q1/1998 - Q1/2006

Economic growth in main trading areas



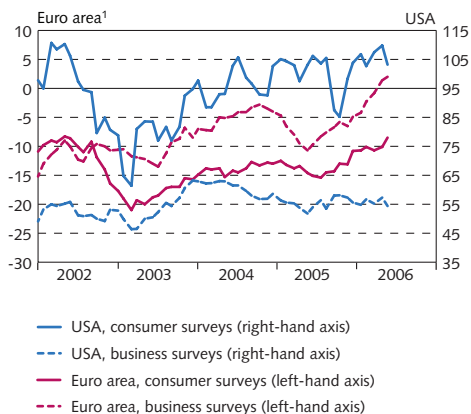
Source: Reuters EcoWin.

Chart II-2  
Industrial production  
January 2004 - April 2006<sup>1</sup>  
Seasonally adjusted index



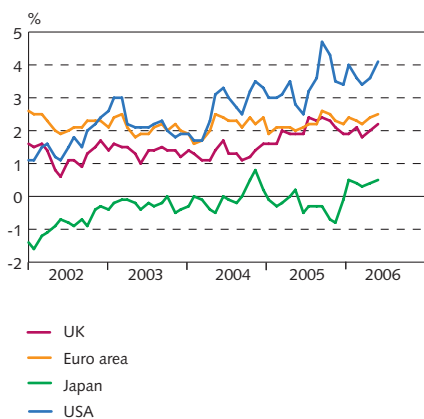
1. USA includes May.  
Source: Reuters EcoWin.

Chart II-3  
Business and consumer confidence in the  
euro area and USA  
January 2002 - May 2006



1. Balance shows the difference between the percentages of respondents giving positive and negative replies.  
Source: Reuters EcoWin.

Chart II-4  
Inflation in the USA, UK, Japan and  
euro area  
January 2002 - May 2006



Source: Reuters EcoWin.

ured 2.2% in May. The Bank of England has kept its official Bank rate unchanged at 4.5% since August 2005, but fairly high growth and mounting inflation make a rise more likely.

### Strong economic situation in the Nordic countries

The Nordic countries have easily outpaced the euro area for GDP growth in Q1/2006, with 5.4% in Norway and roughly 4% in Sweden, Denmark and Finland. Denmark's Nationalbank raised its discount rate at the same time as the ECB hike. In Norway, Norges Bank upped its sight deposit rate by 0.25 percentage points at the end of May after inflation edged above target to 2.7%. Inflation in Sweden measured 1.6% in May, below Sveriges Riksbank's 2% target but still well within its tolerance interval. However, alongside higher GDP growth and a surge in housing prices, inflation has been picking up speed since the beginning of the year, when it was only 0.6%. Sveriges Riksbank has responded by raising its repo rate by 0.25 percentage points three times this year, most recently on June 20. It has also strongly indicated the possible need for further hikes in the near future.

### Robust growth in the US but climbing inflation as well

Revised figures indicate GDP growth of 3.7% in Q1/2006 in the US, where the economy is still clearly robust. The bulk of growth is borne up by buoyant domestic demand. GDP growth is likely to subdue later in the year to match a slowdown in private consumption growth when the current surge in housing prices abates and interest rates go up. Offsetting this, unemployment has decreased marginally and the impact of oil price rises has not been as negative as was expected, in the short run at least. The main concern now is that inflation will gain pace. Twelve-month inflation jumped from 3.6% to 4.1% in May. Although this was mainly due to higher energy prices, core inflation (the CPI excluding food and energy prices) also showed a slight rise month-on-month. The US Federal Reserve responded to this development by raising its federal funds rate by 0.25 percentage points for the seventeenth consecutive time at the end of June.

### Still no interest rate rises in Japan

In Q1/2006, GDP growth in Japan measured 3%, a steep increase from the corresponding quarter in 2005 when it was a mere 0.5%. Nonetheless, the growth figure was some way down from the 4% recorded in Q4/2005. Inflation has been steadily climbing since November 2005 and the twelve-month rate is now 0.5%. This trend kindles hopes that the Japanese economy is now perking up after an episode of persistent disinflation. Monetary policy is also more likely to be tightened in the near future, i.e. the long-standing zero interest rate policy will be abandoned. A rise in interest rates in Japan could have an indirect effect on the exchange rate of the Icelandic króna, because other things being equal, higher interest rates drive down expected gains on carry trades, for example foreign bonds in currencies of high-interest rate countries such as the króna.

### Rising interest rates and volatile commodity markets

International long-term interest rates have climbed quite steeply since the last *Monetary Bulletin* was published in March and yields on 10-year Treasury bonds are now above 5% in the US and around 4% in the euro area. The main explanations are probably the upbeat global economic outlook and an expected tightening of the monetary stance in the form of higher policy rates. Rising oil prices and higher risk spreads are other possible factors to the upside.

Oil prices have soared so far this year but have also been volatile towards reports from major oil-producing regions and swings in demand. Increased global economic growth has also been reflected in higher prices for most commodities. Rising aluminium prices have been part of this trend, although the spike in May has now largely been reversed. So far, higher commodity prices, especially for oil, have only been captured by the CPI to a limited extent.

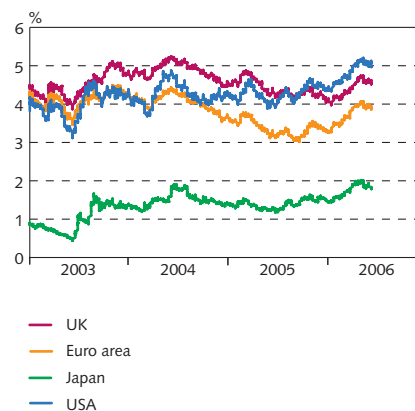
### Fish catch continues to shrink ...

The total fish catch in the first four months of 2006 was unusually skimpy. Only 185 thousand tonnes of capelin were landed, compared with 595 thousand tonnes in the corresponding period in 2005. Demersal fishing was relatively favourable in terms of the past six years, although the catch was 6% down year-on-year. The plunge in pelagics and contraction in demersal fishing brought total catch value down by almost 16%, measured at constant prices, in the first four months of 2006. On the other hand, the pelagic harvest – capelin, herring and blue whiting – has mostly been processed for human consumption instead of fish meal and oil. In 2005, 70% of capelin and herring products were for human consumption, in terms of export value. Thus their export value has dropped by far less than catch volume; processing pelagics for food is estimated to boost catch value by at least one-third.

The 2006 demersal catch is expected to finish broadly comparable to the year before, whereas a further contraction is foreseen in the shrimp harvest, and by roughly one-quarter in the pelagic catch. On these assumptions, marine export production volume is expected to decrease by 2% this year.

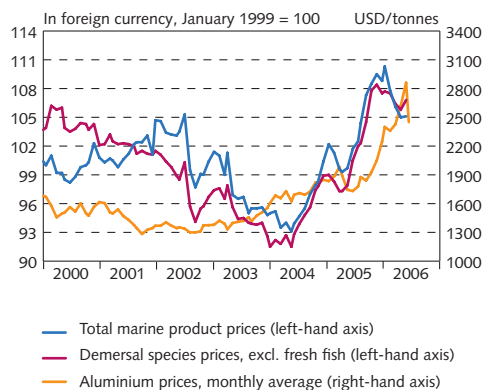
The Marine Research Institute (MRI) recently published its status report *The State of Marine Stocks in Icelandic Waters 2005/2006 – Prospects for the Quota Year 2006/2007*. It paints a fairly bleak picture of the state of the cod stock and proposes a cut in total allowable catch (TAC) of main demersal species from the MRI's recommendations the previous year. The report also mentions that the International Council for the Exploration of the Seas recommended a zero quota for pelagic redfish in 2007. Furthermore, a significant cut is likely in TACs for cod in the Barents Sea, which could result in Iceland's quota being slashed or even withdrawn. Little tangible is known about the state of the capelin stock this year. All these factors combine to give a forecast for a 2% decrease in marine export volume in 2007.

Chart II-5  
Yield on 10-year government bonds  
Daily data January 1, 2003 - June 16, 2006



Source: Reuters EcoWin.

Chart II-6  
Prices of marine exports and aluminium  
January 2000 - May 2006<sup>1</sup>



1. Price of aluminium until June 20, 2006.  
Source: Reuters EcoWin.

### ... but marine product prices rise

Marine prices have shown steady increases in foreign currency terms since early summer 2004, by 13% in all. Demersal products (excluding fresh fish) have risen by 16% over the same period (until April 2006). Prices of frozen-at-sea and fresh fish, which stand closer to the end-buyer in the value chain than factory-frozen and salted products, have risen the most. Excluding fresh fish, average prices of demersal products rose by more than 9% year-on-year in the first four months of 2006, and of all marine products by 7%. Fresh fish product prices climbed much higher, by 15%. Prices of fish meal and oil products soared by 20% over the year until April. Marine product price developments in the first months of 2006 have been characterised by traditional seasonal fluctuations, falling somewhat at the beginning of the year. Generally prices level out again towards summer. Exporters broadly expect some rise in prices for frozen and salted fish products over the rest of the year. However, the market may hardly prove able to absorb further increases. Fresh fish seems to be a different matter, with ongoing substantial price hikes expected for the rest of the year. By mid-June, fish meal had gone up by as much as 80% year-on-year and prices are expected to remain buoyant throughout 2006. In the forecast presented below, marine product prices denominated in foreign currency are expected to be 10% higher on average this year compared with 2005. In 2007, prices are forecast to rise by 4% year-on-year.

### Aluminium prices far above the long-term average

Aluminium prices are at their highest for almost two decades and have risen by 45% over the past twelve months. Prices peaked in the first half of May at 3,250 \$/t, but have unwound by one-quarter over the following four weeks to roughly 2,500 \$/t. High volatility has characterised developments in recent months. On average, sixty-day price volatility was 17½% in 2005 but has measured almost 30% so far this year and 33% in May.<sup>1</sup> Greater volatility is mainly explained by

1. See CRU Monitor, Aluminium, June 2006.

Table II-1 Main assumptions for developments in external conditions

	Current forecast <sup>1</sup>			Change from previous forecast (percentage points) <sup>2</sup>	
	2006	2007	2008	2006	2007
Exports of goods and services	1.4	11.2	14.0	-2.0	-1.9
Marine production for export	-2.0	-2.0	0.0	-	-4.0
Aluminium production for export	27.0	60.0	33.0	-4.3	-1.6
Export prices of marine products	10.0	4.0	2.0	0.5	-
Aluminium prices in USD <sup>3</sup>	39.0	-3.0	3.0	12.0	-1.0
Foreign fuel prices <sup>4</sup>	26.0	5.0	-3.0	10.0	-0.6
Global inflation <sup>5</sup>	2.1	2.0	2.2	0.1	-
Terms of trade for goods and services	11.0	1.0	1.9	3.8	-0.3
Foreign short-term interest rates <sup>6</sup>	3.5	3.9	4.1	0.4	0.4

1. Percentage change year-on-year, except for interest rates. 2. Change since *Monetary Bulletin* 2006/1. 3. Based on aluminium futures. 4. Based on fuel futures. 5. *Consensus Forecasts*. 6. Based on weighted average forward interest rates of Iceland's main trading partner countries.

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

increased speculator activity, mounting uncertainty about power rates in North America and Europe, and industrial disputes in US smelters. These factors are also thought to explain the surge in prices and subsequent unwinding in May. Demand fundamentals are still strong and are seen as a cushion against lower prices. Global aluminium consumption has grown by 6.5% over the past twelve months, but production by 6.1%. The inventory-to-consumption ratio has come down from 6.7 weeks of inventories in 2005 to 6.3 weeks. High energy prices in North America and Europe impose severe limitations on production by aluminium smelters in these countries. Demand continues to climb, driven by China, where consumption has grown by almost 20% over the past year. Aluminium consumption is also rising apace in Eastern Europe (6.3% annually), Russia and associated countries (8.3%) and Asia excluding China and Japan (5.9%).

### Real effective exchange rate now close to its long-term average

The real effective exchange rate, based on relative consumer prices, has shed 15% since the beginning of the year. This is a smaller reduction than the nominal depreciation of the króna over the same period, due to higher inflation in Iceland relative to its main trading partner countries.

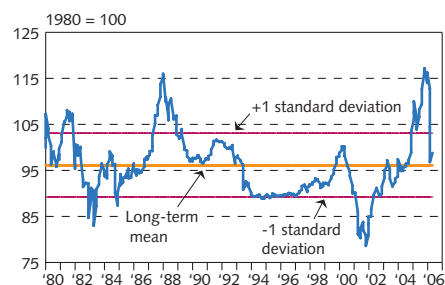
### Little change in assumptions for development of external conditions

Assumptions for international interest rates and inflation conditions are broadly unchanged from the last *Monetary Bulletin* in March, but the forecast for fuel and aluminium prices has been revised sharply upwards for this year and marginally downwards for 2007. As pointed out above, fish catch prospects for 2007 have taken a marked turn for the worse, and the previous forecast for 2% growth has now been revised downwards to a 2% contraction. Accordingly, growth in exports of goods and services in 2006 and 2007 is somewhat lower than in the March forecast.

Chart II-7

Real effective exchange rate of the króna  
January 1980 - May 2006

Monthly data, based on relative consumer prices

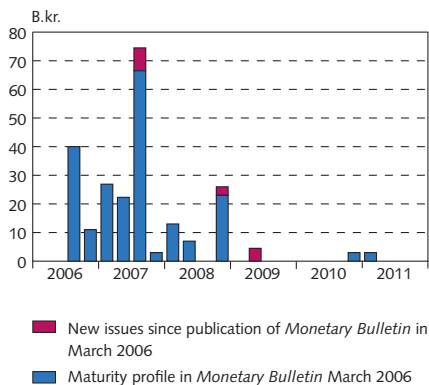


Source: Central Bank of Iceland.

Chart III-1

Maturity profile of króna-denominated Eurobond (glacier bond) issues<sup>1</sup>

Q3/2006 - Q1/2011

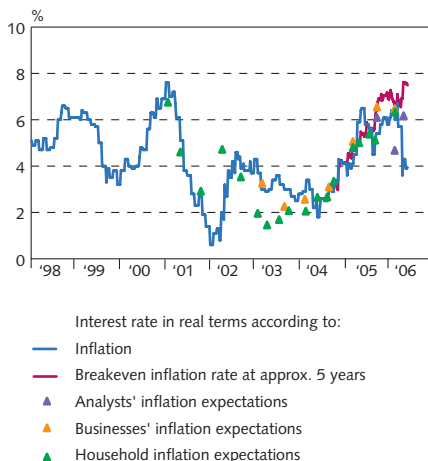


1. Data until June 21, 2006 inclusive.  
Source: Reuters.

Chart III-2

The policy interest rate in real terms

Weekly data January 7, 1998 - June 27, 2006

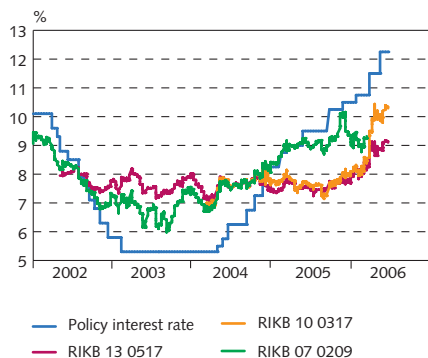


Source: Central Bank of Iceland.

Chart III-3

Long-term nominal Treasury bond yields and the Central Bank repo rate

Daily data January 3, 2002 - June 28, 2006



Source: Central Bank of Iceland.

## III Financial conditions

Since the beginning of this year, the policy interest rate has been raised three times, by 1.75 percentage points in all. Over the same period, inflation expectations have risen by almost as much or even more, depending upon the reference used. The policy rate in real terms has risen by only half a percentage point relative to market inflation expectations and has gone down against household expectations. Gauged in these terms, the monetary stance has therefore either tightened very slightly or eased, in spite of repeated policy rate hikes. The króna has depreciated considerably since the end of March. On the exchange rate measure, the stance has therefore eased as well, both because of the impact on profits in the traded goods sector and because foreign borrowing has once again become a more favourable option. However, a fair amount of uncertainty surrounds exchange rate developments over the next few months due to the wide current account deficit, increased likelihood of higher international interest rates and uncertainties as to whether foreign issuance of króna-denominated Eurobonds ("glacier bonds"), the first of which mature this autumn, will continue. Although the wider interest rate differential with abroad and the weaker króna make such issuance more attractive, it has not resumed with its initial vigour, in part because of changes in investor assessments of the risk profile, depressed carry trades in international markets, poor returns so far and tighter conditions for Icelandic banks to take part in the issuance process.

Yields on nominal Treasury notes have soared since March. The rising policy rate, increased inflation expectations and subdued demand for non-indexed bonds for swaps connected with glacier bond issuance have undoubtedly played a part. Growth of lending by the credit system is now at a historical peak, in the teeth of deteriorating financial conditions, and money supply growth is growing at its fastest rate since the 1980s.

Market agents and analysts appear to expect the policy rate to be raised by 0.5 percentage points when the current edition of *Monetary Bulletin* is published, then continue to rise in the coming months and peak at the end of the year. Indications about policy rate expectations from embedded market prices and analysts' forecasts have converged. One important reason is probably the Central Bank's clearer communication of the prospective policy rate path in the previous *Monetary Bulletin* in March.

Financial conditions of households and businesses have slowly tightened, although they cannot be called restrictive yet.

### Higher inflation expectations ease the monetary stance

Market expectations, measured as the yield spread between Housing Financing Fund (HFF) bonds maturing in 2014 and nominal Treasury notes maturing in 2013, have soared so far in 2006. The spread is now 4.4%, compared with less than 3.2% at the beginning of the year. Early in May, expectations measured in these terms were around 4.6%, the highest figure ever. Households expected 6.6% inflation six months ahead in a survey conducted from May 17 to June 3, the

highest value since October 2001. In mid-June, the real policy rate based on market expectations was only 0.4 percentage points higher than at the beginning of the year, despite being raised three times over that period by a total of 1.75 percentage points. Higher inflation expectations have clearly had a strong counter-effect on the tightening imposed by the high policy rate. The monetary stance has actually eased since March in terms of household expectations. A household confidence survey conducted at the end of February put the real policy rate above 6%. It is down to 5.3% in the most recent survey despite hikes of 1.5 percentage points in the interim.

### Yields on nominal Treasury notes have risen

Yields on nominal Treasury notes have firmed up since March and the spread between roughly four- and seven-year maturities has also widened from previous months. Many explanations are possible and have all undoubtedly exerted some impact. The weakening of the króna at the end of February kindled inflation expectations, making indexed bonds a more attractive option.

The policy rate increase in March affected yields of nominal Treasury notes quite sharply, while the impact of the May hike was negligible. The market appears to expect the current series of policy rate rises to come to an end within the lifetime of notes with a maturity of roughly four years, and foresees a drop in the longer run. Reduced glacier bond issuance is probably a major cause of upward pressure on yields.<sup>1</sup>

### Indexed bond yields have also gone up

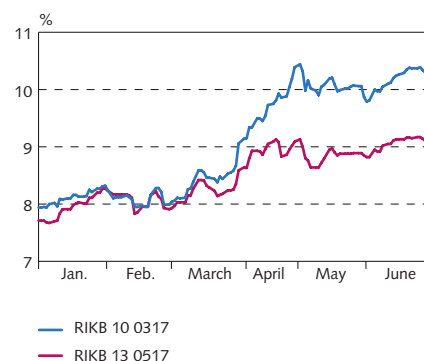
HFF bond yields have been volatile and after dropping in February they have climbed back to broadly the same level as before Fitch Ratings announced its change in Iceland's sovereign outlook from stable to negative. Yields on two shorter HFF bond series have moved away from those on two longer series since May. The impact of higher inflation expectations on bond yields may well vary according to their maturity.

While the March policy rate increase apparently drove up indexed bond yields, the effect of the May hike was limited to the shortest series after some rise in the days before it was announced. An explanation for this muted response may be that investors foresee an end to the policy rate rises shortly, or that inflation expectations have gone up.

### Convergence of forward rates and analysts' forecasts for medium-term policy rate developments

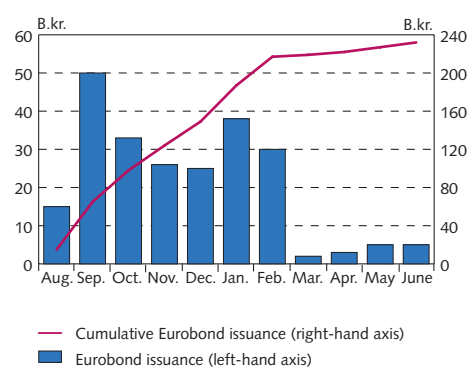
Recently there has been some misalignment between the expected policy rate path that can be read from forward rates in the market and financial market analysts' forecasts. Forward rates have implied that the policy rate is expected to come down quite rapidly in the next few months, despite repeated Central Bank statements to the

Chart III-4  
Nominal Treasury bond yields  
Daily data January 3, 2006 - June 28, 2006



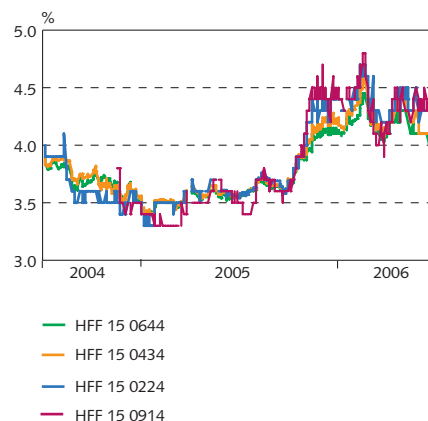
Source: Central Bank of Iceland.

Chart III-5  
Króna Eurobond (glacier bond) issuance  
August 2005 - June 2006<sup>1</sup>  
Monthly and cumulative volume



1. Data until June 21, 2006 inclusive.  
Source: Reuters.

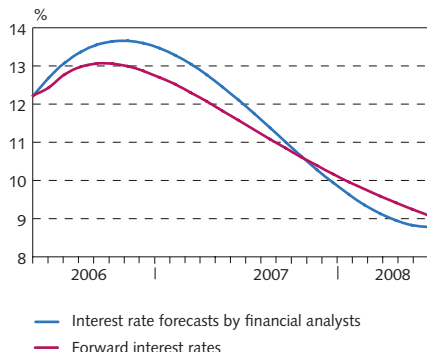
Chart III-6  
HFF bond yields  
Daily data July 8, 2004 - June 28, 2006



Source: Central Bank of Iceland.

1. Glacier bond issuance is discussed in more detail in Financial markets and Central Bank measures, pp. 63-69.

Chart III-7  
Central Bank policy rate based on forward  
rates and analysts' projections  
May 2006 - June 2008



Source: Central Bank of Iceland.

contrary. Analysts, on the other hand, have forecast that the policy rate will continue to rise and remain high, which is more in line with the Central Bank's own communication.

As pointed out above, this misalignment has been attributed to robust demand for domestic short-term securities in connection with glacier bond issuance, and to limited supply of Treasury securities. Both factors have created a shortage of domestic short-term securities and probably temporarily distorted their pricing. Forward rates have therefore failed to give reliable indications of the expected policy rate. However, they may also have reflected foreign investors' over-assessment of the prospective strength of the króna before tremors hit the foreign exchange markets.

As Chart III-7 shows, this situation has changed recently. The expected policy rate paths signalled by forward interest rates and analysts' forecasts have moved into broad alignment. Analysts generally forecast a 0.5 percentage-point hike in July (see the survey in Box VIII-2). Forward rates and analysts' forecasts imply continued policy rate rises until the autumn, when it will peak at 13-13.5%. This interest rate level is some way higher than indicated by their forecasts in *Monetary Bulletin* in March; the current policy rate is higher than they had expected then. Afterwards, the policy rate is expected to enter a gradual downward path early in 2007 and reach 9% two years hence. The standard deviation in the analysts' forecasts has also decreased sharply compared with *Monetary Bulletin* 2006/1 in March. Although based on few observations, this may indicate less uncertainty about policy rate developments.

### Market imbalances have adjusted and the Central Bank's message is clearer

Closer alignment between analysts' forecasts for the policy rate and embedded expectations in forward rates indicate some adjustment of the imbalances described above. A decline in glacier bond issuance, plans by the National Debt Management Agency to step up Treasury securities issuance – which will contribute towards deepening the market and more efficient pricing – and the establishment of an international market for swaps of domestic bonds with a maturity of up to seven years have enhanced market price formation.

Another explanation for the closer alignment between forecasts and expectations may be that some uncertainty has been dispelled about how the policy rate will develop. In the last *Monetary Bulletin* in March, the Central Bank delivered a clearer communication concerning policy rate developments two years ahead. The Bank presented for the first time a policy rate path based on an endogenous policy response for attaining the inflation target by mid-2008. That path showed that the policy rate would continue to rise quite substantially and the Bank stated that it would raise it as much as was needed in order to attain the inflation target within an acceptable time. This probably clarified the Central Bank's message, which ought to facilitate monetary policy transmission, i.e. contribute towards heightening the impact of policy rate changes across the interest rate spectrum to long-term interest rates.



### Foreign interest rates continue to rise

Both long-term and short-term interest rates in Iceland's main trading partner countries have shown sizeable increases recently as policy rates rise in many parts of the world. Despite these increases, Iceland's interest rate differential with its main trading partner countries, based on three-month interbank market rates, has not been wider since March 2002. Relative to five-year Treasury notes, the differential has increased since March, because Icelandic yields have risen by more and the yield difference has widened to broadly the June 2001 level. A wider interest rate differential should support the króna. Yields on ten-year US Treasury bonds and in the euro area have gone up since March.

### Credit system lending growth at a historical peak

At the end of March, twelve-month growth of lending by the credit system reached its highest rate since the end of the inflationary episode at the beginning of the 1990s, at 39.7%. Corporate lending increased by 61.8% and household lending by 25%. Foreign lending growth of 107.6% was almost entirely accounted for by deposit money banks (DMBs). Foreign borrowing has increased in króna terms, and conditions for new foreign borrowing are expected to have improved following the depreciation of the króna.

After adjustment for exchange rate movements and inflation, twelve-month DMB lending growth has slowed down to roughly the same level as in March 2005. Twelve-month indexed DMB lending growth also appears to be on a downward path as new mortgage lending by banks falls. This has been offset by added momentum behind lending by the HFF, which had not raised its mortgage rates by as much as the banks until the end of June.

### Steep growth in money supply at present

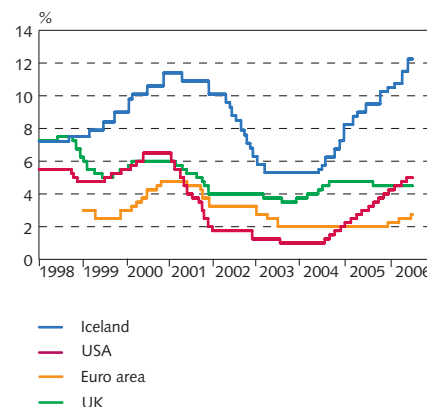
Money supply growth has surged in recent months on all four criteria by which it is measured. Growth over the past half-year has been close to the growth rate prevailing in the late 1980s. Measurements of money supply are volatile, as shown in Chart III-11, partly due to short-term deposits of large amounts in ordinary savings accounts. Over the past year the sharpest increase has been in the most liquid categories, M1 and M2. Although it has shown wide fluctuations, deposit growth has increased firmly in recent months. In the current climate of high inflation expectations and several months of uncertainty in the equity market, investors might be expected to restructure their asset portfolios, opting to deposit funds in high-interest accounts, preferably indexed, instead of buying shares. Such a trend might have been reflected in an increase in M3 in excess of other money supply categories, but this appears not to be the case at present. Rapid money supply growth must therefore be seen as an indicator of large amounts of liquidity which will exert inflationary pressure in the long run.

### Financial conditions of households and businesses

Financial conditions of households and businesses have probably deteriorated in the first half of this year. Interest rates on new mort-

Chart III-8  
Central Bank policy rate

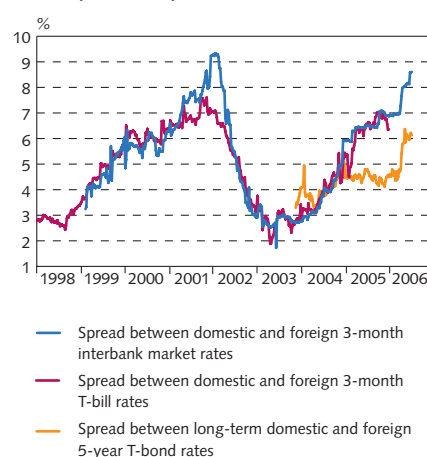
Daily data January 1, 1998 - June 28, 2006



Sources: Reuters EcoWin, Central Bank of Iceland.

Chart III-9  
Interest rate differential with abroad

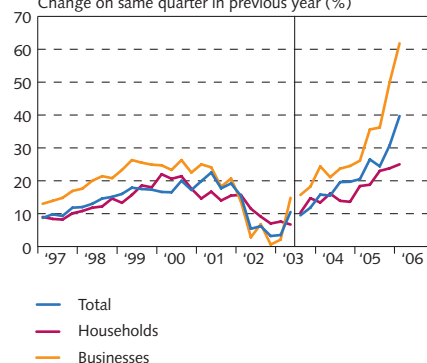
Weekly data January 7, 1998 - June 27, 2006



Source: Central Bank of Iceland.

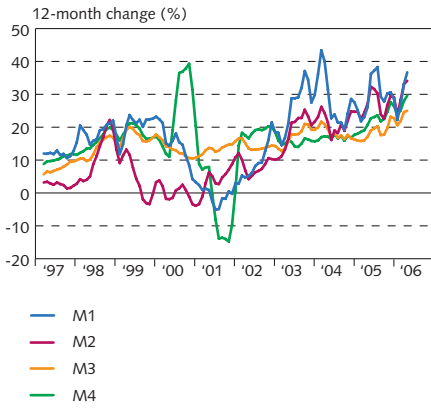
Chart III-10  
Quarterly credit system lending growth<sup>1</sup>  
Q1/1997 - Q1/2006

Change on same quarter in previous year (%)



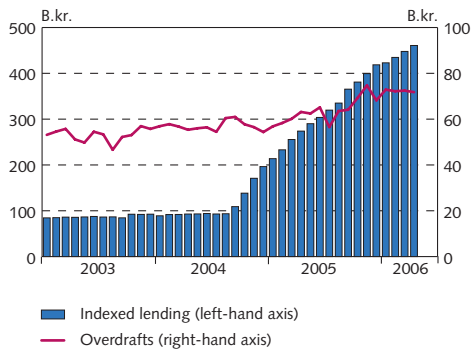
1. Due to a reclassification of lending, after Sept. 2003 data by sector are not comparable with earlier data.  
Source: Central Bank of Iceland.

Chart III-11  
Money supply (three-month averages)  
March 1997 - May 2006



Source: Central Bank of Iceland.

Chart III-12  
Growth in DMB lending to households  
January 2003 - April 2006



Source: Central Bank of Iceland.

gages have been raised, although this will only affect new borrowing. Banks have also lowered their maximum loan-to-value ratios in recent months. The Government has announced temporary reductions in the HFF's loan-to-value ceilings from 90% to 80% and in maximum mortgage amounts from 18 m.kr. to 17 m.kr. Nominal interest rates have risen, but since inflation expectations have increased at the same time, short-term rates have probably not gone up in real terms. There is no question about the heavier debt service on foreign borrowing, because the depreciation of the króna is passed through to it immediately. Foreign interest rates, which are usually variable, and risk spreads have also increased. As pointed out in *Monetary Bulletin* in March, however, foreign borrowing accounts for only a small part of household credit portfolios. Furthermore, the depreciation of the króna diminishes the expected exchange rate risk for foreign currency-denominated borrowing, at least in the long run.

Household and business debt has been mounting and the quarterly rate of increase is at a record level. When the banks launched their new mortgage loans, it was claimed that households would reduce their overdrafts after debt conversion. After an initial reduction, households have overdrawn more again. However, figures for arrears and default do not indicate that households or businesses are becoming overburdened by their financial conditions.

## IV Domestic demand and production

Demand has continued to surge so far in 2006, at a faster pace than the Central Bank had projected. According to data from Statistics Iceland, national expenditure grew by 13.7% year-on-year in Q1/2006. Annualised and seasonally adjusted national expenditure is estimated to have increased by 16.1% from the preceding quarter. This is even faster growth than the 14.9% average recorded in 2005. In its March *Monetary Bulletin*, the Central Bank forecast that national expenditure in 2006 would be 4.7% more than the previous year. This forecast can only hold if the rate of increase dwindles to almost nothing for the rest of the year.

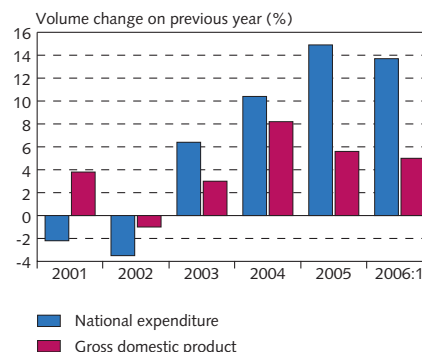
GDP growth in Q1/2006 was broadly in line with the figure a year before. Statistics Iceland estimates that GDP increased by 5% over the twelve months from Q1/2005. Annualised and seasonally adjusted GDP growth measured 4.1% between Q4/2005 and Q1/2006. In March, the Central Bank forecast a rather lower growth rate of 4.2% over 2006. Now the outlook has moved to the upside and GDP growth for the year is forecast at 4.8%. The estimated positive output gap remains broadly unchanged at just under 4%. GDP growth looks set to shrink in 2007, falling to 1.8%. In spite of curtailed growth, the output gap is projected to remain positive by 3% on average in 2007 and not reach balance until 2008. GDP is forecast to contract by ½% in 2008 and the output gap will turn negative during the latter half of the year.

As explained in the forecast overview in section I, the baseline forecast assumes that the policy interest rate will develop in line with market agents' and analysts' expectations and forecasts. Two alternative scenarios are calculated. One keeps the policy rate unchanged, while the other presents a calculated policy rate path based on a simple monetary policy rule which will bring inflation down to 2.5% two years ahead. Very little difference is shown in the output gap produced by the various paths in 2006, since the impact of a policy rate change tends to be transmitted to output and inflation with some lag. However, the output gap estimates diverge widely for 2007. The forecast based on an endogenous policy rule produces a marginally negative output gap, but it is positive by more than 3% in the other cases. In 2008 the output gap is negative in all scenarios, most strikingly in the case where the monetary policy rule determines the policy rate which leaves it at roughly 5%. This is the size of negative output gap needed to bring inflation down to target in Q1/2008. In the other cases, the rate of inflation is significantly higher.

### Private consumption

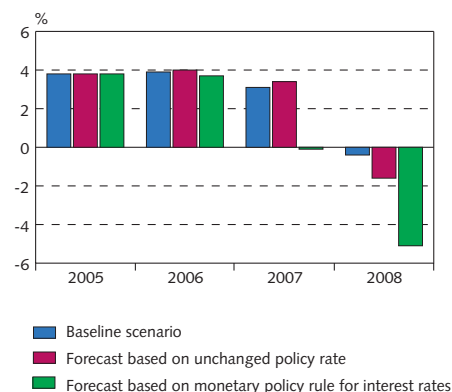
Private consumption raced ahead in Q1/2006. Statistics Iceland estimates an increase of 12.6% year-on-year in that quarter. This figure is even higher than the average over 2005 when it reached 11.9%. In March, the Central Bank had forecast that private consumption would grow by 5.4% year-on-year in 2006. For that forecast to hold, private consumption growth would need to plummet to 3.3% over the remaining three quarters.

Chart IV-1  
National expenditure and GDP growth  
2001-Q1/2006



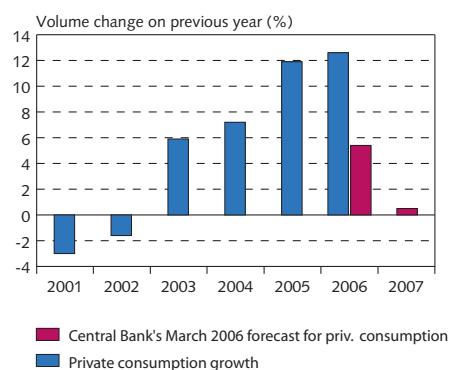
Source: Statistics Iceland.

Chart IV-2  
Estimated output gap 2005 and forecasts  
for 2006-2008



Source: Central Bank of Iceland.

Chart IV-3  
Private consumption growth 1997-2007<sup>1</sup>



1. Data for 2006 are based on Statistics Iceland estimates for Q1/2006 and the Central Bank's March 2006 forecast for the year.  
Sources: Statistics Iceland, Central Bank of Iceland.

Table IV-1 Indicators of private consumption 2005-2006

% year-on-year change unless otherwise stated	Quarterly figures				Most recent period		
	Q2/2005	Q3/2005	Q4/2005	Q1/2006	Month	Change based on	
						same period in prev. year	year-to-date figures
Groceries turnover (in real terms)	10.5	9.2	9.5	7.4	May	7.3	7.3
Payment card turnover (in real terms) <sup>1</sup>	14.4	10.7	4.8	9.3	May	-0.7	5.2
of which domestic	12.8	8.3	1.5	7.6	May	-2.4	3.4
of which abroad	35.7	42.9	49.1	35.6	May	20.7	28.7
Domestic retail debit card turnover	26.7	23.5	13.4	14.3	May	10.4	10.2
Car registrations (increase in number)	64.4	57.8	43.3	37.2	May	-22.0	7.4
General imports (volume change) <sup>2</sup>	17.5	19.5	24.0	30.0	May	24.3	.
Imports of consumer goods (volume change) <sup>2</sup>	26.9	26.0	27.1	23.3	May	12.6	.
Private motor vehicles <sup>2</sup>	66.0	61.3	54.9	51.9	May	15.1	.
Consumer durables, e.g. household appliances <sup>2</sup>	38.5	38.7	35.7	12.6	May	12.2	.
Consumer semi-durables, e.g. clothing <sup>2</sup>	17.4	17.5	20.6	12.4	May	12.0	.
Food and beverages <sup>2</sup>	9.0	8.5	12.4	6.1	May	9.9	.
Imports of investment goods excluding ships and aircraft (volume change) <sup>2</sup>	26.6	28.4	42.7	48.8	May	48.8	.
Gallup confidence index	9.4	6.2	7.1	3.7	June	-18.2	-7.1
Current situation	34.6	31.5	28.8	14.6	June	-10.2	1.8
Expectations six months ahead	-5.9	-10.5	-8.1	-4.1	June	-25.0	-14.0

1. Payment card turnover for both households and businesses; the bulk of payment card turnover comes from households. 2. Quarterly figures are year-to-date.

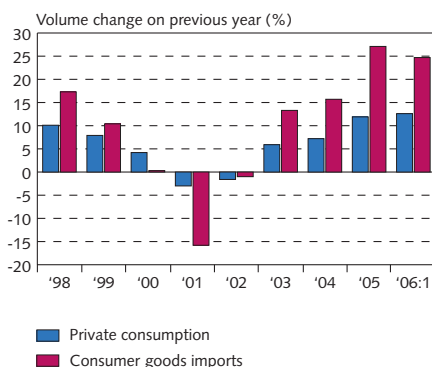
Sources: Federation of Trade and Services, Housing Financing Fund, IMG Gallup, Land Registry of Iceland, Motor Dealers' and Services Federation, Statistics Iceland, Central Bank of Iceland.

### Indicators point in various directions

Monthly indicators are always prone to fluctuations and one should be careful not to draw too sweeping conclusions from figures for individuals months. This applies in particular to the first months of the year, because the Easter holidays sometimes fall in Q1 and sometimes in Q2. Easter was in April this year but in March in 2005. Data for twelve-month growth in March and April, and thus in Q1 and Q2, therefore need to be read with particular caution. However, demand for consumer durables appears to have clearly diminished, as shown by the slump in motor vehicle registrations in April and May 2006 compared with the same months in 2005 (see Table IV-1). Over the period January-April, however, total imports of consumer goods were up 15% year-on-year, including a 34% increase in imports of private cars. Figures for April reveal that imports of consumer goods rose by 2.5% at constant exchange rates compared with the same month in 2005, but car imports shrank by 13%. Payment card turnover in April and May hardly changed year-on-year. Retail payment card use, which may be the most effective indicator of private consumption developments, is still growing fast, however. Turnover on payment cards used by Icelanders abroad has also continued to soar with an annualised growth rate of 21% in April and May. Groceries turnover in April and May 2006 was 7% up year-on-year in real terms.

These data could indicate a slowdown in the rate of private consumption growth from Q1 to Q2. Gallup's consumer confidence index may provide some indication about the longer-term trend. It reveals that households' confidence about the current situation and outlook peaked in February this year. Over the past three months

Chart IV-4  
Growth of private consumption and consumer goods imports 1998-2005 and Q1/2006



Source: Statistics Iceland.

confidence has plunged, although it crept back slightly from May to June. In May the index measured 97, its lowest value since January 2002, but in June it shifted up to 101. In February the index stood at 138. Given the historical correlation between the confidence index and private consumption, its development may signal a slowdown in private consumption growth later in the year.

### Private consumption growth and its determinants

The main determinants of private consumption growth are growth of disposable income and household assets, and changes in real interest rates and the employment situation. In 2005, private consumption increased by 11.9%, in excess of real disposable income growth of roughly 8%. Measured by Statistics Iceland's wage index deflated by the CPI for private consumption, real wages per employee increased by 4.8%.

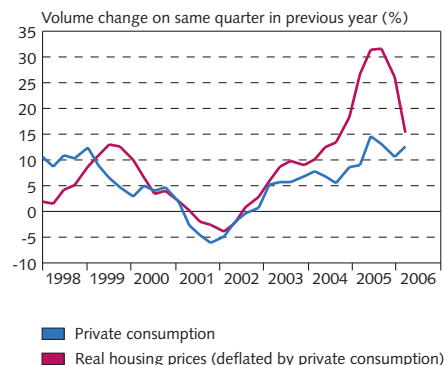
Both economic and statistical arguments point to the large contribution that soaring housing prices have made to the recent surge in private consumption. Housing prices in Q4/2005 were up 28% year-on-year. Combined with a massive increase in equity prices, they drove up net household assets<sup>1</sup> by 27% in real terms at the end of 2005 compared with a year before, even though household debt rose by 22% in real terms over the same period.

Greater real disposable income and the wealth effect were partly offset by higher interest rates in 2005. The impact of interest rate rises on indexed lending was not felt until towards the end of the year, and was slight compared with the earlier drop in interest rates. Also, only a small part of household debt bears variable interest, which is much more sensitive to changes in the Central Bank's policy rate. Thus even with a leap in household debt and some rise in interest rates, households' debt service actually went down as a proportion of their disposable income. One reason is rocketing disposable income, and the other is that new borrowing is generally at a longer maturity. Longer average household borrowing counteracts the rise in short-term interest rates.<sup>2</sup>

According to the baseline forecast, net household assets will decline over the period 2006-2008, both because of a drop in housing prices and because household consumption is expected to increase by more than disposable income, reflecting greater scope for borrowing on favourable terms against the sharp increase in their net assets recently. However, the swelling of assets caused by higher housing prices could easily reverse because of increased housing supply at the same time as disposable income hardly grows or even contracts. There is little historical experience of forecasts for housing price developments in a climate like the present, so their reliability is

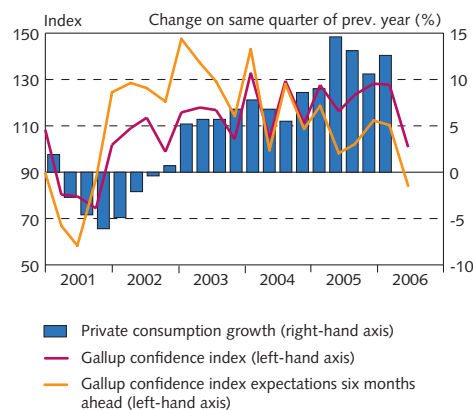
1. Net household assets are estimated here as the value of residential housing plus financial assets such as securities and bank deposits, less liabilities. Assets represented by pension rights or other similar demands are not included.  
 2. In the short term, longer maturities may reduce the risk that households will default on borrowing from credit institutions if their disposable income falls, because it will account for a smaller share of their debt service. However, long average loan maturities restrict credit institutions' scope for responding to household liquidity problems with extended repayment terms.

Chart IV-5  
Changes in private consumption and real housing prices  
Q1/1998 - Q1/2006



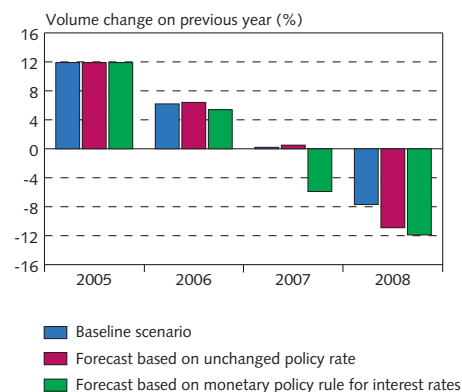
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-6  
Private consumption and consumer confidence  
Q1/2001 - Q2/2006<sup>1</sup>



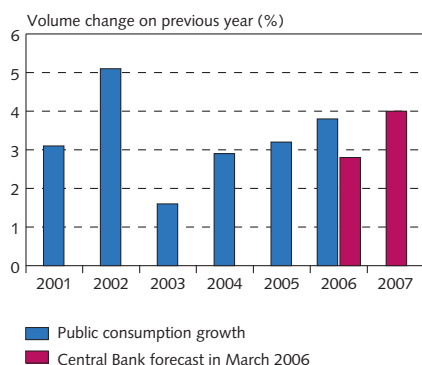
1. Confidence index at end of each quarter.  
Sources: IMG Gallup, Statistics Iceland.

Chart IV-7  
Private consumption 2005 and Central Bank forecasts for 2006-2008



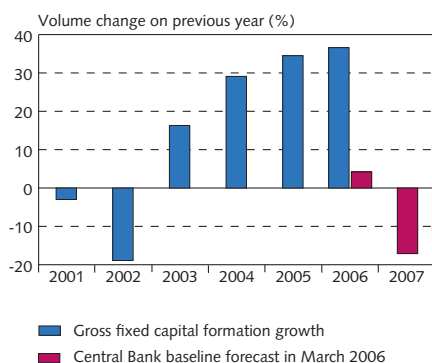
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-8  
Public consumption growth 2001-2007<sup>1</sup>



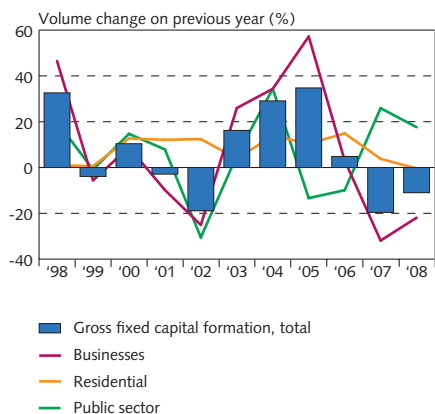
1. Data for 2006 are based on Statistics Iceland estimates for Q1/2006 and the Central Bank's March 2006 forecast for the year.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-9  
Gross fixed capital formation growth 2001-2007



1. Data for 2006 are based on Statistics Iceland estimates for Q1/2006 and the Central Bank's March 2006 forecast for the year.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-10  
Gross fixed capital formation growth and its main segments 1998-2008<sup>1</sup>



1. Central Bank baseline forecast 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

questionable. Housing price movements may therefore prove crucial for the way economic developments unfold. This introduces a high degree of uncertainty into forecasts for private consumption, and also for households and credit institutions faced with making decisions on consumption and borrowing on the basis of their net assets.

### High private consumption growth forecast this year, then a contraction

In the baseline forecast, real disposable income is expected to grow by ½% this year and housing prices to go down by 2½% in real terms. On the basis of these assumptions and data on private consumption developments in the first months of this year, the Central Bank forecasts private consumption growth beyond 6% in 2006. In 2007, real disposable income is expected to grow by 1½% while housing prices decline by 12% in real terms and private consumption remains more or less stagnant. Lower real housing prices and private consumption growth in excess of real disposable income will cause net household assets at constant prices (deflated by the price index for private consumption) to shrink by 7% in 2006 and 21% in 2007.

The alternative scenarios forecast a similar level of private consumption this year, but a much sharper difference in 2007. Private consumption will shrink by 6% then in the monetary rule-based scenario and by 12% in 2008, which is 4 percentage points more than in the baseline forecast.

### Public consumption

In its March baseline forecast, the Central Bank estimated that public consumption would increase by 2.8% this year, 4% in 2007 and 2.8% in 2008. One driver of high public consumption in 2007 is the government's takeover of projects previously handled by the US military at the Keflavik NATO base. The Bank's new baseline forecast is virtually unchanged.

Statistics Iceland estimates that public consumption grew by 3.8% year-on-year in Q1/2006, on the back of a 3½% increase in the second half of 2005. In order for the 2006 growth forecast to hold, public consumption may only increase by 2½% over the rest of the year.

### Gross fixed capital formation

The rate of growth of gross fixed capital formation in Q1/2006 implies that the figure for the whole year could exceed the Central Bank's March forecast. Its original forecast was for 4.2% growth in total investment, comprising a contraction of 1.1% in business investment, 24.8% growth in residential investment and a 7.5% contraction in public sector investment. Statistics Iceland estimates that investment grew by 36.6% over the twelve months to Q1/2006, including a 51.4% increase in business investment and 14.2% in residential housing investment, and a contraction of 2.2% in public sector investment.

### Business investment remains buoyant

The current growth episode is characterised by hefty investment equivalent to 28.7% of GDP. A comparable ratio can only be found thirty years back, in the mid-1970s. Over the period 1991-2004 the investment-to-GDP ratio was roughly 20%. The crucial factor here is investment in the aluminium industry and associated power plants, which was equivalent to almost 9% of GDP in 2005 and is forecast at almost 10% this year.

The forecast for investment in the aluminium and power sectors has been revised upwards since March. Part of the explanation is that some of the construction work scheduled for 2008 has been brought forward. According to current estimates, only 7 b.kr. will be invested in the aluminium and power sectors in 2008 (see Box IV-1). It should be pointed out that although new power-intensive industry projects are being studied, these are not incorporated into the current Central Bank forecasts, which follow the principle of excluding such projects until they are more or less formally settled.

Other business investment was equivalent to almost 11% of GDP in 2005. Little reduction is expected in 2006 and 2007. Strong investment is expected in aircraft, tourism and fisheries. Thus no crowding out effect can be discerned as a result of the investments in the aluminium sector.

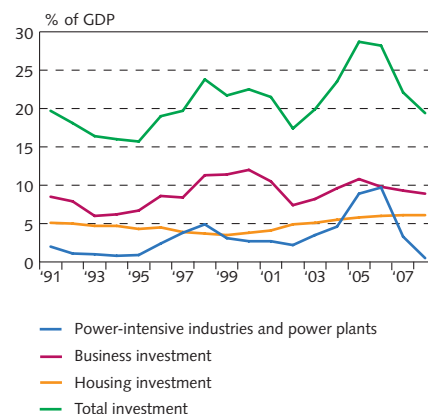
A Gallup survey reveals that almost 48% of companies expect to make broadly the same level of investment in 2006 as last year, 26% expect more and the same number less. Businesses have been turning steadily more pessimistic about their medium-term investments compared with earlier surveys.

Business investment, including the aluminium and power sectors, will increase by 3% in 2006, according to the baseline forecast. After the 51% growth in Q1/2006 shown by data from Statistics Iceland, this will entail a massive turnaround during the year. Business investment in Q4/2006 is therefore forecast to drop by 20% year-on-year. A contraction of 32% is forecast for 2007 and a further 22% in 2008.

By the middle of this year more than  $\frac{2}{3}$  of ongoing construction projects for aluminium smelters and power stations are expected to be completed. When these projects wind up in 2009, Iceland's total aluminium production will be roughly 800 thousand tonnes per year (tpy), an increase of 530 thousand tpy from this year's 273 thousand tpy. Plans have been aired for two new smelters, in Helguvík in southwest Iceland for Norðurál (Century Aluminium) and near Húsavík in north Iceland for Alcoa. An extension to the Alcan plant in Straumsvík, southwest Iceland, is also on the agenda. More progress has been made on some plans than others, but all are at the exploratory stage, so that it is still very uncertain when they will be launched or even if they will materialise at all.

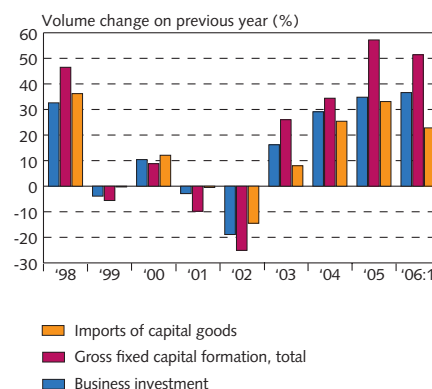
Alcan has concluded siting agreements with the landowners around Straumsvík and an environmental impact assessment (EIA) has been made without being challenged. An operating permit has also been issued, so that official permission to go ahead is at hand, apart from a construction permit from Hafnarfjörður municipal au-

Chart IV-11  
Gross fixed capital formation: businesses, power-intensive industries and power plants 1991-2008<sup>1</sup>



1. Central Bank baseline forecast for 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-12  
Gross fixed capital formation and imports of capital goods 1998-2005 and Q1/2006



Source: Statistics Iceland.

### Box IV-1

## Major uncertainties still loom over further aluminium investment plans

thority. Also, an agreement has been reached on the sale of up to 40% of the additional electricity required for the proposed extension. Current production capacity is 180 thousand tpy, and the estimated 280 thousand tpy extension will give a total production capacity of roughly 460 thousand tpy one year after it is completed. Construction of the extension is provisionally timetabled to begin in 2008 and finish in mid-2010. Power supply development would need to begin earlier to enable the smelter to go on stream then. Agreements have not yet been made on sale of the remaining 60%.

In the beginning of June, Norðurál signed a memorandum of understanding with Suðurnes Heating (Hitaveita Suðurnesja) and Reykjavík Energy (Orkuveita Reykjavíkur) on supply of 250 MW of energy to a new smelter at Helguvík. It is assumed to be built in two stages. Work on Phase 1, with a capacity of 150 thousand tpy, could conceivably begin around mid-2010. Phase 2, adding a further 100 thousand tpy, would be completed in 2015. In April this year, Norðurál signed a conditional site and harbour agreement with the local Reykjanesbær municipal authority. A provisional timetable pinpoints autumn 2007 for the launch of construction work in Helguvík. However, a long licensing process lies ahead. For example, a formal EIA has not been launched. Only when that assessment is made can the authorities decide on issuing an operating permit. Also, the power sale agreement made this June will not suffice to supply Phase 1. Presumably agreements on adequate power supply will need to be concluded before construction can begin.

Less progress appears to have been made on preparations for the Húsavík smelter than for the Helguvík project or Straumsvík extension. Only the site has been decided by the developers. Ideas for electricity supply are still very vague and in-depth research will be needed before it is established whether local geothermal steam resources can provide enough. The power supply itself as well as the cost of providing it are thus all open to question and will be for some while. The entire licensing process also remains, i.e. an EIA and official operating permit.

### **The current sentiment is favourable but the outlook is poorer**

In a Gallup survey of business sentiment conducted among Iceland's largest companies in May, executives consider the economic situation is generally good but will deteriorate over the coming six months.

A majority of executives expect domestic demand to remain unchanged over the next six months and are considerably more downbeat than in the previous survey in February. Exporters are far more optimistic, however; the overwhelming majority expect demand to increase over the next six months. Recent developments of the króna have been favourable for these companies and most predict higher EBIDTA over the next half-year. Sentiment is more upbeat in fisheries, travel and transport and tourism than in the retail and financial sectors.

### **Public sector investment**

Forecasting public sector investment is fraught with problems. Budget authorisations cannot always be relied upon because they are commonly deferred between the years. In March the Central Bank forecast that public sector investment would contract by 7½% in real terms in 2006 but increase by 23% in 2007 and 18% in 2008. These estimates assumed a 19% cutback in central government investment.



Statistics Iceland estimates that public sector investment in Q1/2006 was 2.2% down year-on-year. Treasury data on a cash basis show 6% higher investment outlays and capital transfers in real terms in the first four months of 2006 compared with the same period a year before. After incorporating this data, this year's contraction in public sector investment is now estimated at almost 10%. Investment in 2007 and 2008 is expected to be in line with the March forecast, except that the Treasury now plans to lease Coast Guard helicopters instead of buying them next year. All told, public sector investment is expected to increase by 20% in volume terms on average over the next two years.

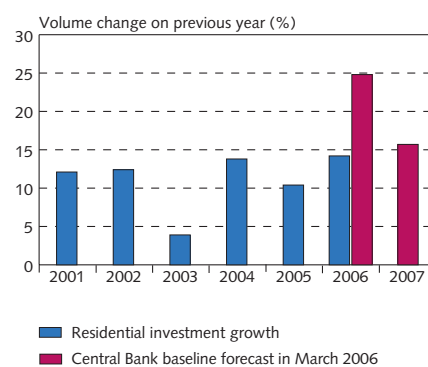
### Hefty residential investment, but less than forecast in March

Data on residential investment over the first months of the year indicate that the March forecast of almost 25% growth in 2006 was tilted to the upside. Recent quarterly figures from Statistics Iceland show 14.2% year-on-year growth in residential investment in Q1/2006. For the March forecast to hold, annualised growth will have to reach 28% over the other three quarters.

Other recent-term indicators for residential investment have been quite ambiguous. Huge rises in residential housing prices relative to the construction cost index imply high profitability in the sector, and this is reflected in the Central Bank's forecast. The number of issued building permits also supports forecasts of large-scale growth. Heavy investments in aluminium smelters, power stations and other structures make it difficult to read pointers from large imports of construction materials, but these are thought to corroborate forecasts for a large increase in residential investment.

Forecasts of the investment stock are complicated by changes in Statistics Iceland's methodology for assessing residential investment. Table IV-2 shows changes in Statistics Iceland's estimates and Central Bank forecasts since *Monetary Bulletin* 2004/4. The figures for 2004 show how Statistics Iceland's estimates, on which the forecasts in *Monetary Bulletin* were based, changed from preliminary data in March 2005 and up to the most recent figures published in March this year. Residential investment is forecast to grow by almost 15% this year but by less than 4% in 2007.

Chart IV-13  
Growth of residential investment  
2001-2007<sup>1</sup>



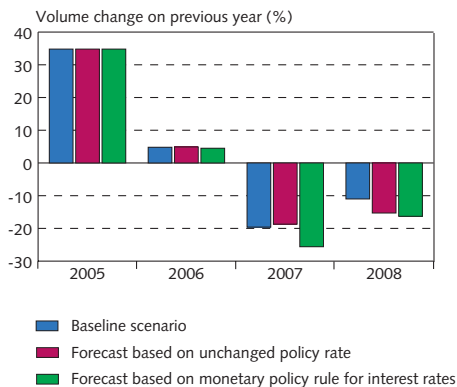
1. Data for 2006 are based on Statistics Iceland estimates for Q1/2006 and the Central Bank's March 2006 forecast for the year.  
Sources: Statistics Iceland, Central Bank of Iceland.

Table IV-2 Residential investment growth, year-on-year (%)

	2004	2005	2006	2007
MB 2004-4		8.3	5.8	-
MB 2005-1	3.0	19.5	9.6	-
MB 2005-2	3.0	21.9	9.9	-
MB 2005-3	5.7	12.0	10.0	0.2
MB 2005-4	5.7	11.8	9.5	0.6
MB 2006-1	13.8	10.3	24.8	15.7
MB 2006-2	13.8	10.4	14.9	3.8
Statistics Iceland June 2006	13.8	10.4	14.2 <sup>1</sup>	-

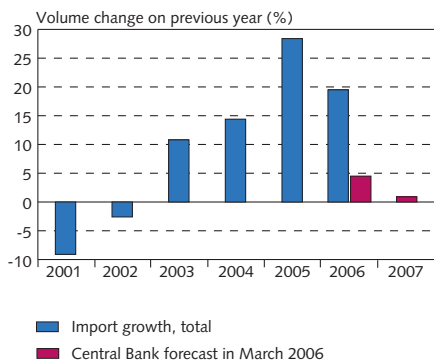
1. Increase from Q1/2005 to Q1/2006.

Chart IV-14  
Investment in 2005 and Central Bank forecasts  
for 2006-2008



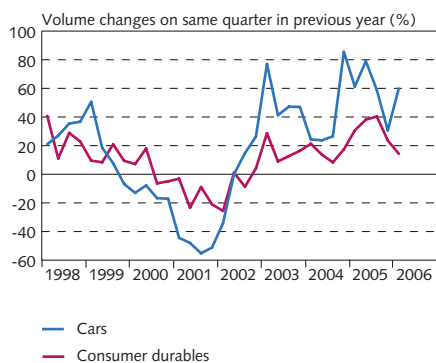
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-15  
Import growth 2001-2007<sup>1</sup>



1. Data for 2006 are based on Statistics Iceland estimates for Q1/2006 and the Central Bank's March 2006 forecast for the year.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-16  
Imports of cars and consumer durables  
Q1/1998 - Q1/2006



Sources: Statistics Iceland, Central Bank of Iceland.

### Marginally more investment forecast this year but less in 2007

According to the baseline forecast, gross fixed capital formation will grow by almost 5% in 2006, which is a slight upward revision from March. Growth in 2006 is broadly the same in the alternative scenarios. All scenarios show a sharp drop in investment in 2007 and 2008. This is most marked in the case where a monetary policy rule is applied, where gross fixed capital formation plunges by 26% in 2007 and 16% in 2008.

### Imports

After a surge in import growth in 2005 and fairly strong growth in the two preceding years, the Central Bank has been expecting the rate of increase to slow down. Imports are still expected to contract in the near term. In Q1/2006, total imports were up by 19½% year-on-year, measured at constant prices. Merchandise imports were up by 24½%, which is broadly unchanged from the 2005 rate. Services imports grew by somewhat less, at 9½% measured at constant prices, way down from the increase of almost 35% recorded in 2005. However, spending by Icelandic travellers abroad in Q1/2006 was 27% more than in Q1/2005.

### Merchandise imports still rising apace

Data for merchandise imports in April and May give no signs that import growth will slow down significantly in Q2. A major turnaround will therefore be needed in the second half of the year if the Central Bank's March forecast for 4½% growth this year is to hold. The sharpest increase in imports of capital and operating goods was during the first months of this year, which is attributable to construction of aluminium smelters and power plants. In all likelihood these investments are now peaking. The strong value of the króna over the past couple of years has meant that consumer durables have been relatively inexpensive, stimulating imports of them. In its initial stages the recent depreciation of the króna probably spurred imports of cars and other higher-bracket consumer durables, which are likely to wane in the near future when the weakening of the currency has been transmitted to domestic prices.

The impact is difficult to quantify both because of the effect of the depreciation on the price of the goods themselves and the volatile character of such imports, as shown in Chart IV-16 (see further section VII on External balance).

### Outlook for slower import growth

The baseline forecast for import growth this year has been revised downwards since March, to 3½%. In 2007 a much sharper slowdown in imports is forecast than in March. A contraction of 6% is now expected according to the baseline forecast instead of 1% growth, and 11% in the scenario applying a monetary policy rule. It should be borne in mind that the March forecast was based on a considerably stronger króna than now. Imports are forecast to decline by a further 2-6% in 2008, and most sharply in the rule-based scenario.

## GDP growth and the output gap

The past two years have been characterised by a wide positive output gap. A sharp turnaround took place in 2004 when the output gap turned positive by 2½% after being negative by 2% the year before. The main reason for this shift was robust GDP growth of 8.2% in 2004. As Chart IV-17 shows, the output gap correlates closely with GDP growth.<sup>3</sup> It also shows the negative correlation between unemployment and the output gap, i.e. a large output gap and strong growth are accompanied by low unemployment and vice versa.

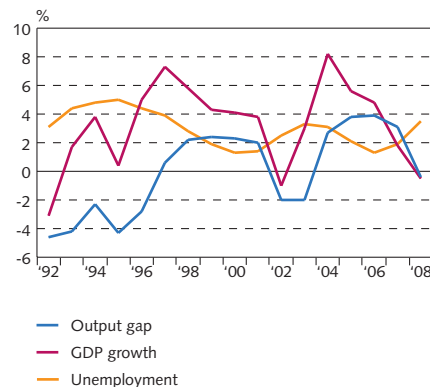
With GDP growth measuring 5.6% in 2005, the output gap widened to almost 4%, which is less than previously estimated, after Statistics Iceland had revised historical data on the capital stock upwards. All things being equal, a higher capital stock reduces the measured output gap.

The Central Bank has revised its GDP growth forecast upwards to almost 5% from 4% in March. However, the output gap remains virtually unchanged. Growth of just under 2% is forecast for 2007, narrowing the output gap to 3%. In 2008, a forecast ½% contraction in GDP will turn the output gap slightly negative.

The current estimate of the output gap is made from the baseline forecast, whereby the policy interest rate changes in line with bond market expectations and financial market analysts' forecasts. Forecasting the output gap is fraught with uncertainties. Chart IV-18 shows the current output gap estimate (the dark line in the centre of the blue path) and the confidence intervals representing the probability that the output gap will deviate from the estimate. There is a 50% probability that the output gap will fall within the darkest range, the 75% confidence interval is the lighter range and the 90% confidence interval is the shaded range. According to these calculations, there is a 5% probability that the output gap will be less than 1% in 2007, but also a 5% probability that it will be more than 5%.

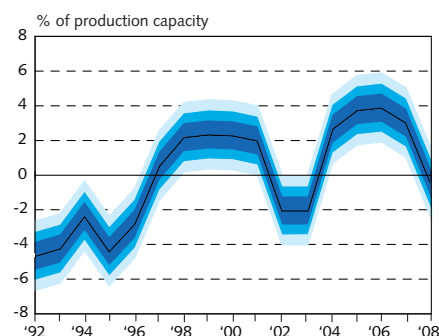
Other assumptions for the policy rate produce a different probability distribution. The mean values for the output gap based on the three forecasting paths can be seen in Chart IV-2 on p. 19. It shows that the output gap and demand reach balance in 2007 if the monetary policy rule is applied to determine the policy interest rate. In this scenario there is an even probability that the output gap will be negative during the year, but a 5% probability that it will be 2% or more.

Chart IV-17  
Output gap, growth and unemployment 1992-2008<sup>1</sup>



1. Central Bank baseline forecast for 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-18  
The output gap 1992-2008<sup>1</sup>

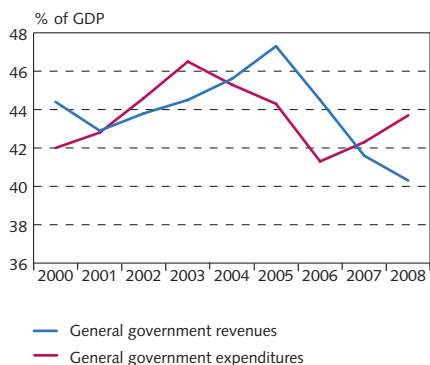


1. Confidence intervals for the output gap showing 50%, 75% and 90% probability that the output gap will lie within them, based on the average standard deviation of various measurement methodologies since 1981.  
Source: Central Bank of Iceland.

3. The methodology for estimating the output gap is described in more detail in Box IV-3, *Monetary Bulletin* 2006/1, 29.

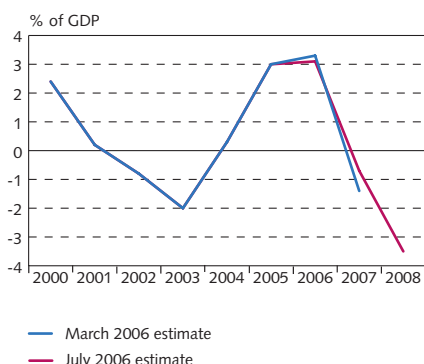
## V Public sector finances

Chart V-1  
Treasury revenues and expenditures  
2000-2008



Sources: Statistics Iceland, Central Bank of Iceland baseline forecast.

Chart V-2  
Changes in fiscal balance estimates  
2000-2008  
General government



Source: Central Bank of Iceland.

### Outlook for a sharp reversal in public sector finances over the next two years

Public sector finances are heading for a sharp reversal over the next two years, as has been pointed out in *Monetary Bulletin* since it presented its initial estimates for 2007 in autumn 2005. The last *Monetary Bulletin* in March forecast a public sector deficit equivalent to 1½% of GDP in 2007, which has now been revised to ½%. The outlook for 2008 is considerably worse, however. Estimates made from the Central Bank's baseline forecast and Ministry of Finance's medium-term programme show a decrease in public sector revenues from 47% of GDP in 2005 to just over 40% in 2008. Expenditures remain almost unchanged as a proportion of GDP, at close to 44%. Accordingly, the public sector balance will deteriorate from an estimated 3% surplus in 2005 and 2006 to a deficit of roughly 3½% in 2008. Part of the reason for this reversal lies with the depreciation of the króna and rising prices in export product markets, which both raise GDP prices by more than domestic prices, especially in 2006. Public sector revenues and expenditures fall relative to GDP as a result. Besides, public sector expenditures seem set to grow by 10% in real terms while revenues fall by the same measure over the period 2005-2008. In the Central Bank's alternative scenario applying a monetary policy rule, public sector finances show an even greater deterioration, as described in more detail below.

On June 27, shortly before *Monetary Bulletin* was published, the Government announced a reduction in maximum mortgages from the Housing Finance Fund (HFF), as well as postponement of state investment projects that had not already been launched and talks with local authorities on doing the same. Plans to postpone investment projects are still unformulated so they are not incorporated into the following analysis. Because the postponement was announced well into this year it will largely be reflected in 2007 and 2008 and probably only have a slight impact on the fiscal balance in 2006. More difference may be felt in 2007, but figures will not be known until the budget for that year is announced. The most crucial factor might be if households gain confidence that the government is squaring up to join the battle against inflation.

Table V-1 Public sector 2004-2008<sup>1</sup>

% of GDP	2004	2005	2006	2007	2008
Public sector revenues	45.6	47.3	44.5	41.6	40.3
Public sector expenditures	45.3	44.3	41.3	42.2	43.6
Public sector balance	0.3	3.0	3.1	-0.6	-3.4
Net public sector debt <sup>2,3</sup>	19.4	10.2	5.1	5.2	8.4
Total public sector debt <sup>3</sup>	36.5	29.0	22.4	20.5	21.6

1. National accounts presentation. 2. Including Treasury liquidity. 3. Excluding pension fund commitments.  
Sources: Ministry of Finance, State Accounts, Statistics Iceland, Central Bank baseline forecast 2006-2008.

### Large revenues produce strong fiscal surplus this year

The outlook is for a similar Treasury result in 2006 to the record set in 2005. It is estimated at 3.6% of GDP excluding proceeds from the sale of government assets and fluctuations in tax write-offs and pension commitments. This year's bright outlook is due to both negligible expenditure growth in real terms as result of lower investment and financial expenses, and an estimated 1.6% revenue increase in real terms on top of last year's result. Revenue growth is largely driven by short-lived conditions forming in the current upswing, e.g. high Treasury revenues from corporate income tax, capital income tax and stamp duty. These factors offset the erosion of revenues from value-added tax and import duty caused by the depreciation of the króna and easing pressures in the economy.

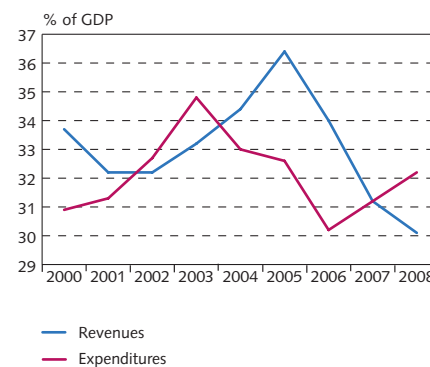
### Treasury close to balance in 2007

The estimates presented here for 2007 repeat the assumption made in *Monetary Bulletin* in March of a cut in the income tax rate and unwinding of the special conditions that have boosted revenues from corporate income tax, capital income tax and stamp duty, reducing Treasury revenues by just over 25 b.kr. Conversely, expenditures will increase by 25 b.kr., according to the medium-term programme and baseline forecast assumptions. The Treasury will be in broad balance, which is some improvement on the outlook foreseen in *Monetary Bulletin* in March, which was heading for an estimated deficit equivalent to 1% of GDP.

According to the Central Bank's baseline forecast, Treasury revenues from indirect taxation will show some increase in 2007, due to an appreciation of the real exchange rate. The final stage of the Government's tax cut package is estimated to cost the Treasury roughly 14 b.kr., somewhat more than the tax cuts this year. The tax restructuring announced to facilitate the wage settlement review in June has little effect on costs in 2007 but will be felt more in 2008. According to the baseline forecast assumptions, these arrangements will then cost the Treasury around 2 b.kr. or more, depending upon how mortgage interest allowance is reviewed.

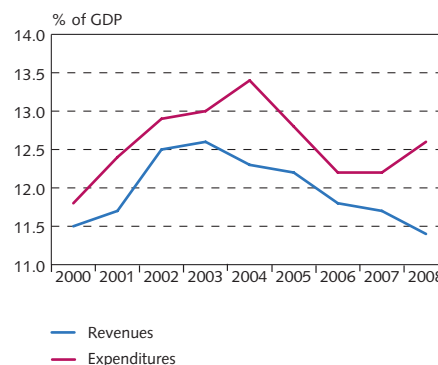
Treasury revenues from corporate income tax are estimated to halve in 2007 to a mere 15 b.kr. after collections of more than 32 b.kr. this year. Large financial institutions currently pay the lion's share of this tax. The fall implies an assumption that their profits will be much lower this year compared with 2005, although this may be ques-

Chart V-3  
Treasury revenues and expenditures  
2000-2008



Sources: Statistics Iceland, Central Bank of Iceland baseline forecast.

Chart V-4  
Local government revenues  
and expenditures 2000-2008



Sources: Statistics Iceland, Central Bank of Iceland baseline forecast.

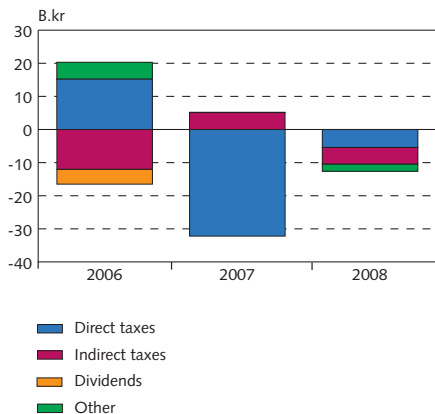
Table V-2 Treasury 2004-2008<sup>1</sup>

% of GDP	2004	2005	2006	2007	2008
Treasury revenues	34.4	36.4	34.0	31.2	30.1
Treasury expenditures	33.0	32.6	30.2	31.1	32.1
Treasury balance	1.3	3.8	3.8	0.1	-2.0
Treasury credit balance <sup>2</sup>	2.6	11.4	3.8	-0.1	-2.2
Net Treasury debt <sup>3,4</sup>	14.6	4.9	0.0	0.1	2.3
Total Treasury debt <sup>4</sup>	28.1	20.3	14.2	12.4	12.4

1. National accounts presentation unless otherwise stated. 2. Including liquidity. 3. Excluding pension fund commitments. 4. Estimate based on State Accounts presentation.

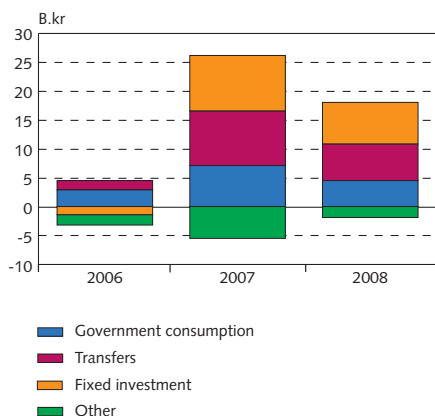
Sources: Ministry of Finance, State Accounts, Statistics Iceland, Central Bank baseline forecast 2006-2008.

Chart V-5  
Changes in central government revenue  
2006-2008  
At constant prices



Source: Central Bank of Iceland baseline forecast.

Chart V-6  
Changes in central government spending  
2006-2008  
At constant prices



Source: Central Bank of Iceland baseline forecast.

tionable. If their profits remain steady the Treasury's position would improve to yield a surplus equivalent to 2% of GDP in 2007.

Reasons for the increase in Treasury expenditures in 2007 are increased public consumption (including defence outlays), larger-scale transfers (including higher child allowance and mortgage interest allowance) and stepped-up investment in line with the medium-term programme. The investment increase is now uncertain in view of the latest announcements by the Government.

### The balance will continue to deteriorate in 2008

The Treasury balance is expected to continue to deteriorate in 2008, leaving a deficit measuring 2% of GDP. Tax revenues will shrink due to contracting economic activity and expenditures will outstrip inflation according to the public consumption forecast and Government investment plans, insofar as they go ahead.

Expenditures are expected to increase by 15-20 b.kr. in real terms in both 2007 and 2008. Almost half of this growth derives from government plans for investment projects to mitigate the contraction in those years when investments in the aluminium and power sectors come to an end. When those plans were drawn up, the draft budget for 2004 assumed that GDP in 2007 would be broadly balanced with output capacity. However, the output gap in the Central Bank's baseline forecast for 2007 is still positive by 3%, turning slightly negative in 2008. Thus there appears to be plenty of scope to defer the planned investment projects and distribute them more effectively. Similarly, it could be worth considering a deferral of planned public consumption expenditures and transfers where possible. The gains are fairly obvious if the Central Bank's baseline forecast is compared with the alternative scenario applying an endogenous monetary policy rule. Admittedly, there will be a sharper initial contraction in output and real wages if counterinflationary measures are launched, but they will readjust sooner, and inflation will come down much earlier. Another benefit of a coordinated fiscal and monetary mix is to spread the side-effects more evenly than if monetary policy is given sole responsibility for tightening. With coordinated measures, the policy interest rate will not need to be raised by as much. The Government's latest declaration promises steps in this direction.

### Local government deficit could increase in the coming year

Little of note has happened in local government finances since *Monetary Bulletin* was published in March. Preliminary accounts

Table V-3 Local government 2004-2008<sup>1</sup>

% of GDP	2004	2005	2006	2007	2008
Local government revenues	12.3	12.2	11.8	11.7	11.4
Local government expenditures	13.4	12.8	12.2	12.2	12.6
Local government balance	-1.1	-0.6	-0.4	-0.5	-1.2
Net local government debt	5.1	5.3	5.0	5.0	6.0
Total local government debt	8.5	8.8	8.3	8.2	9.3

1. National accounts presentation.

Sources: Ministry of Finance, Statistics Iceland, Central Bank baseline forecast 2006-2008.

from Statistics Iceland for 2005 had been released then, as had the Association of Local Authorities' survey of their budgets for that year. The Central Bank has not produced independent statistics from local government accounts and budgets, nor are requisite data available within the year to support forecasting on a quarterly basis.

The Ministry of Finance has made only minor revisions to its estimates of local government finances between its forecasts in January and June. The forecast for local government consumption has been revised slightly upwards, however. Recent Statistics Iceland data for Q1/2006 seem to corroborate that total public consumption this year will exceed earlier estimates, and over and above what can be inferred from monthly Treasury figures.

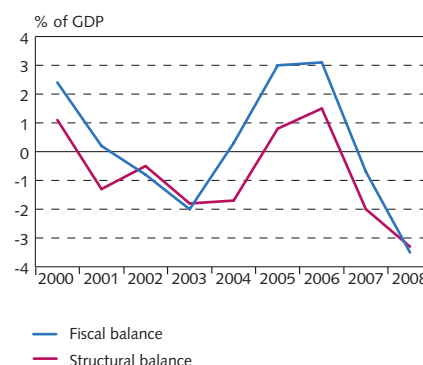
The Central Bank now forecasts an annual increase in local government consumption of almost 4%, which is close to its ten-year average growth rate, then a drop in investment in 2006 and 2007, followed by another increase in 2008. Some 60% of local government revenues derive from municipal income tax. During a contraction, they track GDP much more closely than central government consumption and other indirect taxes. Real estate taxes are more likely to display cyclicity, but account for only 10% of total local government revenues. Thus a contraction in national expenditure has a far more subdued effect on revenues for local government than for central government. The Central Bank's baseline forecast projects that local government revenues will increase in real terms by 4% from 2005 to 2008, while real Treasury income will shrink by 5%. The local government deficit will remain around or below ½% of GDP in 2006 and 2007, but widen with increasing expenditures and declining revenues in 2008. Net local government debt will rise by 1% of GDP to 6%. However, further sales of assets and restructuring along the lines followed in recent years could keep the book value of debts in check.

### Slightly higher structural balance forecast

As mentioned above, the public sector in general and Treasury in particular are expected to show a strong result in 2006, then reverse over the next two years from a surplus equivalent to 3% of GDP to a deficit on the same scale according to the baseline forecast. The alternative scenario based on endogenous monetary policy responses produces a poorer result. The reason is that in 2007-8, much larger slack forms in the economy compared with the baseline forecast. In 2008 the real exchange rate will decline as well. Over the past quarter-century, consumption has invariably contracted during periods of falling output gap and real exchange rate, and is reflected in the revenue forecast.

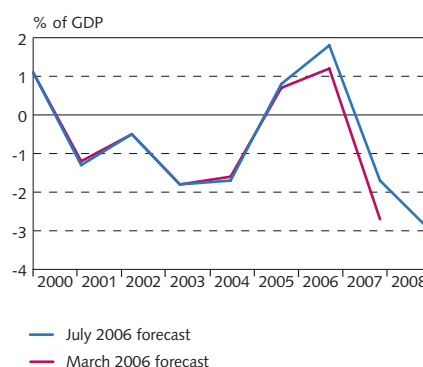
Chart V-7 shows the public sector balance along with the structural budget balance according to the baseline forecast. The structural balance is calculated by adjusting expenditures and revenues for changes in the output gap. Corrections for known changes in tax and expenditure rules are incorporated beforehand. Since the output gap is the most common gauge of cyclicity, the estimated correlation between the output gap and fiscal aggregates is traditionally used to estimate the impact of the economic cycle on public sector finances. However, this approach is probably too simplistic in Iceland's case,

Chart V-7  
Structural balance of public sector  
2000-2008



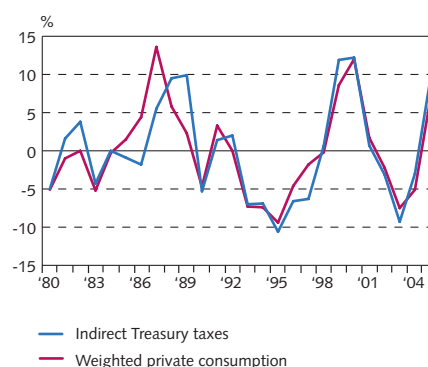
Sources: Statistics Iceland, Central Bank of Iceland baseline forecast.

Chart V-8  
Change in structural balance  
2000-2008



Source: Central Bank of Iceland baseline forecast.

Chart V-9  
Indirect taxes and weighted consumption  
1980-2005  
Deviations from trend



Components of consumption weighted by probable taxation.  
Source: Central Bank of Iceland.

because real exchange rate volatility, for example, can be crucial for the public sector balance.

The forecast 2006 public sector deficit of 3.4% of GDP is broadly in line with the forecast last March. In the current forecast the estimated output gap is slightly smaller, implying a slightly better structural balance at 1.8%. In 2007, a 0.4% deficit is forecast compared to 1.4% in March. With an unchanged estimate of the output gap, the structural balance is estimated at -1.7%, also a great improvement on March. In 2008, the deficit is forecast to widen by 2.8 percentage points as a proportion of GDP. This is in part explained by a 3% of GDP positive output gap turning into a ½% negative one. The structural balance deteriorates by a smaller 1.3 percentage points to around 3% of GDP, as shown in Chart V-8.

In Iceland, the exchange rate exerts a strong influence on Treasury revenues. Exchange rate fluctuations tend to follow the cycle closely, but not closely enough for their effect to be picked up by the output gap. The effect on Treasury revenues is nevertheless quite clear and at least in part due to the fact that when the króna strengthens, the makeup of consumption shifts in favour of heavily taxed items like automobiles and other durables. This is reflected in Chart V-9, which shows the deviation of indirect tax revenue from a trend as well as the similar deviation of a weighted average of consumption components, where the weights reflect approximate taxation. Private consumption as a whole does not explain the peaks in revenues, but an average weighted by the tax contribution of each component of private consumption comes close in the last fifteen years.



## VI Labour market and wage developments

Unemployment has continued to fall since the last edition of *Monetary Bulletin* was published in March and is now close to the previous cyclical low. Labour use has increased but there are indications of a pending drop in labour demand. The agreement signed between the social partners on June 22 will cause substantially higher wage inflation, well beyond a level compatible with price stability.

### Unemployment close to previous low

So far in 2006, unemployment has been in line with the Central Bank's March forecast in *Monetary Bulletin*, at 1.5%. Both registered and seasonally adjusted unemployment remained unchanged month-on-month in May at 1.3% and 1.2% respectively. Unemployment is forecast to remain broadly unchanged from the present level throughout 2006, then begin to climb and reach 3.5% in 2008.

### Labour use is still on the increase ...

According to Statistics Iceland's labour market survey, there was a surge in labour use year-on-year in Q1/2006, in terms of both number of employed and total hours worked.<sup>1</sup> Labour market participation increased by 4.3%. The number of people at work in Q1 increased by more – just under 5% – due to lower unemployment.

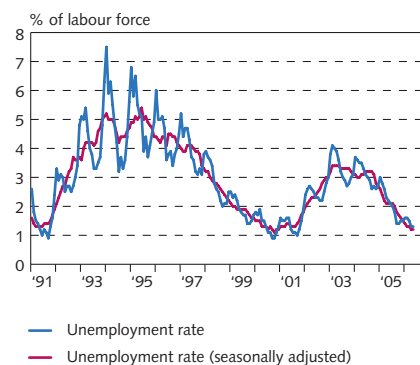
Growing labour use in the first quarter of last year produced a significant rise in employment among the most flexible sections of the labour force. The participation rate among the youngest age groups (16-24) rose from 64% a year ago to 69% in Q1/2006. Also, 10% more people were at work in the 55-74 age group and their average working hours increased by 3½ hours per week. In Q1/2006, employment for people aged 25-54, which had remained steadier than for other age groups for some while, also ran higher, and so did their total hours worked. The number of males at work aged 25-54 increased by 7½% and average hours worked by females was up by just over one hour per week. Total hours worked by this age group therefore increased by almost 7.8%, outpacing the total labour market average of 6.8%.

Labour market participation increased by 1.3 percentage points year-on-year in Q1/2006, to 81%. However, participation remains some way below the peak reached in 1999-2001, so domestic labour use may still grow.<sup>2</sup>

Vacancies registered at unemployment agencies have increased at a much slower pace since autumn 2005. So far in 2006 they are down by roughly 40% year-on-year. This does not reflect lower demand for labour, however, because now fewer vacancies need to be advertised to fulfil qualifications for work permits.<sup>3</sup>

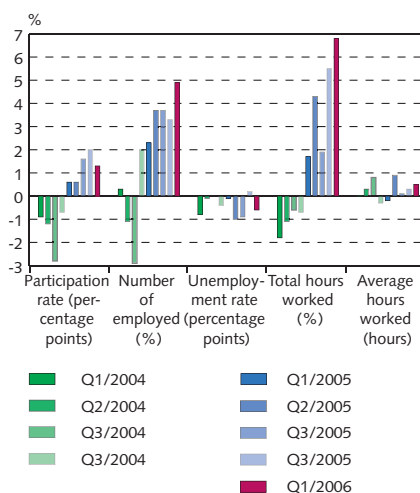
1. Total hours worked are the number of persons at work during the reference week multiplied by their hours worked.
2. The findings of labour market surveys for 1991-2002 are not fully comparable with those after 2003, however, due to changes in measurement methodologies.
3. See the discussion of vacancies in Rannveig Sigurdardóttir: The enigma of the Icelandic labour market, *Monetary Bulletin* 2005/1, 93-103.

Chart VI-1  
Unemployment rate  
January 1991 - May 2006



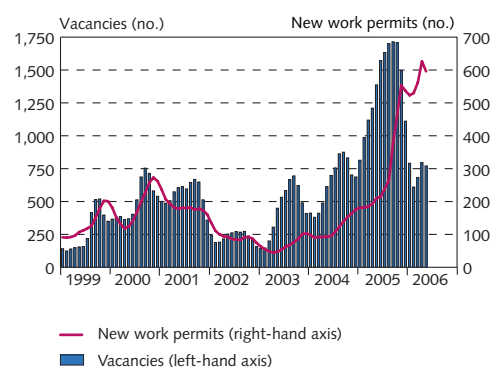
Sources: Directorate of Labour, Central Bank of Iceland.

Chart VI-2  
Changes in labour market 2003-2006  
Change on same quarter in previous year



Source: Statistics Iceland.

Chart VI-3  
Vacancies registered at employment agencies  
and issuance of new work permits 1999-2006<sup>1</sup>



1. Monthly data, shown as 3-month moving average.  
Source: Directorate of Labour.

### ... and so is work permit issuance ...

A considerable amount of the excess demand for labour has also been met by bringing workers into Iceland. This year's growth in work permit issuance indicates ongoing excess demand, which can only be met domestically on a small scale. As it happens, nominal work permit issuance fell in May, but only because permits were no longer required from nationals of the new EU states visiting Iceland to work as of May 1.<sup>4</sup> Employers recruiting them must nevertheless notify the Directorate of Labour and 323 such registrations were made in May.<sup>5</sup> Bracketing these registrations with work permit issuance produces a year-on-year increase in new foreign labour of 165% over the three months to end-May. Fewer work permits are likely to be issued for hydropower and aluminium sector projects in the coming months, because their labour requirement will diminish later this year after accounting for more than one-third of new work permits in Q1.

### ... but more businesses want to keep the status quo on staffing

The latest confidence survey in May among the 400 largest businesses in Iceland indicates that employers expect more difficulty in recruiting labour in the coming months than they did in the previous survey in February.<sup>6</sup> Also, fewer expect to take on new employees and more want to keep staffing levels unchanged. The change is most marked in the retail, financial and insurance sectors.

### Easier exchange rate position eases for traded goods sector

Attitudes have also changed in the fisheries and specialised services sectors. Many more companies in these sectors want to recruit in the next few months compared with the February survey.<sup>7</sup> Much of their more upbeat outlook is probably explained by a recovery in profitability following the recent depreciation of the króna.

### Real wage growth slows despite strong wage drift

Improved profitability in the traded goods sector is also a likely explanation for the early initiative to make substantial changes in current wage agreements which employers proposed on June 2.

Statistics Iceland's wage index shows wage inflation so far this year in line with the Central Bank's forecast, but accelerating price inflation has eroded real wages sharply. The twelve-month increase in the wage index was 8.7% in May, but real wages over the same period increased only by 1.1% as the CPI rose by 7.6%.

As inflation has considerably exceeded the inflation assumptions made in private sector wage agreements, they clearly no longer hold and wage agreements would most likely either have been reviewed or revoked towards the end of the year.

Chart VI-4  
Wage index and real wages  
January 2000 - May 2006



Source: Statistics Iceland.

4. The new EU states are: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.
5. More migrant workers probably arrived from these countries and were registered in June, because Icelandic ID numbers must be issued before registration.
6. Conducted by Gallup on behalf of the Central Bank, Ministry of Finance and Confederation of Employers.
7. Specialised services comprise education, software, public sector agencies and business services.

### Social partners' recent agreement well above a level compatible with price stability ...

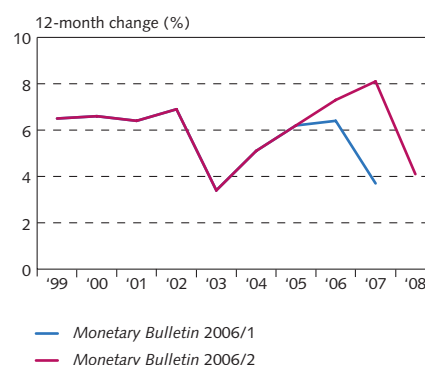
Under an agreement signed between the Confederation of Employers (SA) and the Federation of Labour (ASÍ) and its national member associations on June 22, an increment of 15,000 kr. will be added to all monthly basic wage rates as of July 1 – equivalent to an estimated 8% on average wages of the entire group to whom the settlement applies. Both sides hope that this increment will entail extra wage costs only in the case of private sector employees who are not paid more than the basic rate, because it is assumed that such overpayments will be reduced to offset the rise in basic rates. Employees who do not qualify for the increment but whose wages have not risen by at least 5.5% during the twelve months up to July 2006 will be awarded a rise equivalent to the difference, effective from July 1. The agreement is discussed in more detail in Box VI-1 on pp. 36-38.

### ... and a timely monetary policy response was impossible

In the current labour market climate, it seems implausible that the social partners will succeed in their aim of confining the wage rises to basic wage earners in the private sector. The labour market has been under severe pressure recently and businesses have been vying to clinch key personnel. This has created workplace wage differentials over and above those already structured into the pay scales laid down by wage agreements. The new agreement strives to erase this differential by focusing in particular on raising wages of employees who have been left behind. Market forces must surely seem likely to re-establish at least part of the differential eventually.

In light of the wage review agreed by ASÍ and SA and the probable wage drift it will catalyse, the Central Bank's forecast for the rise in wage costs this year has now been revised upwards. Productivity is not expected to increase from the previous forecast. Unit labour costs are now expected to rise by 7½% in 2006 instead of the 6½% forecast in March. This will cause strong inflationary pressures from the domestic labour market to which monetary policy cannot make a timely response. Unit labour costs are forecast to increase by more than 8% in 2007 and more than 4% in 2008. Wage rises on such a scale are far above a level compatible with the 2.5% inflation target. The alternative scenario based on a fixed policy interest rate yields broadly the same result as the baseline forecast. In the alternative scenario adjusted for the Central Bank's monetary policy response, however, the tighter stance results in higher unemployment in 2007 and 2008, and thereby smaller rises in wage costs.

Chart VI-5  
Unit labour cost 1999 - 2008<sup>1</sup>



1. Central Bank baseline forecast 2006-2008.  
Source: Central Bank of Iceland.

## Box VI-1

Review of private sector  
wage agreements**Assumptions underlying the 2004 private sector wage settlements have not held**

When nationwide private sector wage settlements were made in 2004, two underlying assumptions were that inflation would develop in line with the Central Bank's target and that the cost increases entailed by the agreements would be broadly indicative for other labour market settlements. Under a review clause, a joint committee appointed by the negotiating parties, the Federation of Labour (ASÍ) and Confederation of Employers (SA), would convene in November 2005 and November 2006 to assess whether these assumptions had held. If it found that they had not, the contracting parties could either review the wage package within the settlement or revoke the settlement en bloc.

In November 2005, the review committee found that the assumptions had not held and the wage section of the agreements was renegotiated.<sup>1</sup>

Since then, both prices and wages in other sections of the labour force have exceeded the underlying assumptions. SA presented a formal proposal for a wage review on June 2 with the aim of preventing a period of uncertainty until the scheduled revision in November 2006 and the prospect that wage settlements would be revoked in the run-up to next year's general election. A new agreement was reached on June 22.

**Twin aims ...**

The main objective of the new agreement is to "change inflation expectations in 2007 by bringing inflation into line, in the second half of that year, with the 2.5% target laid down in the wage agreement and in the Central Bank of Iceland's inflation target".<sup>2</sup> Targets are set by ASÍ and SA for maximum three-month rises in the CPI (see Table). On these assumptions, the twelve-month rise in the CPI in Q4/2007 will be close to 3.5%, and thus somewhat above the 2.5% inflation target.<sup>3</sup> However according to the ASÍ and SA assumptions, the annualised quarterly rise in the CPI would be under 2.5% in the second half of the year.

The second objective of the agreement is to "reduce the misalignment that has developed between contractual wage rates in the parties' settlements and those of the public sector" and a two-point agreement was made to that effect.

**Social partners' targets for inflation developments (%)**

	Quarterly change in CPI will be below:	Annualised quarterly change	Quarterly year- on-year change
Q3/2006	3.7	15.6	10.0
Q4/2006	2.9	12.1	11.7
Q1/2007	1.2	4.9	11.8
Q2/2007	1.0	4.1	9.1
Q3/2007	0.7	2.8	5.9
Q4/2007	0.6	2.4	3.5

1. See Economic and Monetary Chronicle, *Monetary Bulletin* 2005/4, 106-7.

2. ASÍ and SA objectives for reducing inflation, and cooperation between the social partners and the Government in connection with the agreement of June 22, 2006. Posted (in Icelandic) on the websites of ASÍ ([www.asi.is](http://www.asi.is)) and SA ([www.sa.is](http://www.sa.is)), June 22, 2006.

3. The inflation target is defined in the Declaration by the Government of Iceland and the Central Bank of Iceland on an inflation target and a change in the exchange rate policy from March 27, 2001, which states: "The Central Bank aims at an average rate of inflation, measured as the annual 12-month increase in the CPI, of as close to 2½% as possible."

### ... and two-point agreement

The agreement between ASÍ and SA is in two parts. First, the joint ASÍ and SA review committee agreed to establish a "safety net" ensuring wage-earners a minimum rise of 5.5% over the preceding year. Wage-earners whose wages have risen by less shall be awarded a rise equivalent to the shortfall from that figure.

Most private sector employees have probably received contractual wage increases of at least 4-5% over the past year. The broad private sector wage settlement included an across-the-board rise of at least 2.5% on January 1, 2006. A review of pay scales added a further increase estimated as costing employers 1%. Furthermore, a one-off payment of 26,000 kr. was made in December 2005 as part of the November review, which is equivalent to an additional 0.65% increase in monthly wages. In its own right, the safety net for wage developments will therefore probably not cost employers much, although companies might be affected to varying extents. The committee's new agreement also ensures that settlements remain in effect for their original duration, i.e. until the end of 2007.

Second, ASÍ and SA, with the latter's national member associations, upped all monthly wage rates by a flat 15,000 kr. as of July 1. The social partners estimate that the increment represents an 8% increase on average wages of the entire group to whom the settlement applies. Wage costs are not expected to rise by this much, because employees who are already paid more than the basic rate will only receive the difference between their current extra wages and the increment. It was also agreed to raise the minimum wage for full-time employment from 108,000 kr. to 125,000 kr., or almost 16%, over the term of the settlement.

### Public sector wages automatically incorporate the minimum rise

Most public sector wage agreements allow for them to be revised in line with the findings of the joint ASÍ and SA review committee. This means that their agreements will automatically be adjusted to incorporate the private sector's 5.5% safety net for wage developments. However, since the flat-rate increment and minimum wage hike were not part of the review committee's findings but a separate annexe to the ASÍ and SA national member associations' settlements, public sector agreements will not be automatically adjusted to incorporate this part of the package.

### Government involvement in the agreement

The Government of Iceland announced the following measures to facilitate the agreement between ASÍ and SA:<sup>4</sup>

1. The personal income tax rate will be reduced by 1% in 2007 instead of the announced 2% cut, while the personal income tax credit (personal allowance) will be increased by 8.3% over and above the previously decided 2.25% increase as of the beginning of next year. The tax-free income threshold will therefore be increased by 14% at the beginning of 2007, instead of 8%. Also, the personal tax credit will be indexed to the CPI. These changes will entail only a negligible increase in cost to the Treasury in 2007, because 1% of its announced 2% income tax cut has been withdrawn, but indexation of the personal allowance could cut Treasury revenues by 2 b.kr. in 2008.

4. The Government likewise announced its support for the goal of ASÍ and SA to reduce inflation in 2007 and "will cooperate closely with the parties to ensure the implementation of the economic premises underlying their agreement, especially as regards the development of prices." Posted on the website of the Prime Minister's Office ([www.forsaetisraduneyti.is](http://www.forsaetisraduneyti.is)) on June 22, 2006 (in English on June 23).

2. Legislation on mortgage interest allowance will be reviewed if rising housing prices erode these tax credits substantially. It is uncertain whether this will entail cost increases beyond the budget assumptions, because the sharpest rises in housing prices took place after the budget assumptions were decided.
3. Child allowances will apply to children up to the age of 18 instead of the present 16, at an estimated additional annual cost of 600-700 m.kr.
4. Contributions to adult education and job training will be increased by 120 m.kr. on an annual basis.
5. The Government will initiate cooperation with the social partners on foreign labour issues and the underground economy.
6. Basic monthly unemployment benefit will be increased by 15,000 kr. to almost 114,000 kr. as of July 1, a rise of more than 18%. The ceiling for income-related unemployment benefit will also increase from 180,000 kr to 185,000 kr. Based on the current level of unemployment this will cost an estimated 350 m.kr. per year, but could prove considerably higher if unemployment increases in line with forecasts by the Central Bank and others.

## VII External balance

### The outlook for the current account this year has been revised downwards but a sharper reversal is expected in 2007

The outlook is for a wider current account deficit than was forecast in March, for three main reasons. A very large deficit was recorded in Q1/2006, as domestic demand grew faster than forecast and exports by less. However, a higher policy rate than in the March baseline forecast – where it was assumed to remain unchanged across the horizon, as was the exchange rate – will cause demand to contract in 2007 and 2008 and unwind most of the current account deficit in the space of two years. A tighter monetary stance than assumed in the baseline forecast would expedite this development.

### Record current account deficit

According to preliminary estimates by Statistics Iceland and the Central Bank, the current account deficit in the first quarter of 2006 was more than 66 b.kr., equivalent to almost 26% of GDP. It widened by 7.1 b.kr. from the previous quarter. By comparison, the deficit in Q1/2005 corresponded to 14% of GDP. Some  $\frac{2}{3}$  of the additional deficit derived from investment and  $\frac{1}{3}$  from increased private consumption.

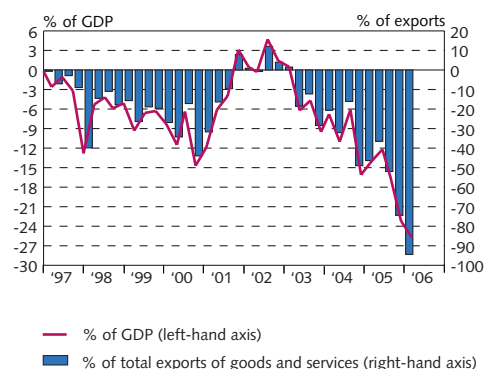
Roughly 47 b.kr. (71%) of the current account deficit in Q1/2006 originated in the trade and services account and 19½ b.kr. in income and current transfers. The deficit on income widened by almost 3 b.kr. from the previous quarter. Of this figure, interest payments were up by almost 27%. This was offset by a surge in investment income of more than 49%. Since interest payments account for a considerably larger share of the balance on income than interest income, however, the net effect was negative.

### Merchandise trade deficit widens from the previous quarter

The merchandise trade deficit in Q1/2006 totalled 31½ b.kr., equivalent to 12% of GDP. This is broadly the same figure as in the preceding two quarters. As before it is driven by robust import growth, although exports did increase slightly over the period. A large share of the additional deficit was accounted for by imports of capital and operating goods, especially for investments in the aluminium and power sectors. Imports of capital goods increased by more than 56% and operating goods by almost 41%. Consumer goods imports also soared in spite of the depreciation of the króna. Imports of consumer durables and semi-durables (e.g. household appliances and clothing) in the first four months of 2006 were up by more than 14% year-on-year. Growth slowed down in April, but perhaps only because there were fewer working days in that month. Another record for motor vehicle imports – close to 3½ b.kr. – was set in March, a month of particularly heavy imports.

Vehicle imports have probably reached a peak for the time being. The weaker króna and conceivable saturation after massive growth in the car stock in recent years should cut back demand. When the króna depreciated it is likely to have caused a shift in expenditure

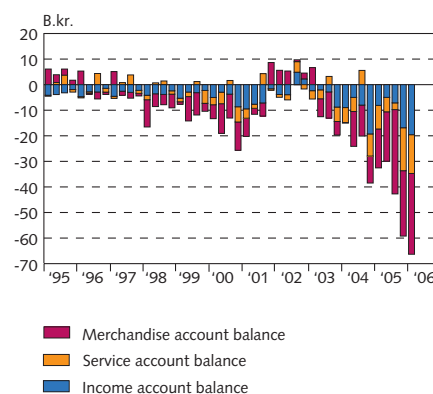
Chart VII-1  
Quarterly current account balance  
Q1/1997 - Q1/2006



Sources: Statistics Iceland, Central Bank of Iceland.

Chart VII-2  
Current account balance components  
Q1/1996 - Q1/2006

Net current transfer is included in balance on income



Sources: Statistics Iceland, Central Bank of Iceland.

on imports of cars and consumer durables in March, which fed the huge merchandise trade deficit in Q1. Declining car imports can therefore be expected for the rest of the year. However, the J Curve will initially operate against the deficit unwinding, because goods imports that had been decided before the depreciation will first be more expensive until demand manages to respond to the higher prices. In the second half of the year, the demand effect should kick in with increasing force.

The service account deficit exceeded 15 b.kr. in Q1/2006, compared with 9 b.kr. in the same quarter a year before. Services imports were up by 13%, measured at a constant exchange rate, while exports of services declined by 6%. Tourism receipts increased in Q1/2006 by 8½% year-on-year, while tourism expenditure abroad by Icelanders rose by 26% to produce a deficit of almost 9 b.kr. on this item of the service account.

### Impact of aluminium and power sector investments

No precise figures are available for the share in imports of goods and services accounted for by investments in the aluminium and power sectors. Estimates by the developers put the total cost of projects this year at 113 b.kr. It is estimated that 65% of investment cost is deployed on imported goods and services. Distributing this cost equally over the year yields a figure of almost 17 b.kr. for imports of goods and services for aluminium-related projects in Q1/2006. Hence close to 40% of the deficit on the goods and services account and almost 28% of the current account deficit in Q1 would be directly attributable to investments in the aluminium and power sectors. However, even if this impact is excluded the residual current account deficit amounts to 18½% of GDP.

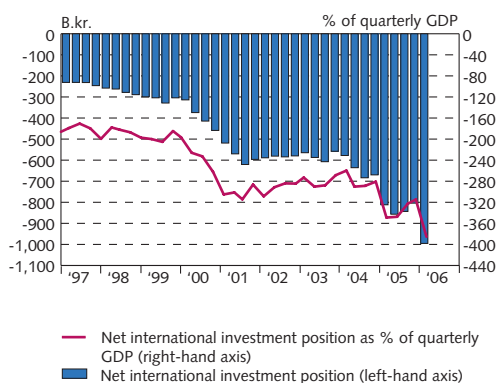
### Net external position worsens

The widening current account deficit and weaker króna were reflected in a worsening of Iceland's external position. In Q1/2006, net external debt grew by 191 b.kr. Just under 60% of this figure is explained by the depreciation of the króna and the remainder by the current account deficit. Foreign assets grew by roughly the same proportion as foreign debt, namely just over one-quarter. However, the debt stock is considerably larger than the asset stock, causing some deterioration in the net external position. Foreign long-term borrowing has decreased, but foreign short-term borrowing more than doubled from the previous quarter.

### Historical low in national saving

National saving (defined as the difference between investment and the current account balance) in Q1/2006 measured only 5% of GDP, the lowest ratio ever. The previous low was 8% in Q4/2005. Such an unparalleled low level of national saving clearly points to the presence of exceptional imbalances. According to the inflation forecast, however, the current account deficit will reverse rapidly in the coming months, boosting national savings in Q3 and Q4 to almost 13% of GDP for the year as a whole.

Chart VII-3  
International investment position  
Q1/1997 - Q1/2006



Sources: Statistics Iceland, Central Bank of Iceland.



### The current account deficit will remain wide this year but shrink in 2007 – especially if the monetary stance is tighter

The previous *Monetary Bulletin* in March pointed out that Iceland's current account deficit in 2005 was a record figure for OECD countries. Over the past four quarters, the cumulative deficit is even greater. However, the current account deficit will narrow significantly for the rest of the year, according to the baseline forecast. It is forecast at 15½% of GDP for the whole of 2006 and will shrink substantially in 2007 with a surge in aluminium exports then. It may seem optimistic to forecast an unwinding of the current account deficit this year with import growth projected to outpace export growth and the deficit in Q1 equivalent to 25% of GDP. The chief explanation is that export prices are expected to rise by much more than import prices. Arguably, there is a risk that this year's current account deficit will overshoot the forecast, given its scale in the first quarter. Figures for April and May appear to indicate only a slightly smaller merchandise trade deficit in Q2. The deficit will therefore need to unwind very rapidly in the second half of 2006 in order for the forecast to hold.

A tighter monetary stance could contribute to a faster adjustment, but the impact during 2006 would be relatively modest. According to the forecast path with endogenous policy responses, the deficit in 2007 will be 5½% instead of 8% and a surplus will emerge in 2008. Such a development ought to bolster the króna in the second half of the forecast horizon and contribute to a slowdown in the inflation rate, as discussed in section VIII.

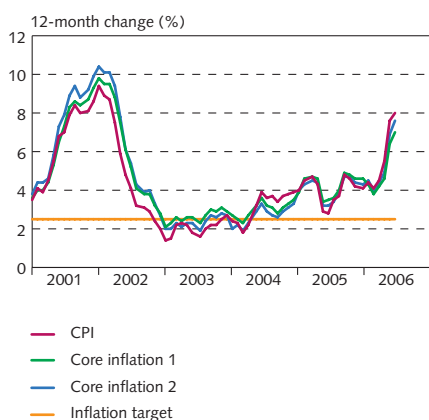
Table VII-1 Current account 2005-2008

% of GDP	2005	2006	2007	2008
Current account balance	-16.5	-15.4	-8.0	-1.0
Goods and services account	-12.8	-10.8	-3.9	3.1
Balance on income <sup>1</sup>	-3.7	-4.9	-4.3	-4.3

1. Including current transfers.

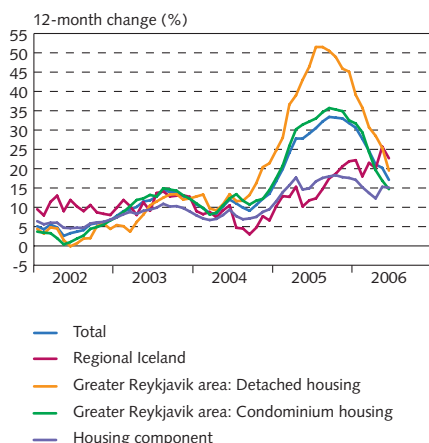
Sources: Statistics Iceland, Central Bank baseline forecast June 2006-2008.

Chart VIII-1  
Inflation January 2001 - June 2006<sup>1</sup>



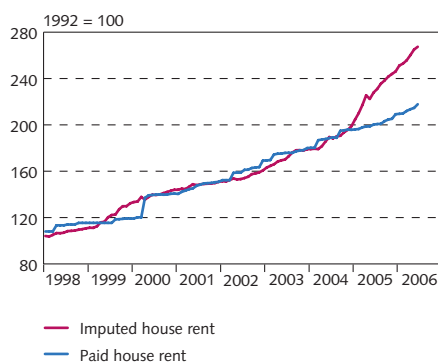
1. The core indices are compiled on the same basis as the CPI, with Core index 1 excluding prices of vegetables, fruit, agricultural products and petrol, and Core index 2 also excluding prices of public services.  
Source: Statistics Iceland.

Chart VIII-2  
The CPI housing component and market prices of housing January 2002 - June 2006



Source: Statistics Iceland.

Chart VIII-3  
Paid and imputed house rent  
January 1998 - June 2006



Source: Statistics Iceland.

## VIII Inflation developments and inflation forecast

### Inflation developments

The inflation rate has increased sharply since the last *Monetary Bulletin* was published at the end of March. The main explanation is that the króna has depreciated at the same time as demand has continued to surge. Furthermore, the base effect of the drop in groceries prices last summer contributes significantly to the year-on-year increase, while the impact of changes to the housing component of the CPI in May 2005, which lowered inflation temporarily, also passes out of the index. In June, the twelve-month rise in the CPI was 8%, which is 5.5 percentage points above the inflation target, while inflation measured 4.5% over Q1/2006.

In recent months the composition of inflation has changed markedly. Housing costs no longer make an overwhelming contribution, although 3.3 percentage points of the increase in the CPI can still be explained by a rise in the housing component. The twelve-month rise in the CPI excluding housing was 6% at the beginning of June, but close to zero at its lowest last year and only 1% at the beginning of 2006. Important contributing factors are the depreciation of the króna in recent months and expectations of exchange rate developments. In June the króna was more than 8% weaker on average than at the end of March.

Higher prices of volatile components such as petrol, fruit and vegetables have driven up inflation recently. Nonetheless, the two core indices have tracked the rise in the CPI fairly closely. This implies that underlying inflationary pressures extend to most components of the index. Core index 1 has risen by 7% over the past twelve months and Core index 2 by 7.6%. The main reason for the smaller rise in Core index 1 is that it includes public services prices, which have only risen slightly over the past twelve months. Over the past three months, rising prices of housing, new cars, petrol and imported goods exerted the most upward pressure on the CPI.

### Higher-than-expected inflation in Q2

The inflation forecast published in the March *Monetary Bulletin* projected 4.6% inflation in Q1/2006, which was only 0.1 percentage point above the actual figure; the forecast was produced towards the end of the quarter. An inflation rate of 4.5% was projected in Q2, but as it turns out inflation is heading above 7½%. Most of the deviation is explained by unfavourable exchange rate developments, but it is also possible that cost pressures, which could be unusually salient in the present climate, were underestimated.

### Temporary reversal in housing price deflation

Housing price inflation had fallen to 12.3% in April, after steady decreases since October 2005. This trend reversed in May when the base effect of changes made to the housing component of the index in May 2005 ceased to affect the twelve-month figures. Statistics Iceland had shortened the reference period for real interest rate cost from five

years to twelve months, which lowered the index value by 0.45% in May 2005. Although the change in method no longer affects the twelve-month figure, it gives a marginally higher inflation measurement than before, because the impact of higher mortgage interest rates affects the index more quickly. At the beginning of June, twelve-month housing price inflation exceeded 15%. Besides the base effect, the reversal of housing price deflation in May can be attributed to a sizeable rise in residential housing prices in the Greater Reykjavík Area.

Although housing price inflation is beginning to slow down, demand for housing still looks firm. Since the beginning of the year, housing prices have gone up by a monthly average of 1.2%. Land Registry figures for registered housing sale contracts in May 2006 show a 7.4% increase year-on-year. However, demand is likely to contract in the coming months, among other things because mortgage interest rates have gone up by 0.3-0.75 percentage points and banks have tightened their lending rules and lowered the maximum loan-to-value ratio.

The decline in bank mortgage lending in the past few months is offset by increased lending by the Housing Financing Fund, which has recently had some competitive edge over the banks. Robust supply of new housing, tighter credit, falling real wages and dwindling consumer confidence all point to a contraction in demand this year. Most indications are that housing price inflation will continue to wane in the near term. This is reflected in the Central Bank's forecast for housing prices to begin to decline in 2007.

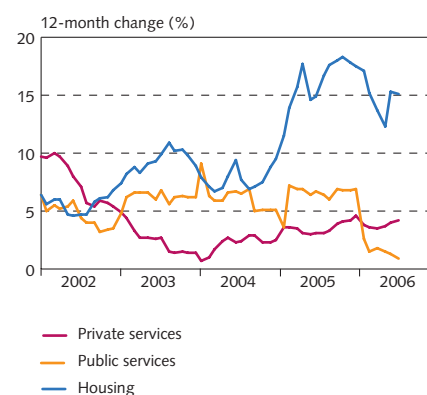
Few conclusions can be drawn from developments over a short period, because monthly fluctuations can be quite large, even after seasonal adjustment. According to Land Registry data, housing prices in the Greater Reykjavík Area fell by 0.2% between April and May.<sup>1</sup> If this trend continues over the next few months, housing price inflation will fall sharply, with a strong downward impact on overall inflation. The housing component accounts for more than 23% of the total CPI, of which owner-equivalent (imputed) rent accounts for approximately 17%. However, higher finance and maintenance costs could offset lower market prices of housing. It is also conceivable that paid rent, which over the past year has risen by much less than imputed rent, will go up when higher interest rates, lower loan-to-value ratios and rising inflation make housing less attractive to buy.

### Depreciation of the króna drives up prices of petrol, new cars and food ...

The króna depreciated sharply following Fitch Ratings' announcement on February 21 that it had changed Iceland's sovereign outlook from stable to negative. The exchange rate index climbed for the next two months, peaking at 133.5 on April 21, and has fluctuated in the range 124-133 since then. One consequence has been a rise in prices of imported consumer goods. Their weight in the CPI is just over 34%, having been raised from 30.5% in March in the annual revision of import trade weights. The higher weight exacerbates the effect of

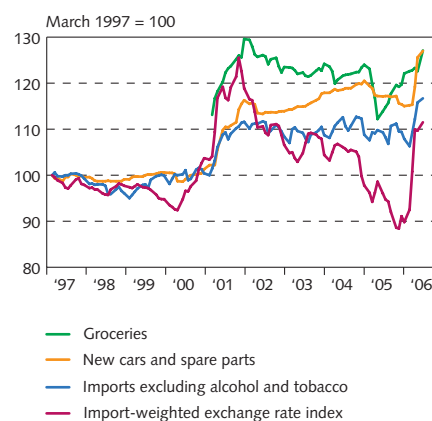
1. The seasonally adjusted decrease was 0.05%.

Chart VIII-4  
Prices of housing and services  
January 2002 - June 2006



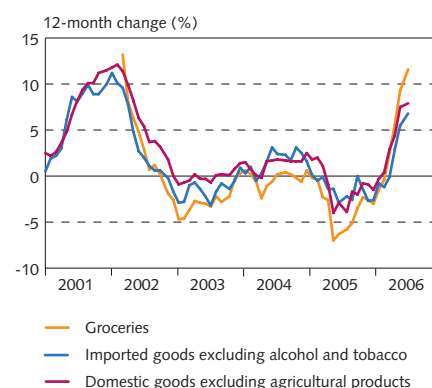
Source: Statistics Iceland.

Chart VIII-5  
Import-weighted exchange rate and import prices  
March 1997 - June 2006



Source: Statistics Iceland.

Chart VIII-6  
Goods prices January 2001 - June 2006

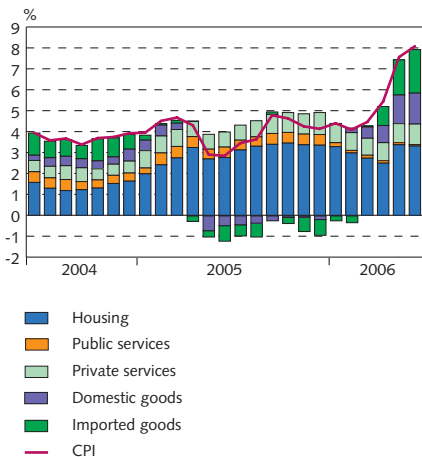


Source: Statistics Iceland.

Chart VIII-7

Components of the CPI  
June 2004 - June 2006

Contribution to CPI inflation in past 12 months



Source: Statistics Iceland.

Chart VIII-8

Private sector wage index and private services  
Q2/1998 - Q1/2006

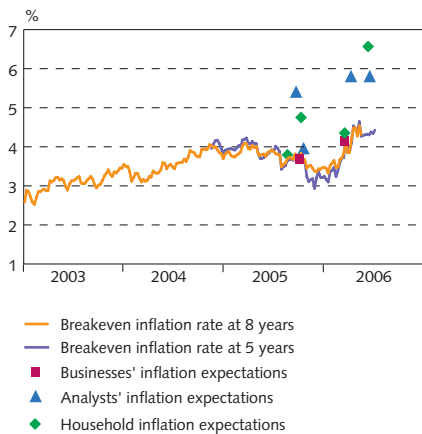


Source: Statistics Iceland.

Chart VIII-9

Inflation expectations

Weekly data January 7, 2003 - June 27, 2006



Household and businesses' inflation expectations are based on expectations over the next twelve months and analysts' expectations on twelve-month inflation one year ahead.  
Source: Central Bank of Iceland.

exchange rate movements on the index, as discussed in Box VIII-1 on pp. 45-46. However, import prices generally track exchange rate movements with some lag.

Recently, the main impact of the depreciation has been to drive up prices of new cars, petrol and imported food and beverages. The twelve-month rise in prices of fuel and lubricants hit a peak in May at 21%, but following a drop in petrol prices between May and June it slipped back to 18%. Rising world market prices of crude oil to the tune of 50% over the past twelve months have also made a significant contribution. Prices of new cars have been quick to accommodate the depreciation, increasing by more than 10% over the period April-June to stand at 8.5% higher year-on-year.

This relatively sharp response is noteworthy considering that the depreciation of the króna in 2001 and appreciation over the past two years were not passed through in full to import prices. Demand is still firm, the króna has depreciated sharply and the outlook is for ongoing pressure on the exchange rate. Under such conditions, import prices may adjust to exchange rate movements more quickly. The impact of the depreciation will probably continue to be felt in price changes in the months to come.

**... but the sharp rise in goods prices is also explained by the base effect of last year's supermarket price war**

Prices of imported food and beverages have risen by approximately 7% over the past three months and 15% over the past twelve months. Groceries prices showed a 12% twelve-month rise. Besides the depreciation, an important factor has been that twelve-month figures no longer reflect the base effect of lower goods prices when supermarkets waged a short-lived war for market share in spring 2005.

Higher prices from domestic producers and short supply of meat have also driven up food prices in the past months. Meat prices went up by more than 5% over the past three months, clocking up an additional 0.15% on the CPI. Prices of dairy products fell by 5.5% in May but the effect was reversed with a 7% month-on-month increase in June.

**Services prices have lagged behind wage costs**

Private sector services prices went up by 3.6% year-on-year in Q1/2006. This is a notably small increase given that the private sector wage index rose by 8% over the same period. Prices of private sector services have often been more sensitive to wage cost increases than at present. This is more likely to indicate that a sizeable increase may be pending rather than reflecting gains in productivity.

The twelve-month increase in public services prices has slowed down and measured only 0.8% at the beginning of June, after dropping from around 7% in December 2005. At the beginning of 2006, prices of public services rose by much less than in previous years, and charges for certain types of service such as preschooling were cut. Muted rises in public services prices are common in the run-up to local and national elections, or in connection with government efforts to reduce inflation.

Statistics Iceland revises the base of the consumer price index (CPI) annually to bring it into line with changes in consumption patterns and consumer spending and purchasing. The most recent revision was made in March 2006. Index weights are based on the results of ongoing household expenditure surveys over a three-year period, currently 2002-2004.<sup>1</sup> Every time the index base is revised, the period is shifted forward by one year.

#### Main changes in weight of subindices

When the index base is revised, the weight of various subindices is altered. Major changes can have a substantial effect on measured inflation, especially if component prices are volatile. Exchange rate movements can influence the weight of individual components. For example, the high value of the króna in recent years caused imported goods to weigh more heavily in household expenses. In turn, the increased weight of imports in the new CPI base magnifies the effect of the depreciation of the króna.

Main changes in relative weights of CPI subindices in March 2006 were as follows:<sup>2</sup>

- Food and beverages decreased from 14.2% to 13.3%.
- Owner-equivalent (imputed) rent decreased from 17.2% to 16.8%.
- Motor vehicles increased from 3.4% to 5.9%.
- Fuels and lubricants increased from 4.9% to 6.3%.
- Recreation and culture decreased from 12.4% to 11.7%.
- Domestic goods decreased from 15.8% to 14.4%.
- Imported goods increased from 30.5% to 34.1%.
- Groceries decreased from 16.4% to 15.2%.

The greatest change was in the transport component, which includes purchases of vehicles, their operation and maintenance, and fuels and lubricants. Its weight increased from 13.1% to 16.9%. Vehicle imports soared as households took advantage of favourable prices caused by the buoyant króna. When the results of the 2004 consumption survey were included, this drove up the weight of motoring costs in household expenditures. Car imports were at a low in 2001, which ceased to be an index base year after March. Household expenditures on fuel have also soared.

Housing and utilities, a subindex including owner-equivalent (imputed) rent and house maintenance and repairs, fell in weight from 27.2% to 26.4%, largely driven down by own housing. Over the survey period, a drop in finance costs and household debt service apparently outweighed the rise in housing prices in 2004.

#### Medium-term scenario for exchange rate developments and CPI base revisions

Imported goods increased as a proportion of expenditures in 2004, reflecting the strong króna. Their larger weight will amplify the effect that the subsequent depreciation will have on the CPI this year. Imported goods will probably weigh even more after the next revision, which will incorporate survey results for 2005 – a record year for imports of motor vehicles and other consumer goods. Increased imports and sales of new cars account for one-third of private consumption growth over the past three years, with a 57% increase in new vehicle registrations in 2005 alone. Further changes can there-

1. The revision of groceries weights was based on survey findings for 2003-2005.

2. The previous and new bases are compared at constant prices, i.e. the weights for 2005 have been adjusted for inflation during that year.

#### Box VIII-1

### Revised CPI base

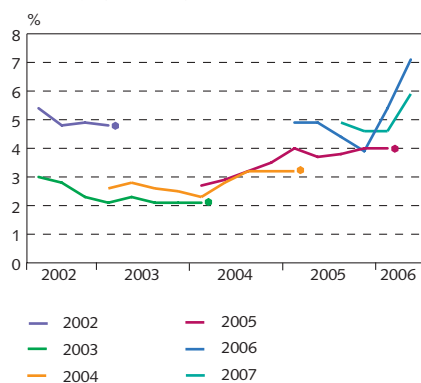
fore be expected when the period 2003-2005 constitutes the index base. On the other hand, neither the impact of the recent depreciation of the króna on the composition of household expenditures, nor a possible contraction in private consumption, will be felt significantly until with the index base revision in 2008. Chart VIII-5 shows the development of the import-weighted exchange rate index and import prices since March 1997.

Of other conceivable changes, the rise in petrol prices in recent months will presumably drive up household expenditures in 2006, which will be reflected in the 2008 base revision. Housing price inflation in 2005 and higher finance costs will probably increase the weight of own housing when the index base is next revised in 2007 and 2008.

### Temporal coverage of price collection

Statistics Iceland plans to reschedule its surveys for the CPI and collect prices in the middle of the month instead of the first two days. This decision comes after EU Council Regulation No. 6998/06 was set, establishing minimum standards for the price collection period in the Harmonised Index of Consumer Prices (HICP). Although the regulation is only binding for Iceland with respect to the HICP (and not the CPI), it would be inefficient to maintain two price collection periods. The change will be implemented in Iceland with new legislation entering into force in January 2008, from which time prices will be collected for around one week during the middle of the month.

Chart VIII-10  
Financial market analysts' forecasts for  
average year-on-year inflation<sup>1</sup>



1. Points show actual rate of inflation for each year.  
Source: Central Bank of Iceland.

### Inflation expectations continue to climb

Inflation expectations have continued to climb in pace with rising inflation and the depreciation of the króna. In Gallup's household confidence survey conducted from May 17 to June 3, households expected average inflation of 6.6% over the following twelve months. A far higher figure than in the preceding survey, it reflects the jump in inflation in April and May and media discussion of it.

The survey in Box VIII-2 on pp. 47-48 reveals a jump in financial market analysts' inflation expectations for 2006 and 2007 since the last survey conducted in mid-March for the previous *Monetary Bulletin*. In March they expected year-on-year inflation of 5.4% on average in 2006 but now forecast a rate of 7.1%. For 2007 the analysts have upped their year-on-year forecast from 4.6% to 5.9%. Two years ahead, however, the majority of analysts expect inflation to approach target.

Measured by the breakeven inflation rate on bonds with a maturity of five years, expectations have inched up, but they have remained fairly stable in recent months. Market agents expected average inflation of 4.3% over the bonds' maturity between March 28 and June 27.

### Inflation forecast

The forecast presented by the Central Bank in this *Monetary Bulletin* shows once again a rate of inflation two years ahead which is incompatible with the target. Since the last forecast in March the Bank has twice raised its policy rate, by a total of 1.5 percentage points to the current 12.25%. Over the same period the króna has depreciated by 12% – half of it on top of the figure on which the Central Bank based its policy rate hike on May 18.

The inflation forecast is presented in a new form in this edition of *Monetary Bulletin* (discussed in Box VIII-3 on pp. 52-55). Three inflation paths are presented. The baseline forecast is conditioned on the policy rate path over a two-year horizon that is expected by market agents and financial analysts (see Chart III-7). Two alternative scenarios are presented. One is based on an unchanged policy rate across the forecast horizon, like the previous baseline forecast. The other is conditioned on a policy rate path that delivers the inflation target at the end of the forecast horizon, using a simple, Taylor-type, monetary policy rule. In all three cases, the exchange rate of the króna is calculated by the macroeconomic model from the interest rate path

The accompanying table shows the survey responses of financial market analysts in mid-June. Participants in the survey were the research departments of Glitnir (previously Íslandsbanki), Kaupthing Bank and Landsbanki, and Economic Consulting and Forecasting.

In addition to the information presented in the table, analysts were asked to give an assessment of the Central Bank's policy interest rate path, i.e. on the timing of the policy rate cycle's peak and trough within the forecast horizon, and what the Central Bank's next policy rate decision on July 6 would be.

The main changes from the survey in March are that analysts have revised their forecast for output growth downwards, especially for next year, with a much higher rate of inflation in both 2006 and 2007, and a marginally higher policy rate and a weaker króna across the forecast horizon.

#### **Analysts expect inflation to surge across the forecast horizon**

Analysts forecast year-on-year inflation in 2006 of roughly 7%, significantly above their expectations in the previous survey in March. The Central Bank's baseline forecast, which is now based on analysts' forecasts for the medium-term policy rate path and an exchange rate path calculated from it using the Central Bank's macroeconomic model, projects inflation of 8% over 2006. For 2007 the divergence between the analysts' forecasts and the baseline forecast is even wider. Survey respondents expect an inflation rate of just under 6% while the Central Bank's baseline forecast is much higher, at almost 10%. Two years ahead, analysts also expect somewhat lower inflation (just over 3%) than the Central Bank's baseline forecast of almost 7%. However, in the Central Bank's alternative scenario with an endogenous monetary policy rule inflation will be 5½% two years ahead.

#### **Growth outlook for 2007 has changed**

The analysts' forecast for output growth for 2006 is broadly unchanged since March. They are quite unanimous about the growth outlook, apart from one who expects a contraction next year. On average, market analysts expect 4½% growth this year and 1% in 2007, which is close to the Central Bank's baseline forecast.

#### **Forecasters expect an ongoing depreciation of the króna ...**

There has been a slight shift since March in the survey respondents' forecasts of the exchange rate, particularly for 2006. The króna has continued to depreciate in recent months and they now forecast a correspondingly lower value. They foresee an exchange rate index of 130 twelve months ahead but a small appreciation a year later. Opinions are rather divided about exchange rate developments, especially for next year.

## Box VIII-2

### Financial market analysts' assessments of the economic outlook

### ... a rise in the Central Bank policy rate ...

The Central Bank has raised its policy interest rate twice in the past few months, on March 30 and May 18, 2006. The policy interest rate is now 12.25%. Analysts have revised their March forecasts marginally upwards for one year ahead, but left their forecast two years ahead unchanged. On average, they expect the policy rate to be 12½% one year ahead, dropping back to around 9% two years hence. They were also asked to forecast the next policy rate decision, and the peak and trough of the policy rate over the next two years. Most forecast a hike of 0.5 percentage points on July 6, but one expects 0.75 percentage points. Opinions about the peak are quite close, in the range 13-14.5%. Most expect the policy rate to peak in the second half of this year with a low in 2008 in the range 7.5-9%.

### ... and a sharp slowdown in asset price rises

On June 15, the ICEX-15 share index stood at 5,413, which was 12% lower than when the analysts last made their forecasts in March. On the present occasion they expect considerably less rise in equity prices over the forecast horizon. However, outlooks differ. One forecaster believes that equity prices will drop both one and two years ahead.

Finally, respondents expected real estate prices to increase by less than in previous surveys, which is in line with indications that the market is cooling. One forecaster expects real estate prices to decline both one and two years ahead.

## Overview of forecasts by financial market analysts<sup>1</sup>

	2006			2007		
	Average	Lowest	Average	Lowest	Average	Lowest
Inflation (year-on-year)	7.1	6.7	7.3	5.9	5.0	6.7
GDP growth	4.5	4.0	5.1	1.0	-0.1	1.7
	One year ahead			Two years ahead		
Inflation	5.8	4.7	7.1	3.2	2.4	4.5
Effective exchange rate index of foreign currencies vis-à-vis the króna (Dec. 31, 1991=100)	130	124	135	125	115	127
Central Bank policy interest rate	12.4	11.3	14.5	9.1	7.5	12.0
Nominal long-term interest rate <sup>2</sup>	8.5	7.6	9.5	7.6	6.6	8.5
Real long-term interest rate <sup>3</sup>	4.1	3.8	4.5	4.0	3.5	4.5
ICEX-15 share price index (12-month change)	5,811	4,500	6,500	6,556	4,000	7,924
Housing prices (12-month change)	1.9	-5.0	5.0	2.0	-10.0	8.0

1. The table shows percentage changes between periods, except for interest rates (percentages) and the foreign exchange rate index (index points) and ICEX-15 index (index points). Participants in the survey were the research departments of Glitnir (previously named Íslandsbanki), Kaupthing Bank and Landsbanki, and Economic Consulting and Forecasting.

2. Based on yield in market makers' bids on non-indexed T-notes (RIKB 13 0517). 3. Based on yield in market makers' bids on indexed HFF bonds (HFF150644).

Source: Central Bank of Iceland.

on which the forecast is based. The current forecast horizon is until Q2/2008.

### Inflation outlook has deteriorated even further

In spite of a tighter policy stance, the inflation outlook over the next two years has worsened considerably since March, as shown in Chart VIII-11. The main reasons are the sharp depreciation of the króna at the start of the previous forecast horizon, which has already been



reflected in higher-than-forecast inflation in past months, a faster-than-expected increase in unit labour costs following recent private sector wage agreements, and higher inflation expectations.

In the baseline forecast, the policy rate will continue to increase in 2006 and peak just above 13% in Q4. It will then gradually decline over the forecast horizon to just above 9% in Q2/2008. The króna will depreciate until mid-2007 then appreciate over the remainder of the forecast period and stand at roughly 131 at the end of the forecast horizon.

The rate of inflation will remain high for the entire forecast period on these assumptions. Inflation looks set to gain momentum over 2006 and peak close to 11% in Q2/2007. Afterwards it will slow to a forecast rate of just below 6% in mid-2008. This high inflation across the whole forecast term implies that there is a very small probability that the target will be attained unless the monetary stance is substantially tightened beyond what market agents expect.

### The three inflation paths show broadly the same rate one year ahead, but a tighter stance will improve the long-term outlook

The inflation outlook one year ahead has therefore taken a sharp turn for the worse compared with the previous forecast in March, measured against both the baseline forecast and the two alternative scenarios. Further across the horizon, however, the higher policy rate starts to affect the path based on endogenous policy responses, bringing inflation back down faster than in the baseline forecast and the scenario with an unchanged policy rate.

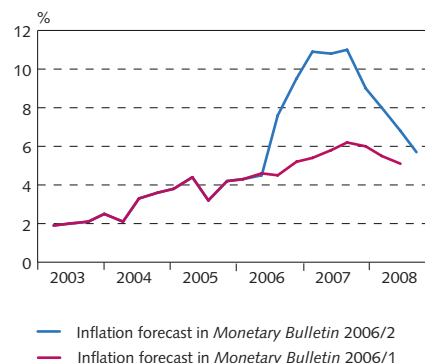
As Chart VIII-12 shows, the path based on endogenous policy responses indicates a need for much faster policy rate rises in the second half of 2006 than are assumed in the baseline forecast, pushing the rate up very high at the end of the year where it will remain until spring 2007. It then starts to decline to 9% at the end of the forecast period, i.e. the same level as in the baseline forecast.

A tighter policy rate in the forecast based on the endogenous policy rule will further bolster the króna compared with the baseline forecast. The stronger króna, coupled with a tighter monetary stance towards domestic demand, is reflected in a rapidly improving inflation outlook later along the forecast horizon. Thus inflation will measure 5½% two years hence, 4% at the end of the forecast period and around target by mid-2008. The two forecasts show little divergence to begin with, because monetary policy measures have little effect in the short run. Chart VIII-13 presents the three inflation paths.

### The underlying inflationary pressures remain the same

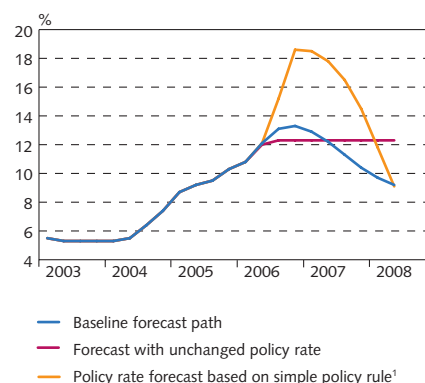
The first part of the forecast period is characterised by strong labour market pressures and low unemployment. As mentioned above, the forecast for wage costs one year ahead has been revised upwards. The agreement signed by the Federation of Labour (ASÍ) and Confederation of Employers (SA) on June 22 entails wage rises over and above those agreed in current wage settlements. More wage drift may be expected as a result. Strong labour market pressures also make these rises likely to be passed through to prices quite quickly. Unit labour costs are therefore rising at a considerably brisker pace

Chart VIII-11  
Revised inflation forecast



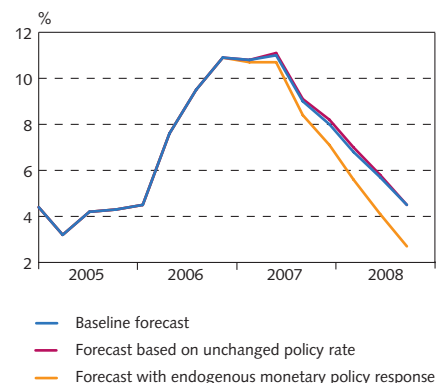
Sources: Statistics Iceland, Central Bank of Iceland.

Mynd VIII-12  
Alternative policy rate paths



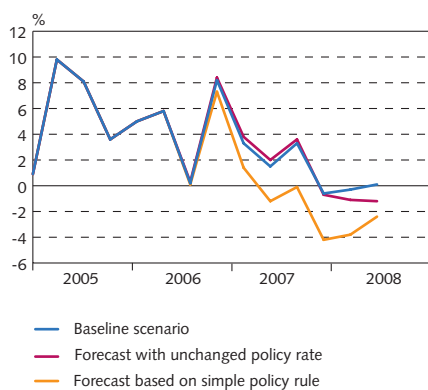
1. Policy rate consistent with attaining the inflation target within the next 2-3 years.  
Source: Central Bank of Iceland.

Chart VIII-13  
Different inflation paths



Sources: Statistics Iceland, Central Bank of Iceland.

Chart VIII-14  
Different GDP growth paths  
Forecasting period: Q2/2006 - Q2/2008



Sources: Statistics Iceland, Central Bank of Iceland.

than in the March forecast, especially in 2006, and far in excess of the 2.5% inflation target. The króna will continue to depreciate this year, partly because of higher inflation expectations. The forecasts for this year's growth of GDP and domestic demand have been upped, with capacity pressures fuelling inflation. The output gap remains large in historical terms, although it has narrowed slightly compared with the March forecast following Statistics Iceland's revision of historical data. While the global inflation outlook over the forecast horizon is broadly unchanged from the March forecast, international short-term interest rates are marginally higher.

### **Inflation is driven by strong growth in unit labour costs and mounting inflation expectations ...**

Wage rises under the new private sector agreement are hardly conducive to easing inflationary pressures one year ahead. On the contrary, they will propel the already high rate of inflation and are probably so large that they will have a strong effect on inflation expectations. If higher expectations become persistent, it will prove costly to rein inflation back in. If the inflation target can provide a firmer anchor for expectations, inflation is more likely to come down faster than in the baseline forecast. Thus the credibility of monetary policy is crucial for determining the amount by which the policy rate will need to be raised in order to curtail demand and employment to a level that will enable the target to be reached within an acceptable time period.

### **... with a sizeable positive output gap**

The outlook is for a sizeable positive output gap during the forecast period, although it will gradually close. At the end of 2008 the output gap will have turned negative, as GDP growth slows down and enters a contraction at the end of the previous year. However, the contraction in the baseline forecast is insufficient to prevent a persistent deviation from the inflation target. If the policy rate is raised in line with the forecast with endogenous policy responses, GDP and private consumption will shrink more quickly and aggregate domestic demand will contract sharply in mid-2007. This will turn the output gap negative at the end of that year. Beyond the forecast horizon, GDP will begin growing again sooner in that scenario, while the contraction will linger on according to the assumptions in the baseline forecast. Greater imbalances will accumulate if no response is made, calling for a lengthier unwinding.

### **The main risk factors remain the same**

The current risk factors affecting the forecast are broadly comparable with those in the Bank's last forecast. Although the króna has depreciated substantially, there is still a risk that it will weaken by more than expected for the first part of the forecast period. The wide current account deficit and entrenched inflation expectations compound this risk. Inflation, too, could turn out higher for the first part of the forecast period. However, falling asset prices, particularly real estate prices, could lower private consumption from the baseline forecast assumption. Like the risk of a faster-than-expected rise in international interest rates, this could cram down domestic demand in the second half of the forecast period.

The private sector wage agreement could drive wage drift higher than is currently forecast, adding to inflation for the first part of the forecasting period. Finally, plans for further investment projects in the aluminium and power sectors in 2008 could boost confidence before they are actually launched, strengthening the króna and domestic demand by more than is expected in the baseline forecast. Other risk factors have not changed much since March. The main asymmetric risk factors to the forecast are presented in Table VIII-1 below.

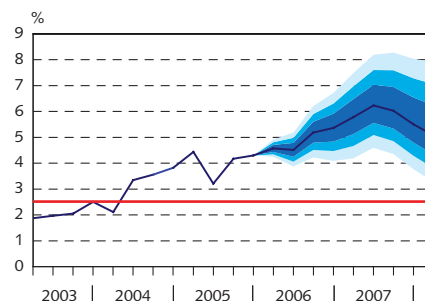
Taking account of these changes from the previous forecast and the underlying uncertainties, the risk profile is tilted more to the upside one year ahead compared with March. However, there is now less risk to the upside two years ahead and the probability distribution is broadly symmetric. Part of the explanation is that the forecast now extends further beyond the end of the aluminium-related investment programme. Chart VIII-15 presents the confidence intervals for the baseline forecast. Given that macroeconomic imbalances have grown since March, it can be inferred that uncertainties about the inflation outlook across the forecast horizon have also increased.

### Inflation target will not be attained over the forecast period unless the policy rate is raised substantially

The three inflation paths presented in this *Monetary Bulletin* all show a rate of inflation over the forecast period which is far above the target. While these inflation paths are fraught with uncertainties, they do underline the low probability of attaining the target within two

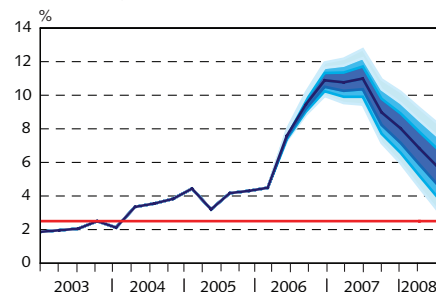
Chart VIII-15  
Previous Central Bank inflation forecast  
(in *Monetary Bulletin* 2006/1)

Forecasting period: Q1/2006 - Q1/2008



Current Central Bank inflation forecast

Forecasting period: Q2/2006 - Q2/2008



— CPI  
— Inflation target  
■ 50% confidence interval  
■ 75% confidence interval  
■ 90% confidence interval

The charts present the estimated confidence intervals of the forecast for the next two years. The entire shaded area shows the 90% confidence interval; the two darkest ranges show the corresponding 75% confidence interval and the darkest range shows the 50% confidence interval. The uncertainty increases over the horizon of the forecast, as reflected in the widening of the confidence intervals. Uncertainty in the forecast is considered to be somewhat less than is shown by historical forecasting errors, which reflect volatile inflation in the period 2001-2002 immediately after Iceland moved on to an inflation target. A detailed description of how the probability distribution is calculated is given in Appendix 3 to Economic and monetary developments and prospects, *Monetary Bulletin* 2005/1. Source: Central Bank of Iceland.

Table VIII-1 Main asymmetric uncertainties in the baseline forecast

Uncertainty	Explanation
Private consumption	Increased indebtedness and falling asset prices could curtail private consumption growth beyond the baseline scenario
Exchange rate developments	Wide current account deficit and expectations of increasing inflation in the coming years could exert downward pressure on the króna
Public sector finances	The fiscal stance could be easier than forecast, especially with a forthcoming general election The impact of planned tax cuts on future income expectations could be underestimated
Wage costs	The wage drift impulse from the private sector wage agreement could be underestimated
Asset prices	Asset prices could fall, reducing private consumption later in the forecast period
Global economy	Foreign interest rates could rise faster and by more than assumed, increasing external debt service beyond the baseline scenario
Transmission of monetary policy	If the transmission of monetary policy is stronger than assumed in the baseline forecast, inflation could decline faster
Planned investments in aluminium and power sectors	Proposed investments in aluminium-related projects in 2008 could spur confidence and bolster the króna and demand
<i>Central Bank risk profile</i>	<i>One year ahead</i> <i>Two years ahead</i>
<i>Monetary Bulletin 2005/4</i>	Upward                                      Upward
<i>Monetary Bulletin 2006/1</i>	Upward                                      Upward
<i>Monetary Bulletin 2006/2</i>	Upward                                      Symmetric

years unless the policy rate is raised by much more than the baseline forecast assumes. The probability that the target will be attained over the two-year baseline forecast horizon is virtually zero, as Table VIII-2 shows. However, if the monetary stance is tightened in line with the alternative scenario based on an endogenous policy rule, the likelihood of attaining the target is significantly greater.

Table VIII-2 Probability ranges for inflation over the next two years

Quarter	Inflation				
	Under 1%	In the range 1% - 2½%	Under 2½%	In the range 2½% - 4%	Over 4%
Q3/2006	<1	<1	<1	<1	99
Q2/2007	<1	<1	<1	<1	99
Q2/2008	<1	<1	<1	2	98

The table shows the Central Bank's assessments of the probability of inflation being in a given range, in percentages.

### Box VIII-3

## New presentation of the macroeconomic and inflation forecast

The Central Bank's macroeconomic and inflation forecast is presented in a new form in this edition of *Monetary Bulletin*. A forecast based on market expectations of the policy rate path, and on an exchange rate path based on this and calculated using the Central Bank's macroeconomic model, now constitutes the baseline forecast. The previous baseline forecast, based on an inflation path assuming an unchanged policy rate, is now presented as an alternative scenario.<sup>1</sup> Another alternative scenario is presented showing the interest rate path based on an endogenous monetary policy rule. An overview of the baseline forecast results is presented in the Tables and Charts appendix. Also, the different paths for GDP and its components are discussed from a different perspective in section IV on Domestic demand and output. The new inflation forecast presentation is modelled on that of many major European central banks, including the Bank of England and Sweden's Sveriges Riksbank. Its aim is to enhance the Central Bank of Iceland's monetary policy transparency even further.

### Problems posed by assuming an unchanged policy rate

Monetary policy is basically about managing expectations. Although a central bank's policy rate directly affects only a very limited group of financial market agents, the expected future policy rate path has important effects on long-term interest rates, and therefore on expenditure decisions of households and firms. By signalling the potential future policy rate path, a central bank can therefore exert much more impact on the shape of the yield curve in order to facilitate the monetary policy transmission to the economy. This is particularly relevant in a financial system such as Iceland's where a large proportion of financial liabilities bear fixed interest.

A forecast conditioned on a constant policy rate does not give a clear signal about the future policy rate path, and therefore has only a limited effect on market expectations about that path. Neither is such a forecast internally consistent, because it either uncouples or dampens an important transmission channel of monetary policy,

1. The Central Bank's macroeconomic model is discussed in New quarterly economic model, *Monetary Bulletin* 2006/1, Appendix 1, 59-61, and the Bank's forecasting methods in Central Bank inflation forecasting methods, *Monetary Bulletin* 2006/1, Box VIII-1, 46-7.

namely the monetary policy response to economic developments and its transmission via expectations about how policy rate developments will influence long-term interest rates. Various problems in forecasting can therefore result. The forecast may become unstable, especially over longer horizons. Interpreting the forecast can therefore become problematic, limiting its usefulness.

### **Central banks can enhance the effectiveness of monetary policy by influencing expectations**

Instead of assuming an unchanged policy rate across the forecast horizon, a central bank can attempt to influence expectations about the policy rate path by conditioning its forecast on market expectations about the path. One way for the central bank to have such an influence is to state its view on how realistic these expectations are from the perspective of attaining the inflation target within a specific period.<sup>2</sup> This is the approach adopted by, for example, the Bank of England since August 2004, Sveriges Riksbank since October 2005 and Norges Bank of Norway until it began forecasting its own policy rate in November 2005.

### **Inflation forecasting using an internal policy rate forecast**

Another option is the precedent set by the Reserve Bank of New Zealand (RBNZ) and Norges Bank, which present an internal policy rate path for the forecast, i.e. the path that the central bank itself deems most likely to enable the inflation target to be attained. The RBNZ was the first to present this kind of forecast in 1998, and Norges Bank followed suit in November 2005. From a theoretical viewpoint, this is the most natural policy rate assumption for the forecast. It ensures an internally consistent forecast and facilitates its interpretation. Svensson (2005) and Woodford (2004), for example, argue that a central bank can have a substantial effect on market expectations, as well as enhancing its credibility because the forecast always approaches target within the horizon. A stronger impact on expectations will greatly enhance the effectiveness of monetary policy. Others, such as Goodhart (2001) and Mishkin (2004), have doubted the benefits of going this far, fearing that the central bank's message will become too complex and that the policy rate path will be interpreted as a commitment to a given medium-term interest rate path rather than as a conditional forecast which will change in line with changing economic conditions. The experience of New Zealand and Norway, however, does not suggest that this is a problem. It may therefore be quite feasible for the Central Bank of Iceland to adopt this approach as well when more experience has been gained from its new macroeconomic model and the results of pioneers in this field. By presenting a policy rate path based on endogenous monetary policy responses alongside its other scenarios, the Central Bank has already taken an important step in this direction, although the baseline forecast is still conditioned on a policy rate path.

### **The baseline forecast has hitherto assumed an unchanged interest rate and exchange rate**

Hitherto, the Central Bank of Iceland has presented a macroeconomic and inflation forecast assuming an unchanged policy rate and exchange rate from the day of forecast. This baseline forecast has been described in more detail than other projections or alternative scenarios which have also been presented. The chief aim of

2. This approach is also more likely to ensure internally consistent forecasting, even though a central bank needs to be careful in using external expectations of its decisions as an input in its decision-making, as the danger is that nothing will anchor those expectations, leading to indeterminacy problems (see Bernanke and Woodford, 1997).

the baseline forecast has been to indicate the probable way that economic events will unfold if the policy rate is not changed and the exchange rate remains constant. Above all, the baseline forecast has therefore signalled whether the policy rate level at any given time is sufficient to ensure that the inflation target will be attained, thereby contributing to the Bank's assessment of the need to change the policy rate. The assumption of a constant exchange rate has also been justified on the basis of the near-random walk properties of exchange rates.

### **An unchanged policy rate and exchange rate are implausible in the current climate**

When the economy is in reasonable balance a forecast assuming an unchanged policy rate and exchange rate may give a fairly accurate picture of the economic outlook one to two years ahead. In a climate with as pronounced macroeconomic imbalances as at present – inflation way above target and a bleak inflation outlook – an inflation path based on such assumptions is extremely unrealistic. The greater the imbalances, the less informative is the baseline forecast. Although it does indicate whether or not the policy rate needs to be adjusted, it says little about the scale or timing of such changes or their likely impact on economic developments, as discussed in previous editions of *Monetary Bulletin*.

### **New presentation of the macroeconomic and inflation forecast**

In an effort to address this problem, *Monetary Bulletin* has presented alternative scenarios using a variable interest rate and exchange rate alongside the baseline forecast. This may be quite important when the exchange rate of the króna appears likely to have deviated far from long-term equilibrium and an unchanged policy rate would not ensure that inflation will trend towards target within the forecast horizon. The advantage of such a presentation of the macroeconomic and inflation forecast is that its assumptions for monetary policy responses to a poor inflation outlook are more realistic than in the baseline forecast.

This edition of *Monetary Bulletin* presents a new baseline forecast conditioned on similar assumptions to the previous alternative scenario, with its individual components discussed in rather more detail. However, this is not to suggest that its results are necessarily considered to be the most likely course for economic developments to take, unless the assumptions hold on which it is based. The assumptions in the new baseline forecast include the market and analysts' expectations about the medium-term development of the policy rate. Based on that interest rate path, an exchange rate path is determined by the interaction of uncovered interest rate parity and purchasing power parity. The new presentation gives a considerably more realistic picture of the Central Bank's monetary policy response to prevailing macroeconomic conditions across the forecast horizon. Assigning a certain weight to purchasing power parity takes into account the impact that an exceptionally strong or weak króna will have on the inflation outlook.

### **Two alternative scenarios**

Two alternative scenarios to the baseline forecast are presented. One assumes an unchanged policy rate and exchange rate across the forecast horizon, and is comparable with the Central Bank's previous baseline forecast. The second alternative scenario uses the Central Bank's macroeconomic model to forecast the policy rate by applying an endogenous monetary policy rule. In the model, the

monetary policy response is determined by the output gap and the deviation of inflation from target. The exchange rate is forecast by the same method as in the baseline forecast, i.e. using the macroeconomic model. As pointed out above, the Central Bank may give this alternative scenario a higher profile in the future.

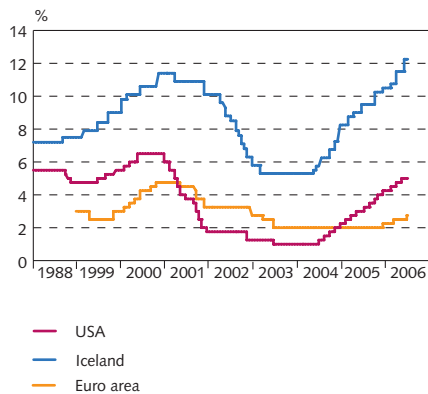
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## IX Monetary policy

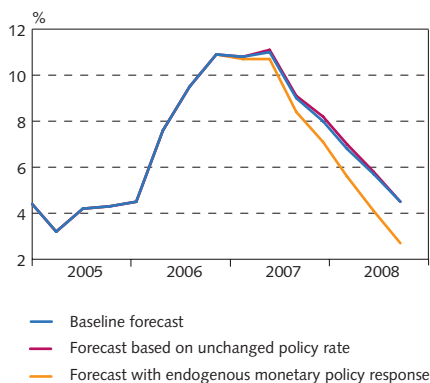
Chart IX-1  
Central bank policy interest rates

Daily data January 1, 1998 - June 26, 2006



Sources: Reuters, EcoWin, Central Bank of Iceland.

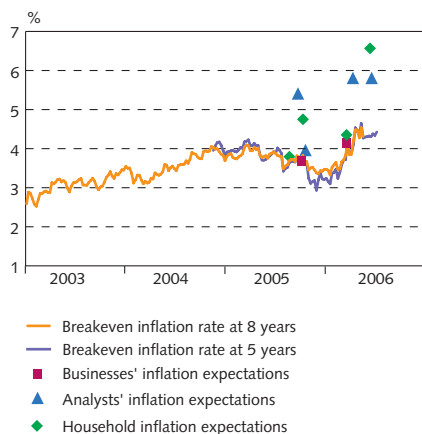
Chart IX-2  
Different inflation paths



Sources: Statistics Iceland, Central Bank of Iceland.

Chart IX-3  
Inflation expectations

Weekly data January 7, 2003 - June 27, 2006



Household and businesses' inflation expectations are based on expectations over the next twelve months and analysts' expectations on twelve-month inflation one year ahead.  
Source: Central Bank of Iceland.

### Inflation outlook deteriorates yet again

In its *Monetary Bulletin* published on March 30, the Central Bank presented an assessment of the inflation outlook which it deemed to have worsened sharply, assuming an unchanged policy interest rate. The inflation outlook has now deteriorated even further according to the forecast paths presented above. The policy rate has been raised twice by a total of 1.5 percentage points since the assessment of the outlook in March, by 0.75 percentage points at the end of that month and again on May 18. Counteracting this, the króna has depreciated sharply, inflation has gained pace and inflation expectations have offset the rise in nominal interest rates. Although considerable, the Central Bank's policy rate hikes have hardly managed to maintain the tightness of the monetary stance since the beginning of the year.

When the forecast presented above was compiled, the króna had already depreciated some way from the level at the time of the 0.75 percentage-point hike in May. Although there are vague indications of a slowdown in recent months, demand growth is still rapid and generates intense pressures in both the labour and goods markets. Macroeconomic imbalances are currently so pronounced – witness the large current account deficit and output gap – that a slower rate of demand growth cannot be expected to suffice to bring the economy fast enough back to balance. To do so, domestic demand will need to contract. Recent agreements on further wage rises, on the back of increases over the past year far beyond a level compatible with the inflation target, will delay the adjustment. A delayed adjustment increases the likelihood that it will be disruptive. This must be borne in mind when implementing monetary policy, and economic policy in general.

In the last Central Bank forecast in March, inflation measured 4.5%. In June the rate was 8%, i.e. 3.5 percentage points higher. The deterioration has been exceptionally swift and it is clear that short-term inflation was significantly underforecast in March. The current outlook is that inflation in Q3 will be more than 4 percentage points above the March forecast and will head as high as 11%, unless the pace of monetary policy tightening exceeds market expectations and analysts' forecasts. This serious development entails a great risk that higher inflation expectations will become entrenched. If that happens, an even higher policy rate will be needed to beat inflation back down.

### Inflation expectations and weaker króna undermine the monetary stance

There is no universal criterion for the monetary stance. Several factors need to be examined simultaneously to gauge their contribution at any given time. Until this year, the tight stance was largely manifested in the strong value of the króna. Transmission of monetary policy measures across the yield curve, on the other hand, has been inhibited. Interest rates on indexed loans, for example, have only risen slightly and are still much lower than when the banks began compet-



ing with the Housing Financing Fund (HFF) over mortgage loans. As it happens, the banks have recently been offering higher rates of interest than the HFF, which has since followed suit. Judging from recent HFF bond yields, these rates might remain unchanged for some while. Nominal bond rates have risen by more, but much of the explanation for the increase in nominal rates lies in higher inflation expectations.

At the same time as real interest rates have hardly changed, the tightening imposed until this year by the strong króna has diminished significantly. A strong domestic currency squeezed the traded goods sector and helped to keep wage inflation in check under difficult conditions, for example in the wage review of November 2005. The recent agreement granting a substantial increase to the lowest-paid is a clear indication of how much easing has taken place. Conceivably, the real exchange rate may not be far from long-term equilibrium. In this regard, borrowing in foreign currency is much more favourable at the current exchange rate, but this is offset by higher foreign interest rates. The depreciation of the króna has strongly affected inflation expectations too, and thereby contributed to lower real interest rate expectations.

While interest rates have not risen markedly in real terms recently and the restraint coming from a strong exchange rate has diminished, international financial conditions have shown a marked downturn. Basic interest rates, i.e. on low-risk government bonds, have gone up and so has the borrower risk premium, especially for Icelandic credit institutions. Since the bulk of funds raised by Icelandic companies in the international capital market is intermediated by domestic financial companies, a significant deterioration in their terms can be expected in the near future. Interest rates on the commercial banks' foreign currency-denominated lending have increased by roughly one percentage point since the beginning of the year. Nonetheless, rates are still very low in real terms relative to the current inflation outlook, assuming that the exchange rate remains broadly stable.

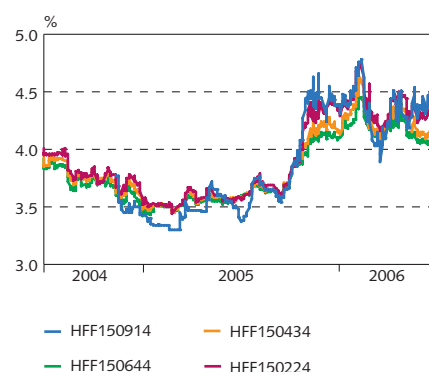
### Monetary policy needs to respond to the worsening outlook for wage developments

For some time the Central Bank has expressed concerns that unit labour costs have risen far in excess of a level compatible with the inflation target. So far this year the wage index has risen roughly 8½% year-on-year. Inflationary pressures from these wage rises are coming to light now that the króna no longer keeps economic conditions tight.

Labour shortages have been a growing problem. In the run-up to the local government elections this spring, municipalities gave way to pressure and raised wages for certain jobs which were difficult to man. Wages for selected groups of workers, particularly in the public sector, have risen way above market norms. This and rising inflation have contributed to growing tension in the labour market and sparked claims for all-round increases. In an overheating economy, tensions over income distribution can easily cause wage developments to get out of hand. Wages have already gone up far beyond the levels laid down in the settlements of 2004. The recent agreement made to

Chart IX-4  
HFF bond yields

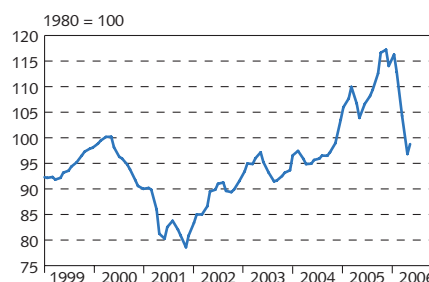
Daily data July 8, 2004 - June 28, 2006



Source: Central Bank of Iceland.

Chart IX-5  
Real effective exchange rate of the króna

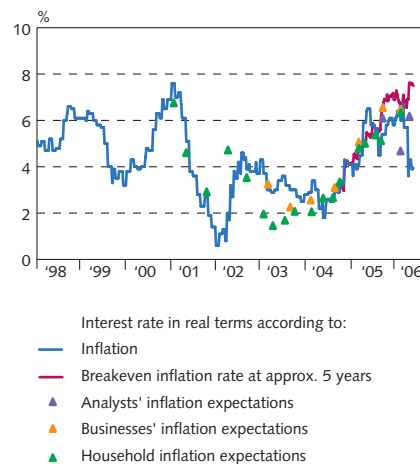
Monthly data, based on relative consumer prices  
January 1999 - May 2006



Source: Central Bank of Iceland.

Chart IX-6  
The policy interest rate in real terms

Weekly data January 7, 1998 - June 20, 2006



Source: Central Bank of Iceland.

Chart IX-7  
Unit labour cost and wage index 2001-2008



1. Central Bank baseline forecast for 2006-2008. 2. Data for 2006 show 12-month change (%) of wage index in May.  
Source: Statistics Iceland, Central Bank of Iceland.

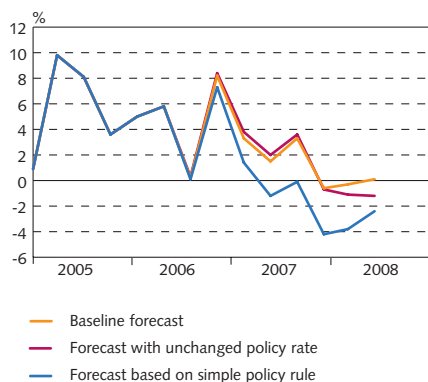
head off a wage review in the autumn entails generous increments. The idea behind that agreement, which is described in more detail in Box VI-1 on pp. 36-38, is to raise wages for those who have missed out on the extra pay that businesses have resorted to offering in order to retain key staff, and to dispel the uncertainty posed by the review clause in current wage settlements. In a very tight labour market, wage raises for the lowest-paid are more likely to creep up the pay scale. The inflation outlook has therefore turned substantially bleaker as a result of this agreement. Further wage increases now will feed domestic demand at a time when the positive output gap is close to its peak. The boost to domestic demand and the deteriorating inflation outlook could also weaken the króna, which is already under pressure. A firm monetary policy response to these conditions is essential. An inevitable consequence of this development would seem to be to increase the likelihood of a hard landing later on.

### Very large current account deficit calls for a contraction in demand

External imbalances are clearly greater than was previously thought. The current account deficit in Q1 was equivalent to a record 26% of GDP. This is the second consecutive quarter with a deficit of 20% or more. Although much of the deficit is attributable to imports of capital goods, even excluding them all would still leave a deficit equivalent to 16% of GDP. Such a huge deficit is unsustainable in a climate of rising interest rates. Admittedly, net exports of aluminium will increase this year and in 2007, but a large part of the adjustment will have to be made through a contraction in imports of consumer goods and services. Broadly speaking, the adjustment may occur through two channels. A depreciation of the króna would drive up inflation, erode real wages, bring down private consumption and channel it into the domestic economy. Alternatively, the monetary policy stance and fiscal impulse could cut demand on such a scale, e.g. through increased unemployment, that imports would contract. A mix of the two is likely. According to the Central Bank's baseline forecast, the adjustment will take the form of shrinking private consumption and investment in 2007 and 2008. If exchange rate developments are less favourable than forecast, which cannot be ruled out, private consumption could drop even more drastically.

A central bank on an inflation target cannot be impartial about which main channel the adjustment will take. The inflationary approach is incompatible with the inflation target, although it may be unavoidable in the short term. A sufficiently tight monetary stance is needed to bring demand down faster without weakening the króna excessively and fuelling inflation even further. It is noteworthy to compare the GDP growth paths in the baseline forecast and the tighter monetary policy scenario – the contraction in the latter seems by no means greater. It will take place earlier, however. A tighter monetary stance expedites the adjustment, which consequently reduces the need for adjustment in the long term. Inflation will in turn be lower, with less erosion of real wages. This is an important message.

Chart IX-8  
Different GDP growth paths  
Forecasting period: Q2/2006 - Q2/2008



Sources: Statistics Iceland, Central Bank of Iceland.

### Housing price inflation more persistent than was expected

The composition of inflation has undergone a fundamental change whereby the twelve-month rise in goods prices is now broadly the same as the overall rise in the CPI. The housing component still accounts for just under half of the rise in the index, compared with  $\frac{3}{4}$  a year ago. This turnaround was quite foreseeable. However, the reduction in housing price inflation has been marginally slower than expected. Irrespective of the base effect of a change in estimates of owner-occupied housing prices, residential housing prices have continued to climb, although at a markedly slower rate year-on-year. The slower rate of housing price inflation has been offset by a leap in maintenance costs caused by the depreciation of the króna, and higher interest rates also exert minor upward pressure.

Housing price inflation is likely to slow even more in the coming months and a nominal drop cannot be ruled out either, especially with a pending surge in housing supply, higher interest rates and lower maximum loan-to-value ratios applied by the banks and the HFF. Such a development could have sweeping effects and bring about more contraction of domestic demand. Developments in the housing market are therefore an important indicator to be watched over the next few months

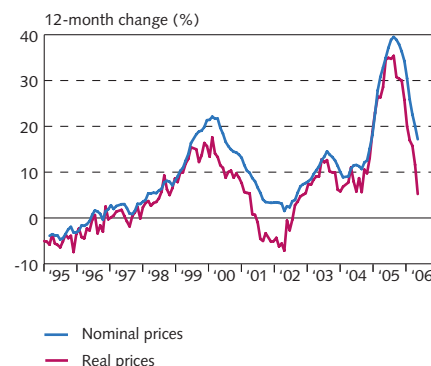
### Very high interest rates required to bring inflation back to target

The policy rate path described above – calculated using the Central Bank's macroeconomic model and a monetary policy rule set to bring inflation to target within roughly two years – should not be taken too literally, due to the great uncertainties involved. However, it does imply that a very high policy rate will probably be needed to rein in inflation within an acceptable period of time.

Whether or not the policy rate needs to reach the heights implied by the monetary policy rule will depend on a number of factors. Monetary policy transmission across the yield curve is subject to high and variable inertia, making it difficult to see how high the policy rate must go before it affects the entire interest rate path. In recent years, international interest rate developments and the banks' entrance into the mortgage market have delayed the pass-through. Changes in external financial conditions and the expected unwinding in the real estate market, however, could cause the higher policy rate to bite fairly swiftly. Foreign interest rates and risk spreads have already increased substantially and the banks have tightened their rules on collateral. If this trend continues – and even gains momentum – there could turn out to be less need for policy rate hikes.

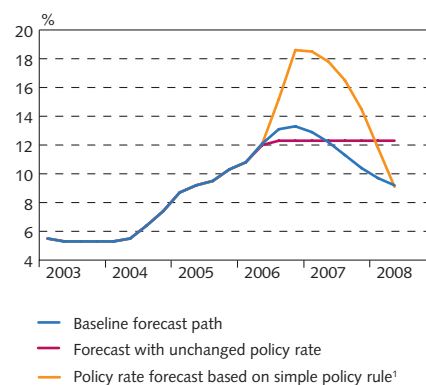
In the opposite direction, a rise in foreign interest rates would probably put increased pressure on the exchange rate. It will raise the cost of funding the current account deficit and, all things being equal, drive it even wider, while the interest rate differential with abroad would narrow if domestic interest rates remain unchanged. Given the size of the current account deficit, it could prove necessary to maintain high interest rates for longer than medium-term domestic demand developments may warrant.

Chart IX-9  
Housing prices in the Greater Reykjavík Area  
January 1995 - May 2006



Sources: Land Registry of Iceland, Statistics Iceland.

Chart IX-10  
Alternative policy rate paths



1. Policy rate consistent with attaining the inflation target within the next 2-3 years.  
Source: Central Bank of Iceland.

Chart IX-11  
Exchange rate index of the króna  
Daily data January 5, 1999 - June 23, 2006



Source: Central Bank of Iceland.

The effect of high measured and prospective inflation on inflation expectations will be an important determinant of how monetary policy needs to be tightened. As inflation expectations intensify and persist, the policy rate required to bring inflation back to target soon enough will be higher, at the cost of lost production and employment. If the inflation target provides expectations with a firm enough anchor to fall relatively fast, there will be less need for such measures, but naturally the Central Bank's own statements and actions will be an important determining factor.

### Asset price developments may entail a tough monetary policy choice

In many parts of the world the question of monetary policy and asset prices is being quite hotly debated, i.e. whether or how monetary policy should respond to asset bubbles. In Iceland the debate has mainly hinged on the contribution of owner-occupied housing to the CPI. Until recently, the housing component accounted for the bulk of the rise in the index. The inflation that is now on the cards is broader-based, however. The question of whether a rise in the housing component distorts monetary policy decision-making is thus not as pressing as often before.

Nonetheless, asset price developments will clearly be crucial for monetary policy measures in the near term. Housing prices in the Greater Reykjavík Area are currently so high that a fall in real terms – even in nominal terms – over the coming years must be considered likely. Lower housing prices will have a sharp impact on the growth of private consumption and investment, not least residential investment. Some reduction in housing prices in the years ahead is already built in to the Central Bank's forecasts and is an important driver of the contraction in domestic demand that they imply. Given their current high level, a faster adjustment of housing prices to long-term equilibrium cannot be ruled out. If the current account deficit adjustment is faster as well, with a correspondingly large depreciation of the króna and resulting inflationary pressures, the Central Bank could find itself in the predicament of needing to keep interest rates fairly high during an economic downturn. It is not unlikely that the Central Bank's forecasting models underestimate the scale of a contraction that may be caused by a simultaneous drop in asset prices and depreciation of the króna via the effect this will have on household and business balance sheets. The alternative option – a laxer monetary stance which would contribute to a weaker króna – would also cause a considerable contraction through higher inflation and erosion of real wages. Thus the opportunity cost of pre-emptive tightening of monetary policy is lower than one may conclude on first impression, and in the long run it has considerable benefits.

### More support for the Central Bank's struggle against inflation would be beneficial

The Central Bank has the necessary instruments at its disposal to rein in inflation in the long run, even on its own, and will not flinch from using them. However, efforts to solve the inflation problem using

monetary policy measures alone in the current climate could prove costly. This makes it vital that all possible players should contribute towards easing the burden on monetary policy. The Government is an obvious candidate. It can contribute to a smaller rise in the policy rate with an even tighter fiscal stance. The announced delay of new public works projects is laudable, although the scope of these decisions is still unclear. The government can also contribute by promoting a swift and effective solution to the future role of the Housing Financing Fund. It is important to note that the HFF's interest rates would be much higher if they were not backed by a Treasury guarantee and if the fund were subject to similar capital adequacy rules to other credit institutions. Until recently the HFF provided mortgages at a 90% loan-to-value ratio, despite escalating risks that the principal will end up higher than the collateral. There is ample cause to ask whether it is acceptable for taxpayers to underwrite the consequences of such a risky lending policy without the HFF being charged for the government's guarantee. Hence it is to be commended that the government has decided to lower the loan-to-value ratio. Financial companies have shown more caution in their mortgage lending recently, e.g. by lowering their loan-to-value ratios, but greater prudence is called for in all areas of lending. Local authorities should also step up their cost restraint sharply in the aftermath of the elections and households make efforts to reduce their debt. It is food for thought that unit labour costs have risen significantly in excess of the inflation target for years. An important point is to reach consensus that wage changes will in future be compatible with price stability.

#### **Interest rates will rise as much as is needed to rein in inflation**

As pointed out above, every indication is that interest rates still need to rise substantially in order to rein in inflation. Rising inflation, higher inflation expectations, mounting tension over wage distribution which fuels excessive wage growth and a current account deficit which probably heralds major pressure on the exchange rate in the near future – all these factors indicate that the monetary stance is still inadequate. The Central Bank will continue to raise the policy rate for as long as this situation persists, as reflected in its new alternative forecast with endogenous monetary policy responses. As ever, therefore, the Bank will closely monitor the development of indicators of the transmission of monetary policy, whose development will be a crucial factor in determining how high interest rates need to rise in order for the target to be achieved.



### Domestic markets calmer

*Tension in the markets eased considerably in the second half of April after a quite eventful spell since February 20. The Central Bank of Iceland announced an 0.75 percentage-point rise in its policy interest rate on March 30, and again on May 18. A deterioration in the inflation outlook, partly caused by the depreciation of the króna, was cited as the rationale for both hikes. Interest rates in the interbank market for domestic currency rose in pace with the policy rate rises. The króna depreciated by roughly 10% from mid-March to mid-June. Changes in Treasury bond issuance were announced in the beginning of May and subsequent auctions went smoothly. While international equity markets witnessed a fair amount of volatility, the Icelandic market settled down somewhat. Many central banks have either raised their policy rates or appear poised to do so in the near future.*

#### **Did the Icelandic market spark an international reaction?**

Unease has been rising in various international markets recently. In part this is the effect of tighter liquidity, but higher oil prices also appear to be causing concerns about a downturn in the economic outlook. Globalisation also causes contagion between different markets and countries. The outlook for higher inflation has prompted many central banks to raise their policy rates in order to smother inflationary pressures and expectations. Iceland has diverged from this broad trend, because massive investment projects and sudden structural changes in the mortgage loan market triggered imbalances which have been amplified by soaring domestic consumption.

It has been obvious for some time that the economy needed to establish better balance – the Central Bank of Iceland began raising its policy rate in May 2004 in response to a downturn in the inflation outlook. Structural changes in the housing market, banking sector expansion and foreign investor activity caused a lag in the necessary effect of the Central Bank's measures. The record current account deficit, for example, indicated that the króna was overvalued, so a sizeable adjustment was not unexpected. The króna slid in February and March and equity prices, which had peaked in mid-February, also fell quite sharply. Notably, however, equity prices have not dipped much below their value at the end of 2005, even though this sealed in a rise of almost 90% over that year.

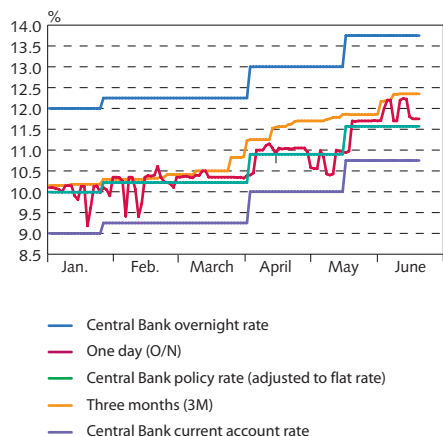
Carry trade began leaving its mark on market developments in August 2005. This caused the króna to appreciate and drove down interest rates in Iceland, counteracting the Central Bank's measures. Market unease in Iceland in February and March infected other markets which were in a comparable position. Investors who had hedged by spreading their trades across markets were forced to respond to losses in Iceland by closing their positions elsewhere, causing a chain reaction. The first-round effect on larger, more developed markets was only slight, but later it may have had an impact, because some of the investors were from these countries and their tighter positions may have set off a chain reaction. Thus changes in Icelandic markets might

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1. This article uses data available on June 23, 2006.

Chart 1  
Interest rates in the interbank market and  
Central Bank policy rate

Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.

appear to have foreshadowed volatility in larger markets. However, global imbalances have been building up for some time and only a small spark may have been needed to light the fuse.

### Two policy rate hikes

The Board of Governors of the Central Bank of Iceland decided to raise its policy interest rate by 0.75 percentage points on March 30, and by the same amount on May 18. A poorer inflation outlook was the reason for both hikes, with the depreciation of the króna in a decisive role. When the revised national accounts for 2004 were published in March it emerged that GDP growth had been seriously underestimated. Banks were likewise urged to tighten their lending, because all criteria for credit growth showed that it had been excessive. The development of the policy rate and interest rates in the interbank market for krónur is shown in Chart 1.

### Weaker – stronger – weaker

The króna continued to weaken in March, for example in the wake of a foreign bank's report on the Icelandic economy published on March 21, when the exchange rate index rose by 2.7%. Shortly afterwards, on March 24, reports that US investors had called bonds issued by Icelandic banks drove the exchange rate index up by 2.3%. Further depreciation was caused by changes in assessments of the banks' financial strength and by higher-than-expected inflation figures in April. The króna appreciated intermittently between these events, but the trend was downward. The highest index value was reached on April 21 at 133.47, shortly after another foreign bank published a negative report on the Icelandic economy. A turning point was reached then, however, because the króna strengthened in the course of that day.

For the next days the trend was towards strengthening, partly shored up by Iceland Chamber of Commerce's publication of a report by Fredrick Mishkin and Tryggvi Thór Herbertsson on May 3. The next day the Central Bank published its annual *Financial Stability* report whose broad finding was that the financial sector was sound and could withstand considerable shocks, but challenges lay ahead. Around the same time, banks published their Q1 figures showing record profits. The exchange rate index rose even though the Central Bank's policy rate hike on May 18 was in line with expectations, possibly due to unease in other countries, including movements of the Turkish lira and South African rand.

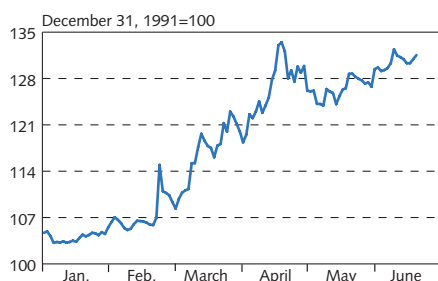
Volatility had diminished by this time, but Standard & Poor's announcement in early June that it had changed Iceland's sovereign outlook from stable to negative weakened the króna. Fitch Ratings' claims that a harsh landing could be expected for the Icelandic economy, plus poor inflation figures, fuelled further depreciation. Occasional glacier bond (foreign króna-denominated Eurobond) issues have been made, which has supported the exchange rate value. The exchange rate index is shown in Chart 2.

### Króna volatility eases towards average

One effect of the exchange rate movements in February was that volatility of the króna, measured as the floating monthly average stand-

Chart 2  
Exchange rate index of the króna

Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.



ard deviation of daily changes, increased sharply, as shown in Chart 3. The exchange rate is clearly much closer to long-term equilibrium now than in the autumn, for example, but judging from the last spell of unrest, overshooting may be expected which could even persist for a while. Economic imbalances in Iceland and movements in international markets could cause intermittent tremors in the next few months.

### Record FX market turnover

The jumpy state of the markets has boosted turnover substantially. Turnover in the foreign exchange market this year already exceeds the total for 2005, which was a record. From the beginning of 2006 to June 23, turnover amounted to 2,313 b.kr, compared with 2,077 b.kr. over the whole of the preceding year. In addition, in the beginning of May Reuters launched a market for Icelandic krónur which has witnessed a fair amount of trading and provides a welcome addition to the available options. Turnover in the Reuters trading system amounted to 243 b.kr. from the launch on May 6 until June 23. Spreads in this market are generally wider than in the domestic interbank market. A number of non-Icelandic banks have tapped into this market, largely using the euro as a reference currency, while the US dollar is used in Iceland's domestic interbank market, at least for now.

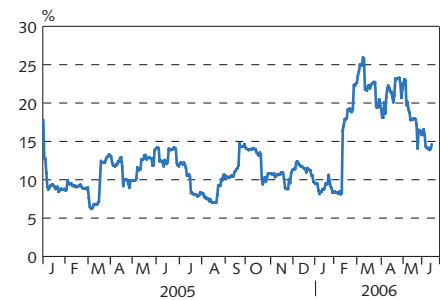
### Foreign reserve movements

The Central Bank's foreign reserves have grown in krónur terms in pace with the depreciation of the króna, over and above its regular currency purchases to meet the Treasury's foreign debt service requirements. At the end of March, reserves exceeded 80 b.kr., including a sizeable amount of currency accumulated by the Treasury to service a loan maturing at the beginning of April. This repayment dented the reserves, which currently stand at 74 b.kr. The external position of the Treasury has improved significantly in recent years, because of easy liquidity connected with the present economic boom, and has been boosted by proceeds from the privatisation of Iceland Telecom.

### Maturity of glacier bonds approaching

When the first glacier bonds mature in September 2006 it will be interesting to monitor their effect on the exchange rate and interest rates. Chart III-1 on p. 14 shows the maturity profile of the glacier bonds. Judging by the experience of New Zealand<sup>2</sup> the impact should not be as great as might be expected, for several reasons. Markets are forward-looking and since these known values can be allowed for, they should not deliver a surprise. Some of the redeemed Icelandic currency could conceivably be reinvested in Iceland by investors who intend to weather the current turbulence. Also, a sizeable group has probably already its closed positions with forward agreements and assumed the loss on investment. Yields on glacier bonds in the secondary market showed a marked rise when the tremors were felt in February and March, and domestic investors may well be attracted to these instru-

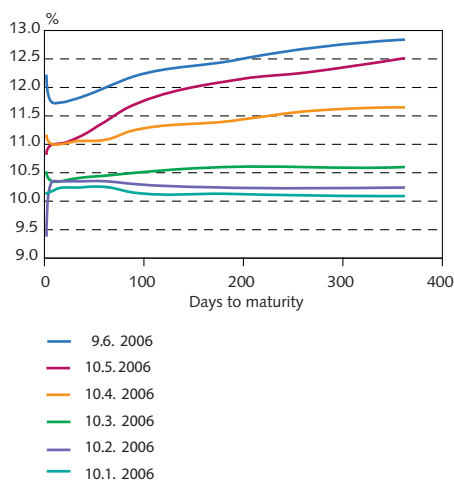
Chart 3  
ISK volatility against USD  
Daily data January 3, 2005 - June 23, 2006



Source: Reuters.

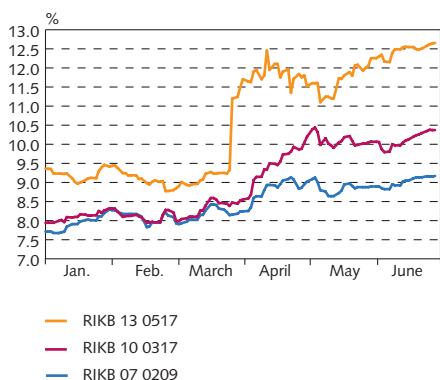
2. See Thorvardur Tjörvi Ólafsson: Króna-denominated Eurobond issues, *Monetary Bulletin* 4/2005, 55-83.

Chart 4  
Yield curve on money market



Source: Central Bank of Iceland.

Chart 5  
Treasury note yields  
Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.

ments, which are generally backed by respected issuers. Such a development would alter the picture, because if the bonds are bought by domestic investors their exchange rate impact will be felt outside the maturity dates, terminating the foreign investors' króna positions.

### Upward-sloping yield curve

Market agents' expectations about future interest rates can be read from a simple yield curve. The position of the curve at different points in time can make a revealing comparison; Chart 4 shows the change in future interest rates on long debt in the space of a very few months. Taking figures for January 10 and February 10, the yield curve in the interbank market for krónur shifted upwards then by broadly the equivalent of the Central Bank's policy rate hike on January 26. In the turmoil that broke on February 20, the risk of higher inflation suddenly dawned on the market, and longer rates jumped between February 10 and March 10, e.g. by 0.36 percentage points in the case of one-year rates, which may be partly explained by expectations of a further policy rate rise. Compared with March 10, one-year interest rates had risen by 2.24 percentage points on June 9, while the policy rate has gone up by 1.5 percentage points over the same period. Some impact can also be seen on nominal Treasury note yields, as shown in Chart 5. Yields on RIKB 10 0317 rose by 2.03 percentage points from January 10 to June 9, outstripping the policy rate hikes by 0.28 percentage points, while RIKB 13 0517 rose by 1.33 percentage points over the same period, namely by 0.42 percentage points less. Thus the market has signalled its view that the need for higher long-term interest rates has diminished, given that the inflationary spike is only temporary and will unwind over time.

The same inference can be made from calculated yields on swaps in the Reuters trading system.

### Widening interest-rate differential with abroad

Measured in terms of three-month debt instruments in the interbank market, the interest-rate differential between Iceland and abroad widened from 7.0 to 8.6 percentage points over the period from March 14 to June 20. Partly this reflects policy rate hikes over the period, but domestic interest rates have also risen by more than the policy rate in response to higher inflation.

### Treasury enhances monetary policy

It has been apparent for some while that nominal interest rate formation has been marred by market breach. Given the Treasury's negligible likelihood of default, its instruments conventionally represent the risk-free benchmark rate on which the market interest rate structure is based. Iceland's low central government borrowing requirement led to a decrease in short-term issuance by the Treasury, which decided to try to build up the series with the longest residual maturity, i.e. maturing in 2010 and 2013. T-bill maturities were also shortened from three months to one month. As a result, a sizeable gap developed in the yield curve. A review of this arrangement, launched on the Central Bank's recommendation, decided that the Treasury would

issue two-year notes at six-month intervals, and reintroduce monthly issues of three-month bills. In the course of time this will create a fairly continuous yield curve for the two years ahead. The value of each series of two-year T-notes will be roughly 15 b.kr. and they will be built up to that size with three auctions. It is hoped that this amount will suffice to establish credible price formation, especially since there will be so many closely spaced series. Eventually, the total volume of Treasury securities series with a maturity of two years or less will amount to around 60 b.kr. If primary dealers exercise their full entitlement to borrow government securities under new National Debt Management Agency (NDMA) rules, the total market value of each series could reach 25 b.kr. When the first tranche of two-year T-notes was auctioned on June 14, bids were submitted for 14 b.kr. In addition to accepted bids for 5 b.kr., primary dealers were allowed to buy a further 10% at the average auction yield, which was 11.6%. Total tranche volume therefore amounted to 5,424 m.kr. On May 30, the NDMA signed new agreements with five primary dealers in government securities. Market making for the RIKB 07 0209 series was also resumed after being discontinued for a period.

### Brisk repo transactions

One consequence of the current ample Treasury liquidity and of requirements for minimum reserves is to create a strong need for Central Bank lending facilities. Repo volume has exceeded 100 b.kr. on several occasions, and on June 20 it amounted to more than 110 b.kr., the highest position ever. The repo stock is shown in Chart 6. The average balance on the Treasury's account with the Central Bank has been close to 40 b.kr., over and above its 32 b.kr. deposit of privatisation proceeds in a tied account with the Bank. Minimum required reserves have risen apace during 2006, by more than 36%. The main reason appears to be growth in foreign deposits with the deposit money banks. The minimum reserve requirement in June was 24.6 b.kr.

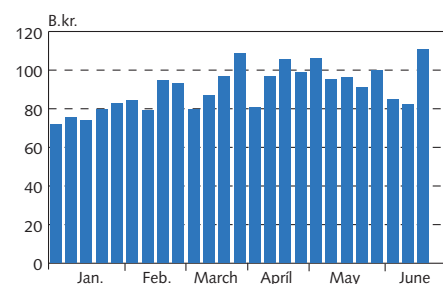
### Decline in króna market trading

Trading in the interbank króna market so far this year is down year-on-year by 13%. Total trading has amounted to 691 b.kr. Swap market trading has been sluggish, at only 19 b.kr. this year. Overnight lending has been fairly sporadic, although almost 40 b.kr. has been granted so far, compared with 2 b.kr. at the same point in 2005. Of this figure, 21 b.kr. was provided on a single day, June 16, when one bank underestimated its credit requirement. Average weekly stock of certificates of deposit has run at 1.4 b.kr. so far this year, compared with 4.8 b.kr. over the corresponding period in 2005.

### Volatile yields on Housing Financing Fund bonds

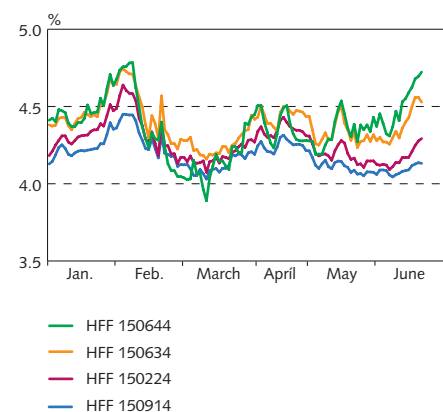
Yields on Housing Financing Fund (HFF) bonds on Iceland Stock Exchange (ICEX) have followed an ambiguous trend, as shown in Chart 7. This may well reflect the ongoing debate on the future of the HFF, as well as Standard & Poor's announcement in June that the fund was on CreditWatch negative. The HFF has held two bond auc-

Chart 6  
Outstanding stock of Central Bank repos  
Weekly data January 3, 2006 - June 20, 2006



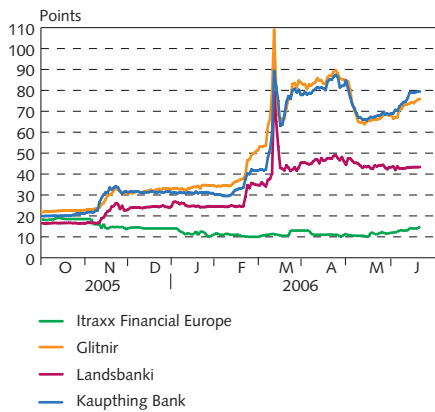
Source: Central Bank of Iceland.

Chart 7  
HFF bond real yields  
Daily data January 3, 2006 - June 23, 2006



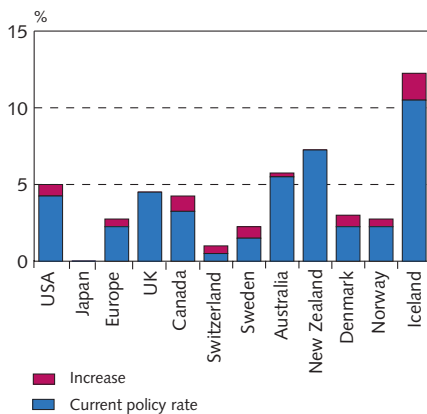
Source: Central Bank of Iceland.

Chart 8  
CDSs of Icelandic banks and Itraxx  
Financial Index  
Daily data October 5, 2005 - June 20, 2006



Source: Reuters, Bloomberg.

Chart 9  
Increases in selected central banks' policy  
interest rates since the beginning of 2006



Source: Central Bank of Iceland.

tions but sold considerably less than in its original plans, and has now announced that they will be lowered. At the first auction on March 31, bids of 2.2 b.kr. for HFF 44 bonds and 1.5 b.kr. for HFF 14 bonds were accepted. In consequence, the HFF raised its new customer lending rate by 0.2 percentage points. The second auction, on June 16, saw total bids of 6.4 b.kr. accepted, comprising 1.7 b.kr. for HFF 34 and 4.7 b.kr. for HFF 14. The strengthening of HFF 14 deserves special note, because this series has been so small as to be marginally significant. Kaupthing Bank listed two series of mortgage-covered bonds on May 16 for a total market value of 48 b.kr. These bonds have not yet traded in the secondary market.

### CDS prices on the rise

Credit default swaps (CDSs) are a recent addition to Icelandic securities trading. By pricing the risk of debtor default, CDSs offer investors a hedge to ensure payment on due date. CDSs for Icelandic bank bonds have not had a high market profile internationally, but in October 2005 their prices began to move upwards. Since then they have surged, albeit in a number of steps. Their increase is not in synch with the iTraxx Europe CDS index, which has trended downwards over this period, as Chart 8 shows.

### Foreign portfolio investment still running high

Substantial levels of investment have been made in foreign portfolios in recent months, apart from March which saw sizeable net sales for the first month since 2002. Over the first four months of 2006, net foreign portfolio investment amounted to almost 61 b.kr., up from 22 b.kr. year-on-year. Non-residents made net sales of Icelandic securities for 30 b.kr. in Q1, as against net investment of 11 b.kr. in Q1/2005.

### International fear of inflation

Many central banks have raised their policy interest rates over the past few months, as seen in Chart 9. High oil prices are probably leaving their mark, compounded by the tendency for housing price inflation in many countries to propel general inflation through the wealth effect and increased consumption. Rising interest rates push up the profitability required from investments and demand for liquidity is curbed. Equity prices have also come down so far in 2006, especially in European markets.

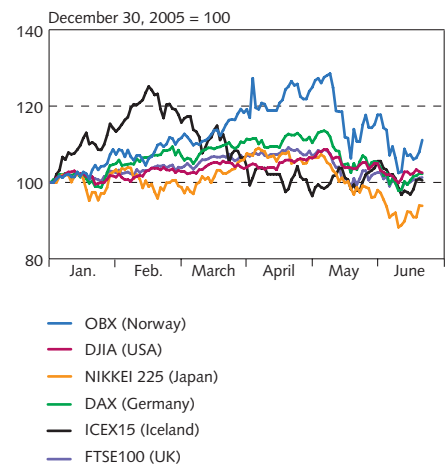
### Equity market rallies

After coming under strain in February and March, Iceland's equity market has bounced some way back. Interestingly, equity prices have more often than not remained marginally higher than at the beginning of 2006, even after soaring by almost 90% in the course of 2005. Chart 10 maps the ICEX-15 index against indices of several major international exchanges.

New selection criteria for the ICEX-15 index will be introduced in mid-2006, whereby 12-15 of the 15 most traded and most liquid listed companies will be included in ICEX-15, instead of the previous arrangement of selecting 15 from a pool of 20.

Considerable changes have taken place in ownership of a number of companies listed on ICEX, including systematic measures to unwind the cross-ownership which came under criticism from international analysts when the unrest in February and March was at its greatest. Changes already made include Kaupthing Bank's sale of its 24% holding in VÍS insurance company to Exista investment company. Kaupthing Bank aims to retain only a negligible share in Exista, which aims for a listing in September, and will divest to institutional investors. Landsbanki sold its holding in the Swedish investment bank Carnegie at the end of April. Glitnir sold Sjóvá insurance company to Milestone investment company in May. FL Group sold its entire share in Easy Jet in April and has increased its holding in Glitnir from 4.2% to 23% since the beginning of this year.

Chart 10  
Development of selected share indices  
Daily data December 30, 2005 - June 23, 2006





*Davíð Oddsson*

Chairman of the Board of Governors, Central Bank of Iceland

## Challenging times

*Address to the Annual Meeting on March 31, 2006<sup>1</sup>*

On behalf of the Board of Governors of the Central Bank of Iceland I welcome you all to the 45th annual meeting since the Central Bank was established on April 7, 1961. The Bank's financial statements for the year 2005 have been ratified today by the Prime Minister. The Bank's annual report has also been published. It includes a report on the Bank's performance and a summary of how it has implemented its mandatory role.

### **Economic developments less favourable than forecast last year**

The Chairman of the Supervisory Board devoted part of his address to Birgir Ísleifur Gunnarsson, the former Chairman of the Board of Governors. The present Governors endorse his words wholeheartedly. In this context I would like to draw attention to two points that the former Chairman of the Board of Governors mentioned at the last annual meeting. One concerned the Bank's forecast for inflation and the current account deficit. At that time the Bank forecast that the current account deficit would be equivalent to 12% of GDP in 2005 and inflation would be 2½% by today. Now it is clear that developments have been less favourable than was forecast and hoped. The current account deficit ended up at 16.6% of GDP and inflation is currently 4.4%.

Institutions are admittedly not accustomed to drawing attention to their forecasts if they do not come completely true. But what are the explanations?

### **Robust growth and unemployment at a minimum**

It has transpired now that GDP grew last year by more than was forecast, and new national accounts data also show that the figure for 2004 was hugely underestimated. GDP growth then was 8.2%, the highest figure in Iceland since 1987, which was effectively a tax-free year [when Iceland moved onto a PAYE tax system]. Last year was eventful on the economic front. Private consumption grew at its fastest rate since 1987 and gross fixed capital formation faster than any year since 1971. Import growth has not been as brisk in any year since 1953 and the current account deficit broke previous records – although it should be added that as a result of income from soaring foreign asset holdings, Iceland's net external position only deteriorated slightly. Real wages were at a peak, unemployment at a mini-

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1. Translated from Icelandic.

mum and direct foreign inward investment ran at a massive level. This inflated picture must be seen in the light of the very robust economic growth in the previous year, 2004, and strong growth in 2003 as well. Besides these large movements, a structural change in the domestic credit market made much more capital available to mortgage borrowers. Higher disposable income and net wealth also contributed to making this a unique period in Icelandic economic history.

### **Surprisingly modest deviation from forecasts**

Bearing all this in mind, it is probably surprising how modest a deviation was actually shown from the forecasts for inflation and the current account deficit. So far, house prices have been the main driver of inflation above the target. If house prices alone are excluded, Iceland's rate of inflation is low – and also in comparison with other European countries, for example. House price inflation was widely expected to stop sooner than it actually did. *Monetary Bulletin*, which was published yesterday, describes how the financial position of households has tightened due to a rise in short-term interest rates and in the lowest rates for new mortgages, compounded by the depreciation of the króna and higher inflation. For a number of familiar reasons, however, these monetary effects are not felt strongly yet, which is dampening efforts to slow down the economy. The increase in mortgage interest rates following yesterday's rise in the Central Bank's policy rate, however, represents an important contribution now.

### **Central Bank's policy rate measures have played a crucial part**

Private consumption grew by almost 12% last year. Growth at such a pace is rare and can only be short-lived. Disposable income has been driven up by wage rises, a higher employment rate and tax cuts. Household wealth has also grown as real estate and equity prices rose substantially. Most indications are that asset prices are the main driver of private consumption growth. Housing prices in the Greater Reykjavík Area went up by 45% over the past year and a half, and equity prices by almost 96% over the same period. In the Central Bank's view, the real estate market will cool down significantly in the near future and private consumption growth will normalise next year. It might seem natural to ask whether the Bank's concerns about inflation will not vanish overnight then, because housing prices have been the only factor keeping inflation figures high. Unfortunately the matter is not so simple. There is no doubt that the Central Bank's policy rate measures have played a crucial part in helping the other index components to counteract house price inflation in the recent term. The movements in the exchange rate of the króna in the past few weeks exacerbate the challenge of steering inflation back onto a more moderate course.

Of course it would be easy to cite repeated comments and Central Bank declarations that the strength of the króna was unsustainable in the long run, and the many arguments supporting them. However, the Central Bank had hoped that the inevitable exchange rate adjustment would have occurred somewhat later than it actually did and would also have been more measured. The exchange rate



adjustment would preferably have taken place after a slowdown in house price inflation and a substantial easing of the pressures which, according to newly published national accounts figures, were even greater than previously thought.

### **“Letting inflation through” is not an option**

Under these circumstances, what the Central Bank must do is clear and it has no alternatives. “Letting inflation through”, as it is sometimes called, without taking any measures, is not an option – neither as a policy nor according to the Bank’s mandatory duties. For this reason, the Board of Governors decided yesterday to raise the policy interest rate by 0.75 percentage points. This is a greater increase than in recent decisions and reflects both the exchange rate movements that have taken place and the forecasts for economic developments that the Bank has now presented. No absolute commitment has been given about further policy rate hikes or whether the next steps will be large or small. That will depend on diverse economic events as they unfold. But the tasks assigned to the Bank are clear and it is willing to undertake them. Tight monetary policy may cause a temporary contraction in the economy while a satisfactory balance is restored. It is almost certain that too lax a stance would lead to a disorderly adjustment.

Sometimes the economic situation requires the Central Bank to encourage growth and stimulate initiative and enterprise. People see the Bank’s actions then in that same positive light. Then conditions change and the Bank has to change course. Action is needed to counter overexpansion and overheating, and encourage saving, prudence and caution. Then the Bank has to resort to means which may have uncomfortable side-effects. Seen in that light, the Bank’s profile and image appear different. The Central Bank’s ability to use the powers at its disposal as conditions demand must not be changed. Those powers are limited and their effects often take a long time to emerge.

### **Banks need to play along**

I began by mentioning that I would like to refer to two points from last year’s address by the Chairman of the Board of Governors, and use them as headings for my discussion here of the Bank’s two most important tasks at present, and in fact at all times. The first concerns the inflation target and figures connected with it. The second is the position and performance of financial companies. As it happens these two issues are generally interlinked, because decisions by financial companies have a strong impact on the first task, and imbalances in the Icelandic economy can affect international analysts’ assessments of the position of the financial sector. But be that as it may.

I was interested to note that my cautious predecessor as Chairman of the Board of Governors described in his last address to the annual meeting how the strong growth in lending by the banks showed that they have overstepped the mark. Those were the words he used. He was discussing the impact on growth, overheating and inflationary pressures in the economy. I quote: “The surge

in lending over the past two years is a cause of concern both for financial stability and the Central Bank's inflation target ... Lending by the credit system as a whole increased by 16% in real terms last year." Unfortunately these cautionary words had no effect, because on top of the 16% increase in lending in real terms in 2004 came a further 25% increase in lending in real terms in 2005. This must be changed.

The Board of Governors of the Central Bank has held productive meetings with leaders of the banking sector to discuss this question among others. Statements have been issued in these meetings boding a more cautious approach in the future. The Board of Governors has no reason to doubt the integrity behind these promises. However, lending has continued to grow in the first months of this year, and at a faster pace than in 2004. The difference in practice is explained by the time it takes to clear promised loans which are in the pipeline. The Central Bank still has faith that these planned improvements will materialise, since a great deal is at stake.

#### **Banks more exposed to shocks originating in foreign markets**

In his address last year that I quoted from, the former Chairman of the Board of Governors also said that changes in their activities and strategies have left the banks more exposed to shocks originating in foreign markets. Recently we have seen instances of this. Admittedly, a lot of what was said in the much-quoted reports by international analysts is misrepresented, and some of it based on misunderstandings, wrong information and, occasionally, obvious antipathy towards the Icelandic banks and their activities. This is all regrettable and, in some cases, deserves to be condemned. But these cases are not the essence of the matter. The essential point is that the banking sector as a whole, or individual banks, are not in a position to refute this kind of coverage for once and for all. Another serious matter is that, at a certain time, these institutions are vulnerable to changes in supply or risk assessment in international banking and bond markets.

#### **Solid financial position of the banking sector**

For its part, the Central Bank reiterates at this meeting that the underlying financial position of the Icelandic banking sector is very solid, fulfils the most stringent requirements and has easily passed all the stress tests conducted on it. This of course is the crucial issue. However, the scenario that we have witnessed since November must be taken very seriously. The Icelandic banking sector must address the shortcomings that international analysts repeatedly stumble over, regardless of whether these are exaggerated and overestimated. Lending growth must be reined in as promised. Certain financial institutions need to improve their communications to a significant degree, and a joint effort by them all could be worth considering. Hype and empty phrases must be avoided.

Some analysts in other countries have claimed that the market has already downgraded its ratings for the Icelandic banks some way below those issued by international ratings agencies. They claim that the ratings agencies cannot avoid moving into line with these mar-

ket perceptions sooner or later. In a recent interview with [business paper] *Viðskiptablaðið*, I mentioned that if the financial institutions act appropriately, the outcome could turn out much more favourable for them. Once all the explanations have been made and the reforms are finished or close to completion, the market will be more likely to move into line with the rating agencies' outlook, and not vice versa. Since then, Standard & Poor's has issued sound ratings for Glitnir. Secondary market terms for Icelandic bonds improved as a result. The ratings companies have better knowledge of the Icelandic economy and financial sector than most other institutions that discuss them.

### **Collaboration by government authorities, Central Bank and Financial Supervisory Authority**

I have mentioned a number of issues here which Icelandic financial companies cannot avoid addressing. But in this respect we must not just preach to the banks. We need to take a critical look at ourselves and the other regulatory and supervisory agencies, monitor compliance with regulations and create a solid framework for the financial sector. It must be ensured that the institutions involved in these tasks can compete for capable staff who can soon tackle delicate issues and enjoy the confidence and respect of the markets. The government authorities, the Central Bank and the Financial Supervisory Authority [FME] have already made a formal agreement on joint monitoring of signs of weakness in financial institutions, and contingencies for responding to them. This agreement has been under preparation for a long time, is similar to those in effect in other advanced economies and has nothing to do as such with the current market unease.

### **Untenable arrangements for the Housing Financing Fund**

Developments following the structural changes in the housing mortgage market have left the arrangements for the Housing Financing Fund in an untenable position. Moves to rectify this situation have been unduly delayed. Interest rate formation in this market has become unrealistic as a result, which in turn has an adverse effect on the Central Bank's efforts to cool the economy. The Prime Minister's recent declaration concerning the Housing Financing Fund is important and has met a positive response. But the declaration needs to be followed through in practice, as soon as possible.

### **Fundamental importance of strong supervisory institutions**

A few years ago it was decided to separate the activities of the Central Bank and banking supervision, drawing on developments elsewhere, in particular in the UK, which had a widespread influence. This may well not have proved as successful everywhere as was hoped. Most of the banks in the UK are foreign banks, and the share of domestic banks is small. The opposite is true in Iceland. In spite of their large and growing activities abroad, all the Icelandic financial institutions are classified as resident companies. The international debate may now be turning in the opposite direction to that taken by Iceland and others when the banking supervision was separated from the Central Bank in its day. Iceland is a small country with rapidly expanding

financial and banking business. It is a cause of some concern that supervisory and regulatory institutions have not grown correspondingly, although they have still performed their functions very well. The Icelandic banks are well aware of and understand the fundamental importance that strong institutions such as the Central Bank and FME have for assessments by ratings agencies and international analysts. The Board of Governors raises this point here for consideration in conceivable reforms of Iceland's financial institutional framework. But other action is needed as well.

#### **Foundations of the bond market need strengthening**

In consultation between the Government of Iceland and the Central Bank, it has been decided to increase the Bank's foreign reserves in coming years and boost its capital position further, probably with foreign borrowing rather than by purchasing foreign currency in the markets. This is of course done on a long-term view and reflects ongoing changes in the external economic environment rather than the temporary market unease at present. Also, the Central Bank has recommended to the Ministry of Finance and the Government that special action should be taken to strengthen the foundations of the Icelandic bond market. The Treasury is in an unusually strong position at present and its debts are decreasing from one year to the next. Although the Treasury does not need to raise funds in the market, this does not prevent Treasury instruments from forming the backbone of active markets, as international experience shows us. The Ministry and Government have responded positively to the Central Bank's promptings and are now considering them.

#### **Warning bells must be taken seriously**

The Icelandic Treasury is in a very strong position and the Icelandic economy is highly flexible and responsive. Icelandic financial institutions have never had a better foundation for building on than now. I am convinced that the warning bells that have been ringing will eventually be to our advantage. In our high-tech age we sometimes notice that it is the warning bells themselves that are broken and simply need to be mended. This may well be true of some of the bells that have been ringing recently. But we shall still take all the warning signs seriously and rectify everything that is rightly found wanting, no matter how trivial it may seem. Then, in the course of time, we will stand even stronger. A solid and powerful banking and financial system is the precondition for a dynamic society. Most of the people who can influence this good position are present at this meeting now. They are all urged to do their utmost. There is much at stake.

## Effective exchange rate calculations

*This article argues that the methods used by the Central Bank of Iceland to calculate its published exchange rate indices (including the official effective exchange rate) do not fully serve their purpose, especially after the change in monetary policy framework in 2001. It proposes ideas for new indices based on methodology applied in the UK, US and elsewhere in recent years, using a more strictly rules-based selection of basket currencies. Inclusion in the index would depend upon fulfilling either a narrow or broader set of conditions. The narrow index would incorporate all countries accounting for 1% or more of Iceland's total foreign trade, and the broader one would have a threshold of 0.5%.*

### Purposes and viewpoints

The effective exchange rate is a key concept in economics. The nominal effective exchange rate expresses the price of the domestic currency relative to two or more foreign currencies, while the real effective exchange rate provides an indication of changes in competitive position between countries or currency areas. In both cases, the selection methodology and weights used to calculate the indices have a great effect on their usefulness. The Central Bank accordingly compiles three main indices: the official effective exchange rate and two real effective exchange rates based on consumer prices and unit labour costs respectively. A common feature of all these indices is that they are based on a basket specifying the reference currencies and the weight of each one. This article mainly focuses on the methodology used to determine the composition of currency baskets, i.e. how currencies are selected for inclusion and how individual weights are determined.

Currency baskets are not based on a single theoretical foundation and their underlying methodologies must reflect the importance of the role assigned to them, and the integrity of domestic and foreign data. Determination of exchange rate strategy will balance the exchange rate's twin functions as an instrument for macroeconomic adjustment and as an anchor of monetary policy. Whichever viewpoint prevails is then reflected in the weights in the index that is used as a reference for exchange rate policy. Countries where a fixed exchange rate regime provides an anchor for price developments tend to use hard currencies, i.e. from economies with a low and stable rate of inflation. Currencies of countries where there is price instability are therefore excluded from the index, even if considerable bilateral trade takes place. If the exchange rate is conceived as an instrument of adjustment, on the other hand, the broadest possible currency basket can be used so that the index will closely track changes in competitive position. Another important consideration when monetary policy is

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1. The authors are economists at the Central Bank of Iceland's Economics Department. Part of the article is based on a report co-authored by them and Regína Bjarnadóttir and Arnór Sighvatsson, whom they thank for their cooperation. Thórarinn G. Pétursson is also thanked for his constructive remarks and Guðrún Sóley Gunnarsdóttir for her assistance. Any remaining errors are the sole responsibility of the present authors. The views presented in this article are those of the authors and do not necessarily reflect those of the Central Bank of Iceland.

anchored against an inflation target with a floating exchange rate is that changes in index values will give a clear picture of the impact that exchange rate movements have on prices, while whether or not the component currencies are hard is a secondary consideration.

## Indices in Iceland and other countries

The following is a summary of the methodology used to calculate the currency basket for the Icelandic króna. A comparison is made with the methodologies used by Norway, Sweden, the UK, the US, New Zealand, the International Monetary Fund (IMF) and the Bank for International Settlements (BIS).

### The Icelandic exchange rate index

The official exchange rate index which has been calculated in recent years comprises nine currencies and is based on separate weighted merchandise and services baskets. It is calculated as the geometric average of indices for the exchange rate of the nine currencies and is chain-linked.<sup>2</sup> The index is reweighted annually on the basis of the share accounted for by each country or currency area in Iceland's trade in merchandise and services over the previous calendar year. The weight between the merchandise and services indices in the total indices is determined by their respective shares in Iceland's total external trade.

The currency basket for the Icelandic króna is therefore calculated as follows:

$$W_{ij} = a_M W_{ij}(M) + a_S W_{ij}(S),$$

Where  $W_{ij}(M)$  and  $W_{ij}(S)$  are each country's respective weight in Iceland's trade in merchandise and services, and  $a_M$  and  $a_S$  the respective shares of merchandise and services in the total basket.

Merchandise trade figures are based on the geographical breakdown published by Statistics Iceland, while the breakdown of trade in services is estimated by the Central Bank as described below. Inclusion of currencies is not formally rules-based, but in principle the most important trading partner countries are selected. Their number has remained unchanged since 1995, apart from the reduction caused by the introduction of the euro.

All in all, a considerable amount of trade takes place with countries that are not directly taken into account in the basket. Two possible methods are available for reflecting this trade. Either these countries can be assigned a zero value and the weights of the other currencies left at their original share of the total, or the weights of the currencies outside the basket can be distributed among those in it on the basis of a rule. The latter option has been chosen for the Icelandic index, but not always applied using the same methodology. Merchandise trade with non-basket countries has been spread among four currencies – the US dollar, euro, yen and pound sterling – in the same proportions as their weight in the SDR. Trade with Eastern European EU ac-

2. For a more detailed discussion of the technical aspects and properties of indices based on arithmetic averages and chain-linking see e.g. Ellis (2001).

cession countries has been bracketed with the euro. These countries' combined share of Iceland's total trade is just under 5%. In effect, this approach tends to firm up the basket with harder currencies. Another justification for this methodology is that smaller countries tend to peg their currencies to a major one. However, the flotation of the króna (and many currencies that were once pegged) has undermined the arguments in favour of this approach. It probably biases the index towards the major currencies. If the purpose of the index is to give an accurate picture of the impact that exchange rate movements have on Iceland's competitive position and price level, this arrangement might be unsuitable, for example by causing the index to exaggerate the effect that the slide in the US dollar in recent years has had on the Icelandic economy.

Iceland's index also takes into account third-market effect and the export index is adjusted to eliminate it.<sup>3</sup> However, the underlying calculations have not been updated since 1995. Only exports of marine products to main markets are adjusted for third-market effect. Information was collected from the main fish importers in Iceland's five main markets for marine products: the UK, US, France, Germany and Japan. Because neither price elasticity of demand in these markets nor price elasticity of supply from individual countries to them is known, a simplified rule for estimating third-market effect is applied. A competing country's share in the markets of main importers from Iceland is estimated and half of it is transferred from the importing country to the competitor. This implies that the supply and demand sides are treated equally, which may be justified by their elasticity of supply and demand being broadly the same. Market size is estimated in terms of fish consumption. While adjusting by relative consumption rather than supply may be a questionable choice, neither solution is necessarily better than the other.

Services trade estimates include data on transport and various business services, and a geographical breakdown of tourism sector data for currency transactions, payment card use, number of visitors to Iceland and nights of accommodation. Some figures involve more uncertainty than others, but payment card information is among the most reliable on both the income and the expenditure side. Currency transactions are disaggregated by country using trading system records, which is considered a fairly unreliable way of estimating both their scope and distribution. Most countries have therefore abandoned this approach in favour of survey-based collection of information.

### IMF index

The IMF's index for Iceland is compiled from three separate indices for merchandise, services and commodities. Current basket composition is based on external trade over the period 1999-2001. Recently the methodology has been altered, especially for services calculations. Relative weights were previously estimated solely on the basis of manufacturing and services trade, adjusted for third-market effect.

3. "Third-market effect" refers to the impact on competitive position caused by trade between trading partner countries. For example, Norway is given increased weight because its marine products compete with Iceland's in European and other markets.

*Services trade* was originally estimated by redistributing tourism expenditures and revenues, but only to countries where this sector is an important component of total trade. The current index covers all trade in services, if known. Comprehensive data on bilateral trade in services is rarely available, except for tourism, where it can be proxied by data on tourist arrivals. Research does suggest that trade in services is determined by the same basic factors, such as distance, relative GDP and cultural links, that explain trade in manufactures. Accordingly, the IMF assumes that trade in services – except for tourism – is distributed along the same geographical lines as manufactures, and uses the same weights. For countries where tourism is a particularly important part of overall trade, separate weights are calculated for income and expenditure related to it.

*Commodity trade* is divided into twenty categories, each weighted as a homogeneous good with a single price. Total commodity weight is found by adding up the global importance of the country in different commodity trade, applying weights that capture the internal importance of each commodity for the country's trade. Trade in petroleum and oil products is excluded from calculations.

*Manufactures trade* weights consist of two effects: competition through imports of manufactures and through exports of such goods. Within exports, the weights reflect both direct competition with the producers in the destination country and (indirect) competition with them in third-country markets. The importance of the third-market effect is determined by the relative importance of imports of manufactures versus sales of home products of the destination country. Hence the weight is smaller the more closed the country.<sup>4</sup>

The IMF's exchange rate basket for each country is therefore calculated as follows:

$$W_{ij} = (a_M + a_S)W_{ji}(M) + a_C W_{ji}(C) + a_T W_{ji}(T),$$

where  $W_{ji}(M)$ ,  $W_{ji}(C)$  and  $W_{ji}(T)$  are country weights for manufactures, commodities and tourism, and  $a_M$ ,  $a_S$ ,  $a_C$  and  $a_T$  denote the shares of manufactures, (non-tourism) services, commodities and tourism in overall trade.

The IMF's index weights for the króna diverge quite markedly from the Central Bank of Iceland's foreign exchange index, see Table 1.

The Central Bank currently weights the US dollar and euro considerably more than the IMF, but the yen less. Interestingly, this divergence occurs even though the methodology for calculating the two baskets is basically similar. Where the difference lies is in the services trade estimations and the exclusion of commodities trade from the Central Bank index. The IMF estimates geographical distribution of services exports solely on the basis of tourism data and assumes that other services than tourism resemble merchandise trade closely enough that no separate estimate is needed. The Icelandic index, on the other hand, uses currency transaction data to estimate non-tourist

4. Third-market effect calculations are discussed further in *New Rates from New Weights*, Annex 2, *IMF*.



Table 1

	<i>Central Bank of Iceland</i>	<i>IMF</i>	<i>BIS</i>
US	23.03	12.52	10.80
Canada	1.10	2.06	0.90
North America, other	0.00	0.51	0.00
<b>North America</b>	24.13	15.09	11.70
Euro area	41.14	31.64	40.40
UK	12.10	7.91	8.30
Denmark	8.13	6.83	6.70
Norway	6.04	4.58	3.80
Russia	0.00	0.56	1.10
Switzerland	1.21	1.04	2.00
Sweden	3.87	4.85	5.50
Europe, other	0.00	3.75	9.60
<b>Europe</b>	72.49	61.16	72.20
Japan	3.38	6.94	4.70
China	0.00	2.61	4.90
Asia, other	0.00	3.75	4.80
<b>Asia</b>	3.38	18.20	14.40
<b>South America</b>	0.00	0.00	1.10
<b>Africa</b>	0.00	1.68	0.20
<b>Oceania</b>	0.00	1.00	0.10

services. Compared with the IMF, Iceland's data shows a much higher level of services trade with the US than US services trade with Europe and Asia. Geographical factors may explain some of the difference, but not much. Revenues from the US military base at Keflavík have also boosted the US share, but these have been declining and explain only part of the difference – and will cease entirely this autumn. The US accounts for almost as large a share of Iceland's services trade as it does for Canada and Mexico, where it is the main trading partner country, sharing long borders and a free-trade agreement. These countries' high proportion of services trade with the US fits the hypothesis that merchandise and services trade generally follow the same geographical pattern, but Iceland is a case unto itself. The most probable explanation lies in the Central Bank's methodology for estimating geographical distribution of services trade in terms of vehicle currency rather than the actual trading partner country. As a result it increases the weight of the major currencies, in particular the US dollar, at the expense of others.<sup>5</sup> The IMF basket for Iceland includes more currencies than the Central Bank, but ignores trade with the rest. This methodology increases the weight of Asian countries and also takes trade with China directly into account. It should also be borne in mind that the IMF basket is based on trade in the period 1999-2001, while Iceland's is revised annually on the basis of trade in the previous year.

## BIS

BIS has regularly published real effective exchange rate indices for 27 currencies since 1993. Following a recent expansion and revision of the underlying baskets, BIS now calculates indices for 52 economies,

5. Services for the military base in Keflavík may tilt the US weight upwards. Less than 4% of export income has originated from the US base in recent years, however, so the impact on the currency basket is hardly more than 1½%.

including Iceland and the króna, accounting for 93% of world trade in 2004. Methodologies have been revised aimed at capturing global trade trends in recent years.<sup>6</sup> Indices are based entirely on bilateral trade, but adjustment for third-market effect is made through a double-weighting approach. The methodology for calculating indices closely resembles that currently used by the Central Bank of Iceland. While the exclusion of services and commodities trade may be a shortcoming, it enables BIS to apply a harmonised methodology to all 52 currencies covered by the index, making it a useful tool for international comparisons.

### Norway

Norway's trade-weighted index (TWI) comprises 15 currencies and is constructed on the basis of trade with its 25 main trading partner countries. These were increased from 18 in February 2000 in connection with the replacement of 11 currencies by the euro (Norges Bank 1999). At the same time the TWI was chain-linked, thereby preventing major changes in the index as a result of changes in the weights. It is based on OECD weights.<sup>7</sup> Norges Bank also calculates an import-weighted exchange rate index for 44 economies. Its development shows that sharp fluctuations in relatively low-weighted countries can have a considerable impact on Norway's average exchange rate. The impact of Asian countries is particularly undervalued in the TWI. The 25 countries in the TWI accounted for almost 99% of total trade in 1970, but had shrunk to 89% in 1996. As well as incorporating more currencies, the Norwegian index differs from Iceland's in that it excludes services trade.

### Sweden

Sweden has not revised its total competitiveness weights (TCW) index since the krona was floated on November 19, 1992. The TCW is based on average aggregated flows of manufactured goods for 21 countries, taking account of exports, imports and third-market effects. It was originally compiled by the IMF on the basis of international trade data for 1989-1991.

### United Kingdom

The Bank of England recently revised the approach for calculating its exchange rate index (ERI), because its weights no longer reflected changes in the importance of services trade relative to trade in manufactured goods, nor the increase in trade with Asia. Previous sterling ERI weights were constructed by the IMF and based on manufacturing trade in 1989-91. In the new index, 15 currencies are now weighted instead of the former 6 and services trade is taken into account. Weights and country coverage are revised annually. A threshold for inclusion is set at 1% of total merchandise trade over the preceding

6. See Klau and Fung (2006).

7. The index is calculated in relation to exchange rates on the first business day in February (base rates). Until 2001, when Norway moved onto an inflation target, the base rates were revised annually and weights updated at the same time.

three years. The new index largely comprises countries with broadly the same rate of inflation as the UK. A broader index was also calculated with a threshold of 0.5% of total trade. Serving as an effective gauge of short-term competitive position, it includes several more volatile currencies of countries where inflation tends to rise in the wake of a depreciation and needs to be adjusted for, i.e. by calculating the real exchange rate, in order to evaluate long-term competitive position.<sup>8</sup>

### United States

From 1971 to the end of 1998 the US Federal Reserve's index profiled the G-10 currencies. It was revised when the euro replaced five of the previous ten currencies, and also because of changes in US trade patterns (Leahy 1998). The single G-10 index was replaced by three: a broad index, major currency index and other important trading partner index. These incorporate third-market effects and the weights and country coverage are reviewed annually.

The *broad index* comprises economies whose bilateral shares of US merchandise imports or exports exceed 0.5%, i.e. trade in services is excluded. Country coverage and weights are revised annually.

The *major currency index* was designed to serve many of the same purposes that the G-10 index served. It not only measures the competitiveness of US goods relative to those of the major industrial countries, but also serves as a gauge of financial pressures on the dollar. As a consequence, the index includes currencies traded in deep and relatively liquid financial markets and for which short- and long-term interest rates are readily available. Currencies of trading partners with a history of high inflation relative to the US are excluded (Leahy 1998; Loretan 2005).

The *OITP index* captures movements of the dollar against the currencies of key US trading partners in Latin America, Asia, the Middle East and Eastern Europe. These currencies account for more than 40% of the weight in the broad index in recent years, providing important measures of the competitiveness of US goods in those regions and vice versa. Because some of these economies have experienced episodes of hyperinflation, the nominal OITP index is likely to be most useful in analysing shorter-term developments in dollar exchange rates. Methodology is under ongoing review, but no major overhauls have been made since its introduction (Loretan 2005).

### European Central Bank (ECB)

The European Central Bank regularly calculates several indices for the euro. After an update of the underlying weights in 2004 (see ECB 2004a, 2004b) it currently publishes three indices, designated by the respective number of main trading partner countries that they include: *EER-12*, *EER-23* and *EER-42*. Inclusion is based on bilateral merchandise trade<sup>9</sup> and minimum requirements for accessibility and reliability of statistical data. The methodology is based on the geometric weight-

8. For a more detailed description, see Lynch and Whitaker (2004).

9. Only manufacturing goods trading is taken into account, so that services and commodities are excluded from weight calculations. No threshold is set for share of total trade.

ing principle, applying the overall trade weights to the bilateral exchange rates of the euro against the currencies in each group, adjusted for third-market effects, using the methodology developed by BIS.<sup>10</sup> The ECB assumes that the composition of foreign trade is inelastic and only updates the weights every five years, when the two periods are chain-linked. As well as nominal effective exchange rates, the ECB calculates real EERs for 23 and 42 countries deflated by consumer prices, producer prices, gross domestic product, unit labour costs in manufacturing and unit labour costs in the total economy (ECB 2004b).

### New Zealand

In 1999, the Reserve Bank introduced a new method for calculating the effective exchange rate index for the New Zealand dollar. Replacing a fairly conventional methodology which was confined to bilateral merchandise trade, the new composition aims primarily to capture the impact of exchange rate movements on domestic prices. Currencies included in the trade-weighted index (TWI) cover New Zealand's five main trading partner areas, after the replacement of the Deutschmark with the euro (Hargreaves and White 1999). It was decided to keep the number of component currencies to a minimum, both for simplification's sake and because comparisons of larger baskets did not produce categorically better properties for explaining the impact of exchange rate movements on domestic inflation (White 1997). The main change was that the TWI weights the currencies partly on the basis of the size (GDP) of the trading partner's economy, and partly on their share of New Zealand's bilateral trade. This results in larger weights for the currencies of the world's larger economies, thereby indirectly allowing for the third-market effect and trade in primary commodities.<sup>11</sup>

### Summary

Design of exchange rate indices has changed markedly in most countries in recent years. The apparent trend is towards broader indices, partly to reflect their changed functions and new international trade patterns.<sup>12</sup> Keeping indices in pace with global trade developments is not always a majority priority. For example, Sweden has not changed its index weights since 1992 and they probably do not reflect its current external trade very closely. Norway's weights have been unchanged since 2001. None of the other countries discussed in this article uses the same methodology as the Central Bank of Iceland to adjust for services trade. Even the US Federal Reserve, which probably has more reliable information on trade in services than can be obtained in Iceland, does not do so. Besides Iceland, only the Bank of England fully incorporates the effects of trade in services, but uses a completely different method for estimating the data, through direct surveying of geographical distribution. Third-market effects are generally taken into account with the exception of Norway, and in Iceland they have not been regularly upgraded.

10. A more detailed description of the methodology is found in Buldorini *et al.* (2002).

11. For further discussion see RBNZ (1998).

12. This pattern is not universal, however, cf. the Reserve Bank of New Zealand methodology.

Both the Bank of England and the Federal Reserve have recently revised their methodologies, introducing broader indices and thresholds for inclusion of specific currencies. With ten fewer currencies in its basket, the Bank of England's rules are rather more stringent.

In practice Iceland's currency basket resembles the British one quite closely, because the threshold actually lies close to 1% despite the absence of a formal rule for inclusion. Setting a minimum for 1% of merchandise trade would see only Russia and China added to the basket. Scant information about services trade with these two countries, however, brings Russia's share of the total below 1%. Iceland's indices differ from all the others in one respect, however: trade with countries whose currencies are not included in the basket have no effect on its composition. A comparative overview is given in the table in the Appendix.

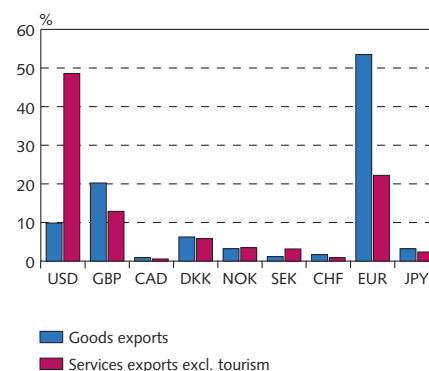
## Estimating geographical distribution of trade in services

As pointed out above, some indices include trade in services and others do not. Even so, Iceland's methodology for estimating geographical distribution of trade in services in Iceland, on the basis of vehicle currency, is not used elsewhere. Hence there is reason to examine the effect that this methodology has on index composition. The IMF ventures that geographical distribution of services trade, excluding tourism, should closely match that of merchandise trade. Charts 1 and 2 compare these two aggregates for Iceland. They present a straightforward geographical breakdown of merchandise trade with countries in the index, irrespective of third-market effects or special adjustments for other countries.

The data used for calculating the breakdown of Iceland's trade in services appear to contradict the IMF's hypothesis. Services trade with the US far outstrips merchandise trade, while the opposite applies in the case of Europe. Iceland may in fact conduct rather more trade with the US than is the norm, because of the presence of the US-manned Iceland Defence Force, but given the size of business with the military, the difference can hardly be more than roughly 1½%-2% of the country's total international trade. A more likely culprit is the methodology for estimating geographical distribution. This point can be highlighted by comparing Iceland's services trade with the US and other countries. Chart 3 is based on bilateral trade data (excluding Iceland) collected from OECD surveys. Iceland's own estimate for distribution of trade is based on data from currency trading systems, plus the underlying data on tourism and transport as in the currency index.

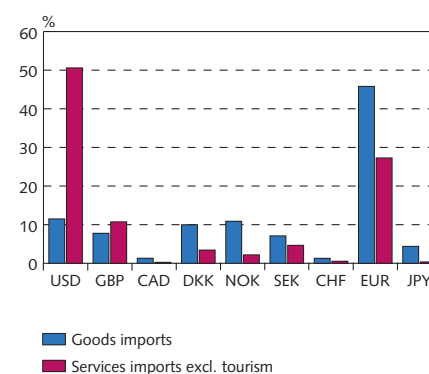
By international comparison, Iceland appears to conduct an exceptionally high level of services trade with the US. It ranks third after NAFTA members Mexico and Canada, which also conduct the bulk of their merchandise trade with the US. Iceland's geographical location is a dubious explanation for the services figure, since this would have an equal if not greater effect on merchandise trade. No other country displays such a wide discrepancy between the size of its merchandise and services trade with the US. The EU bloc comes next, if cross-border trade within the Community is excluded. The difference is less pro-

Chart 1  
Respective exports of goods and services, excluding tourism<sup>1</sup>



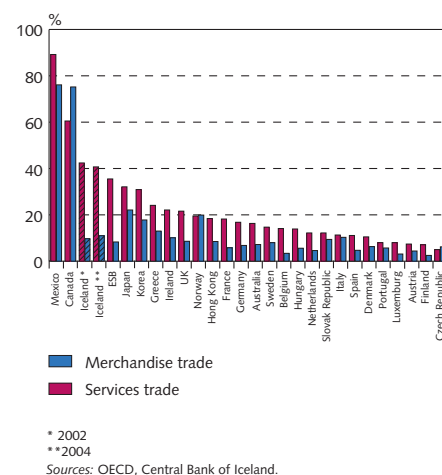
1. Based on external trade in 2004.  
Source: Central Bank of Iceland.

Chart 2  
Respective imports of goods and services, excluding tourism<sup>1</sup>



1. Based on external trade in 2004.  
Source: Central Bank of Iceland.

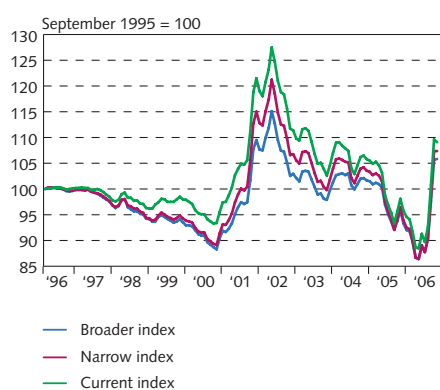
Chart 3  
US share of selected countries' total trade 2002



\* 2002  
\*\* 2004  
Sources: OECD, Central Bank of Iceland.

Chart 4  
Comparison of the current exchange rate index  
and new exchange rate indices

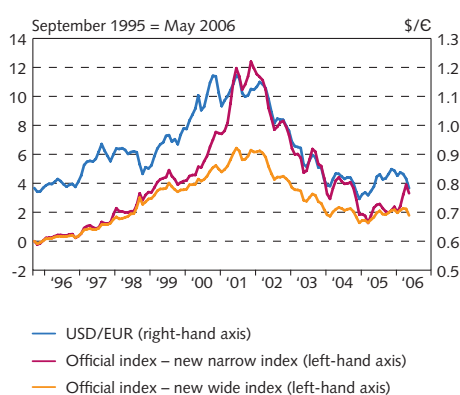
September 1995 - May 2006



Sources: Reuters EcoWin, Central Bank of Iceland.

Chart 5  
Difference between indices for US dollar rates

September 1995 - May 2006



Sources: Reuters EcoWin, Central Bank of Iceland.

nounced for individual EU member states, although in most cases the US weighs heavier for services than for merchandise. All the same, the surveyed EU countries conduct much higher levels of trade in services with each other. Iceland is therefore distinguished not only by exceptionally large trade in services with the US both in volume and relative to merchandise trade, but also by its small services trade with the EU.

A probable explanation for Iceland's incongruity is that it presents the geographical distribution of trade by vehicle currency – it is well known that total trade in main global currencies far exceeds that of the countries of origin. This prompts the question whether the Central Bank of Iceland's methodology for geographical distribution is suitable or misleading. Currencies used in international trade do not necessarily reflect the underlying country of origin or destination. The weight of the dollar and, in recent years, the euro is likely to be greater if trade in them is measured. This may not matter if the index serves as an anchor for monetary policy, but the index is inappropriate if it is used to gauge competitive position or the effect of exchange rate movements on the price level.

## How exchange rate developments are captured by new and earlier indices

Indices for the Icelandic króna have been calculated based on similar methodologies for country coverage to those now used in the UK and US.<sup>13</sup> Two measures are used. The narrow index covers all countries accounting for more than 1% of Iceland's merchandise trade over a three-year period. For the broad index, the threshold is 0.5%.<sup>14</sup> Indices have been calculated retrospectively to 1995. Based on a 1% entrance rule, Russia, Australia and Taiwan are added to the current index in 1995. China joins in 1999 and Estonia in 2002. Taiwan drops out again in 1999, Canada in 2003 and Australia in 2004. The broader index includes 14 extra countries at various times, and comprises a total of 19 currencies for 2005, instead of the present 9.

The new indices give a broadly unchanged overall picture of the development of the króna compared with those currently used. Over certain periods, however, a clear divergence is displayed. One explanation is that the US dollar has a much larger weight in the official index than in the new ones. As Chart 5 shows, the divergence correlates with the exchange rate of the dollar. In general, the new and old indices diverge the most with sharp movements in the dollar, which has a lower weight in the new indices. Nonetheless, other factors were clearly at work in the late 1990s, when the new indices show a considerably greater appreciation of the króna.<sup>15</sup> During dollar depreciations

13. Indices were not adjusted for third-market effect. Although preferable, such estimates are technically difficult and judgement-based. The benefits are hardly sufficient to justify regular updating.

14. Merchandise trade with countries that are not included in the basket is excluded from the calculations, i.e. given a zero value. The previous methodology of attributing the share of trade with "outsiders" to the major currencies, i.e. according to their share in SDR, increased the weight of the hard currencies. This is pointless if the index does not serve as an anchor for a fixed exchange-rate regime.

15. To avoid the problem of frequent addition or removal of currencies to match annual fluctuations in trade, the entrance criterion is based on three-year average merchandise trade.

such as the present episode since 2002, the króna has appreciated more by the official index than the new ones.

A considerable difference is revealed between the narrow and broad indices in the first part of the current decade, apparently tracking fluctuations in the US dollar exchange rate but diminishing the more that the dollar depreciates and volatility abates. Naturally the extra currencies in the broad index do not weigh very heavily, but in the long run these indices will conceivably diverge more, for example if growing trade with emerging market economies results in more relatively volatile currencies being included.

## Further revisions might be necessary

Since the purpose of the broad index is to measure Iceland's competitive position relative to main trading partner countries, it should preferably incorporate services trade, provided that reasonably reliable information about the composition is available. If the distribution of merchandise trade follows a similar pattern to services (excluding tourism), there may be reason to take tourism income and expenditures into account.<sup>16</sup> For example, information is available about tourists' country of origin, destinations of Icelandic travellers and nights of accommodation, which could be incorporated as well. As described above, it may be advisable to calculate new indices which mirror the new economic climate more effectively. It is therefore proposed to calculate two new indices which will have different focuses and be updated more systematically than the current ones. A useful indicator for monetary policy implementation may also be provided by calculating an index specially designed to measure the impact of exchange rate movements on the price level. This is particularly apt in small, open economies such as Iceland, where exchange rate movements are likely to influence the general price level quite strongly. There are reasons for exploring in more detail how such an index can be developed for the Icelandic economy.

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## Appendix

	<i>Calculated from:</i>	<i>Last change in methodology</i>	<i>No. of currencies in present basket</i>	<i>Revision frequency</i>	<i>Third- market effect</i>	<i>Other</i>
<b>Iceland</b>	Merchandise and services trade	1995	9	Annual (July)	Yes (last updated 1994)	Same currencies used, minor change to index
<b>Norway</b>	Merchandise trade	2000	15	Unchanged since 2001	...	Based on OECD trade weights
<b>Sweden</b>	Merchandise trade and tourism	1992	10	Unchanged since 1992	Yes	IMF weights based on data from 1989-1999
<b>UK</b>	Merchandise and services trade	2005	15	Annual (spring)	Yes	1% of imports or exports
<b>US</b>						
– Broad index	Merchandise trade	2003	26	Annual	Yes	0.5% of imports or exports
– MCI	Merchandise trade	2003	7	Annual	Yes	Major currencies
– OITP index	Merchandise trade	2003	19	Annual	Yes	Countries in broad index but not in MCI
<b>IMF</b>	Merchandise trade and tourism	2001	...	Irregular, 10 years before last revision	Yes	
<b>New Zealand</b>	Merchandise trade	1999	6	Annual	Yes	Weights country's GDP with share of bilateral trade
<b>BIS</b>	Merchandise trade	2006	52	Irregular, last 2006	Yes	Covers 93% of total global trade



## International Monetary Fund

# Article IV Consultation: Concluding Statement

*The International Monetary Fund conducted Article IV consultations with Iceland over the period May 8-15, 2006. Below is the Concluding Statement of the IMF Mission delivered at the end of the consultations on May 15.*

### Introduction

1. The medium-term outlook for the Icelandic economy remains enviable. Institutions and policy frameworks are strong. Markets are open and flexible, and the skillful management of the country's natural endowments has diversified the economy and helped to ensure sustainability. Further, these factors are combined within a culture of entrepreneurial dynamism that has led to economic outcomes that belie the country's small size.
2. However, at the current juncture, mounting macroeconomic imbalances are concerns that policymakers must promptly address. The level of excess demand, high and rising inflation, the large current account deficit, and highly leveraged households and firms, particularly banks, are generating financial market turbulence that threatens near-term stability. Looking back, these circumstances could have been mitigated by more coordinated policy actions that would have implied a tighter fiscal stance and reform of the Housing Financing Fund.

### The Outlook

3. The economy is expected to grow by roughly 4 percent in 2006 with a considerable easing in growth close to 1 percent in 2007. Investments in the aluminum smelting sector and robust private consumption are forecast to support growth over the remainder of 2006. In 2007, moderating private consumption and a sharp reversal in private investment, reflecting the completion of the projects, should result in a much-needed contraction in domestic demand. The current account deficit is expected to decline only marginally in 2006 as domestic demand remains strong. However, a significant pickup in net exports and notably lower domestic demand are projected to cut the current account deficit roughly by half in 2007. Inflation pressures are expected to remain strong over the rest of the year, reflecting the overhang from rapidly rising wages, a strong housing market, and currency depreciation. Provided wage agreements are not significantly altered in November of this year, inflation should moderate throughout 2007, returning toward the central bank's target.
4. However, this outlook is predicated on policy actions being taken quickly to reduce domestic demand pressures, anchor inflation expectations, and remove uncertainties that could undermine

financial stability. Given the heightened risk of a sharp adjustment, a prompt, multidimensional, and coordinated policy response is called for.

### Fiscal Policy

5. The low and declining level of public debt is a testament to responsible fiscal management as well as a key element underpinning the favorable medium-term outlook for the Icelandic economy. Nevertheless, at this point, an adjustment to the current fiscal plan is essential because macroeconomic imbalances are notably wider than expected at the time of the 2006 budget. The widening in imbalances has increased the risk that the economy could experience an abrupt and disruptive contraction as a result of international financial market conditions becoming considerably less favorable for Iceland.
6. On current plans, the fiscal surplus will decline in 2006 relative to what was achieved in 2005. With considerable excess demand projected for 2006, appropriate measures at the central and local government levels are required to maintain fiscal restraint. This can be achieved by reducing the high growth budgeted for nominal public consumption and delaying more public investment. At the same time, the government should announce that additional fiscal restraint will be introduced in the budget for 2007 if domestic demand pressures do not abate as required. Areas for potential adjustment include planned tax cuts, public investment, and public consumption.
7. Thinking of the future, this is the appropriate time to continue strengthening the fiscal framework to help reduce the volatility in the Icelandic economy in the years to come. The introduction of multi-year budgeting was the first step along the path to a rules-based fiscal framework. The next step is to add more structure to the budgeting and the implementation process to ensure that fiscal policy provides consistent and substantial offsets to the fluctuations in private demand that have generated enormous swings in economic activity in Iceland. Such systematic fiscal policy would consistently reinforce monetary policy, thereby limiting these swings that have historically created uncertainty and hardship.

### Monetary Policy

8. Further increases in the policy rate will be required as monetary policy faces a considerable challenge to anchor inflation expectations and return inflation to target. Although house prices, which have driven inflation well above target in the recent past, are starting to show some signs of moderation, rising prices of imported and domestic goods and services are forecast to keep inflation persistently high for an extended period. Additional pressures could come from developments in domestic wage formation. Wage growth has been well in excess of the rate consistent with the inflation target given labor productivity growth and, with

the potential for wage contracts to be reexamined later this year, there is a risk of further acceleration. All social partners need to be aware that monetary policy will be forced to respond to any additional wage growth that could delay inflation returning to target.

9. Given the current risks to inflation and the high output cost of returning inflation to target should expectations of high inflation become entrenched, the central bank should be biased toward a tight monetary stance. However, there are comforting signs that monetary policy is starting to have more of an impact on the credit conditions faced by domestic households and firms, and these developments will need to be monitored carefully to gauge the appropriate degree of monetary policy restraint. Moreover, inflation expectations should now be better anchored with the introduction of a preannounced schedule for monetary policy meetings that conclude with a public announcement of the central bank's decision regarding its policy rate. Inflation expectations should also be positively influenced by the central bank's open discussion of the interest rate path that could be required to return inflation to target.

## Financial Sector

10. The financial system appears sound, but actions should continue to be taken to reduce vulnerabilities. The balance sheets of Icelandic banks have been growing at a staggering pace, both at home and abroad. International markets are concerned that this rapid growth has exposed the Icelandic financial system to vulnerabilities that could undermine its health as the economy adjusts to restore balance. Potential vulnerabilities include considerable near-term refinancing needs, credit quality, the long-term sustainability of the banks' presence in the domestic mortgage market, and the crossholdings of equity.
11. Stress tests performed by the central bank and the Financial Supervisory Authority (FME) suggest that banks' capitalization can withstand very large shocks. Should there be a sharp downturn in the economy, the impact would likely show up in reduced profitability through a reversal of trading gains, higher financing costs, and increases in non-performing loans. Banks are taking significant steps to meet their funding needs over the near term, even in the event of dramatic tightening in international credit conditions. Should systemic issues arise, the authorities have put in place contingency plans to maintain financial stability. Banks' increased recognition of the need for careful liquidity management should reduce the risk of similar vulnerabilities developing in the future. In addition, the banks have begun reducing crossholdings of equity, thereby making ownership structures more transparent. At this point in the economic cycle, it will also be important for banks to be increasingly vigilant regarding credit quality and, given global credit conditions, to expand their balance sheets more slowly than they have in the recent past. The authorities need to ensure that banks carry on addressing all of these sources of vulnerability.

12. The continued strengthening of the FME's supervisory framework is welcome. For example, the broadening and increased stringency in the stress tests should provide positive assurance for international markets, as should the banks' willingness to make the bank-by-bank results of these tests public. To further improve the stress tests, the FME should adjust the interest rate component to make it more transparent and more closely match how interest rates along the yield curve would likely evolve as monetary policy tightens.
13. The Housing Financing Fund (HFF) needs immediate reform. The consultation process is underway, but it should be expedited. The unhealthy competition between the banks and the state-subsidized HFF has undermined the effectiveness of monetary policy, unnecessarily exacerbated macroeconomic imbalances, and threatened financial stability. In a modern industrial country like Iceland with highly competitive, world-class private financial institutions, there is no need for a significant state presence in the mortgage market. Turning the HFF into a privately-held wholesale funding institution would retain important economies of scale in mortgage funding. As international experience proves, the social objective of adequate access to mortgage financing can be achieved with more efficient and targeted public programs.
14. Icelandic policymakers have a history of responding appropriately when economic circumstances warrant prompt adjustment. The present situation requires a similar response to ensure that the current imbalances in the economy unwind in an orderly fashion and financial stability is maintained.

# Monetary policy and instruments

## The target of monetary policy

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

- The Central Bank aims for an annual rate of inflation, measured as the annual twelve-month increase in the CPI, which in general will be as close as possible to 2½%.
- If inflation deviates by more than ±1½% 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 once again. This report shall be made public.
- The Central Bank shall publish inflation forecasts, projecting inflation at least two years into the future. Forecasts shall be published in the Bank's *Monetary Bulletin*. This 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.

Since 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 this is 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 through interest rate decisions for its repurchase agreements with credit institutions. Yields in the money market have a strong impact on currency flows and thereby on the exchange rate, and in the long run on domestic demand. Broadly speaking, transactions with credit institutions can be classified into fixed trading instruments and market actions.

### **Fixed trading instruments:**

- *Current accounts* are deposits of the credit institutions' undisposed assets. These are settlement accounts for netting between deposit institutions and for interbank market trading, including transactions with the Central Bank. Interest rates on these accounts set the floor for overnight interest rates in the interbank market.

## Overview of Central Bank interest rates June 20, 2006

	Current rate (%)	Last change		Rate one year ago (%)
		Date	Percentage points	
Current accounts	10.75	May 21, 2006	0.75	8.00
Overnight loans	13.75	May 21, 2006	0.75	11.00
Certificates of deposit, 90 days	11.75	May 21, 2006	0.75	9.00
Required reserves	11.50	May 21, 2006	0.75	8.75
Repos (yield)	12.25	May 23, 2006	0.75	9.50
Certificates of deposit, 7 days (yield)	12.10	May 23, 2006	0.75	9.35

- *Overnight loans* are provided on the request of credit institutions and secured with the same securities that qualify for repo transactions (see below). Overnight interest rates form the ceiling for overnight interest rates in the interbank market.
- *Certificates of deposit* are issued with a maturity of 90 days, on the request of credit institutions. Although they are unlisted, they qualify for repo transactions. Their role is to establish the floor for three-month yields in the money market.
- *Required reserves* are made with the Central Bank by credit institutions which 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 which is tied for two years or longer. The maintenance period is based on the 21st day of each month until the 20th of the following month, and the two-month average reserve is required to reach the stipulated ratio during the period.

***Market operations:***

- *Repurchase agreements* are the Central Bank's main instrument. Auctions of 7-day agreements are held every week. Credit institutions need to put up securities that qualify as collateral. Auctions can be fixed-price or auctions where total amount is announced. Fixed-price auctions have been used so far.
- *Certificates of deposit* with a maturity of 7 days are auctioned weekly. Their function is to counteract temporary surplus liquidity in the banking system. The auction format is fixed-price.
- *Securities* market trading is limited to Treasury-guaranteed paper.
- *Foreign exchange market intervention* is employed only if the Central Bank considers this necessary in order to promote its inflation target or sees exchange rate fluctuations as a potential threat to financial stability.



# Economic and monetary chronicle

## March 2006

On March 28, Standard & Poor's Rating Services announced its first credit rating for an Icelandic bank, Glitnir Bank (formerly Íslandsbanki). The ratings were long-term A- and short-term A-2, with a stable outlook.

On March 30, the Governors of the Central Bank of Iceland announced that the Bank would raise its policy interest rate (i.e. its repo rate in transactions with credit institutions) by 0.75 percentage points to 11.5%. Other Central Bank interest rates were also raised by 0.75 percentage points. Interest rates on one-week certificates of deposit and the repo rate were raised as of April 4 and other rates as of April 1.

On March 31, Kaupthing Bank issued € 500 million (43.5 b.kr.) of króna-denominated structured covered bonds. Issued to finance the bank's residential housing loans in Iceland, the bonds were assigned an Aaa credit rating by Moody's Investors Service.

## April 2006

On April 4, Moody's Investor Service published a Special Comment on the Icelandic economy which found that Iceland is not experiencing undue risk to solvency or liquidity as result of recent volatility in the nation's business and financial cycles. The report is published on the Moody's website.

On April 4, Moody's Investor Service affirmed the deposit and debt ratings of Landsbanki Islands at A2 long-term and P-1 short-term. At the same time, the rating agency altered the outlook to negative from stable for Landsbanki's financial strength rating, which is currently C.

On April 4, Moody's Investor Service affirmed the deposit and debt ratings of Kaupthing Bank at A1 long-term and P-1 short term. At the same time, the rating agency put the bank's financial strength rating C+ on review for possible downgrade.

On April 4, Moody's Investor Service affirmed the deposit and debt ratings of Glitnir Bank at A1 long-term and P-1 short-term. At the same time, the rating agency altered Glitnir Bank's outlook to negative from stable for the bank's financial strength rating.

On April 24, Moody's Investors Service affirmed its ratings on the Republic of Iceland at Aaa for long-term obligations and P-1 for short-term obligations, both in foreign and domestic currency, with a stable outlook.

On May 1, changes to the Central Bank's Rules on liquidity entered into force. One objective of the review was to preclude intragroup transactions aimed at sidestepping the Bank's liquidity rules.

On May 1, changes to the Central Bank's Rules on foreign exchange balance entered into force. Two main changes were made: uniform exposures for individual currencies were introduced and financial institutions were allowed to maintain a separate positive foreign balance

outside their total foreign balance as a hedge against the effect of exchange rate movements on their capital adequacy ratios.

### May 2006

On May 4, the Central Bank of Iceland published its *Financial Stability* report for 2006.

On May 4, the Ministry of Finance and National Debt Management Agency (NDMA) announced a new benchmark series of Treasury securities. The Minister of Finance assigned the NDMA to introduce regular issues of two-year Treasury notes and three-month Treasury bills in order to support economic policy decisions and improve interest rate formation in the bond market.

On May 8-15, an IMF mission visited Iceland for consultations with representatives of the authorities and the private sector. The mission's concluding statement was published on the websites of the Central Bank of Iceland and IMF on May 15.

On May 12, Kaupthing Bank issued subordinated bonds in the amount of 1,250 million US dollars (88.5 b.kr.). The issue is classified as Tier 2 capital.

On May 18, the Governors of the Central Bank of Iceland announced that the Bank would raise its policy interest rate (i.e. its repo rate in transactions with credit institutions) by 0.75 percentage points to 12.25%. Other Central Bank interest rates were also raised by 0.75 percentage points. Interest rates on one-week certificates of deposit and the repo rate were raised as of May 23 and other rates as of May 21.

On May 24, Glitnir Bank announced that it had acquired all the shares in the Swedish finance group Fischer Partners Fondkommission AB. The acquisition price was 3.7 b.kr.

On May 26, the NDMA signed an agreement in connection with Treasury securities issues and secondary market making. New rules on facilities for primary market makers entered into force on May 30. Primary market makers for Treasury securities – Glitnir Bank, Kaupthing Bank, Landsbanki, MP Fjárfestingarbanki investment bank and Straumur-Burðarás Fjárfestingabanki investment bank – have exclusive access to NDMA's securities lending facilities. The agreement covers all Government securities, replacing the previous two.

On May 30, the NDMA auctioned a new series of three-month Treasury bills, RIKV 06 0901, maturing on September 1, 2006.

### June 2006

On June 5, Standard & Poor's Ratings Services revised its outlook on the Republic of Iceland to negative from stable on the increasing likelihood of a hard landing for the country's economy. At the same time, Standard & Poor's affirmed its long-term AA- foreign and AA+ local, and its short-term A-1+ foreign and local currency sovereign credit ratings on the republic.

On June 12, Glitnir Bank issued subordinated bonds in the amount of 500 million US dollars (37 b.kr.). The issue is classified as Tier 2 capital.

On June 14, the NDMA issued a new series of two-year Treasury notes, RIKB 08 0613, maturing on June 13, 2008.

On June 22, the Federation of Labour (ASÍ) and Confederation of Employers (SA) signed a two-part agreement on a review of wage settlements. A joint ASÍ-SA review committee agreed on a wage development safety net which guarantees all employees covered by its settlements a minimum wage rise of 5.5% over the preceding year. SA and ASÍ, along with the latter's national associations, also agreed on a 15,000 kr. increment to all monthly wages as of July 1 inclusive.

On June 22, the Government of Iceland announced the following seven-point measures to facilitate the agreement on a wage review between ASÍ and SA: 1) The personal income tax credit (personal allowance) will be increased by 8.3% over and above the previously decided 2.25% increase and will be indexed to the CPI. 2) Legislation on mortgage interest allowance will be reviewed if rising housing prices erode these tax credits substantially. 3) Child allowances will apply to children up to the age of 18 instead of the present 16. 4) The personal income tax rate will be reduced by 1% in 2007 instead of the announced 2% cut. 5) Contributions to adult education and job training will be increased. 6) The Government will initiate cooperation with the social partners on foreign labour issues and the underground economy. 7) Basic monthly unemployment benefit will be increased by 15,000 kr. as of July 1. The ceiling for income-related unemployment benefit will also increase from 180,000 kr. to 185,000 kr.

On June 27, in continuation of the social partners' agreement, the Government agreed on: 1) a temporary reduction in the Housing Financing Fund's maximum loan-to-value ratio from 90% to 80% of house sale price and a reduction from 18 m.kr to 17 m.kr. in the maximum mortgage amount; 2) a temporary postponement of tenders and new public works investment by the central government; 3) initiation of talks with local authorities on comparable postponements on their part.



## Tables and charts

Tables and charts are generally based on statistical information available on June 21, 2006, apart from financial market data, which are from May 31, 2006. A list of symbols is on p. 2.

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Table I Baseline macroeconomic and inflation forecasts

	Macroeconomic forecast							
	Current forecast				Change from prev. forecast (perc. points)			
	2005	2006	2007	2008	2005	2006	2007	2008
<i>GDP and its main components<sup>1</sup></i>								
Private consumption	11.9	6.2	0.2	-7.7	-	0.8	-0.3	.
Public consumption	3.2	2.9	3.9	2.8	-	0.1	-0.1	.
Gross fixed capital formation	34.5	4.8	-19.6	-11.0	-	0.6	-2.5	.
Business sector investment	56.9	3.1	-31.9	-21.9	-	4.2	0.4	.
Residential construction	10.3	14.9	3.8	-0.4	-	-9.9	-11.9	.
Public works and buildings	-13.5	-9.9	25.9	17.6	-	-2.4	3.2	.
National expenditure	14.9	5.3	-4.2	-6.2	-	0.6	-0.9	.
Exports of goods and services	3.5	1.4	11.2	14.0	-	-2.0	-1.9	.
Imports of goods and services	28.4	3.6	-6.0	-2.1	-	-0.9	-6.9	.
Gross domestic product	5.5	4.8	1.8	-0.5	-	0.6	1.4	.
<i>Other key aggregates</i>								
Gross domestic product at current prices (b.kr.)	996	1,163	1,299	1,370	-	64	131	.
Current account balance (% of GDP)	-16.5	-15.4	-8.0	-1.0	-	-1.3	1.9	.
Unit labour cost (change between annual averages in %)	4.7	7.3	8.1	4.1	-1.5	0.9	4.2	.
Unemployment (% of labour force)	2.1	1.3	1.9	3.5	-	-0.2	-	.
<i>Policy rate and exchange rate</i>								
Central Bank policy interest rate (%)	9.37	12.33	11.70	9.10	-	1.60	0.95	.
Foreign exchange index (Dec. 31, 1991 = 100) <sup>2</sup>	108.6	125.3	130.7	131.5	-	9.6	12.7	.
<i>Inflation forecast</i>								
Quarter	Change on same quarter of previous year		Change from previous forecast (percentage points)		Annualised quarterly change (%)			
2006:1	4.5		-0.1		4.5			
2006:2	7.6		3.1		14.7			
2006:3	9.5		4.3		13.2			
2006:4	10.9		5.5		11.4			
2007:1	10.8		5.0		4.1			
2007:2	11.0		4.8		15.6			
2007:3	9.0		3.0		5.2			
2007:4	8.0		2.5		7.5			
2008:1	6.8		1.7		-0.4			
2008:2	5.7		.		10.6			

1. Volume change on previous year (%). 2. Change from previous forecast is the percentage-point change in the effective exchange rate index.

Table 2 Main monthly indicators

	Consumer prices % change in CPI <sup>1</sup> over the previous		Exchange rate % ch. in effective exchange rate <sup>1,2</sup>		Interest rates (end of period, %)					Money and credit (end of period) <sup>5</sup>				
	1 month	12 months	1 month	12 months	Short-term rates			Long-term rates <sup>4</sup>		Base money	M3	DMB lending	DMB foreign liabilities <sup>6</sup>	
					Central Bank repo yield	3-month REIBOR <sup>3</sup>	3-month Treasury bills	5-y. non- indexed T-notes	10-year Treasury bonds					40-year HFF bonds
2000	.	5.0	.	-0.1	11.4	12.0	11.5	11.7	5.5	6.3	-10.4	11.2	26.2	83.4
2001	.	6.7	.	-16.7	10.1	12.5	10.0	9.1	5.1	5.9	-14.2	14.9	13.4	30.1
2002	.	4.8	.	3.0	5.8	6.2	5.8	6.9	4.9	5.2	17.2	15.3	0.9	-2.8
2003	.	2.2	.	6.4	5.3	5.1	4.8	7.5	4.3	4.6	-33.5	17.5	14.8	67.3
2004	.	3.1	.	2.1	8.25	8.6	7.4	7.9	3.6	4.6	77.7	15.0	39.5	59.2
2005	.	4.0	.	11.4	10.50	10.2	9.7	8.0	4.1	5.2	23.1	23.2	51.5	96.4
2004														
August	0.0	3.7	0.5	3.9	6.25	6.6	6.5	7.7	3.7	3.7	-15.8	12.6	23.6	58.5
September	0.4	3.4	-0.3	3.6	6.75	6.9	6.8	7.5	3.7	3.7	-8.3	18.3	26.6	65.0
October	0.8	3.7	0.6	3.6	6.75	7.2	7.0	7.8	3.7	3.7	3.5	18.1	32.4	55.3
November	0.2	3.8	1.4	4.6	7.25	7.7	7.5	7.8	3.6	3.6	7.4	16.7	34.9	53.4
December	0.5	3.9	4.5	8.7	8.25	8.6	7.4	7.9	3.6	3.5	77.7	15.0	39.5	59.2
2005														
January	0.1	4.0	1.9	7.2	8.25	8.6	7.1	7.7	3.5	3.5	3.9	17.1	37.0	61.3
February	0.2	4.5	1.6	7.8	8.75	9.0	7.8	7.8	3.4	3.5	-13.1	15.5	40.0	71.0
March	0.8	4.7	2.2	12.1	9.00	9.2	8.7	7.9	3.6	3.6	14.7	14.9	41.4	64.5
April	0.2	4.3	-2.3	11.1	9.00	9.2	8.8	7.7	3.5	3.5	-23.4	17.5	47.6	70.4
May	-0.5	2.9	-2.6	8.6	9.00	9.2	8.6	7.6	3.6	3.6	52.0	18.9	53.5	84.5
June	0.7	2.8	2.3	10.4	9.50	9.3	9.2	7.7	3.6	3.6	36.0	20.7	53.3	94.6
July	0.1	3.5	1.3	11.5	9.50	9.3	9.4	7.6	3.7	3.7	-18.2	19.1	54.8	110.4
August	0.2	3.7	0.5	11.5	9.50	9.3	9.3	7.6	3.6	3.6	-10.9	21.1	50.5	100.7
September	1.5	4.8	2.6	14.7	10.25	10.0	8.4	7.3	3.6	3.7	-5.4	12.9	55.8	82.6
October	0.6	4.6	3.5	18.1	10.25	10.1	9.7	7.8	4.0	4.0	-6.4	19.4	49.0	91.6
November	-0.2	4.2	0.1	16.5	10.25	10.1	9.7	8.0	4.2	4.1	15.7	27.3	53.7	97.9
December	0.4	4.1	-3.0	8.2	10.50	10.2	9.7	8.0	4.1	4.1	23.1	23.2	51.5	96.4
2006														
January	0.3	4.4	1.7	8.0	10.75	10.3	10.2	8.3	4.5	4.4	-3.9	18.0	51.2	95.7
February	-0.1	4.1	-3.1	3.1	10.75	10.4	14.1	8.0	4.0	4.1	40.8	20.8	51.8	113.4
March	1.1	4.5	-8.2	-7.4	10.75	11.3	12.4	9.1	4.4	4.2	85.2	26.4	57.0	126.1
April	1.1	5.5	-8.0	-12.8	11.50	11.7	12.0	10.2	4.3	4.2	64.6	26.3	57.8	121.3
May	1.4	7.6	0.4	-10.1	12.25	11.9	12.6	10.1	4.0	4.1	44.9	22.4	54.0	94.0
June	1.2	8.0	...	...	...	...	...	...	...	...	...	...	...	...

1. Percentage changes between period averages. 2. Based on the official effective exchange rate basket (trade-weighted). Positive sign indicates appreciation of the Icelandic króna. 3. Average yield on the interbank market in Icelandic króna. 4. 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. 5. Annual figures are changes over year. Latest figures are preliminary. 6. DMBs = deposit money banks = commercial and savings banks and other institutions permitted to accept deposits from the public. Foreign lending excluded from January 2002.



Table 2 (continued) Main monthly indicators

	Foreign exchange market and reserves				Foreign trade and external conditions				Labour market		Treasury financial balance, % of revenues, from Jan. 112		Asset prices 12-mo. % changes	
	Gross foreign currency reserves:				Trade balance (b.kr.)	Merchandise exports (b.kr.)	Merchandise imports (b.kr.)	Marine product prices 12-mo.% ch. <sup>9</sup> Króna <sup>10</sup>	Unemployment	Wages, 12-mo. % change <sup>11</sup>	Equity prices <sup>13</sup>	Housing prices <sup>14</sup>		
	Merch. imports <sup>7</sup>	For. short-term liabil. <sup>8</sup>	as ratio of:	net purchases (b.kr.)									CB	
2000	34.2	2.1	0.60	-13.9	-38.0	149.3	187.3	-3.0	96.2	1.3	6.6	5.9	-19.3	13.3
2001	36.6	2.1	0.40	-29.5	-6.7	196.4	203.1	1.6	83.7	1.4	8.8	-0.2	-11.2	3.1
2002	37.2	2.5	0.20	4.5	13.1	204.3	191.2	3.4	88.5	2.5	7.2	-5.6	16.7	7.5
2003	58.1	3.5	0.25	43.2	-16.9	182.6	199.5	0.4	94.1	3.4	5.6	-7.7	56.4	9.1
2004	65.6	3.6	0.24	27.2	-37.8	202.4	240.2	0.6	97.2	3.1	4.7	0.0	58.9	23.3
2005	67.3	2.9	0.16	24.6	-94.5	194.4	288.9	8.9	107.0	2.1	6.8	8.6	64.7	31.0
2004														
August	70.8	3.8	0.30	1.6	-6.5	14.1	20.6	3.3	96.5	2.9	5.2	-4.8	92.6	9.5
September	71.1	3.8	0.29	1.6	0.3	19.4	19.2	4.3	96.5	2.6	5.3	-5.8	109.3	14.3
October	66.1	3.5	0.27	1.4	-4.5	17.1	21.6	4.9	97.2	2.7	5.3	-2.1	75.1	13.8
November	67.1	3.6	0.24	4.9	-2.3	18.9	21.2	5.2	98.9	2.6	5.4	-3.8	70.1	17.3
December	65.6	3.6	0.24	1.4	-4.0	16.9	20.9	9.2	103.5	2.7	6.0	0.0	58.9	23.3
2005														
January	65.0	3.5	0.26	0.8	-4.7	14.1	18.8	9.5	106.0	3.0	6.6	15.2	54.6	27.9
February	60.0	3.2	0.26	0.6	-5.0	16.5	21.4	7.9	107.7	2.8	6.7	21.0	43.3	32.2
March	59.5	3.1	0.26	0.6	-5.9	16.4	22.3	9.6	110.0	2.6	6.5	11.5	53.5	32.2
April	61.5	3.0	0.22	0.6	-4.7	17.2	21.9	8.6	106.7	2.3	6.7	5.7	51.8	34.1
May	61.7	3.0	0.21	7.3	-8.1	15.8	23.9	8.9	103.9	2.2	6.6	3.7	51.6	38.5
June	62.4	2.9	0.19	0.6	-6.9	22.7	29.6	8.7	106.6	2.1	6.3	5.4	39.9	38.8
July	58.8	2.8	0.17	0.7	-10.0	13.9	23.9	8.1	108.2	2.0	6.6	3.6	38.3	39.4
August	58.3	2.7	0.18	0.8	-13.0	14.4	27.4	10.1	109.4	1.8	6.7	4.9	38.0	40.4
September	70.7	3.2	0.20	2.5	-10.4	16.9	27.3	11.5	112.6	1.4	6.9	4.4	21.8	37.0
October	59.5	2.7	0.16	3.2	-5.5	16.0	21.6	10.3	116.6	1.4	6.9	6.7	39.0	36.4
November	64.2	2.8	0.16	3.4	-11.0	16.7	27.8	9.0	117.2	1.5	7.3	6.4	48.4	35.5
December	67.3	2.9	0.16	3.5	-9.4	13.7	23.1	5.1	114.0	1.5	7.2	8.6	64.7	31.0
2006														
January	68.5	1.1	0.17	1.4	-11.4	14.1	25.5	6.0	116.3	1.6	8.3	38.0	69.6	25.3
February	72.1	1.0	0.12	1.3	-7.2	14.7	22.0	4.5	112.8	1.6	8.6	30.8	74.9	21.7
March	79.9	1.0	0.10	1.6	-13.3	19.9	33.3	4.5	104.3	1.5	8.6	25.4	57.0	20.9
April	66.2	0.9	0.08	1.5	-9.7	17.7	27.3	5.5	96.8	1.3	8.4	19.4	49.7	17.7
May	70.4	...	...	1.8	...	...	...	...	98.8	1.3	8.7	...	52.2	13.2
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...

7. Gross foreign exchange reserves at end of period as a ratio of the average monthly value of merchandise imports. Calculated at fixed exchange rates. 8. The denominator is foreign short-term liabilities of credit institutions (deposit money banks and investment banks). 9. Prices in SDR. Annual figures are % changes between annual averages. 10. Real effective exchange rate of the Icelandic króna based on relative consumer prices (a trade-weighted average of 17 trading partners' consumer prices is used). 1980 = 100. 11. Annual figures show change in annual averages. 12. Cash basis. Without privatisation revenues. Adjusted for changed timing of expenditure changes in Jan. - Nov. 2004. 13. The ICEX-15 index. Annual figures are % changes over year. 14. Residential housing in the Greater Reykjavík Area. Annual figures are % changes over year.

Sources: Directorate of Labour, Iceland Stock Exchange (ICEX), Land Registry of Iceland, State Accounting Office, Statistics Iceland, Central Bank of Iceland.

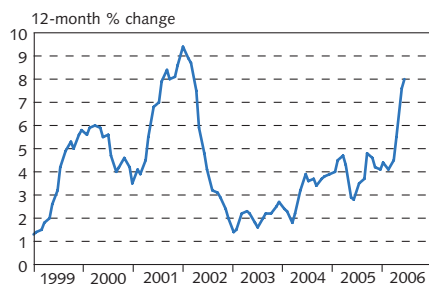
Table 3 Prices

	2005			2006					
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Consumer price index, May 1988 = 100	248.4	248.0	248.9	249.7	249.5	252.3	255.2	258.9	261.9
<i>1-month % changes</i>									
Consumer price index	0.6	-0.2	0.4	0.3	-0.1	1.1	1.1	1.4	1.2
Domestic goods excl. agric. products and vegetables	1.4	0.0	-0.0	1.1	0.6	1.0	-0.5	0.5	2.2
Agricultural products and vegetables	1.4	-0.3	0.5	2.6	0.7	-0.7	0.3	-1.2	4.3
Imported goods excl. alcohol and tobacco	0.4	-1.5	-0.1	-1.4	-1.5	2.8	2.8	3.2	0.8
Petrol	-2.4	-4.8	-1.5	2.2	1.1	-0.1	6.7	6.5	-2.4
Housing	1.1	0.7	0.8	1.5	0.7	0.9	1.4	1.6	1.7
Public services	0.2	0.1	0.1	0.2	-0.1	0.0	-0.2	0.0	0.0
Other services	0.0	0.2	0.8	0.2	0.3	0.4	0.1	0.7	0.3
Harmonised index of consumer prices (HICP) <sup>1</sup>	0.5	-0.4	0.2	-23.1	-0.2	1.1	0.8	1.2	...
<i>12-month % changes</i>									
Consumer price index	4.6	4.2	4.1	4.4	4.1	4.5	5.5	7.6	8.0
Domestic goods excl. agric. products and vegetables	-0.8	-0.9	-1.5	-0.3	0.4	2.9	4.4	7.5	7.9
Agricultural products and vegetables	0.1	0.5	-0.3	1.1	2.7	4.0	6.2	10.8	12.5
Imported goods excl. alcohol and tobacco	-1.4	-2.7	-2.6	-0.8	-1.2	-0.1	2.9	5.5	6.8
Petrol	7.4	4.5	4.1	12.8	13.9	10.7	18.0	21.0	18.3
Housing	18.3	17.8	17.5	17.1	15.2	13.7	12.3	15.3	15.1
Public services	6.8	6.8	6.9	2.6	1.5	1.8	1.5	1.3	0.9
Other services	4.1	4.2	4.6	3.8	3.6	3.5	3.7	4.0	4.2
Harmonised index of consumer prices (HICP) <sup>1</sup>	1.5	1.1	1.0	1.3	1.2	2.0	3.3	4.8	...
Building cost index for residential buildings	4.6	4.2	3.9	3.9	3.8	3.9	4.2	5.3	6.9
Housing prices <sup>3</sup>	36.4	35.5	31.0	25.3	21.7	20.9	17.7	13.2	...
<i>Foreign CPI and commodity prices, 12-mo. % changes</i>									
Consumer price index in USA	4.3	3.5	3.4	4.0	3.6	3.4	3.5	4.2	...
Consumer price index in euro area <sup>3</sup>	2.5	2.3	2.2	2.4	2.3	2.2	2.4	2.5	...
Commodity prices excl. oil	13.1	13.2	17.5	16.1	16.5	12.4	22.5	...	...
Petrol prices <sup>5</sup>	18.0	28.2	44.2	42.7	31.6	17.5	35.8	43.4	...

1. Deviates from the CPI calculated by Statistics Iceland in that the latter includes own housing, education and health care. 2. Present value of price per m<sup>2</sup> in the Greater Reykjavík Area. 3. Harmonised index of consumer prices (HICP). 1996=100. 4. Crude oil (Brent).

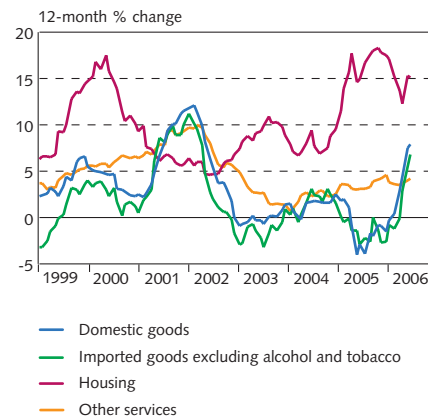
Sources: EcoWin, Land Registry of Iceland, Statistics Iceland.

Chart 1  
Consumer price index  
January 1999 - June 2006



Source: Statistics Iceland.

Chart 2  
Consumer price index by origin  
January 1999 - June 2006



Source: Statistics Iceland.

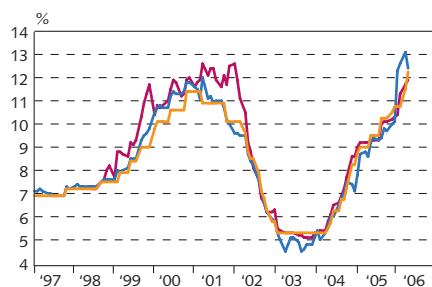
Table 4 Interest rates

All figures are in %	Annual averages <sup>1</sup>			At end of month '05		At end of month 2006				
	2003	2004	2005	Nov.	Dec.	Jan.	Feb.	March	April	May
<i>Central Bank rates</i>										
Credit institutions' current accounts	2.9	3.7	7.7	8.75	9.00	9.00	9.25	9.25	10.00	10.75
Required deposits	4.2	4.9	8.5	9.50	9.75	9.75	10.00	10.00	10.75	11.50
Overnight loans (discount rates)	7.8	8.3	11.0	11.75	12.00	12.00	12.25	12.25	13.00	13.75
Repurchase agreements	5.4	6.1	9.4	10.25	10.50	10.75	10.75	10.75	11.5	12.25
<i>Yields in the money market<sup>2</sup></i>										
REIBOR, O/N	5.1	6.1	8.9	9.8	9.3	10.4	10.4	10.4	11.1	11.7
REIBOR, 1-month	5.3	6.1	9.1	10.0	10.2	10.4	10.4	11.1	11.1	11.7
REIBOR, 3-month	5.3	6.3	9.4	10.1	10.2	10.3	10.4	11.3	11.7	11.9
REIBOR, 6-month	5.5	6.5	9.5	10.1	10.1	10.2	10.5	11.4	12.1	12.1
Treasury bills, 3-month	5.0	6.1	8.9	9.7	10.0	10.1	12.3	12.6	13.1	12.4
Treasury bills, 6-month <sup>3</sup>	5.0	...	...	...	...	...	...	...	...	...
<i>Yields in the capital market<sup>4</sup></i>										
Treasury notes (RIKB 07 0209)	6.8	7.5	9.0	10.0	9.3	9.4	8.9	12.0	11.6	12.3
Treasury notes (RIKB 10 0317)	.	7.6	7.7	8.0	7.9	8.3	8.0	9.1	10.4	9.9
Treasury notes (RIKB 13 0517)	7.6	7.6	7.6	7.8	7.8	8.3	7.9	8.6	9.1	8.9
Treasury bonds (RIKS 15 1001)	4.4	3.9	3.7	4.2	4.1	4.5	4.0	4.4	4.3	4.0
Housing Financing Fund bonds (HFF 150914) <sup>5</sup>	.	3.5	3.7	4.4	4.3	4.6	4.0	4.4	4.3	4.3
Housing Financing Fund bonds (HFF 150224) <sup>5</sup>	.	3.8	3.8	4.4	4.3	4.6	4.2	4.4	4.5	4.3
Housing Financing Fund bonds (HFF 150434) <sup>5</sup>	.	3.8	3.7	4.2	4.1	4.5	4.1	4.3	4.3	4.1
Housing Financing Fund bonds (HFF 150644) <sup>5</sup>	.	3.7	3.7	4.1	4.1	4.4	4.1	4.2	4.2	4.1
<i>Commercial banks' lending rates<sup>6</sup></i>										
Average rates on non-indexed securities	12.0	12.2	14.8	15.7	16.0	16.0	16.2	16.2	17.0	17.5
Average rates on indexed securities	9.1	8.0	7.2	6.7	6.7	6.7	6.8	6.8	6.8	7.0
<i>Rates acc. to Interest Rate Act 38/2001<sup>7</sup></i>										
Penalty rates	17.3	17.3	20.3	20.5	21.5	21.5	21.5	21.5	21.5	21.5

1. Arithmetic averages of end-of-month figures. Central Bank rates are time-weighted averages. 2. REIBOR are interest rates on the interbank market in Icelandic króna. For Treasury and bank bills, yields in trading on ICEX (Iceland Stock Exchange). 3. Treasury bills with the closest maturity to 6 months. 4. All bond yields are in real terms. 5. Housing bonds and Housing authority bonds were discontinued as of July 1, 2004. New bonds, Housing Financing Fund bonds (HFF), were issued instead and the majority of older issues were swapped into the new bonds. 6. From July 1, 2001, the Central Bank issues information on banks' average interest rates only as statistical information. 7. Interest rates that have legal status in the month shown. From July 1, 2001, penalty rates are revised at 6-month intervals.

Source: Central Bank of Iceland.

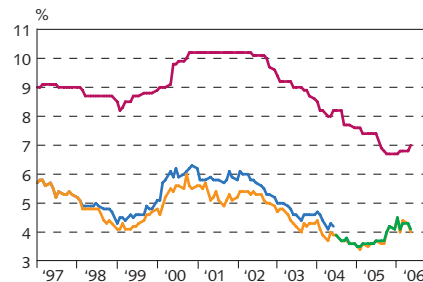
Chart 3  
Short-term interest rates  
January 1997 - May 2006  
At end of month



— Central Bank repo rate  
— 3-month Treasury bills  
— 3-month REIBOR on the interbank market

Source: Central Bank of Iceland.

Chart 4  
Long-term interest rates  
January 1997 - May 2006  
At end of month



— 30-year HFF bonds  
— 15-year Treasury bonds  
— Housing bonds  
— Secured bank loans

Source: Central Bank of Iceland.

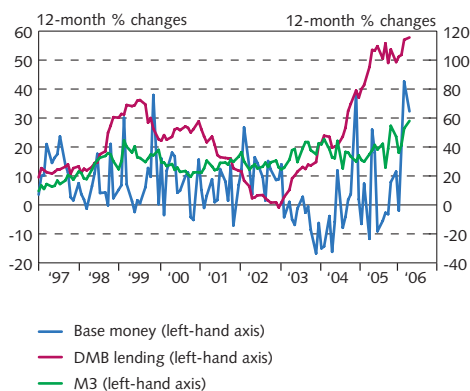
Table 5 Money and credit

	B.kr. April '06	% change over year			1-mo. change in b.kr.			12-mo. % change		
		2003	2004	2005	Feb.'06	Mar.'06	Apr.'06	Apr.'04	Apr.'05	Apr.'06
<i>Central Bank</i>										
Net foreign exchange reserves	66.2	.	.	.	3.9	7.7	-13.5	.	.	.
Claims on Treasury and govt. institutions, net	-76.9	.	.	.	-4.7	-1.1	15.2	.	.	.
Claims on deposit money banks	86.0	-65.2	32.2	144.8	15.0	11.1	-8.1	-48.1	-53.0	397.7
Base money	42.9	-33.5	77.7	23.1	5.6	18.1	-13.3	-7.7	-23.4	64.6
Notes and coins in circulation	10.1	9.4	9.0	14.8	0.0	0.4	0.1	10.2	10.5	15.2
Reserves of deposit money banks	32.8	-46.7	121.0	25.6	5.6	17.7	-13.4	-12.0	-33.7	89.5
<i>Deposit money banks</i>										
Central Bank items	-53.7	.	.	.	-9.3	6.6	-5.8	.	.	.
Short-term position, net	-54.5	.	.	.	-9.3	6.8	-5.0	.	.	.
Credit and listed securities <sup>1</sup>	3,651.8	28.2	40.4	75.7	214.1	196.7	193.7	35.9	51.7	83.1
Credit <sup>2</sup>	2,788.9	22.8	43.0	67.7	140.6	231.8	164.8	32.3	55.8	76.6
Treasury and government institutions	12.3	8.1	1.6	-16.1	-1.0	5.4	-4.6	-25.7	-11.2	-9.8
Non-bank financial institutions	33.3	-45.2	.	.	-2.7	7.8	5.8	.	-25.3	117.6
Businesses	1,390.3	15.5	2.1	25.1	63.7	112.8	75.3	30.6	35.1	57.3
Households	616.2	9.9	8.1	12.7	27.6	21.3	23.5	-2.6	109.5	58.9
Foreign sector	725.0	.	63.1	117.9	55.4	83.1	65.4	163.9	113.2	167.6
Listed securities	390.5	38.3	22.1	64.9	16.3	22.8	18.6	25.3	33.8	78.4
Domestic credit and listed securities	2,599.1	22.6	35.6	54.2	130.1	103.4	87.3	27.7	43.6	56.2
Domestic credit	2,063.9	14.8	39.5	51.5	85.3	148.7	99.4	23.5	47.6	57.8
Deposits	877.9	22.5	13.5	29.7	53.5	0.0	88.4	21.3	20.6	46.5
Domestic deposits	742.5	.	.	0.0	9.9	62.8	25.6	0.0	17.6	29.2
Bonds	2,604.8	106.1	78.8	100.3	149.2	339.8	176.7	122.5	81.0	113.6
Domestic bonds	174.1	4.9	25.3	52.8	-2.1	43.8	-3.3	6.7	42.9	45.0
Foreign liabilities, total <sup>3</sup>	3,061.0	67.3	59.2	96.4	298.2	263.3	208.2	77.0	70.4	120.1
<i>Banking system</i>										
Foreign assets, net	-879.6	18.5	25.9	55.0	-48.0	-19.0	-61.7	29.6	33.0	67.3
Domestic credit and marketable securities	2,312.6	21.6	36.0	44.2	92.7	151.5	115.9	26.7	44.9	51.4
Money supply (M1) <sup>4</sup>	202.1	22.6	30.1	23.5	-3.6	23.9	7.9	32.6	28.1	40.1
M2 (M1 + demand savings deposits)	369.0	18.4	28.0	25.7	-4.0	57.5	18.2	21.7	28.9	42.6
M3 (M2 + time savings deposits)	752.5	17.5	15.0	23.2	9.9	63.2	25.7	19.2	17.5	29.0
M4 (M3 + securities issues)	926.6	15.5	16.4	27.7	7.8	107.0	22.4	17.2	21.1	31.8

1. Treasury bills, equities and leasing contracts also included. 2. Lending series have been adjusted retroactively following reclassification under the ISAT standard. Data on lending to foreign entities available since January 2001. 3. Effective as of *Monetary Bulletin* 2005/3, this item includes securities issues abroad. 4. Sum of notes and coins in circulation and DMBs' demand deposits.

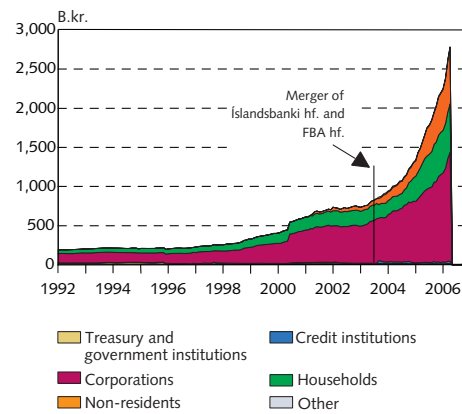
Source: Central Bank of Iceland.

Chart 5  
M3, DMB lending and base money  
January 1997 - April 2006



Latest figures are preliminary.  
source: Central Bank of Iceland.

Chart 6  
Deposit money bank lending by sector  
January 1992 - April 2006<sup>1</sup>



1. 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.

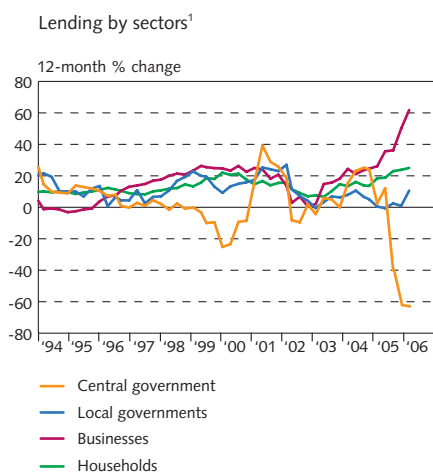
Table 6 The credit system<sup>1</sup>

Assets	B.kr. March '05	% change over year						3-mo. % change		
		2000	2001	2002	2003	2004	2005	Sep.'05	Dec.'05	Mar.'06
Domestic lending and securities	3,943.1	17.2	19.2	3.2	11.8	19.7	30.8	4.1	7.7	13.7
Banking system <sup>2</sup>	2,436.3	44.4	13.8	8.0	22.4	36.9	50.9	6.9	10.8	13.9
Miscellaneous credit undertakings	711.8	-3.8	20.8	-2.0	8.0	15.1	8.3	7.5	3.0	3.6
Housing Financing Fund	396.0	12.0	18.1	11.5	14.1	0.3	-10.5	1.4	-2.1	-1.0
Credit undertakings subject to minimum reserve requirements <sup>3</sup>	281.6	-34.9	30.3	-41.4	-19.0	133.6	75.5	31.1	11.9	10.5
Other credit undertakings <sup>4</sup>	34.2	17.2	16.1	9.0	0.8	-2.4	-23.8	-30.3	5.2	6.9
Pension funds	912.0	4.6	16.4	12.2	13.4	16.5	18.7	5.0	5.6	4.9
Insurance companies	97.2	24.1	12.2	6.3	14.8	4.1	36.3	2.9	4.6	6.5
Mutual and investment funds <sup>5</sup>	305.7	-14.0	22.3	39.2	47.0	38.9	9.3	3.5	-7.0	9.0
Foreign credit	3,624.9	39.6	29.5	-4.6	30.5	41.4	77.0	5.5	22.4	27.2
State lending funds	291.7	0.0	31.9	-2.9	-1.2	-4.3	-12.1	-3.3	-3.2	3.5
Total of above	8,379.6	18.4	21.6	3.1	19.2	27.8	43.0	5.5	12.0	16.4
Less inter-institutional transactions	-4,436.5	20.4	25.4	2.9	30.3	38.6	56.4	6.8	16.2	18.9
Assets = liabilities	3,943.1	17.2	19.2	3.2	11.8	19.7	30.8	4.1	7.7	13.7
<b>Liabilities</b>										
Domestic liabilities	2,709.8	7.1	14.1	7.2	19.4	16.5	16.5	5.1	7.3	11.8
Notes and deposits	657.8	11.1	14.9	13.4	21.9	9.8	9.8	2.7	4.1	10.2
Securities	264.9	10.1	6.7	0.2	45.2	25.9	25.9	-2.2	-5.3	-4.8
Insurance companies' indemnity fund	56.4	11.5	15.6	4.4	4.7	2.3	2.3	-2.4	-2.3	11.6
Pension funds	1,291.5	9.9	13.7	4.9	21.1	19.8	19.8	4.8	6.9	9.8
Capital of financial institutions	711.5	14.3	26.0	19.4	19.7	71.0	71.0	20.8	13.6	9.4
Other items, net	-272.3	.	.	.	.	.	.	.	.	.
Foreign liabilities, net	1,233.3	50.2	31.0	-4.8	-5.7	28.7	28.7	1.9	8.7	18.4
<b>Credit by sector<sup>6</sup></b>										
Central government	65.7	-8.6	25.8	1.8	0.0	24.1	-62.4	-38.6	-38.8	-11.7
Municipalities <sup>7</sup>	127.3	15.9	23.0	4.1	6.3	5.1	0.9	2.7	-1.5	6.1
Businesses <sup>7</sup>	2,587.4	22.5	20.7	0.6	18.2	24.5	50.0	7.8	12.1	18.3
Households <sup>7</sup>	1,162.8	17.6	15.5	7.0	14.7	13.6	23.8	6.1	5.8	7.1

1. Partly preliminary or estimated. 2. In May 2003, Glitnir leasing company merged into Íslandsbanki and was thereby reclassified to "Banking system". 3. Credit undertakings subject to minimum reserve requirements comprise: Frjálsi fjárfestingarbankinn hf., Framtak fjárfestingarbanki hf., Lýsing, SP-fjármögnun, Europay, Greiðslumiðlun hf., MP fjárfestingarbanki (since November 2003) and Straumur fjárfestingarbanki (since January 2004). 4. Other credit undertakings comprise: The Agricultural Loan Fund, the Agricultural Productivity Fund, the Municipal Loan Fund and the Regional Development Fund. 5. Since December 2003 investment funds are included. 6. Partly estimated. 7. Since September 2003, lending by sector has been reclassified according to the ÍSAT standard. This produces a lower figure than otherwise for lending to households, and a higher figure for lending to municipalities and businesses.

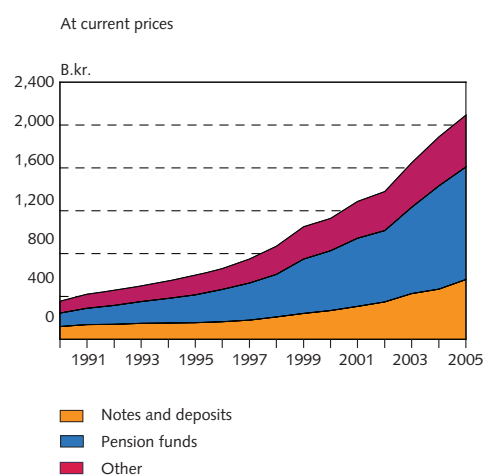
Source: Central Bank of Iceland.

Chart 7  
Growth of credit system lending 1994-2006



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

Chart 8  
Credit system liabilities at end of year 1990-2005



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

Table 7 Financial markets

At end of period	Outstanding in b.kr.			1-month % change			12-month % change		
	2004	2005	Apr.'06	Feb.'06	Mar.'06	Apr.'06	Feb.'06	Mar.'06	Apr.'06
Money market <sup>1</sup>	39.4	84.1	62.2	-3.8	4.9	-11.7	107.9	63.6	7.9
Securities market <sup>2</sup>	1,734.2	2,768.8	3,476.1	2.8	11.1	8.9	61.1	71.0	80.0
thereof Treasury bonds	45.1	27.2	27.2	0.2	1.5	1.5	-37.7	-38.7	3.2
thereof housing bonds	98.2	53.6	47.9	-3.6	-2.1	-2.2	-40.6	-36.4	-34.6
thereof HFF bonds	340.3	393.4	406.3	-0.9	1.4	2.1	15.7	12.7	15.4
Market capitalisation of listed equities	1,083.7	1,815.9	1,944.2	6.2	-7.9	-5.2	82.5	61.2	45.4
Mutual funds' units (open-end)	272.7	328.2	377.5	8.8	4.4	0.0	25.0	23.5	20.0

1. Bills issued by Treasury, commercial banks, savings banks and investment credit funds. 2. Government bonds, government notes, housing bonds, housing authority bonds, HFF bonds and listed bond issues of banks, savings banks, investment credit funds, leasing companies, businesses, municipalities and non-residents. Open-end mutual funds' units not included.

Source: Central Bank of Iceland.

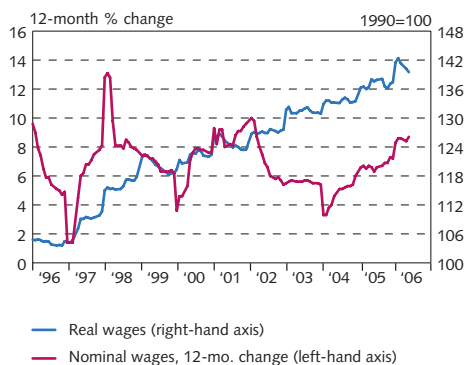
Table 8 Labour market

Changes in indices are in percent. Other changes indicate increase/decrease in jobs or permits	Averages			1-month change			12-month change		
	2004	2005	May '06	Mar.'06	Apr.'06	May '06	May '04	May '05	May '06
Wage index (1990=100)	215.6	230.1	249.0	0.4	0.4	0.9	4.6	6.6	8.7
Real wages (1990=100) <sup>1</sup>	133.9	137.4	139.5	2.9	-0.8	-0.5	1.3	3.6	1.1
Number of issued work permits	3,750	6,362	342	-204	183	-638	46	96	-45
Job vacancies, total	668	1,379	653	64	75	-214	129	978	-1,057
thereof Greater Reykjavik Area	204	376	105	-9	-20	-18	26	171	-214
<i>Period averages</i>	2004	2005	2006	Mar.'06	Apr.'06	May '06	May '04	May '05	May '06
Number of unemployed	4,893	4,564	3,119	2,417	2,112	2,062	4,900	3,332	2,062
Measured unemployment rate (% of labour force)	3.4	3.1	2.1	1.5	1.3	1.3	3.3	2.2	1.3
Seasonally adjusted unemployment rate (% of labour force)	.	.	.	1.3	1.2	1.2	3.1	2.1	1.2
<i>Quarterly measurements</i>	2004	2005	QI '06	QIII '05	QIV '05	QI '06	QI '04	QI '05	QI '06
Wage index (1990 = 100)	215.5	230.1	244.8	1.2	1.2	4.4	3.5	6.7	8.5
Wages in the private sector	196.9	210.6	223.9	0.8	1.4	4.5	2.4	8.1	8.0
Wages in the public sector and banks	246.3	262.4	279.3	1.8	1.0	4.2	5.0	4.5	9.3

1. Deflated by consumer prices.

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

Chart 9  
Nominal and real wages<sup>1</sup>  
January 1996 - May 2006



1. Real wages = wage index deflated by the CPI.  
Sources: Statistics Iceland and Central Bank of Iceland.

Chart 10  
Unemployment and labour participation<sup>1</sup>  
January 1996 - May 2006



1. Statistics Iceland's labour market survey 1996-2005.  
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

Table 9 National accounts – annual data (continued on next page)

B.kr.	2000	2001	2002	2003	2004	Estimate 2005
Gross domestic product (GDP), current prices	678.3	764.9	799.6	827.9	916.8	996.0
Current account balance, current prices	-69.4	-33.4	12.6	-41.0	-85.3	-164.1
GDP at 2000 fixed prices <sup>1</sup>	678.3	704.1	696.7	717.8	776.7	819.7

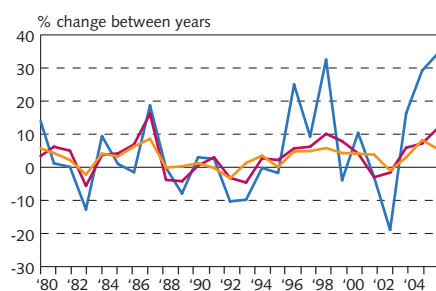
*Volume changes between years, percent<sup>1</sup>*

Private consumption	4.2	-3.0	-1.6	5.9	7.2	11.9
Public consumption	4.3	3.1	5.1	1.6	2.9	3.2
Gross fixed capital formation	10.4	-3.0	-18.9	16.3	29.2	34.5
Business sector investment	8.8	-9.8	-25.1	26.0	34.4	57.2
Residential construction	12.9	12.1	12.4	3.9	13.8	10.4
Public works and buildings	14.7	7.9	-30.5	5.2	34.4	-13.4
National expenditure	5.7	-2.3	-3.5	6.4	10.4	14.9
Exports of goods and services	4.3	7.4	3.8	1.6	8.4	3.5
Exports of goods	-1.3	7.2	6.6	-1.2	9.2	-0.4
Exports of services	16.3	7.7	-1.7	7.3	7.0	10.5
Imports of goods and services	8.6	-9.1	-2.6	10.8	14.4	28.4
Imports of goods	2.8	-10.0	-3.4	7.3	15.8	25.0
Imports of services	21.5	-7.3	-1.0	17.2	12.1	34.7
Gross domestic product (GDP)	4.1	3.8	-1.0	3.0	8.2	5.5
Gross national income (GNI)	2.4	2.8	3.0	-0.2	5.8	6.7
Terms of trade (goods and services)	-2.4	0.3	0.6	-4.1	-1.3	1.0

*Percent of GDP*

Private consumption	61.0	56.5	55.7	57.6	57.4	60.2
Gross fixed capital formation	22.5	21.5	17.4	19.9	23.5	28.7
Current account balance	-10.2	-4.4	1.6	-5.0	-9.3	-16.5
Gross national saving	12.7	16.9	19.0	14.8	14.1	12.1

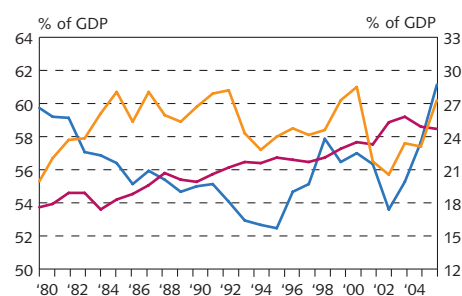
Chart 11  
Growth of GDP, private consumption and  
gross fixed capital formation 1980-2005<sup>1</sup>



— Gross fixed capital formation  
— Private consumption  
— GDP

1. Preliminary 2005.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 12  
Private consumption, public consumption and  
gross fixed capital formation 1980-2005<sup>1</sup>



— Gross fixed capital formation (right-hand axis)  
— Public consumption (right-hand axis)  
— Private consumption (left-hand axis)

1. Preliminary 2005.  
Sources: Statistics Iceland, Central Bank of Iceland.

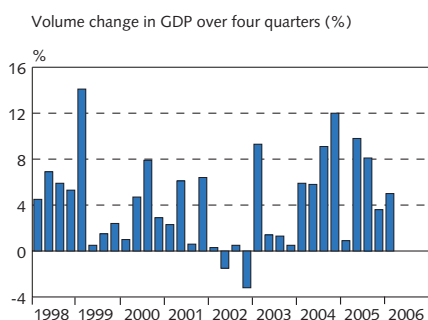
Table 9 (continued) National accounts – quarterly data

B.kr.	Private consumption	Public consumption	Gross fixed cap. format.	Changes in stocks	National expenditure	Exports	Imports	GDP
2002: Q1	104,570	49,414	32,772	-339	186,416	75,597	-71,277	190,736
2002: Q2	112,955	49,865	34,263	-896	196,187	78,495	-75,354	199,328
2002: Q3	112,428	51,219	36,478	825	200,951	79,996	-75,266	205,681
2002: Q4	115,666	51,638	35,781	228	203,314	71,520	-71,018	203,815
2003: Q1	111,247	52,449	37,708	2,261	203,666	70,906	-67,695	206,877
2003: Q2	120,113	53,005	40,156	-353	212,920	67,861	-78,552	202,229
2003: Q3	120,272	53,920	43,937	34	218,163	80,326	-87,508	210,981
2003: Q4	125,248	54,127	42,897	-3,395	218,877	69,460	-80,559	207,777
2004: Q1	122,378	55,961	47,022	3,412	228,774	73,098	-79,431	222,441
2004: Q2	132,310	57,083	50,171	-1,108	238,456	75,170	-94,599	219,028
2004: Q3	130,773	58,070	58,319	-3,596	243,566	90,028	-96,826	236,767
2004: Q4	140,347	57,172	60,135	374	258,028	78,607	-98,106	238,529
2005: Q1	137,249	59,432	56,066	4,068	256,815	70,147	-94,338	232,624
2005: Q2	154,168	61,301	67,044	-4,904	277,608	82,037	-113,117	246,529
2005: Q3	149,933	63,256	84,271	2,093	299,552	82,162	-120,424	261,290
2005: Q4	157,872	62,336	78,552	-2,119	296,642	79,604	-120,699	255,547
Volume change from same quarter in previous year (%) <sup>1</sup>								
2002: Q1	-4.9	4.0	-26.8	.	-6.5	3.3	-13.9	0.3
2002: Q2	-2.1	4.0	-19.3	.	-4.8	11.9	2.2	-1.5
2002: Q3	-0.4	6.0	-15.7	.	-2.0	2.2	-3.4	0.5
2002: Q4	0.7	6.3	-13.7	.	-0.9	-1.7	6.5	-3.2
2003: Q1	5.2	1.9	15.6	.	7.7	5.9	1.3	9.3
2003: Q2	5.7	2.1	16.7	.	7.1	-3.8	10.8	1.4
2003: Q3	5.7	1.4	16.0	.	6.0	4.0	16.4	1.3
2003: Q4	6.8	1.1	16.6	.	5.1	0.6	13.8	0.5
2004: Q1	7.8	3.0	24.3	.	10.0	4.9	16.9	5.9
2004: Q2	6.8	3.7	21.7	.	8.6	6.1	13.8	5.8
2004: Q3	5.5	3.6	30.1	.	8.2	10.3	7.5	9.1
2004: Q4	8.6	1.1	39.2	.	14.8	12.2	20.4	12.0
2005: Q1	9.0	2.3	17.8	.	9.4	-1.8	22.5	0.9
2005: Q2	14.6	3.2	34.5	.	14.4	12.9	24.0	9.8
2005: Q3	13.1	3.7	48.3	.	22.0	-3.6	32.1	8.1
2005: Q4	10.6	3.6	35.4	.	13.8	7.8	33.9	3.6
2006: Q1	12,6	3,8	36,6	.	13,7	-6,4	19,5	5,0

1. In September 2005, annual chain-linking was introduced for calculations of volume changes, replacing the earlier use of constant prices relative to a specific base year. Data extending back to 1997 have been revised on this basis.

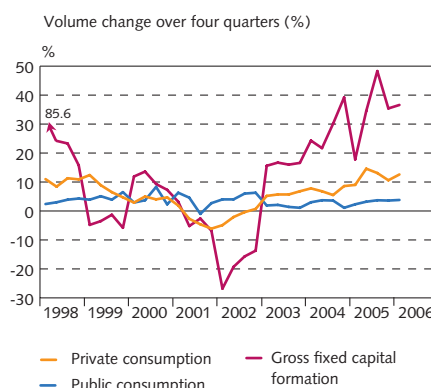
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 13  
Quarterly economic growth  
Q1/1998 - Q1/2006<sup>1</sup>



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

Chart 14  
Components of economic growth  
Q1/1998 - Q1/2006<sup>1</sup>



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

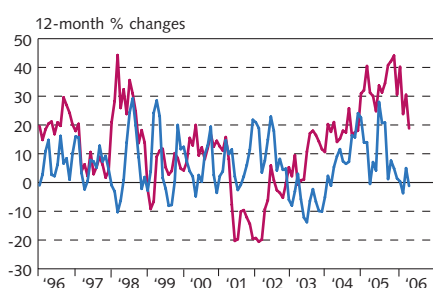


Table 10 Current account balance<sup>1</sup> (continued on next page)

Trade in goods and services	B.kr.					% change from previous year <sup>2</sup>		
	2002	2003	2004	2005	Jan.-Apr. '06	3-mo.	6-mo.	12-mo.
Trade balance	13.1	-16.9	-37.8	-94.5	-41.6	.	.	.
Merchandise exports fob	204.3	182.6	202.4	194.4	66.4	-1.2	-0.5	6.4
Excluding ships and aircraft	202.0	181.2	201.6	184.7	66.3	-0.2	-0.1	2.2
Marine products	128.6	113.7	121.7	110.1	38.4	-6.5	-5.0	-0.0
Aluminium and ferro-silicon	43.5	40.3	42.6	42.1	16.9	11.7	18.1	10.2
Other industrial products	14.5	21.6	28.4	24.7	8.5	13.2	-5.6	1.5
Merchandise imports fob	191.2	199.5	240.2	288.9	108.0	19.0	29.0	33.0
Excluding ships and aircraft	180.0	195.7	231.7	276.8	105.9	24.7	33.7	35.9
Consumption goods	59.5	66.3	77.2	92.1	32.8	13.7	25.8	29.4
Investment goods	38.6	46.1	52.8	67.2	28.2	43.7	60.3	54.8

Services and income balance	B.kr.					% change from previous year <sup>2</sup>		
	2002	2003	2004	2005	2006/Q1	3-mo.	6-mo.	12-mo.
Services balance	-0.7	-9.2	-14.4	-34.3	-15.2	.	.	.
Services exports	101.2	105.6	113.9	125.7	24.1	-6.4	3.4	14.5
Transportation	48.5	50.2	63.2	65.3	11.7	-18.0	-15.0	4.3
Travel	22.8	24.5	26.1	25.8	3.7	14.0	12.8	10.2
Other receipts	29.9	30.9	24.6	34.6	8.7	5.9	37.8	44.1
Services imports	-101.9	-114.8	-128.3	-160.0	-39.2	12.8	26.4	32.1
Transportation	-38.6	-39.7	-48.8	-55.5	-11.8	-13.8	1.3	13.6
Travel	-33.4	-39.8	-48.5	-61.2	-14.4	28.5	36.2	39.0
Other expenditure	-29.9	-35.3	-31.0	-43.2	-13.1	31.7	50.5	50.1
Balance on income	-1.9	-14.8	-40.0	-35.3	-19.1	.	.	.
Receipts	27.2	28.5	32.6	94.1	27.1	123.8	264.6	197.7
Compensation of employees	5.4	6.2	5.6	4.6	1.4	16.6	5.5	-0.1
Interest payments	4.8	4.3	8.6	21.4	11.2	240.8	248.9	213.4
Dividends and reinvested earnings <sup>3</sup>	16.9	18.0	18.4	68.0	14.5	89.8	324.4	233.9
Expenditures	-29.1	-43.4	-72.7	-129.4	-46.1	131.6	139.8	114.5
Compensation of employees	-0.7	-0.5	-0.8	-1.5	-0.6	122.7	120.3	139.2
Interest payments	-29.2	-29.4	-35.5	-61.1	-24.7	123.5	118.8	108.9
Dividends and reinvested earnings <sup>3</sup>	0.8	-13.5	-36.4	-66.8	-20.9	142.2	157.7	119.4
Current transfer, net	1.2	-1.2	-1.2	-1.7	-0.5	168.5	163.5	114.6
Current account balance	12.6	-41.0	-92.2	-164.5	-66.3	.	.	.

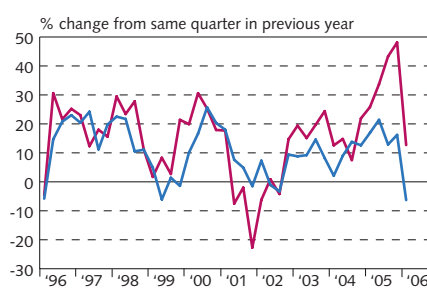
Chart 15  
Merchandise trade  
January 1996 - April 2006  
3-month moving averages at fixed exchange rates



— Merchandise imports  
— Merchandise exports

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

Chart 16  
Exports and imports of services  
Q1/1996- Q1/2006  
At constant exchange rates



— Services exports  
— Services imports

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

Table 10 (continued) Current account balance<sup>1</sup>

	B.kr.					Change from prev. year (b.kr.) <sup>2</sup>		
	2002	2003	2004	2005	Q1'06	3-mo.	6-mo.	12-mo.
Capital and financial account	-8.4	16.3	125.6	118.2	64.7	.	.	.
Capital transfer, net	-0.1	-0.4	-0.2	-1.7	-0.5	-0.2	-0.7	-1.3
Financial account <sup>4</sup>	-8.3	16.7	125.8	119.9	65.2	-64.3	-136.7	-179.3
Financial account excl. reserves	-2.6	40.1	140.1	124.6	68.9	-57.1	-133.9	-170.1
Direct investment, net	-21.3	-4.1	-128.1	-285.8	10.0	26.3	-36.3	-139.7
Abroad	-29.6	-28.5	-179.8	-439.2	-12.0	18.9	-143.4	-246.6
In Iceland	8.3	24.4	51.6	153.3	22.1	7.4	107.1	106.9
Portfolio investment, net	13.6	228.0	474.5	780.1	91.2	-101.2	-74.1	147.8
Assets	-28.9	-45.4	-107.3	-283.9	-47.4	-28.4	-124.8	-231.6
Equities	-23.8	-40.6	-110.4	-193.9	-29.4	-13.9	-59.8	-128.8
Debt securities	-5.1	-4.8	3.1	-90.0	-18.0	-14.5	-65.0	-102.8
Liabilities	42.5	273.3	581.8	1,064.0	138.6	-72.8	50.7	379.4
Equities	4.5	-5.6	20.2	4.5	-3.4	-1.3	-3.0	-13.7
Debt securities	38.0	278.9	561.6	1,059.5	142.0	-71.5	53.7	393.1
Other investment, net <sup>4</sup>	5.0	-183.8	-206.4	-369.6	-32.4	17.8	-23.6	-178.2
Assets	-30.4	-156.1	-237.6	-687.5	-262.1	-214.6	-399.9	-664.7
Liabilities	35.5	-27.7	31.2	317.9	229.7	232.4	376.3	486.4
Reserve assets	-5.7	-23.4	-14.2	-4.7	-3.7	-7.3	-2.7	-9.2
Net errors and omissions	-4.2	24.7	-33.4	46.3	1.7	.	.	.
<i>Memorandum items</i>								
Long-term borrowing, net	32.3	67.0	344.1	595.1	87.9	-75.4	-37.5	103.0
Assets	-41.2	-184.3	-248.7	-782.2	-283.8	-236.3	-467.6	-776.6
Monetary authorities	-5.7	-23.3	-14.2	-4.7	-3.7	-7.3	-2.7	-9.2
General government	0.0	0.0	0.0	0.0	-	-	-	-
Deposit money banks	-35.3	-162.6	-220.8	-729.1	-248.8	-203.5	-417.3	-704.5
Other sectors	-0.3	1.7	-13.7	-48.4	-31.3	-25.6	-47.5	-63.0
Liabilities	73.5	251.3	592.8	1377.4	371.7	160.9	430.1	879.5
Monetary authorities	4.8	-15.9	0.0	0.0	0.2	0.1	0.4	0.1
General government	9.7	-10.4	9.9	-32.3	3.3	16.0	1.6	-7.8
Deposit money banks	49.4	264.3	582.9	1302.5	363.8	140.1	369.5	770.0
Other sectors	9.5	13.2	-0.1	107.1	4.4	4.8	58.5	117.3

1. Latest figures are preliminary. 2. Changes in components of the trade and services accounts are in %, but changes in components of the capital and financial account in b.kr. At constant exchange rates 3. Dividend payments and reinvestment of earnings on direct investment. 4. Positive value represents inflow of capital due to foreign borrowing or decrease in assets. Negative value accounts for outflow of capital, debt repayments or increase in assets.

Source: Central Bank of Iceland.

Chart 17  
Quarterly current account balance  
Q1/1996- Q1/2006

At current exchange rates

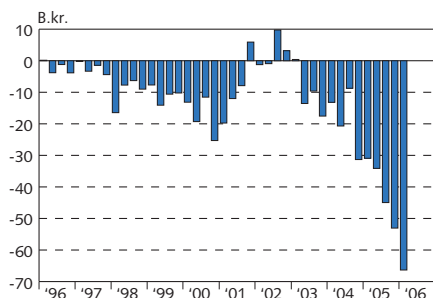
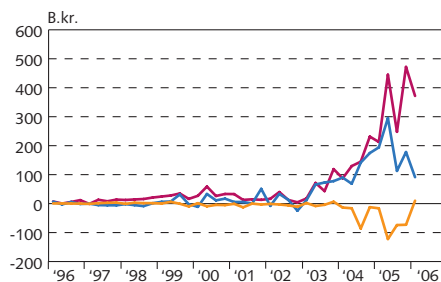


Chart 18  
Selected financial account items  
Q1/1996- Q1/2006

At current exchange rates



— Net foreign direct investment  
— Portfolio investment abroad  
— Net liabilities (loans, securities issues, etc.)

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

Table 11 International investment position

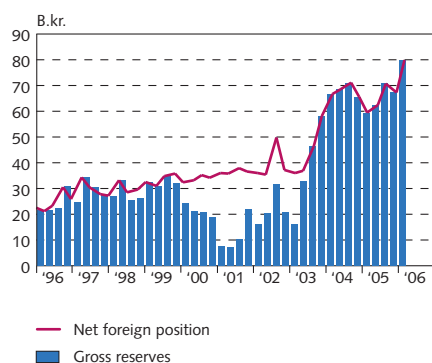
B.kr.	Position at end of period								
	2001	2002	2003	2004	2005	June '05	Sept. '05	Dec. '05	Mar. '06
International investment position	-596.3	-579.7	-557.9	-665.7	-828.9	-856.7	-843.4	-804.2	-995.2
Total assets	415.9	409.4	708.2	1,153.5	2,398.4	1,595.0	1,753.9	2,440.3	3,070.1
Direct investment abroad	86.8	101.3	122.5	245.0	597.0	317.4	366.3	618.9	639.2
Equity capital	66.8	82.3	110.5	210.6	461.3	273.9	315.1	516.1	531.2
Other capital	19.9	19.0	12.1	34.3	135.7	43.5	51.1	102.9	108.0
Portfolio assets	197.3	159.7	262.3	374.2	627.6	424.0	512.6	648.0	819.9
Equity capital	184.8	149.3	239.2	356.4	528.2	386.2	459.4	544.9	687.2
Debt securities	12.5	10.4	23.1	17.8	99.4	37.8	53.2	103.1	132.7
Other investment assets	95.2	111.2	265.2	468.7	1,106.5	791.2	804.4	1,106.1	1,531.1
Reserves	36.6	37.2	58.1	65.6	67.3	62.4	70.7	67.3	79.9
Total liabilities	1,012.2	989.1	1,266.1	1,824.7	3,244.5	2,451.7	2,597.2	3,244.5	4,065.3
Direct investment in Iceland	70.7	64.3	84.6	127.4	252.0	140.7	149.6	252.0	278.8
Equity capital	62.9	56.1	61.8	94.1	228.3	108.6	105.6	228.3	254.8
Other capital	7.8	8.2	22.8	33.3	23.7	32.1	44.0	23.7	23.9
Portfolio liabilities	471.3	490.2	776.1	1,302.3	2,302.9	1,823.0	1,926.4	2,302.9	2,775.7
Equity capital	12.1	35.7	42.5	86.6	141.7	102.4	118.1	141.7	160.3
Debt securities	459.2	454.4	733.6	1,215.7	2,161.2	1,720.6	1,808.2	2,161.2	2,615.3
Other investment liabilities	470.2	434.6	405.4	395.1	689.6	488.0	521.3	689.6	1,010.9
Long-term debt	377.0	296.2	259.2	213.3	363.7	223.1	233.8	363.7	311.3
Short-term debt	93.2	138.4	146.2	181.8	325.9	264.9	287.5	325.8	699.6
<i>Memorandum items</i>									
Equity capita, net	188.8	150.5	234.6	388.7	770.1	460.5	557.9	770.1	887.3
Net external debt position	-785.1	-730.2	-792.5	-1,058.5	-1,574.3	-1,317.0	-1,401.0	-1,552.6	-1,882.5
Monetary authorities	21.7	20.8	58.1	65.5	67.2	62.2	70.5	67.2	79.5
General government	-239.8	-227.2	-220.9	-212.4	-169.1	-193.5	-176.7	-168.8	-188.2
Deposit money banks	-373.7	-361.8	-471.1	-778.2	-1,287.8	-1,041.2	-1,137.2	-1,268.5	-1,574.1
Other sectors	-193.2	-162.0	-158.6	-133.5	-184.7	-144.5	-157.7	-182.6	-199.7
<i>Percent of gross domestic product<sup>1</sup></i>									
International investment position	-76.3	-69.9	-70.2	-82.1	-86.2	-85.5	-92.2	-86.2	-88.6
Net external debt <sup>2</sup>	100.4	99.3	100.1	130.6	161.4	130.2	147.0	161.4	167.6
External debt position <sup>2</sup>	118.9	142.7	144.3	198.8	293.8	218.3	244.4	293.8	322.8
Long-term debt	96.9	109.1	110.0	159.9	245.2	178.8	204.4	245.2	249.1
Short-term debt	22.0	33.6	34.3	38.9	48.6	39.5	40.0	48.6	73.7

1. Foreign debt at year-end at annual average exchange rates (based on SDR). Quarterly ratios as percent of estimated annual GDP. 2. Direct investment capital and portfolio equities excluded.

Source: Central Bank of Iceland.

Chart 19  
Reserve assets and Central Bank net foreign position, Q1/1996- Q1/2006

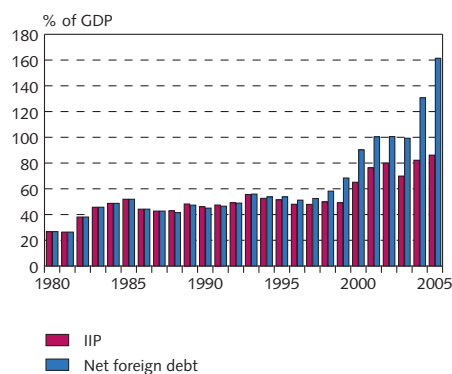
Quarterly, at current exchange rates



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

Chart 20  
International investment position 1980-2005<sup>1</sup>

At end of year and latest quarter



1. IIP is shown here with positive sign but is actually negative (see Table 11). Latest data are preliminary.  
Source: Central Bank of Iceland.

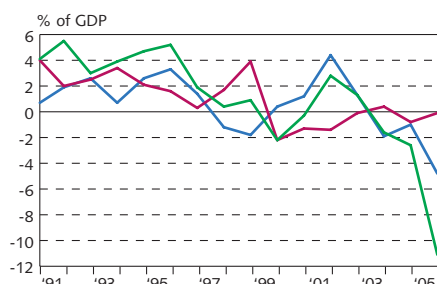
Table 12 Summary of Treasury finances<sup>1</sup>

B.kr.	Accruals basis			Jan.-Dec.		% ch. from prev. year	Jan.-Dec.		% ch. from prev. year
	2002	2003	2004	2004	2005		2005	2006	
Revenues	259.2	274.6	302.4	280.7	399.3	42.2	109.4	135.0	23.5
Expenditures	267.3	280.7	300.4	280.4	308.4	10.0	92.8	100.3	290.1
Financial balance	-8.1	-6.1	2.0	0.3	90.9	.	16.6	34.7	.
Miscell. short-term accounts	-14.7	8.9	-3.8	-0.6	-1.3	.	-3.8	-2.5	.
Net lending	12.0	5.7	26.3	26.4	13.7	.	18.5	2.3	.
Equity transactions	0.0	4.8	-0.7	-0.4	10.6	.	-0.2	0.5	.
Balance before financing	-10.9	13.3	23.8	25.7	113.9	.	31.2	35.0	.
Pension funds	-0.7	-9.9	-12.8	-10.8	-5.5	.	-2.3	-2.9	.
Net borrowing	10.0	-2.9	-3.6	-6.6	-52.1	.	-22.0	-18.3	.
Short-term domestic	0.0	8.5	-6.0	-6.0	-0.5	.	-15.1	-7.7	.
Long-term domestic	-0.5	4.6	11.3	8.5	-3.9	.	0.2	3.1	.
From abroad	10.5	-16.0	-8.9	-9.1	-47.7	.	-7.1	-13.8	.
Cash balance	-1.6	0.5	7.4	8.3	56.3	.	6.8	13.8	.
<i>Revenues and expenditures</i>									
Total revenue	259.2	274.6	302.4	280.7	399.3	42.2	109.4	135.0	23.5
Personal income taxes, gross	55.1	58.0	65.0	62.6	69.0	10.3	25.3	27.9	10.4
Other income and property taxes	27.5	30.8	38.3	32.8	48.1	46.7	19.5	29.8	53.3
Value-added tax	76.3	80.9	96.4	91.1	111.2	22.1	31.9	38.2	19.7
Taxes on commodities & imports	14.6	16.9	20.3	20.8	26.3	26.6	7.0	9.0	29.5
Payroll taxes	23.4	26.3	28.4	27.8	32.3	16.2	10.1	11.7	15.6
Other taxes	23.6	25.9	27.3	25.7	27.9	8.6	8.1	8.8	9.1
Interest, dividends and rent	18.7	14.4	13.9	12.0	16.6	38.7	3.9	4.7	19.6
Profits from asset sales	11.7	12.0	1.1	0.2	58.5	.	0.1	1.4	.
Other revenues	8.3	9.3	11.8	7.8	9.3	19.4	3.5	2.7	-23.5
Total expenditures <sup>2</sup>	267.3	280.7	300.4	280.4	308.4	10.0	92.8	100.3	8.1
Expenditure on goods and services	116.8	110.1	138.9	136.1	154.1	13.2	44.8	51.3	14.3
Current transfers	112.6	129.5	124.4	111.5	120.9	8.4	37.6	42.8	13.9
Interest payments	16.0	15.3	14.2	13.1	17.7	35.2	3.7	1.7	-54.7
Maintenance	6.1	6.3	5.0	3.7	3.6	-0.4	0.6	0.9	49.0
Capital expenditures	15.8	19.6	18.0	16.1	12.1	-24.6	5.9	3.6	-40.3

1. First three columns on accruals basis as in the Treasury accounts but latest figures on cash basis. 2. The most recent expenditure figures are not comparable with earlier data due to changes in the presentation of the accounts.

Source: State Accounting Office.

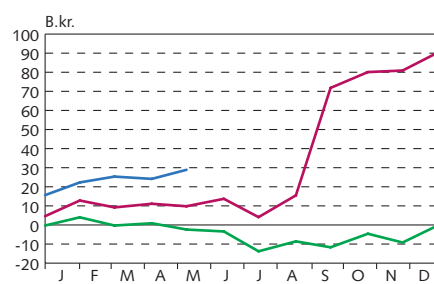
Chart 21  
Treasury borrowing 1991-2005



— Net foreign borrowing  
— Net domestic borrowing<sup>1</sup>  
— Net borrowing requirement

1. Including reduction in pension fund commitments and outstanding long-term interest.  
Sources: Treasury accounts 1990 - 2005, Central Bank projections.

Chart 22  
Monthly Treasury balance 2004-2006  
Cumulative from beginning of year



— 2004  
— 2005  
— 2006

Source: State Accounting Office.

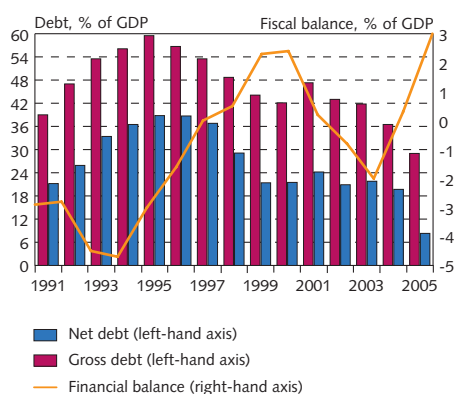
Table 13 Public sector finances<sup>1</sup>

B.kr.	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Revenues	179.7	197.2	213.2	242.9	278.6	301.1	328.5	350.6	368.4	418.0	471.2
Expenditures	193.1	204.9	213.3	240.0	264.0	284.6	327.2	356.8	384.8	415.5	441.6
Financial balance	-13.4	-7.7	-0.1	2.8	14.6	16.6	1.3	-6.2	-16.3	2.5	29.6
Net debt <sup>2</sup>	174.6	187.2	192.0	167.7	131.6	141.8	181.2	165.7	178.5	177.7	80.3
Gross debt	267.6	274.4	279.4	280.5	271.5	278.0	354.6	340.7	341.6	328.9	279.7
<i>Central government<sup>3</sup></i>											
Revenues	141.4	155.7	162.4	184.0	213.9	228.9	246.0	257.8	275.0	315.0	362.6
Expenditures	153.5	163.2	159.6	177.0	196.4	209.8	239.5	261.1	288.1	302.7	324.3
Financial balance	-12.8	-8.2	1.8	6.0	16.4	18.1	5.4	-4.5	-14.5	11.0	38.3
Net debt	150.7	163.9	167.7	138.3	103.5	110.5	150.7	133.0	142.3	131.6	28.4
Gross debt	232.6	239.2	241.6	237.8	226.0	228.5	298.3	281.1	277.2	253.0	195.6
<i>Local government</i>											
Revenues	40.9	46.9	55.5	62.9	69.9	77.7	89.5	99.8	104.3	112.7	121.6
Expenditures	42.3	47.4	58.5	67.2	72.8	80.3	94.8	103.2	108.0	122.7	127.9
Financial balance	-1.4	-0.4	-3.0	-4.3	-2.9	-2.6	-5.3	-3.0	-3.4	-9.9	-6.2
Net debt <sup>2</sup>	25.1	24.2	25.0	30.1	28.7	31.7	30.7	32.8	36.3	45.6	51.4
Gross debt	35.6	35.7	38.4	43.3	46.1	49.8	56.6	60.2	64.9	76.4	84.5
<i>General government, % of GDP</i>											
Revenues	39.6	40.5	40.5	41.6	44.3	44.4	42.9	43.8	44.5	45.6	47.3
Expenditures	42.6	42.1	40.6	41.1	42.0	42.0	42.8	44.6	46.5	45.3	44.3
Financial balance	-3.0	-1.6	0.0	0.5	2.3	2.4	0.2	-0.8	-2.0	0.3	3.0
Net debt <sup>2</sup>	38.8	38.7	36.8	29.1	21.4	21.5	24.2	20.9	21.8	19.7	4.7
Gross debt	59.5	56.7	53.5	48.7	44.1	42.1	47.3	43.0	41.8	36.5	29.0

1. National accounts presentation. 2. Treasury bank deposits lower net debt. 3. Including social security transactions.

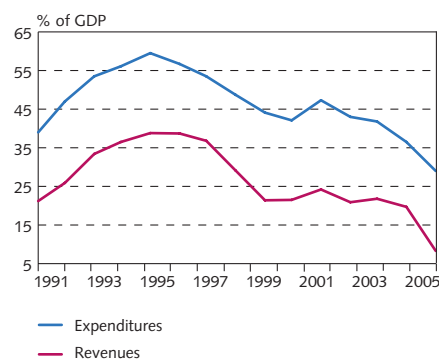
Sources: Statistics Iceland, Central Bank baseline forecast.

Chart 23  
General government balance and debt  
1991-2005



Sources: Statistics Iceland, Central Bank projections.

Chart 24  
General government revenues and expenditures  
1991-2005



Source: Statistics Iceland.

Table 14 Turnover<sup>1</sup>

B.kr.	January-December			% ch. in previous year, Jan.-December <sup>2</sup>		
	2003	2004	2005	2003	2004	2005
Industries, total	335.0	355.0	389	-5.2	5.8	9.8
Industries, excluding fish processing	223.0	233.0	233	-0.2	4.5	-0.1
Industries, excl. fish processing and power-intensive	182.0	190.0	195	4.5	4.0	2.7
Retail trade	192.0	205.0	223	2.3	6.5	8.8
Wholesale trade	315.0	383.0	417	8.3	21.6	8.9
Wholesale trade, excluding fuels	221.0	333.0	362	9.3	22.9	8.5
Construction	100.0	122.0	155	22.3	22.2	27.4
Total	1,438	1,614	1,757	1.6	12.2	8.9
Total, excluding fuels	1,334	1,516	1,702	7.7	13.6	12.3

1. Based on VAT reports. 2. Based on price-adjusted turnover, deflated by the consumer price index, in some cases excluding housing and petrol.

Sources: Statistics Iceland, Central Bank of Iceland.

Table 15 Real effective exchange rate of the Icelandic króna<sup>1</sup>

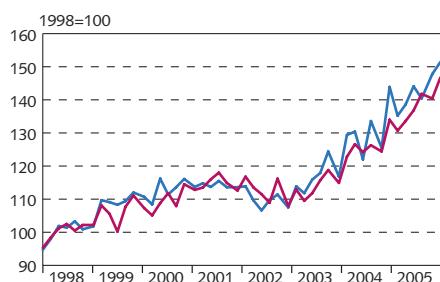
	Annual averages					Q1 2006	% change on previous year		
	2001	2002	2003	2004	2005		Q3 '05	Q4 '05	Q1 '06
Real effective exchange rate (1980 = 100)									
based on relative consumer prices (CPI)	83.7	88.5	94.1	97.2	107.0	109.3	9.2	11.4	1.4
based on relative unit labour costs (ULC)	73.2	76.9	80.2	79.4	88.8	93.5	7.8	15.9	0.3
% change on previous year	1998	1999	2000	2001	2002	2003	2004	Prel. 2005	Forecast 2006
Nominal effective exchange rate	1.5	0.0	0.2	-16.6	2.5	6.2	1.8	8.3	-8.4
Foreign consumer prices	1.6	1.6	2.3	2.1	1.7	2.0	1.8	2.3	1.5
Domestic consumer prices	1.7	3.4	5.1	6.6	4.8	2.1	3.2	4.0	4.9
Real exchange rate based on relative CPI	1.6	1.8	2.8	-13.0	5.7	6.3	3.2	10.2	-5.3
Foreign productivity	3.0	3.3	4.2	3.0	4.1	4.3	2.0	3.2	1.6
Domestic productivity	7.7	1.6	1.9	2.2	-0.5	4.4	7.2	1.3	2.8
Foreign wages	3.0	3.3	4.2	3.0	4.1	4.3	2.0	3.2	1.6
Domestic wages	7.1	5.5	5.6	8.4	5.4	5.5	4.5	7.0	8.0
Real exchange rate based on relative ULC	-0.5	1.4	1.1	-13.6	5.1	4.3	-1.1	11.9	-4.2

1. Latest values are preliminary and estimates.

Source: Central Bank of Iceland.

Chart 25  
Turnover volume 1998/1 - 2005/6

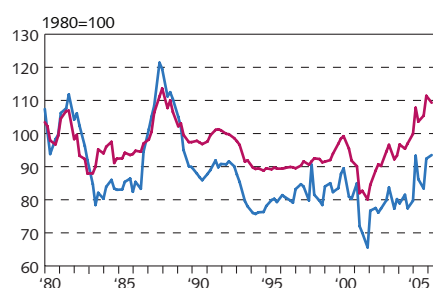
Two-month periods at constant prices, seasonally adjusted



— Domestic sectors  
— Total turnover

Sources: Statistics Iceland, Central Bank of Iceland.

Chart 26  
Quarterly real effective exchange rate of the Icelandic króna Q1/1980- Q1/2006



— Relative ULC  
— Relative CPI

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

Table 16 Real estate market and asset prices

Real estate market <sup>1</sup>	2003	2004	2005	May '06	1-mo. % change		12-mo. % change			
					Apr. '06	May '06	May '04	May '05	May '06	
Residential housing price index <sup>2</sup>	177.7	200.5	271.3	307.1	1.6	0.9	11.5	35.0	17.2	
Apartment housing price index <sup>2</sup>	160.7	179.9	201.3	298.6	0.9	0.9	11.4	31.3	15.9	
<i>Fish quota prices (period averages, kr./kilo)</i>										
Price of long-term cod quota (kr./kilo)	1,223	1,126	1,363	1,700	-	-1.4	-11.5	22.7	28.3	
Price of short-term cod quota (kr./kilo)	117	119	124	125	-	-	-11.1	4.2	-	
<i>Equity market</i>										
Equity prices, Dec. 31, 1997 = 1,000	At end of year				May 31,	% change to May 31, 2005				
	2002	2003	2004	2005	2006	1 mo.	3 mo.	6 mo.	12 mo.	
ICEX-15	1,352.0	2,114.3	3,359.6	5,534.4	5,709.4	2.4	-13.4	11.8	41.3	
ICEX-MAIN (The Main List index)	1,436.2	2,075.2	3,167.4	5,107.5	5,267.0	1.9	-12.9	11.4	39.3	
<i>ICEX industry indices, Dec. 31, 2004 = 100<sup>3</sup></i>										
Fisheries (ICEXFISH)	107.3	100.0	120.7	121.2	121.2	-1.4	3.8	3.0	-7.9	
Finance and insurance (ICEX40)	.	.	.	171.6	171.6	2.1	-20.3	9.6	.	
Consumer staples (ICEX30)	.	.	.	135.0	135.0	-0.5	-1.2	2.5	.	
Health care (ICEX35)	.	.	.	164.7	164.7	7.5	11.4	27.9	.	

1. Changes are based on 3-month moving averages. 2. Greater Reykjavik Area (GRA). January 1994=100. 3. New industry indices were introduced on April 1, 2005. Of the previous indices, only the fisheries index is still calculated, based on its initial value of 100 on December 31, 1997.

Sources: Federation of Icelandic Fishing Vessel Owners, Housing Financing Fund, Iceland Stock Exchange (ICEX), Land Registry of Iceland, Quota Exchange, Central Bank of Iceland.

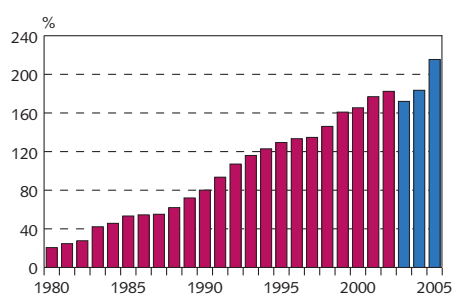
Table 17 Households and businesses: assets and debt

B.kr. unless otherwise stated	1998	1999	2000	2001	2002	2003	Preliminary data		% change
							2004	2005	'04-'05
Household assets in residential housing and cars <sup>1</sup>	724.1	842.6	952.9	1,043.8	1,108.2	1,235.3	1,448.7	1,789.2	23.5
Assets in pension funds	398.2	507.3	557.3	640.1	664.6	805.1	964.6	1,176.1	21.9
Household debt with the credit system <sup>2</sup>	442.6	522.0	613.8	710.9	758.6	772.2	877.0	1,082.5	23.8
Household debt as % of disposable income <sup>2</sup>	146.1	160.9	165.4	176.9	182.4	172.0	183.5	214.7	17.4
Businesses' debt with the credit system <sup>2</sup>	509.4	668.8	801.1	962.3	972.6	1,171.0	1,457.7	2,172.2	50.0
Debt of firms in fisheries sector	139.7	160.3	165.2	195.5	191.9	185.5	208.4	216.0	3.7

1. National Economic Institute national wealth estimates. At average annual prices. 2. Due to reclassification of lending within the credit system, household debt is 50.3 b.kr. lower than would otherwise have been the case at the end of 2003 and business sector debt 27.9 b.kr. lower, compared with the former classification. Year-on-year changes are based on the former classification.

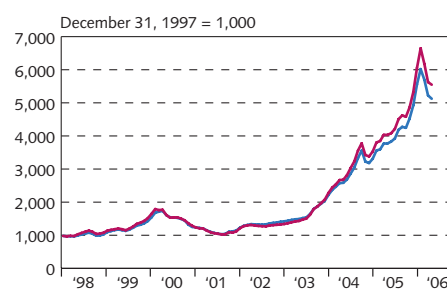
Source: Central Bank of Iceland.

Chart 27  
Household debt as percentage of disposable income 1980-2005<sup>1</sup>



1. New classification from 2003 (blue columns). See footnote 2 to Table 17. Latest values are preliminary.  
Source: Central Bank of Iceland.

Chart 28  
Equity prices 1998-2006  
Monthly averages January 1998 - May 2006



— ICEX-15  
— ICEX-15

Source: Iceland Stock Exchange (ICEX).

Table 18 Businesses' financial accounts

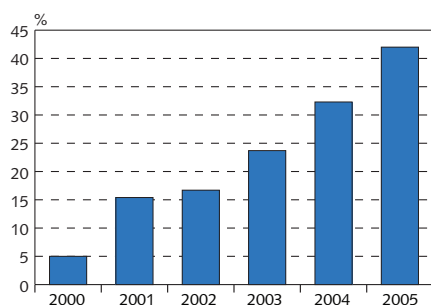
Accounts of publicly listed companies <sup>1</sup>	Jan.-Dec.		% of turnover		Jan.-March		% of turnover	
	2004	2005	2004	2005	2005	2006	2005	2006
All amounts in b.kr.								
Profit before financial expense & depreciation	31.5	48.8	12.6	11.3	14.6	25.6	11.1	11.2
Fisheries	2.6	2.5	19.3	16.2	1.3	1.3	25.9	23.8
Transport	8.9	13.2	8.7	7.4	0.5	3.7	2.3	7.7
ICT	3.9	4.9	12.2	9.7	1.1	1.3	12.3	10.2
Industry and manufacturing	16.2	24.7	19.4	15.9	5.1	11.3	17.3	15.0
Profit after taxes	17.1	36.4	6.9	8.5	4.2	7.7	3.2	3.4
Fisheries	1.8	0.9	13.6	6.4	1.2	-1.4	24.3	-26.5
Transport	5.8	20.1	5.7	11.7	-1.3	5.2	-6.5	10.9
ICT	1.2	1.6	3.9	3.0	0.3	-0.2	3.7	-1.9
Industry and manufacturing	9.2	11.4	11	3.3	3.3	2.6	11.0	3.4
Equity ratio	35.8	36.0	.	.	37.2	35.6	.	.
Return on equity	11.9	8.7	.	.	5.3	8.6	.	.
Sample size at end of period	18	18	18	18	17	17	17	17

Accounts of commercial banks <sup>2</sup>	2001	2002	2003	2004	2005	Q1/2006	% change	
							03-04	04-05
All amounts in b.kr.								
Net interest income	24.8	23.9	30.5	45.8	79.1	27.2	72.8	-65.6
Other operating income	8.2	15.6	40.9	66.2	120.2	52.4	81.6	-56.4
Net operating income	33.0	39.5	71.4	112.0	199.3	79.6	78.0	-60.1
Operating expenses	20.7	22.8	39.1	52.4	71.4	26.5	36.2	-62.9
Provisions for bad and doubtful debts	5.7	7.3	11.4	11.4	10.5	3.7	-7.9	-64.9
Taxes	0.5	1.7	2.5	8.2	21.3	7.7	160.2	-63.8
Profit	6.0	7.7	16.3	42.9	95.2	43.0	121.6	-54.8
Total assets at end of period	816.7	836.1	1,450.8	2,968.9	5,418.5	6,677.1	82.5	23.2
Stockholders' equity at end of period	48.8	52.5	97.7	246.1	400.9	456.5	62.9	13.9
% at end of period								
Return on equity	15.4	16.7	23.7	32.3	42.0	49.0	.	.
Cost ratio <sup>3</sup>	62.9	57.6	54.8	46.8	35.8	33.0	.	.
Capital ratio	11.2	11.4	12.0	12.9	12.6	12.0	.	.
Capital ratio excluding subordinated loans (Tier 1)	8.3	8.7	9.3	10.1	10.2	9.8	.	.

1. Companies listed on Iceland Stock Exchange (ICEX), excluding the finance and insurance sector. Two-year paired comparison. 2. The three largest commercial banks. Their accounts for 2005 and 2004 are compiled in accordance with IFRS (International Financial Reporting Standards). 3. Operating expenses as a percentage of net operating income.

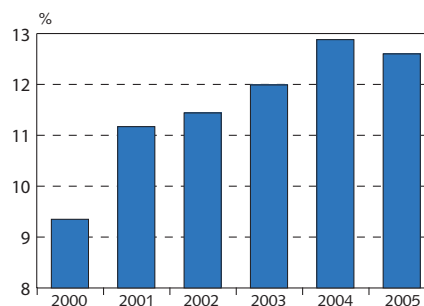
Sources: Financial Supervisory Authority (FME), Central Bank of Iceland.

Chart 29  
Commercial banks return on equity<sup>1</sup>  
2000 - 2005



1. The three largest commercial banks. Their accounts for 2005 and 2004 are compiled in accordance with IFRS (International Financial Reporting Standards).  
Source: Banks' annual reports.

Chart 30  
Commercial banks capital ratio<sup>1</sup>  
2000 - 2005



1. The three largest commercial banks. Their accounts for 2005 and 2004 are compiled in accordance with IFRS (International Financial Reporting Standards).  
Source: Banks' annual reports.



Table 19 International comparison

Based on latest monthly data for each region:	EU-25	EMU-12	USA	UK	Japan	Sweden	Norway	Finland	Denmark	Iceland
Inflation in previous 12 months	2.3	2.5	3.5	2.6	0.4	1.5	2.7	1.6	1.8	4.0
Unemployment <sup>1</sup>	8.3	8.0	4.6	5.2	4.1	5.5	4.0	7.5	4.8	1.2
Economic growth <sup>2</sup>	2.6	1.9	3.6	2.2	3.5	3.9	2.7	2.9	2.8	5.5
Long-term interest rates (nominal yield) <sup>3</sup>	.	3.7	5.0	4.7	1.4	3.6	4.0	3.7	3.7	9.9
Long-term interest rates (real yield) <sup>3, 4</sup>	.	.	2.3	1.8	.	1.2	.	.	.	4.0
Short-term interest rates <sup>5</sup>	2.9	2.7	4.8	4.6	0.3	2.1	3.0	2.9	2.9	11.9

In 2004 (unless otherwise stated):

GDP per capita based on PPP, in thous. US\$ <sup>6</sup>	.	27.1	37.6	29.9	28.0	29.0	37.1	28.6	30.7	29.4
Gross saving, % of GDP <sup>7</sup>	.	.	13.0	14.8	26.4	24.2	32.4	24.3	22.2	14.7
Gen. government fin. balance, % of GDP	.	-2.9	-3.7	-3.1	-6.5	1.2	15.3	2.1	2.8	3.0
Gen. government gross debt, % of GDP	.	79.3	63.8	46.8	158.9	61.5	51.7	53.3	49.7	28.0
Gen. government expenditure, % of GDP	.	47.9	36.6	44.9	37.4	57.2	46.1	50.9	54.0	44.0
Current account balance, % of GDP	0.3	-0.2	-6.5	-1.8	3.4	7.1	16.1	3.5	3.0	-16.5

1. Seasonally adjusted. 2. Annual GDP growth based on latest quarterly figures. Seasonally adjusted except for Iceland. 3. Five-year Treasury bonds. 4. Figures are omitted where price indexation is not applied. 5. Three-month T-bill rates. 6. 2003. Converted to US dollars at an exchange rate that eliminates the difference in price levels between the countries. 7. 2002 for Japan and 2003 for USA.

Sources: EcoWin, Eurostat, OECD.

Table 20 International economic developments

	1999	2000	2001	2002	2003	2004	Preliminary 2005	Forecast	
								2006	2007
<i>Annual economic growth (%)<sup>1</sup></i>									
World	3.7	4.8	2.6	3.1	4.1	5.3	4.8	4.9	4.7
Euro area	2.9	3.8	1.9	0.9	0.7	2.1	1.3	2.1	1.8
United Kingdom	3.0	4.0	2.2	2.0	2.5	3.1	1.8	2.3	2.5
United States	4.4	3.7	0.8	1.6	2.7	4.2	3.5	3.4	2.9
Japan	-0.1	2.4	0.2	0.1	1.8	2.3	2.7	3.0	2.3
Other emerging market and developing countries <sup>2</sup>	4.1	6.1	4.4	5.1	6.7	7.6	7.2	6.9	6.6
<i>Annual growth in world trade (%)</i>	5.7	12.1	0.3	3.4	5.4	10.4	7.3	8.0	7.5
<i>Consumer price inflation (%)</i>									
Euro area	1.1	2.1	2.3	2.3	2.1	2.1	2.2	2.1	2.1
United Kingdom	1.4	0.8	1.2	1.3	1.4	1.3	2.1	2.0	2.0
United States	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2	2.4
Japan	-0.3	-0.9	-0.7	-0.9	-0.3	0.0	-0.3	0.4	0.6
<i>Unemployment, % of labour force</i>									
Euro area	9.2	8.2	7.8	8.3	8.7	8.9	8.6	8.2	8.0
United Kingdom	6.0	5.5	5.1	5.2	5.0	4.8	4.8	4.9	4.8
United States	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.7	4.9
Japan	4.7	4.7	5.0	5.4	5.3	4.7	4.4	4.1	3.8
<i>General government financial balance, % of GDP<sup>3</sup></i>									
Euro area	-1.3	0.0	-1.9	-2.5	-3.0	-2.7	-2.9	-2.7	-2.5
United Kingdom	1.1	3.8	0.7	-1.7	-3.3	-3.2	-3.1	-3.0	-3.2
United States	0.9	1.6	-0.4	-3.8	-5.0	-4.7	-3.7	-4.2	-3.9
Japan	-7.2	-7.5	-6.1	-7.9	-7.7	-6.5	-6.5	-6.0	-6.0
<i>Long-term interest rates<sup>4</sup></i>									
Euro area	4.6	5.4	5.0	4.9	4.1	4.1	3.4	3.7	4.1
United Kingdom	5.1	5.3	4.9	4.9	4.5	4.9	4.5	4.5	4.7
United States	5.6	6.0	5.0	4.6	4.0	4.3	4.3	4.7	4.8
Japan	1.7	1.7	1.3	1.3	1.0	1.5	1.4	1.8	2.3

1. Real GDP percent change between years. 2. In May 2004, the IMF revised its world economic classifications into two categories of countries. The category "Other emerging market and developing countries" comprises 146 countries. 3. General government, e.g. central government, local governments and social security transactions. 4. Yields on ten-year Treasury bonds.

Sources: Consensus Forecasts, International Monetary Fund, OECD.

Table 21 Historical economic indicators

	Consumer prices <sup>1</sup>		Krona effective exchange rate <sup>2</sup>		Interest rates (%)		Money and credit		Ratio of gr. reserves to merch. imports <sup>6</sup>	External debt, % of GDP <sup>7</sup>	Growth of real GDP (%)		
	Consumer price index	CPI inflation (%)	Nominal exchange rate <sup>3</sup>	Real exchange rate <sup>4</sup> Relative CPI	Relative ULC	Gov. bonds average yield <sup>5</sup>	Banks' secured lending (real yield)	Indexed				% change over year	Credit system lending
1977	2.4	30.3	9.7	113.1	114.2	3.5	-9.5	43.9	40.5	41.8	2.0	37.6	8.8
1978	3.5	44.0	13.9	105.3	106.6	3.3	-13.4	48.7	47.3	62.8	2.6	39.2	6.0
1979	5.0	44.5	18.7	100.0	100.7	3.5	-15.4	55.9	58.1	46.4	2.5	39.7	4.9
1980	8.1	61.8	25.9	100.0	100.0	3.5	-8.3	65.4	66.4	71.1	2.4	35.9	5.7
1981	12.2	50.8	34.7	104.4	106.3	3.2	-1.7	70.5	72.2	54.1	3.0	36.5	4.3
1982	18.4	51.0	54.5	95.8	102.2	3.5	-9.4	58.0	92.0	100.2	2.1	46.4	2.2
1983	33.9	84.2	100.0	90.3	84.3	3.8	-14.2	78.7	85.6	82.9	2.5	57.2	-2.2
1984	43.7	29.2	116.3	94.7	83.4	7.0	3.4	33.4	43.0	40.2	2.1	60.2	4.1
1985	57.9	32.4	148.7	93.2	84.5	6.9	-2.3	47.6	29.7	35.2	2.8	63.6	3.3
1986	70.2	21.3	171.0	95.0	86.4	8.5	4.3	35.0	19.1	20.1	3.6	56.5	6.3
1987	83.4	18.8	177.3	104.1	109.0	8.7	4.7	35.2	42.1	31.4	2.4	49.4	8.6
1988	104.6	25.4	202.6	109.4	113.4	8.7	11.8	24.0	37.2	34.0	2.4	51.3	-0.1
1989	126.7	21.1	254.7	100.6	98.1	7.4	6.5	27.2	25.2	33.8	3.0	56.8	0.3
1990	145.5	14.8	283.7	97.3	87.4	7.0	9.3	14.9	11.0	12.5	3.3	55.2	1.2
1991	155.4	6.8	283.6	99.9	89.6	8.1	10.0	14.4	11.6	15.4	3.2	56.0	-0.2
1992	161.2	3.7	285.0	99.8	92.5	7.4	11.8	3.8	5.3	11.8	4.0	58.8	-3.3
1993	167.8	4.1	308.8	94.4	84.3	6.7	11.5	6.5	5.0	11.1	4.3	66.7	1.3
1994	170.3	1.5	324.8	89.3	77.6	5.0	9.5	2.3	-1.3	4.5	2.6	63.4	3.5
1995	173.2	1.7	322.3	89.4	81.0	5.6	10.1	2.2	0.0	5.9	2.4	63.4	0.1
1996	177.1	2.3	322.9	89.7	81.9	5.5	10.5	6.8	11.8	9.3	3.0	62.5	4.8
1997	180.3	1.8	318.7	90.5	84.5	5.3	11.1	8.7	12.7	11.8	2.6	64.5	4.9
1998	183.3	1.7	313.6	91.9	88.7	4.7	11.8	15.1	30.3	15.1	2.2	69.5	5.8
1999	189.6	3.4	313.1	93.6	90.2	4.4	8.0	17.1	22.8	17.3	2.6	82.0	4.3
2000	199.1	5.0	313.3	96.2	91.4	5.1	12.7	11.2	26.2	17.2	2.1	101.5	4.1
2001	212.4	6.7	376.3	83.7	78.7	5.1	9.4	14.9	13.4	19.2	2.1	118.9	3.8
2002	222.6	4.8	365.2	88.5	84.1	5.2	13.7	15.3	0.9	3.2	2.5	122.5	-1.0
2003	227.3	2.1	343.3	94.1	88.5	4.4	9.4	17.5	14.8	11.8	3.5	142.7	3.0
2004	234.6	3.2	336.3	97.2	90.6	3.9	8.3	15.0	39.5	19.7	3.6	198.8	8.2
2005	244.0	4.0	301.8	107.7	103.7	3.7	10.7	23.6	49.3	30.1	2.9	293.8	5.5

1. Annual averages (May 1988=100) and changes between years. 2. Annual averages. Exchange rate of the króna against a trade-weighted average of foreign currencies. 3. 1983=100. 4. 1980=100. ULC=unit labour cost. 5. Annual average yield of indexed Treasury bonds of all maturities. Yields on Iceland Stock Exchange from 1987. Before that primary market yields. 6. Gross foreign exchange reserves at end of period as a ratio of the average monthly value of merchandise imports. Calculated at fixed exchange rates. 7. Gross debt. Direct investment capital excluded.

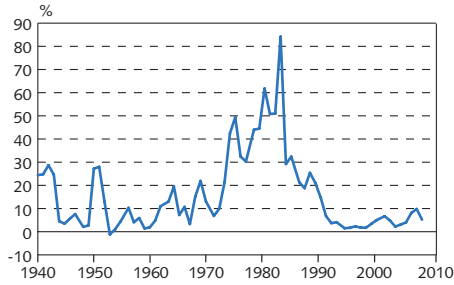
Table 21 (continued) Historical economic indicators

	Components of GDP				External trade (% change from previous year)				General government (% of GDP) <sup>8</sup>			Labour market (% of labour force)		Wages (% change from previous year)	
	(% change from previous year)		National expenditure	Terms of trade	Goods & services (volume changes)		Curr. acc. balance (% of GDP)	Financial balance	Revenues	Expenditures	Unemployment	Labour particip.	Real wages <sup>9</sup>	Real disposable income	
	Private consumption	Gross fixed cap. formation			Exports	Imports									
1977	12.9	11.5	15.0	7.1	20.6	7.1	-2.3	-0.2	30.5	30.7	0.3	72.5	.	15.5	
1978	9.0	-5.5	2.1	0.2	3.7	0.2	1.2	0.1	31.0	30.9	0.3	73.6	.	8.5	
1979	2.8	-1.8	3.4	-8.6	2.5	-8.6	-0.7	0.9	32.4	31.4	0.4	73.0	.	2.0	
1980	3.4	13.9	5.9	-2.8	3.0	-2.8	-2.0	1.3	35.1	33.8	0.3	74.1	.	1.1	
1981	6.2	1.2	5.6	-0.4	7.1	-0.4	-4.1	1.3	36.3	35.0	0.4	76.8	0.7	5.4	
1982	5.0	0.1	5.0	-0.7	-0.6	-0.7	-8.0	1.7	37.4	35.7	0.8	77.6	1.7	2.2	
1983	-5.6	-12.7	-8.6	-1.3	-9.7	-1.3	-1.9	-2.0	35.6	37.6	1.0	77.4	-16.7	-12.5	
1984	3.7	9.4	6.4	0.7	9.2	0.7	-4.6	2.2	36.6	34.4	1.3	77.6	-3.1	-2.5	
1985	4.2	1.0	2.7	-0.9	11.1	9.4	-3.9	-1.6	35.2	36.9	0.9	79.3	1.2	10.8	
1986	6.9	-1.5	4.5	5.4	1.0	5.4	0.5	-4.0	35.3	39.3	0.7	80.9	5.7	9.5	
1987	16.2	18.7	15.7	4.3	23.3	4.3	-3.4	-0.8	35.5	36.3	0.4	84.1	9.0	25.8	
1988	-3.8	-0.2	-0.6	-0.8	-4.6	-0.8	-3.4	-2.0	39.2	41.2	0.6	80.1	2.2	-2.7	
1989	-4.2	-7.9	-4.4	-3.9	-10.3	-3.9	-1.3	-4.5	39.1	43.6	1.7	78.7	-9.1	-9.4	
1990	0.5	3.0	1.5	-2.0	1.0	-2.0	-2.1	-3.3	38.8	42.1	1.8	77.5	-4.9	-4.6	
1991	3.0	2.6	3.5	3.4	5.3	3.4	-4.0	-2.9	40.5	43.5	1.5	76.2	1.4	2.1	
1992	-3.2	-10.3	-4.6	-0.5	-6.0	-0.5	-2.4	-2.8	41.6	44.5	3.1	75.5	-0.8	-2.7	
1993	-4.6	-9.8	-2.9	-3.6	-7.5	-3.6	0.7	-4.5	39.7	44.3	4.4	75.3	-2.6	-7.6	
1994	2.7	-0.2	1.7	0.3	3.8	0.3	1.9	-4.8	39.3	44.1	4.8	75.4	-0.3	0.0	
1995	2.2	-1.7	2.2	1.0	3.6	1.0	0.7	-3.0	40.4	43.4	5.0	75.7	2.8	2.7	
1996	5.7	25.0	6.8	-3.2	16.5	-3.2	-1.8	-1.6	41.3	42.9	4.4	76.4	4.0	4.4	
1997	6.2	9.3	5.7	2.0	8.0	2.0	-1.8	0.0	40.5	40.6	3.9	76.6	3.6	8.5	
1998	10.1	32.5	13.3	5.2	23.4	5.2	-6.8	0.5	41.6	41.1	2.8	77.1	7.6	8.6	
1999	7.9	-3.9	4.4	-0.7	4.4	-0.7	-6.8	2.3	44.3	42.0	1.9	77.3	3.3	6.8	
2000	4.2	10.4	5.7	-2.4	8.6	-2.4	-10.2	2.4	44.4	42.0	1.3	77.3	1.6	5.4	
2001	-3.0	-3.0	-2.3	0.3	-9.1	0.3	-4.4	0.2	42.9	42.8	1.4	77.5	2.0	1.4	
2002	-1.6	-18.9	-3.5	0.6	-2.6	0.6	1.6	-0.8	43.8	44.6	2.5	77.3	2.3	-0.1	
2003	5.9	16.3	6.4	-4.1	10.8	-4.1	-5.0	-2.0	44.5	46.5	3.4	76.6	3.4	5.2	
2004	7.2	29.2	10.4	-1.3	14.4	-1.3	-9.3	0.3	45.6	45.3	3.1	76.3	1.6	3.4	
2005	11.9	34.5	14.9	1.0	28.4	1.0	-16.5	3.0	47.0	44.0	2.1	76.0	2.6	8.1	

8. Central and local governments and the social security system. 9. Deflated by consumer prices.

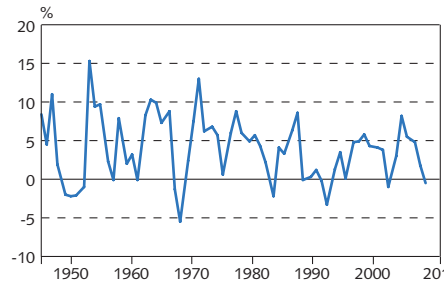
Sources: Directorate of Labour, Iceland Stock Exchange, Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

Chart 31  
Consumer price inflation 1940-2008<sup>1</sup>  
Change between annual averages (%)



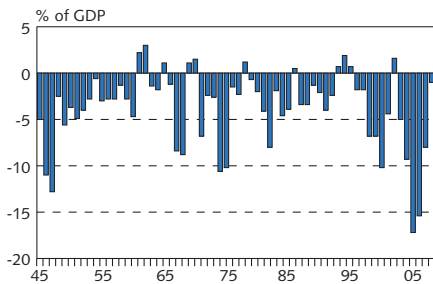
1. Central Bank forecast for 2006-2008.  
Sources: Statistics Iceland and Central Bank of Iceland.

Chart 32  
Economic growth 1945-2008<sup>1</sup>  
Change in real GDP between years



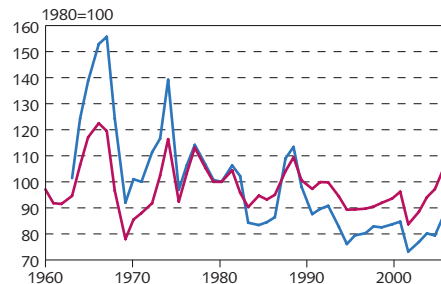
1. Preliminary 2004. Forecast 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 33  
Current account balance 1945-2008<sup>1</sup>  
% of GDP



1. Preliminary 2005. Forecast 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

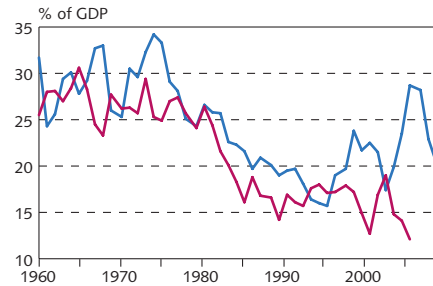
Chart 34  
Real effective exchange rate of the  
Icelandic króna 1960-2005<sup>1</sup>



— Relative unit labour cost  
— Relative consumer prices

1. Preliminary 2004. Estimate 2005.  
Source: Central Bank of Iceland.

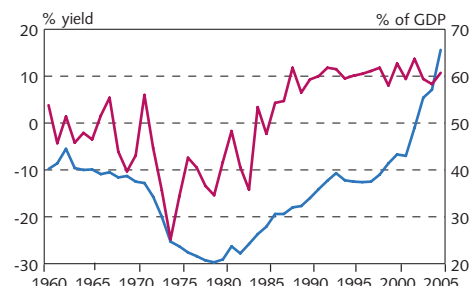
Chart 35  
Gross national saving and fixed capital  
formation 1960-2008<sup>1</sup>  
% of GDP



— Gross fixed capital formation  
— Gross national saving

1. Preliminary 2005. Forecast 2006-2008.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 36  
Real yield and broad money 1960-2005  
Real yield on non-indexed bank loans and M3  
as percent of GDP



— M3 (right-hand axis)  
— Real yield (left-hand axis)

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

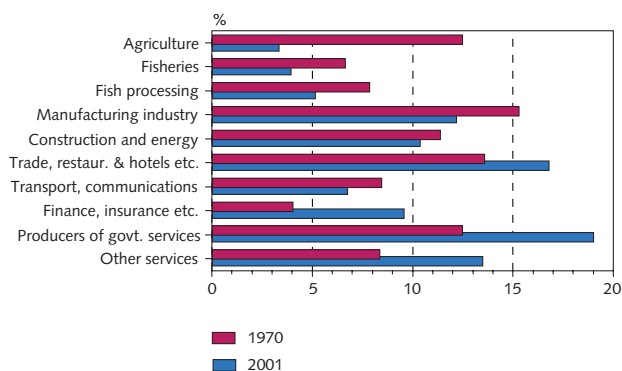
Table 22 Structural indicators for the Icelandic economy

<i>I Population and labour force (thous.)</i>		1970	2005
Population at end of year		204.8	299.9
under 16 years of age		70.6	70.2
16-74 years of age		127.3	212.8
above 74 years of age		7.0	16.9
Average population growth in previous 5 years (%)		1.1	1.1
Labour force (thous. man-years)		82.7	152.1
Males		54.7	87.7
Females		28.0	64.5
<i>II Employment by industry (%)</i>		1970	2001
Agriculture		12.4	3.3
Fisheries		6.6	3.9
Fish processing		7.8	5.1
Manufacturing industry		15.2	12.1
Construction, electricity and water supply		11.3	10.3
Wholesale and retail trade, restaurants & hotels		13.5	16.7
Transport, storage and communication		8.4	6.7
Financial, insurance, real estate, business services		4.0	9.5
Producers of government services		12.4	18.9
Other services		8.3	13.4
<i>III Merchandise exports</i>			
<i>Distribution by category (%)</i>		1970	2005
Marine products		77.1	56.7
Manufactures		18.4	34.9
thereof aluminium and ferro-silicon		13.2	21.6
Agricultural products		3.4	1.9
<i>By regions (%)</i>		1970	2005
United States		30.0	8.8
European Union		52.8	74.6
Other		17.2	16.6
<i>IV National income and output</i>		1970	2005 <sup>1</sup>
Gross domestic product (GDP), b.kr.		0.4	996.0
GDP, billion USD		0.5	15.8
National income per capita, thous. USD		2.0	52.1
GDP per capita (PPP) thous. USD <sup>2</sup>		2.7	35.8
Gross capital formation, % of GDP		25.3	28.7
Gross national saving, % of GDP		26.1	13.3
Net national saving, % of net national product		13.8	0.3
Export of goods and services, % of GDP		46.4	31.5
Public consumption, % of GDP		12.7	24.7
Gen. government total expenditures, % of GDP <sup>3</sup>		28.9	45.3
Total taxes, % of GDP <sup>3</sup>		28.9	38.8
<i>V Capital and debt</i>			
<i>% of GDP unless otherwise stated</i>		1970	2005 <sup>1</sup>
Fixed assets, % of GDP		3.4	2.9
Fixed assets, billion USD		1.8	46.0
Net external debt		20.1	161.4
Debt service, % of export revenue		11.3	71.9
General government total debt		13.0	35.2
General government net debt		-2.3	21.6
Broad money (M3)		37.5	65.5
Credit system total lending		484.8	342.4
to industries		53.6	215.7
to households		21.2	107.5
Market capitalisation of listed equities		.	180.3

1. Preliminary data. If preliminary data for 2004 are not available another year is stated. 2. Converted to US dollars at an exchange rate that eliminates the difference in price levels between the countries. 3. National accounts basis.

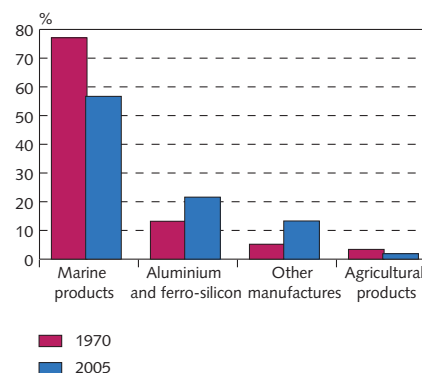
Sources: Iceland Stock Exchange, National Economic Institute, OECD, Statistics Iceland, Central Bank of Iceland.

Chart 37  
Employment by industry in 1970 and 2001



Source: Statistics Iceland.

Chart 38  
Merchandise exports by category  
1970 and 2005



Source: Statistics Iceland.

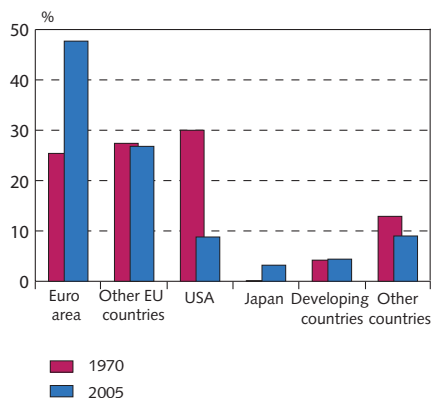
Table 23 Merchandise exports and imports by regions<sup>1</sup>

	Share of total (%)						B.kr.	
	1970	1980	1990	2000	2005	Jan.-April		
						2006	2005	2006
<i>Merchandise exports, fob</i>								
European Union	52.8	52.3	70.7	67.4	74.6	76.1	144.9	48.8
Euro area	25.4	30.2	37.6	42.3	47.7	48.8	92.8	31.3
Other EU countries	27.4	22.0	33.1	25.1	26.8	27.3	52.1	17.5
United Kingdom	13.2	16.5	25.3	19.3	17.8	18.4	34.6	11.8
Other Western European countries	2.8	2.3	3.4	7.8	5.9	5.5	11.5	3.5
Eastern Europe and former Soviet Union <sup>2</sup>	9.6	8.8	2.9	1.4	1.1	2.5	2.1	1.6
Russia	6.8	5.4	2.5	0.4	1.0	2.5	2.0	1.6
United States	30.0	21.6	9.9	12.2	8.8	7.6	17.1	4.9
Japan	0.1	1.5	6.0	5.2	3.2	3.2	6.3	2.1
Other OECD countries	0.5	0.6	0.5	2.0	1.5	1.1	2.9	0.7
Developing countries	4.2	12.9	5.5	3.0	4.4	3.6	8.6	2.3
Other countries	0.0	0.0	1.1	1.0	0.4	0.4	0.9	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	194.4	64.1
<i>Merchandise imports, cif</i>								
European Union	64.9	58.0	59.9	57.0	61.6	59.6	193.5	69.9
Euro area	32.0	33.2	35.5	33.5	33.7	34.9	105.8	40.9
Other EU countries	33.0	24.8	24.4	23.6	27.9	24.7	87.6	29.0
United Kingdom	14.3	9.5	8.1	9.0	5.8	5.3	18.1	6.2
Other Western European countries	5.4	8.1	5.2	9.7	9.5	9.8	29.7	11.5
Eastern Europe and former Soviet Union <sup>2</sup>	10.4	10.9	6.5	5.7	0.9	0.7	2.9	0.8
Russia	7.2	9.7	5.0	1.8	0.5	0.5	1.5	0.6
United States	8.2	9.4	14.4	11.0	9.3	7.8	29.3	9.1
Japan	2.9	4.0	5.6	4.9	5.3	5.0	16.5	5.9
Other OECD countries	0.4	5.8	3.7	4.5	3.8	4.4	11.8	5.2
Developing countries	7.2	2.7	3.1	5.6	8.6	11.7	26.9	13.8
Other countries	0.6	1.1	1.4	1.5	1.0	1.0	3.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	313.9	117.3

1. In data prior to the year 2000, country groups are based on the year 2000. 2. The eight Eastern European countries that acceded to the European Union in 2004 are included with the EU as of 2004 and removed from this category at the same time.

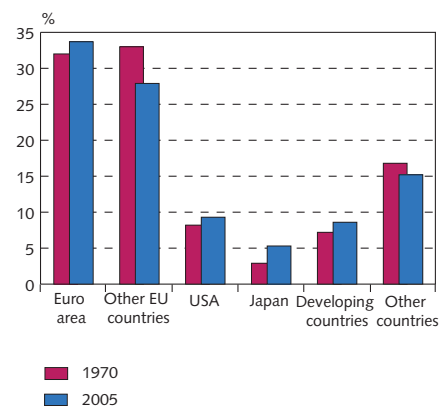
Source: Statistics Iceland.

Chart 39  
Merchandise exports by region  
1970 and 2005



Source: Statistics Iceland.

Chart 40  
Merchandise imports by region  
1970 and 2005



Source: Statistics Iceland.