Economic and monetary developments and prospects[1]

Inflation outlook over the next two years has taken a turn for the worse

Long-term inflation prospects have taken a turn for the worse since the Central Bank of Iceland published its last inflation forecast in June this year. In particular this is the result of greater-than-expected growth in domestic demand. Since the June forecast, a number of factors have been driving demand growth. Planned investments for the aluminium industry have been stepped up even further, at the same time as household access to credit has been made much easier and long-term interest rates on mortgage lending have gone down. It has also been announced that proposed tax cuts over the next few years will be implemented, which will boost household disposable income even more and stimulate private consumption. The outlook is that these conditions will result in a far larger positive output gap than had been foreseen, which unless appropriate action is taken will fuel inflation in the second half of the forecast period.

I Overview of macroeconomic and inflation forecast

Assumptions of the current forecast

As usual, the inflation forecast is based on the technical assumption of an unchanged policy interest rate (currently 7.25%) over the forecast horizon and an unchanged exchange rate of the króna from the day of the forecast. It is based on the value of the Central Bank's effective exchange rate index on November 10, which was roughly 120, just over 3% stronger than assumed in the June forecast although this is the same value on which the March update was based.

Outlook for even faster growth of domestic demand than previously expected

The Central Bank's macroeconomic forecast is shown in Table 1. A sizeable upward revision has been made to the forecasts for domestic demand and GDP growth over the next two years, as explained in detail in the main text. Private consumption is expected to increase by 9½% next year and national expenditure by 11%. GDP will grow by less than national expenditure due to heavy imports in connection with investments for the aluminium industry, but still by much more than output capacity with normal utilisation of production factors. If it turns out as forecast, GDP growth will be the highest since 1987. Investments for the aluminium industry will peak in 2006 but given the high level of investment in the previous year and a large positive output gap, GDP growth will slow down somewhat from 2005.

The inflation outlook over the next two years has deteriorated significantly

As a result of robust domestic demand growth, excess production capacity has been eliminated and the output gap has turned sharply positive, which will intensify over the forecast period. Higher inflation will inevitably result, even though the strong króna will continue to counteract domestic inflationary pressures in the short run.

1. This article uses data available on November 23, 2004.

Table 1 Central Bank macroeconomic forecast

	Current forecast			*Previous forecast*			*Change from previous forecast (percentage points)*[1]		
Policy rate and exchange rate assumptions[2]	*2004*	*2005*	*2006*	*2004*	*2005*	*2006*	*2004*	*2005*	*2006*
Central Bank policy interest rate (%)	6.10	7.25	7.25	5.40	5.50	5.50	0.70	1.75	1.75
Foreign exchange index[3]	121.5	120.0	120.0	123.0	124.0	124.0	-1.2	-3.2	-3.2
	Billion krónur at current prices			*Volume change on previous year (%)*			*Change since previous forecast (percentage points)*[1]		
GDP and its main components	*2004*	*2005*	*2006*	*2004*	*2005*	*2006*	*2004*	*2005*	*2006*
Private consumption	496.8	562.6	621.8	7.0	9.5	6.8	1.5	3.3	1.6
Public consumption	225.2	244.1	263.1	1.3	3.1	2.5	0.8	1.1	0.5
Gross fixed capital formation	212.7	270.0	290.0	17.3	20.6	2.8	0.3	4.8	-3.7
Industries	131.1	177.2	189.6	29.3	29.3	2.3	-1.0	4.5	-5.0
Excl. power-intensive projects, ships and aircraft	79.7	86.9	92.7	9.3	4.3	2.0	1.8	-2.2	-5.0
Residential housing	56.5	67.6	74.0	13.0	8.3	5.8	1.0	4.3	2.8
Public investment	25.1	25.2	26.4	-18.4	-4.0	0.0	-1.4	4.5	-9.0
National expenditure	934.8	1,076.6	1,174.9	8.1	10.9	5.0	1.1	3.1	0.0
Exports of goods and services	314.6	340.5	371.4	6.5	5.7	8.9	1.5	1.7	2.9
Imports of goods and services	361.4	428.3	471.6	14.1	17.2	8.3	2.3	5.7	1.3
Gross domestic product	888.0	988.8	1,074.7	5.4	6.1	4.9	1.1	1.4	0.4
				% of GDP			*Change since previous forecast (percentage points)*[1]		
Current account balance	.	.	.	-6.5	-10.4	-11.4	2.2	1.1	0.6
Gross national saving	.	.	.	18.2	17.1	15.7	2.7	1.6	0.2
Net external debt[4]	.	.	.	101.7	105.5	111.8	-1.6	-3.2	-1.2
International investment position[4]	.	.	.	-66.8	-69.9	-75.5	4.7	8.6	10.0
Output gap[5]	.	.	.	1.7	3.7	5.0	1.0	2.2	2.8
Main labour market aggregates				*%*			*Change since previous forecast (percentage points)*[1]		
Private sector wages, % change between annual averages				4.5	6.0	6.0	-0.5	0.5	0.5
Labour productivity, % change between annual averages				3.4	2.1	1.6	0.9	0.1	0.1
Unemployment, % of labour force				3.1	2.4	1.8	0.1	-0.1	-0.2

1. Change since *Monetary Bulletin* 2004/2. 2. Annual averages, assuming unchanged interest rates and exchange rate from the day of forecast. 3. Percentage-point change in index from previous forecast. 4. Net external debt and GDP are calculated at comparable SDR exchange rates. 5. As a proportion of production capacity in the economy.

The inflation forecast is shown in Table 2. Inflation is forecast at 3½% one year ahead. In June an inflation rate 4% was forecast for one year ahead, but over the one-year horizon corresponding to the current one-year forecast (i.e. up to and including Q3/2005), an inflation rate of 3% was forecast. Two years ahead, inflation is also forecast at 3½%, while in June, inflation of only 2½% was forecast two years ahead. It should be noted that the June forecast horizon spanned only Q2/2006, while the current forecast includes Q4/2006, close to the peak of investments for the aluminium industry.

Table 2 Central Bank inflation forecast

%	*Percentage change on previous quarter*	*Annualised quarterly change*	*Change on same quarter of previous year*
2002:1	1.0	4.2	8.7
2002:2	0.4	1.6	5.5
2002:3	0.2	0.7	3.3
2002:4	0.6	2.3	2.2
2003:1	0.7	2.9	1.9
2003:2	0.5	2.0	2.0
2003:3	0.3	1.1	2.1
2003:4	1.0	4.1	2.5
2004:1	0.3	1.3	2.1
2004:2	1.7	7.0	3.3
2004:3	0.5	1.9	3.6
2004:4	1.1	4.7	3.7
2005:1	0.7	2.6	4.0
2005:2	0.9	3.7	3.2
2005:3	0.8	3.2	3.5
2005:4	0.5	2.2	2.9
2006:1	0.7	2.8	3.0
2006:2	1.1	4.4	3.1
2006:3	1.2	5.0	3.6
2006:4	1.0	4.2	4.1

Figures indicate changes between quarterly averages of the consumer price index. Shaded area indicates forecast.

%	*Change, year-on-year*	*Change within year*
2001	6.7	9.4
2002	4.8	1.4
2003	2.1	2.4
2004	3.2	3.8
2005	3.4	3.0
2006	3.5	4.3

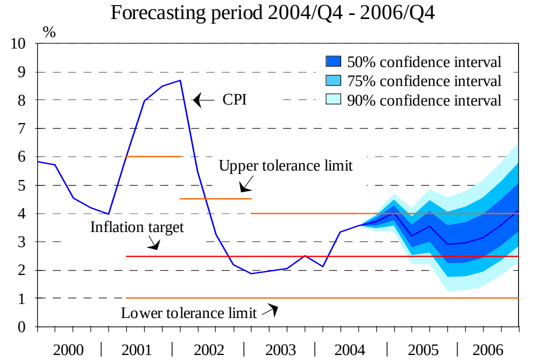
Shaded area indicates forecast.

Chart 1 presents the forecast and the estimated confidence intervals. The Bank evaluates the upside and downside risks to the forecast as symmetric one year ahead. However, there is an upside risk in the longer term.

Chart 1

Central Bank inflation forecast

Forecasting period 2004/Q4 - 2006/Q4



Source: Central Bank of Iceland.

It is important to remember that, as always in Central Bank of Iceland forecasts, an unchanged monetary policy stance is assumed over the forecast horizon. Indeed, the main task of monetary policy in the medium term will be to ensure that the potential overheating implied in the forecast does not materialise, and that the inflation target will be attained. In particular, the forecast serves the purpose of guiding the Central Bank in its monetary policy decisions rather than describing the way that the Bank considers developments are most likely to unfold in the coming years. In all probability the Bank's policy rate will be higher over the forecast period than assumed in the forecast.

II External conditions and exports

Fairly robust global growth and low inflation

In recent months international institutions have revised their growth forecasts downwards for this year and 2005. Nonetheless, GDP growth in the US is still forecast at just over 4% this year and 3½% next year. Rather slower growth is forecast in the euro region, at 2½% in both 2004 and 2005. After a spurt in Q1, growth in Japan slowed in Q2. Surveys of business and consumer confidence are upbeat and the outlook is moderately optimistic that, in the next few years, Japan will work its way out of the economic troubles that have beset it for the past 10-15 years. Growth in the developing countries has varied widely but on the whole it has been running high and outpaced the industrialised countries. The IMF now

Table 3 Main assumptions for developments in external conditions

	Current forecast[1]			*Change from previous forecast*[2]		
	2004	*2005*	*2006*	*2004*	*2005*	*2006*
Marine production for export	7.5	4.0	1.0	1.0	0.5	-1.0
Prices of marine products	0.0	5.0	2.0	3.5	3.0	0.0
Aluminium prices	13.2	-2.7	-7.0	1.4	-7.7	-10
Prices of exported goods and services	2.7	2.4	0.2	2.5	0.1	-1.6
General import prices	3.5	2.0	2.0	1.5	1.0	0.5
Of which fuel prices[3]	27.7	9.3	-2.2	10.2	25.6	5.8
Terms of trade for goods and services	1.0	1.3	-1.5	2.8	0.0	-1.7
Foreign short-term interest rates (%)	2.3	3.5	4.0	-0.2	0.0	0.0

1. % change year-on-year, except for interest rates. 2. Change since *Monetary Bulletin* 2004/2. 3. Weighted average of petrol (20%) and crude oil prices (80%).

forecasts global growth of 5% this year and 4.3% in 2005. Although inflation has been kindled by higher oil prices in much of the world, it is generally expected to remain low in the industrialised countries, at around 2%. More details about the assumptions made for external conditions in the Central Bank's macroeconomic forecast are presented in Table 3.

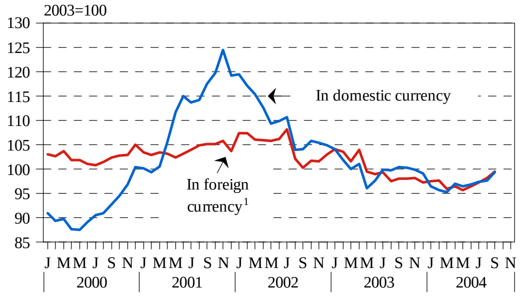
Slight rise in merchandise export prices

Prices of marine products, especially demersal products, have been climbing recently from the low at the beginning of the year. The current forecast assumes that marine product prices in 2004 will be broadly the same in foreign currency terms as in 2003. Aluminium and ferrosilicon prices have soared recently – the forecast assumes that, in foreign currency terms, aluminium prices will be up by more than 13% from last year and ferrosilicon by 20%. Prices of other merchandise exports are expected to rise by 7% from 2003. Overall, merchandise export prices are expected to increase by almost 3% and prices of total exports by just over 4%. Over the next two years, marine product prices are expected to rise by a total of roughly 7% while aluminium will slip down. Total export prices will increase by 1½% next year but remain broadly unchanged in 2006.

The forecast assumes that the exchange rate index will be 1.6% lower on average than in 2003, but remains unchanged from November 10. This implies that, on average, the exchange rate index will be 1.2% lower next year than in 2004. The assumed global price and wage trends and the corresponding domestic developments as forecast imply that the real effective exchange rate based on relative CPI will

Chart 2

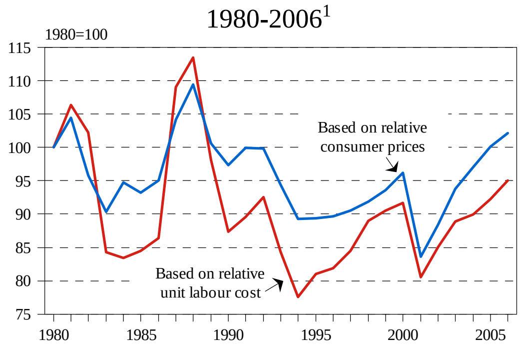
Estimated marine product prices
January 2000 - September 2004



1. An index calculated by Statistics Iceland translated into foreign currency using the export-weighted currency basket. *Sources:* Statistics Iceland, Central Bank of Iceland.

Chart 3

Real effective exchange rate of the króna
1980-2006[1]



1. Central Bank forecast for 2004-2006. *Source:* Central Bank of Iceland.

strengthen by just over 3% next year and roughly 2% in 2006. In terms of relative unit labour cost it will appreciate by 2½% and roughly 3% respectively.

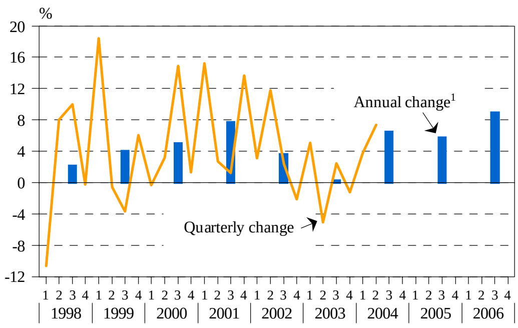
Export volume grows as well

The fish catch over the first nine months of 2004 was 14% down year-on-year. The main factor at work was a 19% contraction in the pelagic catch. The much more valuable demersal catch increased by 3% in volume terms. Statistics Iceland estimates that catch value, measured at constant prices, decreased by 0.8% over the period.

Statistics Iceland reports that marine product export value rose 5.9% year-on-year over the first three quarters of this year. On the basis of these data and an expected decline in the average domestic-currency price of marine products this year, the Central Bank forecasts that marine exports will grow in volume by 7.5% in 2004. Exports of aluminium are forecast to rise by 2% and ferrosilicon to contract by 4%, with increases of 18% in other merchandise exports[2] and 5.2% in services, at constant prices. Exports of aluminium are expected to increase by 31% in 2006 when the Norðurál smelter expansion is completed. Smelting facilities currently under construction will go on stream in 2006-2008. Growth of other merchandise exports and services exports is also expected to be robust over the forecast horizon.

Chart 4

Export growth in real terms 1998-2006

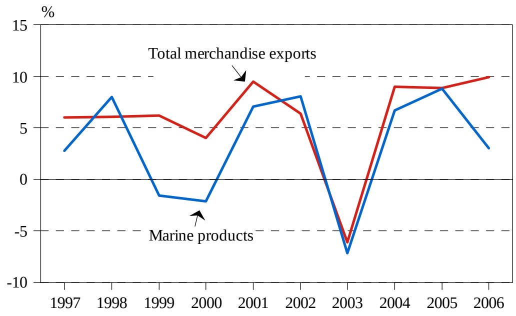


1. Central Bank forecast for 2004-2006. *Sources:* Statistics Iceland, Central Bank of Iceland.

2. In particular, exports of pharmaceuticals, medical equipment and food processing equipment. Growth forecasts are based on information from leading companies in these sectors.

Chart 5

Merchandise export growth 1997-2006[1]



1. At constant exchange rates. Central Bank forecast for 2004-2006.
Sources: Statistics Iceland, Central Bank of Iceland.

III Financial conditions

In *Monetary Bulletin* in September it was concluded that financial conditions of the economy were still favourable for borrowers, despite a slight tightening since the beginning of the summer, and unambiguously easier for households. Broadly speaking this finding is unchanged, despite a considerable rise in short-term interest rates since the spring and two hikes since September when *Monetary Bulletin* 2004/3 was published.

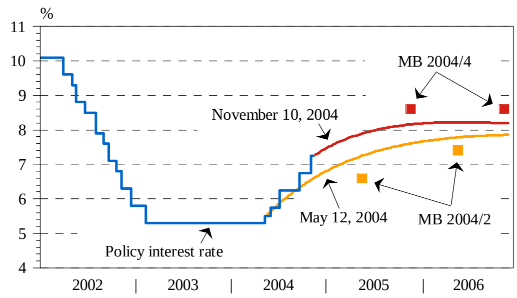
Central Bank policy interest rate hikes continue

Since the spring, the Central Bank has sought to tighten the monetary policy stance in response to surging demand, rising inflation and credit growth. On the back of the 0.5 percentage point rise

Chart 6

Central Bank policy interest rate 2002-2006

Red and yellow lines indicate forward interest rates. Boxes indicate interest rate forecasts by financial analysts before publication of *Monetary Bulletin* (MB).



Source: Central Bank of Iceland.

announced when *Monetary Bulletin* 2004/3 was published in September, the policy interest rate was raised by 0.5 percentage points in the beginning of November. This was the fifth policy rate hike this year, bringing the total increase to 1.95 percentage points.

In accordance with the Central Bank's declarations in recent editions of *Monetary Bulletin* that continuing policy rate rises could be expected, market agents clearly anticipate further increases. Indications can be seen, for example, from implicit forward interest rates that can be derived from the yield curve on non-indexed bonds. Given certain assumptions, market agents' expectations about the shorter end of the yield curve can be inferred from the forward rates. On the basis of this analysis, the market expects the policy rate to peak at about 8¼% two years ahead, which is somewhat above the prevailing expectations in mid-May when the Central Bank prepared its previous inflation forecast, reflecting an increase in the policy rate since then beyond what the market apparently expected at that time. The market appears to expect the policy rate to be raised by around 1 percentage point over the next two years, which is a rather flatter profile than was foreseen in June.

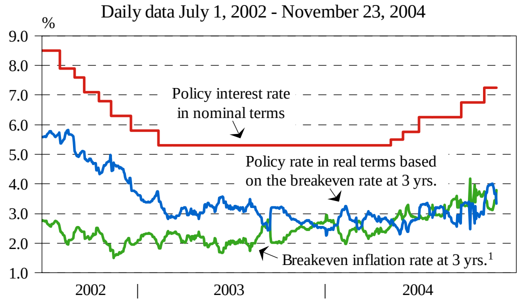
Interpretation of forward interest rates needs to take into account that they may also incorporate an investors' risk premium and therefore diverge from the market agents' actual expectations.[3] It may be useful to incorporate information from the survey of financial analysts' evaluation of policy rate developments for the next two years into the analysis. On average, analysts forecast the policy rate to reach 8½% one year ahead, where it will broadly remain until the second half of 2006 (see Box 5). This is a marginally higher and steeper profile than can be read from forward rates, which is the opposite pattern to June.

Despite recent rises, the policy rate in real terms (calculated on the basis of the breakeven inflation rate defined as the spread between non-indexed and indexed three-year Treasury bonds) is only slightly higher than over the past half year, but rose in November after the Central Bank's latest hike. The interest-rate differential with abroad has widened and continued to bolster the króna – the exchange rate has been quite stable over the past year. Interest rates in foreign credit markets are still very low. The sluggish recovery among most of Iceland's trading partner countries probably implies that the increase in short-term rates will be modest in the near term. Icelandic businesses, financial undertakings and to some extent households as well are therefore likely to enjoy favourable financial conditions in foreign credit markets in the period ahead.

Chart 7

Nominal policy interest rate, inflation expectations and the policy rate in real terms

Daily data July 1, 2002 - November 23, 2004



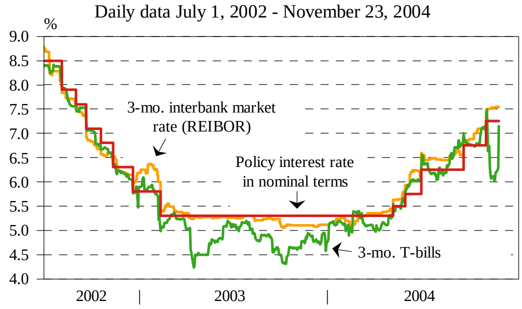
1. Defined as the spread between non-indexed and indexed three-year Treasury bond yields.
Source: Central Bank of Iceland.

Other short-term interest rates have not fully followed the rises in the Central Bank policy rate, and towards the end of November lay well below it. Average yields on 3-month and 6-month Treasury

Chart 8

Policy interest rate and other short-term market rates: Treasury notes and REIBOR

Daily data July 1, 2002 - November 23, 2004



Source: Central Bank of Iceland.

3. The risk premium may be seen as a premium that investors require due to uncertainty about future interest rate developments or for positions in securities that may later prove difficult to unwind. A further complication could be that the risk premia may vary over time.

bills were 6.4% and 6.9% respectively in the first half of November, marginally above their August averages of 6.3% and 6.5%.

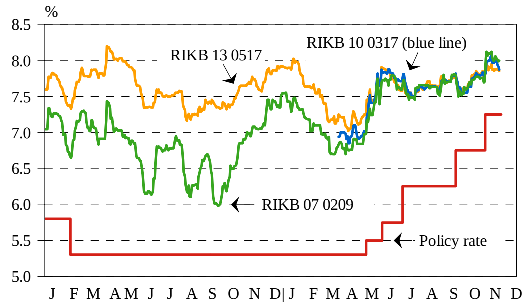
Foreign short-term interest rates edge up from a historical low

Foreign short-term interest rates have edged up from their historical low, in pace with higher policy rates in the US, UK and several other countries. The most important factor is that the European Central Bank's (ECB) policy rate has still not risen, because Iceland's foreign exchange exposure is probably greatest against the euro. Thus higher foreign short-term rates are still not significantly affecting the Icelandic economy, except insofar as expectations of higher rates attract debtors towards longer-term borrowing even though long-term interest rates are higher at the moment. Since September there has been little change in foreign short-term rates, except that the US Federal Reserve raised its funds rate by 0.25 percentage points on September 21 and again on November 10. The ECB is not expected to raise its key interest rates in the next few months and the Bank of England's last hike was in March. In the current forecast, an average foreign short-term rate of 3½% is assumed next year, rising to 4% in 2006. This assumption is unchanged since the June forecast.

Chart 10

The Central Bank policy interest rate and T-notes

Daily data January 3, 2003 - November 23, 2004

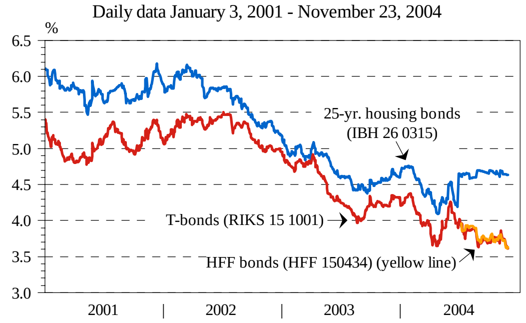


Source: Central Bank of Iceland.

Chart 11

Yields on indexed long-term bonds

Daily data January 3, 2001 - November 23, 2004

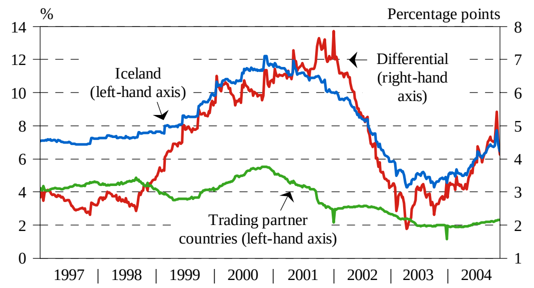


Source: Central Bank of Iceland.

Chart 9

Domestic and foreign short-term interest rates and the interest-rate differential with abroad

3-mo. T-bills, weekly data January 1997 - November 2004

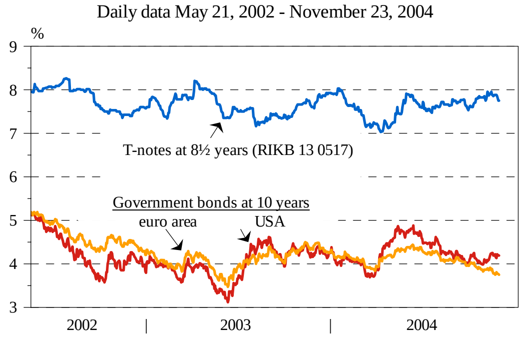


Source: Central Bank of Iceland.

Chart 12

Long-term interest rates in Iceland and abroad

Daily data May 21, 2002 - November 23, 2004



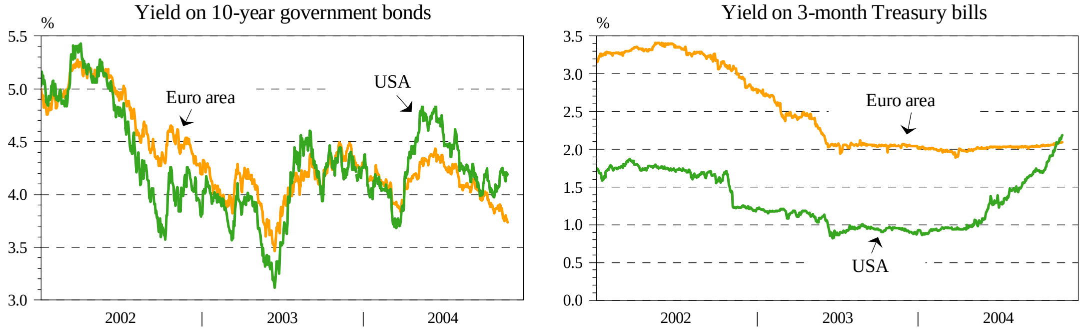
Sources: EcoWin, Central Bank of Iceland.

Chart 13

Foreign interest rate developments January 2, 2002 - November 23, 2004 (daily data)

Yield on 10-year government bonds

Yield on 3-month Treasury bills



Sources: EcoWin, Eurostat.

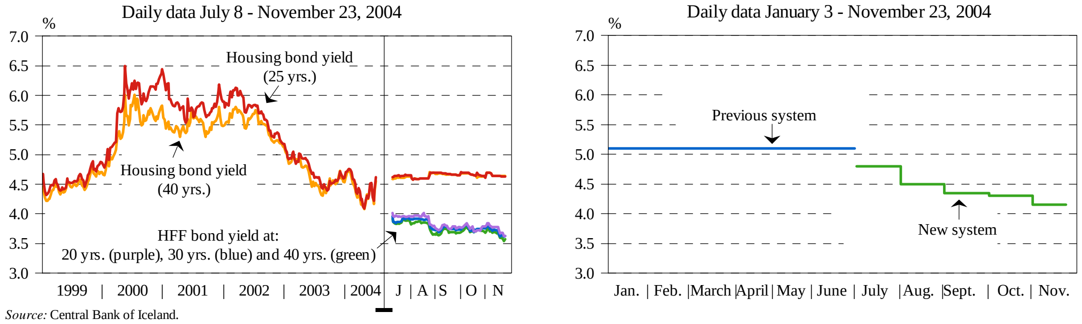
Chart 14

Housing bond and HFF bond real yields

Weekly data January 3, 1999 - July 7, 2004
Daily data July 8 - November 23, 2004

Housing Financing Fund mortgage bond interest rates

Daily data January 3 - November 23, 2004



Source: Central Bank of Iceland.

Non-indexed T-note yields rose in pace with the policy rate, but indexed and foreign long-term interest rates have fallen

Until the policy rate hike early in November, yields on non-indexed Treasury notes had remained fairly stable since the spring. They increased after the policy rate rise was announced, most sharply on notes with the shortest maturity. Towards the end of November, for example, the yield on six-year T-notes was roughly 0.1-0.2 percentage points above the average for the second half of September and all of October.

Long-term indexed bond rates, on the other hand, have shown a marked drop in recent months, which can be explained by changes in the housing loan market, i.e. the introduction of cash mortgages to replace housing bond mortgages and the banks' entry into the housing finance market. Yields on Housing Financing Fund (HFF) bonds have been some 0.3 percentage points higher than on 10-year government bonds, which have hovered in the range 3.6%-3.8% in recent weeks.

Foreign long-term interest rates have inched down over the past three months, continuing the pattern since the early summer. Rates on 10-year US T-bonds have been in the range 4.0%-4.3% for the past four weeks and corresponding Euro benchmarks in the range 3.7%-3.9%.

Non-indexed lending rates of commercial banks and savings banks have risen in fairly close line with the Central Bank policy rate, while indexed lending rates went down by 0.5 percentage points on average in the first half of September.

Credit and money continue to surge

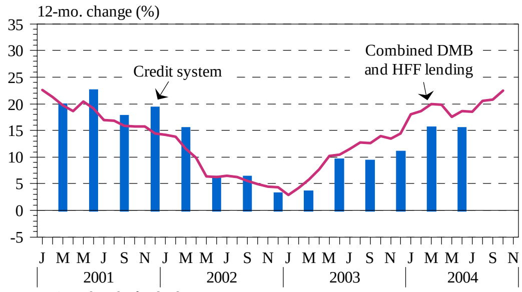
The surge in credit is evidence of favourable economic and financial conditions. In recent months credit growth has continued to gain momentum. Lending by the credit system as a whole grew by 15.4% over the twelve months to the end of June. Data for the credit system as a whole until the end of September are not yet available, but an approximation of the growth rate can be obtained by adding lending figures for the deposit money banks (DMBs), HFF and pension funds. At end-September their twelve-month lending growth was 22%. Lending to the corporate sector showed particularly rapid growth, having increased by more than one-fifth at the end of June and by almost one-third at the end of September. Lending to households has also soared over the past two quarters. Annual growth in combined household lending by DMBs, pension funds and the HFF amounted to 14% at the end of September. Data for DMB and HFF lending are available until the end of October. Domestic lending by DMBs grew by more than 7% over the month and one-third over one year. To some extent, the increase in DMB lending is at the expense of the HFF, and perhaps the pension funds as well, although no data are available for the latter's lending in October. At the end of October, combined DMB and HFF lending had increased by slightly less than 23% in the space of a year.

Growth in broad money (M3) has been in the range 15-25% since spring 2003 and close to 20% over the past twelve months. Such strong growth is obviously incompatible with price stability in the long run, even if the short-term link between money and inflation appears relatively weak.

Chart 15

Lending growth January 2001 - October 2004

Quarterly credit system lending, monthly bank lending and Housing Financing Fund lending

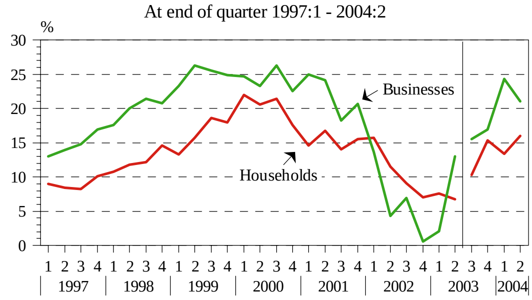


Source: Central Bank of Iceland.

Chart 16

Credit system lending to households and businesses[1]

At end of quarter 1997:1 - 2004:2



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

Slight strengthening of the króna but equity prices have slipped recently

The exchange rate has been quite stable over the past few months. Changes in the exchange rate have therefore had little impact on financial conditions. The Central Bank's June forecast assumed an exchange rate index value of 124. The index was close to 122 when that forecast was reviewed in September and in recent weeks it has been near 120.

After falling in October, equity prices have climbed back in recent weeks and remain high by common measures. In mid-November, after the slide, the ICEX-15 index still stood more than 60% higher than at the beginning of the year and 150% higher year-on-year. In fact, ICEX-15 was almost 6% higher on average in the first three weeks of November than the average for August, so the position has changed little since financial conditions were last assessed before the publication of *Monetary Bulletin* 2004/3 in the beginning of September.

Increased supply of lower-interest mortgage loans has boosted household financial conditions

The bulk of household debt is fixed interest, indexed and long-term, while just over one-tenth consists of short-term debt or variable-interest loans that track changes in the Central Bank policy rate. Even though the lion's share of their long-term debt carries fixed interest, households can achieve considerably easier payment burdens by refinancing their stock of debt, if the spread between the two is wide enough to offset refinancing costs over a relatively short period. Interest on the mortgage loans that banks have been offering households recently is 0.95 percentage point lower than the previous housing bond rates. The banks lent some 55 b.kr. in mortgages from the time they began offering new terms late in August until the end of October. A large share of those loans was used to prepay older HFF loans (see Box 1).

Corporate sector financial conditions are favourable and have changed little since September

Financial conditions of the corporate sector have shown little change since September. More diverse channels of finance are open to businesses than households, and are correspondingly more difficult to evaluate. A large amount of the stock of corporate debt is foreign in origin and at the end of September more than 60% of companies' debt with DMBs was exchange rate-indexed. International interest rate and exchange rate developments therefore exert a strong impact on the corporate sector's financial conditions. Overall, no significant change can be discerned in international interest rate trends since the last analysis of financial conditions in September. However, in the US the federal funds rate has been raised twice by a total of 0.5 percentage points and is currently 2%. Short-term rates are still extremely low and on average have only inched up slightly since September, while long-term rates have trended downwards. At present, corporate spreads are considerably lower than 1-2 years ago, which may benefit Icelandic businesses. In the US, corporate spreads have fallen by 1-1½% from their peak in 2002.

Box 1 Main changes in the housing market in 2004

Major changes have taken place in the Icelandic mortgage market this year. The state Housing Financing Fund (HFF) has expanded its activities and the commercial banks have captured a share of the market.

The HFF's maximum loan amounts were raised in the beginning of the year and again in October. In total they were increased from 8 m.kr. for housing in the secondary market and 9 m.kr. for new housing to 11.5 m.kr. for either category. The combined ceiling for main and second mortgages has also been reset at 13 m.kr.

The format of HFF bonds was changed in July. Loans are now disbursed to borrowers in cash, instead of the old tradable housing bonds. Interest rates are fixed but reflect market yields at the time the mortgage bonds are issued. They are in an annuity format with a maturity of 10, 20, 30 or 40 years and two due dates per year. Interest rates on mortgage loans had come down to 4.15% at the end of November, compared with 5.1% on the housing bonds that they replaced.

At the end of August, the commercial banks responded to the changes in HFF terms by offering CPI-indexed mortgages at a lower rate of interest (4.3%) and a loan-to-value ratio of up to 80% (relative to market prices) or 100% (of fire insurance value), whichever was lower. As a rule these loans are indexed with a maturity of 25 or 40 years, and carry a fixed rate of interest (in some cases with five-year review clauses), which had come down to 4.15% at the end of November. Since these loans are not confined to housing purchases, they can also be taken for refinancing and mortgage equity withdrawal. Some savings banks and pension funds have responded to this competition by lowering their interest rates and raising their loan-to-value ratio.

The HFF's increase in its maximum loan amounts in October was made earlier than planned, and its loan-to-fire insurance value ratio was increased from 85% to 100%. In turn, the banks began offering 100% loans, although these are subject to various restrictions and differ in a number of ways from the 80% loans on offer. For example, their maximum amount is set at 25 m.kr., while 80% loans are unlimited. Another requirement is that they are only used to finance housing purchases, and the borrower's debt service capacity is put through a more stringent evaluation process. From August 23 to the end of October the banks had disbursed mortgage loans amounting to more than 50 b.kr. A large proportion of the new borrowing has been used to prepay older loans from the HFF, whose market share has contracted recently.

Table 4 Changes in financial conditions since September 2004

	4 weeks to August 30	*First 3 weeks of November*	*Sectoral impact*[1] *House-holds*	*Export and traded goods*	*Financial undertakings*	*Other business*
Policy interest rate in real terms[2]	3.1	3.8	–	–	–	–
Short-term interest rates[3]	3.2	3.0	+	+	+/–	+
CPI-indexed domestic interest rates (yield on 40-year HFF bonds)[4]	3.8	3.7	+	.	+/–	.
Average non-indexed domestic bank rates	12.1	12.6	–	–	.	–
Average CPI-indexed domestic bank rates	8.0	7.5	+	+	.	+
Foreign short-term interest rates (3-month T-bills)[5]	1.9	2.1	–	–	–	–
Foreign long-term interest rates (10-year T-bonds)[5]	4.2	3.9	+	+	+	+
Exchange rate index	121.7	120.0	+	–	+/–	+/–
Equity prices[6]	3,216.6	3,401.0	+	+	+	+

1. '+' indicates more favourable financial conditions, '–' less favourable, '+/–' ambiguous and '.' not applicable. 2. Deflated by 3-year breakeven inflation rate. 3. On three-month T-bills. 4. HFF = Housing Financing Fund. 5. Weighted with euro 2/3 and US dollar 1/3. 6. ICEX-15 index.
Sources: EcoWin, Iceland Stock Exchange and Central Bank of Iceland.

Buoyant equity prices imply easy corporate financial conditions. Even after a considerable downturn in equity prices in recent weeks, the ICEX-15 index is still around the same level as in September and much higher than at the beginning of the year.

On the whole, corporate sector financial conditions have changed little. Domestic short-term interest rates have risen, but so have inflation expectations, and foreign interest rates are still very low and are hardly likely to increase rapidly in the near future.

Financial conditions of financial companies marginally tighter

In the September analysis, the financial conditions of financial companies were deemed marginally tighter than in the spring. In November, the policy rate was 1 percentage point higher in real terms than the average in the first half of September, based on the three-year breakeven inflation rate. Financial companies have been lengthening the maturity of their foreign borrowing in recent months, which increases their debt service burden, but this has been offset by the downward trend in long-term interest rates in the past few months. The banks' funding appears to be smooth and their interest rate premia have probably gone down recently, if anything. Recent equity offerings have also been well subscribed.

IV Domestic demand and output

When the last macroeconomic forecast was published in the beginning of June, no data were available for GDP growth during the current year. The national accounts for the first two quarters have subsequently been published and were at hand when the outlook was assessed in September. They show that GDP growth and national expenditure this year are heading beyond what was forecast in June. Private consumption growth in H1/2004 was the highest for five years and gross fixed capital formation is soaring, especially in business investments including the power and aluminium sectors. However, in spite of rising exports, foreign trade made a negative contribution to GDP growth – as it did during the last three quarters of 2003, albeit on a smaller scale now. GDP growth in the first half of 2004 was 5½%, and with broadly the same pace expected for the second half, the forecast is that GDP will grow by just under 5½% over the year as a whole. Growth is expected to remain robust for the next two years.

Table 5 Indicators of demand in the first three quarters of 2004

% change from year before unless otherwise stated	*Q1*	*Q2*	*Q3*	*In 2004 (period)*[1]	
Grocery turnover, in real terms	3.8	3.4	4.3	3.9	*Jan.-Oct.*
Payment card turnover, in real terms[2]	9.8	9.8	4.9	7.4	*Jan.-Oct.*
of which domestic	8.9	8.6	4.0	6.3	*Jan.-Oct.*
of which abroad	27.3	29.1	18.4	25.2	*Jan.-Oct.*
Car registrations, increase in number	35.8	28.4	19.5	26.2	*Jan.-Oct.*
Cement sales, volume change (tonnes)	65.4	48.5	37.1	44.1	*Jan.-Oct.*
General imports, volume change	23.7	18.7	13.6	13.6	*Jan.-Sept.*
Imports of consumer goods, volume change	14.5	15.3	14.5	14.5	*Jan.-Sept.*
Private motor vehicles	24.4	24.2	24.6	24.6	*Jan.-Sept.*
Consumer durables, e.g. household appliances	21.7	19.4	16.3	16.3	*Jan.-Sept.*
Consumer semi-durables, e.g. clothing	10.7	9.9	8.8	8.8	*Jan.-Sept.*
Food and beverages	13.8	11.8	10.5	10.5	*Jan.-Sept.*
Imports of investment goods (excl. vessels and aircraft), volume change	36.9	38.3	23.8	23.8	*Jan.-Sept.*
Gallup confidence index	18.0	-11.7	5.5	2.1	*Jan.-Oct.*
Current situation	66.1	13.8	23.1	29.1	*Jan.-Oct.*
Expectations six months ahead	2.4	-22.3	-3.5	-9.3	*Jan.-Oct.*

1. The first column shows the year-on-year change in % and the second column the period for which data are available. 2. Payment cards of households (which account for the bulk of payment card turnover) and of businesses. *Sources:* Cement distributors, Federation of Trade and Services, Housing Financing Fund, Land Registry of Iceland, Motor Dealers' and Services Federation, Statistics Iceland and Central Bank of Iceland.

Private consumption

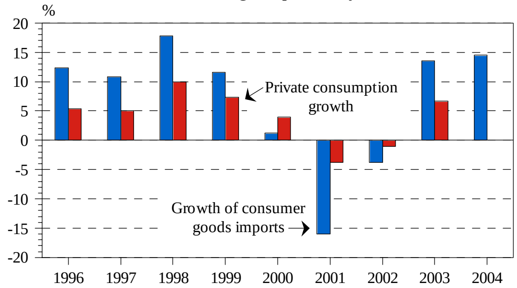
In June the Central Bank forecast 5½% growth in private consumption in 2004. The outlook now is for a considerably larger increase. Private consumption grew by 7.2% year-on-year in the first half of 2004. For the June forecast to hold, second-half private consumption growth must not exceed 4%. Such a sharp slowdown seems unlikely in light of indications for Q3 and easier access to consumer loans. The increase in motor vehicle registrations has slowed slightly, but imports of consumer goods grew at broadly the same rate in Q3 as early in the year. In Q4 the impact of greater credit supply and lower mortgage interest rates will stimulate private consumption further.

As pointed out above, greater supply of credit to households at lower interest rates implies a considerable easing of their financial conditions. This may prove to be a crucial factor, because recent private consumption growth has been sustained by ongoing household debt accumulation and the heightened wealth effect caused by rising asset prices. Real wages rose 1.4% year-on-year over the first ten months of 2004 and employment has apparently contracted (see later). However, the most recent labour market data suggest that labour demand has been picking up in the last quarter of the year. Per capita real disposable income is estimated to increase by 3% year-on-year in 2004. Growing private consumption during the year is therefore clearly not only driven by increased disposable income, but by households' expectations of higher future earnings and easier debt service, the result of lower interest rates and longer debt maturities – at the same time as assets have gained value, increasing their mortgageability.

Chart 17

Growth of consumer goods imports and private consumption 1996-2004

Volume change on previous year

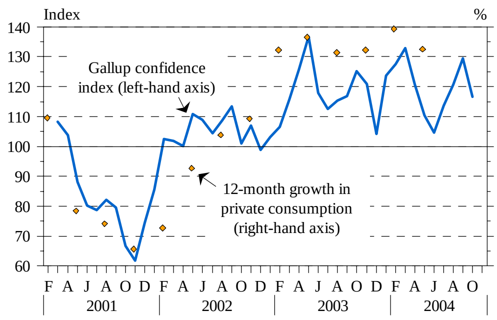


Source: Statistics Iceland.

Households are fairly optimistic about the future, judging by Gallup's consumer confidence index. Although this index has dipped twice during 2004 it is still running high. Such a climate makes households more willing to increase their debt – as shown by the 14% growth in lending by the main pillars of the credit system, i.e. DMBs, the HFF and pension funds, over the twelve months to the end of September. Growth picked up even more speed in October, since at the end of the month the twelve-month growth in household lending by DMBs amounted to 30%.

Chart 18

Private consumption growth and the consumer confidence index February 2001 - October 2004



Sources: IMG Gallup and Statistics Iceland.

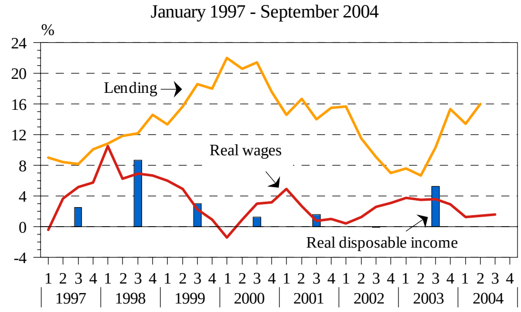
Besides easier access to credit and lower interest rates, households have been given added incentives and scope for borrowing because of rising housing prices, especially in the Greater Reykjavík Area. According to the Land Registry, the twelve-month rise in price per m² of residential housing in and around the capital was almost 14% in October. Prices of detached housing have increased the most in recent months, rising by more than one-fifth over twelve months and 6% in the past three months. It can be inferred that the banks' new mortgage loans are having an effect here, since unlike HFF loans they are only capped by collateral coverage and an evaluation of the buyer's debt service capacity. Bank housing loans facilitate mortgage equity withdrawal because, contrary to HFF loans, they do not require a property transaction to take place. The more that housing prices rise, the more equity that households can withdraw. Another factor is the wealth effect – both housing prices and equity prices have soared during the year, although the latter partly unwound in October.

All these factors highlight the prime conditions for private consumption growth at the moment. While the primary school teachers' strike may have acted as a temporary brake, the growth drivers probably weigh heavier, so there are no grounds to expect significantly lower private consumption in the second half of 2004 than in the first half of the year. Private consumption is now forecast to grow by 7% over the year.

Chart 19

Real wages, disposable income and lending to households

January 1997 - September 2004



Sources: Statistics Iceland, Central Bank of Iceland.

Outlook for buoyant private consumption over the next two years

On a two-year horizon, it seems beyond doubt that private consumption will continue to grow rapidly. Private consumption is forecast to grow by 9½% in 2005 and just under 7% in 2006. Many factors are at work. Households have responded promptly to the banks' mortgage loans and most indicators suggest that they will continue to refinance their debt in the years to come and lengthen the maturities of their outstanding debt when they do so. The repayment burden on outstanding debt will therefore ease considerably. Households will be left with more disposable income after debt service and probably spend most of it on private consumption.

If forecasts for the current year hold, private consumption will have increased altogether by 14% in real terms in 2003 and 2004. At the same time, household housing debt will grow by almost 10% in real terms. Household housing wealth has risen by even more in real terms, or 22%. This hefty improvement

Box 2 The impact of the banks' new mortgage loans on private consumption

As described in Box 1, major changes have taken place in mortgage supply this year. In the spring, the Central Bank produced an in-depth analysis of the economic impact of plans by the Housing Financing Fund (HFF) to offer a 90% loan-to-value ratio and raise its maximum loan amounts.[1] The study assumed an increase in the maximum loan amount from 9.2 m.kr. for secondary market housing and 9.7 m.kr. for new housing to 15.4 m.kr. for both categories, an increase in the loan-to-value ratio from 65-70% to 90% of purchase price (and from 85% to 100% of fire insurance value), a requirement that the loan would be on a first priority pledge, and shortening of the maturity of maximum loans from 40 to 30 years. Certain assumptions need to be changed before the same methodology can be applied to evaluate the impact of the commercial banks' recent mortgage loan offers. The banks do not specify absolute loan ceilings, so this restriction does not apply, but set a maximum loan-to-value ratio of 80% of purchase price (except in the case of 100% loans, which are capped at 25 m.kr.). Bank mortgages are also limited to 100% of fire insurance value (but this can be exceeded for 100% mortgages by buying extra insurance cover). The banks insist on a first priority pledge for their new loans, which are generally for a term of 40 years.

In its report, the Central Bank assumed that the average mortgage term would be shortened from 34 to 29 years. The commercial banks' new mortgage offers, however, are not likely to result in a shortening of the average mortgage term, since bank mortgages are for 25 and 40 years, like previous HFF loans, and not for 30 years as the new HFF loans were expected to be. Shorter maturities have a constrictive effect, since other things being equal they will increase the debt service burden and thereby dampen private consumption. The new bank loans do not have this effect, so they will probably serve to ease the debt service burden, despite increased borrowing. Since these loans can be used for refinancing without a housing transaction taking place, they are likely to lead to even longer maturities.

The HFF's planned changes in its lending arrangements were expected to leave only 2.5% of homebuyers' debt service capacity unused (compared with 7% previously) due to loan ceilings and priority pledge requirements. Virtually no such scope can be expected to remain now, since the 100% fire insurance value factor will probably cap mortgages in most cases, regardless of whether the loan-to-value ratio is 80% or 90%.

The report expected that the average amount of new loans would increase by roughly 5%, corresponding to a 2½% rise in average household debt at the new equilibrium level. At a cautious estimate the new bank loan offers will increase the average amount of new loans by around 7½%, in particular since housing transactions are no longer a precondition for borrowing.

On the basis of these assumptions, and allowing for the transmission of the new loans through disposable income, interest rates, access to credit and the wealth effect, the outcome is that private consumption will grow over the next three years by a total of 1½-2 percentage points more than would otherwise have been the case, and that the main impulse will be delivered during the first year under these new arrangements.

1. Central Bank of Iceland, *Efnahagsleg áhrif breytinga á fyrirkomulagi lánsfjármögnunar íbúðarhúsnæðis* (The economic impact of changes in housing financing arrangements), report to the Minister of Social Affairs, June 28, 2004.

in their equity will drive households' capacity and propensity to spend over the forecast period. A substantial part of the expected growth in private consumption over the next two years can be traced to greater household wealth. The new mortgage arrangements have played a major role in this trend. At a cautious estimate, the new arrangements will boost private consumption by 1½-2 percentage points more than otherwise over the next two years. Besides being transmitted through higher housing prices and thereby driving up household wealth, the changes in the mortgage market are reflected in easier access to credit and lower long-term interest rates, and have an indirect effect on disposable income (see Box 2).

Labour demand is also poised to firm up over the forecast period (see the analysis of the labour market below). Labour participation and employment should rise and wage drift, which has been subdued recently, is likely to increase. Income from employment should increase faster over the next few years than in the recent term. Other effects will be delivered in 2005 by cuts of 1 percentage point in personal income tax and 2 percentage points in the higher-income tax surcharge, coupled with a 5½% increase in the tax-free personal allowance. In 2006 the income tax rate will be reduced by a further 1 percentage point, and the personal allowance will be raised by 5%. Child benefit will also go up considerably in that year. All told, lower taxes and faster-growing income from employment will cause disposable income to increase faster in 2005 than this year. Per capita real disposable income is expected to grow by almost 4% in 2005 and 2½% in 2006.

According to the current forecast, private consumption will increase at a considerably faster pace than in the June forecast of just over 6% in 2005 and just over 5% in 2006. Most of the difference lies in the new credit market climate and the associated wealth effect, as described above, while plans to step up investments for the aluminium industry by even more than originally envisaged will also have an impact (see later).

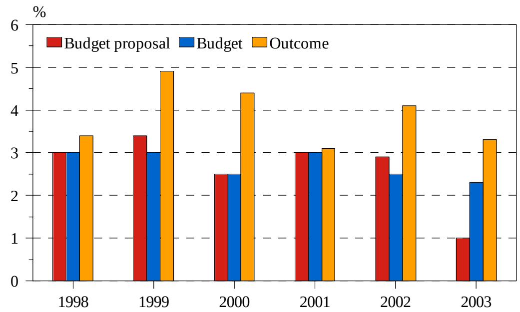
Public consumption

Public consumption looks set to increase by roughly 1½% this year, broadly in line with the assumption in the Ministry of Finance's national budget from the beginning of October. However, the current figure incorporates the effect of the teachers' strike, which will reduce public consumption expenditure in 2004 and increase it in 2005. It should be pointed out that revised accounting procedures make this year's expenditure figures exceptionally difficult to interpret.

According to estimates in the budget proposal for 2005, underlying public consumption growth will amount to 2%. The Central Bank forecast assumes a rather larger underlying increase, at 2.5% in all, divided between local government (3.0%) and central government (2.3%). One reason for deviating from the budget proposal assumptions for underlying public consumption growth is that expenditure figures for the year seem to indicate that both outlays and revenues will overshoot the estimates made this autumn. Also, it seems a rather unrealistic target to keep the increase in public consumption growth to within 2% in 2005 and 2006 when substantial output growth is expected, especially given that public consumption by local government has increased more than 5% annually on average since 1998, and almost 3½% by central government and the welfare system. Furthermore, the budget proposal's general 1% cost-efficiency demand for most government agencies must surely be regarded as quite weak, since it is a complicated matter to fulfil such decisions. Finally, public consumption growth has tended to be underestimated at this time of year in the past, by an average of 1.2% over the period 1998-2003, as shown in Chart 20. Thus the Central Bank forecasts that public consumption will increase by just over 3% in 2005 and 2½% in 2006.

Chart 20

Public consumption growth
– forecasts and outcomes 1998-2003



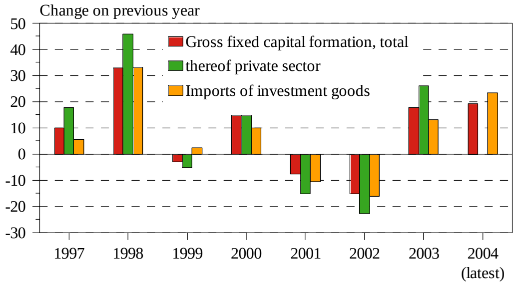
Sources: Ministry of Finance, National Economic Institute (until 2002) and Statistics Iceland.

Gross fixed capital formation

Growth of gross fixed capital formation is firmly shaped by the increasing momentum behind investments in power stations and the aluminium industry. In June the Central Bank forecast that gross fixed capital formation would increase by 17% in 2004, which appears likely to hold. In the first half of 2004, gross fixed capital formation grew 19% year-on-year. The rate in Q3 was probably broadly the same, although the increase in imports of investment goods has slowed down. No breakdown of quarterly data is available showing the respective shares of businesses, public sector and households in gross fixed capital formation, but it is clear from Treasury expenditure figures that public sector investment has been shrinking over the course of the year and the current forecast assumes a contraction in the second half. Business investment, on the other hand, is soaring, due to construction of power stations. Most indicators also suggest that residential housing investment will increase by at least as much as in 2003.

Chart 21

Gross fixed capital formation and imports of investment goods[1] 1997-2004



1. For 2004, gross fixed capital formation growth is shown for the first half-year and growth in imports of investment goods until the end of September. Private sector data are not available for 2004. *Source*: Statistics Iceland.

Investment is forecast to grow by more than 20% in 2005 and almost 3% in 2006. Next year's investment level is far higher than was forecast in June, while the figure for 2006 is somewhat lower. More investment in 2005 is largely the result of new plans for aluminium-related projects and increased housing investment, partly driven by the new domestic mortgage market climate and its impact on housing prices, which provide a further stimulus to invest. The lower investment level in 2006 than forecast in June is primarily caused by the higher level next year.

Business investment

The changes in the forecast for businesses' gross fixed capital formation this year and in 2005 are largely explained by investment in power stations and aluminium smelters. These projects are now in full swing. Work is in progress on the Kárahnjúkar hydropower station in east Iceland and geothermal stations in Hellisheiði and Reykjanes (southwest Iceland). Construction of Alcoa's Fjarðaál smelter in Reyðarfjörður and the Norðurál smelter expansion has begun. Total investment on these projects will be as much as 250 b.kr. In 2004, the total investment will amount to 38 b.kr., which represents 18% of total gross fixed capital formation over the year, and almost one-third of total business investment.

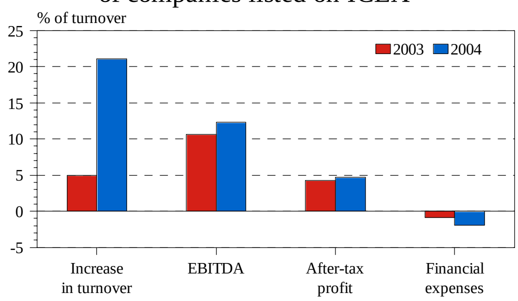
Investment in these projects will peak over the next two years, at 86 b.kr. in 2005 and more than 80 b.kr. in 2006. Further expansion at Norðurál is the main change that has occurred in aluminium-related investments. Norðurál now plans to expand to 122 thousand tonnes per year (tpy), instead of the former 90 thousand tpy (see Box 3). The additional investment spurred by this 32 thousand tpy expansion is expected to amount to 10½ b.kr. and will be made over the next two years.

There are various indications that increases in investments by other sectors have been increasing and will gain pace next year. The investment index, compiled from a survey conducted twice-yearly by IMG Gallup for the Central Bank and Ministry of Finance (most recently in September), is at its highest value since these surveys were launched in September 2001. Indices of profits and staff numbers show the same pattern. To some extent this optimism may be connected with projects related to the aluminium industry investments, e.g. among transport and consulting companies. Heavy investment has also been made in various services and the hotel and catering sector in recent times, accounting for roughly one-fifth of business investment in 2003 and increasing this year.

Vigorous growth has characterised the activities of companies listed on Iceland Stock Exchange (ICEX) this year. Nine-month interim results from 28

Chart 22

Third-quarter EBITDA, profit and turnover of companies listed on ICEX[1]



1. Excluding the finance and insurance sector. Figures are expressed as ratio of turnover except for the 'increase in turnover' which is annual increase. *Source:* Central Bank of Iceland.

Box 3 Revised plans for smelter and power station construction

In the past few weeks the scenario for investments in aluminium smelters and power stations has changed in two respects. Norðurál has decided to boost its production capacity by more than previously planned, with an additional investment of just over 10½ b.kr. spread over 2005 and 2006. Alcoa has also revised the cost and development schedules for its aluminium smelter in Reyðarfjörður, east Iceland. While estimated total cost has not changed substantially from previous plans, investment will be stepped up next year with a corresponding reduction in 2007. Overall, the scale of investment in these projects will increase considerably in 2005 and slightly in 2006, but contract in 2007.

In the beginning of November Norðurál concluded an agreement with Suðurnes Heating (Hitaveita Suðurnesja, HS) and Reykjavík Energy (Orkuveita Reykjavíkur, OR) on expanding its smelter at Grundartangi, west Iceland, by 32 thousand tonnes per year (tpy) over and above the 90 thousand tpy expansion that had already been agreed. When this new capacity goes on stream in autumn 2006, total production capacity at the smelter will be 212 thousand tpy. Talks are also in progress with the same utilities on further power sales to boost Norðurál's production capacity by a further 8 thousand tpy in 2006.

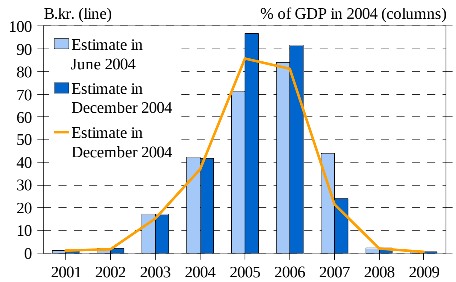
Norðurál is also mulling a further 40 thousand tpy expansion over the period 2007-2009. If this project materialises, the smelter's total capacity could increase to as much as 262 thousand tpy towards the end of the present decade. Preparations and talks with OR and other authorities are under way and a conclusion is aimed for within 4-6 months.

Estimated cost of the expansion that has already been agreed is 7.5 b.kr., of which 4.5 b.kr. will be invested next year. The manpower requirement during construction will increase by an estimated one-third, or 140 man-years, compared with earlier plans.

The bulk of power for the plant will be supplied by HS. Geothermal harnessing that it is currently undertaking on the Reykjanes peninsula will provide up to 100 MW. Since this figure is some way above previous estimates, there is more scope for power sales to Norðurál than originally assumed. HS's power station at Svartsengi will be expanded by 20 MW with an investment estimated in the region of 3 b.kr. Total investment in the additional 32 thousand tpy capacity at Norðurál and harnessing the power to supply it is estimated at 10½ b.kr., while the total cost of expanding Norðurál from 90 to 212 thousand tpy is put at 32 b.kr., and the extra power facilities at just over 20 b.kr.

Aluminium and power sector investments: total investment cost 2001-2009

Construction of Fjarðaál smelter, expansion of Norðurál smelter and related power facilities



Source: Central Bank of Iceland.

companies listed on ICEX[4] show turnover increasing by more than one-fifth year-on-year, and improved EBITDA of almost 13% compared with 11.5% in 2003. Profit after taxes remains broadly unchanged even though the companies' financial items are much more negative than last year. Cash from operating activities has grown by almost one-third year-on-year. Profitability is up in all sectors apart from fisheries, where EBITDA has shrunk from almost 22% to 18% and profit from 10% to 7.4%, due to negative financial items.

Corporate sector financial conditions have been very favourable for a long while, especially interest rates on foreign borrowing. Foreign short-term rates are still close to their lowest point for half a century and premia have generally been heading downwards,

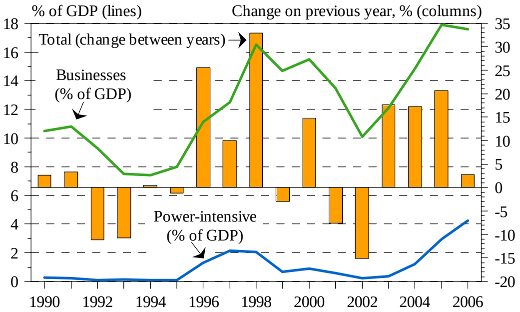
4. Excluding financial institutions and insurance companies.

as mentioned above.[5] Despite a lack of information about average interest terms of Icelandic businesses, they are clearly easy from a historical perspective, since lending to the corporate sector has been soaring. Lending to businesses by the main pillars of the credit system, i.e. DMBs, the HFF and pension funds, increased by 18% over the twelve months to the end of September. Such intense growth, along with other indicators, suggests sizeable levels of investment.

The Central Bank forecasts that business investment will increase by more than 29% in 2005 but only just over 2% in 2006, as a result of the base effect of huge investment in the preceding year. According to the forecast, gross fixed capital formation in 2006 will equal roughly 27% of GDP. Over the past two decades this ratio has measured around 20%, although it reached 25% in 1998 and 2000. In the 1960s and 1970s, however, it ran at around 30%.

Chart 23

Gross fixed capital formation of businesses and power-intensive industries 1990-2006



Sources: Statistics Iceland, Central Bank of Iceland.

A substantial share of business investment is directly connected with projects for the aluminium industry, as mentioned earlier. Business investment excluding projects for power-intensive industry, ships and aircraft is expected to grow by only just over 4% next year and 2% in 2006. According to the forecast, some 30% of gross fixed capital formation in 2005-6 is connected with construction of aluminium smelters and power stations.

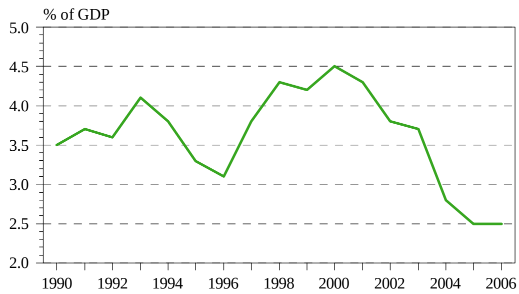
5. In the US, corporate spreads have dropped by 1-1½ percentage points from their peak in 2002.

Public sector investment

Plans to cut back construction programmes which focus on relatively large and clearly delimited projects are more credible than general plans for trimming down public consumption. Thus the present forecast follows the investment plans described in the budget proposal and the reports accompanying it, and the long-term plans of municipalities, even though this produces a fairly low figure for public sector investment compared with recent times. Public sector investment is expected to contract by more than 18% this year and 4% in 2005, and remain unchanged in 2006.

Chart 24

Public sector investment 1990-2006[1]



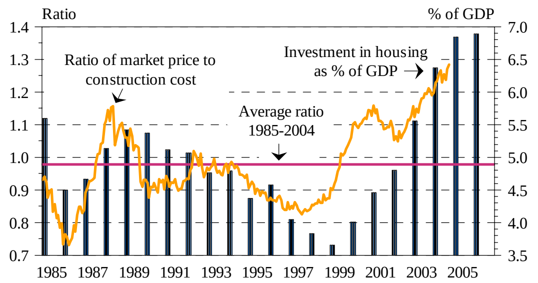
1. Change in definition in 1997 caused the ratio to rise by 0.5 percentage points. Central Bank forecast for 2004-2006. *Sources:* Statistics Iceland and Central Bank of Iceland.

Residential housing investment

Residential housing investment was depressed in the second half of the 1990s. In spite of rapid growth in disposable income over the period 1997-1999, gross fixed

Chart 25

Housing market prices, construction cost and housing investment 1985-2006[1]

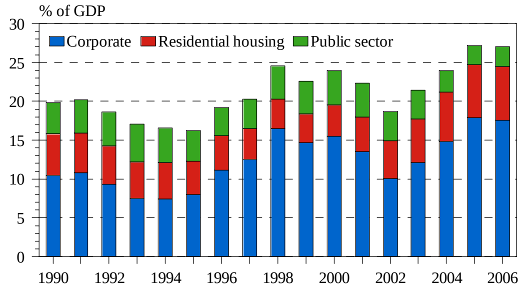


Index for market prices of apartments in the Greater Reykjavík Area, as a ratio of the construction cost index. Both indices normalised to the average for 1985-2004. Central Bank forecast for investment in housing 2004-2006. *Sources:* Land Registry of Iceland, Central Bank of Iceland.

capital formation did not begin to increase on any scale until around the millennium, after a considerable rise in housing prices, but since then housing investment has been steadily growing as a proportion of GDP. As Chart 25 shows, the rise in housing prices in excess of construction cost has been one of the main drivers of residential investment. Housing prices in the Greater Reykjavík Area have outstripped the increase in the general price level almost continuously since 1997, by a total of roughly 50%. Residential housing investment grew in step with the widening gap between construction cost and market prices. In 2003, housing investment rose by 13% at constant prices and amounted to 5½% of GDP.

Chart 26

Investment as % of GDP 1990-2006[1]



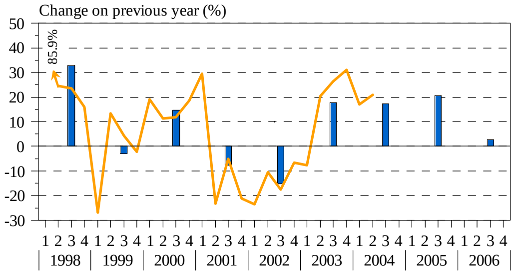
1. Central Bank forecast for 2004-2006.
Sources: Statistics Iceland, Central Bank of Iceland.

Developments this year have followed the same course. While disposable income will grow more slowly than in 2003, housing prices have continue to rise rapidly. In October, the cash price of apartments in the Greater Reykjavík Area had increased by almost 14% year-on-year. Easier access to mortgage loans and lower interest rates have driven housing demand and the overall impact could be hefty, as explained in Box 2. Prices are therefore likely to continue upwards, spurring more construction in the years to come.

Chart 27

Total investment growth 1998-2006

Line indicates change on same quarter in previous year.
Columns indicate annual changes.[1]



1. Central Bank forecast for annual changes in 2004-2006.
Sources: Statistics Iceland, Central Bank of Iceland.

Housing investment is forecast to increase by 13% year-on-year in 2004. However, this estimate is partly based on more fragmentary information than was at hand when the HFF was the sole provider of the bulk of housing loans. It is known that the banks have captured a large share of the HFF's lending, but no breakdown is available showing how these funds are allocated, i.e. to refinancing, secondary market purchases, new housing or renovations, nor how much has been lent to construction contractors.

Investment in housing is forecast to grow by more than 8% in 2005 and almost 6% in 2006. This forecast assumes growing real disposable income over the next two years and a strong impulse to housing demand from easier credit and lower interest rates. Housing prices will therefore continue upwards for some time although the pace will slow down over the forecast period. Unlike many metropolitan areas in other countries where prices have also been soaring in recent years, the Greater Reykjavík Area still has a relatively large amount of undeveloped land. This should reduce the probability that the prices will spiral to the extremes sometimes seen elsewhere. When the gap between market prices and construction cost begins to narrow again, the incentive for investment will diminish and it will shrink back. Assuming that the policy interest rate remains unchanged, this is unlikely to happen over the next two years – but demand developments may be sensitive to the interest rate trend.

Imports

Brisk rises in private consumption and investment this year are reflected in the fastest import growth since 1998 (see Chart 28). The relatively strong króna and upbeat outlook for economic growth over the next few years have stimulated imports, in particular of consumer goods. A large proportion of investment good imports is probably associated with projects for the aluminium industry. This component will grow even further over the next two years.

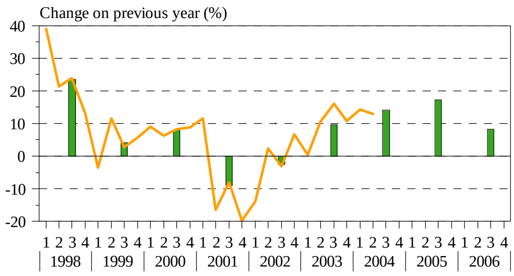
In June, the Central Bank forecast import growth of almost 12% in 2004. According to the national accounts, growth ran higher in the first half of the year, at 13½%. Merchandise import data for Q3 indicate a marginally lower rate of growth than in the first half, although it was still robust. Imports of consumer goods have been growing at a steady rate of 14-15% so far this year, while imports of investment goods have decreased for the time being, but will presumably pick up again when investments for the aluminium industry gather pace.

The service account for Q3 is not available at the time of writing, but in the first half of the year tourism expenditures rose by 26% year-on-year at constant prices, and travel and transport expenditures by almost one-quarter.

Chart 28

Import growth 1998-2006

At constant exchange rates. Line indicates change on same quarter in previous year. Columns indicate annual changes.[1]

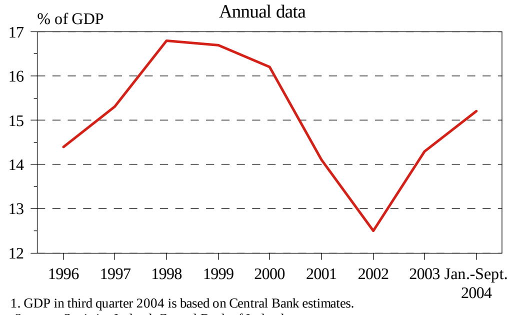


1. Central Bank forecast for annual changes in 2004-2006.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 29

Imports of consumer and investment goods 1996-2004[1]

Annual data



1. GDP in third quarter 2004 is based on Central Bank estimates.
Sources: Statistics Iceland, Central Bank of Iceland.

Judging by developments in the first half of the year and an economic climate conducive to private consumption growth in the closing months, imports will probably increase by rather more in 2004 than the Central Bank forecast in June – the current forecast is just over 14%. Growth will speed up in 2005, to 17%, with increases in private consumption driven by the wealth effect and easier credit climate, and in imports for the aluminium industry. In addition, the króna is expected to be on average rather stronger in 2005 than this year. Sizeable import growth of more than 8% is therefore forecast for 2006, although imports will grow at a slower rate than in 2005.

GDP growth and the output gap

In June, the Central Bank forecast output growth of 4¼% in 2004. Growth was considerably faster in the first half of the year, at 5½%. Based on the most recent data, output for the year as a whole is expected to remain broadly in line with that trend, at just over 1 percentage point more than was forecast in June.

If the above forecast for increased national expenditure and external trade developments holds, output growth next year will be just over 6%, which is 1½ percentage points more than was forecast in June. At the same time, national expenditure is expected to increase by almost 11%, or more than 3 percentage points beyond the June forecast. This would be the highest rate of national expenditure growth since 1987. Firm growth is also expected in 2006, at just under 5%, which is half a percentage point more than forecast in June. The forecast increase in national expenditure remains unchanged.

Outlook for rapid build-up of macroeconomic pressures in the coming years

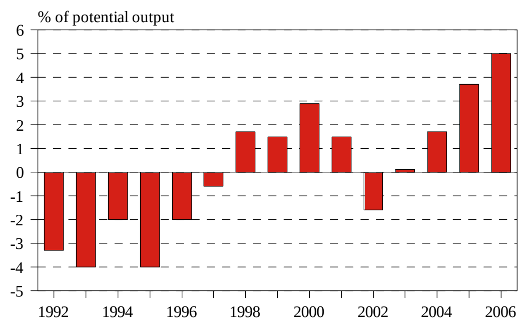
Growth over the next two years will obviously be well beyond the production capacity of the economy. According to revised assessments of demand and production capacity in recent years, the estimated output gap has been revised downwards to 1½% in 2001 and the slack in 2002 to 1½%, closing completely in 2003.

Output growth outstripped the estimated growth in potential output again this year. On the basis of the assumptions in the macroeconomic forecast, including an unchanged exchange rate and policy rate, the economy is heading for a substantial positive output gap over the next few years, at almost 2% in 2004, almost 4% in 2005 and roughly 5% in 2006, which is 1-3 percentage points more than forecast in June. A number of reasons underlie this large change, e.g. lower long-term interest rates and easier access to credit for households, which affect both private consumption and investment, as pointed out above. Demand for housing has increased and is driving up housing prices, which in turn spurs investment in residential housing. Greater housing wealth, lower interest rates, higher loan-to-value ratios on mortgages and increased scope for refinancing – and thereby mortgage equity withdrawal – all boost private consumption. New details of the Norðurál smelter expansion have also been taken into account, and its production capacity is now assumed to increase by 122 thousand tpy instead of 90 thousand tpy. Furthermore, the króna is stronger in the current forecast than it was in June.

The role of the output gap forecast two years ahead is to be able to assess the demand impulse to inflation. Given the heavy investments for the aluminium industry at the same time as household credit has become much more accessible, the wide output gap shown here appears quite plausible. As it happens, an output gap of a similar size has been recorded several times, e.g. almost 5½% in 1980 and 4½% in 1987. A tighter economic policy stance than assumed in the forecast will narrow the output gap and thereby ease inflationary pressures.

Chart 30

The output gap 1992-2006[1]



1. Central Bank forecast for 2004-2006. *Source:* Central Bank of Iceland.

V Public sector finances

Substantial overshoot in central government revenues and expenditure in 2003

Higher inflation and more economic activity than assumed in the budget for 2003 generated much more tax revenue last year than had been forecast. Instead of a projected 3% increase year-on-year, the outcome was over 8%. Interest revenues were lower than estimated, possibly due to cautious accounting principles. Privatisation of the state's remaining shares in Búnaðarbanki and AVI (Iceland Prime Contractor) also brought the Treasury 11 b.kr. more than their book value.

Expenditures also far outstripped the original budget estimates, since significant outlays were decided, some of them in an unusual supplementary budget in March. Regular expenditure was supposed to rise by 4% according to the budget, but the outcome was 11%. Just over half a percentage point of the overshoot can be traced to higher inflation, but the rest to additional outlays.

According to data from Statistics Iceland based on the national accounts for 2003, Treasury revenue increased from 33.0% to 33.6% of GDP, and outlays from 33.6% to 35.4%, the highest ratio since at least 1980. By this yardstick, the Treasury deficit increased from 0.6% to 1.8% of GDP.

Outlook for Treasury revenue and expenditure overshoot in 2004

In the budget for 2004, the Treasury surplus was estimated at 6.7 b.kr. Regular revenues were supposed to rise by just over 5% from the estimate given in the supplementary budget for 2003, in pace with price developments and GDP growth. No privatisation proceeds were expected during the year. Regular expenditures (i.e. with written-off tax revenues and pension fund contributions close to average) were expected to decrease by ½%, implying a reduction of 3% in real terms. Extensive cutbacks in government spending were announced, focusing mainly on transport and communications, the welfare system and general employment affairs, the areas that had risen most in 2003. As a proportion of GDP, regular expenditures were supposed to decrease by almost 2 percentage points to broadly the same level as in 2002. Regular revenues aimed to increase in pace with GDP growth.

The regular supplementary budget proposal currently before parliament adds 8 b.kr. to estimated revenues, mostly from VAT, corporate income tax and capital income tax. Tax revenues are expected to grow by almost 11% from 2003. Estimated interest revenues are 2 b.kr. lower than the budget figure due to more cautious accounting principles, but will still rise by 2 b.kr. year-on-year. This reduction probably heralds lower tax revenue write-offs in the future. Revenues excluding privatisation proceeds are expected to be 10% higher in 2004 than in 2003, while the budget aimed for 5%.

New expenditure authorisations in the supplementary budget amount to 6 b.kr., in addition to existing unused authorisations which will be invoked to the tune of around 1 b.kr. The largest item is a 2 b.kr. increase in outlays on the health service and 3 b.kr. to the welfare system, in particular unemployment insurance and mortgage interest rebates. Consequently, expenditures are scheduled to increase by 2½% year-on-year instead of the ½% decrease assumed in the budget. However, as a result of greater output growth and higher inflation, revenues and expenditure are expected to decrease as a proportion of GDP. The rise in revenue and expenditure forecasts compared with the budget figures is broadly the same as the increase in nominal GDP over and above the underlying budget assumptions. Thus the ratio of revenues and expenditure to GDP is still expected to decrease by the same amount as assumed in the budget.

Tax revenues until the end of September were 15½% higher than for the first nine months of 2003 and expenditure 6-7%, after adjustment for changes in Treasury accounting principles. If this rate of increase is sustained until the end of the year, both revenues and expenditure will overshoot their respective targets, but the regular Treasury balance will be broadly as planned. Other indicators suggest, however, that the overshoot on expenditure could be somewhat greater than on revenues. If so, the regular Treasury result will be lower than aimed for.

Main features of the budget proposal for 2005 are tax cuts and across-the-board cost restraint

The two main features of the budget proposal for 2005 are tax cuts and across-the-board cost restraint. Personal income tax will be reduced from 25.75% to 24.75% and the tax-free personal allowance will be raised by 3%, which corresponds to a 5.6% increase in the tax-free income ceiling if municipal taxes remain unchanged. Further tax cuts are planned for 2006 and 2007. Targets are set for the real growth of public consumption and current transfers of no more than 2% and 2.5% respectively per year until the end of the government's term of office (in 2007). According to the budget proposal the Treasury surplus will increase from just under 8 b.kr. in 2004 to more than 11 b.kr. in 2005, or from just under 1% of GDP to just over 1%. The national accounts presentation will produce a larger surplus improvement, rising from 0.8% of GDP in 2004 to 1.6% in 2005.

Revenues are set to increase by 5½%, or 1½% deflated by GDP prices. As a matter of caution, no privatisation proceeds are assumed for 2005. As a proportion of GDP, revenues will decrease from just over 33% to roughly 32%, partly due to the 5% GDP growth forecast by the Ministry of Finance. The cut in the personal income tax rate means that Treasury revenues from this source will remain broadly unchanged despite an estimated rise in economy-wide wage earnings of more than 8%. Nominal revenues from taxes on goods and services will increase by 8½%, which is a cautious estimate given the Treasury forecast of nominal year-on-year increases amounting to 9½% for private consumption and 11½% for national expenditure in 2005.

Expenditures are scheduled to rise by 4½%, or ½% deflated by GDP prices, but come down from just over 32% of GDP to just under 31% in 2004 and 2005 respectively. Construction projects to the tune of roughly 2 b.kr. will be deferred, mostly within the current transport infrastructure programme. Outlays to other areas will remain broadly unchanged or increase in line with mandatory requirements for service levels, for example in the education and health sectors.

Tax-cuts and long-term programmes

The budget proposal for 2005 is presented with a medium-term programme for 2006-2008. This forecasts that planned income and other tax cuts will bring down tax revenues as a proportion of GDP by 0.8 percentage points in 2004 and 2005, and by 1.2 percentage points each in 2006 and 2007, then leave them unchanged in 2008. On the basis of these ratios, the tax cuts can be estimated at just over 30 b.kr. per year by 2007. Household disposable income and consumption will increase correspondingly. Since Treasury revenues from indirect taxation have amounted to around 28% of household disposable income in recent years, some 10 b.kr. is likely to be returned to the Treasury in the first-round effect.

The government is intent on keeping the increase in total central government expenditure, deflated by GDP prices, within ½% and 1% in 2005 and 2006 respectively. Central government construction activity will be kept to a minimum. Due to output growth, expenditure as a proportion of GDP will decrease by 1 percentage point. Expenditure is expected to increase again when investments for the aluminium industry slow down in 2007-2008 and postponed central government investment plans are relaunched. Child benefits will increase stepwise in 2006-2007 by a total of almost 2½ b.kr.

The Treasury surplus in 2005 and 2006 is expected to amount to roughly 1% of GDP, followed by deficits of 1% and 1½% in 2007 and 2008 respectively. Accordingly, net Treasury debt should decrease from 19½% of GDP to below 16% over the period 2003-2006. The debt ratio will then rise again to 18½% with the deficits in 2007 and 2008, according to Ministry of Finance's assumptions.

Local government finances have improved

Estimates suggest that local government finances will be much less volatile than Treasury finances. Statistics Iceland figures for 2002 and preliminary figures for 2003 show municipalities to be in balance in both years. The Ministry of Finance forecasts that this will continue over the period 2004 to 2006. Local government revenues and expenditure should decrease relative to GDP, from 12.8% to 12% between 2003 and 2006. Their tax revenues will grow in pace with GDP. Financial income will drop from the sizeable levels recorded in 2002 and 2003. The Ministry of Finance forecasts 2% annual growth in the municipalities' public consumption. This is at odds with the trend in recent years, which has been characterised by growing local government activity that drove up their private consumption by an average of just over 5% annually over the period 1998-2003.

The Central Bank forecasts stronger public finances than in the budget proposal, despite higher public consumption expenditure ...

The budget's plans for restraint are targeted at most central government agencies. Such a general remit complicates the implementation of cutbacks, particularly in a robust growth climate. Tax cuts also create uncertainties, partly involving taxpayers' responses to them.

The Central Bank forecasts that national expenditure will grow faster in real terms than projected in the budget proposal, by up to 3½ percentage points more in 2005. Accordingly, Treasury revenues from private sector spending will grow by much more than Treasury costs, leaving a stronger balance than projected in the budget proposal. However, this is entirely due to automatic stabilisers within the tax system, and not to active public sector economy policy measures. In such an expansionary climate, these automatic stabilisers have a much sharper impact than the additional public consumption assumed in the Bank's forecast. The Treasury surplus in 2005 could therefore amount to 5-10 b.kr. more than estimated in the budget proposal. On a national accounts basis, the Treasury surplus could run at 20 b.kr. more each year in 2005 and 2006, according to the Central Bank forecast. As a proportion of GDP, this surplus would be comparable to the one at the peak of overheating in 1998-2000.

The Central Bank's macroeconomic forecast assumes that underlying growth in public consumption at the local government level is 3%, but because of the primary school teachers' strike this will end up as a contraction of roughly ½% this year. Higher charges and real estate valuations that have been announced for the new year will boost local government finances relative to these estimates, but will be offset by higher costs under wage agreements with teachers.

Despite assumptions of higher public consumption, the outlook for local government finances over the next two years is somewhat brighter in the Central Bank's macroeconomic forecast than in the budget proposal. However, the surplus will be well within ½% of GDP for both years, since local government tax revenues are not as cyclically sensitive as Treasury revenues. Surpluses on operations and investments can be expected to produce some reduction in local government debt, which was estimated at just under 7½% of GDP at the end of 2003.

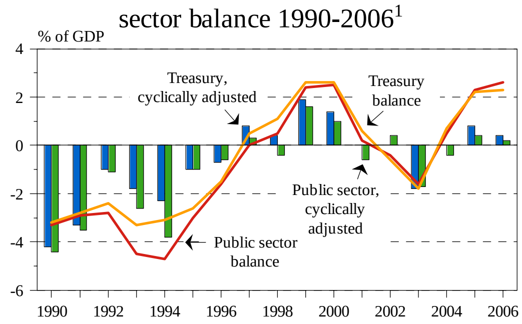
... but the cyclically adjusted public sector result is considerably weaker than during the last expansionary episode

Rather than looking at the measured surplus, a more relevant measure of the fiscal contribution to economic policy implementation is the cyclically adjusted surplus. In an upswing, public sector revenues automatically increase, as pointed out above. The Central Bank's macroeconomic forecast shows a weaker adjusted surplus for central government and the public sector as a whole than does the budget proposal, even though the Central Bank forecast indicates a higher measured surplus.

Chart 31 shows the Treasury balance against the cyclically adjusted balance of central government and the public sector as a whole. Treasury revenues are assumed to increase by 1.1% for each 1% rise in GDP. Lower unemployment benefit payments during an upswing are also taken into account. Local government finances are less dependent on the economic cycle. Measured in this way, the Treasury appears to move into balance in 2005 after hefty outlays in 2003. The cyclically adjusted surplus will be 0.8% of GDP, which is considerably less than the estimated 1.6% national accounts basis figure used in the budget proposal, or the 2.2% surplus forecast by the Central Bank. The corresponding cyclically adjusted surplus for 2006 would be 0.4% of GDP, compared with a nominal surplus of 2.3%. The public sector result develops along broadly the same lines.

Chart 31

Treasury balance and cyclically adjusted central government and public sector balance 1990-2006[1]



1. Central Bank estimates for 2004-2006. *Sources:* Statistics Iceland, Central Bank of Iceland.

The cyclically adjusted result is considerably weaker than during the expansionary episode in 1999 and 2000, when it lay in the range 1½-2% of GDP for the Treasury and 1-1½% for the public sector as a whole. This is a cause of some concern, because public sector cost restraint proved insufficient at that time.

VI Labour market and wage developments

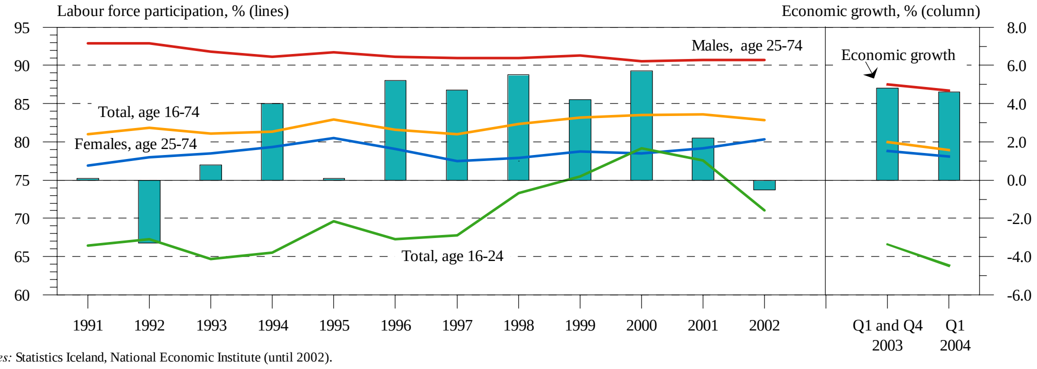
Employment continued to contract in Q3

According to Statistics Iceland's labour market survey, labour market participation contracted by 1.6 percentage points year-on-year over the first three quarters of 2004, mainly due to a reduction in the number of employed. Participation fell sharpest in Q3, by 3 percentage points compared with Q3/2003. However, longer average working hours, primarily among males, caused total hours worked (average actual hours multiplied by the number of employed) to contract by only 1.1%.

The reduction in the number of employed is largely the result of many young people (age 16-24) leaving the labour market. Almost two-thirds of the reduction is accounted for by this age group. The number of employed women of all ages has also fallen, mainly in regional Iceland. Changes in the composition of the group outside the labour market give some indication of what the leavers are doing. According to Statistics Iceland's survey, 9,700 people joined the group outside the labour market over the first three-quarters. Students are the most populous group, accounting for 45%. Their number has increased by 15%, which explains lower participation by the youngest age group. Almost 40% of those not active in the labour market are disabled or sick, and their number has grown by nearly 17%. The largest relative increase (almost 60%) is among people on maternity or paternity leave, who account for 10% of those outside the labour market.

Chart 32

Labour force participation and economic growth 1991-2004



Sources: Statistics Iceland, National Economic Institute (until 2002).

Employment is slower to recover than at the start of the last upswing ...

As Chart 32 shows, labour use also contracted after GDP growth picked up at the end of the last downswing in the first half of the 1990s.[6] However, GDP growth was slower at that time than it has been for almost two years. Changes in labour participation by young people and women in pace with changing demand is a familiar pattern; such flexibility has been one characteristic of the Icelandic labour market. Participation by younger people rose sharply during the last upswing. For example, the participation rate for 16- to 24-year-olds increased from 65% in 1994-1995 to 79% in 2000, but dropped to 64% in the first quarter of this year.

... and imports of labour have increased

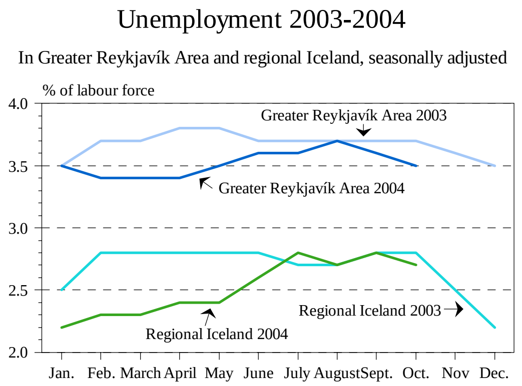
More labour has been imported to work on the Kárahnjúkar power station than was generally expected. Use of foreign labour increased in specific sectors during the last upswing, but large-scale involvement of foreign contractors in projects for the aluminium industry has exacerbated this trend. More employers apparently prefer to retain a core of workers in their companies and import others to handle the largest peaks, rather than outbidding rival companies for staff, with accompanying wage drift and higher wage costs. This is particularly noticeable in the construction and contractor sector. It remains to be seen how pronounced this trend will be in other sectors, if and when labour shortages emerge – foreign labour already plays a significant role in service industries in the Greater Reykjavík Area. More active monetary policy with an inflation target may also prompt companies to rationalise operations or import labour instead of offering higher wages in competition for employees in the hope that the extra wage costs can be passed on through prices. Labour imports ease demand for domestic labour and constrain wage drift that otherwise might attract more people to the labour market. This could explain the recent low labour participation rate among young people.

Little change in unemployment, but more companies plan to recruit

Unemployment over the first ten months of 2004 averaged 3.2%. Seasonally adjusted unemployment increased in May and peaked in August, but has gone down slightly in recent months. The main reason for higher unemployment during the summer is probably an unusually low supply of vacation relief jobs. Job creation programmes in 2003 may also have resulted in more students being entitled to unemployment benefit this year. In addition, summer closures of kindergartens make it difficult for students with young children to take on summer jobs.

6. Comparable data for the labour force are not available for all the years shown. Over the period 1991-2002, Statistics Iceland conducted labour market surveys twice a year, in April and November. As of January 1, 2003 continuous surveying was introduced, with the results published on a quarterly basis. The two survey formats were not allowed to overlap in 2003, so the time series was broken. Since most labour market aggregates are subject to seasonal changes, a survey that is limited to two periods of two weeks a year, in April and November, can scarcely be compared with one conducted over the whole year. The most effective comparison is between the findings of previous labour market surveys and data from Q1 and Q4/2003, as is done in Chart 32.

Chart 33



Sources: Directorate of Labour and Central Bank of Iceland.

Unemployment will come down – the question is, how fast?

There are indications that unemployment will fall in the near future. Major construction projects are being launched near population centres in both east Iceland and the Greater Reykjavík Area, and the largest growth in jobs recently has been in and around the capital, where the majority of unemployed live. The result should be some adjustment of the mismatch between labour supply and demand that has persisted for the past few years. From August until October, vacancies increased by 144% year-on-year, and the Greater Reykjavík Area's share of total vacancies grew from 20% to almost 40%. With more jobs on offer in the Greater Reykjavík Area this spring and summer, seasonally adjusted unemployment has fallen there.

Another possible sign of a drop in unemployment in the near future is that average hours worked have increased so far this year, most noticeably in Q3. Longer working hours by those in the labour force could foreshadow recruitment to meet a growing labour requirement.

An IMG Gallup survey of employee numbers in September, commissioned by the Central Bank and Ministry of Finance and sampling the 400 companies with the highest turnover in Iceland, shows some rise in the staffing index since February. The proportion of companies expecting to recruit more staff over the next six months rose to almost 31% from just over 28%. A similar number forecast an unchanged number of employees six months ahead.

In the current macroeconomic forecast, unemployment in 2004 and 2005 is expected to remain very close to the June forecast. In 2006, unemployment is forecast to drop to 1.8% in spite of more imported labour, since the output gap will have turned sharply positive by then.

Wage changes in line with the cost estimates in wage agreements

Price competition among businesses and more imported labour still appear to be holding back wage drift in sectors where excess demand is present or forming. According to the Statistics Iceland wage index and results from the Institute of Labour Market Research, little wage drift appears to have followed the scheduled pay increments under private sector wage agreements in the spring and summer. Private sector wages have risen by 4.9% so far this year according to the Statistics Iceland wage index. There has also been a longer lag in recording scheduled wage rises than was expected in the Central Bank's June forecast.

The forecast for changes in wage costs in 2004 has therefore been revised downwards by half a percentage point, to 4½%. On the other hand, the forecast rise for 2005 and 2006 has been revised upwards since June, to 6% each year from 5½%. Higher costs in 2005 are mainly caused by the lag in wage changes this year, while increased private consumption and lower unemployment will drive wage drift and therefore raise wage costs in 2006.

The Statistics Iceland labour market survey implies a substantial increase in productivity in 2003 and the emerging picture so far this year suggests sizeable gains as well. The Central Bank's forecast for labour productivity growth this year has been revised upwards by almost 1 percentage point, to 3.4%, with a slower rate in 2005 and 2006. Unit labour costs in 2005 and 2006 are forecast to rise by 3.9% and 4.3% respectively.

VII External balance and prospects for exchange rate developments

Outlook for a substantial and widening current account deficit in the coming years

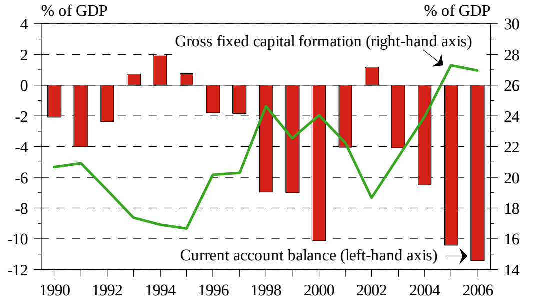
The current account deficit is heading for 6½% of GDP in 2004 and the balance on income for a deficit of 10½ b.kr. Direct imports connected with investments for the aluminium industry are expected to equal 2.3% of GDP this year, 4.1% in 2005 and 4.3% in 2006. The current account deficit is forecast to widen further, to 10½% in 2005 and 11½% in 2006. The forecast deficit for 2006 has been revised marginally downwards since June, in particular because more aluminium exports are now expected that year. After allowing for their macroeconomic impulse, an estimated 40-50% of the current account deficit over the period 2004-2006 can be attributed directly or indirectly to investments for the aluminium industry.

Iceland's external debt will therefore increase considerably over the period, to the equivalent of 112% of GDP at the end of 2006. Interest rates on Iceland's external debt are expected to rise over the next two years, and judging from current foreign interest rates and historical developments it cannot be ruled out that they will go up by more than assumed in the current forecast, which would mean a further rise in external debt service. Great uncertainties also surround the development of other components of the balance on income, especially reinvested income (see Box 4).

When the smelters that are currently under construction go on stream, exports of aluminium will surge. In 2008, when all the investments incorporated into the forecast are completed, aluminium exports will be around 165% higher in volume terms than this year. The current account balance can therefore be expected to improve when the ongoing investments are completed. Nonetheless, a deficit will remain which, as a proportion of GDP, could be equal to at least half of the deficit forecast for 2006. Clearly, closing that gap and rebalancing external trade will call for either more exports or less imports, or both. This adjustment could take place through a contraction, or at least through a sustained period when domestic demand will increase more slowly than exports. A weakening of the króna could then become an unavoidable part of the adjustment process.

Chart 34

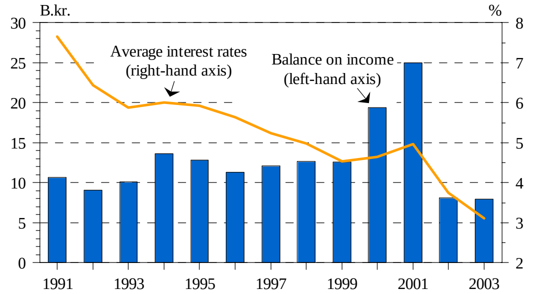
Current account deficit and gross fixed capital formation 1990-2006[1]



1.Central Bank forecast for 2004-2006. *Sources:* Statistics Iceland, Central Bank of Iceland.

Chart 35

Balance on income and average interest on external debt 1991-2003

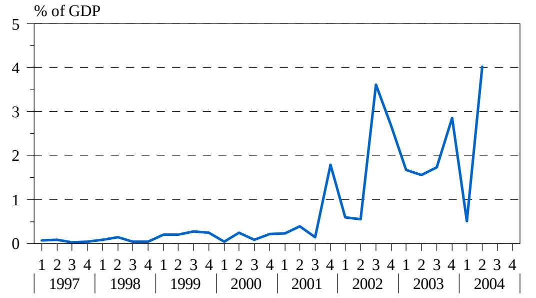


Source: Central Bank of Iceland.

Chart 36

Reinvested earnings from direct investment

1997/Q1 - 2004/Q2



Source: Central Bank of Iceland.

Box 4 Balance on income

The current account balance measures the difference in value between exported and imported goods and services. When this value is negative, as has frequently been the case in recent years, the deficit is financed either with increased external debt or by depleting foreign assets. The main subcomponents of the current account are the balance on goods, which measures the difference in value between exported and imported merchandise; the balance on services, which measures the difference in value between exported and imported services; and the balance on income, which measures the difference between inward and outward compensation of employees, equity investment income and interest payments. Another subcomponent of the current account is current transfers, which mostly consist of contributions by central government to international agencies and development aid, but also include insurance compensation.

Table 1 shows the development of the balance on income since 1998. Employee compensation receipts are far higher than expenditures because wages paid to Icelandic workers at the NATO base in Keflavík are classified as being paid from abroad.

The table reveals that equity investment income has soared, from a negligible figure in 1998 to roughly 18 b.kr. per year in 2002 and 2003. Equity investment income consists of both dividends paid on equities owned by Icelandic residents and reinvested earnings from companies (including subsidiaries and branches) located abroad in which residents own a holding of 10% or more. The latter item has shown by far the most growth in recent years and is headed for a very high figure this year. It has made a substantial contribution to reducing the negative balance on income in 2002 and 2003 compared with preceding years. A similar effect is likely in 2004. However, this item is highly volatile, especially in the short term. Its quarterly values fluctuate very sharply (see Chart 36). In Q1/2004 reinvested earnings amounted to just over 1 b.kr., but in Q2 they measured 8.7 b.kr., equivalent to 4% of GDP for that quarter. If foreign companies owned by residents produce heavy losses, investment income can turn negative.

Outward equity investment income is much steadier. The lion's share is accounted for by profits of foreign-owned metals manufacturers in Iceland.

Balance on income, liabilities and assets 1998-2004[1]

In b.kr.	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2003/Q1-2*	*2004/Q1-2*
Balance on income	-12.6	-12.6	-19.4	-24.9	-8.1	-8.0	-6.8	-4.4
Receipts	8.5	9.3	11.6	16.9	27.9	28.8	12.5	17.5
Compensation of employees	4.7	4.9	5.5	5.8	5.4	6.2	3.0	2.8
Equity investment income	0.6	2.1	2.6	7.8	17.6	18.2	7.5	11.2
Of which reinvested earnings	0.5	1.4	1.0	5.1	14.7	15.9	6.3	9.7
Of which dividends	0.2	0.7	1.6	2.7	2.9	2.3	1.1	1.5
Interest payments	3.1	2.3	3.5	3.4	4.9	4.4	2.1	3.5
Expenditures	-21.2	-21.9	-31.0	-41.9	-36.0	-36.7	-19.3	-21.9
Compensation of employees	-0.3	-0.3	-0.8	-0.5	-0.7	-0.5	-0.3	-0.4
Equity investment income	-2.3	-0.8	-1.6	-0.3	-1.1	-4.6	-2.5	-4.2
Interest payments	-18.6	-20.8	-28.5	-41.1	-34.2	-31.7	-16.5	-17.2
Foreign liabilities less FDI	409	512	723	938	902	1,152	994	1,357
FDI	32	35	42	71	63	75	62	82
Total foreign assets	152	244	316	422	395	677	480	842
USD/kr. exchange rate	69.32	72.35	84.47	102.95	80.58	70.99	76.38	72.49

1. Data for assets and liabilities show the position at the end of the period. *Source:* Central Bank of Iceland.

Interest payment expenditures are the largest single component of the balance on income. As the table shows, this item is very volatile. It is determined by the volume of Iceland's foreign borrowing and the interest rates on those liabilities. Foreign liabilities have increased sharply in recent years, more than tripling from the end of 1998 to the end of 2003. Nonetheless, interest payments on foreign borrowing were only 70% higher in 2003 than in 1998, due to falling foreign interest rates over that period. This item will probably rise in the near future since foreign interest rates are likely to head upwards.

The hefty growth in external debt of the economy reflects not only the widening current account deficit, but also large-scale foreign investment by Icelandic residents. The table reveals a surge in foreign assets over the past few years – by 344% from the end of 1998 to the end of 2003. Foreign assets of Icelandic residents amounted to 842 b.kr. at end-June 2004, of which 147 b.kr. were direct investments and 695 b.kr. investments in foreign marketable securities, derivatives and other financial assets.

VIII Price developments and inflation forecast

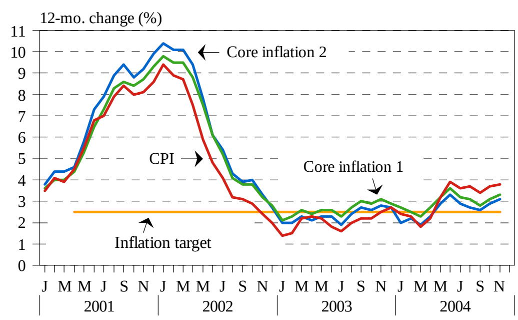
Price developments

Inflation increased in Q3, but by less than was forecast in June

Inflation has been heading upwards in recent months and the twelve-month rate of increase in the CPI measured 3.8% in November. This is the seventh consecutive month that inflation measures more than 3.5%. Inflation in Q3 averaged 3.6%, which is 0.4 percentage points less than was forecast in June. Around half of this forecasting error can be attributed to a one-off reduction in the owner-equivalent rent item in the housing component of the CPI, which was not foreseen in the June forecast.

Chart 37

Inflation January 2001 - November 2004



Source: Statistics Iceland.

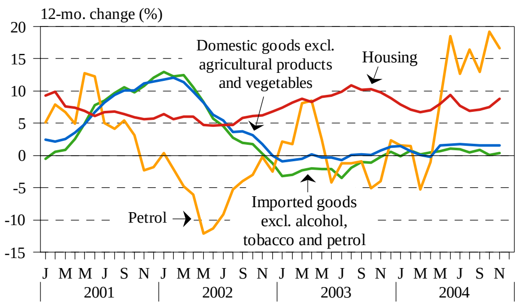
Statistics Iceland publishes two indicators of underlying inflation. The rise in Core index 1 (the CPI excluding agricultural products, vegetables, fruit and fuel) measured 3.3% in November, and has been 3% or above for the past seven months. Core index 2, which furthermore excludes changes in prices of public services, rose by 3.1% over the twelve months to November, and the annualised increase has hovered around 3% for the past seven months as well.

Inflation still explained by rises in a few components

Inflation is still confined to relatively few components. Most of the increase in these components is driven by demand, but part by direct cost pressure. The clearest indicator of demand pressure is the sharp rise in housing prices in the recent term. Of the 3.8% rise in the CPI over the past twelve months, 1.3 percentage points are explained by the housing component. Underlying indicators of demand pressures can also be discerned in various merchandise components, both domestic and imported. Higher energy prices, on the other hand, are an example of direct cost pressure. Some 0.6 percentage points of the increase in the CPI are explained by higher petrol prices, which are transmitted quickly from global markets to domestic prices. The rise in public services prices has also outpaced CPI inflation as a whole. More than two-thirds of inflation over the past twelve months is attributable to higher prices of housing, petrol and public services.

Chart 38

Components of the CPI
January 2001 - November 2004



Source: Statistics Iceland.

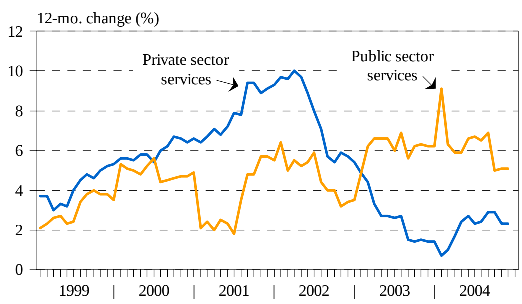
Excluding these components, price increases have been moderate. In the beginning of November the twelve-month rise in private sector services was 2.3%, in imported goods excluding alcohol and tobacco 2.5% and in domestic goods excluding agricultural products and vegetables 1.6%.

Public services prices have risen by double the increase in other services prices

Prices of public services have risen by more than 5% over the past twelve months, which is double the increase in other services. User charges for public sector services appear to rising, but it should be borne in mind that their price increases lagged behind the private sector over the period 1999-2002. If the drop in Treasury revenues resulting from tax cuts is met to some extent with higher user charges for public services, their prices can be expected to go on rising faster than the general price level.

Chart 39

Prices of services
January 1999 - November 2004



Source: Statistics Iceland.

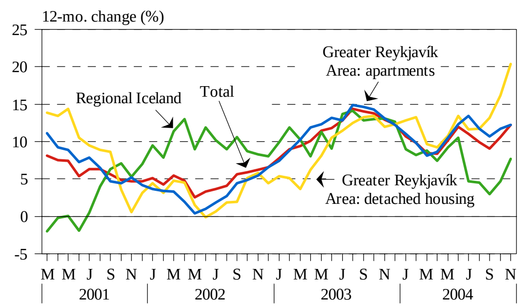
Housing price inflation picks up again

Increases in market prices of housing have continued almost unabated since April. During the summer the increases slowed slightly, but when the impact of tougher competition in the housing loan market and lower mortgage interest rates began to filter through in early autumn, housing prices rose strongly (see Box 1). In November, the twelve-month rise in the housing component of the CPI had reached 8.8%, driving the CPI up by 1.6%.

Housing prices have risen fastest in the Greater Reykjavík Area over the past twelve months, but have also increased considerably in regional Iceland. Market prices rose by an average of 12% nationwide, but just under 8% in regional areas. The sharpest increases have been in detached housing and larger residential properties, at just over 20% over the past twelve months, compared with 12% for apartments over the same period. In the past four months, prices of larger residential housing have increased particularly briskly, averaging 2-3.5% per month.

Chart 40

Market prices of housing
March 2001 - November 2004



Source: Statistics Iceland.

Higher fuel prices explain much of the rise in import prices, but the currency appreciation has not yet been transmitted to some categories of imported goods

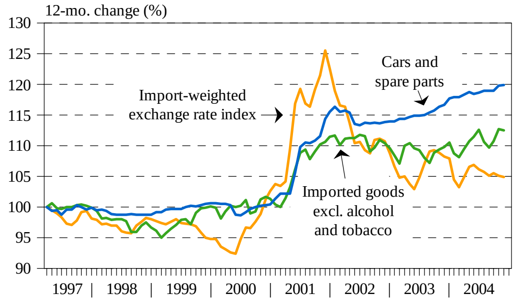
Prices of imported goods rose by 2.5% over the twelve months to November. Excluding the impact of petrol, which went up by 16.6%, imported goods prices rose by 0.4%. Although inflationary pressures, driven by mounting domestic demand, have largely been reflected in housing price rises until now, goods prices appear to have risen marginally in excess of what changes in the exchange rate and foreign prices would warrant. The import-weighted effective exchange rate of the króna had appreciated by 3½% over the twelve months to October, but by different amounts depending on the currency. For example, the króna appreciated by more than 10% against the US dollar, 2% against sterling and 1½% against the euro over this period. In November, the króna appreciated further against the main currencies.

In the beginning of November, prices of imported food and beverages had come down by 0.3% over twelve months. The bulk of Iceland's food imports are from the euro area, the UK and the US. There is no question that prices of imports from the US should have fallen due to the slide in the dollar. According to the Harmonised Index of Consumer Prices (HICP) for the European Economic Area, food and beverage prices in the euro area and the UK have decreased by 0.2% and 0.7% respectively over the past twelve months. Changes in prices of imported foods from these areas are likely to be broadly in line with changes in retail food prices in the respective countries. Bearing exchange rate developments in mind, pressures on imported food and beverage prices should be downward in the near future.

Prices of imported motor vehicles rose by 3.4% over the twelve months to September. At the same time they went up by 1% in the euro area and down by 0.3% in the UK. Given the appreciation of the króna, car prices might have been expected to rise by considerably less than they actually have. Falling prices may even have been warranted this year. Rising prices of new motor vehicles are probably an indication of growing demand.

Chart 41

Exchange rate and import prices
March 1997 - November 2004



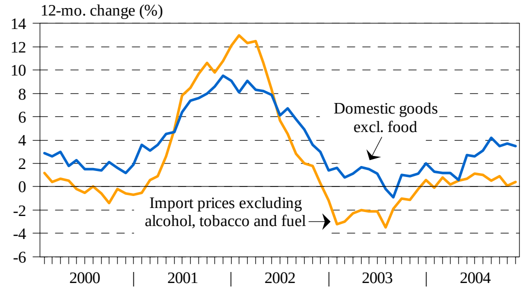
Sources: Statistics Iceland, Central Bank of Iceland.

Sizeable rise in prices of domestic goods excluding food

Domestic goods compete with imports and their price trends are generally broadly comparable, although fluctuations in the exchange rate have a weaker impact on domestic prices. Over the past twelve months, prices of domestic goods as a whole have risen by less than imports. Primarily, this is because domestic food prices, excluding agricultural products, have increased little or even fallen. Apart from food, domestic goods have risen more, which may point to a stronger demand effect where imports impose less restraint. The annualised increase has been in the range 3-4% so far in 2004 and was 3.5% in November. Over the same period, import prices excluding alcohol, tobacco and fuel rose in the range 0.5-1%.

Chart 42

Domestic and imported goods prices
January 2000 - November 2004



Source: Statistics Iceland.

Inflation expectations still rising

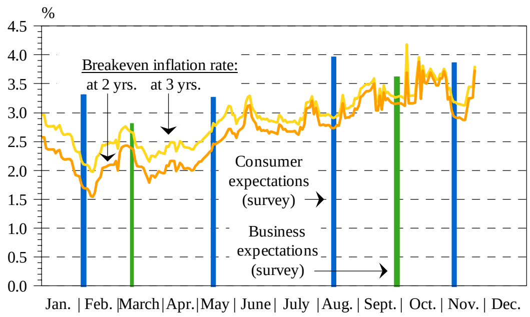
Inflation expectations have risen in the autumn. In August, inflation expectations (measured in terms of the spread between non-indexed and indexed three- and five-year Treasury bonds) averaged 3% and 3.4% respectively, but in the first half of November measured 3.3% and 3.7%, and had been even higher in October. Financial market analysts forecast higher inflation over 2005 than they had expected in the beginning of September. In the most recent survey (see Box 5) their average forecast is for 3.5% inflation over 2005. The lowest value is 2.7% and the highest 4.9%. In a survey for *Monetary Bulletin* 2004/3 in September they forecast inflation of 3.2% on average. The highest value was 3.5% and the lowest 3.0%.

In a survey of business confidence conducted in September by IMG Gallup among Iceland's largest companies in terms of turnover, their inflation expectations twelve months ahead had increased significantly over the preceding half year. They forecast 3.6% inflation, compared with 2.8% in a survey conducted in February. In a survey of household inflation expectations produced by IMG Gallup for the Central Bank four times a year – most recently in the beginning of November – households forecast average inflation of 3.9% over the next twelve months, which is marginally down from the previous survey in August. However, the median rose significantly, from 3.1% in August to 4% in November. The standard deviation went down from 2.3% to 1.9%. These findings can be read as indicating that inflation expectations are on the increase among the great majority of households, but fewer expect very high inflation.[7]

Chart 43

Inflation expectations 2004

Daily data for breakeven inflation January 5 - November 23, 2004



Source: Central Bank of Iceland.

7. The high standard deviation and low median in the earlier survey suggest that a small proportion of the sample expected much higher inflation than the great majority of respondents.

Inflation forecast

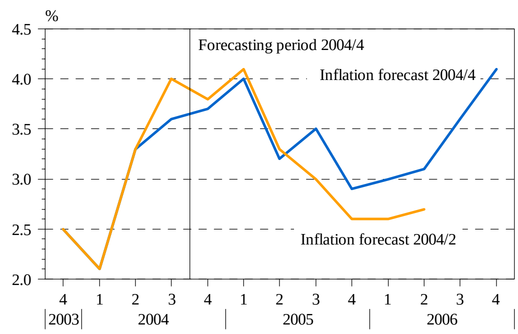
Inflation some way above the target two years ahead

Monetary Bulletin 2004/3 in September included an assessment of the Bank's last forecast, which was published in the beginning of June. It found that medium-term inflation prospects had deteriorated since June, due to higher foreign inflation and even more vigorous domestic demand growth than had been expected. In the current forecast, this trend is even more marked. Even though the strong króna will continue to constrain domestic inflationary pressures in the short term, soaring domestic demand will cause the medium-term inflation outlook to deteriorate. Short-term inflation prospects have changed little since the June forecast. Inflation one year ahead is forecast at roughly 3.5%, compared with 4% one year ahead in June, or 3% for the horizon corresponding to the current one-year forecast (i.e. up to and including Q3/2005).

Towards the end of the forecast horizon, the impact of the currency appreciation and robust productivity growth in 2003 and 2004 will ebb, and be outweighed by rising domestic demand, which then will be driven among other things by the rapidly approaching peak of investments for the aluminium industry. Medium-term inflation prospects have taken a sharp turn for the worse. Inflation two years ahead is forecast at 3.6%, compared with only 2.6% in the June forecast. It should be remembered, however, that the two-year horizon in June extended to Q1/2006, while it is now Q3/2006. Part of the divergence can be explained by the forecast period mov-

Chart 44

Central Bank inflation forecast 2004/2 and 2004/4



ing closer to the peak of the upswing. In Q4/2006 inflation will exceed 4%, according to the forecast. Chart 44 compares the current forecast with that from June.

Inflation is forecast to be above target across the entire horizon, and move beyond its upper tolerance limit at the end. The outlook is for average inflation of 3.2% in 2004, in line with the June forecast. Average inflation next year is forecast at 3.4%. Inflation in 2006 is forecast at 3.5% on average, but almost 4.5% over the year, assuming that the policy interest rate remains unchanged.

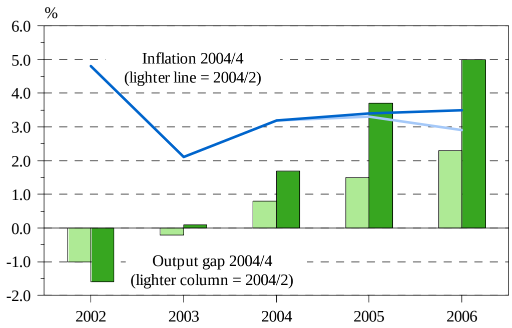
Positive output gap goes on widening ...

The main driver of inflation over the next two years is growing domestic demand which will increasingly widen the output gap, i.e. production in excess of long-term potential. The forecast assumes that the negative output gap was completely eliminated last year and that in 2006, output will exceed potential by almost 5%. This is a substantially wider output gap than forecast in June, the result of brisker growth in domestic demand than was expected then. By comparison, the output gap was estimated to be just under 3% at the peak of the last upswing in 2000.

Chart 45 shows the estimated output gap and inflation (annual averages) over the forecast horizon, compared to the estimates on which the June forecast was based. The output gap in 2002 is rather more negative than was assumed then, but more positive from last year until 2006. The wider positive output gap is reflected in a higher inflation rate, but with a lag of several quarters. In June, the annual rate of inflation was forecast to peak next year, based on the prospect that rising oil prices would deliver a temporary boost to inflation. More robust domestic demand and higher imported inflation (discussed later) have now changed the inflation profile so that the annual rate goes on accelerating to the end of the forecast period. The outlook is also that the large output gap foreseeable in 2006 will – assuming that the policy interest rate remains unchanged – drive inflation even further in the subsequent period. If the króna were to weaken in the course of the forecast period, inflation would rise even more. The Bank's forecasting models suggest that average inflation in 2007 could reach as high as 5-6%, given the above economic assumptions and an unchanged policy rate.

Chart 45

Inflation and the output gap 2002-2006

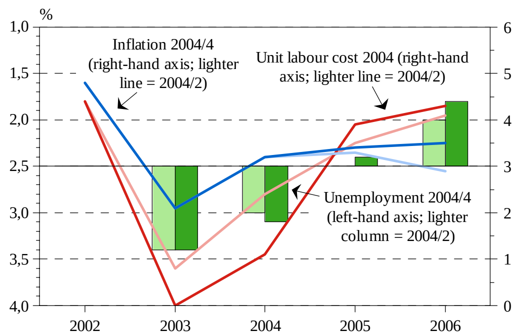


... and labour market slack will disappear

Unemployment is expected to fall faster than was forecast in June, and move significantly below the level compatible with the Central Bank's inflation target in 2006. Despite declining unemployment, labour use will increase more slowly than output. Productivity will therefore continue to increase across the forecast horizon, after substantial growth in 2004 and last year.[8] Rapid productivity growth implies that unit labour cost is forecast to increase by only slightly more than was expected in June, in spite of higher forecast wage costs in 2005-6. The estimated increase in unit labour cost in 2003-4 has also been revised downwards since June. This is evident from Chart 46, which shows the development of

Chart 46

Inflation and the labour market 2002-2006



8. See the sections on the labour market above and in *Monetary Bulletin* 2004/2.

inflation, unemployment (as a deviation from an estimate of the equilibrium unemployment rate of 2.5%), and unit labour cost over the forecast horizon. It reveals little change in the development of unemployment since the June forecast. Labour market slack is forecast to disappear entirely in 2006, but next year unit labour cost will already be rising at a somewhat faster rate than is consistent with the inflation target.

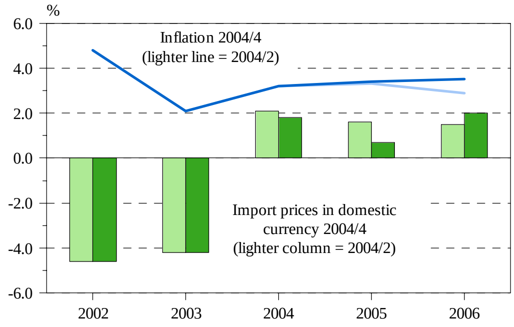
More imported inflation in the long term than was previously forecast

As mentioned earlier, the current forecast assumes that the króna will be just over 3% stronger across the whole period than was expected in June. A stronger currency will counteract domestic inflationary pressure for most of the forecast period. However, the forecast for imported inflation has been revised upwards since June, as discussed in *Monetary Bulletin* 2004/3 in September. The main reason is higher global oil prices. The June forecast assumed that fuel prices would rise by just over 17% in foreign currency terms on average this year, which would unwind completely over the following two years, as implied by futures prices. Oil prices have continued to climb since the summer and this year's increase appears to be heading close to 28% in foreign currency terms. Futures contracts also suggest that oil prices will be more than 9% higher on average in 2005 compared to this year, then fall slightly in 2006. The fuel price outlook has therefore clearly worsened sharply since the June forecast. Developments of manufactured goods prices and prices of commodities apart from oil have also turned less favourable since June, because global excess capacity is apparently shrinking more rapidly than was assumed. Retail margins on imported goods can be expected to increase when demand grows as quickly as has been forecast. Competition and cost-consolidation in the domestic retail market could, however, provide some counteraction.

Assuming an unchanged exchange rate from the day of the forecast, the appreciation of the króna so far this year will offset the rise in foreign inflation into next year. Consumer goods prices will thus rise by less in króna terms than was forecast in June, as Chart 47 shows. It will not be until 2006 that imported inflation, measured in domestic currency terms, will begin to exceed the rate forecast in June.

Chart 47

Inflation and import prices in domestic currency 2002-2006



Upside risk for medium-term inflation

Inflation prospects are always fraught with uncertainty. The main forecast may be seen as the most probable outcome based on an unchanged policy rate and exchange rate. Global economic developments, for example, are a major uncertainty – especially oil prices, but no attempt is made to evaluate whether prices are more likely to be higher or lower than assumed in the forecast.

There is a fairly high probability that the Norðurál smelter will be expanded beyond the scale that has already been announced. A number of other power-intensive and manufacturing options are being explored, although plans are at early stages. If they materialise, these investments will have a macroeconomic impact, but their effect on inflation is uncertain. The króna could strengthen, temporarily cutting back inflation, but the level of economic activity would grow beyond the forecast assumptions, which would spur inflation in the longer run.

The asymmetric uncertainties deserve particular attention. Table 6 summarises the main asymmetric uncertainties in the forecast. It is possible that the expectations and the wealth effect caused by recent soaring asset prices and fiercer competition in the domestic credit market will be stronger than assumed in the forecast. There is some risk of the króna weakening later in the forecast period, as the external imbalances increase. If inflation cannot be brought to target in good time, a review of wage agreements could be triggered in November 2005. Finally, there is some risk of a laxer fiscal stance across the forecast horizon than has been aimed for or is assumed in the forecast, since the fiscal restraints are only defined in fairly general terms. Likewise, the impact of planned tax cuts on future income expectations has been fairly cautiously assessed, and they could provide an even stronger impulse to demand.

While any of these risk factors could fuel inflation, at least one could have the opposite effect in the medium term. Domestic asset prices are very high at present, and probably higher than is warranted by economic fundamentals. Buoyant prices of equities and housing will continue to drive vigorous demand in the medium term, but if asset prices begin to give way, domestic demand is likely to grow more slowly than expected in the main forecast, resulting in less output growth, excess capacity and inflation. A fall in housing prices would also have a direct downward impact on inflation, with "owner-equivalent rent" weighing more than 10% in the CPI. Whether and when such an adjustment will take place is highly uncertain, but the probability of this happening increases across the forecast horizon, especially if the main forecast's assumption for an unchanged policy rate is relaxed.

All the above uncertainties, apart from asset prices, are upside risks to inflation in the main forecast. Since their effect is likely to intensify across the forecast horizon, it is not felt necessary to review the risk profile one year ahead. This is considered to be symmetric as in the June forecast. The risk remains upside two years ahead. On first impression an even higher upside risk might have been expected, but it should be borne in mind that the uncertainties discussed in previous forecasts have now been partly incorporated into the main forecast. Hence there is no reason to presume that the uncertainties two years ahead are significantly more asymmetric than they were in June. Thus the risk profile remains broadly the same as it has been since November 2003.

Table 6 Main asymmetric uncertainties in the inflation forecast

Uncertainty	*Explanation*	*Inflationary impact*
Private consumption................	The impact of changes in the credit market, in the form of lower long-term interest rates and easier credit access, and their potential wealth effect, on private consumption could be underestimated	Risk of underestimated demand pressures and thereby of underforecasting inflation
Exchange rate developments...	Wide current account deficit and increasing inflation expectations for the coming years could create downward pressure on the króna	Risk of the króna weakening and thereby of underforecasting inflation
Wage developments.................	Adverse inflation prospects and the outcome of specific wage agreements could create pressure to renegotiate general wage agreements	Risk of underestimated wage rises and thereby of underforecasting inflation
Fiscal policy	The fiscal stance could be laxer than assumed in forecasts The impact of planned tax cuts on future income expectations could be underestimated, so their demand impulse could be correspondingly greater	Risk of underestimated expansion driven by demand pressures and thereby of underforecasting inflation
Asset prices	Asset prices could fall, reducing private consumption later in the forecast period	Risk of overestimated expansion driven by demand pressures and thereby of underforecasting inflation
Central Bank risk profile	*One year ahead*	*Two years ahead*
November 2003	Symmetric	Upward
June 2004	Symmetric	Upward
December 2004	Symmetric	Upward

Box 5 Financial market analysts' assessments of the economic outlook

The accompanying table shows the economic forecasts of financial market analysts in the beginning of November. Participants in the survey were the research departments of Íslandsbanki, KB banki, Landsbanki, and Economic Consulting and Forecasting.

Analysts have been revising their inflation forecasts for 2004 and 2005 upwards since the beginning of this year, in pace with the development of the CPI over this period. They expect an average rate of inflation of 3.7% over 2004, and 3.2% year-on-year. The Central Bank's forecast is virtually the same: 3.8% over the year and 3.2% year-on-year. There is more divergence in assessments for 2005. The Central Bank forecasts lower inflation in 2005, at 3.0%, compared with the analysts' average of 3.5%, while their year-on-year forecasts are broadly the same. All forecasts are above the Central Bank's inflation target.

The economic growth outlook has improved since August, in the analysts' view. They foresee average GDP growth of 5.0% this year and 5.1% in 2005, but with a considerable difference between the highest and lowest forecast values. The Central Bank forecasts a higher rate of GDP growth, at 5.4% this year and 6.1% in 2005.

On average, respondents forecast an exchange rate index of 123 twelve months ahead, implying a slight depreciation of the króna from its recent value. Two years ahead they forecast a further slide to an exchange rate index of 128.

Although the Central Bank raised its policy interest rate to 7.25% on November 1, analysts expect further hikes in the medium term, forecasting a policy rate of 8.6% one year ahead and the same rate two years hence. As the range of figures in the table shows, opinions are divided about these developments.

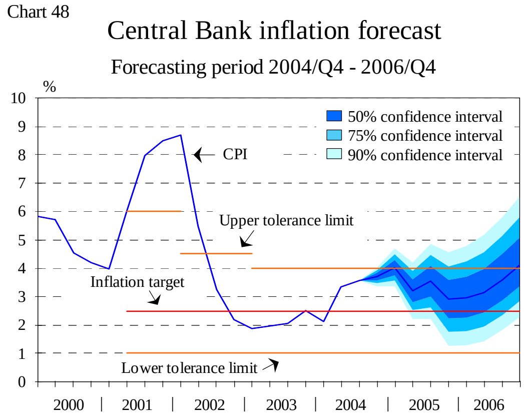
The same applies to future equity prices, especially two years ahead. One forecaster expects a sizeable drop and the others predict rises – although to varying degrees. Also, financial market analysts expect real estate prices to continue trending upwards in the medium term.

Overview of forecasts by financial market analysts[1]

	2004			2005		
	Average	*Lowest*	*Highest*	*Average*	*Lowest*	*Highest*
Inflation (within year)	3.7	3.5	3.9	3.5	2.7	4.9
Inflation (year-on-year)	3.2	3.1	3.3	3.5	3.1	4.4
GDP growth	5.0	3.9	6.2	5.1	4.3	6.5
	One year ahead			*Two years ahead*		
The effective exchange rate index of foreign currencies vis-à-vis króna (Dec. 31, 1991=100)	123.0	120.0	128.0	128.0	123.0	133.0
Central Bank policy interest rate	8.6	8.5	9.0	8.6	8.0	9.5
Nominal long-term interest rate[2]	8.2	8.0	8.2	7.5	7.0	7.7
Real long-term interest rate[3]	3.8	3.5	4.2	3.6	3.2	3.9
ICEX-15 share price index (12-month change)	2.5	-20.0	20.0	11.8	-10.0	35.0
Housing prices (12-month change)	8.8	5.0	10.0	12.3	10.0	15.0

1. The table shows percentage changes between periods, except for interest rates (percentages) and the exchange rate index for foreign currencies (index points). Participants in the survey were the research departments of Íslandsbanki, KB banki 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 (HFF 44 150644). *Source:* Central Bank of Iceland.

Chart 48



Source: Central Bank of Iceland.

As before, estimates of forecast uncertainty based on historical forecast errors are likely to exaggerate to some extent the uncertainties that lie ahead, since they tend to be unduly influenced by the recent period of high and variable inflation.

Chart 48 presents the estimated confidence intervals 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.[9]

Table 7 Probability ranges for inflation over the next two years

	Inflation				
Quarter	*Under 1%*	*In the range 1%-2½%*	*Under 2½%*	*In the range 2½% -4%*	*Above 4%*
2004:4	< 1	< 1	< 1	94	6
2005:3	< 1	10	10	62	28
2006:3	1	13	14	44	42

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

9. The range for which the Bank has not previously forecast is based on a simple extrapolation. Just as forecasts for individual values are subject to uncertainty, so is the method of estimating the uncertainty of forecasts. The estimated forecast uncertainty should therefore be interpreted with caution. The aim is to highlight the inherent uncertainty of the forecast rather than to provide a precise assessment of the probability distribution of forecast inflation.

Less probability of inflation being close to target over the next two years, assuming an unchanged monetary stance

Since June, the probability that inflation will be close to the target over the forecast horizon has decreased significantly, especially in the second half of the period, assuming that the Central Bank's policy interest rate remains unchanged. Similarly, there is a significantly greater probability that inflation will move beyond the upper tolerance limits at the end of the forecast period.

Alternative scenarios

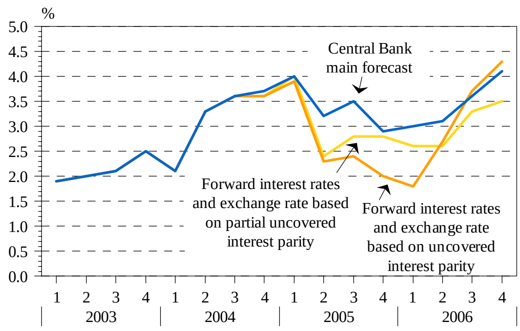
The interest rate rises that can be inferred from forward rates are insufficient to keep inflation close to target

As pointed out elsewhere, the main forecast is based on the technical assumption of an unchanged policy interest rate and exchange rate from the day of the forecast. Such a forecast may present a misleading picture of future economic developments because it is unlikely that these technical assumptions will hold, especially when inflation diverges substantially from target. In particular, the forecast aims to provide the Central Bank with a guideline for its interest rate decisions, so that the policy rate can be set such that the target can be attained.

Hence it can be useful to examine an inflation forecast which allows the interest rate and the exchange rate to change. Chart 49 shows two such forecasts. In both cases the policy rate is allowed to develop in line with forward interest rates as they are presented in Chart 6 above. The exchange rate is also allowed to develop in line with uncovered interest parity, i.e. on the basis of market expectations of the future development of the interest-rate differential with abroad. According to the Central Bank's assumptions for foreign interest rate developments over the next two years and the forward curve of its policy interest rate, the policy rate will increase sharply next year, and in excess of foreign rates, while rises in 2006 will be relatively modest and the differential with abroad will narrow slightly. As a result, the króna will appreciate at first, and then depreciate in the second half of the forecast period in order to ensure that the expected return on domestic and foreign assets is always the same along the hori-

Chart 49

Inflation forecasts based on different interest rate and exchange rate assumptions



zon. This path implies that the króna will strengthen in 2005 by roughly 1½ percentage points in excess of the main forecast, then weaken again in 2006, but without its appreciation in the previous year unwinding entirely. Chart 49 includes another inflation profile which partly deviates from the uncovered interest parity assumption and is smoother, with the króna appreciating by less at first and likewise weakening by less later along the horizon.

In this scenario, inflation is initially lower than in the main forecast, because higher interest rates subdue demand and the króna strengthens. Output growth is in the range of 0.3-0.5 percentage points lower over the next two years, depending upon which exchange rate path is applied, with a corresponding narrowing of the output gap. Later along the forecast horizon the króna begins to depreciate again, and inflation picks up. The rate of inflation varies depending upon which exchange rate assumption is used, and actually exceeds the rate in the main forecast at the end of the horizon if uncovered interest parity is incorporated in full, because that assumption implies a relatively sharp depreciation. If only partial interest parity is included the curve is smoother. The interest rate curve develops along broadly the same lines as in the main forecast, but is always somewhat below it.

In both scenarios, however, it transpires that the expected interest rate rises that can be inferred from forward interest rates are apparently insufficient to keep inflation on target along the forecast horizon. With its current information on the macroeconomic position, changes in the credit market and revised investment plans for the aluminium industry, the Central Bank would clearly have raised its policy rate earlier than it actually did. This implies that a larger rise than otherwise is needed to ensure that inflation remains as close to the target as possible.

Inflation will be lower if the government tightens its fiscal stance as planned

The main forecast diverges from the Ministry of Finance's assumptions about the development of public consumption over the next two years. It assumes that public consumption will grow by just over 3% in 2005 and 2½% in 2006, compared with Ministry's projection of 2% for both years. Part of the explanation lies in the effect of the primary school teachers' strike on local government expenditure, but the forecast also takes into account the vague wording of the cost restraint measures and the strong tendency for public sector expenditure to overshoot targets.

If the Ministry of Finance's estimates hold, however, underlying demand pressures will ease slightly compared with the main forecast. National expenditure growth in 2005 would be almost 1 percentage point lower. GDP growth would therefore probably be almost half a percentage point lower in 2005, but the economic impact in 2006 would be less pronounced. A narrowing of the output gap by half a percentage point across the forecast horizon would ease inflationary pressures. Annual inflation over the next two years would then be in the range 0.2-0.3 percentage points lower than in the main forecast.

IX Monetary policy

At the time of writing, the Central Bank has raised its policy interest five times since early May this year, by a total of 1.95 percentage points. The last hike was announced at the end of October, when the Bank raised its policy rate by 0.5 percentage points to 7.25%. In its press announcement, the Bank cited the analysis of economic and monetary developments and prospects that was published in *Monetary Bulletin* 2004/3 in mid-September. It described how unfolding developments in the financial markets had been counteracting the Central Bank's measures in recent months. The Central Bank had to respond to this development, given that construction work on power stations and aluminium smelters would surge over the next few months. Furthermore, it was pointed out that strong demand for new borrowing had become evident following major changes in credit supply, which resulted in a substantial easing of the debt service burden of households, allowing them considerably more disposable funds for consumption or housing investment. The announcement also emphasised that inflation had been some way above the Bank's 2½% inflation target for some time, exacerbating the risk that inflationary expectations, which had been on the increase over the past year, would become anchored at a higher level. Consequently, the Central Bank's policy interest rate had not gone up in real terms to any extent. The last policy rate increase aimed to counteract the easing of the monetary stance caused by higher inflation expectations and the laxer financial conditions created by the banks' entry into the housing mortgage market and by changes in the state Housing Financing Fund's lending rules. Further measures were probably necessary to bring inflation back down to target, the press announcement said, partly because a rate of inflation some way above the Bank's target could trigger a review of current wage agreements in November 2005, and also because of intensifying investments in the aluminium industry and related hydropower production and the insufficiently tight fiscal stance in the budget proposal for 2005. The Bank warned that the current account deficit over the next two years could threaten to undermine the exchange rate in the course of time, with repercussions for price stability and putting a strain on the financial system. Since recent changes in the housing market delayed the intended effect of policy rate rises, the case for raising the policy rate sooner rather than later had strengthened significantly. A timely policy rate hike could mean that interest rates would not need to be raised by as much later on.

Real policy rate still close to real natural rate of interest

Over the month that has elapsed since the last rise was announced, the policy rate has gone up slightly in real terms, although broadly remaining within the range where it has fluctuated over the past year. Financial companies have clearly had ample liquidity and money market rates have been some way below the Bank's policy rate. Both these factors imply that the monetary stance has not tightened as much as was aimed for. In recent weeks the policy rate in real terms, measured against the breakeven inflation rate on non-indexed two- to three-year Treasury bonds, has been around 4%.

This real rate of interest may be measured against the natural real interest rate in Iceland, i.e. the real rate that is compatible with price stability when GDP growth is in line with the growth of potential output, and hence under normal conditions should represent the real interest rate to be expected on average across the business cycle. While such an assessment is fraught with uncertainties, the natural real interest rate in Iceland probably lies in the range 3-4%. As money market rates have not fully tracked the policy rate, effective real short-term interest rates have been lower. This invites the conclusion that current interest rates need to rise considerably in real terms in order to tighten the monetary stance enough to counteract the demand impulse from investments for the aluminium industry and easier credit supply, and thereby ensure that developments remain in line with the Bank's target. Real interest rates can go up either with nominal rates rising in excess of inflation expectations or with inflation expectations falling. In the present climate, inflation expectations appear unlikely to come down sufficiently except by monetary policy measures. Before inflation expectations can fall, the real interest rate barrier needs to be broken which has formed at a rate that is probably only marginally – if at all – higher than the natural real rate of interest. This requires measures on the part of the Bank that are sweeping enough to make the prospect of constraining inflation credible.

Monetary policy influences effective interest rates on foreign borrowing

There has been some discussion of the notion that easy domestic access to foreign capital at low interest rates severely dampens the effectiveness of monetary policy. It has even been claimed that monetary policy has become completely impotent. This is a misunderstanding. Admittedly, inflows of foreign credit may temporarily dampen the effectiveness of a tight monetary policy and require the policy rate to be moved more in order to achieve the desired effect. But an interest rate level can always be found that fits the Central Bank's target. Easier access to foreign credit may have a considerable effect on the transmission mechanism. It can certainly cause a lag in the transmission of monetary policy through the interest rate spectrum and heighten uncertainty about the speed of the transmission. That said, monetary policy can also have a strong influence on the effective interest rates on foreign borrowing, through its impact on the exchange rate. By raising interest rates, the Central Bank can contribute to a temporary strengthening of the króna. If the króna appreciates in the short term beyond what market agents perceive to be its equilibrium exchange rate, it will prompt expectations of future depreciation. This entails that expected effective interest rates, i.e. the rates that domestic entities actually pay in domestic currency on their foreign debt service, will be higher than the nominal rates. An appreciation above expected long-term equilibrium makes domestic bonds less attractive to foreign investors, since they represent a currency risk. If financing of mortgage loans, for example, is based to some extent on demand from such investors, the point will eventually be reached where lenders will need to adjust their own interest rates to those available to them when funding their lending. In this way, domestic monetary policy influences the effective rates of interest on foreign loans, even though nominal rates are beyond its scope. A stronger króna would also squeeze the export and traded goods sectors and their demand for domestic factors of production, which would help to keep domestic wage and price rises in check. It would be preferable to rely more on other channels for transmitting monetary policy. The reason is that a strong domestic currency hits some sectors sooner and with greater force than others, in additional to initially stimulating imports of consumer goods and causing a wider current account deficit before its impact on general demand kicks in.

Currency purchase to strengthen the foreign exchange reserve will be discontinued

A tight monetary policy inevitably has side-effects in a small, open economy, however. Consequently, it is important not to obstruct the transmission mechanism that enables the Central Bank to influence the effective interest rate on foreign borrowing. This consideration prompts a discussion of the Central Bank's regular currency purchases in recent years, aimed at boosting the foreign exchange reserve. As the Bank has repeatedly stated, the aim of its currency purchases has not been to influence the exchange rate, but rather to consolidate Iceland's foreign liquidity position and create a more secure environment for the króna in the long run. In their own right, the Bank's currency purchases increase liquidity in the domestic market. In practice, however, they tend to be automatically sterilised, since DMBs use the domestic currency they receive from their forex sales to the Bank to reduce their repo liabilities. As explained in more detail in the following chapter on Financial markets and Central Bank measures, currency purchases and the abolition of required deposits have nonetheless had a net positive impact, i.e. the combined reduction in the repo stock and increase in the certificate of deposit stock have not completely managed to offset the impact that currency purchases and last year's lowering of the reserve requirement have had on overall liquidity. In addition, market agents have tended to interpret the Bank's regular strengthening of its reserves as a measure aimed at maintaining exchange rate stability. Irrespective of the Bank's actual purpose, this market perception is very detrimental to monetary policy, since in effect it can cause the Bank's measures to have a similar impact to a fixed exchange-rate regime, although this is not the intention. For this reason and because of the substantial consolidation of the foreign reserve that has been achieved, as of the beginning of next year the Bank will discontinue purchases of currency for this purpose. From that time, purchases will be solely linked to the Treasury's currency requirements for its foreign debt service, as explained in more detail in the chapter on Financial markets and Central Bank measures.

Tighter fiscal policy stance needed

In the next few years, monetary policy will face conditions that seriously challenge the adaptability of the economy. An effective monetary and fiscal policy mix is vital in such a climate. The greater the burden that monetary policy has to bear over this period, the more negative its side-effects. The Central Bank has firmly underlined that monetary policy should be backed up with a tight fiscal policy stance and from the public sector as a whole. The fiscal budget proposal for 2005 implies some tightening from the previous year. Nonetheless, the cyclically adjusted

Treasury balance in 2005 and 2006 will be considerably weaker than during the episode of overheating in 1999 and 2000. The stance at that time proved to be insufficiently tight, as became clear in the aftermath in 2001 and 2002. Counteracting the impulse provided by tax cuts over the coming years calls for sizeable cuts in central government spending, which undoubtedly will meet with resistance. The vague nature of plans announced for cost restraint is therefore a major cause of concern. Public sector expenditure tends to overshoot the budget targets in most years. Monetary policy can not afford to take the realisation of ambitious plans for cutbacks for granted. If they fail to be realised, it may be too late to respond, given the circumstances that lie close ahead. The Central Bank must base its monetary policy measures on what it considers to be the most probable scenario.