

## Inflation outlook similar to June forecast, but the risk of higher inflation in 2006 has increased

*This issue of Monetary Bulletin does not include a macroeconomic and inflation forecast. In January, the Central Bank announced that comprehensive macroeconomic and inflation forecasts will be published twice a year, instead of on a quarterly basis, in the June and December issues of Monetary Bulletin. Nonetheless, the Bank reviews its forecasts at least four times a year. A review of the forecasts that the Bank published in the beginning of June does not give grounds for expecting a substantial divergence from the forecast. Inflation had approached the upper tolerance limit of the target (4%) somewhat earlier than had been expected, but broadly speaking developments have unfolded in line with the inflation forecast. The exchange rate of the króna has not changed much but is slightly stronger than when the forecast was made, which will counteract inflation in the short run. The long-term outlook for import price developments has worsened, however, which other things being equal increases the upside risk to the June forecast for inflation in the second half of 2005 and in 2006. Since the Bank produced its macroeconomic forecast in June, the national accounts for the first two quarters have been published. These show that domestic demand growth is set to be as much as, or higher than, forecast in June. The higher policy interest rate ought to lean against private consumption growth, but lower interest rates on mortgage loans and other changes in the housing finance market are likely to outweigh this. When investments in the power and aluminium sectors gather momentum in the autumn and into next year, private consumption growth will accelerate even more, other things being equal. And while labour market data suggest some excess supply, it is uncertain to what extent this reserve source of labour can be tapped when construction of the power plant and smelter peak and their impact has extended to most sectors of the economy. Although the rises in the policy rate in June, and especially in July, implied a slight tightening of the monetary stance, this has not managed to change the financial conditions of households and business sectors significantly, and as far as households are concerned, financial conditions have clearly eased.*

### I Economic developments

The upturn in inflation that began in April peaked in June, close to the upper tolerance limit of the inflation target. Afterwards, inflation dipped back, as it

happens partly due to the impact of changes in the housing loan system. Some of the increase in inflation is explained by higher import prices, which are largely caused by soaring fuel prices. In this respect, higher inflation is less of a cause for concern. Excluding the effect of changes in the housing loan system, the temporary impact of higher fuel prices, and to some extent increases in the price of public

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1. This article uses data available on September 15, 2004.

services, the underlying inflation rate is just under 3%. However, a sizeable share of inflation can be attributed to robust domestic demand, which so far has mainly been reflected in rises in the housing component of the consumer price index (CPI), while the strong króna has held back goods prices from rising. Higher inflation prompted some rise in inflation expectations, especially among households.

There are no signs of a slowdown in domestic demand growth. Both private consumption and investment surged in the first half of 2004. The latest statistics indicate ongoing strong growth in the third quarter. Investment in hydropower and aluminium projects will also increase in the next few months. The labour market has shown some inertia in adjusting to rapid demand growth. The situation is characterised by labour shortages in some sectors and excess labour in others, and seasonally adjusted unemployment has risen since the spring.

#### Price developments

##### *Inflation climbed at the beginning of summer and approached the upper tolerance limit of the target*

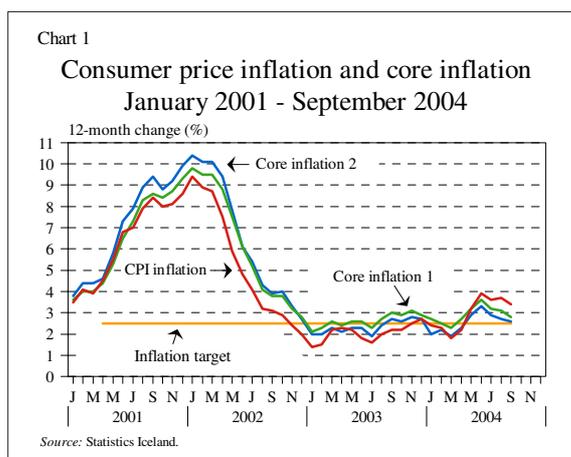
Inflation began climbing in the spring and peaked at 3.9% in June. It has fallen since and measured 3.4% in September. To some extent the surge in inflation this summer can be traced to volatile factors. Nonetheless, underlying inflation has followed a similar path. Statistics Iceland publishes two indicators of underlying inflation. The rise in Core index 1 (the CPI excluding agricultural products, vegetables,

fruit and fuel) reached a high of 3.6%, and measured 2.8% at the beginning of September. Measured by Core index 2, which furthermore excludes changes in prices of public services, inflation has been somewhat lower, and stood at 2.6% in September. Inflation in recent months has been driven by both demand and cost pressures. Demand pressures have been felt in the housing market in particular, but cost pressures mostly in fuel prices and, to a lesser extent, services.

##### *Housing price inflation still running high, but marginally lower than in June*

The housing component of the CPI accounts for almost one-third of the rise in the index over the past twelve months, or 0.9%. After slowing down in the second half of 2003, housing price inflation picked up in the spring and market prices of housing rose rapidly in the summer. Housing price rises have slowed down again, but this is partly caused by changes to the housing loan system in July which had a negative impact on the housing component, bringing the index overall down by 0.17% (see Box 1).

Major changes in the housing market recently may have spurred price increases. Easier access to credit and lower interest rates stimulate demand. The rise in the Housing Financing Fund's (HFF) maximum loan amounts at the beginning of the year gave more access to cheaper finance than was available from the commercial banks, which have had a low profile in the residential mortgage market until recently. The commercial banks responded to this competition by making foreign currency-linked mortgages available to homebuyers at lower real rates of interest than were offered by the HFF. It should be borne in mind that these were variable-interest loans based on foreign short-term rates, which have been close to a historical low. In July the HFF introduced a new system of mortgage bonds and this change soon brought down interest rates on the new bonds (known as Housing Financing Fund bonds) to  $\frac{3}{4}$  of a percentage point lower than under the old housing bond system. Towards the end of August, the commercial banks began offering their customers mortgages on similar terms to the HFF. Since no maximum amount is imposed on these loans, they are particularly useful to homeowners who seek to buy larger properties or refinance out-



### Box 1 The impact on the CPI of changes in the housing finance market

At the beginning of June the Housing Financing Fund (HFF) changed its lending system so that homebuyers are now granted cash loans at fixed interest instead of housing bond loans. The new loans are financed with bond issues. Interest rates offered to homebuyers are the same as the HFF's yield on the sale of the bonds, plus a premium currently set at 0.6%. The following is an analysis of the impact of these systemic changes on methodologies for measuring the CPI.

*Monetary Bulletin* 2004/2<sup>1</sup> included a detailed account of the way that housing costs are measured in the CPI. It described how the market price and lifetime of sold housing are calculated, together with the opportunity cost of owner-occupancy. The following discussion is confined to the changes resulting from the new HFF loan framework and their impact on measurement of the CPI.

Statistics Iceland receives data from the Land Registry on cash prices in housing sales, which it calculates in the same way as before the loan system was changed. Since mortgage loans from the HFF are now paid out in cash rather than with housing bonds, they no longer need to be revalued at present discounted value.

The opportunity cost of owner-occupied housing is calculated by Statistics Iceland using real rates of interest on collateral loans, and 3% real interest on the part of the value of the housing which is classified as owner's equity (see further Appendix 1 in *Monetary Bulletin* 2004/2). In July, interest rates on new HFF loans were 0.3 percentage points lower than under the old system. The impact of this change was treated in the same way as previous changes in HFF interest rates. By reducing interest on HFF loans, as recorded in deeds of sale, by 0.3 percentage points, the CPI for July measured 0.17 percentage points lower than otherwise.

1. Housing price indices – measurement methodologies, Appendix 1 to Economic and Monetary Development and Prospects, pp. 29-32.

Statistics Iceland does not consider it desirable to incorporate all short-term movements in long-term interest rates into its calculations of the housing component of the CPI, since it is only rates on new borrowing that change. Accordingly, it adopted a new methodology for evaluating real interest rates on new loans when the CPI was calculated for August. The reference used now is the average real interest rate over the preceding five years. Initially, however, instead of covering a full five years, the average will be calculated from March 2000, when data from deeds of sale for housing outside the Greater Reykjavík Area were first included in calculations of the housing component of the CPI. From February 2005, a full five years (60 months) will have elapsed since this systemic change and the reference will be average interest rates over the past 60 months in each instance. At the same time, the weight of owner's equity in the housing component was reduced slightly to below one-half, and the weight of the seller's debt taken over by the buyer was increased by a corresponding amount. The higher interest rate caused by the change in weight between equity and debts taken over was not allowed to raise the value of the "owner-equivalent rent" subcomponent.

In August, interest rates on HFF loans went down by a further 0.3 percentage points. Since the reference was the monthly average since March 2000, HFF interest rates actually rose in the CPI calculation between July and August, but dropped marginally between June and August. The change between June and August is in line with Statistics Iceland's new methodology, while the change between July and August is not. The owner-equivalent rent component rose by 0.9% between July and August, driven up by higher market prices of housing.

Statistics Iceland has not stated how the commercial banks' newly announced housing loans will be treated in the CPI.

standing debt.<sup>2</sup> By enabling more people to buy first-time or larger housing, this change may be expected to fuel housing prices.

2. These new loans are not exclusively for housing purchases. They may be used to prepay existing loans or to increase the mortgage amount and thereby lower owner's equity in housing without a transaction taking place. This option will hardly affect housing prices directly, but could boost private consumption.

Offsetting this demand effect, heavy investment in residential housing last year and this year will in the long run generate greater supply. There are signs that increased supply is already beginning to restrain price rises, at least in certain parts of the Greater Reykjavík Area. If macroeconomic conditions turn downwards, this development could lead to excess supply and a price slump.

*Low imported inflation apart from fuel price rises*

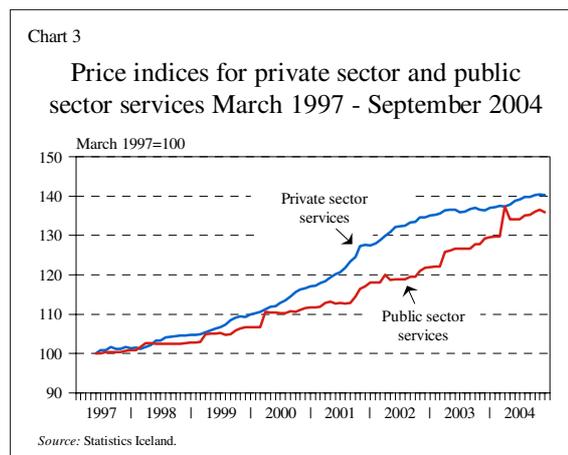
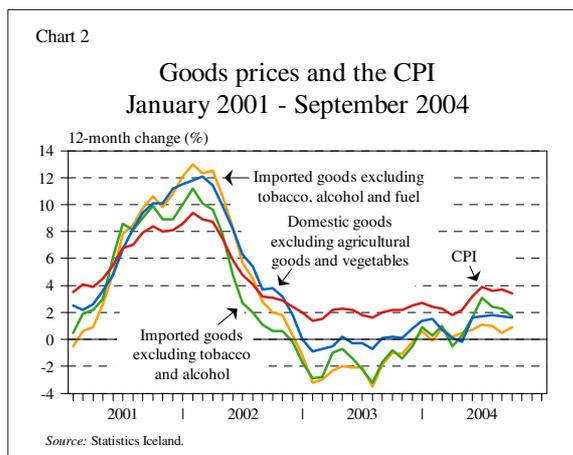
Excluding the rise in fuel prices, imported inflation has been moderate so far this year. For the past eight months, the twelve-month rise in imported goods prices (excluding fuel, alcohol and tobacco) has been in the range 0.5% to 1%, and in September it measured 0.9%. However, fuel prices have been soaring recently and by September they had risen by 13% in the course of one year. Of the 3.4% increase in the CPI over the twelve months to September, 0.5 percentage points are accounted for by higher fuel prices. If fuel is included with imported inflation, the figure is considerably higher, measuring 1.7% in September. Excluding fuel, there is little inflationary impulse from abroad. A year ago, however, the impact was still on the downside.

Since domestic goods producers compete with imports, import prices affect the prices of domestic goods. The twelve-month rise in prices of domestic goods, excluding agricultural products and vegetables, has been in the range 1.5%-2.0% over the past five months and was 1.6% in September, which is somewhat higher than the increase in import prices

excluding fuel; the additional costs in connection with recent wage agreements should have exerted some impact on prices. The Producer Price Index (PPI) for the domestic market barely rose at all in H1/2004, according to Statistics Iceland. Thus rising producer prices are unlikely to exert upward pressure on retail prices of domestic goods.

*The increase in private sector services prices exceeds the inflation target, but public services prices have outstripped them*

The twelve-month increase in prices of private sector services amounted to 2.9% in September and has been on an upward trend so far this year. Since the beginning of 2004, they have risen by 2.2%. Service prices are sensitive to changes in wages. Their rise is therefore probably partly influenced by contractual wage rises. The bulk of contractual wage rises this year have probably already been transmitted to private services prices, and estimated wage drift so far this year is in line with the assumptions in the Central Bank's last inflation forecast in June. Conditions should thus be in place for a moderate increase for the remainder of the year. Prices of public services have increased far more, by 5% over the twelve months to the beginning of September. It is sensible to compare prices of private and public services over a long horizon. Over the past seven years, prices of private services have increased marginally more than public services (see Chart 3), but the gap has been closing recently, partly as a result of public sector wage increases exceeding private sector wage growth over the past couple of years.



### Higher import prices fuel inflation, but are offset by the stronger króna

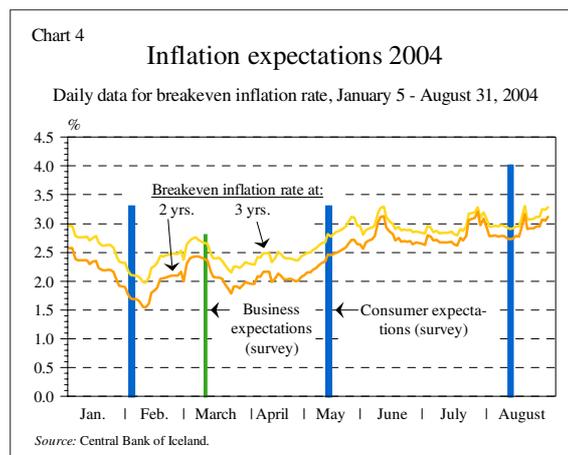
Since the Central Bank's June forecast, wage and productivity developments have unfolded broadly in line with the assumptions made at that time. However, changes in the exchange rate and import prices may perhaps warrant a revision. Towards the end of August the króna was just over 1½ percentage points stronger than assumed in the last forecast, which by itself would lead to lower inflation. Offsetting this, there are various indications that import prices will rise by more than had been assumed, led by hefty increases in fuel prices. Futures prices imply that fuel prices will remain high, but they have not always been a reliable predictor of spot price trends. Forecasts for world market prices of commodities and manufactured goods also suggest that imported inflation could rise in the fairly near term. This would drive up the inflation rate over the second half of the forecast horizon, compared with the June forecast.

### Underlying inflation just under 3%

The core indices mentioned above only provide a framework of reference for assessing underlying inflation. Whether to ignore specific price increases when assessing underlying inflation must be weighed up on a case-by-case basis. There are strong arguments in favour of disregarding the direct impact of higher fuel prices, as the core indices do. A case can also be argued for discounting public sector price increases. Given that prices of public services are quite closely matched to those of private services over an eight-year period, public services prices could adjust more slowly to those of other services. Be that as it may, public services prices are a unique case in that they are at the discretion of the authorities. However, the contribution made to inflation by civil servants' pay increases, which have outstripped those in the private sector, cannot be ignored. They may also provide some stimulus to inflation. Thus underlying inflation can arguably be estimated higher than the rise in Core index 2, which has gone up by 2.6% over the past twelve months. Finally, the one-off impact of changes in the housing loan system, amounting to just under 0.2 percentage points, should be disregarded. Taking all the above into account leaves an underlying inflation figure of just under 3%.

### Inflation expectations on the increase

The breakeven inflation rate (defined as the spread between non-indexed and indexed three-year Treasury bonds) has moved in the range 2.8%-3.3% and averaged around 2.9% since the beginning of June. This is around half a percentage point higher than during the first five months of 2004, when the breakeven inflation rate was close to the inflation target for most of the time. There are several reasons for the higher breakeven inflation rate, including greater increases in the CPI than the commercial banks' analysts had assumed, both in May and June. In fact, the CPI fell by more than expected in July, but because this was largely attributable to summer clothing sales and will be reversed, it does not seem to have had much impact on expectations. Fuel prices have risen by more than expected and there is no outlook for a substantial reduction in the near future. Global prices of manufactured goods and commodities, and expectations about them, have also been on the increase. Countering this, the króna has strengthened by more than 1½% since mid-May.



Households' mean expectations of inflation twelve months ahead rose to 4% at the beginning of August, from just over 3% in May – outpacing the rise in the breakeven inflation rate. Households were surveyed in July after the greater-than-expected drop in the CPI, which can be expected to have tempered inflation expectations. Counterbalancing this, fuel prices rose over the period when the survey was conducted. The median for inflation expectations was somewhat lower than the mean, at just over 3%. Half the respon-

dents in the survey expected a rate of inflation within 3% over the next twelve months, but a fairly large group foresaw it much higher than 4%, and thus beyond the upper tolerance limit of the inflation target.

*Risks from buoyant demand, the fairly strong króna, the current account deficit and rising inflation expectations*

Underlying inflation in the region of 3% need not be a cause for concern in its own right if broad macro-economic balance prevailed. Excluding energy and housing prices, inflation is currently within the target. Inflation is therefore still confined to a few factors. Wage rises also seem to be broadly consistent with the inflation target. However, a number of risk factors should be borne in mind. First, housing price inflation may be a leading indicator of future inflation, as happened in 1999. Unlike the situation in that year, however, a substantial increase in housing supply may serve to keep housing prices in check. Second, domestic demand growth has been soaring recently, as discussed below. Demand pressure thus far has taken the form of a widening current account deficit rather than rising inflation. In this respect, the current situation resembles the events of 1998. Growing external imbalances entail the risk of pressure on the exchange rate of the króna later, especially bearing in mind that the real exchange rate is probably on the strong side at present. A weakening of the króna under robust demand conditions could amplify the inflationary impact.

On the other hand, several factors can be identified which ought to have a positive effect in the near

term. Public sector investment, which had been driving demand, has been reduced, especially in the second half of last year and the beginning of 2004. Labour market pressures also seem weaker on the whole that could have been expected given the large investments that have been launched for the aluminium industry, despite localised and segmental labour shortages.

*Outlook for lower inflation this year, but higher in H2/2005 and 2006, than was forecast in June*

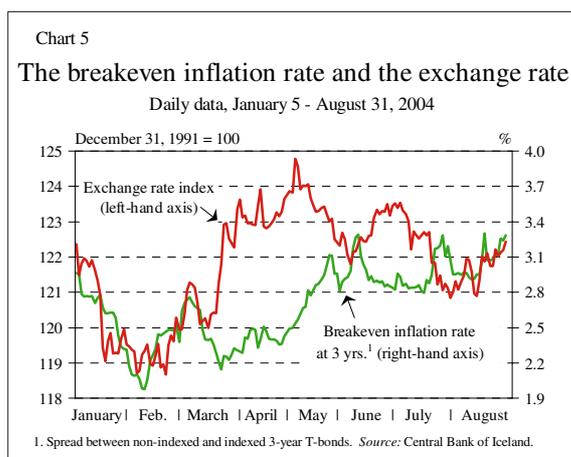
In June the Central Bank forecast an inflation rate of 3.3% during Q2, which held good. So far in Q3, measured inflation is headed below the June forecast of 4.0% year-on-year. Once again it should be remembered that the changes to the housing finance system caused a one-off drop in owner-equivalent rent. This impact was not incorporated into the June forecast but brought down the CPI for July by 0.17%. Had this been done, there would have been very little divergence between the forecast and outcome.

Overall, the June forecast seems to present a fair assessment of inflation prospects over the next two years. While inflation in H2/2004 will be lower, the outlook is for more increase in import prices and a larger output gap than forecast in June which could result in higher-than-forecast inflation in the second half of the forecasting period.

**Output and demand**

*US recovery slows down and domestic growth in the euro area remains weak*

On the whole, the external conditions of the economy have improved on the export side but deteriorated on the import side. Economic recovery in trading partner countries is continuing, although growth has slowed down in the US. In recent months rising oil prices have left their mark on the global economy, kindling inflation and dampening demand. Robust growth in the US in Q1 slowed down in the next quarter. Growth forecasts for this year have been revised downwards. It is debatable to what extent this is a short-lived interruption due to higher oil prices or a more lasting effect. The impact of expansionary fiscal policy in the US is also petering out and short-term interest rates have started moving upwards. Japan's growth in Q2 was also disappointing. Growth



## Box 2 Financial market analysts' assessments of the economic outlook

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

On average, respondents foresee a very slight weakening of the króna over the next twelve months, with an exchange rate index of just over 123, marginally above its recent value. Opinions are more divided on this point than in the May survey, and also over a longer horizon.

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

	2004			2005		
	<i>Average</i>	<i>Lowest</i>	<i>Highest</i>	<i>Average</i>	<i>Lowest</i>	<i>Highest</i>
Inflation (within year) .....	3.5	3.4	3.6	3.2	3.0	3.5
Inflation (year-on-year) .....	3.2	3.0	3.7	3.2	2.9	3.3
GDP growth .....	4.3	3.9	4.6	4.7	4.3	5.0
	<i>One year ahead</i>			<i>Two years ahead</i>		
The effective exchange rate index of foreign currencies vis-à-vis króna (Dec. 31, 1991=100)...	123.3	120.0	128.0	123.8	120.0	133.0
Central Bank policy interest rate .....	7.8	7.5	8.0	7.8	7.5	8.0
Nominal long-term interest rate <sup>2</sup> .....	7.8	7.5	8.0	7.5	7.0	8.5
Real long-term interest rate <sup>3</sup> .....	3.8	3.5	4.2	3.7	3.5	4.0
ICEX-15 share price index (12-month change) ....	12.6	5.0	18.0	18.0	10.3	35.0
Housing prices (12-month change) .....	7.5	5.0	10.0	11.3	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 07 0209). 3. Based on yield in market makers' bids on indexed housing authority bonds (IBN 38 0101). *Source:* Central Bank of Iceland.

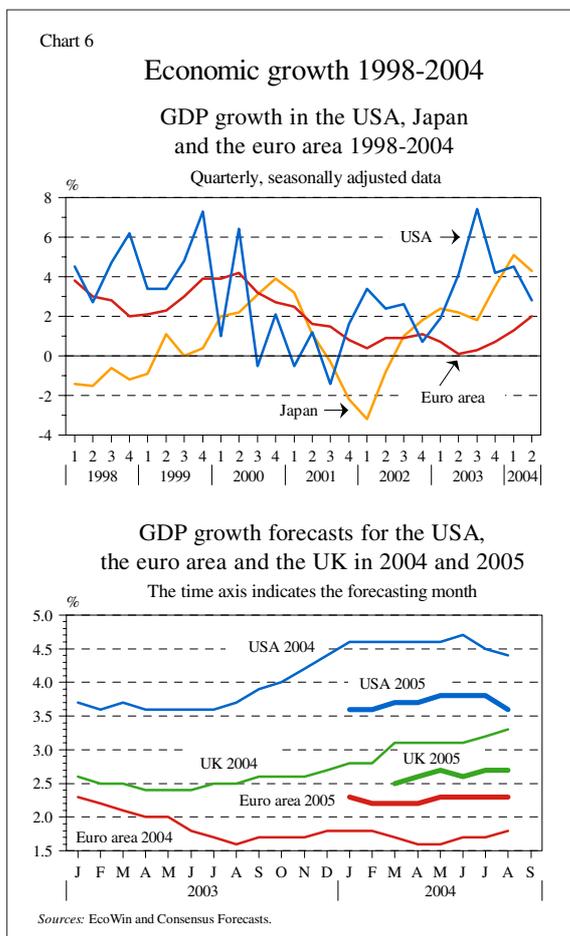
Analysts were very close in their forecasts for inflation over 2004, which is 3.5% on average. This is higher than their forecasts in the last survey conducted in May, and much higher than at the beginning of this year, which is hardly surprising in light of housing and oil price hikes so far in 2004. They are also unanimous about a slight slowing of inflation in 2005. These forecasts are above the Central Bank's inflation target, but within the upper tolerance limit. Inflation measured between annual averages is quite close to the rate over the year, as the table shows, but the forecast range is wider.

Analysts have revised their growth prospects for 2004 upwards since May, but their forecasts for next year are unchanged. The average forecast is for 4.3% growth this year and 4.7% in 2005, with broadly the same deviation towards the lowest and highest values.

The Central Bank's policy rate is currently 6.25% and analysts are unanimous that it will be raised in the next few months. On average they expect it to reach 7.8% twelve months ahead, and remain there 24 months hence.

All respondents in the survey expect some rise in equity market prices over the next 12 and 24 months, even though the ICEX-15 index has already gained more than 60% so far this year and is now at a historical high. Expectations differ widely, however, as the lowest and highest values show, but the average forecast rise is 12% over a twelve-month horizon and 18% over 24 months. Analysts disagree about real estate price developments, but all forecast ongoing increases both one and two years ahead.

in the euro area has still not taken off, although the picture brightened at the beginning of the year. Domestic demand is sluggish in Japan and the euro area, and growth has primarily been export-driven.



#### Marine export prices may have bottomed out

Whether driven by the recovery in main market regions or other factors, marine export prices – especially for demersal fish products – have edged up since March. In the first seven months of 2004, however, average prices were just under 5% lower in foreign currency terms than a year before.<sup>3</sup> Price developments vary substantially between segments. For example, prices of frozen-at-sea products in July this year were roughly unchanged from July 2003, while

3. Based on a trade-weighted currency basket.

land-frozen products were 4.3% lower. Prices of fish-meal have slumped following a EU ban on its use in animal feed, which it is hoped will be lifted in the autumn. Aluminium prices have been broadly stable in recent months, at roughly one-fifth higher year-on-year. Prices are expected to be relatively stable in the near future.

#### Rising fuel prices have some macroeconomic impact

Fuel prices have soared this year. Petrol prices have risen by almost 50% and crude oil by more than half over the past twelve months. Average crude oil prices are expected to end up almost one-third higher in dollar terms this year than in 2003. These increases have a sizeable impact in certain areas of the economy. Fuel costs of fisheries companies, for example, account for around 15% of their operating costs, and price rises could trim their EBITDA by 4 percentage points this year (see Box 3). The surge in prices also affects the external balance of the economy. Fuel imports were valued at roughly 16 b.kr. in 2003. Assuming that current prices remain unchanged for the rest of the year, fuel imports can be expected to rise by at least 6 b.kr. in 2004.

#### Robust growth continued in the first half

When the Central Bank published its last forecast in June, no national account data were available for GDP growth during the current year. Since then, the national accounts for two quarters have been published. They indicate that growth and national expenditure this year could exceed the forecast. On September 9, Statistics Iceland published its revision of the national accounts for 2003, which revised last year's output growth figure upwards to 4.3% from 4%. The main factors at work were higher growth in services exports than indicated by provisional data and slightly higher private consumption growth, while gross fixed capital formation increased by less than originally estimated.

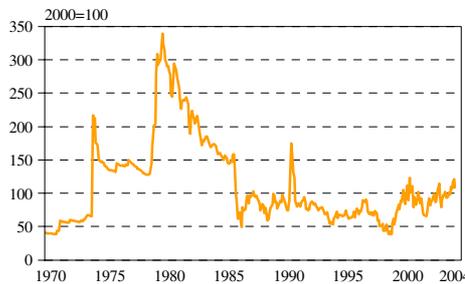
First-half growth was broadly the same as in the preceding quarters, at 4.6% in Q1 and 6.4% in Q2. This was the highest rate of growth for two consecutive quarters since Q1/2001. Gross fixed capital formation was marginally lower in Q1 than in preceding quarters due to aircraft purchases a year before, but jumped in Q2 to 21%. Private consumption in the first half grew at the fastest pace since 1999. Despite

### Box 3 The macroeconomic impact of oil prices

*Oil prices soar, but have often been higher in real terms*

Over the past twelve months, the price of crude oil has risen by half in global markets, and petrol by broadly the same amount. Despite talk of “record oil prices”, this is hardly the case except for nominal US dollar prices. Crude oil prices in autumn 1990, deflated by the OECD CPI (excluding high-inflation countries), were one-fifth higher on average than today. They were two-thirds higher on average over the period 1979-1985 than today, and also higher in the second half of the 1970s and first half of the 1980s. Furthermore, since 2001 the US dollar has slid sharply against the euro and other major world currencies. Oil prices have therefore generally risen by much less in other currencies than in US dollars, which dampens the impact on business profitability and economic growth in those countries – including Iceland.

Chart 1  
Crude oil prices 1970-2004  
In real terms<sup>1</sup>, January 1970 - August 2004

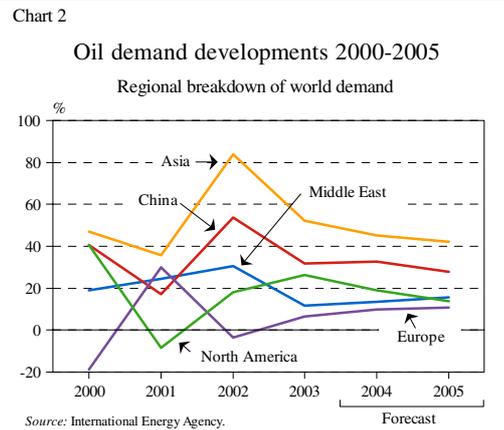


1. Deflated by consumer prices in OECD-countries (excluding high inflation countries until May 2004). Sources: EcoWin, Central Bank of Iceland.

#### *Strong role of demand in driving prices*

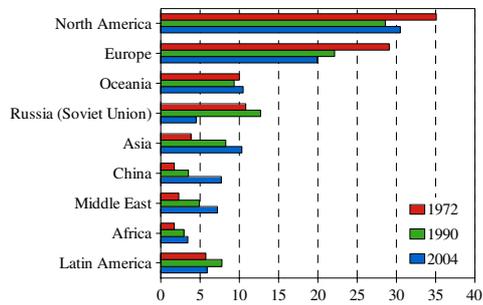
To some extent the recent price rises have different causes from those in the past. Sharp hikes over the past few decades have generally been caused by decreased supply. Oil producers have cut production to force up prices. In the present case, however, the explanation is thought to lie on the demand side. Demand for oil has been growing so fast in the recent past that supply has hardly been able to keep pace with it. The shortage of excess production capacity has left prices highly susceptible to the impact of regional conflicts in major oil-

producing countries, the situation in Iraq and global economic expansion.



*Increased share in demand from Asia, especially China*  
Regional shares in demand for oil have changed greatly over the past three decades. North America's share has declined from 35% in 1974 to less than 30% this year, and Europe's from 29% to 20%. In the space of 30 years, the share of Asia excluding Japan has grown from 6% to 18%, and China's share from 2% to 8%. The change has been sharpest in recent years. Thus demand growth over the past few years has mostly been driven by China, other Asian countries and the US. Almost half the increase in demand this year can

Chart 3  
Crude oil demand by regions of the world  
1972-2004



Source: International Energy Agency.

be traced to Asia, thereof one-third to China, while demand growth from the US has slowed down. A similar trend is forecast for next year.

*Less impact on output growth in Iceland than in most other countries*

The macroeconomic impact of higher oil prices takes two main forms. One is an increase in the price of imported goods, which has the direct effect of driving up inflation as measured by the CPI. The other is to cause a deterioration in the terms of trade, which curbs output growth. Studies using the Central Bank of Iceland macroeconomic model suggest that the rise in oil prices so far this year and the change implied by futures prices until the end of 2005, which together are equivalent to an increase of one-quarter in foreign currency terms between 2003 and 2004 and 6% between 2004 and 2005, will leave output growth over the next two years 0.1-0.2 percentage points lower than otherwise. This impact is somewhat softer than the estimates for other countries, e.g. the US. The probable explanation is the more widespread use of oil for heating and electricity production there than in Iceland.

*Short-term rise in inflation*

The impact on domestic inflation is more complex. In the short run, the direct impact of higher oil prices on inflation can be expected to weigh heavily, possibly driving it as much as 0.3 percentage points higher than otherwise this year, measured in terms of the increase between annual averages. However, the deterioration in the terms of trade would start to outweigh this impact roughly two years ahead, by which time oil prices are expected to be back on a downward path as well. Accordingly, inflation could then be roughly 0.2 percentage points lower than otherwise, ignoring the effect on the exchange rate of the króna.

*Higher oil prices have a considerable effect on fisheries profitability, especially for blue whiting and shrimp vessels*

Oil consumption is currently equivalent to 12% of fishing vessels' operating revenues on average, and accounts for 15% of their operating costs. This proportion has been rising over the past two years, due to higher prices of oil products. In Statistics Iceland's highlights of fishing operations for 2002, oil consumption was equivalent to 8% of revenues and accounted for 11% of operating costs. Operating profit (EBITDA) of fishing companies during the current year can therefore be expected to deteriorate by as much as 4 percentage points as a result of oil price rises in recent months. Higher oil prices hit individual fisheries segments in different ways. The impact is heaviest on trawlers, for which oil costs are equivalent to 13%-16% of revenues or 18%-20% of operating costs. The oil price hikes in recent months could cause serious difficulties for blue whiting and shrimp vessels and even bring these fisheries to a standstill, since they are energy-intensive and yield relatively low catch value.

*Crude oil supply will increase in the years to come, contributing to lower prices*

Supply of crude oil is expected to increase this year. In August, the IEA (International Energy Agency) forecast that supply will increase during the present year and 2005 by almost 7%, considerably in excess of demand. OPEC countries are currently producing more than their quotas. Inventories are thought to be above average and the position is in fact much better than could have been expected given the recent wave of price increases. Prices and inventories generally move in opposite directions, but this has not been the case in recent months. Inventories in the US are now at their highest for three years. Refineries have boosted their production capacity and are considered fully capable of meeting demand for oil products in the near future. Crude oil production capacity has mostly grown outside OPEC. In addition, IEA has strategic oil reserves corresponding to 2% of annual demand. For all these reasons, it is widely considered that the present high oil prices will not be sustained.

increased exports, net foreign trade made a negative contribution to growth, as it did in the last three quarters of 2003.

Recently published statistics do not suggest that growth has slowed down so far in Q3. Payment card turnover in July rose at a slower pace than earlier in

Table 1 National accounts 2003-2004

Volume change on previous year (%)	Total	2003		2004		
		Q3	Q4	Q1	Q2	Forecast for 2004 <sup>1</sup>
Gross domestic product .....	4.3	3.5	4.9	4.6	6.4	4¼
National expenditure .....	8.0	9.0	9.3	8.5	8.7	7
Private consumption .....	6.6	6.3	6.5	7.9	6.5	5½
Public consumption .....	3.3	3.0	3.1	1.9	2.2	½
Gross fixed capital formation .....	17.6	26.3	31.0	17.1	21.0	17
Exports of goods and services .....	0.3	2.5	-1.2	3.8	7.4	5
Imports of goods and services .....	9.7	16.0	10.8	14.3	12.9	11¾
<i>% of GDP</i>						
Goods and service balance .....	-2.9	-3.5	-4.6	-2.4	-8.4	-6½
Current account balance .....	-4.1	-4.3	-4.6	-5.4	-7.7	-8¾

1. Central Bank forecast in June 2004. Sources: Statistics Iceland, Central Bank of Iceland.

### Private consumption growth headed higher than forecast

Private consumption in H1/2004 increased by 7.2% year-on-year. Some slowdown in growth is needed if the Central Bank's forecast of 5½% growth for 2004 is to hold good (see Table 1). Real wages grew by only 1½% in the first half of the year and employment seems to have fallen year-on-year. Households have therefore largely financed their private consumption with borrowing, possibly influenced by higher asset prices.

the year, in fact, but there was a spike in grocery turnover, conceivably due to the good weather. Imports of consumer goods were also robust during the month although year-on-year growth slowed down compared to preceding months. Data on Treasury revenues from VAT and import duties also suggest that demand is still buoyant.

However, there are some signs that somewhat slower private consumption growth could lie ahead compared with the first half of this year. Gallup's consumer confidence index dipped in the summer. It now stands some way lower than in the corresponding period in 2003, although it rose in both July and August. Real wages have also risen more slowly recently than last year, due to higher inflation and the timing of wage agreements. Even though subdued real wage growth has not yet managed to check household spending, this could happen eventually. Finally, labour market conditions do not seem to be improving as rapidly as expected, as discussed in the Labour market section below.

### Public consumption decreases, but the targeted cut-back is unlikely to be met

Public consumption grew by only about 2% in the first half of the year, the lowest rate of increase

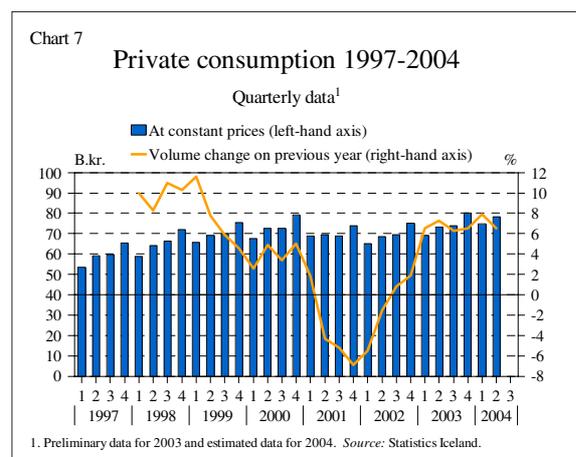
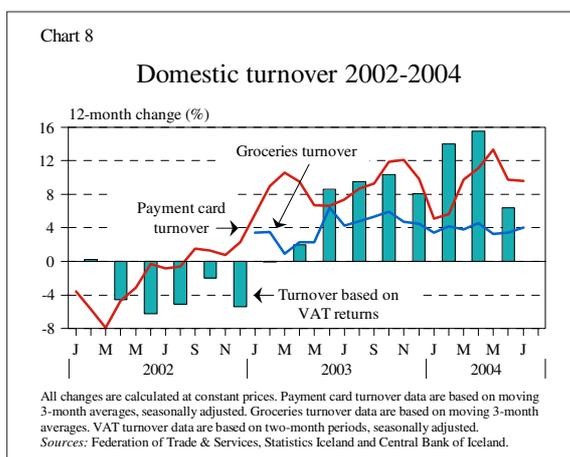


Table 2 Indicators of demand in the first half of 2004

% change from year before unless otherwise stated	Q1	Q2	Two latest months <sup>1</sup>	
Grocery turnover, in real terms.....	3.8	3.4	June-July	5.5
Payment card turnover, in real terms.....	9.8	9.8	June-July	8.0
Car registrations, increase in number.....	35.8	28.4	June-July	25.1
Cement sales, volume change (tonnes).....	65.4	48.5	June-July	37.6
General imports, volume change.....	23.7	.	January-July	14.9
Imports of consumer goods, volume change.....	14.5	.	January-July	14.1
Imports of investment goods (excl. vessels and aircraft), volume change.....	36.9	.	January-July	26.3
Residential housing in Greater Reykjavík Area, price change.....	9.1	11.6	June-July	10.7
Lending by the Housing Financing Fund (nominal value).....	12.5	77.5	May-June	118.5

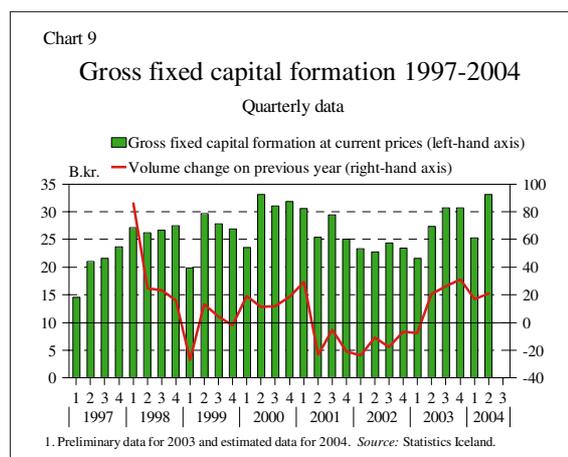
1. The right-hand column shows the year-on-year change in the two most recent months for which data are available. For imports, changes are based on cumulative data from the beginning of the year. Sources: Cement distributors, Federation of Trade and Services, Housing Financing Fund, Land Registry of Iceland, Motor Dealers' and Services Federation, Statistics Iceland and Central Bank of Iceland.



since 2001. This growth is well compatible with 3% growth, in real terms, of central government operational outlays and health outlays on the social security accounts, which are the clearest available indicators of public consumption expenditures. Year-on-year comparisons are complicated by changes in the presentation of expenditure data. After the central and local government budgets were published, public consumption was forecast to increase by ½% over this year, namely by 1% for municipalities and very slightly for central government and health outlays on the social security accounts. If the forecast is to hold, public consumption will need to decrease by 1% in the second half, which seems optimistic.

### Gross fixed capital formation picking up

Gross fixed capital formation in 2004/H1 increased by 19.3% year-on-year. Growth in Q1 slowed down from the preceding quarter, probably due to less investment in ships and aircraft. Since these investments are very irregular, it is useful to exclude them to reach an assessment of underlying investment. Imports of other investment goods grew by 37%, broadly in line with the previous quarters. A breakdown of quarterly data is not available for gross fixed capital formation, but it is clear from figures for Treasury expenditures suggest that public sector investment has contracted in the course of this year and can be expected to contract further in the second half. On the other hand, business investment is soaring, as was expected. Most indicators also suggest



that residential housing investment will increase by at least as much as in 2003.

*Current account widened in H1/2004 but the deficit in 2003 is revised downwards*

The current account deficit in H1/2004 was equivalent to 6½% of GDP. The deficit has widened by the equivalent of almost 3 percentage points of GDP year-on-year, despite growing exports. It should be added that revised statistics for the balance on income in 2003 raised the earlier estimate for receipts, leaving the current account deficit for last year almost 1½ percentage points smaller than originally assumed, at just over 4%. Exports in H1/2004 were up 5½% year-on-year, which is a faster rate of growth than a year before. The widening deficit is primarily explained by a 13½% surge in imports. First-half growth of both imports and exports was more than the Central Bank forecast in June for the whole of the year.

Merchandise imports increased by 15½% year-on-year in volume terms over the seven months of this year and the rate of growth does not appear to be tailing off. Twelve-month growth in imports of consumer goods over the first seven months was just over 14%. Outlays on tourism increased by 26% year-on-year, measured at constant exchange rates, and on travel by almost one-quarter. Thus a growing share of Icelandic household expenditure has taken place abroad this year.

Marine exports over the first seven months of this year increased 8% year-on-year in volume terms, but average prices dropped, as mentioned above. Exports of pharmaceuticals and miscellaneous manufactured goods also rose sharply. Aluminium production was broadly unchanged year-on-year but exports, which are subject to large monthly fluctuations, were slightly down over the first seven months. Revenues from travel and tourism soared in the first half, by 26% and 11% respectively measured at constant exchange rates. On the whole, the position of export sectors appears to have been relatively strong.

In June, the Central Bank forecast a current account deficit this year equivalent to 8¾% of GDP. Judging by the trend so far this year, the deficit is likely to be somewhat less. However, deficits driven by private consumption tend to be larger in the second half of the year than the first. Investments in

power stations will also be stepped up in the next few months. Fluctuations in imports of investment goods and the balance on income, however, are difficult to predict, as the large revisions for 2003 show. Considering the above, it cannot be concluded that the outlook is for a significantly narrower current account deficit over the next two years than the Central Bank forecast in June.

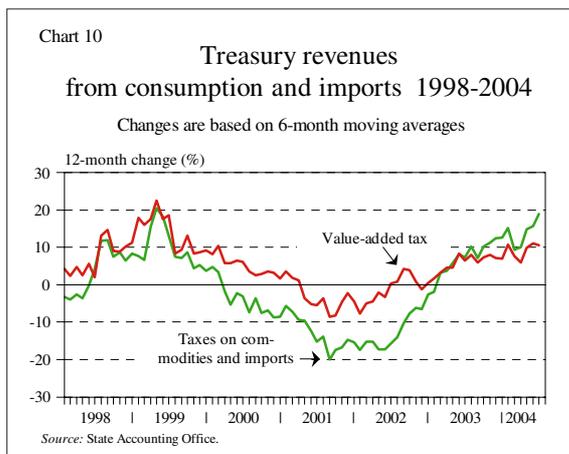
*Central government finances*

*The Treasury balance has improved considerably ...*

According to the Treasury accounts, expenditures exceeded revenues by 3.4 b.kr. in the first half of this year. A year-on-year comparison is not possible due to the privatisation of state banks last year and a changeover to earlier accounting of expenditures this year. After adjustment for these two factors, revenues exceeded expenditure by 1½ b.kr. in 2004/H1, compared with a 9 b.kr. deficit in the first half of 2003. This represents a considerable improvement in the Treasury balance. The budget for 2004 aims at a balance between paid expenditures and collected revenues, while provisional figures for last year showed a 20 b.kr. deficit excluding privatisation proceeds.

*... partly fuelled by growth in demand and imports*

Even though no privatisation has taken place in 2004, Treasury revenues until the end of June were broadly the same year-on-year, since tax revenues excluding privatisation proceeds rose by 10% in real terms. Personal income tax, national insurance contributions and value-added tax also yielded roughly 10% more at fixed prices than in H1/2003, and import duties 19% more. It should be borne in mind that a significant part of this year's hefty tax revenues is generated by short-lived economic and current account deficit expansion, and will therefore fall back when activity subsides. By comparison, annual Treasury revenues from consumption and imports during the upswing in 1998-2000 exceeded those in the preceding and following years by an estimated 2% of GDP. This amount corresponds roughly to the Treasury surplus during the upswing years. However, it should be noted that investment weighs more heavily during the current upswing than in the previous one.



*Little change in expenditures in real terms, but they are still short of target*

After adjustment for changes in expenditure reporting, Treasury expenditures in H1/2004 rose by an estimated ½% in real terms year-on-year. The budget target is a 3% reduction in real terms. On first impression, operating outlays seem consistent with the budget, but so far this year transfers have risen by 5% in real terms, even though a 2% reduction was aimed for in the budget. National insurance benefits and various other mandatory payments to non-public sector parties constitute the bulk of transfers. Investment outlays have fallen by 16% at fixed prices since the first half of 2003, but a target was set for a 33% reduction in 2004 following large-scale investment last year. It is likely that some investments authorised in the budget for 2003 were deferred until 2004 and were thereby added to authorised outlays.

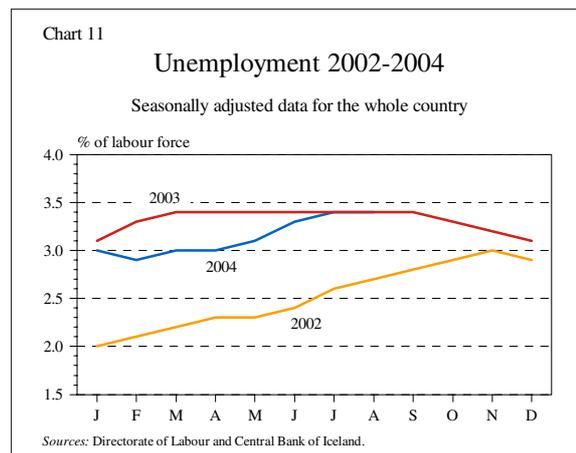
Proceeds from the sale of assets in 2003 produced a surplus of 4½ b.kr. on the credit account until the end of June, while the borrowing requirement over the first half of this year was more than 3 b.kr., despite an improved rate of loan collection. The requirement has been met with domestic issues of Treasury bills. The comparison problems that applied to revenues and expenditures do not extend to the borrowing requirement.

**Labour market**

*Rise in seasonally adjusted unemployment*

Unemployment has not decreased in pace with increased economic activity. Seasonally adjusted

unemployment has been growing steadily since April and reached 3.4% in August. The recent trend for seasonally adjusted unemployment resembles the pattern in 2002, when it was on the increase, rather than last year when a contraction was beginning.



*Employment rises in the Greater Reykjavik Area but drops in regional Iceland*

Statistics Iceland's labour market survey reveals a continuing contraction<sup>4</sup> in labour use during the first half of 2004, year-on-year.<sup>5</sup> The labour participation rate declined by one percentage point due to a reduction of 2,800 in the number of people in the labour market. Labour use and participation dropped by more in Q2 than in Q1, and unemployment decreased more slowly.

According to Statistics Iceland's survey, labour use in H1/2004 (measured as the number of employed) contracted by 0.4% year-on-year, which is

4. According to Statistics Iceland's PAYE register, there was a negligible decline in the number of employed, at 0.2%. However, the year-on-year rise of only 4.4% in earnings from employment while the wage index, which measures changes in regular wages, rose by 5.6%, suggests a contraction in the total hours worked by the employed. See also the discussion in *Monetary Bulletin* 2004/2.
5. These findings indicate that the unemployment rate was higher than 3.5% in the first half of the year because fewer man-years were worked than the Directorate of Labour assumed. The Directorate of Labour uses estimates from the Economics Office of the Ministry of Finance for man-years in the labour market as the denominator in its calculations and estimates a year-on-year increase of 0.9% in man-years during the first six months of 2004. However, Statistics Iceland's labour market survey shows a contraction over the same period in all its terms of reference: labour force (-0.9%), number of employed (-0.4%) and total hours worked (-1½%).

explained entirely by a reduction in regional Iceland, since there was an increase in the Greater Reykjavík Area. In terms of hours worked, the contraction was greater. Total hours worked in the first half of 2004 dropped by almost 1½% year-on-year, and 80% of that decrease is explained by fewer hours worked in regional Iceland. Given the sizeable output growth in H1/2004, productivity has increased significantly year-on-year.

*Fewer summer relief jobs may explain the rise in unemployment*

There was a spike in short-term unemployment (i.e. those who have been out of work for less than six months) in May, around the time that unemployment increased again. This is almost entirely explained by higher unemployment among younger females. This trend diverges from the seasonal pattern over the past two years. Long-term unemployment fell at the same time, however. The immediate explanation for the rise in unemployment since the spring is a shortage of summer jobs, so that it partly reflects a temporary increase in the number of students registered as unemployed.

The increase in registered unemployment is surprising, given that job supply has surged. Vacancies registered with employment agencies were up by more than 40% year-on-year over the first eight months of 2004. The increase was greater in the Greater Reykjavík Area (77%) than regional Iceland (31%). Excluding east Iceland, the regional increase was only one-quarter. Some of the vacancies in the

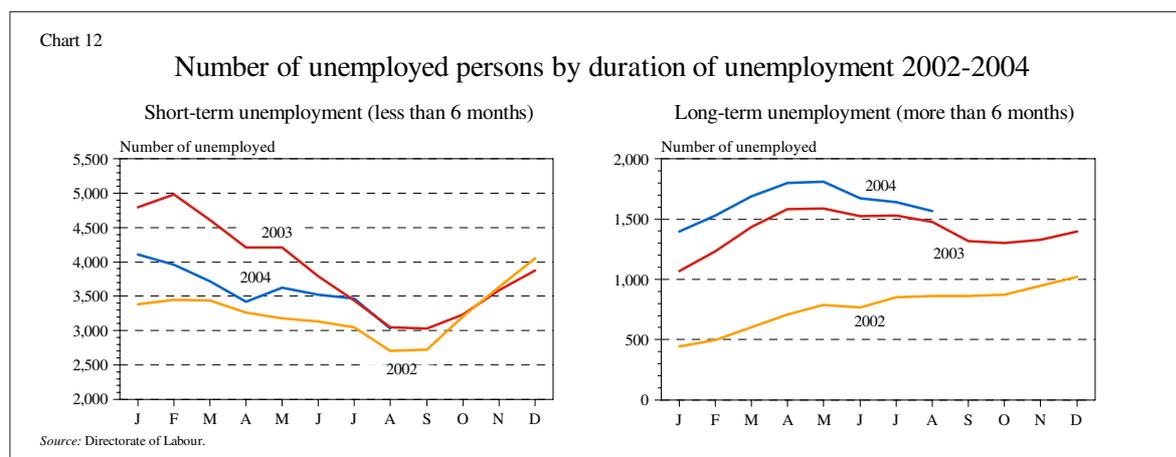
east which are connected with power station and aluminium smelter investments will probably be filled by foreign labour. Nonetheless, the employment situation in east Iceland appears to be on the mend. Construction of the aluminium smelter in Reyðarfjörður is not yet in full swing, but when this takes off in the next few months the number of jobs on offer in east Iceland will probably swell even further.

*Many more work permits issued, but foreign labour increases by much more*

Issuance of new work permits likewise indicates robust demand for labour. Over the first eight months of 2004 the figure more than doubled year-on-year. At the same time, work permit extensions are down by almost one-third. However, issuance of work permits says less about the employment situation than it once did. Employment agencies and the social partners report an increasing trend for employing European Economic Area (EEA) nationals, who do not need to apply for work permits.

*More employers plan to recruit staff in the coming months*

According to a survey conducted by the Confederation of Industry among its members in June, more employers plan to recruit staff and fewer to make redundancies over the next 3-4 months than in a similar survey made in December 2003. Employers in manufacturing, tourism and fish processing want to take on the most staff. A smaller increase is on the cards among financial companies and electrical con-



tractors. Some reduction in staffing looks likely in fisheries and in the commerce and service sectors.

Groundwork on the Reyðarfjörður aluminium smelter will begin this autumn and power station construction is being launched in Reykjanes, southwest Iceland. Sufficient labour does not seem to be available to fill these vacancies either in east Iceland or the Greater Reykjavík Area. Considerable competition prevails in the construction sector, so contractors are likely to turn to importing labour rather than out-bidding for employees of other companies.

#### *Slowdown in real wage growth and wage drift*

Private sector wages rose by 4.2% in Q2 year-on-year, according to Statistics Iceland's wage index. Negotiated rises in most private sector wage agreements are 4.3% this year, but their full weight will not be felt in the index until Q3. Based on the Q2 outcome, it appears that high wage levels, price competition in the sectors where a shortage of labour is developing, and imported labour are keeping wage drift in check. Some uncertainty may be created about wage developments for the coming years if forthcoming civil service wage deals trigger review clauses in private sector settlements. (See Box 1 in *Monetary Bulletin* 2004/1, pp. 9-10).

In July, Statistics Iceland's wage index showed a 5.1% increase year-on-year. The CPI rose by 3.6% over the same period, so real wages increased by an average of 1.4%. This is considerably weaker real wage growth than last year. It should be borne in mind that the rise in residential housing prices, which accounts for 0.9 percentage points of the 3.4% inflation rate in September, affects only a relatively small group of wage-earners. For the rest, the increase is greater in real terms.

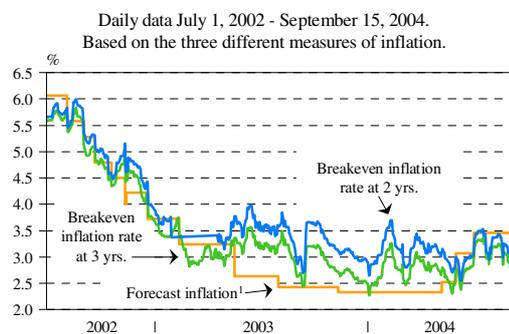
#### *Financial conditions*

The finding of the analysis in *Monetary Bulletin* 2004/1 in March was that the financial conditions of households and businesses were somewhat more favourable than in autumn 2003, while those of financial companies were broadly unchanged. *Monetary Bulletin* 2004/2, published in the beginning of June, found little change in financial conditions since March, since higher inflation expectations had offset the rises in the Central Bank's policy interest rate.

The massive growth in lending in recent years has still not slowed down to any significant extent. Lending by the credit system as a whole increased by 15.4% over the twelve months to end-June, which is broadly the same rate as in March. As in recent years, lending to businesses increased particularly rapidly, by more than one-fifth. Lending to households gained speed in Q2. Data for deposit money bank (DMB) lending in July showed a similar rate of growth.

Since the June *Monetary Bulletin*, the main changes in financial conditions have been that the Central Bank has twice raised its policy rate, by a total of 0.75 percentage points. The policy rate had previously been raised by 0.2 percentage points in May, after remaining unchanged for more than a year. Based on the breakeven inflation rate for three-year non-indexed Treasury bonds, the policy rate has risen broadly as much in real terms as nominal rates, according to a comparison of the four-week averages that were available for the June *Monetary Bulletin* and until the end of August.

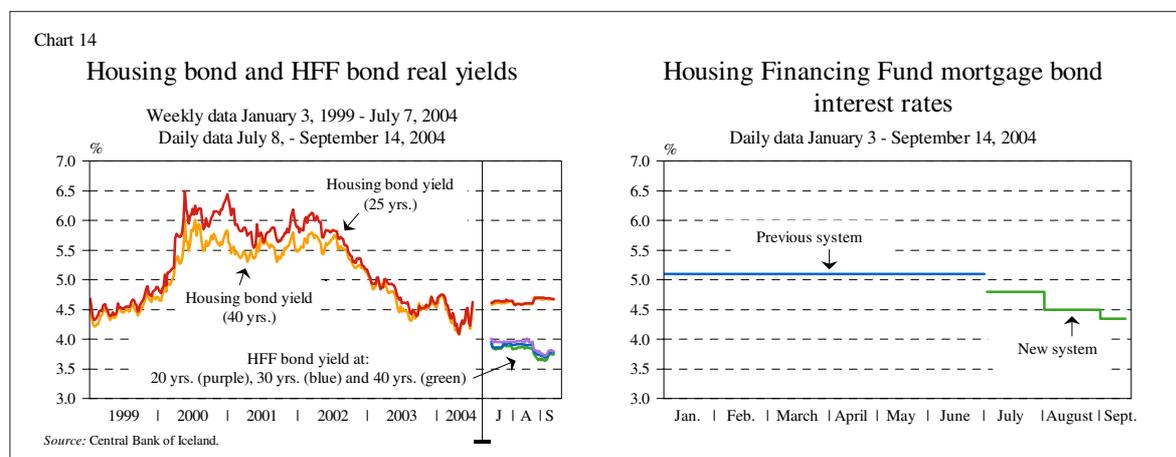
Chart 13  
The Central Bank policy rate in real terms



Other short-term rates have tracked the policy rate fairly closely. Yields on three-month Treasury bills rose by one percentage point over the same period, and twelve-month T-bills by 1.2 percentage points. At the shorter end of the market, the financial conditions of households and businesses seem less favourable than they were when the June *Monetary Bulletin* was being prepared. The trend at the longer end of the market has been in the opposite direction. As a result of the switchover in the housing loan system from housing bond loans, households are now

offered cash loans carrying  $\frac{3}{4}$  of a percentage point lower interest, while the yield in auctions of the HFF bonds which replace housing bonds has been roughly one percentage point lower than in the secondary market for housing bonds of comparable maturity. Banks are now offering mortgages with interest rates that are competitive with HFF loans but are not conditional on housing purchases. Average interest on indexed loans from commercial banks and savings banks remained virtually unchanged over the summer but fell by 0.3-0.35 percentage points at the beginning of September. Non-indexed lending rates have risen somewhat in pace with the Central Bank's policy rate.

est rates have remained unchanged. Thus the effect of rising foreign short-term rates is still not being felt on any great scale in the interest burden of businesses, financial institutions or the economy as a whole, except insofar as higher interest rates present an incentive for debtors to extend their maturities. They have had reasonable opportunities for doing so, since some of the rise in long-term rates that began last year has unwound. Over the four weeks until the end of August, for example, 10-year euro and dollar T-bond rates were somewhat lower on average than during the period when financial conditions were last assessed in May.



Movements in the exchange rate of the króna have only been slight and have hardly had any discernible effect on financial conditions. Equity prices are a different matter. As a rule, higher equity prices imply an easing of the financial conditions of businesses, which can then procure relatively cheap capital through share offerings. Insofar as prices are driven by strategic leveraged buyouts aimed at gaining control of specific companies, however, it is doubtful that companies can in all cases procure substantial amounts of capital at the price at which their shares are listed on Iceland Stock Exchange at the moment.

Foreign short-term interest rates are inching up in pace with rising policy rates in the US, UK and several other countries which are less important for Iceland. Given that the bulk of Iceland's national debt is denominated in euros, however, the crucial factor is that the European Central Bank's (ECB) key inter-

*Financial conditions of households are more favourable than in the previous quarter*

In light of the above, how should the financial conditions of households, businesses, financial companies and the economy as a whole be assessed? As far as households are concerned, the bulk of their debt is at fixed interest rates, inflation-indexed and long-term. Changes in financial conditions are therefore primarily determined by, first, their short-term debt, and second, by their new long-term borrowing, including refinancing. Roughly 11% of total household debt is short-term or at adjustable rates that track changes in the Central Bank's policy rate fairly closely. Since the bulk of long-term household debt carries fixed interest, and new borrowing and refinancing generally constitute a relatively small part of the total stock, higher short-term rates could be supposed to weigh heavier for the financial conditions of households

than the lower rates on the new HFF bonds. Now that private banks and some pension funds have begun offering mortgages on similar terms to the HFF, the outlook is for refinancing of mortgages on an unprecedented scale. Cheaper mortgages will exacerbated the situation in the already heated residential

ment burden increasing.<sup>7</sup> Although the changes in short-term rates in recent months spell a slight deterioration in the financial conditions of households in the short run compared with the previous quarter, they have clearly improved on the whole.

Table 3 Changes in financial conditions since the June forecast

	4 weeks to May 19	4 weeks to August 30	Sectoral impact <sup>1</sup>			
			House- holds	Export and traded goods	Financial undertakings	Other business
Policy interest rate in real terms <sup>2</sup> .....	2.6	3.1	-	-	-	-
Short-term interest rate in real terms <sup>2</sup> .....	2.6	3.2	-	-	+/-	-
CPI-indexed domestic interest rates (yield on 40-year housing bonds) .....	4.2	4.6	.	.	+/-	.
CPI-indexed domestic interest rates (yield on 40-year HFF-bonds <sup>3</sup> ) .....	.	3.8	+	.	+/-	.
Average non-indexed domestic bank rates.....	11.3	12.1	-	-	.	-
Average CPI-indexed domestic bank rates .....	8.0	8.0	0	0	0	0
Foreign short-term interest rates (3-month T-bills) <sup>4</sup> .....	1.7	1.9	-	-	-	-
Foreign long-term interest rates (10-year T-bonds) <sup>4</sup> .....	4.4	4.2	+	+	+	+
Exchange rate index .....	123.7	121.7	+	-	+/-	+/-
Equity prices <sup>5</sup> .....	2,695.9	3,216.6	+	+	+	+

1. '+' indicates more favourable financial conditions, '-' less favourable, '+/-' ambiguous, '0' no change and '.' not applicable. 2. Deflated by 3-year breakeven inflation rate. 3. HFF = Housing Financing Fund. 4. Weighted with euro 2/3 and US dollar 1/3. 5. ICEX-15 index.

Sources: Iceland Stock Exchange (ICEX) and Central Bank of Iceland.

housing market. Especially if loan-to-value ratios are increased to as much as 90%, the new HFF loan system will presumably encourage households to fund their consumption through mortgage equity withdrawal, which is a familiar practice in other countries.<sup>6</sup> The banks' recent offers open up new possibilities in this respect, since a housing purchase is no longer a condition in itself for borrowing. Homeowners can therefore easily take on a higher mortgage than they need in order to prepay existing debt and extend the term of their borrowing, without trading their property. They can deploy the difference on consumption or other expenditure, without their pay-

#### *Financial conditions of businesses marginally tighter due to higher short-term rates*

Financial conditions of businesses are more complex to evaluate than households because of their more diverse sources of funding. Besides their domestic borrowing – short- or long-term, indexed or non-indexed – businesses also borrow heavily abroad. Roughly one-third of Iceland's corporate debt stock is foreign in origin. International interest rate trends, coupled with exchange rate developments, therefore exert a strong impact on the financial conditions of businesses. All told, international interest rate developments do not seem to have greatly overburdened Icelandic businesses compared with the analysis in June, although short-term rates have been inching upwards. It should be borne in mind that expectations

6. Households can do this in many ways: by selling a property without buying another in its place, trading down the housing chain without repaying debt, taking out a higher mortgage against housing of the same price, or taking a second mortgage against the same property. The banks' latest move greatly increases the scope for the last-mentioned option.

7. However, in many cases it will take a fairly long time to win back borrowing costs.

of higher short-term rates may encourage businesses to fix their interest rates. However, there are no signs that this has happened yet and informal sources report that the term of interest rates is generally only a few years. Also, interest rate premia have probably been falling. The main change lies in rising domestic short-term rates, but the overall change is likely to be insubstantial.

#### *Slightly tighter conditions of financial companies*

Financial conditions of financial companies are probably only slightly tighter than in the analysis made in May and published in June. In real terms the policy interest rate has risen by 0.5 percentage points based on the three-year breakeven inflation rate, and by 0.9 percentage points relative to the Bank's most recent forecast from June (eight quarters ahead). At the same time, domestic financial institutions have been extending their foreign maturities, which also increases their interest burden even though long-term rates have not changed significantly in recent months.

The overall conclusion is that macroeconomic financial conditions have tightened slightly since the last *Monetary Bulletin* was published at the beginning of June. That said, they are still very favourable, and undoubtedly easier than before for households.

## II Monetary policy

### *Policy interest rate raised in June and July*

The Central Bank raised its policy interest rate by 0.25 percentage points at the beginning of June and by a further 0.5 percentage points on July 1. Since then the policy rate has been 6.25%. The rise on July 1 had been strongly implied in the introduction to *Monetary Bulletin* which was published at the beginning of June, which said that the outlook could warrant an even larger rise than was announced then. In a press release, the Bank stated that economic developments did not give grounds to deviate from previous intentions to tighten monetary policy further, with demand surging and higher inflation expectations. According to the forecast published on June 1, inflation was expected to rise slightly above the tolerance limit in the following months but subsequently abate below the 2½% target next year. Since that

forecast was made the Bank has raised its policy rate twice, by a total of 0.75 percentage points.

The press release also stated that although inflation was partly of external origin, beyond the control of the Central Bank, domestic price increases have also contributed to it. Accelerating inflation, robust growth in private consumption and investment, and rising inflation expectations which had lowered the policy rate in real terms were deemed to have strengthened the case for raising the policy rate. Other things being equal, the large investment projects on the horizon would require further increases in coming months. It was stated that the pace of interest rate increases would depend on a number of factors, not least inflation developments and domestic demand growth.

### *The appropriate monetary stance must be evaluated in light of intensifying large-scale investments*

Any evaluation of the current or necessary monetary stance needs to take into account the special conditions pertaining at the moment. On the horizon is one of the most intense investment periods in Iceland's history and it is obvious that a very tight monetary stance is needed while it takes place. The hydropower and aluminium industry investments will inevitably exert a sizeable crowding-out effect which will partly be transmitted through a tighter monetary stance. Although the scale of the investments is well known, the macroeconomic impact is clouded by uncertainties. While the economy has previously experienced investment episodes on a similar scale as a proportion of GDP, these have happened under completely different conditions. For example, the economy is much more open than during the wave of investment projects in connection with the aluminium industry at the end of the 1960s. A major factor at work now is that Iceland is part of the integrated European labour market and allows unrestricted capital movements. Monetary policy implementation has also been radically transformed and the exchange rate of the króna floats freely in the foreign exchange market.

One of the main benefits of the changes in monetary policy implementation in recent years has been to enable much more timely responses to foreseeable shocks like the pending investments. The problem lies in the limited historical experience that can be drawn upon. Inflation targeting is still in its infancy

and none of Iceland's fellow inflation-targeters has had to tackle a shock on a comparable scale.

*Interest rates will need to rise – the question is, how fast?*

Despite the highly uncertain macroeconomic impact of the planned investments, it seems certain that an even tighter monetary stance will be needed to keep inflation under control. The problem faced by the Central Bank is to weigh up how fast the stance needs to be tightened. In this context it should be remembered that monetary policy implementation is not an exact science. Uncertainty surrounds most aspects of its implementation and the impact is transmitted with a long but variable lag. There is considerable uncertainty about the transmission mechanism of monetary policy, as reflected for example in the difficulty – in Iceland or elsewhere – of forecasting exchange rate developments. Consequently, monetary policy cannot be applied for short-term fine-tuning of demand in the economy. A forward-looking monetary policy looks at recent and current demand primarily as an indicator of medium-term developments. A crucial factor in monetary policy decisions in the near future must be the simple fact that the peak of the investment projects is moving ever closer.

*Inflation risk lower in the short term than the long run*

The Central Bank publishes its macroeconomic and inflation forecast twice a year. Nonetheless, the Bank reviews its forecasts at least four times a year, as mentioned above. A review of the Bank's forecasts from the beginning of June does not give grounds to expect that unfolding developments will diverge significantly from them. The exchange rate has shown little change but the króna is slightly stronger than when the forecast was made, which has a disinflationary effect in the short term. However, the long-term import price outlook has worsened which, in isolation, has increased the upside risk to the June forecast for the second half of 2005 and the whole of 2006.

When the Bank prepared its macroeconomic forecast in June, the quarterly national accounts for this year had not been published. Data for two quarters have now been published and domestic demand seems to be headed for a somewhat higher rate of growth than forecast in June. The policy rate hike

should dampen private consumption, but structural changes in the residential housing market are likely to outweigh that effect. When aluminium-related investments gather momentum in the autumn and into next year, private consumption growth will be stimulated, other things being equal. And while labour market data suggest some excess capacity, it is uncertain to what extent this can be used as a reserve pool of labour when construction activity peaks and its impact has extended to most sectors of the economy.

*Slightly tighter monetary stance has not changed financial conditions significantly*

Despite the slightly tighter monetary stance implied by the policy rate hikes in June and in particular in July, these have not managed to bring about much change in the financial conditions of households and businesses. In broad terms they are likely to have remained more or less unchanged. Other factors have acted in the opposite direction, such as a considerable reduction in interest rates on housing loans and greatly increased scope for remortgaging and even mortgage equity withdrawal. Share prices have also continued to climb, offsetting higher short-term interest rates in Iceland and abroad. Rising inflation expectations, especially among households, weaken the restraint imposed by a higher policy rate.

*Fiscal policy must play a key role in the coming years*

The Central Bank has repeatedly pointed out the key role that fiscal policy should play in economic policy over the next few years, by mitigating the impact of the large-scale investment projects. The government set itself a fairly ambitious expenditure target for the current year. It seems that some effort will be needed to achieve this in full. More important, however, is to restrain expenditure for the next two years. This is a particular challenge in light of planned tax cuts amounting to 20 b.kr. over the next three years. To offset the impact of lower taxes at the same time as measures are needed to mitigate the impact of the aluminium-related investments, considerable cut-backs in public sector spending are required. A credible long-term plan to this effect would bolster economic policy and reduce the likelihood of putting an excessive burden on monetary policy which could undermine financial stability and the competitive position of domestic industries.